ISTANBUL TECHNICAL UNIVERSITY

# DEPARTMENT OF LANDSCAPE ARCHITECTURE

## STUDENT PROJECTS
2018-2022

PEM İTÜ

# PEM ‘18 /’22

ISTANBUL TECHNICAL UNIVERSITY DEPARTMENT OF
LANDSCAPE ARCHITECTURE STUDENT PROJECTS 2018-2022

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## BÖLÜM BAŞKANI'NDAN
*FROM THE HEAD OF THE DEPARTMENT*

Peyzaj Mimarlığı Bölümü bir dört yılını daha başarılarla tamamladı. Ekoloji ve teknoloji ekseninde doğa ve kültüre saygılı projelerin üretilmesi ve eğitimin verilmesini misyon edinen bölümümüz ülkemizdeki peyzaj mimarlığı alanındaki öncü rolünü korumaya devam etmektedir. Geçen dört yıl, disiplinler arası ilişkiler, ulusal ve uluslararası ölçekte akademik ve araştırma ağlarımızı geliştirmemizde önemli fırsatlar sunmaya devam etmekle birlikte pandeminin etkisi ile eğitimin ve iletişimin dünya genelinde aksadığı, yeni pedagojik modelleri keşfetmemizi zorunlu kılan zorlayıcı bir dönem bu dört yılı tariflemektedir. Gerek pandemi gerekse de her geçen gün olumsuz etkilerinin daha da hissedildiği iklim değişimi nedeniyle mesleğimizin eylem alanları olan açık ve yeşil alanların kent ekolojisi, toplum sağlığı, dayanıklı şehirler ve toplumlar oluşturmada vazgeçilmez bir rolünün olduğu dünya genelinde anlaşılmıştır. Sorumluluğunun bilincinde peyzaj mimarları yetiştirmek üzere yeniden şekillendirdiğimiz eğitimimizin içeriğine öğrencilerimizin ve mezunlarımızın gösterdiği ilgi beraberinde pek çok yayını, ödülü ve araştırmayı getirmiştir. Bu sebeple 2018-2022 dönemini bölümümüzün jeo-politik, iklimsel ve sosyo-ekolojik her tür krize rağmen üretken şekilde değerlendirmesi özveri ile çalışan öğretim görevlilerimiz ve Fakültemizdeki akademik kültürün öğretileri ile mümkün olmuştur.  Emeği geçen herkese şükranlarımı sunarım.

*The Department of Landscape Architecture has successfully completed another four years. Our department, which is dedicated to producing projects that respect nature and culture within the axes of ecology and technology and providing education, continues to maintain its pioneering role in the field of landscape architecture in our country. Over the past four years, despite the impact of the pandemic causing disruptions in education and communication worldwide, we have continued to present significant opportunities for developing interdisciplinary relationships and our academic and research networks on national and international scales. This period, which has forced us to explore new pedagogical models, is defining these four years. Due to the pandemic and the increasing negative effects of climate change, there is a global understanding of the indispensable role of our profession in creating open and green spaces for urban ecology, public health, and resilient cities and societies. The interest shown by our students and graduates in the content of our education, which we have reshaped to train landscape architects aware of their responsibilities, has brought along many publications, awards, and research. Despite geopolitical, climatic, and socio-ecological crises, we have productively evaluated the 2018-2022 period, thanks to the dedication of our faculty members and the academic culture in our faculty. I express my gratitude to everyone who contributed to this effort.*

# BÖLÜM HAKKINDA
*ABOUT THE DEPARTMENT*

İTÜ Peyzaj Mimarlığı Bölümü'nün Özgörevi

. Doğal kaynakların korunması ve etkin şekilde kullanılması, sürdürülebilir bir yaşam ortaklığının gözetilmesini öncelikli bir sorun olarak ele alan,
. Ulusal peyzaj mimarlığı mesleğinin uygulama normlarını ve koşullarını yeniden oluşturacak,
. Araştırmacı, bilimsel ve eleştirel düşünmeyi benimsemiş, özgün düşünceler geliştirebilecek ve bunları uygulama becerisine sahip,
. Diğer tasarım dalları ve disiplinlerle ortak araştırma ve üretim yapabilecek,
. Ulusal ve uluslararası alanda lider olabilecek donanımda peyzaj mimarları yetiştirmektir.

İTÜ Peyzaj Mimarlığı Bölümü'nün Özgörüşü

. Ulusal peyzaj mimarlığı eğitiminde öncü olmak ve ulusal akreditasyon kriterlerini belirlemek,
. Uluslararası alanda peyzaj mimarlığı araştırmaları, eğitimi ve bilgi üretiminde söz sahibi olmak,
. Diğer tasarım alanları ve disiplinlerle ortak üretim yapabilecek şekilde mesleki kuram, uygulama, yöntem ve süreçlerini geliştirmektir.
İTÜ Peyzaj Mimarlığı eğitiminde peyzaj tasarımı kuramı ve uygulamaları, peyzaj planlama, doğa ve insan bilimleri, görsel iletişim, peyzaj mühendisliği, çevre yönetimi ve meslek pratiği konularında öğrencilerin bilgilendirilmeleri hedeflenmektedir. Ayrıca, araştırma, veri toplama, sentez yapma ve problem çözme becerilerinin tasarıma yansıtılmasını sağlayacak bilgiler ile tasarıma destek olacak serbest çizim, teknik çizim ve bilgisayar kullanım becerileri verilmektedir.

*Our program is rooted in a studio-based teaching environment with a relatively low student-to-teacher ratio, enabling close mentor-to-peer interaction.*

*The department offers students an opportunity to focus on the relationship of natural and man-made environments ranging from community landscape design to regional environmental planning and protection. The program of study provides a strong foundation in the natural and social sciences. It includes training in both traditional skills and contemporary methods. With the continuing expansion of our cities and suburban areas, landscape architects increasingly serve not only as designers but also as advocates of landscape reclamation and conservation. Public values are stressed through courses in environmental law and community participation in planning and design, and through an overriding concern for the protection of the environment.*

Prof. Dr. Hayriye EŞBAH TUNÇAY / Prof. Dr. Hayriye EŞBAH TUNÇAY
Prof. Dr. Y. Çağatay SEÇKİN / Prof. Dr. Y. Çağatay SEÇKİN
Prof. Dr. Gülşen AYTAÇ / Prof. Dr. Gülşen AYTAÇ
Prof. Dr. Meltem ERDEM KAYA / Prof. Dr. Meltem ERDEM KAYA
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Araş. Gör. Lâl DALAY / Ress. Ass. Lâl DALAY

# AKADEMİK KADRO
*ACADEMIC STAFF*

# LİSANS PROGRAMI
*UNDERGRADUATE PROGRAM*

İstanbul Teknik Üniversitesi Mimarlık Fakültesi bünyesinde gerçekleştirilen Peyzaj Mimarlığı eğitimi toplam 4 yıl sürmektedir. İTÜ Mimarlık Fakültesi'nde ilk üç yarıyıl Peyzaj Mimarlığı, Mimarlık ve İç Mimarlık bölümleri dersleri ortak yürütülmektedir. 2015 yılına kadar üç bölümün ortaklığında geliştirilen bu tasarım eğitimi 2015-16 güz döneminde itibaren Mimarlık Fakültesindeki tüm bölümleri kapsayacak şekilde strüktüre edilmiştir. Söz konusu ortak eğitim Temel Eğitim Stüdyoları (TES) başlığı altında ilk üç yarıyılda verilmektedir. İlk iki yarıyılda TES eğitimi Proje I-II, Basic Design & Visual Arts ve Visual Communication I-II derslerini kapsamaktadır. Üçüncü yarıyılda ise bölümler bazında özelleşmiş Project III stüdyo dersleri verilmektedir (https://mim.itu.edu.tr/blog/2015/11/11/24697/).
Dördüncü yarıyıldan itibaren öğrenciler Peyzaj Mimarlığı mesleğine yönelik olarak eğitimlerine devam etmektedir. Peyzaj Mimarlığı lisans eğitiminde peyzaj tasarımı ve uygulamaları, ekoloji, peyzaj planlama, doğa ve insan bilimleri, görsel iletişim, peyzaj mühendisliği, çevre yönetimi, meslek pratiği, konularında öğrencilerin bilgilendirilmeleri hedeflenmektedir. Lisans eğitimi tasarım ağırlıklı olup peyzaj mimarlığı stüdyolarında farklı disiplinlerden gelen uzman öğretim elemanlarıyla biraraya gelerek peyzaj mimarlığıyla ilgili sorunların ve çözümlerinin tartışıldığı interaktif bir ortamda çalışılmaktadır. Ayrıca, araştırma, veri toplama, sentez yapma ve problem çözme becerilerinin tasarıma yansıtılmasını sağlayacak beceriler ile tasarımlarda serbest çizim, teknik çizim ve bilgisayar kullanım becerileri verilmektedir.
Bu kapsamda İTÜ Peyzaj Mimarlığı Lisans eğitim programı, PEMDER (Peyzaj Mimarlığı Eğitim ve Bilim Derneği) ulusal akreditasyonunu 2022 yılında almaya hak kazanmıştır.

Çift Anadal Lisans Programları

İstanbul Teknik Üniversitesi Lisans Programlarına kayıtlı öğrencilerin yatay geçiş, dikey geçiş, çift anadal ve yan dal uygulamalarında ve bu uygulamalar ile başka programlarda ve/veya kurumlarda alınmış dersler ve kazanılmış kredilerin değerlendirilmesinde İstanbul Teknik Üniversitesi Yatay Geçiş, Çift Anadal Programı (ÇAP) ve Yandal Programı Yönergesi uygulanmaktadır (http://www.sis.itu.edu.tr/tr/yonetmelik/YatayCapYandal.html). Bölüm içerisinde yatay geçiş, dikey geçiş, çift anadal ve yan dal uygulamaları ile ilgili Çap ve Yandal Komisyonu; muafiyet ve intibak işlemleri ile ilgili ise Af, Yatay-Dikey Geçiş ve İntibak Komisyonu bulunmaktadır. Yatay yada dikey geçiş yapan öğrencilerin daha önce aldıkları ve başarılı oldukları derslerden muafiyetleri ve intibaklarıyla ilgili işlemlerde ise İstanbul Teknik Üniversitesi Muafiyet ve İntibak İşlemleri Yönergesi uygulanmaktadır (https://www.sis.itu.edu.tr/TR/mevzuat/muafiyet-intibak-yonerge.php). Bu doğrultuda tüm dersleri en az (BB=3.00) başarı ortalaması ile tamamlamış olan öğrenciler, 3. yarıyılın başından itibaren 'Çift Anadal Programı' / ÇAP yaparak iki diploma sahibi olabilirler. Öğrenciler başarılı oldukları takdirde İTÜ Mimarlık Fakültesi bünyesindeki bir programa, kontenjan dahilinde yatay geçiş yapabilirler.

*The undergraduate program in Landscape Architecture (BLA) is based on a six-semester curriculum. The first three semesters consist of several cross-disciplinary fundamental courses with students pursuing degrees in Architecture and Interior Architecture. The second half of the curriculum is field-specific. In addition to a cross-disciplinary design foundation, this approach also provides opportunities for seeking double major degrees and a transition between majors. Students who have completed the first three semesters with a GPA minimum of 3.00 are allowed to enter the double major program. At this point, students can also apply for a transfer between departments within the ITU Faculty of Architecture; Landscape Architecture, Architecture, Interior Architecture, Urban Planning, and Industrial Design. During the fundamental period, students learn about basic design and drafting techniques, architectural design and rendering, as well as an introduction to landscape architecture, the history and theory of landscape architecture, plant materials, natural systems and design, computer-aided design and information systems, landscape construction and site planning. At the beginning of the fourth semester, students begin their field-specific courses, which provide opportunities to discuss problems and solutions specifically related to the field of landscape architecture. The Landscape Architecture curriculum consists of 49 courses in total: 39 mandatory and 10 elective courses. The total credit hours are 152.*
*The main educational aims of the Landscape Architecture program are to prepare students for a professional career built on the visions of landscape planning and design, human and natural sciences, landscape theory and praxis with its well–grounded curriculum. The curriculum is supported by professional lectures, including landscape engineering (site planning) and construction, environmental management, and professional practices in terms of landscape design and practice, including drafting techniques and the use of relevant computer programs.*
*An emphasis is placed on training students' problem-solving skills in the design process and the application of scientific research methods; data gathering, analyzing, and synthesizing. Students in Landscape Architecture will be educated according to the ethics of the profession, such as efficient usage of resources, economic prosperity, and social justice, as well as preservation of social, historical, and cultural environment.*

# LİSANSÜSTÜ PROGRAMLARI
*GRADUATE PROGRAMS*

İTÜ Peyzaj Mimarlığı Bölümü lisansüstü programlarının amacı, peyzaj mimarlığında öncü araştırmacılar ve tasarımcılar olarak eğitilmiş; eleştirel düşünebilen ve icat edebilen; doğal kaynakların korunmasını ve sürdürülmesini ana problem olarak ele alan; mesleğin ulusal ve uluslararası standartlarını ve koşullarını yeniden yaratabilecek; kentsel ve kırsal çevrelerin tasarımı için gerçek tasarım fikirlerini oluşturacak bilgi ve yöntem üretebilecek adayların yetişebileceği bir akademik ortam sağlamaktır. Temel özgörü, peyzaj mimarlığı mesleğinin ulusal norm ve standartları için kriterleri belirlemede öncü rol oynamaktır.

Lisansüstü programlardaki başlıca araştırma konuları aşağıda yer almaktadır:

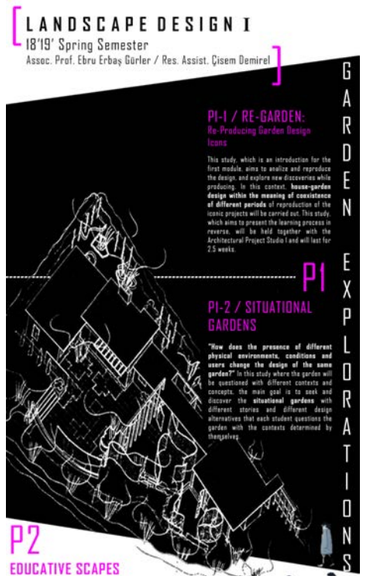
- Peyzaj Mimarlığı Tarihi, Kuramı ve Eleştirisi,
- Peyzaj Tasarımı ve Tasarım Kuramı,
- Mimari Tasarım, Kentsel Tasarım ve Peyzaj Tasarımı İlişkileri Peyzaj Ekolojisi ve Planlaması,
- Kentsel ve Kırsal Peyzaj Tasarım ve Planlaması,
- Degrade Alanların Islahı ve Planlanması,
- Peyzaj Konstrüksiyon Teknik ve Malzemeleri,
- Bitkilendirme Tasarımı ve Malzemeleri,
- Peyzaj Planlamasında Coğrafi Bilgi Sistemleri (CBS) Uygulamaları Peyzaj Tasarımında Bilgisayar Uygulamaları,
- Enerji Etkin Peyzaj Tasarımı,
- Sürdürülebilirlik.

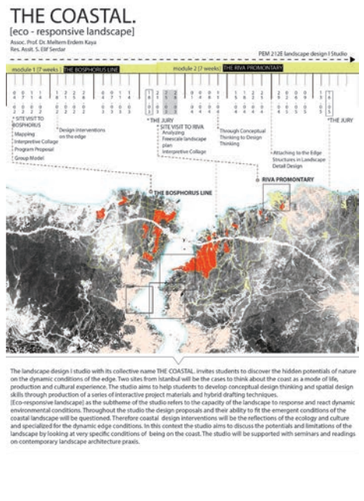
Ayrıca, öğrencilerin, disiplinlerarası kuramsal ve uygulamaya yönelik araştırmalar ve çalışmalar yapması teşvik edilmektedir.
Peyzaj Mimarlığı lisansüstü programları eğitim sürecinde, öğrencilerine, ulusal ve uluslararası alanda gerçekleştirilen proje ve araştırmalara katılma ve bu alanlarda çalışma olanağı sunarak profesyonel alanda metodolojik çalışma ve yaratıcılığın gelişmesini sağlar. Programdan mezun olan öğrenciler entellektüel ve bilimsel anlamda daha geniş bir vizyon kazanarak, ileri derecede araştırmacı, öncü ve mesleğinde uzmanlaşmış bilim adamları olma yetisini kazanırlar. Ayrıca, peyzaj mimarlığı alanındaki özel tasarım problemlerinde çözüm geliştirme ve geliştirdikleri çözümü uygulayabilme yeteneğine sahip olurlar.

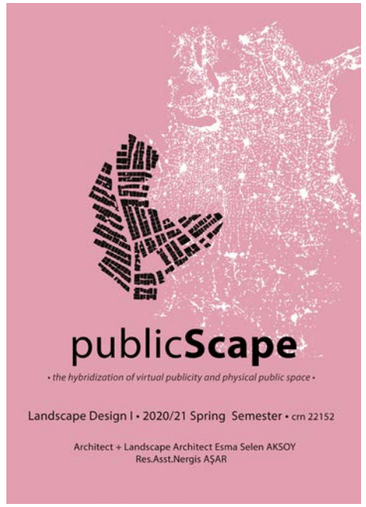
*Master of Landscape Architecture Program (MLA) and Doctor of Philosophy (Ph.D.) in Landscape Architecture Program*

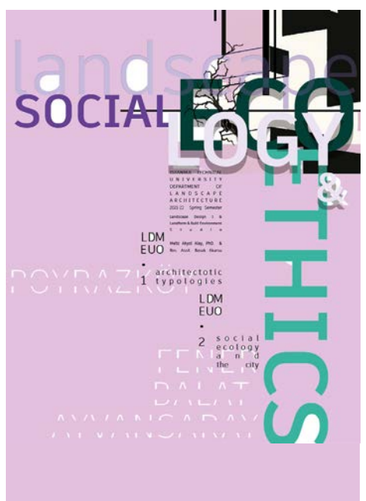
*The Landscape Architecture graduate program has been active since the 2002-2003 academic year in the Faculty of Architecture of ITU. Before 2002, it was a Landscape Planning sub-program under the Urban and Regional Planning graduate program.*
*The goals of the Landscape Architecture graduate program are;*
*To train young scientists and academicians to enrich the faculty body; to develop cutting-edge research approaches in landscape design and planning; to promote interdisciplinary research; to educate people who will assume leadership roles in academic career or professional practice, the public sector and the private sector, to teach prospect scientists, who have a wide vision and expertise in their field; to set international norms in landscape architecture graduate education; to give students ability to develop their own research base and participate in national and international level interdisciplinary projects; and to trigger creative and critical thinking.*

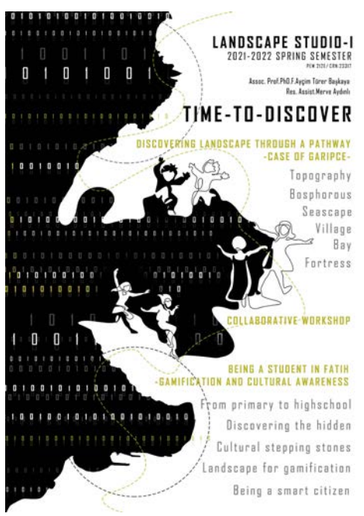
*Research areas include,*
*- Landscape design, Architecture, and Landscape Architecture relationship,*
*- Urban Landscape Planning,*
*- Landscape ecology and design,*
*- Quality in Landscape Architecture,*
*- Urban design and landscape design,*
*- Ecological landscape planning and design,*
*- Natural and cultural landscapes,*
*- Landscape design in degraded lands,*
*- Landscape materials in landscape design,*
*- Urban furniture,*
*- Landscape construction.*

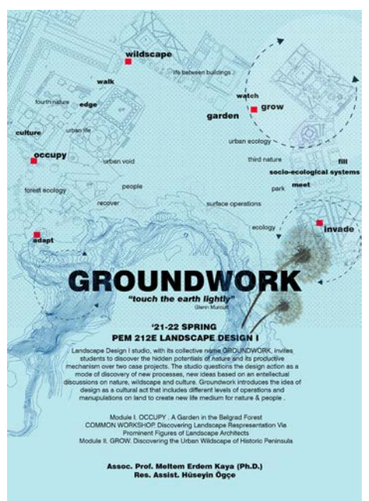







*PROJE I*

# LANDSCAPE DESIGN I

## Proje I Stüdyo Felsefesi

Peyzaj Tasarımı I Stüdyosu, öğrencilerin kentsel içerikte küçük ölçekli kent boşlukları ve kamusal alanlara yönelik peyzaj tasarımı becerilerini geliştirmeyi amaçlamaktadır. Bu amaç doğrultusunda stüdyo, öğrencilerin farklı tasarım sorunlarıyla karşılaşabilecekleri ve belirlenen bir tasarım sorununa yönelik yeni tasarım önerileri sunabilecekleri etkileşimli bir stüdyo ortamı etrafında yapılandırılmıştır. Peyzaj Tasarımı Stüdyosu "yer"i anlama ve yorumlama üzerine eleştirel düşünmeye sevk etmeyi, yeni mekanlar üretme, tasarlama eylemlerini açığa çıkarmayı, tasarım pratiğini kazandırmayı ve buna yönelik temsil sorunlarını tartışmayı ve yeni yöntemler geliştirmeyi hedefler. Bu kapsamda stüdyo, kavramsal tasarım problemlerine yönelik tasarım süreçlerini ve hibrid çözümleri anlama pratiğinin geliştirilmesine yönelik çalışmaları barındırır. Stüdyo çeşitli program ve işlevleri içeren bir açık mekan kurgusunun geliştirilmesine yönelik morfolojik, deneysel ve görsel yaklaşımları ve hibrid tasarım metotlarını incelemektedir. Bu kapsamda stüdyo öğrencilerin mekânsal okunaklılık, peyzaj temsili ve eleştirel tasarım düşüncesini geliştirmelerine yardım etmektedir. Bu kapsamda stüdyo iki temel modül doğrultusunda kurgulanmıştır. İlk modül her dönem belirlenen spesifik bir tema doğrultusunda küçük ölçekli kamusal mekan tasarımlarını içeriri. Bu modülde tasarım hem bir araştırma hem de bir temsil olarak öğrenciler tarafından deneyimlenir. İkinci modül İstanbul'un karakteristik bölgelerinden seçilen çalışma alanlarına yönelik olarak bu alanların gündelik kent hayatına entegrasyonuna yönelik peyzaj tasarım projelerinin geliştirilmesini kapsamaktadır.

## *Landscape Design I Studio Philosophy*

*The Landscape Design I Studio aims to train students to develop landscape design skills for small-scale urban voids and public spaces in the urban context. With this goal, the studio is structured around an interactive studio environment where students can encounter different design problems and provide novel design proposals for a specified design problem. Landscape Design I Studio aims to encourage critical thinking on understanding and interpreting "place", to reveal the actions of producing and designing new spaces, to gain design practice and to discuss representation problems related to this and to develop new methods. With this respect, the studio includes iterative studies to understand the design process and hybrid solutions to common conceptual design problems. The studio investigates landscape design methods and approaches, based on morphological, experiential and visual, to develop spatial landscape settings with diverse programs and functions. The studio helps students develop spatial literacy, representation of landscape and critical design thinking. The objective of this studio is to gain an understanding of the design process and hybrid solutions to common conceptual design problems. The studio includes two main modules. The first module investigates small-scale design interventions in public space under a specified site context and theme. The second module includes landscape design practices developed for characteristic sites of Istanbul and a search for creative solutions to integrate those spaces into daily urban life.*

# Think, Feel, Breathe, Heal

Betül Eylül Akkaya

*"Think, Feel, Breathe, Heal" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Çisem Demirel under the title "Garden Explorations" in the spring semester of 2018-2019.*

*To heal*

***Water tone and healing herbs help cure***

*To spend time*

***To spend time with neighbors and watch the landscape***

*To meditation*

***Relax and to spend time together***

*To plant*

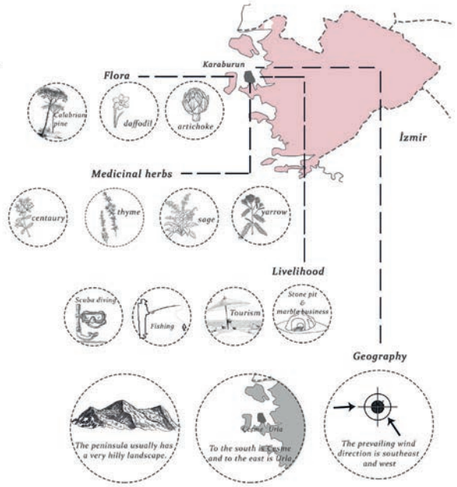
***Provides more natural nutrition***

*To inspire*

***The garden is not just an escape and physical activity area. Helps awaken the mind.***







***Gupset is the author.***
***She has a obsessive compulsive cleaning disorder.***
***She divorced and moved to Izmir with his daughter.***
***Her son is a scientist in Japan.***
***Her ex-husband is a traveler.***
***Her daughter is a student studying in Istanbul. In summer she comes to her mother.***

***Gubset allocates 40 hours of cleaning per week.***

***Gupset wakes up early in the morning to do the cleaning.***

***Denef gets up late and reads a book and spends time in bed.***

***Spends most of her time with his mother. Because of his mother's illness, Denef usually makes purchases.***

***Sometimes they spend some time at home***

***Denef loves her room so she can spend time in her room while her mother is working and cleaning.***

***Denef meditates together to help his mother heal.***

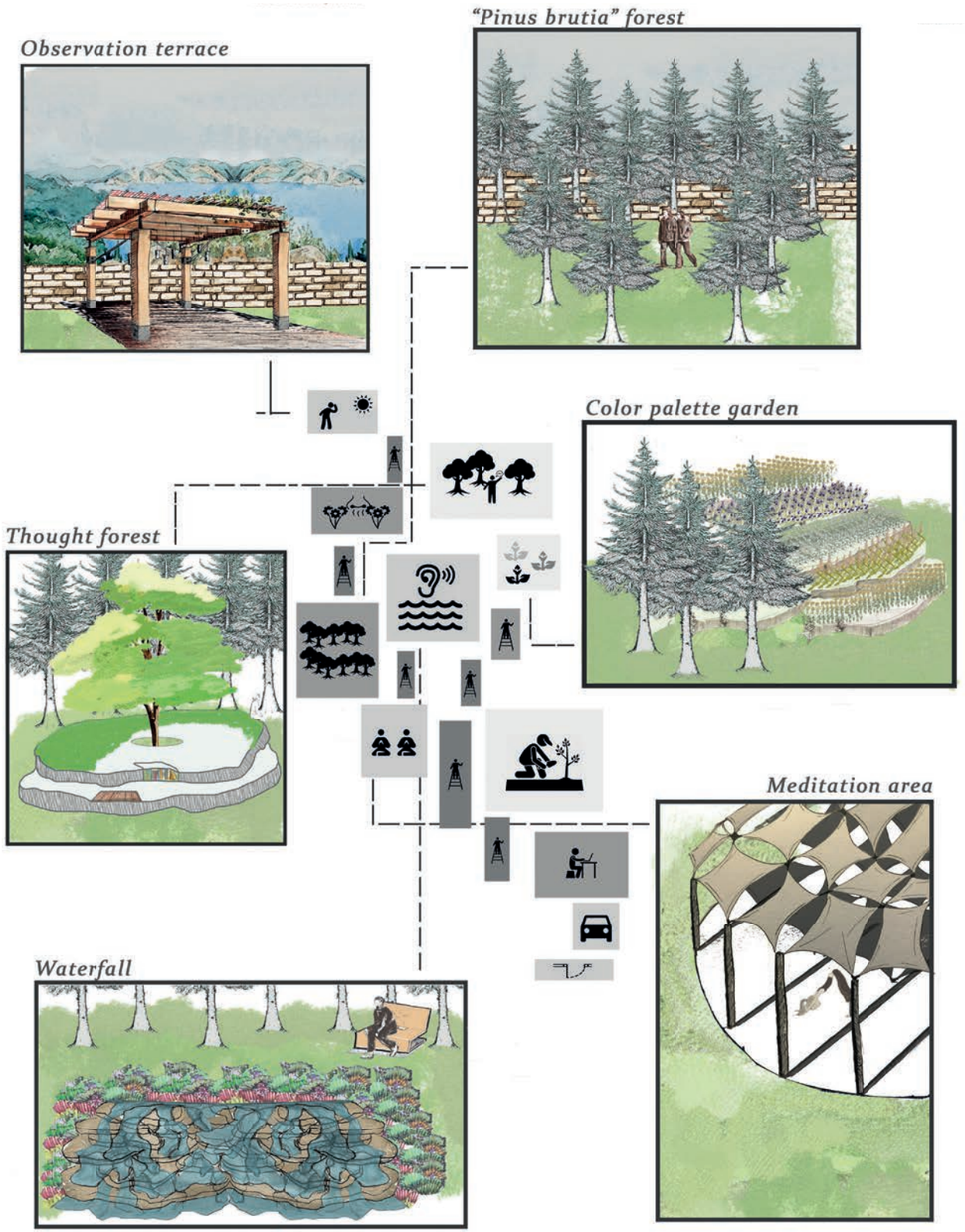
***Gupset and Denef eat together all meals***

***In winter, Denef returns to Istanbul and someone comes to help his mother***

***Divorce and meditation brings them closer and become close friends instead of mother-daughter***

Planting area
Fragrance garden
thymus vulgaris
crithmum maritimum
anethum graveolens
melissa officinalis
salvia officinalis
teucrium chamaedrys
foeniculum vulgare
cnicus benedictus
Color palette garden
achillea millefolium
lavandula stoechas
hypericum perforatum
Thought forest and fence
pinus brutia
laurus nobilis
pistacia terebinthus

1/200
PLAN
N


Observation terrace
"Pinus brutia" forest
Color palette garden
Thought forest
Meditation area
Waterfall

# A Penny for Your History

Betül Eylül Akkaya

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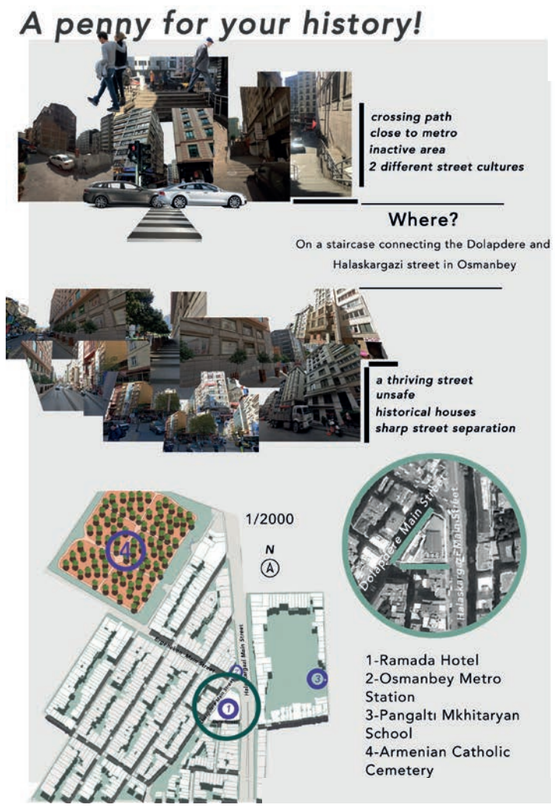
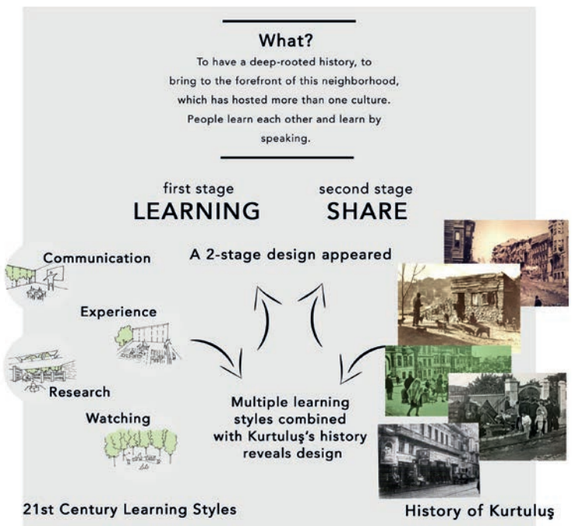
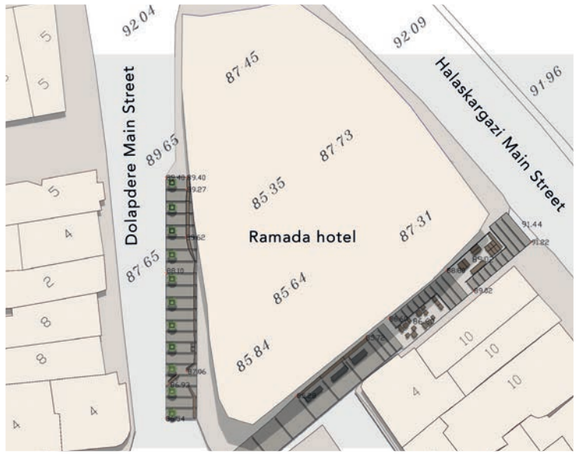
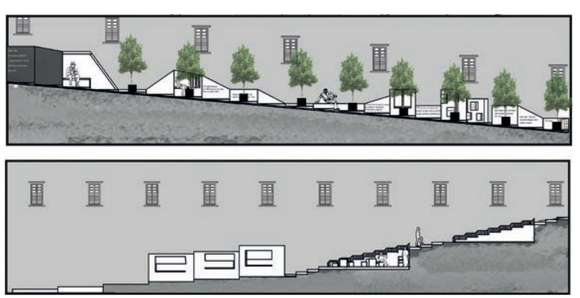
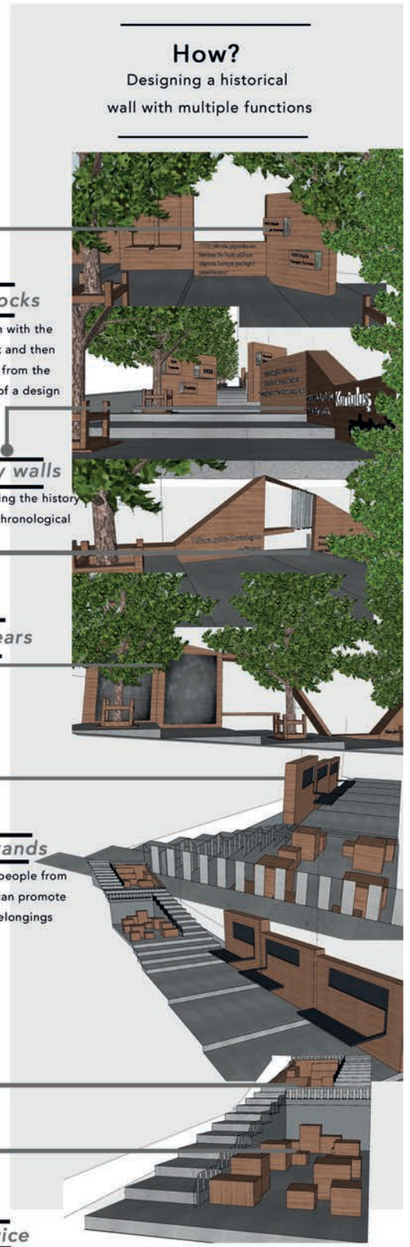









**When?**
All hours of the day

**Who?**
Armenian
Greek
Turkish

# Gatheraround Garden

Ayşe Ceren Yeşilbaş

*"Gatheraround Garden" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Çisem Demirel under the title "Garden Explorations" in the spring semester of 2018-2019.*

## General Features of the Area

The house and it's garden are located in Italy. The house was built in the forest 30m high from sea level. It takes 10 minutes to reach the beach, there is a rock path and stairs which lead people to the beach. In the forest, there is just a few number of houses, that's the reason why beach is never be too crowded. There are only few parasols in there. There is a dock to tie conoes and let people to jump to the water. Sea is not too deep. The garden is surrounded by oak and pine trees. Different species of birds can be seen in the area.

## Climate

A Mediterranean climate is characterized by rainy winters and dry summers, with less than 40 mm of precipitation for at least three summer months. While the climate receives its name from the Mediterranean Basin, these are generally located on the western coasts of continents, between roughly 25 and 38 degrees north and south of the equator. But the are where house is located is in a coastal area, so the soil is little more moist. The area takes rain in autumn but not as much as to ruin the trees in the garden. Also the region is mostly in the celcius of 18 to 25 degrees.

## Activities

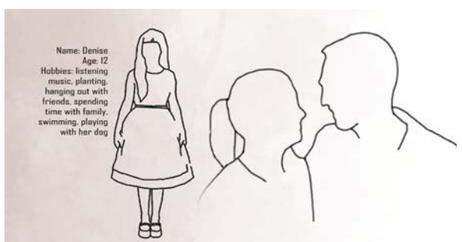
By the help of the location, there area can be defined as a place where you can do many activities such as: market shoping, swimming, relaxing in the beach, sunbathing, jogging in the forest, walking in the coastline, coneing and etc.
The area is a place where you can find the many beauties of nature all together. Oaks, pines and other species can be seen in the huge forest. There is a small bazaar/market is located in the coastline for the urgent needs of the few families who live in the area or for the visitors.

market shoping

swimming & relaxing in the beach

jogging in the forest

coneing




## Garden Design

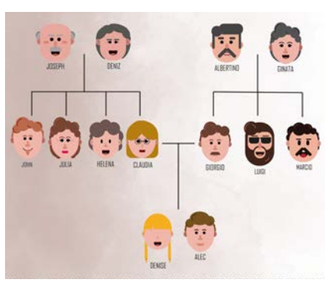
The garden was planned for the Brambilla family, who lives in Italy. The mom Clauida loves doing yoga, swimming and meditating. The dad loves to read his books on hammock and relax underneath the trees. Alec loves to play football and swim in the pool. Denise loves to sit next to water elements, planting and spending the in the garden with beautiful plants. Also the family needs a space to host the crowded family. So the area designed for the needs of the family.

### Program

-Meditation Area
-Swimming Pool
-Planting Area
-Fruit Gardens
-Doghose for Bob
-Veranda
-Pergola
-Hammock Area
-Transition to Forest
-Sensory Garden
-Common Space
-Secret Garden

### How to Design?

The garden has to be designed while considered the needs of Denise. The area was huge and it had to be designed in a detailed way to avoid Denise to have trouble while spending time in the garden. Stairs are designed in the same width in the whole garden. In the areas which might let her fall, gravels are used to warn Denise. Little dots are made in the floor next to stairs to inform her that stairs are in front of her.








## /Sensory Garden Idea

### //Why?

A sensory garden is a garden environment that is designed with the purpose of stimulating the senses. These types of gardens are popular with and beneficial to both children and adults, especially those who have sensory processing issues, including autism and other disabilities. Denise is a blind girl, so the family wanted a garden which let their daughter can experience different senses. Except seeing, there are 4 senses: touching, hearing, tasting, smelling.

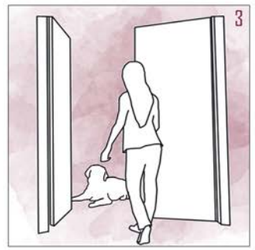
### //How?

In the design of the garden planting areas are created to plant different species. Also some plants with different textures were used. The plants which create sounds by the help of the wind were used, also in sensory gardens water elements are commonly seen, in this garden water elements were also used. For the sense of tasting, different species of trees and plants were used, also the planting area will enable the tasting sense. Lastly for smelling, beautiful plants such as lavander that can be easily seen in Mediterranean area were used.

### Storyboard

Denise wake up in her queen sized bed. She heard Claudia and Giorgio's laughters from their room. She always loved Sunday's, beacuse it was the only day that she can spent time with her parents all day long.

After few minutes, she got up and walked through the window. She opened her window and the fresh air rushed inside. She felt the breeze in her face, smelt the delicious smell of newly baked bread coming through the breakfast table in the garden.

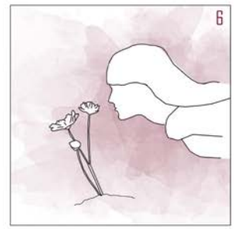



After having a family breakfast, Denise passed to the huge green garden. Bob passed near her and threw himself to the lawn. Denise noticed that he wanted to play. She plays with him for almost half an hour. While she was playing with Bob, Giorgio was already started to read his his book.

Denise called Claudia to plant the strawberry seeds that they bought from the villager market. Denise really loves feeling the soil, when she touches the ground she believe that she can feel all the beauties in the world. She felt the butterflies in the tummy.

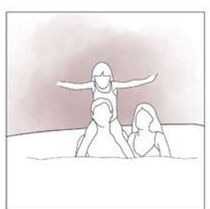
After the planting, Claudia and Giorgio started to watch their favourite tv show: Friends. Claudia stops the show and her eyes started to search where Denise was. Denise was listening the peaceful voice of the fountain. She sit there for a few hours, while Claudia and Giorgio was finishing the season 7 of 'Friends'.

A normal day of Denise is spent as it's shown. The garden was not specifically designed for Denise but her special needs had to be considered while designing. Being disabled is not a disability to live the life in best way. The biggest disability is the boundaries we put in front of us. Denise might have started the life in disadvantaged a way but in years this garden will help her to understand how lucky she is to be alive in a world with thousands of natural beauties.




It was almost the lunch time. Denise was little tired because the sun was up. One of the maids calles Denise to lunch, she was waiting for this moment, she hold the arm of the maid and they started to walk throught the dining room from the garden. While walking to the garden Denise smelt a wonderful smell. She approached to the flowers, fulfilled her lungs with that incredible smell.

She spent the rest of the day with her family and her dog Bob. It was almost 7pm and the wind started to blow, but Denise wanted to pick the tomatoes that they've planted a few weeks ago. By the help of her mother Claudia, they collected the tomatoes for the dinner. Denise taste one of them and they were delicious. The maid helped her to carry the basket full of tomatoes. Claudia told the maid to wash the tomatoes for the dinner.



The families favourite activity is swimming, because Denise relaxes by the help of the water and also Claudia used to be a swimmer. She always tried Denise to love water. She achieved her goal.

Giorgi is a neuroscientist and a doctor. He loves reading books about neuroscience. He also follows the science magazines. He loves to spent his weekends reading books in the hammock.

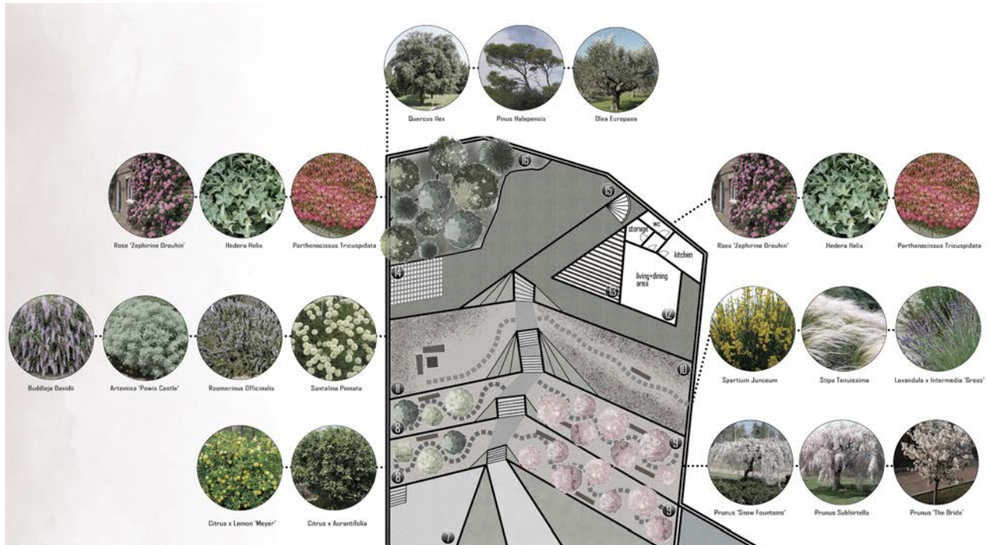
## /Other functions of the garden

The Brambilla family is quiet crowded. Claudia has two sisters and a brother. Also Giorgio has 2 brothers. Most of the family members are married and the have kids. This family's bonds are really tight. Even though some of the family members live in other countries, at least one in a month the family gather around for a weekend. They eat their meals in the garden with a lot of laughters while feeling a lovely breeze. They swim, they plant, they play football, they relax in the hammock. Also there is even a zen garden for meditation. Let's not forget the cute member of the house: Bob. There is a huge doghouse for Bob to rest.

Once or twice in a month, the whole family gather to the house. They always prefer this house beacuse they all love Italy and the house has a wonderful garden. The huge space in front of the house is contains a dining area and living area at outside. The table is always prepared by the maids. When the dining time comes, everyone eats delicious Italian foods and the laughters won't stop until the end of the night.

Claudia does yoga almost everyday to calm herself. She was an landscape architect and she lived in NYC years so she had a stressful life. Also the reason why they came in Italy was to life a peaceful life. So yoga is her bestfriend in Italy.

This is Bob's house but Bob never stays in the hut beacuse he loves Denise so much, sometimes he prefers to sleep in Denise's bed. His best friend is Denise.



## The GatherAround Garden

The garden consists of 16 significant areas. There are 3 veranda/pergolas for the members to dine and spend time together. There are two water elements in the area: one of them is the swimming pool which is located in front of the house and the other is in the Zen garden. Zen garden was designed as a place to fulfill the meditation need. Also there is secret area which you can reach by passing the citrus trees. It is for relaxation, hammocks can be find in there. In the upper parts of the garden a huge winter garden welcomes you, there is a fireplace in the dining/living room of the winter garden. Family loves to spend time in there because a beautiful view can be seen. There is a huge lawn area for Alec to play football with his friends.

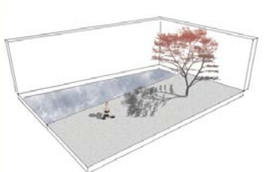
1: The house
2: Veranda
3: Swimming pool
4: Sunbathing area
5: Planting area
6: Zen garden
7: Secret garden
8: Fruit garden (citrus)
9: Fruit garden (prunus)
10: Sensory garden
11: Common space/Vista point
12: Winter garden
13: Veranda of the winter garden
14: Pergola
15: Lawn
16: Transition to the forest

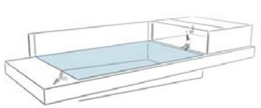
## The GatherAround Garden

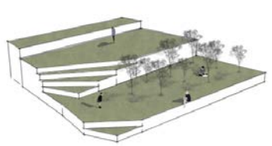
Also the sensory garden idea can be seen all over the garden. Next to the house there is a water element and planting area, by the rising level, fruit trees and sensory plants area can be seen. In the sensory garden level, plants with good smell, such as lavander can be seen. Also for the touching feeling mischantus and other grass types can be found. Also there is a common space area for experiencing the beautiful and natural view. It is one of the spectacular vista points in the garden.

## The Collages of the Garden

Three different and significant areas which are defining the characteristics of the garden. For meditation, an area was designed with gravel, water element and acer palmatum trees. Swimming pool was designed in two different levels to let Denise swim easily and safely. And the third collage was created to show how the level difference problem was solved. The difference was solved by terracing the whole garden while considering the natural topography to avoid ruining the nature.







# ZEK-exchange

Ayşe Ceren Yeşilbaş

*"Zek-exchange" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Çisem Demirel under the title "Garden Explorations" in the spring semester of 2018-2019.*

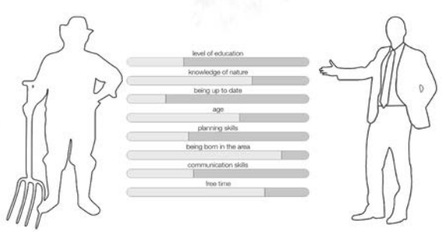
Zek-Exchange aims to bring together two distinct groups of people living in the Zekeriyaköy area. These groups primarily earn their income from two sources: (1) Agriculture & Husbandry, and (2) Other professions. The main goal is to create a space where these two groups can come together and exchange knowledge. People with different skills and interests can share their expertise. For example, in this space, farmers can teach the other group how to care for animals, grow simple vegetables and fruits, and learn to connect with nature. On the other hand, the more educated group, which is up to date with modern technology, can teach farmers how to use technology and stay informed. The concept aims to bring these two groups together in the same space to exchange skills and knowledge.

//Choosen 21st Century's Leaning Tecnique,
is the main method where people can learn anything, anywhere, anyhow. Communicating has a key role on education. Talking and exchanging information with others is benefitial for both sides.

being close to the nature, planting, jam making, tea collecting, being close to animals, knowing the area better, having more experience in life

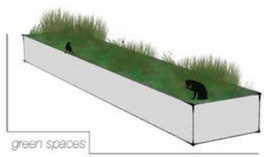
knowing technology well, having better planning skills, access to new selling techniques, being more update

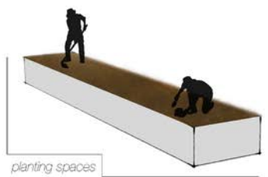
//Group I
These people mostly earn their incomes by farming. They are mostly poorly educated but they are skilled when it comes to work in the fields like agriculture, husbandry. Most of these people were born in the area -in the villages named Zekeriyaköy or Uskumruköy-, and continue to live in that area. They are into planting and most of the food that comes into their houses are organic because almost all of them are growing their plants in their frontdoors.

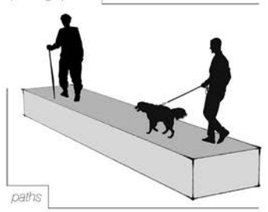



//Group II
These people mostly earn their incomes by working in the jobs which mostly require university diploma. They mostly prefer to become architect, doctor, engineer, managers etc. These group of people are mostly older than the age 40. They decide to move to this part of the city to get away to stress of the cosmopolitan city and they were probably did not born in the area. They live in the area to be more close to nature but they generally do not spend time with the nature enough.

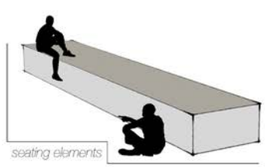
//Units


green spaces


planting spaces


paths

bio-swales


seating elements

## //Program

/spring&summer

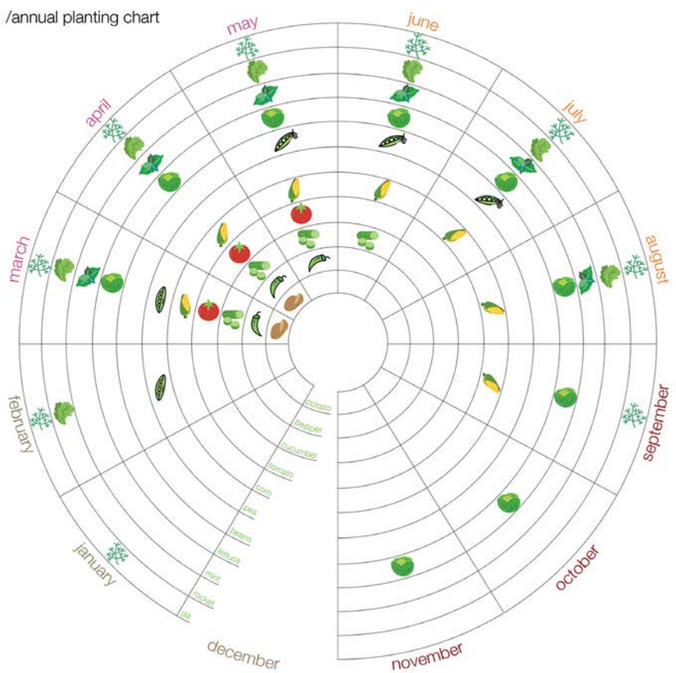
| monday | tuesday | wednesday | thursday | friday | saturday | sunday |
|---|---|---|---|---|---|---|
| 2 | 1 | 2 | 1 | 1 | 3 | 1 |
| 3 | 4 | 3 | 4 | 2 | 2 | 2 |
| | | | | 3 | | 3 |

/autumn&winter

| monday | tuesday | wednesday | thursday | friday | saturday | sunday |
|---|---|---|---|---|---|---|
| 2 | 1 | 2 | 1 | 3 | 1 | 1 |
| 3 | 4 | 3 | 2 | 4 | 2 | 3 |
| | | | | | | |

*1: planting, 2: tea collecting&drinking hours, 3: planting classes for children, 4: jam-tomatoe paste workshops*

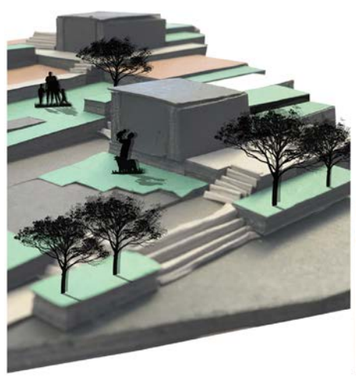
/annual planting chart

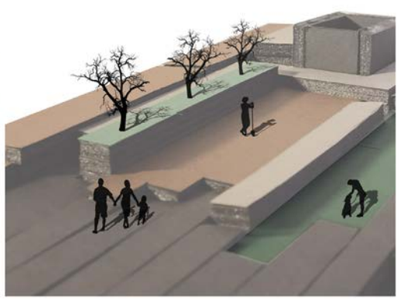


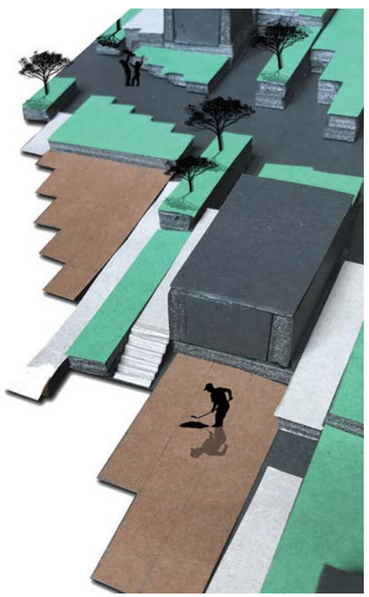





The area was designed to provide a natural atmosphere that brings together people with different lifestyles. Activities such as planting, participating in workshops, and enjoying the green spaces will allow everyone to embrace the beauty of nature in Zekeriyaköy. The common spaces will help people communicate and learn together.
These spaces will foster communication and learning while allowing people to connect with the beautiful surroundings. Additionally, people can enjoy the area in both winter and summer, as the common spaces are ready to welcome every visitor.



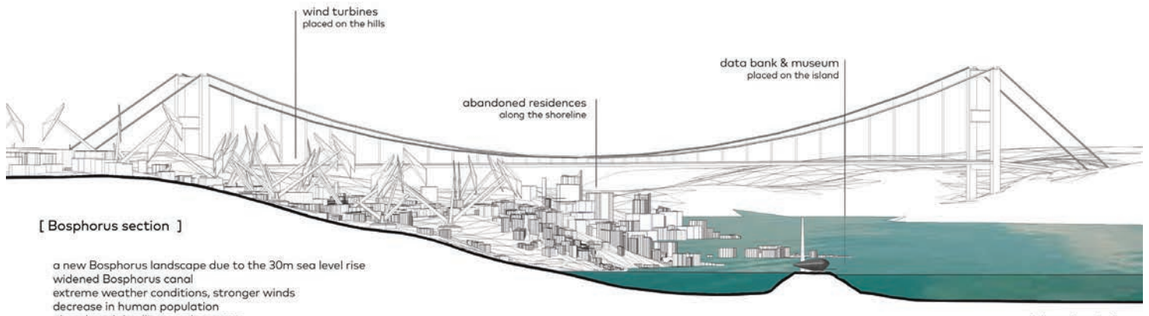




# Deadland

Arda Çoşan

*"Deadland" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*




[ Bosphorus section ]

a new Bosphorus landscape due to the 30m sea level rise
widened Bosphorus canal
extreme weather conditions, stronger winds
decrease in human population
abandoned dwellings under water
introduction of a new system to preserve
and sustain valuable coastal ecosystems

[ data bank ]

preserving the information of ecosystem studies
documentation of coastal experiments
a museum for the future

[ wind turbines ]

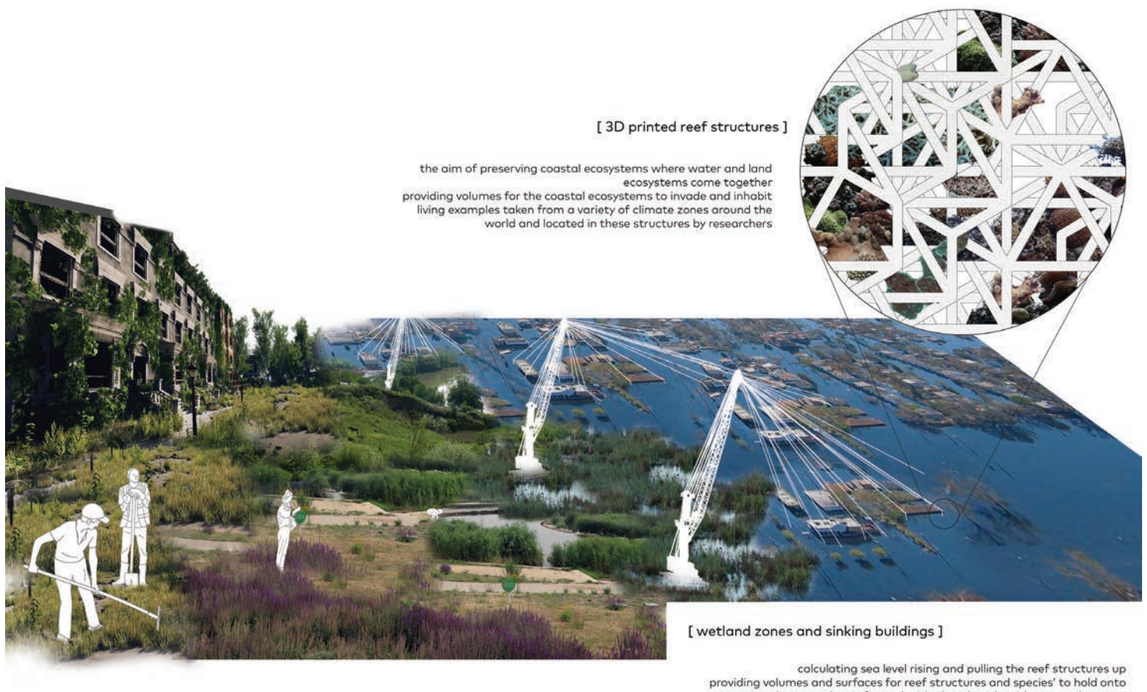
extreme weather conditions because of temperature level rise
strengthened winds blowing through the widened Bosphorus canal
producing energy from extreme weather conditions
renewable energy for a self-sustainable system
location of wind turbines on the hills where the water cannot reach
(above 65m level)





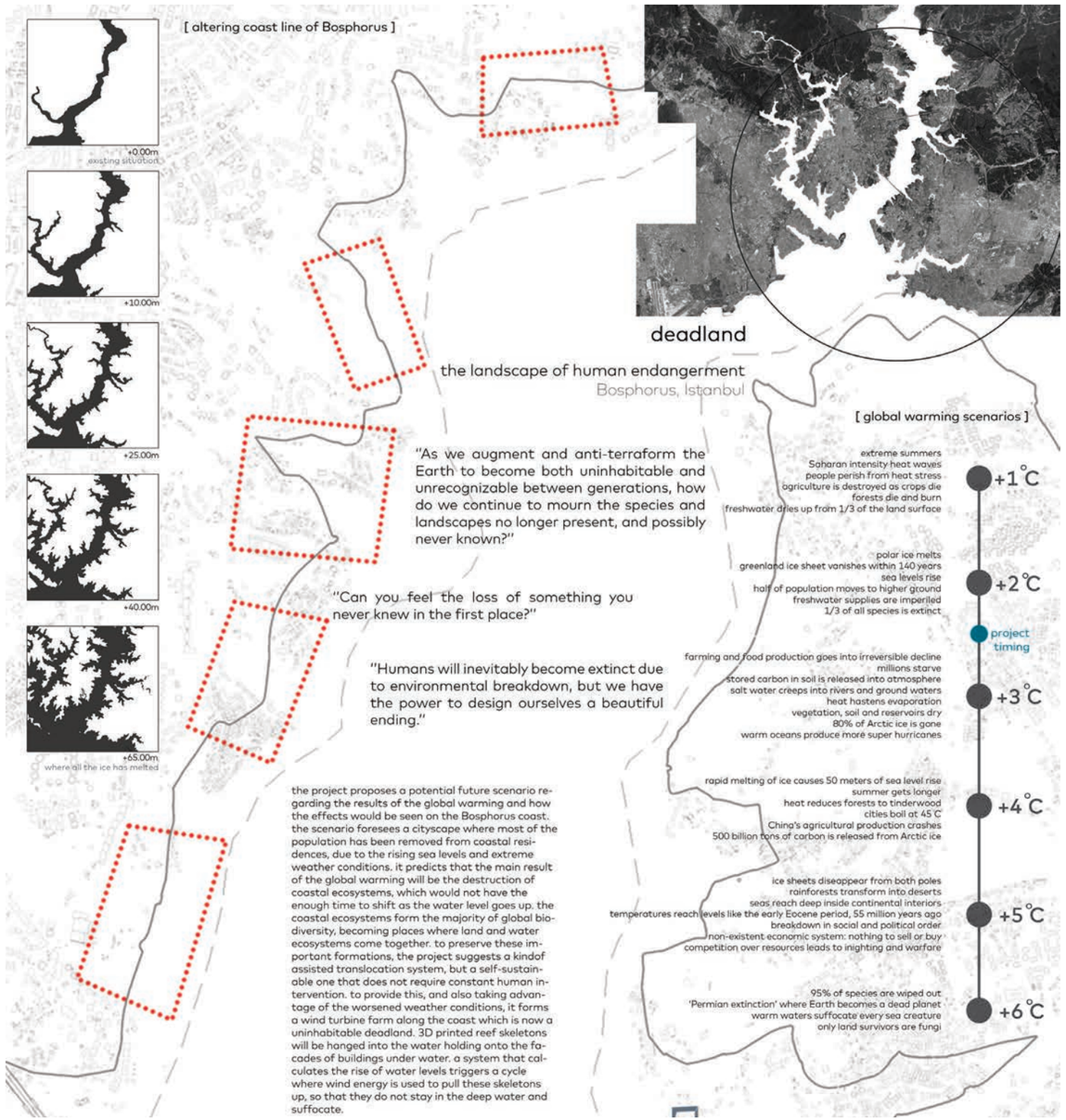
[ 3D printed reef structures ]

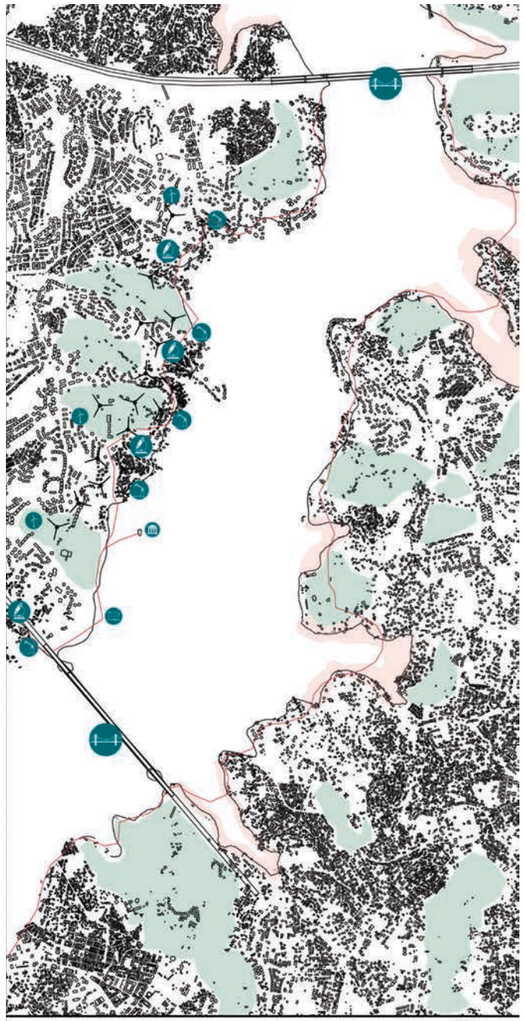
the aim of preserving coastal ecosystems where water and land ecosystems come together
providing volumes for the coastal ecosystems to invade and inhabit
living examples taken from a variety of climate zones around the world and located in these structures by researchers



[ wetland zones and sinking buildings ]

calculating sea level rising and pulling the reef structures up
providing volumes and surfaces for reef structures and species' to hold onto
new coastal texture that is formed with abandoned residences underwater


[ altering coast line of Bosphorus ]
+0.00m
existing situation
+10.00m
+25.00m
+40.00m
+65.00m
where all the ice has melted
deadland
the landscape of human endangerment
Bosphorus, Istanbul
"As we augment and anti-terraform the Earth to become both uninhabitable and unrecognizable between generations, how do we continue to mourn the species and landscapes no longer present, and possibly never known?"
"Can you feel the loss of something you never knew in the first place?"
"Humans will inevitably become extinct due to environmental breakdown, but we have the power to design ourselves a beautiful ending."
the project proposes a potential future scenario regarding the results of the global warming and how the effects would be seen on the Bosphorus coast. the scenario foresees a cityscape where most of the population has been removed from coastal residences, due to the rising sea levels and extreme weather conditions. it predicts that the main result of the global warming will be the destruction of coastal ecosystems, which would not have the enough time to shift as the water level goes up. the coastal ecosystems form the majority of global biodiversity, becoming places where land and water ecosystems come together. to preserve these important formations, the project suggests a kindof assisted translocation system, but a self-sustainable one that does not require constant human intervention. to provide this, and also taking advantage of the worsened weather conditions, it forms a wind turbine farm along the coast which is now a uninhabitable deadland. 3D printed reef skeletons will be hanged into the water holding onto the facades of buildings under water. a system that calculates the rise of water levels triggers a cycle where wind energy is used to pull these skeletons up, so that they do not stay in the deep water and suffocate.
[ global warming scenarios ]
extreme summers
Saharan intensity heat waves
people perish from heat stress
agriculture is destroyed as crops die
forests die and burn
freshwater dries up from 1/3 of the land surface
+1°C
polar ice melts
greenland ice sheet vanishes within 140 years
sea levels rise
half of population moves to higher ground
freshwater supplies are imperiled
1/3 of all species is extinct
+2°C
project timing
farming and food production goes into irreversible decline
millions starve
stored carbon in soil is released into atmosphere
salt water creeps into rivers and ground waters
heat hastens evaporation
vegetation, soil and reservoirs dry
80% of Arctic ice is gone
warm oceans produce more super hurricanes
+3°C
rapid melting of ice causes 50 meters of sea level rise
summer gets longer
heat reduces forests to tinderwood
cities boil at 45°C
China's agricultural production crashes
500 billion tons of carbon is released from Arctic ice
+4°C
ice sheets diseappear from both poles
rainforests transform into deserts
seas reach deep inside continental interiors
temperatures reach levels like the early Eocene period, 55 million years ago
breakdown in social and political order
non-existent economic system: nothing to sell or buy
competition over resources leads to inighting and warfare
+5°C
95% of species are wiped out
'Permian extinction' where Earth becomes a dead planet
warm waters suffocate every sea creature
only land survivors are fungi
+6°C



secondary succession areas
( former groves )

wetland zones
( former valleys )

primary succession zones
( former residences )

wind turbines

robotic arms that pull the steel cables and the 3D reef structures

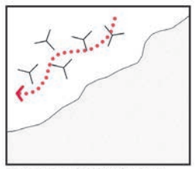
ecological processes research volumes

coastal elevated pathway

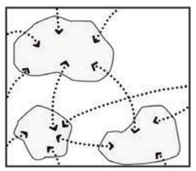
data bank & museum

bosphorus bridges

[ responsive solutions ]

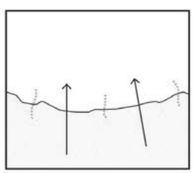


producing motion energy from wind
for the aim of a self-sustainable system



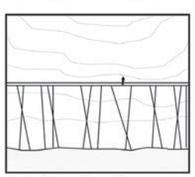
patch relations between primary and secondary succession zones

low level salty water zones that are encouraged by cove structures and stream



natural movement of the species
accelerating this movement with a system

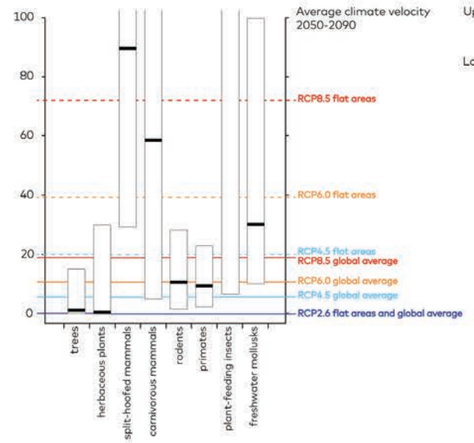
the formation of naturally formed coves (former valleys) as wetland zones



elevated human intervention

[ species ]

[ maximum speed at which species can move km/decade ]



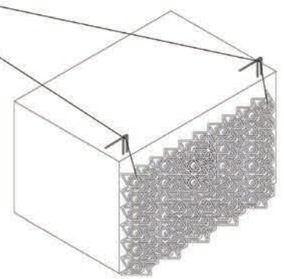

assisted translocation (assisted migration, managed relocation, assisted colonization) theory suggests to relocate species that have no ability to adapt to rapid climate change, in order to preserve lands, waters and biodiversity. assisting native spe cies moving upslope, poleward or toward climate refugia alows climate adaptation. species that are not capable of shifting their habitats at the same pace as the climate change become most vulnerable and potentially extinct, therefore in need of assisted migration. but many of these species will be unable to track suitable climates under mid- and high-range rates of climate change. such action is risky and debatable, but it may be considered as the only option left for specific species.

[ assisted translocation of species ]

extreme weather conditions
wind canalized through Boshporus
self-sustainable energy production from wind which later will be used for pulling the reefs up

transformation of wind energy to motion energy
pulling of the reef skeletons using the wind systems that do not require human assistance
self-sustainable

steel cable legs
big scaled, monumental landscape elements
calculating of the sea level rise
and pulling the cables at the same velocity



3D printed coral reef skeletons
surfaces for coastal ecosystems to hold onto
utilization of the facades of buildings under water
hanged with steel cables
movable and modular

[ abondoned residences ]

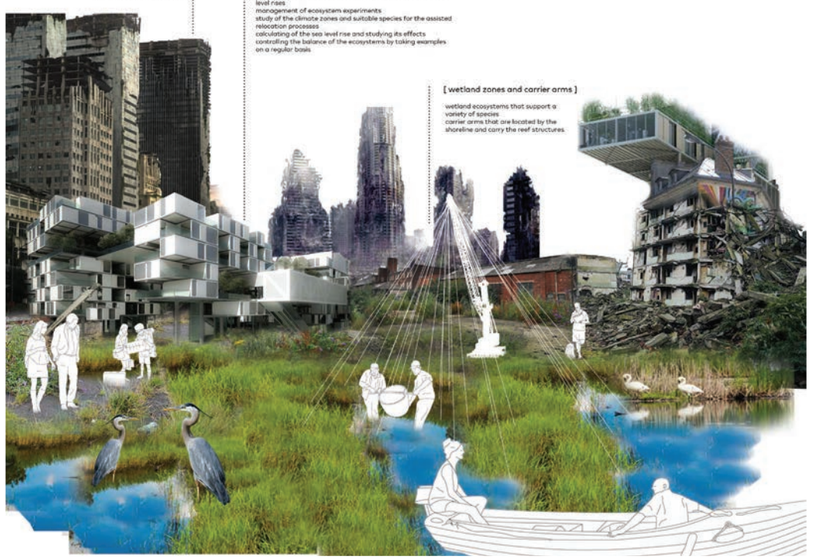
migration from coastal areas to the inner zones and decrease in human population zones for primory succession

[ mobile ecosystem research stations ]

stations that locate by the shoreline
used by researchers and scientists
mobile structures that can be easily relocated when the water level rises
management of ecosystem experiments
study of the climate zones and suitable species for the assisted relocation processes
calculating of the sea level rise and studying its effects
controlling the balance of the ecosystems by taking examples on a regular basis

[ wetland zones and carrier arms ]

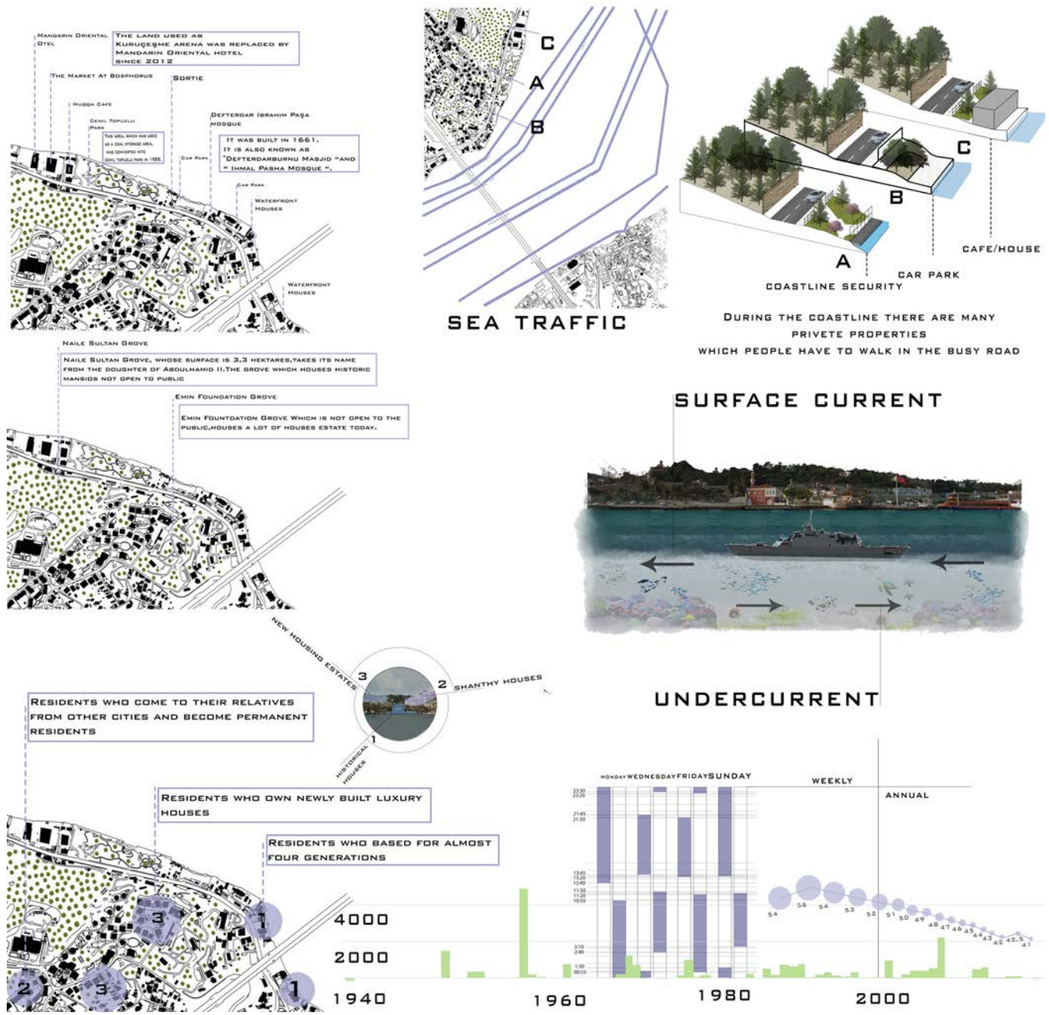
wetland ecosystems that support a variety of species
carrier arms that are located by the shoreline and carry the reef structures

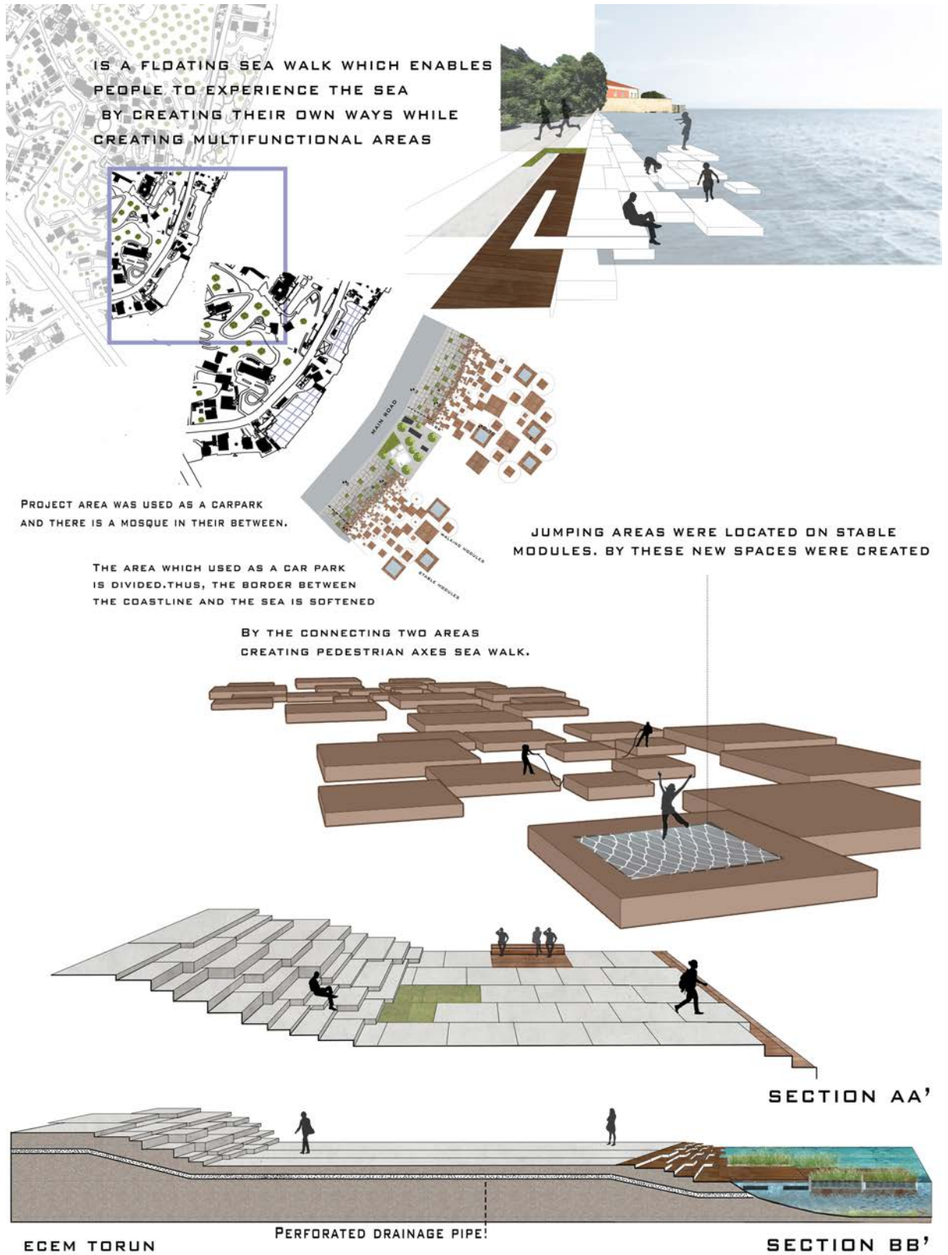


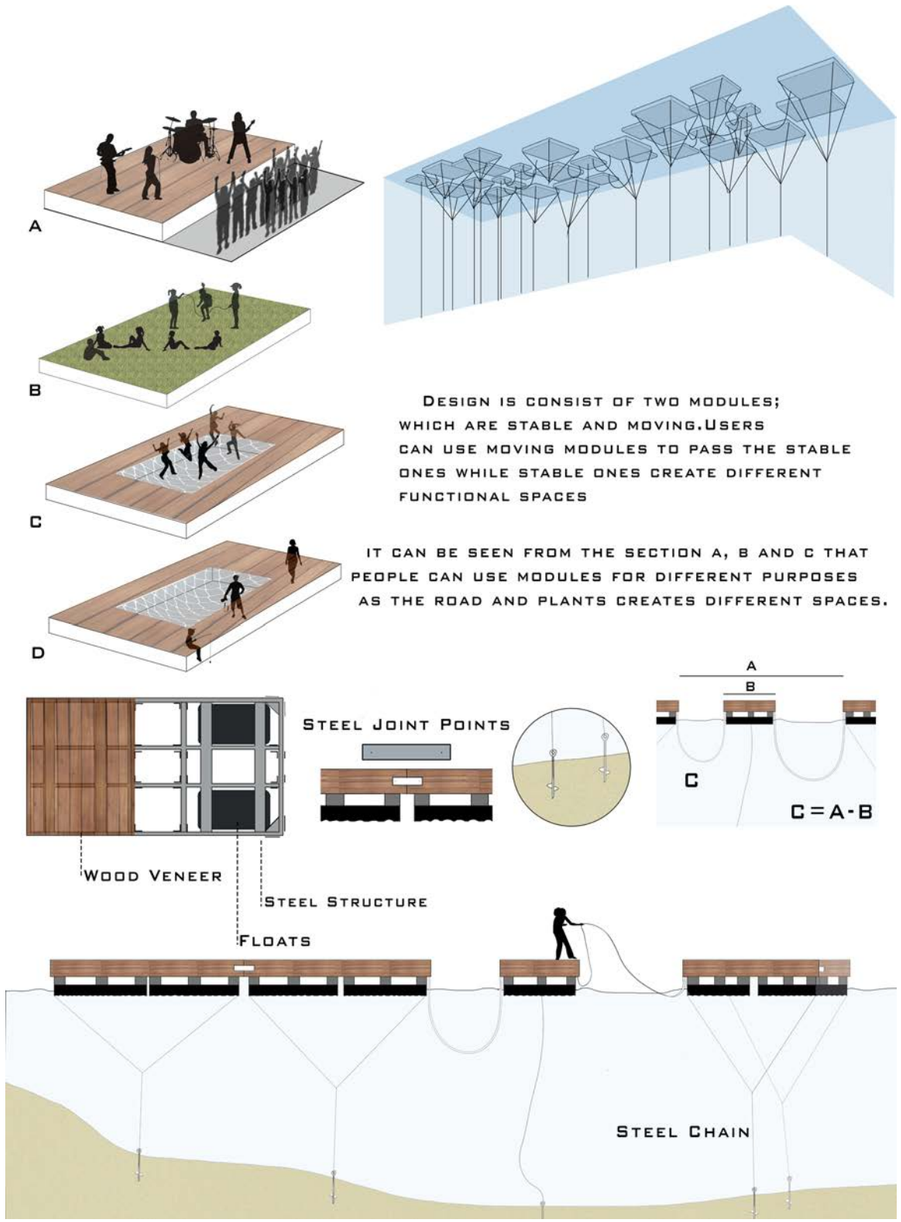
# Walking Modules

Ecem Torun

*"Walking Modeules" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*



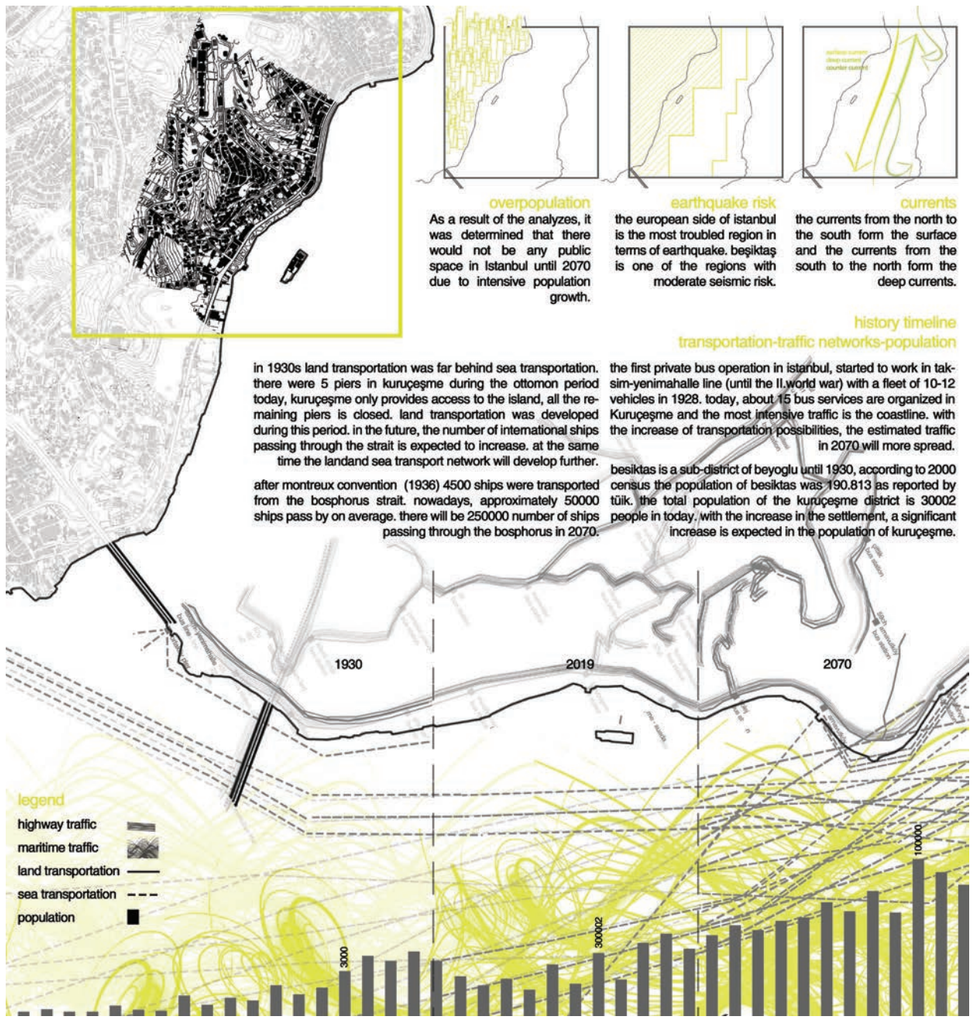

IS A FLOATING SEA WALK WHICH ENABLES
PEOPLE TO EXPERIENCE THE SEA
BY CREATING THEIR OWN WAYS WHILE
CREATING MULTIFUNCTIONAL AREAS
MAIN ROAD
WALKING MODULES
STABLE MODULES
PROJECT AREA WAS USED AS A CARPARK
AND THERE IS A MOSQUE IN THEIR BETWEEN.
THE AREA WHICH USED AS A CAR PARK
IS DIVIDED.THUS, THE BORDER BETWEEN
THE COASTLINE AND THE SEA IS SOFTENED
JUMPING AREAS WERE LOCATED ON STABLE
MODULES. BY THESE NEW SPACES WERE CREATED
BY THE CONNECTING TWO AREAS
CREATING PEDESTRIAN AXES SEA WALK.
SECTION AA'
PERFORATED DRAINAGE PIPE!
ECEM TORUN
SECTION BB'


A
B
C
D
DESIGN IS CONSIST OF TWO MODULES;
WHICH ARE STABLE AND MOVING.USERS
CAN USE MOVING MODULES TO PASS THE STABLE
ONES WHILE STABLE ONES CREATE DIFFERENT
FUNCTIONAL SPACES
IT CAN BE SEEN FROM THE SECTION A, B AND C THAT
PEOPLE CAN USE MODULES FOR DIFFERENT PURPOSES
AS THE ROAD AND PLANTS CREATES DIFFERENT SPACES.
STEEL JOINT POINTS
A
B
C
C=A-B
WOOD VENEER
STEEL STRUCTURE
FLOATS
STEEL CHAIN

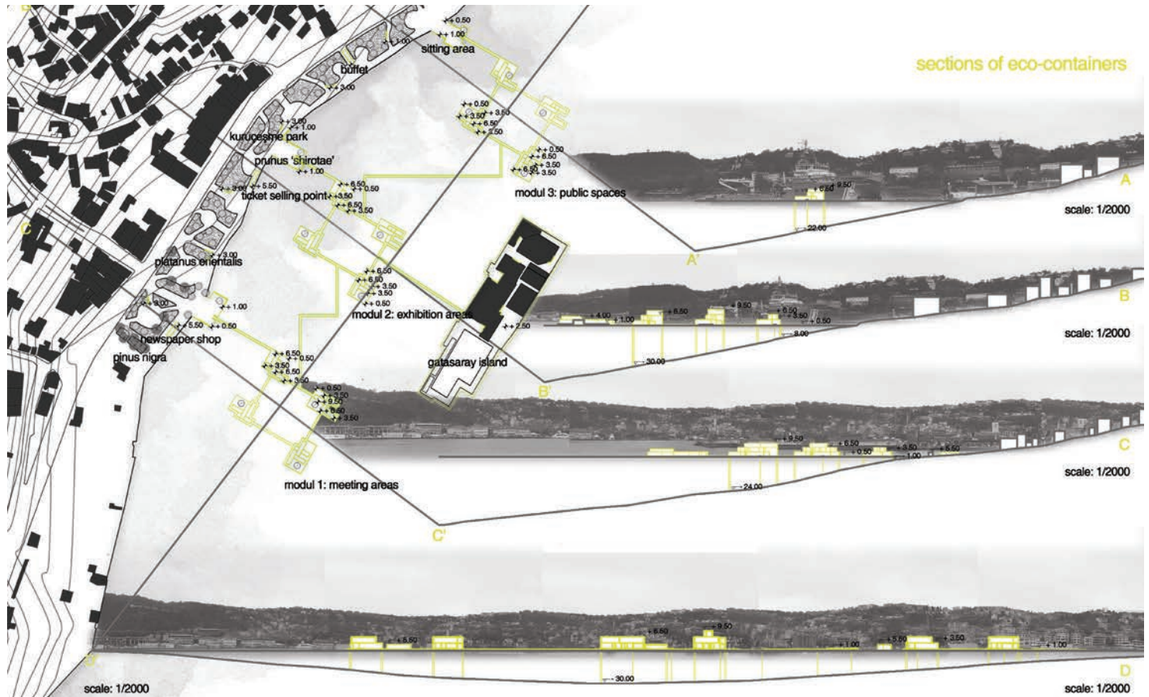
# Eco-Containers

Yağmur Özgüner

*"Eco-Containers" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*

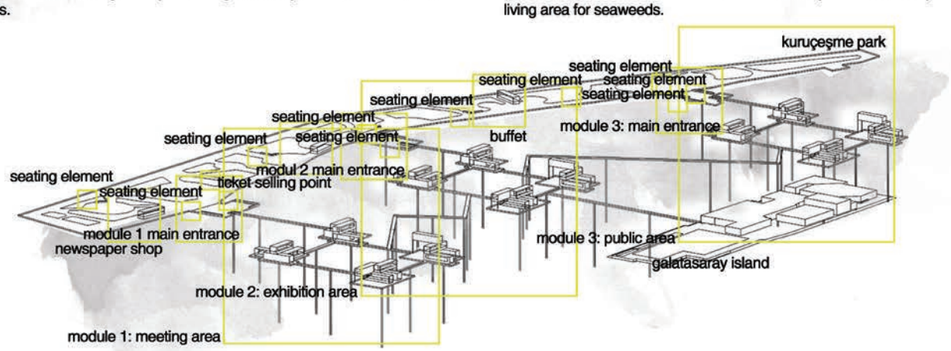





as a result of the analysis, it is expected that 2070 kuruçeşme will not have a public space. heavy traffic and rapid population growth are the main reasons for this. as a solution to all these, it has been proposed a public space system that consisted of various modules. the eco-containers, named by the containers carried in the busy maritime traffic, give a new look to the istanbul's coast line. the design, which is located between kuruçesme park and galatasaray island, consists of 3 main modules.

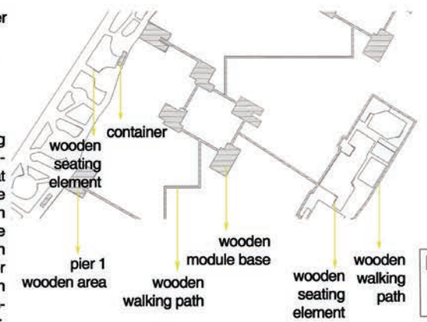
these 3 main modules have 3 different works among themselves. first module consists of meeting areas, second module consists of exhibition areas and the third one consists of public areas. each module is divided into four different zones. these zones, which come together with different arrangement of containers, define different places to users. Wood is selected for the upper surface of the design. the construction of the eco-containers which made by stainless steel provides a new living area for seaweeds.



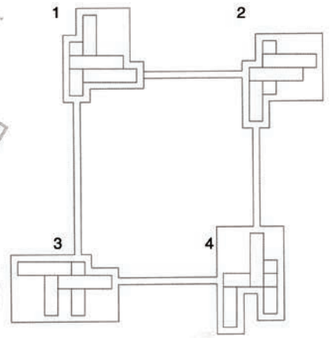
## planting detail

Prunus 'Shirotae' is a flat-topped, deciduous flowering cherry that typically grows to 15-20' tall. It is a medium-sized tree with horizontally spreading branching that often dips close to the ground. Mildly fragrant semi-double white flowers with 5-11 petals bloom in profuse clusters in spring (March-April) when new growth is emerging. Ovate to elliptic leaves with aristate teeth emerge pale green tinged with bronze in spring, turn dark green by summer and finally display attractive shades of orange and red in fall. No fruits are produced by this cultivar. 'Shirotae' translates as snow white in reference to flower color.

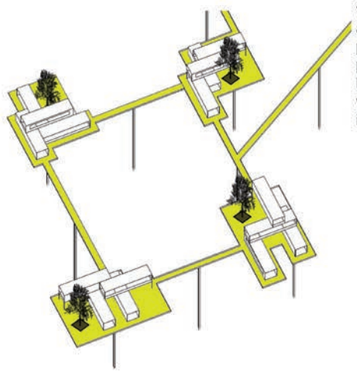
## material details




## defined areas




## planting on containers

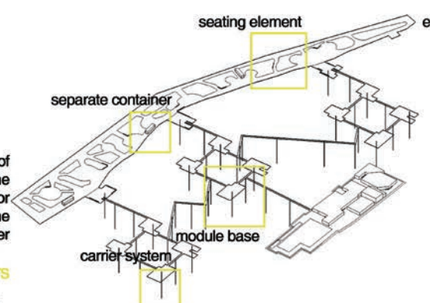


a minimal touch was made to the design by using 1 type of plant, prunus 'shirotae' in the design. also layering of the plantation was made. this cherry tree, which is famous for its white and showy flowers, provides a different look to the design in spring-summer

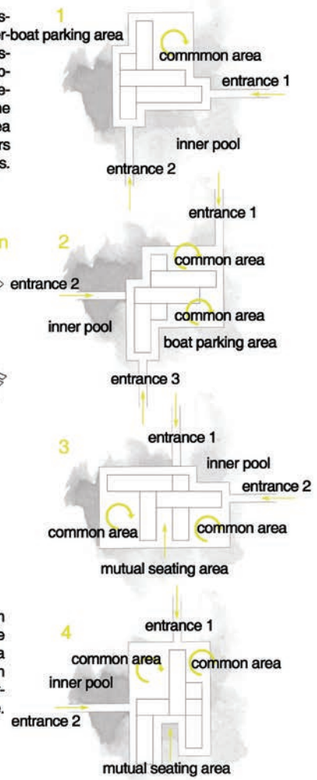
## planting layers

The main purpose of selected wood is, its weight and it is resistant to all types of resistance. designed by taking into consider-ation the strong current, wave intensity and climate of the bosphorus, the eco-ntainers adapt to the region with both their appearance and design details. a smooth material has been selected for easy walking. the wood is covered to the pier, the walkways and the base where the modules will sit. the park area is equipped with wooden seating elements and 3 containers with various tasks to ensure integrity in the bosphorus.

## construction

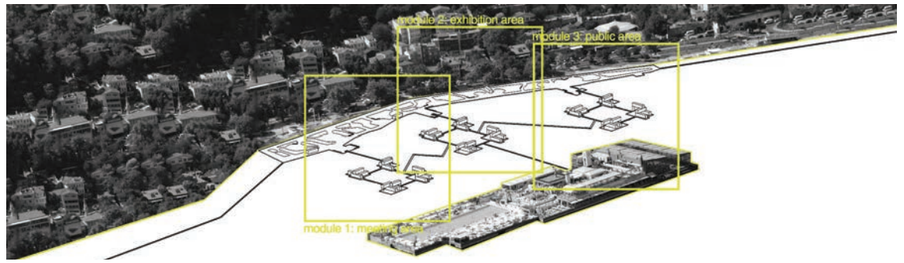



The design is made of stainless steel. the eco-ntainers, which are fixed to the bottom of the sea to stand on the water, provide easy walking for their visitors. at the same time, it provides a new habitat to the creatures under the sea with moss formation on their feet. the module bases are covered with wood to harmonize the walking line.

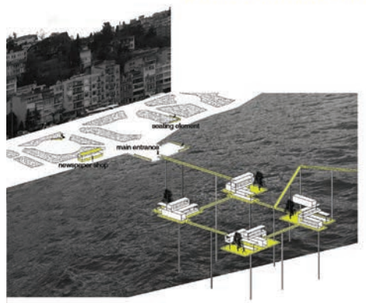




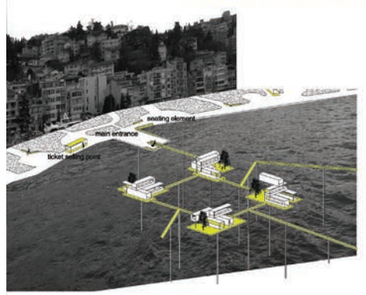


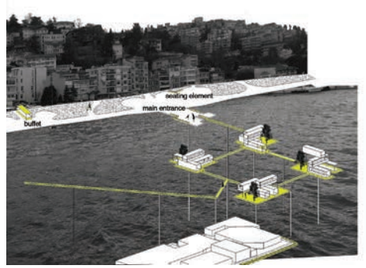

## module 1: meeting area



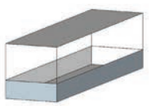

## modul 2: exhibition area



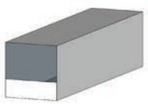

## module 3: public area



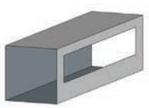

## container types



type 1: it is a type with 4 sides open and 1 meter tall walls. ideal for outdoor



type 2: it has only two sides open, the walls extending longitudinally. It ensures that the area has a dim light.



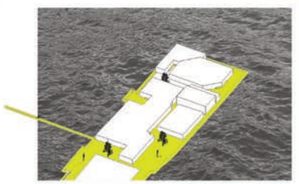
type 3: this container has 2 side open and window which is designed for more meeting area concept.

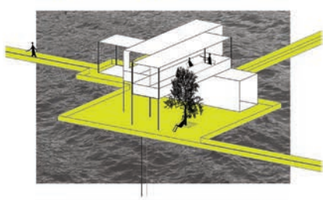
type 4: it has only the lower and upper cover. suitable for observing, watching.

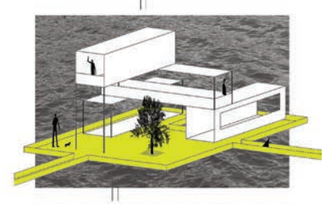
the design is located between kuruçeşme park and galatasaray island. the design, which consists of seating elements and units located in different areas of the park, modulates on water and defines different areas to the users. buffet, ticket selling point, newspaper shop are located on the park, while the meeting, exhibition and public spaces are located on the sea. all modules are composed of various combinations of 4 different containers.

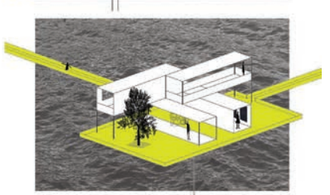
their entrance's define new areas in the coastline of bosphorus. there are seating elements in the entrances that take their forms from their areas. the first module, the meeting area, allows users to meet and and come together. the second module consists of exhibition areas. it provides its users with a floating exhibition on the bosphorus. the last module is a public area that provides meeting, relaxation, watching the bosphorus and so on.

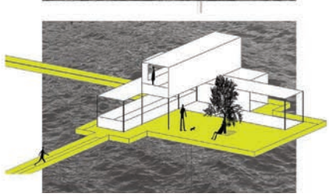
## collages







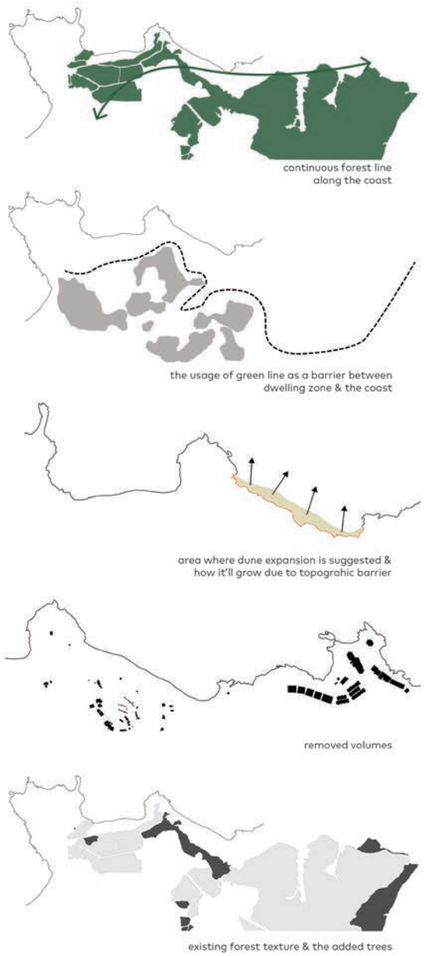


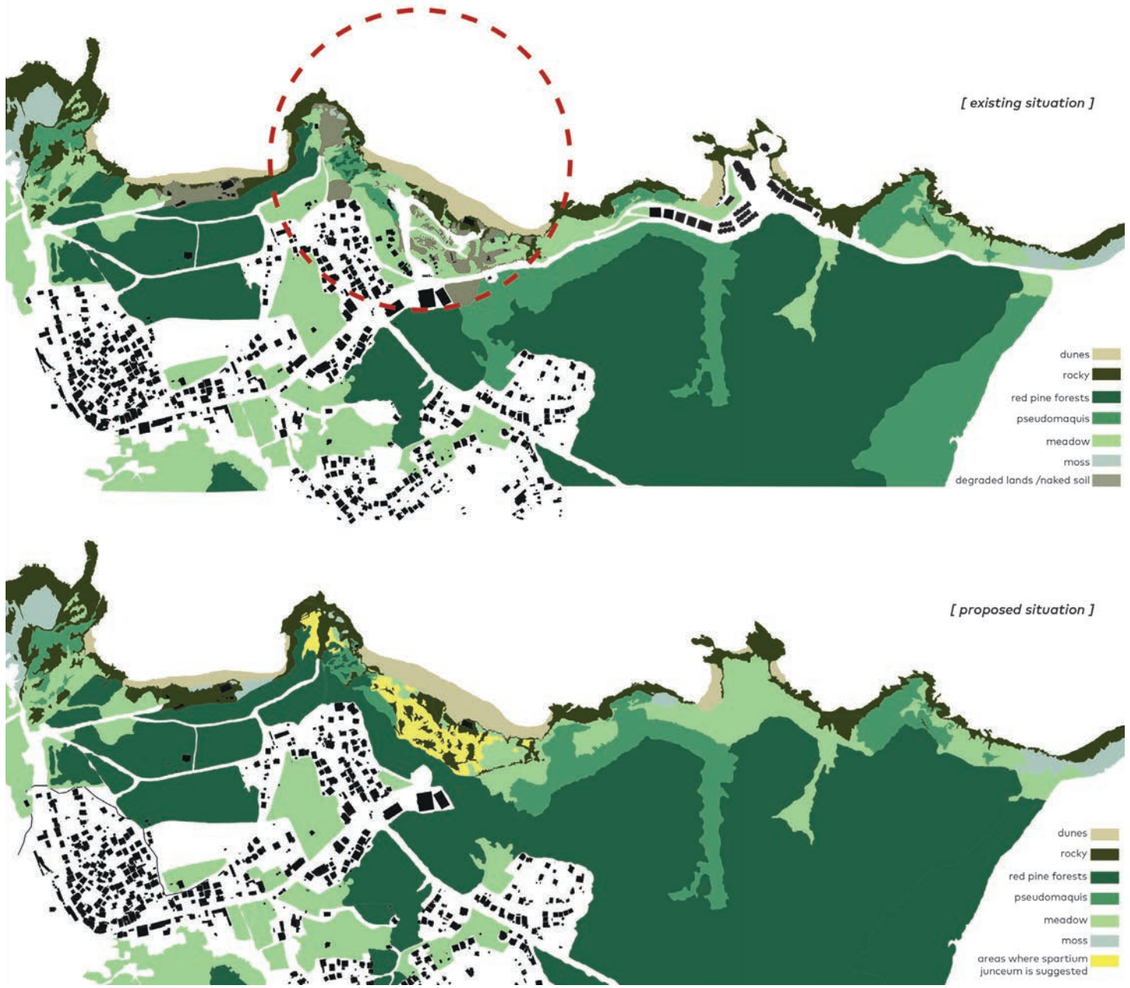


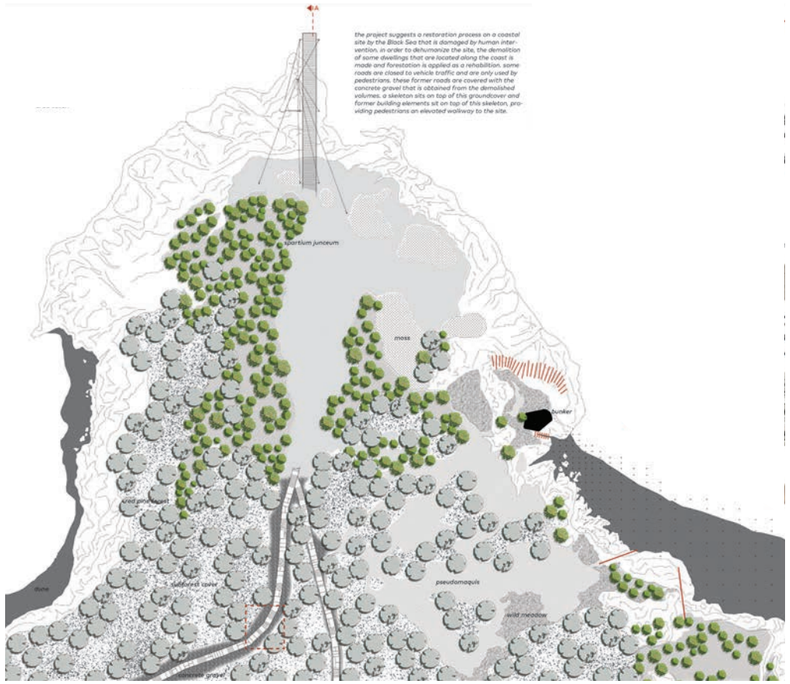
# The Restoration of Riva Coast

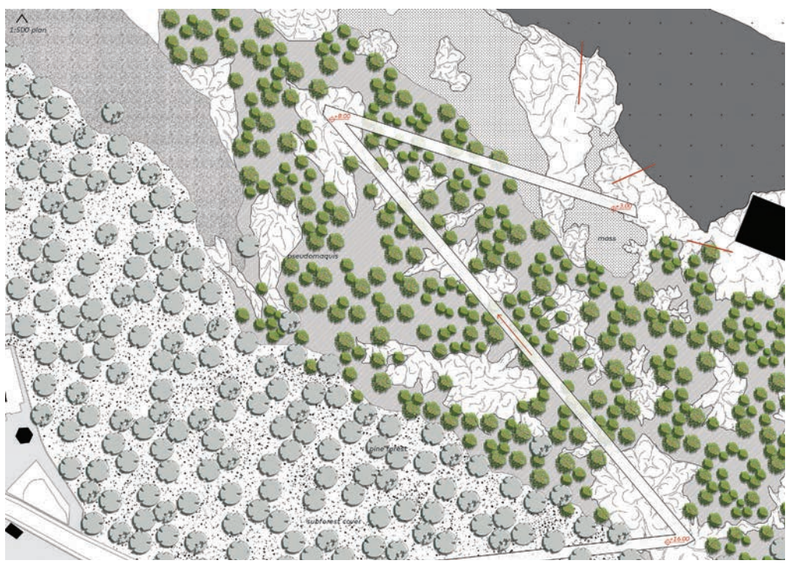
Arda Çoşan

*"The Restoration of Riva Coast" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*



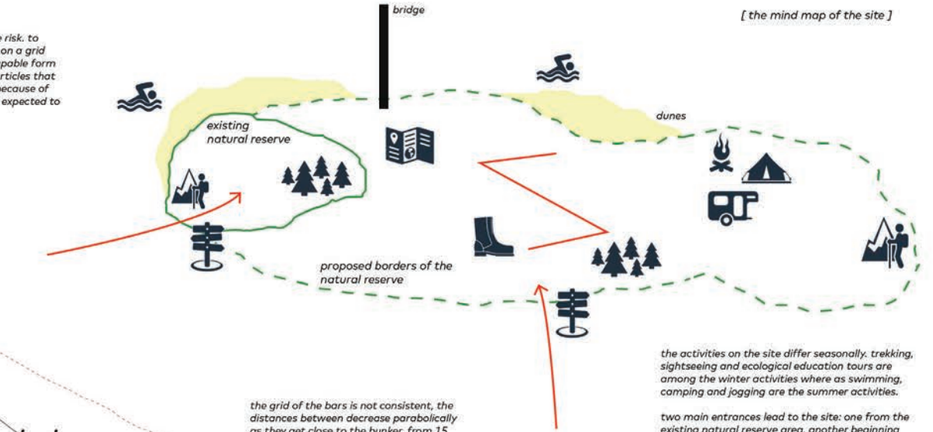



[ the placement of bars ]

due to the rising water levels, dunes on the site are facing disapperance risk. to maintain the dune characteristic of the site, vertical bars are proposed on a grid along the shore. these bars are formed as '+' shape, as it is the most capable form in order to block the wind from all directions. wind releases the sand particles that it carries as it faces an obstruction, and this causes the dune to grow. because of the natural topographic barrier that is formed by the rocks, the dune is expected to expand into the sea.

[ the mind map of the site ]




the activities on the site differ seasonally. trekking, sightseeing and ecological education tours are among the winter activities where as swimming, camping and jogging are the summer activities.

two main entrances lead to the site: one from the existing natural reserve area, another beginning from near the elemantary school.

the grid of the bars is not consistent, the distances between decrease parabolically as they get close to the bunker, from 15 meters to 50 centimeters. this also adds an installation characteristic to the bunker.

# [ the restoration of Riva coast ]

İstanbul, Turkey

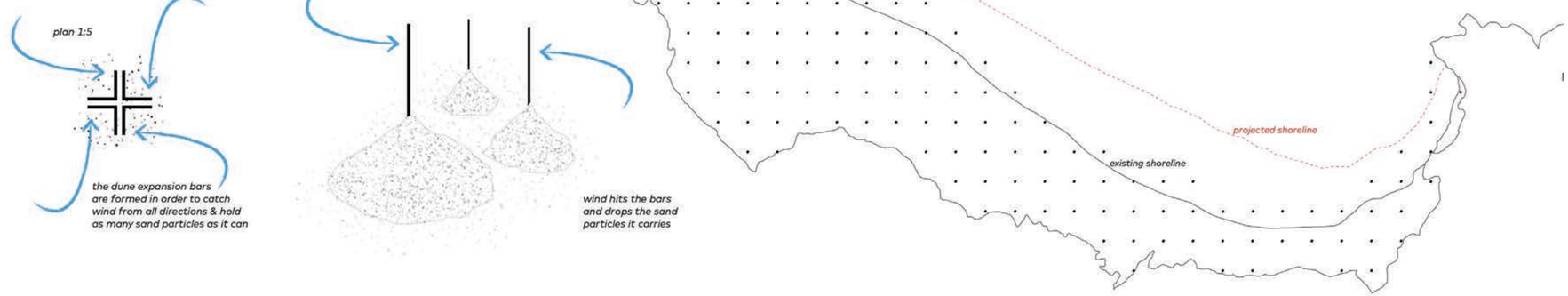
arda cosan




the dune expansion bars are formed in order to catch wind from all directions & hold as many sand particles as it can



wind hits the bars and drops the sand particles it carries



elevated permiable pathway -
spartium junceum suggested shoreline -
rocky characteristic -

- bridge
- addition of spartium junceum
  to define the space where it leads to the bridge
- observation of the landscape from the sea

the volume by the shore is maintaied with the function of a summer facility which accomodates and hosts visitors that come to the site for swimming.

the elevated pathway starts from the dwelling zone, near the elemantary school and leads to theshore, passing thrugh the pine forest.

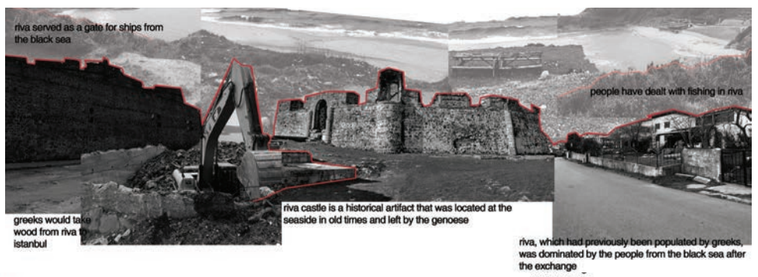
the forest zone acts as a barrier between the dwellings and the shore, which makes the site more secluded and isolated.

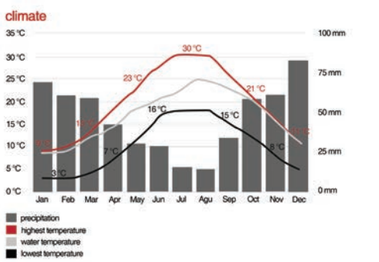
section B

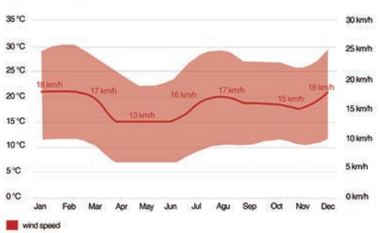
# The Riva Promontary

Ecem Torun, Yağmur Özgüner, Ecem Cengiz, İrem Özeltin, Ece Benan Tüllüoğlu

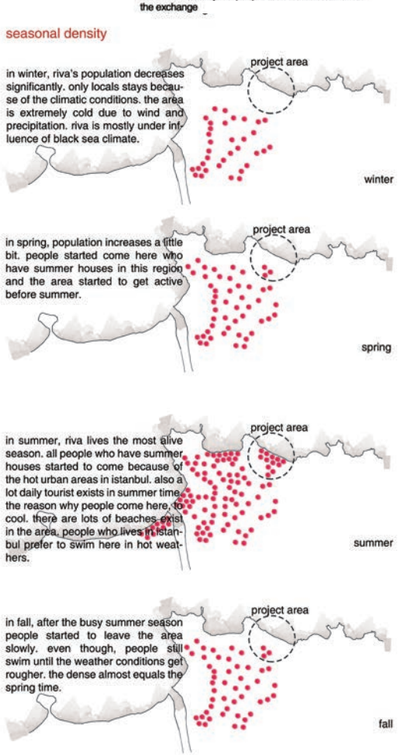
*"The Riva Promontary" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*



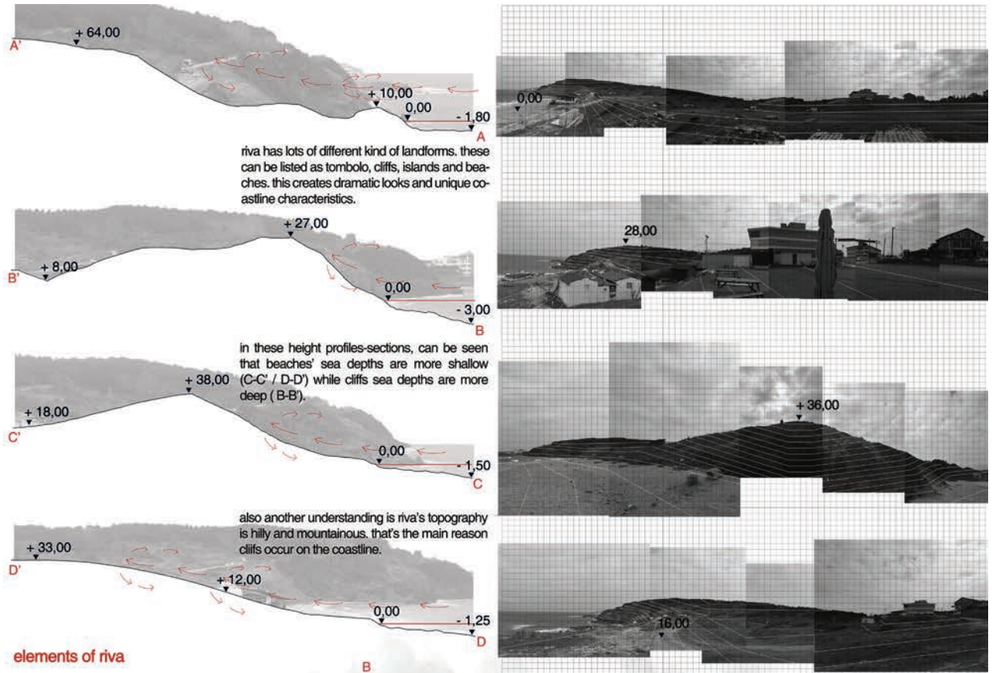



population: 2.237
density: 99.2
socio-economic status: A



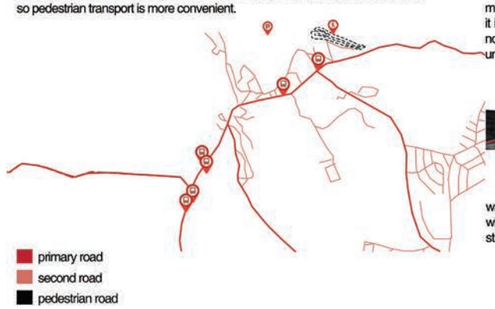




## transportation

In riva, public transport is only available as a public transport, and private vehicles and taxis are available. transportation to the coast is difficult because of the cliffs, so pedestrian transport is more convenient.



primary road
second road
pedestrian road

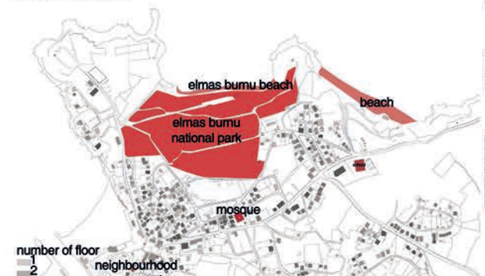
## street conditions

street flooring in settlements is not uniform. stone pavement is used in the street pavement and in some areas it is possible to see gravel or paving. street widths are not constant because the settlement in the area is uneven.

wall, fence, wire and similar structures determine the width of the streets. these structures, which form the street boundaries, are generally 80-100 cm high.

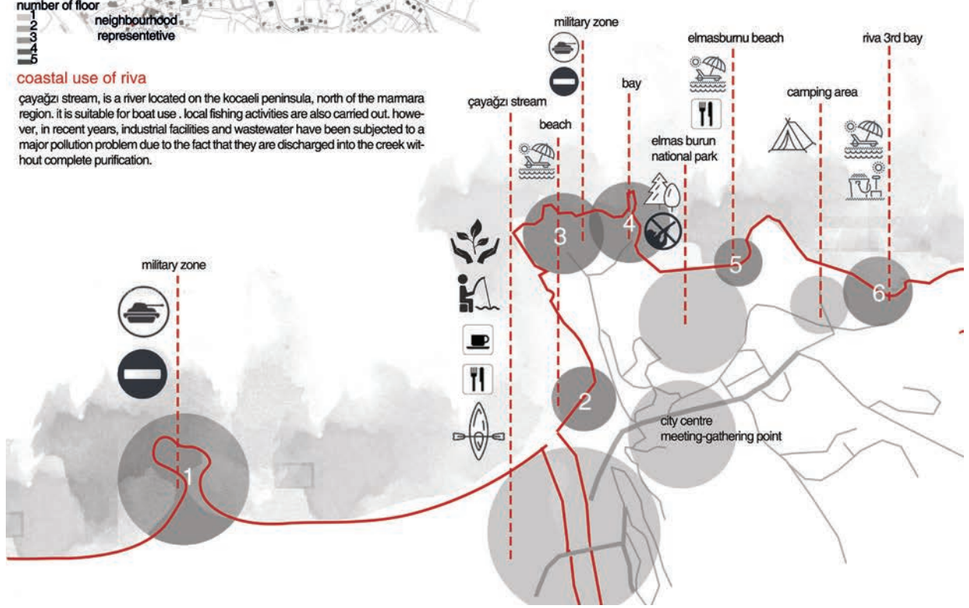
in some areas, street structures can be converted into soil. the width of such streets is determined by the boundaries of the surrounding vegetation.

## land use analyse



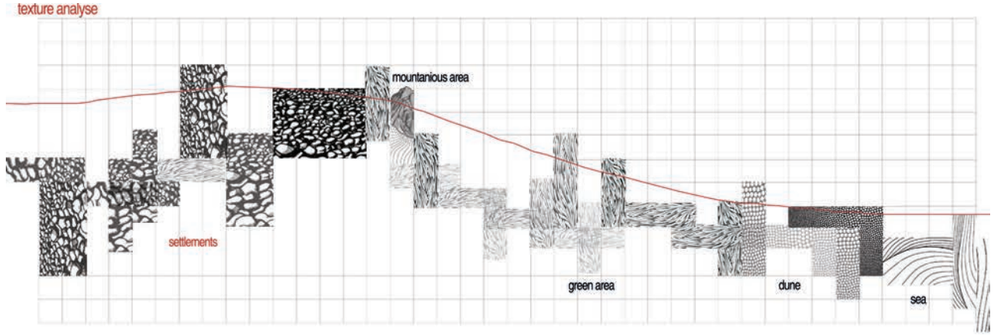

## coastal use of riva

çayağzı stream, is a river located on the kocaeli peninsula, north of the marmara region. it is suitable for boat use . local fishing activities are also carried out. however, in recent years, industrial facilities and wastewater have been subjected to a major pollution problem due to the fact that they are discharged into the creek without complete purification.

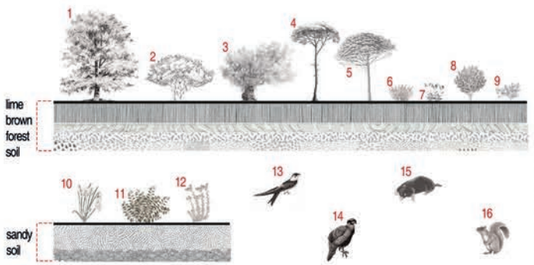





## texture analyse



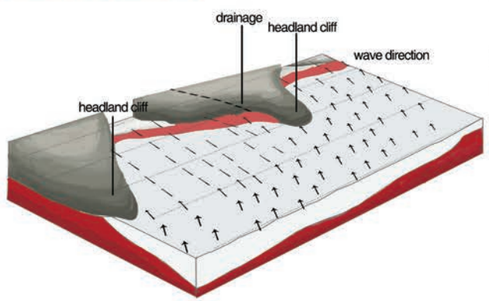

## flora and fauna of riva




1 quercus sp.
2 arbutus unedo
3 phillyrea latifolia
4 pinus maritima
5 pinus pinea
6 spartium junceum
7 cistus creticus
8 laurus nobilis
9 sarcopoterium spinosum
10 paneratium maritimum
11 paliurus aculeatus
12 otanthus maritimus
13 apodidae
14 tragopan melanocephalus
15 talpa europaea
16 sciuridae

there are different kinds of soil types in riva, but in our project area, it consists two soil types; lime brown forest soil and sandy soil.
lime brown forest soil: the top soil is soft or slightly firm. the lower soil is heavier and harder. although lime is washed, the reaction is neutral or alkaline. natural drainage is good. natural vegetation is a mixed forest or shrub.
plant species which grows in this soil: quercus sp., arbutus unedo, philyrea latifolia, pinus maritima, pinus pinea, spartium junceum, cistus creticus, laurus nobilis, sarcopoterium spinosum.
sandy soil: they contain 80% of sand. they are easy to process. they require plenty of water because they do not hold water. this causes the food in the soil to be washed away. it is poor and usually acidic soils.
plant species which grows in this soil: paneraitum maritimum, paliurus aculeatus, otanthus maritimus.
area also have some animal sprecies like apodidae, tragopan melanocephalus, talpa europea and sciuridae.

## coastal characteristics of riva




riva is a residential area on the coast. therefore, wave and wind densities are very effective. the wave direction in our area is perpendicular to the shore. the wind direction is from the sea to the shore line. it has a topographically protruding structure. this allows for various natural formations. it has a more clastic structure. at the same time there are dunes in the coast.

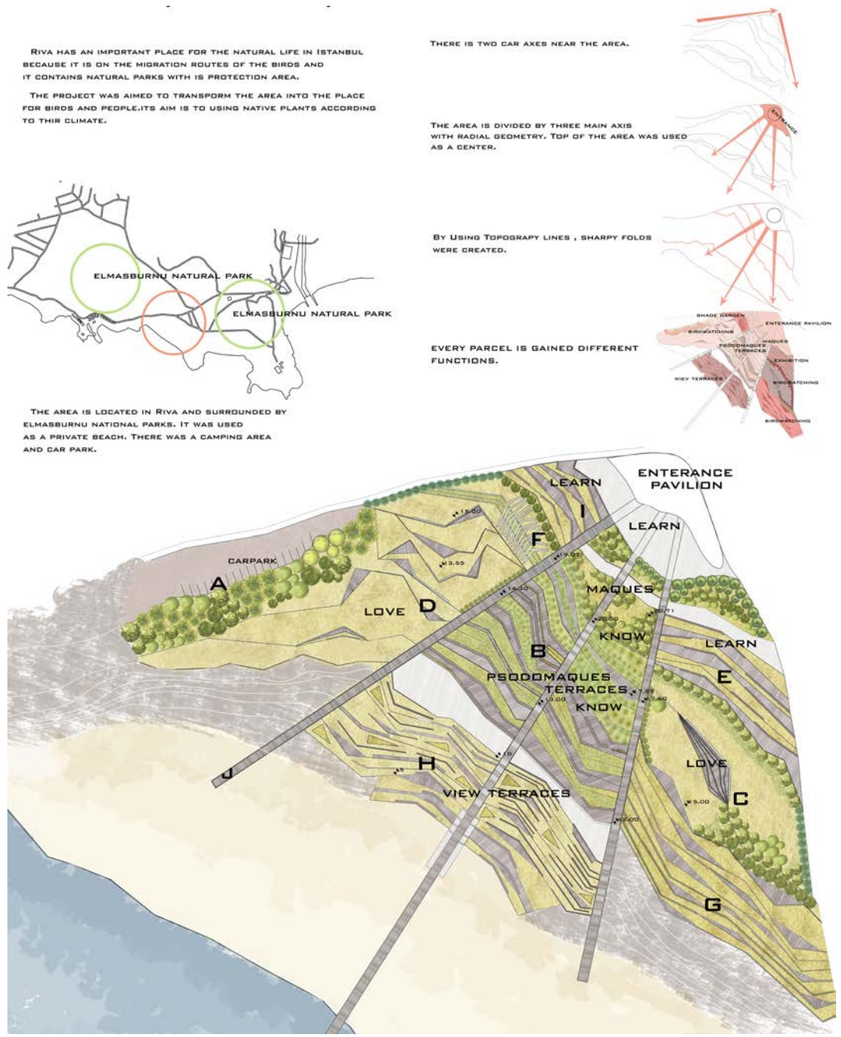
## green area analyse

there are plenty of green areas in riva. they have different kind of textures. this can be listed as medium, fine and coarse texture. there are also sandy areas because of beaches. in sandy areas, sandy soil exists. a few plants that grow in sandy soil written above. medium texture mostly contains of mixture of trees and shrubs; fine texture equals to the forest areas; coarse texture mostly has groundcovers and shrubs.

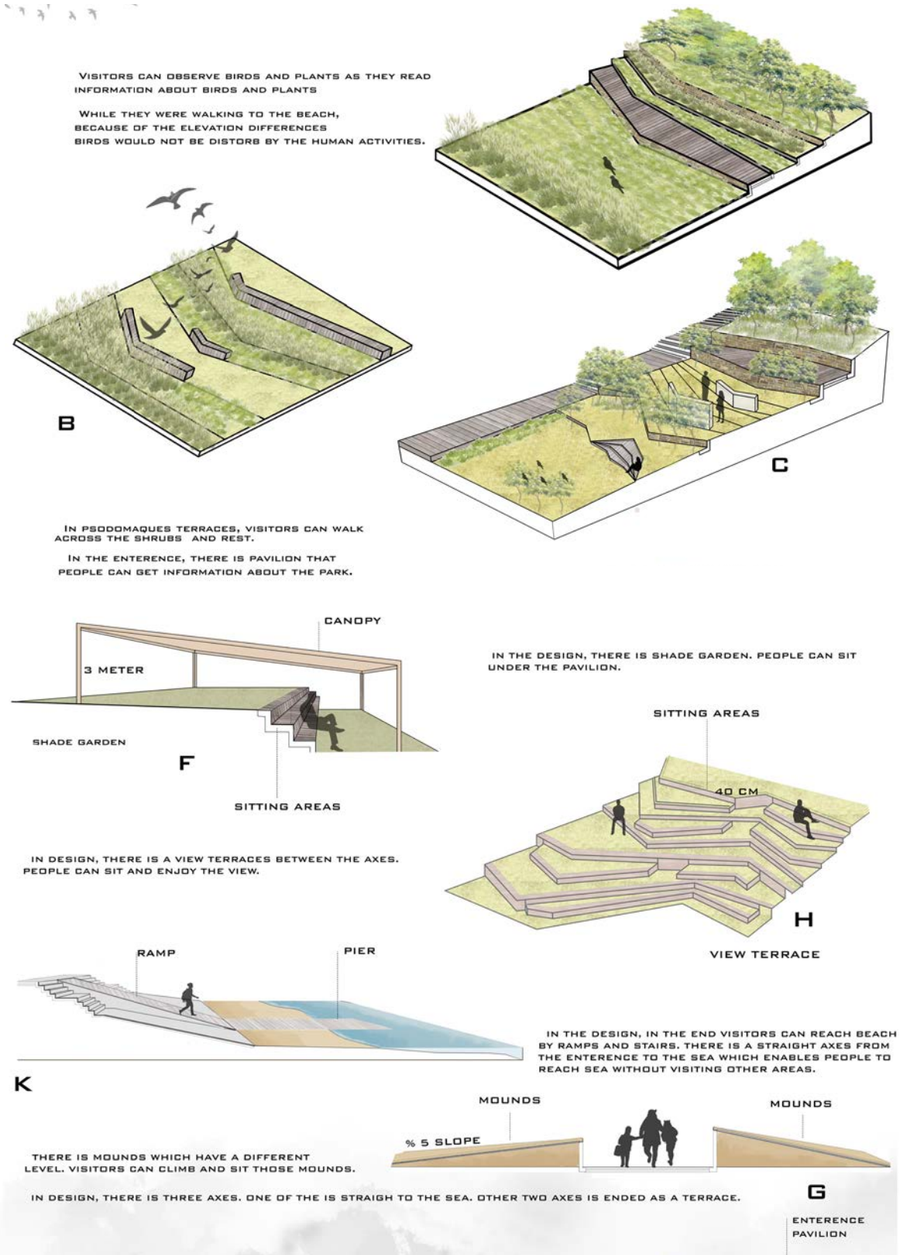
# Riva Promontary- Learn, Know, Love and Protect

Ecem Torun

*"Riva Promontary- Learn, Know, Love and Protect" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*






One of the features that makes Riva an important location for the city of Istanbul is its transitional role within the city. Therefore, when analyzing Riva, its relationship with Istanbul should be considered rather than its existence in isolation. In this respect, Riva exhibits both urban and rural characteristics.

In terms of usage, Riva is primarily a destination for beach tourism, especially during the summer months. Additionally, Riva contains natural parks, including Elmasburnu Nature Park, which is located on both sides of the area where the design will be implemented. Another significant feature of Riva is its importance for birdlife. Migratory birds, in particular, rest in Riva during their passage through the Bosphorus. This makes Riva one of the key bird-watching locations.

Given these features, two main characteristics emerged in relation to the intended design. The first aim was to bring humans and birds together within the design. The goal was to contribute to tourism, while also raising awareness of the accommodation area, which was at risk of being lost, by creating a space for the birds to rest. The second objective evolved from the first, focusing on the use of natural vegetation.

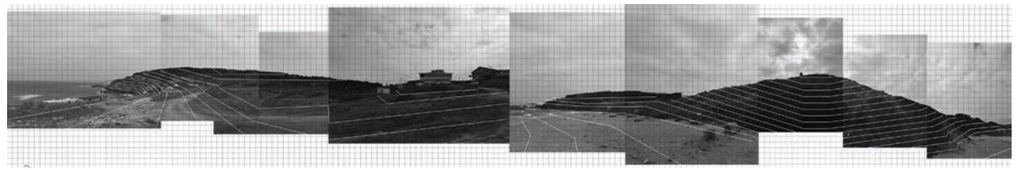
Riva is home to diverse vegetation, including maquis and pseudoma. In the design, the existing topography was utilized and accentuated. To ensure continuity, different areas were created by following a systematic design approach. These areas were categorized according to the characteristics of the maquis and pseudoma vegetation. The created areas include an exhibition garden, birdwatching gardens, pseudoma terraces, maquis garden, and viewing terraces.

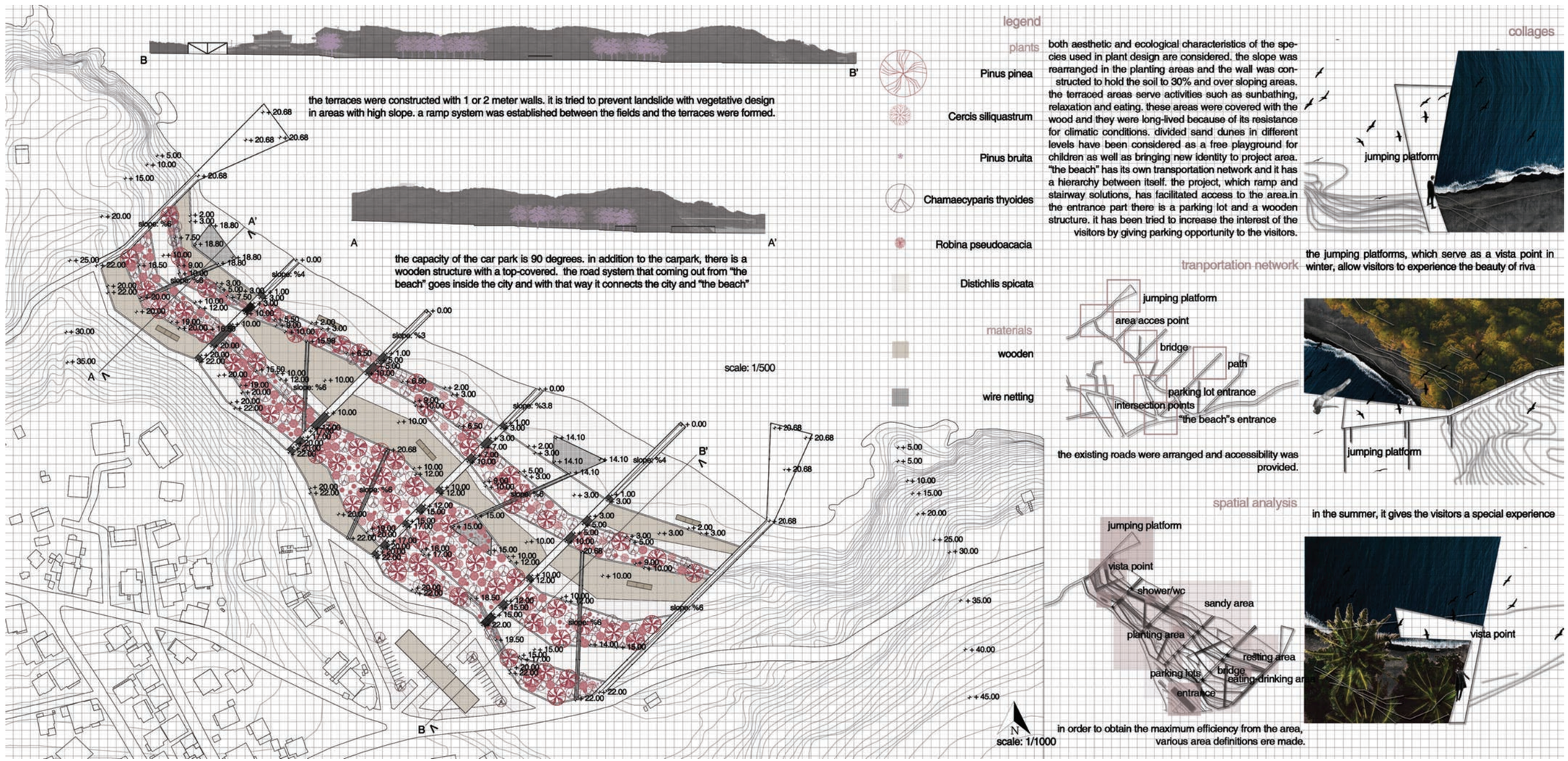
To enhance the connection between the area and the sea, a radial geometry was introduced, with straight axes directed toward the sea. Along with alternative pathways, this design increases the relationship between the area, the beach, and the sea.

# The Beach - The Riva Promontary

Yağmur Özgüner

*"The Beach - The Riva Promontary" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Elif Serdar Yakut under the title "The Coastal. Eco-responsive Landscape" in the spring semester of 2018-2019.*





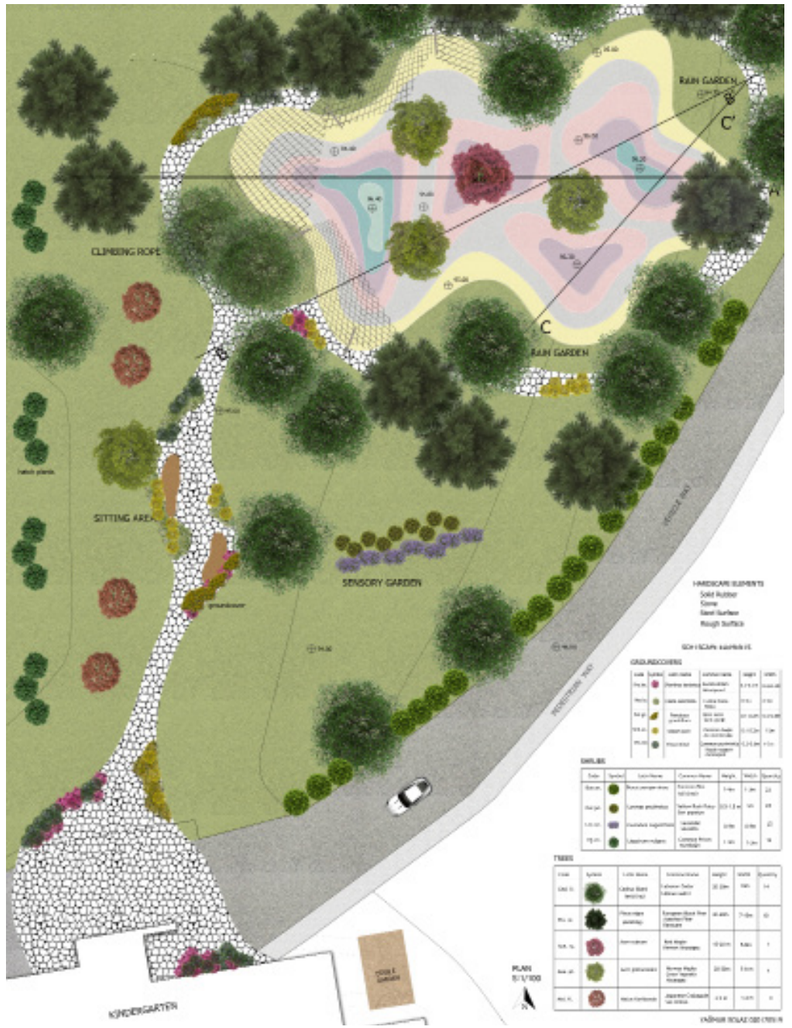
# Dream Up

Yağmur Solaz

*"Dream Up" was produced within the scope of Landscape Design 1 carried out by Dr. Meliz Akyol and Res. Assist. Elif Serdar Yakut under the title "Human" in the spring semester of 2019-2020.*

The kindergarten, located on the Ayazağa Campus of Istanbul Technical University, is closely connected with nature. The garden of the kindergarten is filled with pine and cedar trees. However, there is currently no playground for children, other than the typical plastic, mass-produced play elements. The design aims to create a playground within nature, where children can use their imagination to design their own games and play freely.

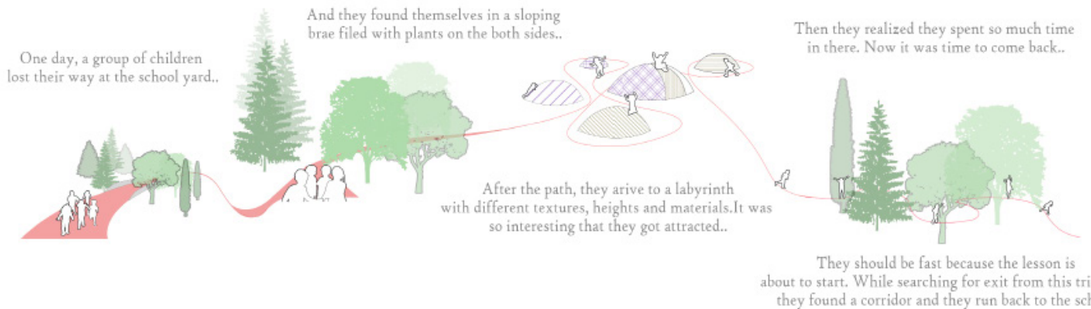
Instead of a play element that tells children what to do, the aim is to provide a suitable space where they can create their own games. The design seeks to support both the motor skills and mental development of children. A free environment was created by designing a playground with hills of varying heights and materials. Different heights offer children unique perspectives, while varying materials enable different functions. The playground includes rough surfaces, slippery areas, soft floors, hard floors, and green spaces. The changing heights, materials, and colors encourage children to use their imaginations and create their own games.
At the same time, the playground is suitable for all age groups, allowing different ages to play together. Younger children can play on the smaller hills, while older children have access to steeper and higher areas. Another goal of the design is for children to observe natural processes and witness changes in nature. The planting design was created with this in mind. Additionally, a rain garden has been designed to collect rainwater descending from the hillocks in the playground.
The rain garden serves both as an educational opportunity for children and as an ecological contribution to nature. The vibrant colors of the design excite children and invite them to explore. The existing trees played a key role in shaping the design.
There is also a climbing rope that starts from the ground and winds around the trunks of the trees, designed to follow the natural shape of the pine and cedar trees in the area. From the entrance of the kindergarten, the playground is accessible via a stone path. The terraced seating area on both sides of this path serves as a space where children can spend time and interact with one another.
The playground offers various spaces and functions with different materials and heights. The green areas change with the seasons, providing children with a new experience each time they visit. In this way, the playground evolves and transforms over time.

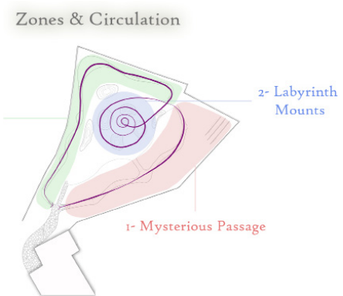


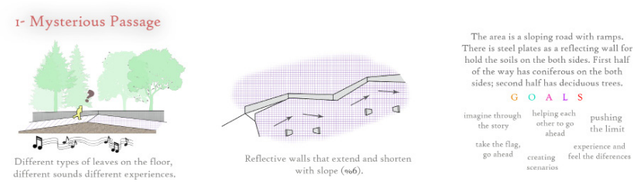
# Vortex

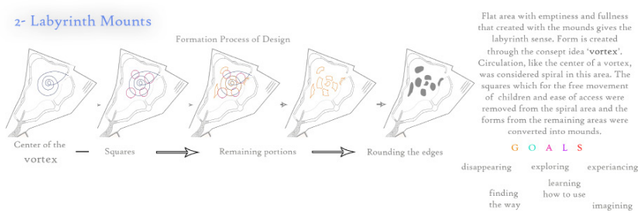
Merve Dilara Ezer

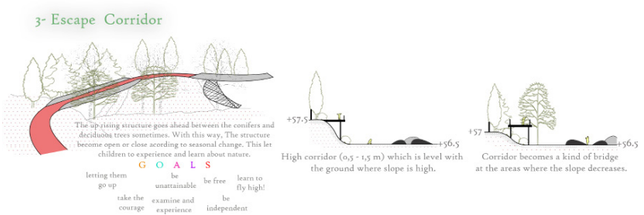
*"Vortex" was produced within the scope of Landscape Design 1 carried out by Dr. Meliz Akyol and Res. Assist. Elif Serdar Yakut under the title "Human" in the spring semester of 2019-2020.*



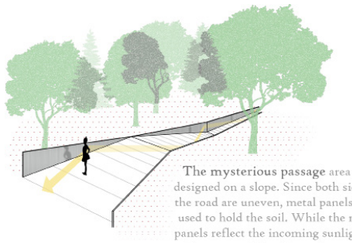




The design was created based on a fictional story. According to the story, when a group of children leaves school, they lose their way in the garden and find themselves in a mysterious passage. After crossing the path, they encounter a maze. This labyrinth is particularly intriguing because it features varying heights and materials, and the children lose track of time as they explore it.

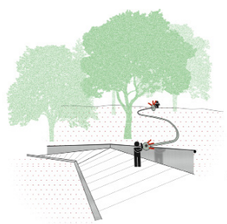
Approach

The slope analysis and usage density analysis, which I conducted on the site beforehand, were significant influences on my design. The decision to reduce the slope by extending it towards the wall at the bottom, combined with the strategy of spreading the usage density from the central area to the walls, formed the foundation of my design.



**The mysterious passage** area was designed on a slope. Since both sides of the road are uneven, metal panels were used to hold the soil. While the metal panels reflect the incoming sunlight all the way, making the environment brighter, warm and interesting, while the reflective surfaces of the metal panels are offered as an additional game tool for children's imagination.

The bridge that passes through the trees in **the escape corridor** section also includes trees in some places. In these areas, the area between the bridge and the tree was combined with rope nets and th e opportunity to climb around the tree was presented from below. While children can climb as they wish, the danger of falling down is also eliminated by the nets around the trees.



The ends of the metal panels used in **the mysterious passage** area were rounded and turned into pipes. These pipes, which extend from the road to the middle in two parts of the road, allow the sound to pass from one area to the other, thus creating a communication tool and an interesting game tool.

**The terrace** was built on the lowest part of the area but overlooking the landscape. This area was considered as a meeting and activity point. A structure with a terrace was designed due to the elevation difference. This area, surrounded by trees, also offers a summer garden with a beautiful view.

# All From

Nuran Kul

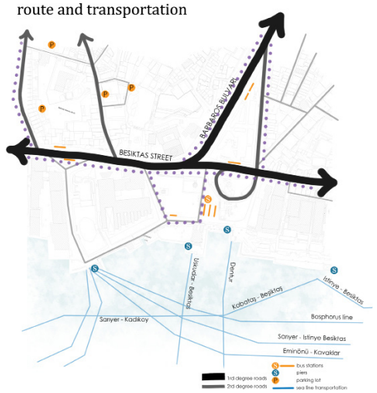
*"All From Lines" was produced within the scope of Landscape Design 1 carried out by Dr. Meliz Akyol and Res. Assist. Elif Serdar Yakut under the title "Human" in the spring semester of 2019-2020.*

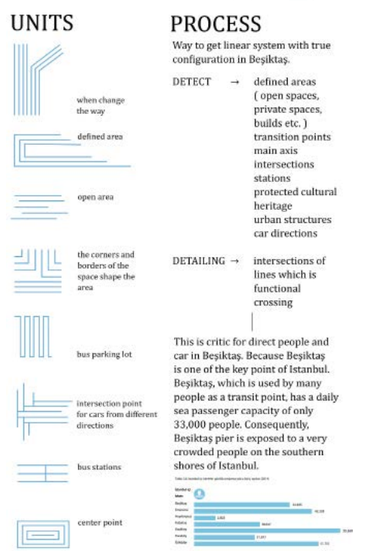
The project "All from Lines" has transformed Beşiktaş into a space that facilitates regular and accessible use, creating a sustainable urban open space in the post-pandemic era, while also addressing systematic trends in landscape architecture. The "All from Lines" project aims to solve several problems faced in our open and green spaces through a new system. It seeks to redesign this square, which is used by 10,000 people daily, by creating open and spacious areas that are free from complexity and offer a sense of dignity, achieved by dividing the space into functional zones with a linear design.

void

pedestrian way / density of people

route and transportation




PROCESS

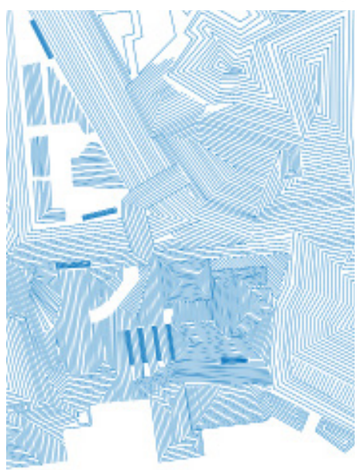
Way to get linear system with true configuration in Beşiktaş.

DETECT → defined areas ( open spaces, private spaces, builds etc. )
transition points
main axis
intersections
stations
protected cultural heritage
urban structures
car directions

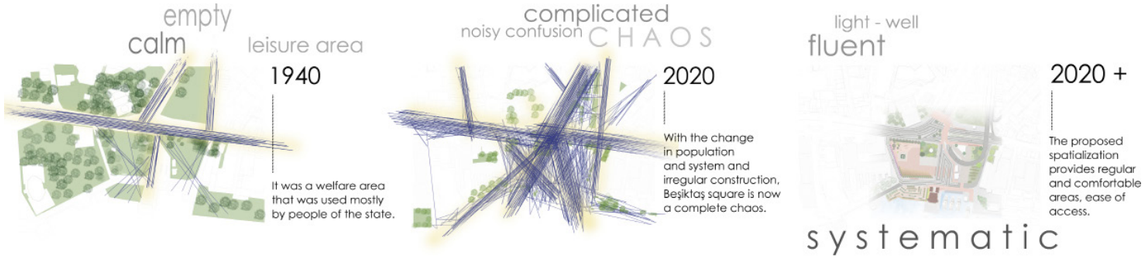
DETAILING → intersections of lines which is functional crossing

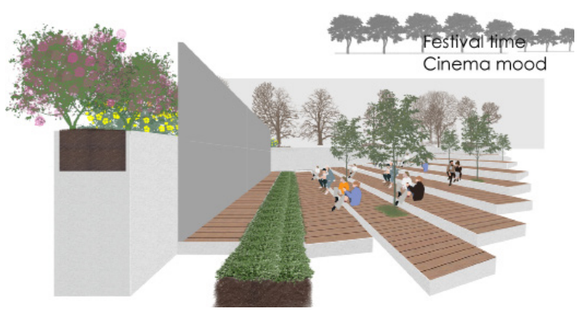
This is critic for direct people and car in Beşiktaş. Because Beşiktaş is one of the key point of Istanbul. Beşiktaş, which is used by many people as a transit point, has a daily sea passenger capacity of only 33,000 people. Consequently, Beşiktaş pier is exposed to a very crowded people on the southern shores of Istanbul.

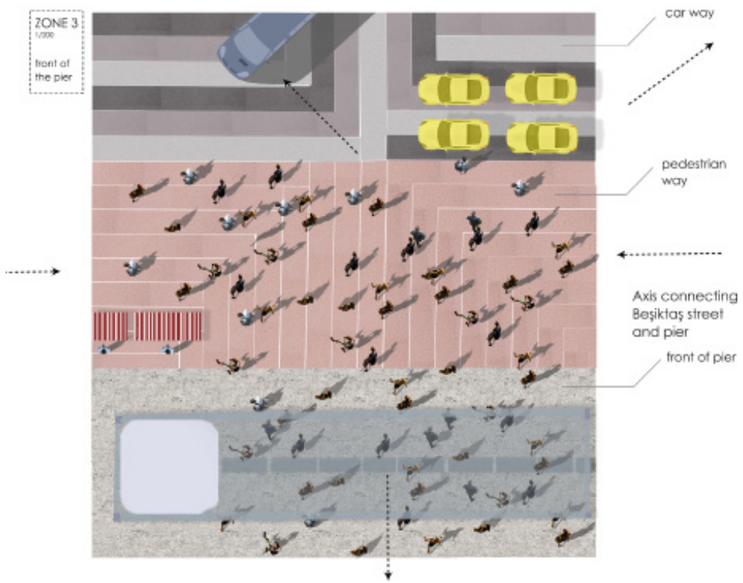


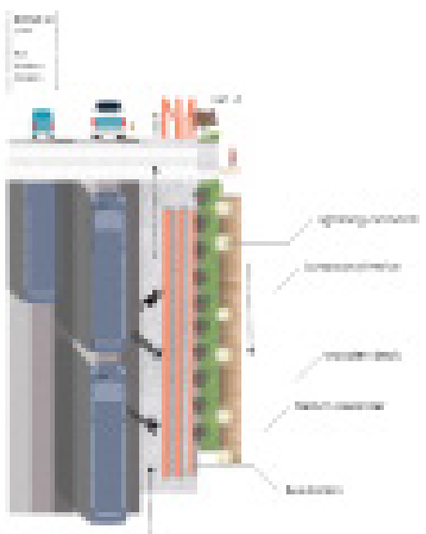


Today's global issue, the Covid-19 pandemic, has exacerbated the problems we face in the crowded streets of Istanbul. The pandemic, which restricts our movements and forces us to stay close to home, has greatly limited our outdoor spaces in the city. As a result, a project to redesign Barbaros Hayrettin Pasha Square has been created to address the key issues of limited space, unsafe areas, and the lack of sufficient open areas. The systematic linear design uses specific units but remains open to different textures at intersections. Starting at the intersection of Barbaros Boulevard and Beşiktaş Avenue, the lines that lead to the pier focus primarily on the individual, helping them navigate easily through the space amidst the confusion.






ZONE 3
1/200
front of
the pier
car way
pedestrian
way
Axis connecting
Beşiktaş street
and pier
front of pier



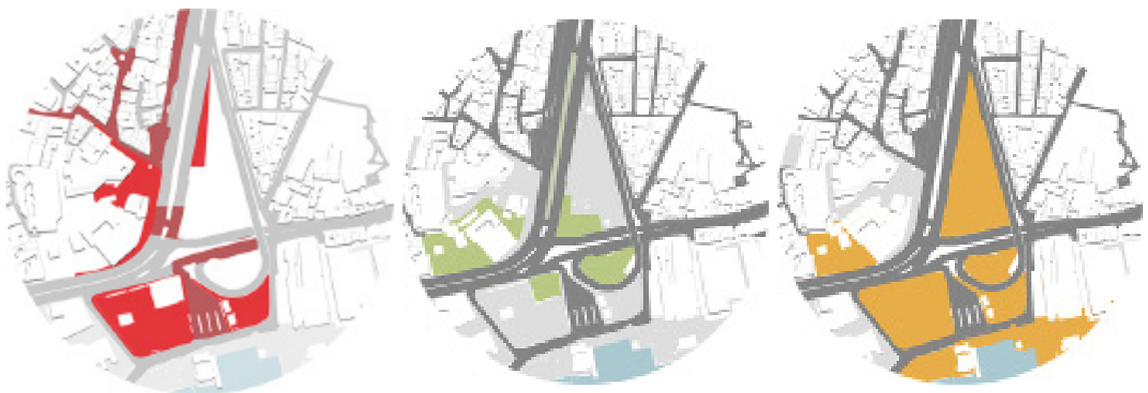
3.00

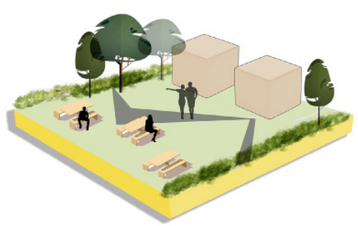
# Roof-tance

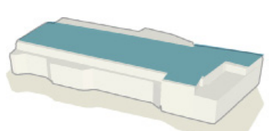
Zeynep Berfu Yılmaz

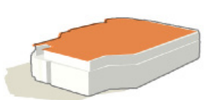
*"Roof-tance" was produced within the scope of Landscape Design 1 carried out by Dr. Meliz Akyol and Res. Assist. Elif Serdar Yakut under the title "Human" in the spring semester of 2019-2020.*

In this project, the roofs of the Büyük Beşiktaş Bazaar (2555 m²), Sinanpaşa Passage (1782 m²), and Akaretler Parking Lot (1500 m²), which are publicly accessible, were redesigned. The terrace of the Büyük Beşiktaş Bazaar was designed as a festival, resting, and viewing area, as it offers a great vantage point. It also serves as a response to the lack of festivals and activities in Beşiktaş. The roof of the Sinanpaşa Business Center was transformed into a space for shopping, dining, and drinking.









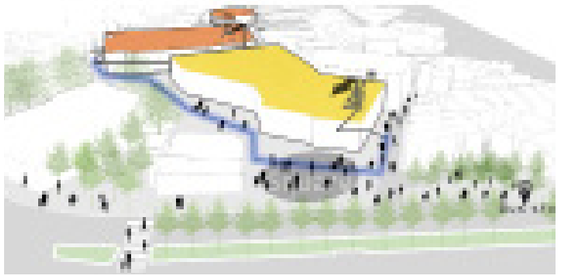
*Akaretler Car Park
-Sports facility
for people living here

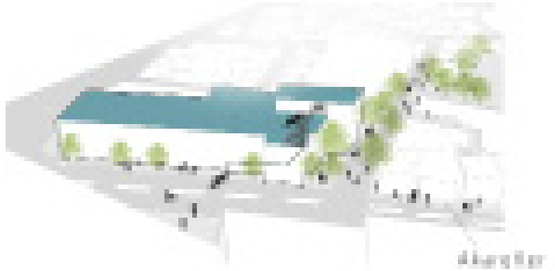
*Sinanpasa Passage
- food hall, shopping

*Buyuk Besiktas Çarsısı
-festivals, activities
scenery point resting

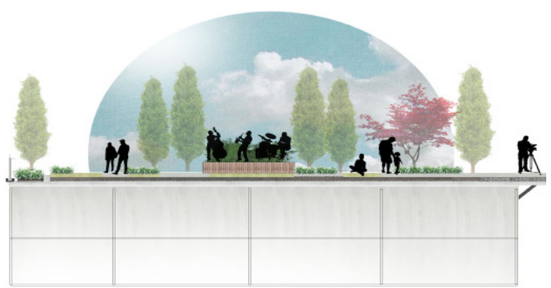






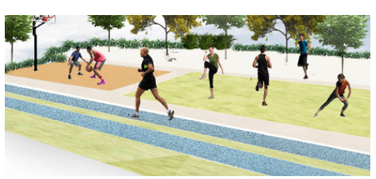


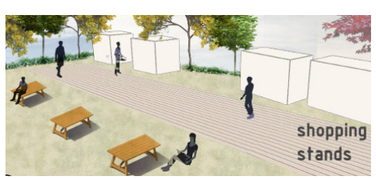
Increasing the green areas of Beşiktaş Square, which is currently lacking in green space, will help reduce street density and provide new spaces for people. In this project, the roofs of the Büyük Beşiktaş Bazaar (2555 m²), Sinanpaşa Passage (1782 m²), and Akaretler Parking Lot (1500 m²), all publicly accessible areas in Beşiktaş, were redesigned. The terrace of the Büyük Beşiktaş Bazaar was designed as a festival, resting, and viewing area, taking advantage of its great vantage point and addressing the lack of festivals and activities in Beşiktaş.
The roof of the Sinanpaşa Business Center was organized as a space for shopping, dining, and drinking. The roof of the Akaretler Parking Lot, located in the residential area of Akaretler, was designed to offer a sports field for the community.
When planting on the roofs, species suitable for rooftop growth, not exceeding 10 meters in height and able to thrive in planters, were selected. These include Chamaecyparis lawsoniana, Acer palmatum, Picea glauca, and Genista lydia.



A-A' SECTION

B-B' SECTION



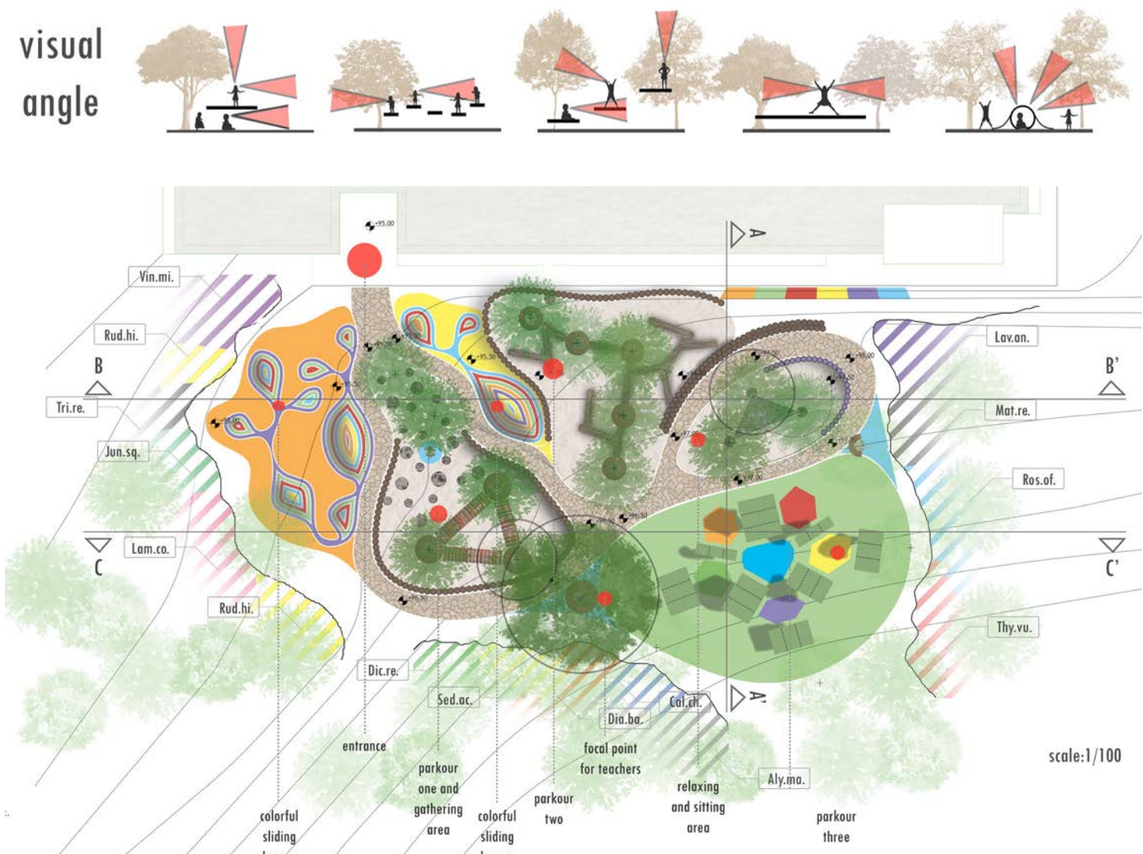


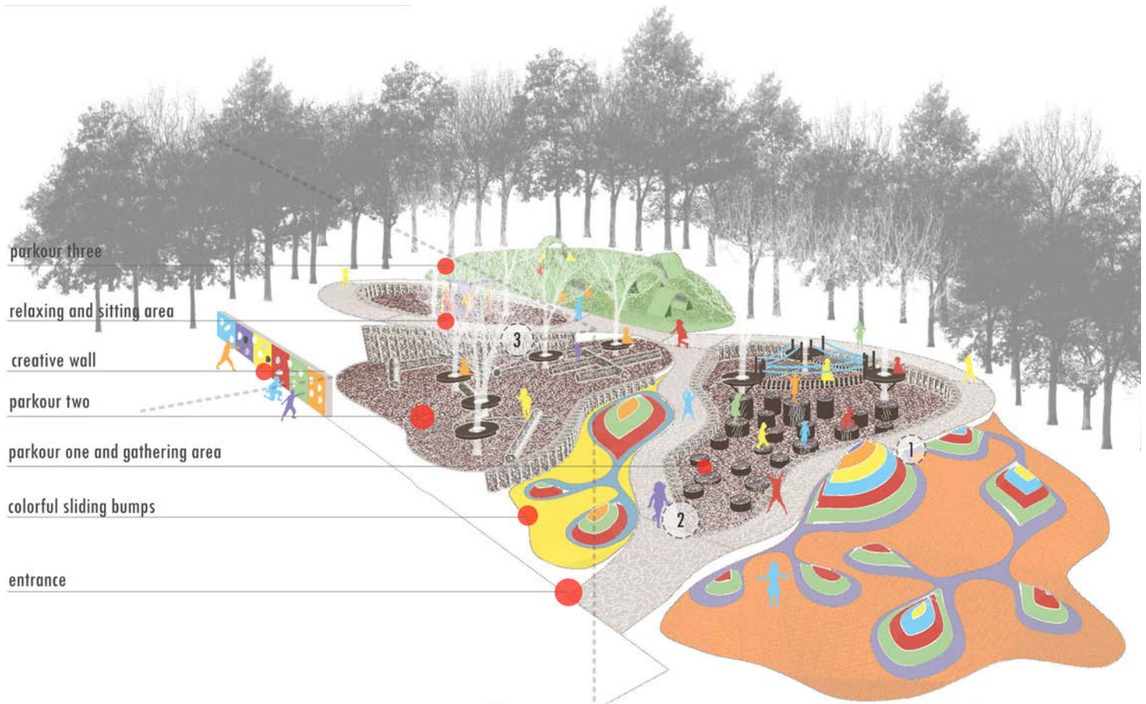
# Parkour Through Woods

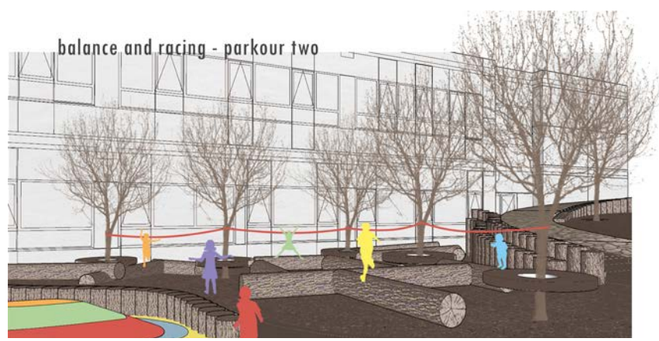
Kübranur Akkabak

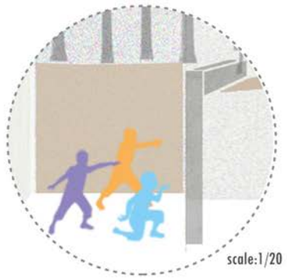
*"Parkour Through Woods" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Fatma Ayçim Türer Başkaya, MSc. Maya Türkmen Numan and Res. Assist. Nergis Aşar under the title "Dream Big" in the spring semester of 2019-2020.*

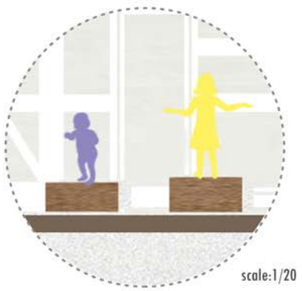
The project focuses on children, and the study area is the ITU Maslak Kindergarten. While the Maslak campus is a vibrant social hub, this kindergarten is isolated, hidden from view, and set in a very natural environment. Additionally, there is a need for privacy and safety for the children. The study area is located behind the main kindergarten, and it lacks structural elements. Therefore, the goal was to design a new playground that remains natural while ensuring safety for the children. Given the age range of the children, from two to six years old, safety is a top priority in this design.

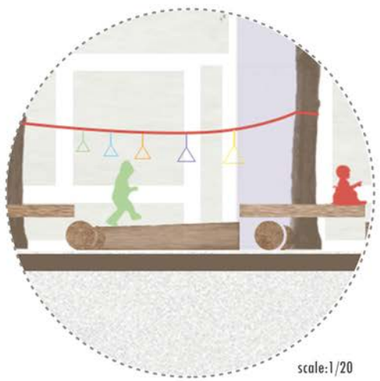


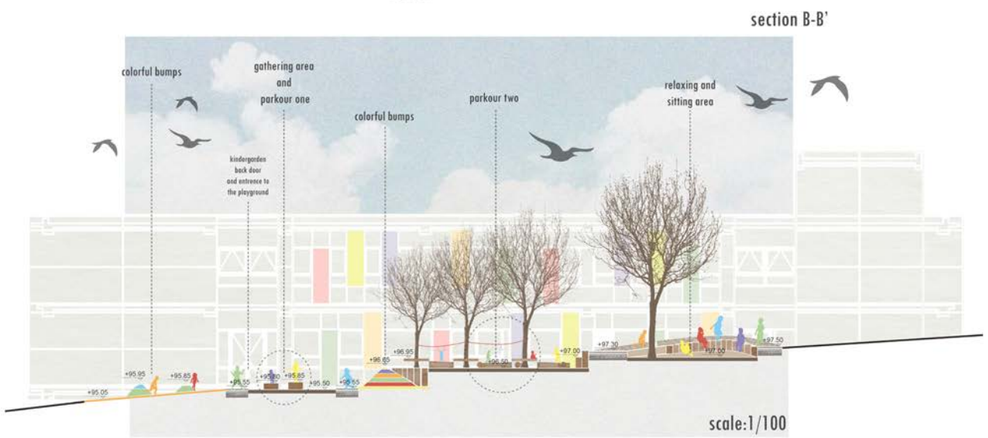









In this design proposal, the creation of various zones and parkour areas for the children's physical activities aims to provide them with diverse experiences. Different elevations, based on the topography of the study area, and the addition of artificial colored mounds offer unique visual perspectives and experiences for the children. Areas created with tree logs, placed between the existing trees in the study area, will give the children a sense of being in a natural woodland or forest. Tubes, positioned at ground level, will offer various experiences, such as looking through holes in the tubes and providing hiding spots for the younger children. A hammock area will serve as a relaxing space for the children after their running and other activities.

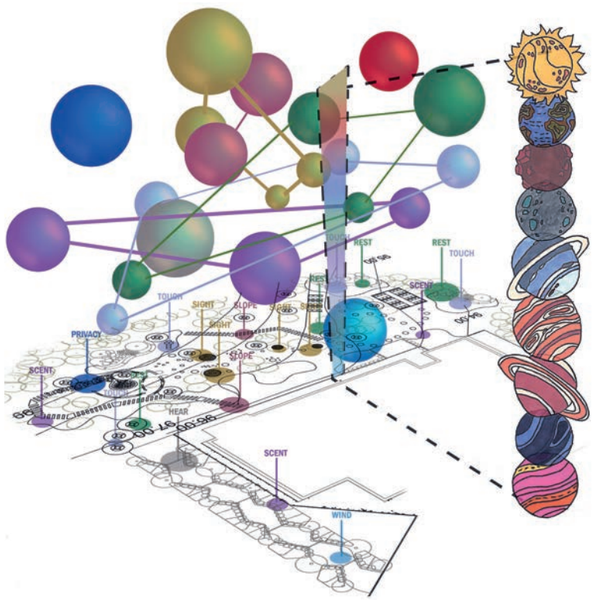
In addition to this design, potential observation points were identified for teachers to monitor the children. Finally, to preserve the natural feel of the area and to complement the existing large trees, the planting design consists of knee-high groundcovers. Aromatic plants, such as lavender and thyme, are placed along Istanbul's prevailing northeast wind direction. Other surrounding groundcovers include spring and autumn-blooming plants to create visual beauty and boundaries, helping to guide the children and prevent them from leaving the playground area. Although there are teachers assigned to each class, the surrounding plants will make it easier for teachers to keep an eye on the children, considering the presence of sixty to seventy little ones.

# Play-Universal-Ground

İrem Nur Yener

*"Play-Universal-Ground" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Fatma Ayçim Türer Başkaya, MSc. Maya Türkmen Numan and Res. Assist. Nergis Aşar under the title "Dream Big" in the spring semester of 2019-2020.*

This area is one that is closely connected to nature, with topographic variations, and has never been designed before. I decided to develop a concept for the playground that allows children to experience the most prominent features of the planets and the Sun in the Solar System.

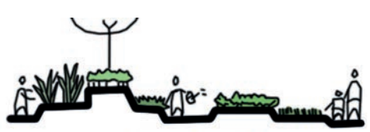


Playgrounds compatible with topography

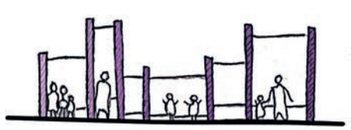
Wind/Sound/Experience

Different cavities/ Hiding

Indepent/Special/Small Group meetings

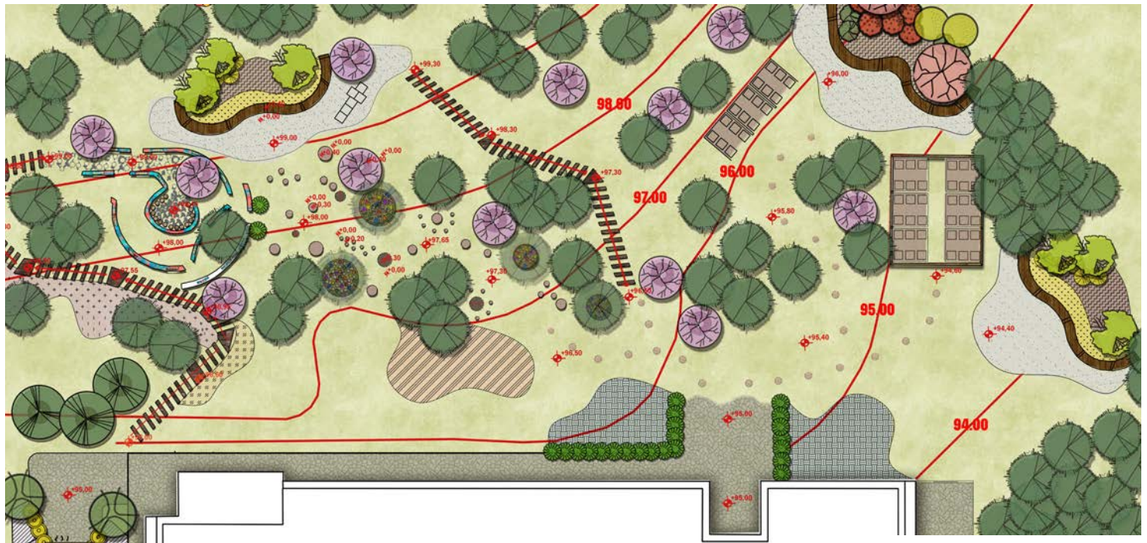


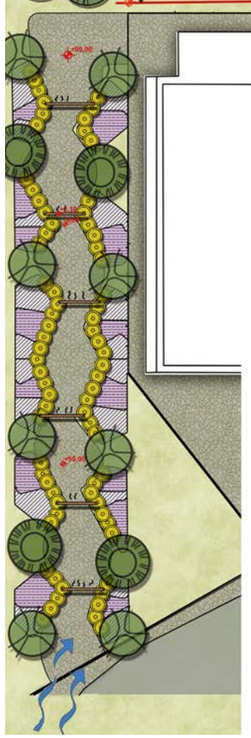
Increasing farming skills



Painting/Drawing Skills

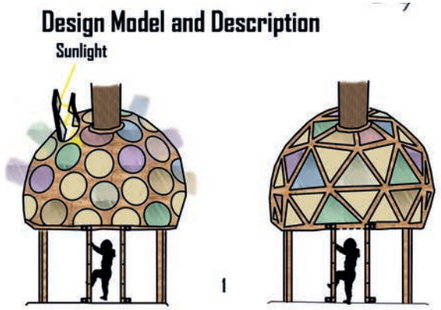




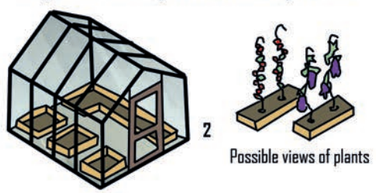
First, I designed a treehouse inspired by the sun's refraction in the atmosphere. The structure of the treehouse will be made of wood, with plexiglass placed in the round or triangular spaces. This will create a visual display for the children using sunlight.
Second, Mercury, the most cratered planet in the Solar System, inspired me to scatter logs of varying sizes across the playground in a specific pattern. This will offer the children different play experiences.
Third, Venus is the planet with the highest wind speeds. Based on field analysis, I decided to create a wind corridor in the area where the wind is strongest. Wooden materials will be used to transform this corridor into a recreational space, with various items suspended that make noise when the wind blows. This will allow children to experience the sounds of these materials in motion.
Fourth, Earth is the only planet known to support life. I wanted to give nursery children the chance to grow their own food, so I designed mini-greenhouses for them. This way, the children can engage with living plants and learn more about life cycles.
Fifth, Mars is home to the longest mountain in the Solar System. To reflect this feature, I introduced a sloped area within the playground. I designed a ladder that aligns with the topography, allowing children to stop climbing at any point and explore other parts of the playground.
Sixth, Jupiter has the most satellites in the Solar System, which protect it from external influences. Inspired by this, I designed plantings to close off three escape points identified in the analysis. These plants will help keep the children within the playground area. Additionally, I included a seating area in front of the plantings, with a hard floor where children can draw and relax while taking a break.
Seventh, Saturn is known for its seven rings. Using this characteristic, I created a circular wooden seating area surrounded by Prunus cerasifera pisardii (ornamental plum trees), a species not found in the area. Children can sit in these scattered seating areas and, when the fruit matures, pick the fruit from the trees.
Eighth, Uranus is the most mysterious planet in the Solar System. Inspired by the concept of mystery, I designed a mini-maze for the children, consisting of colored plates with cavities in different shapes for children to pass through. Two of the plates will remain white, allowing children to draw on them. In the center of the maze, I created a space where teachers can gather the children to tell stories.
Ninth, Neptune is the only non-solid planet in the Solar System. To reflect this feature, I designed various surface types throughout the playground for the children to explore.
These nine elements are connected throughout the design, offering a cohesive and engaging experience for the children.

## Design Model and Description




-Some of the triangles and circles around the design are transparent and will reflect sunlight and offer a visual show for children.

-While the circles reflects the light inside to outside by taking the sunlight inside, the triangles reflects the sunligth to inside.

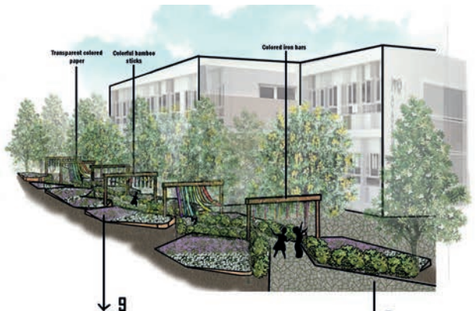




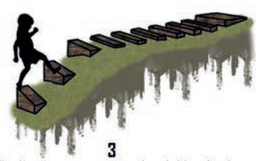

Possible views of plants

-Mini greenhouse will help children grow their own food
-Children will be able to water and collect what they plant here.

- The edges are designed from colored plates, and some of these plates will have cavity of different shapes and sizes, and thanks to these cavities, children will be able to switch to different places.



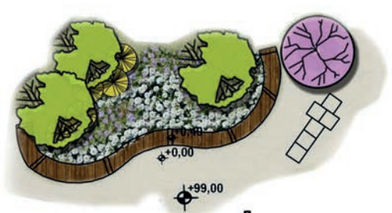

-As a result of the analysis, design was placed in the place with the most wind
-Things that make noise with the help of the wind, which are placed in the wind corridor, will create an entertainment area for children.




-The longest mountain in the children's playground is the slope in the region for children
-In orde to experience this slope, there will be a ladder design compatible with topography.

- It is aimed for children to experience different surfaces thanks to different ground materials in different areas for the planet with different surfaces

- To express the craters, logs of different sizes are scattered around so tat children can do several activities

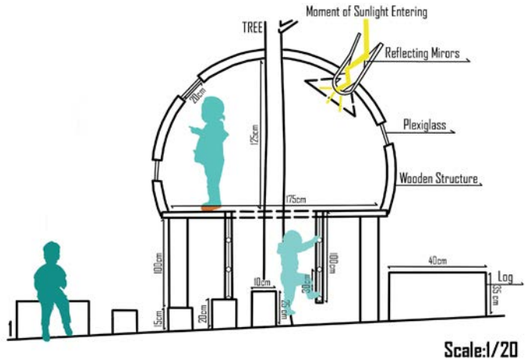



-It is aimed to prevent these escape areas with planting design and wooden sitting area brought in front of it.
-A hard floor was placed in front of this area in order to prevent children from bored while sitting

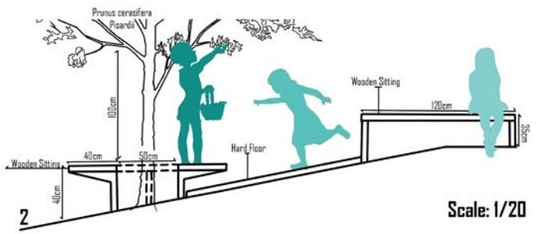
7

-Rings on the planet will come around the trees and will be used as a resting place for children or the height they can use to collect fruit from the trees.

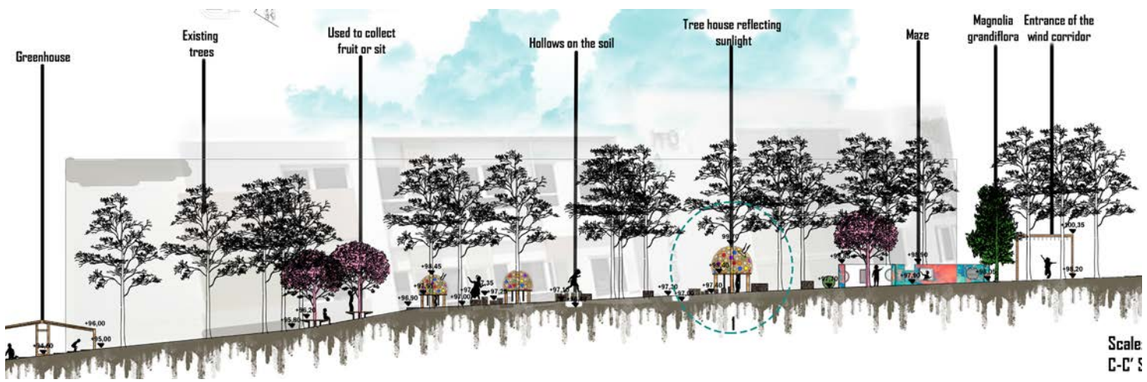




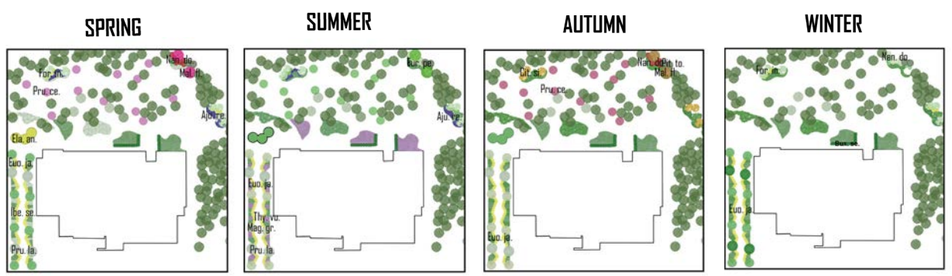

Scale:1/20




Scale: 1/20




Scale
C-C' S

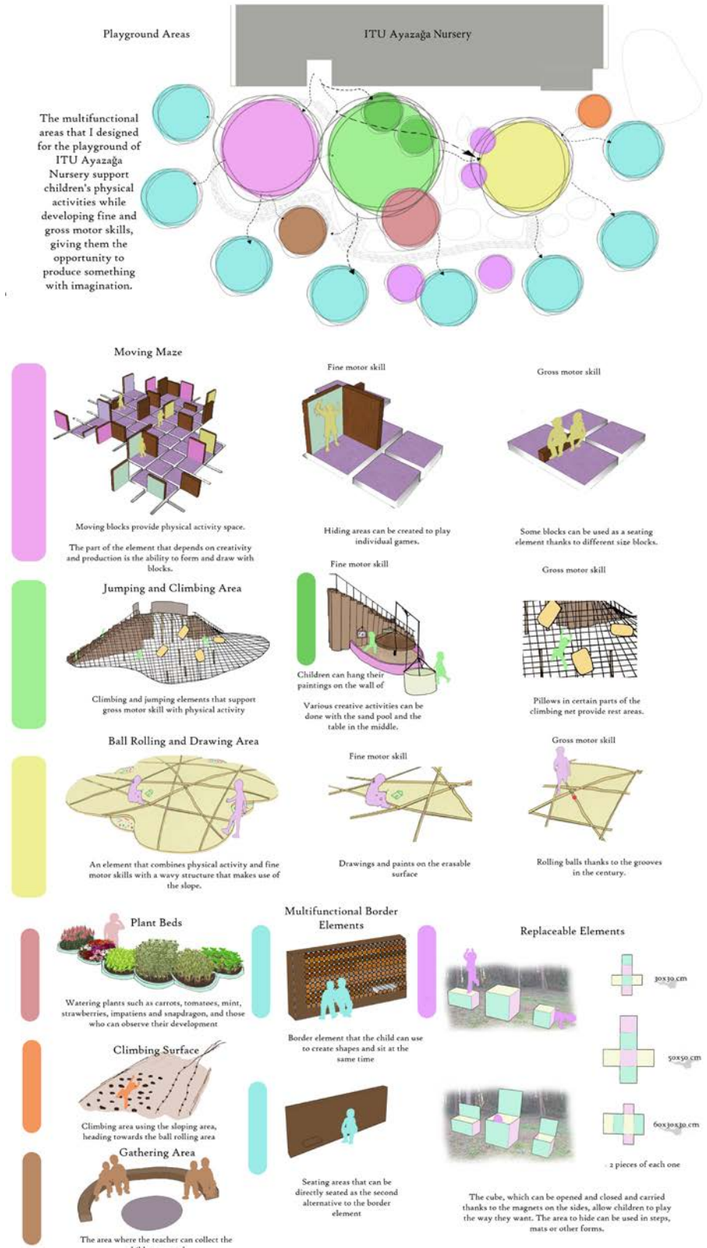


# Cre-Activity / Prod-Activity

Melisa Albayrak

*"Cre-Activity/ Prod-Activity was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Fatma Ayçim Türer Başkaya, MSc. Maya Türkmen Numan and Res. Assist. Nergis Aşar under the title "Dream Big" in the spring semester of 2019-2020.*

I focused on the development of both fine and gross motor skills, which play an important role in childhood development. The areas I designed include spaces specifically intended to enhance these two skills in different ways. A child can develop their gross motor skills through physical activities, while also strengthening their fine motor skills by using creativity and engaging in productive tasks. The name of the project reflects this interconnected system.

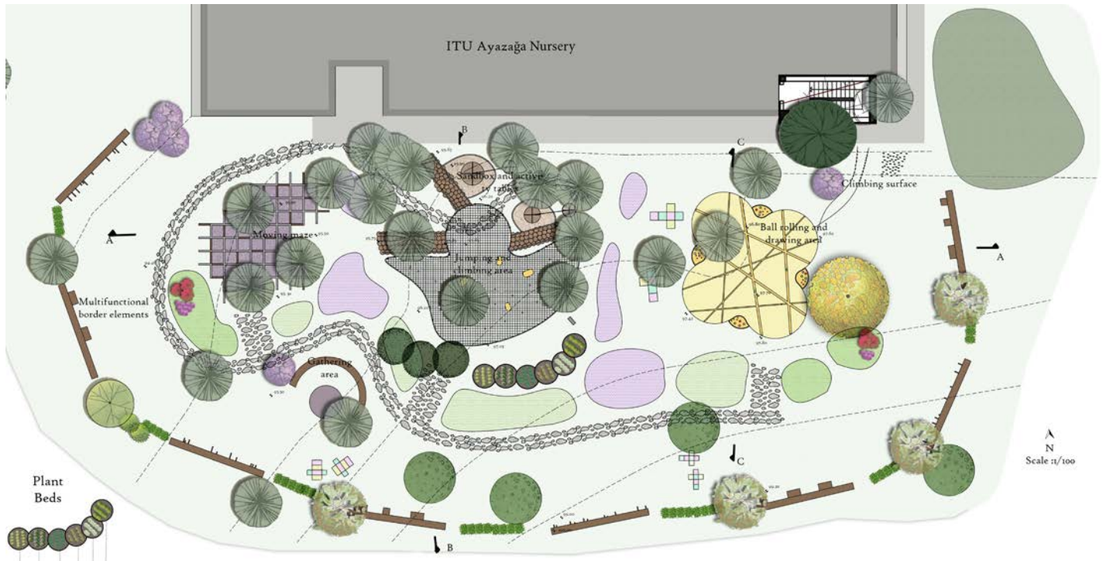


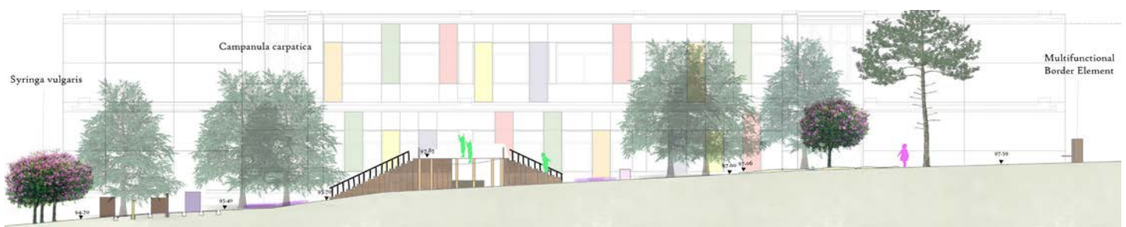

The first playground area is a labyrinth made up of blocks in different colors and heights. It is located closest to the nursery entrance because it is safer and well-suited for children aged 2 and 3. In this moving maze, children can play games by pushing the blocks and hiding. Using their creativity, they can draw shapes on the blocks or create their own shapes by rearranging them. The blocks can be pushed thanks to a rail system, making it easy for young children to use. This feature, along with its proximity to the entrance, makes it an ideal location for this area.

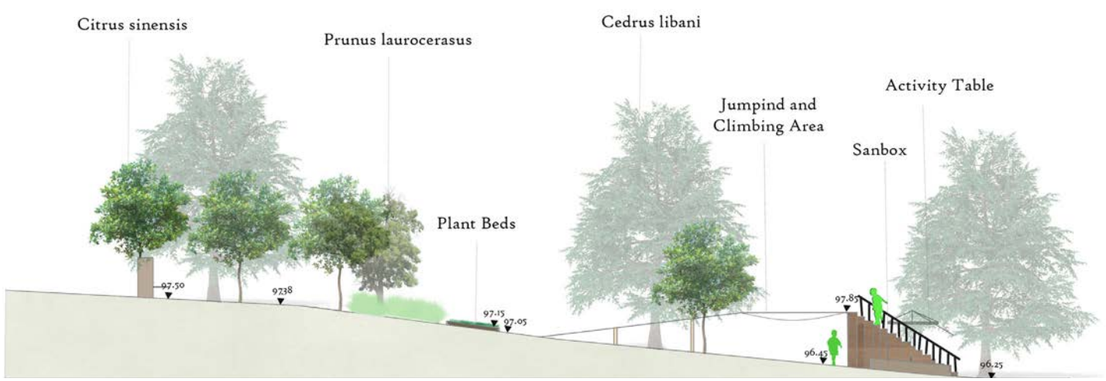
In the climbing and jumping area, activities such as climbing support physical development. The sand pool next to this area and the table in the middle allow children to explore different shapes. This is achieved by placing weight-bearing materials (such as cones or children's items) in a basket next to the system that enables the table to move up and down, or by removing the items from the basket.

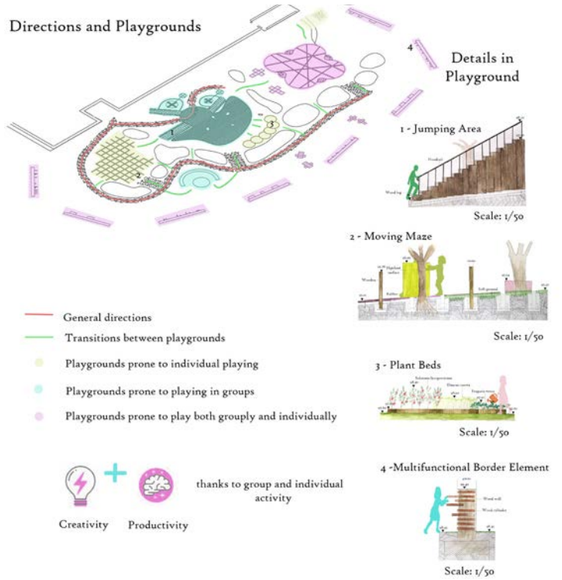
The ball rolling area features a wavy surface, allowing children to roll balls and manipulate them to create different movements. There are two ball rolling grooves for two different ball sizes (6 cm and 12 cm). Since the surface is made of flipchart material, children can easily draw and erase pictures. This drawing area helps develop fine motor skills. Children can reach this area by stepping on the stepping stones or using the climbing elements on the sloping surface next to it.

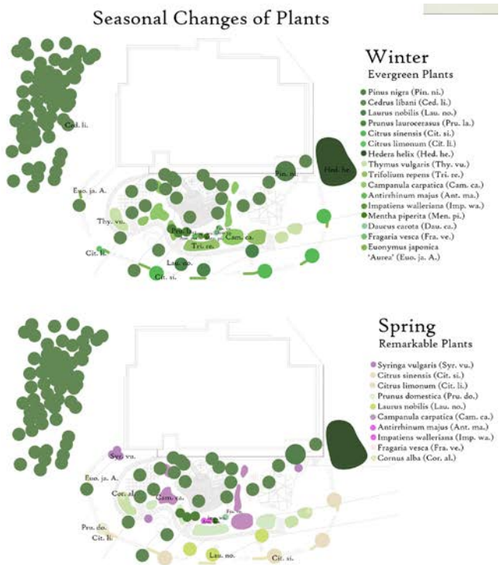
Another area that encourages creativity is the plant beds. Here, children can water and harvest fruits and vegetables from plants like Antirrhinum majus, Impatiens walleriana, Mentha piperita, Solanum lycopersicum, Fragaria vesca, and Daucus carota. These plants are suitable for children to grow, and the flowering plants are especially appealing to them. To ensure children are not lost or wander off, I designed fun fence elements to keep them safely within the playground.




In the first example of this multi-purpose fence element, the wooden rollers allow the child to create different shapes or use the area as a sitting space by adjusting its length. In the second example, there are pull-out seating elements for children who wish to sit directly.

The design also includes a gathering area where the teacher can bring the children together. This half-moon-shaped gathering area, with a mat in the center, facilitates communication between students and teachers.

The movable cube in the playground, which is not a fixed element, can be opened and closed using magnets on the sides. Children can use it to set up games, allowing for both individual and group activities.

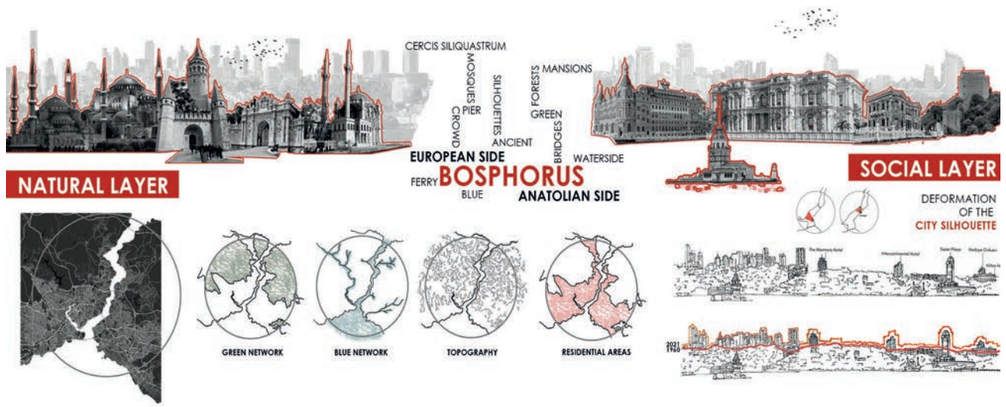
In the planting design, I incorporated Prunus domestica, Citrus sinensis, and Citrus limonum fruit trees, along with plants designed to capture children's attention. Syringa vulgaris, known for its vibrant color, is one of the plants in the playground. Additionally, Thymus vulgaris, Campanula carpatica, and Trifolium repens groundcovers, which surround the three main playground areas, provide children with easy movement due to the gaps between them. Cornus alba, with its striking color, and Aster amellus, which attracts butterflies, are also included. Hedera helix was planted in key areas to prevent children from escaping or getting lost. Finally, Acer campestre, with its brownish-yellow falling leaves, was chosen to attract children's attention and enhance the playground experience.

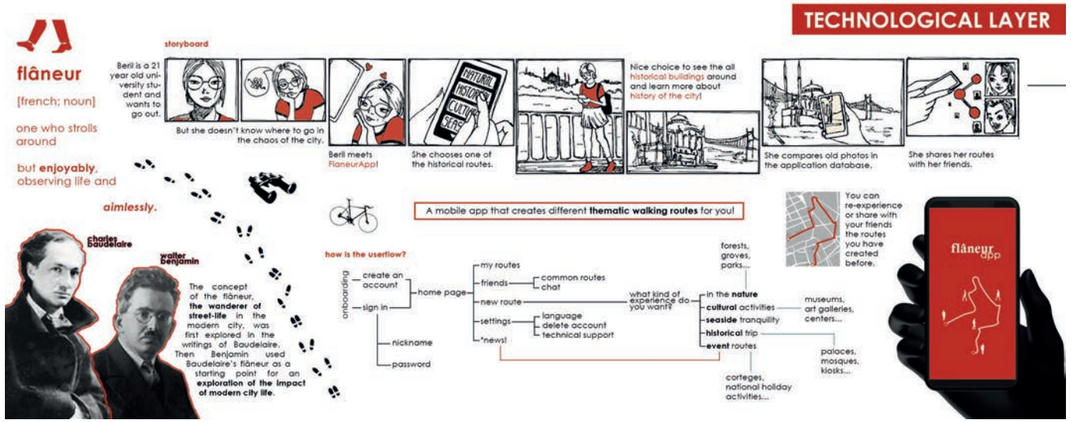
# Timeline Park

Hande Beril Küçükler

*"Timeline Park" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Fatma Ayçim Türer Başkaya and Res. Assist. Başak Akarsu under the title "Responding to the Future" in the spring semester of 2020-2021.*

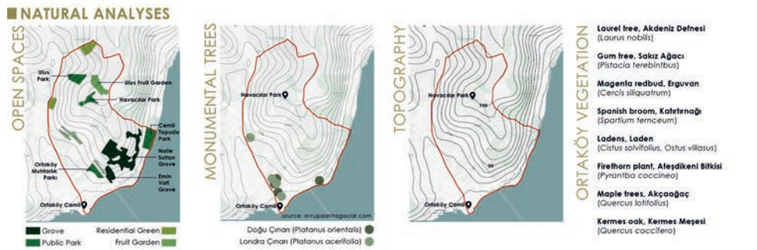
The landscape design project, carried out in collaboration with studios throughout the semester, aimed to examine the landscape layers based on the historical context of the Bosphorus. At the same time, these landscape layers were considered within a socio-economic system, which was then integrated with a technological approach at the conclusion of the project. As part of the project, various field analyses were conducted, moving from general to specific. The analysis began with the history and development of the Bosphorus and was then focused on the project area, Ortaköy. Based on this concept, a new design was developed for the project area, culminating in a planting design.

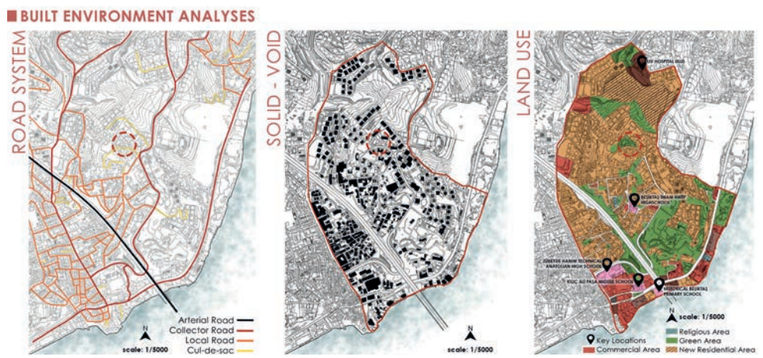


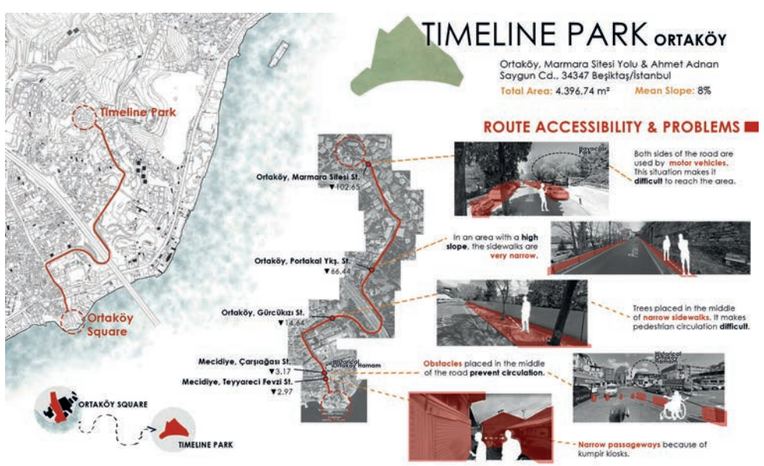







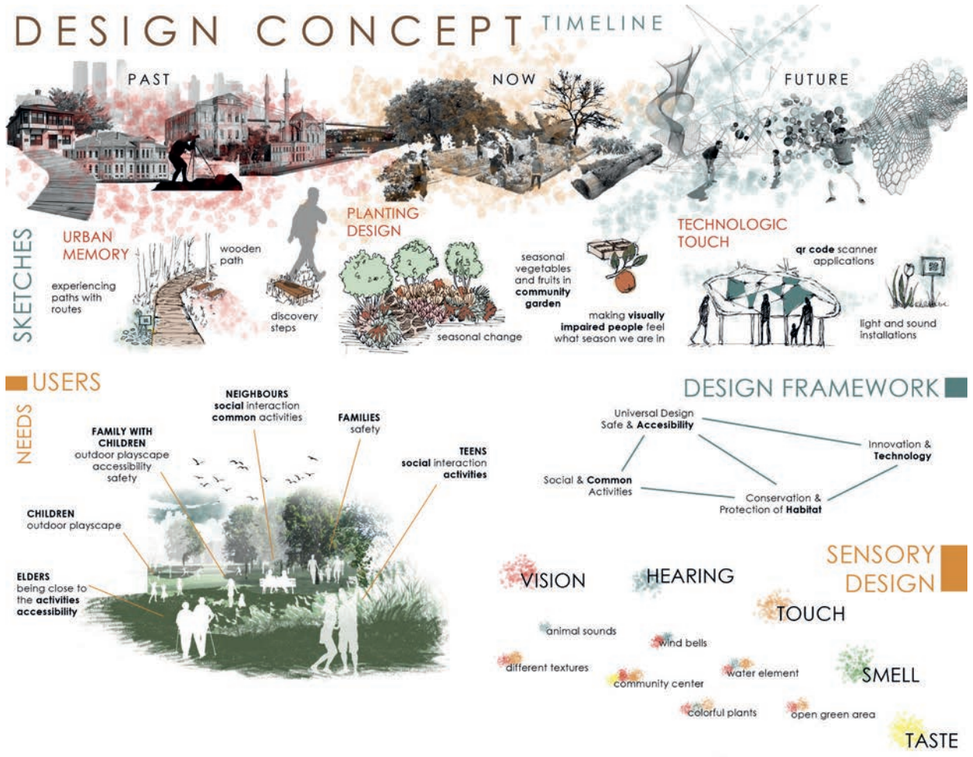




Site analyses were conducted to better understand the characteristics of the area. The purpose of these analyses is to develop sustainable designs that are compatible with the site. In this context, the site's characteristics were examined under various headings. The project area, chosen by narrowing from general to specific, is Ortaköy. Analyses were performed for the Ortaköy area.

Route Accessibility & Problems
The obstacles faced by those wishing to access Havacılar Park from Ortaköy Square provide insights into the park's accessibility. This route faces issues such as narrow sidewalks, barriers, and a lack of parking.

Microclimatic Features
At this stage of the project, the microclimatic characteristics of the area were examined. The findings are as follows: The area receives sunlight almost throughout the day, and there is a wind corridor within the space. To better understand these conditions, the sun and wind patterns were examined at specific times and expressed diagrammatically.

Current Usage of the Area
Currently, Havacılar Park includes basketball courts, sports equipment, seating areas, and a playground. The area functions as a neighborhood park, but based on the analyses conducted, it has been determined that the existing park functions are insufficient.



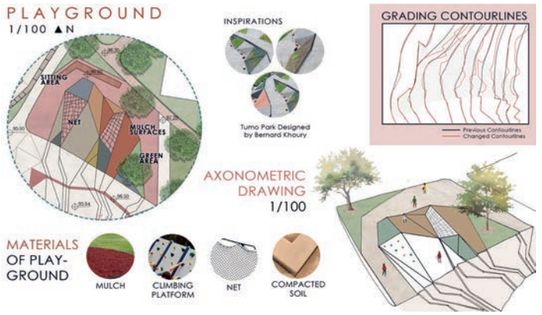

CONCEPTUAL APPROACH
In this approach, predictions were made about the future use of the area, and these scenarios were examined under different headings.

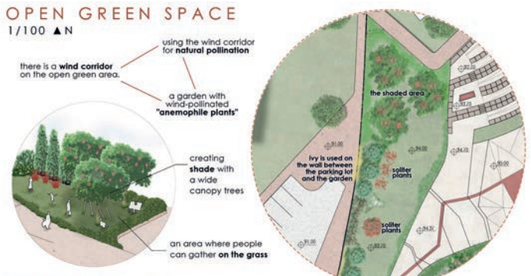
a. Users:
The first heading is the user profile. Currently, the park functions as a neighborhood park, meaning its users are quite diverse. To ensure an effective experience for the future users of the park, the needs of these users were thoroughly examined.

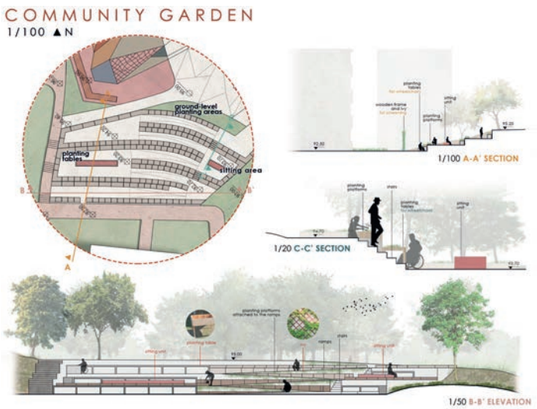
b. Design Framework:
Since the concept is intended to appeal to a wide range of users, organizing the needs of these users under various categories makes the design concept more understandable. The concept and the users' expectations form the foundation of the design. The design focuses on four key areas: universal design, innovation and technology, habitat conservation and protection, and social & communal activities.

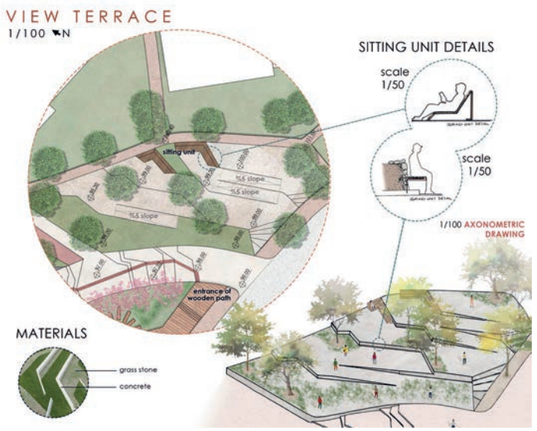
c. Sensory Design Approach:
Within the framework of this design, the park's functions were developed according to sensory design principles. This approach aims to provide a more lasting and unique experience for users of the newly designed park.

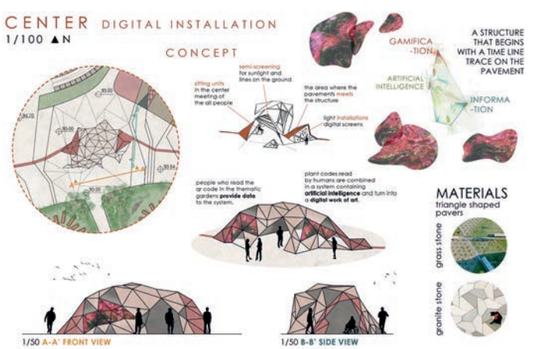
d. Layers of Concept:
The new design concept, which addresses the issues in the area and enhances its positive aspects, is the "Timeline" concept. The Timeline consists of three time layers: past, present, and future. The past layer emphasizes Ortaköy's urban memory, using a wooden path as a historical metaphor. The present layer aims to convey time through landscape elements, while the future layer introduces various installations, incorporating a technological touch.

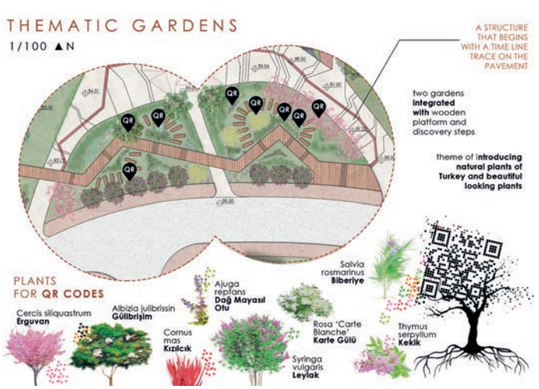





DESIGN APPROACH

Based on all the analyses and ideas, different areas were created within the park. For instance, users will have the opportunity to grow their own fruits and vegetables in the garden. The open green space creates an environment where people can listen to birdsong and connect with the earth. It offers a more natural experience for children at play. The view terrace provides the best panoramic view, in line with the site's topography. Lastly, thematic gardens allow people to feel the passage of the seasons through their landscape designs. The wooden path leads visitors into the past layer, while offering an insight into the future layer, allowing people to learn about plants through applications like QR codes.

a. Community Garden:
The communal garden allows people to grow their own plants, vegetables, and fruits, fostering a different form of communication between neighbors. This space also helps people experience the passage of time without needing a clock or calendar, as the seasonal changes of the plants raise awareness of time.

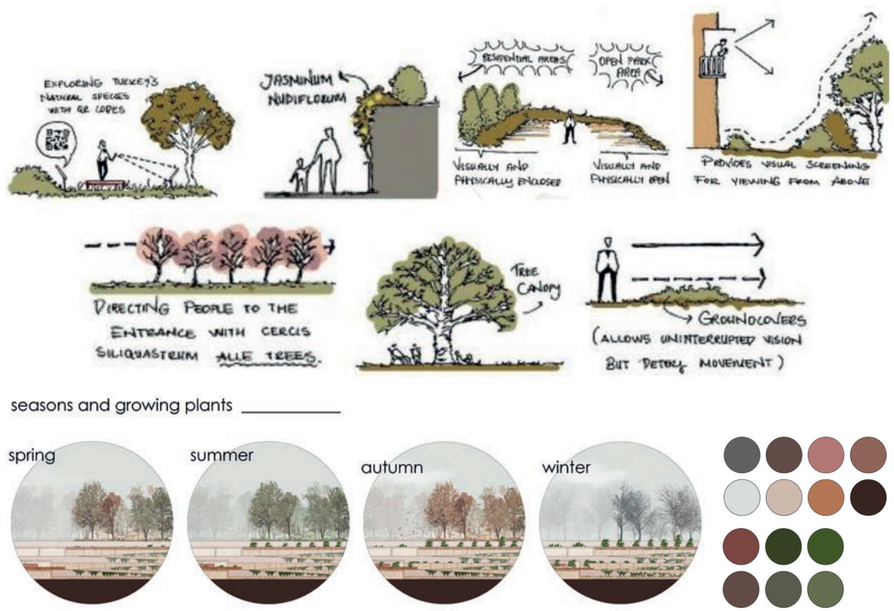
b. Playground:
The playground provides children with a natural play experience. Platforms, climbing areas, and climbing nets have been integrated into the sloping park terrain.

c. View Terrace:
Located at the highest point of the park, the view terrace offers a vantage point from which visitors can observe the vegetation and structures of the park. It provides a comprehensive perspective of the entire timeline concept.

d. Open Green Space:
Designed as a relaxing area for people to sit and unwind, the open green space is also crucial for protecting the local habitat. The existing wind corridor in this area has been positively utilized and complemented with wind-pollinated plants.

e. Thematic Garden:
Thematic gardens introduce a technological element to the park's landscape. Through QR code technology, these gardens introduce visitors to the natural beauty of Turkey's plants. A wooden platform runs through the thematic gardens, connecting them, while discovery steps guide users to plants with QR codes for further exploration.

f. Center:
The concept of the thematic garden merges with the central structure, which contains various seating areas and digital screens. These screens display the transformation of data received from QR codes, which are processed through artificial intelligence technology and converted into visual works of art.

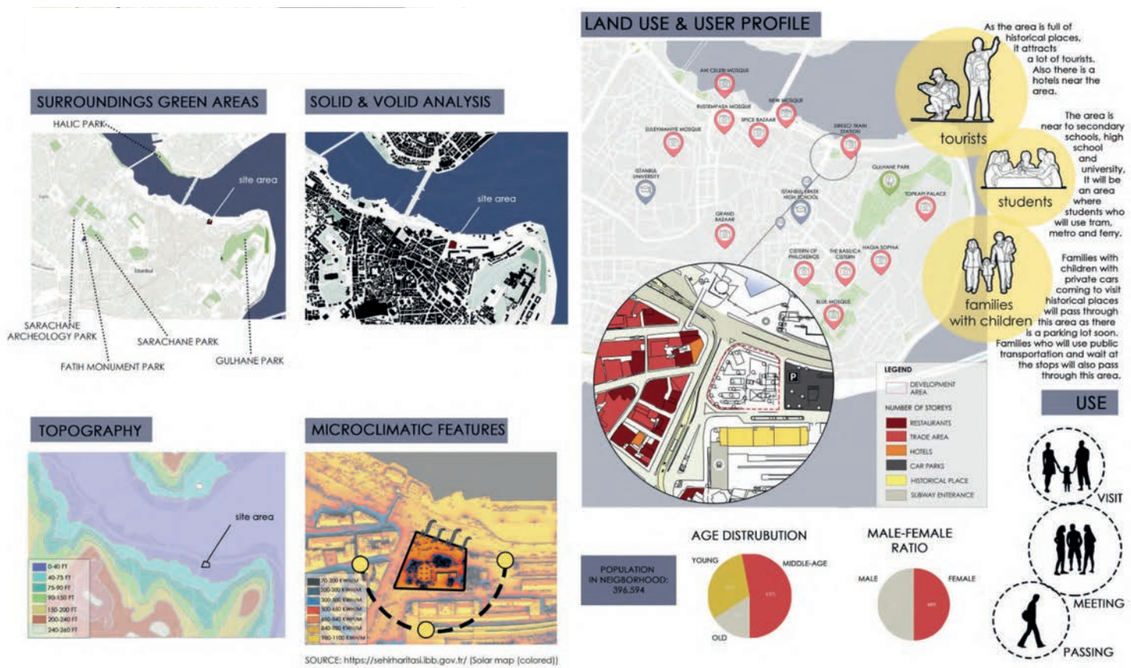


# ON History Park

Esra Solmaz

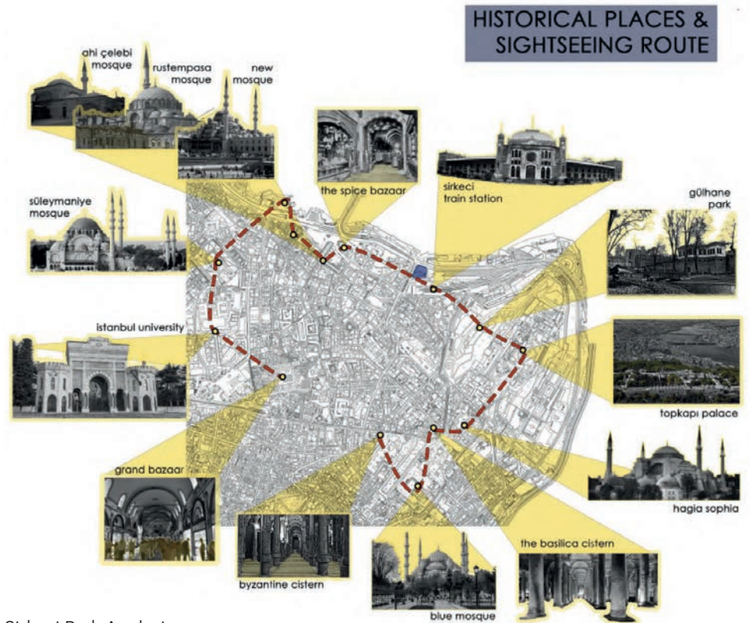
*"ON History Park" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Fatma Ayçim Türer Başkaya and Res. Assist. Başak Akarsu under the title "Responding to the Future" in the spring semester of 2020-2021.*

Fatih, one of Istanbul's oldest settlements on the historical peninsula, is home to significant landmarks, including historical mosques, underground cisterns, and bazaars. The project site is located in the Sirkeci district of Fatih, covering an area of 4,300 square meters. The area is easily accessible via multiple transportation options. It is just two minutes away from the ferry ports and tram lines to Beşiktaş, Kadıköy, Üsküdar, and Harem, and five minutes from the Marmaray metro line. This central location provides a distinct advantage in attracting a diverse range of users to the area. While designing, the needs and preferences of these users were carefully considered. Pedestrian circulation was prioritized, and functions such as vegetation coverage, noise control from vehicles, and providing shade were incorporated. The plant combinations selected are intended to create different color palettes throughout the changing seasons.







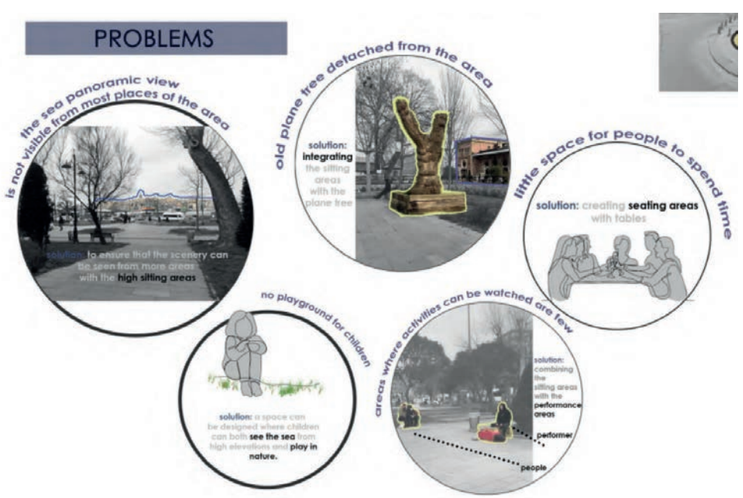




Sirkeci Park Analysis

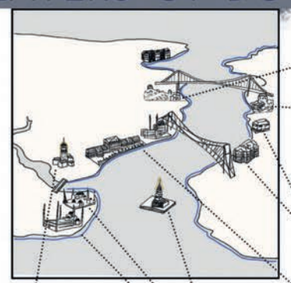
a) Existing Plant Species
Sirkeci Park is home to a variety of plant species, including both younger trees and older, well-established ones. Among the trees in the park, the most deeply rooted specimens were selected for preservation, and the design has been developed with these trees in mind. Notable tree species in the park include Platanus orientalis, Magnolia grandiflora, Prunus cerasifera, Juglans regia, Laurus nobilis, and Sophora japonica pendula.

b) Problems
Several deficiencies have been identified in the park's current use, particularly with regard to its user profile. For example, despite the presence of nearby restaurants and cafes, the park lacks seating areas equipped with tables for those who wish to eat outdoors. Additionally, there is no designated space for children's play activities. The park also lacks provisions for street performers and events, and the park entrances are not properly connected with pedestrian crossings, impeding smooth pedestrian circulation.

While designing the park in this historic district of Istanbul, the concept focused on exploring the underground history of the city. Historical structures dating back to Byzantine times have been destroyed by wars and invasions, leaving behind a landscape rich in underground history, shaped by many civilizations.
The technological layer incorporated into the park will visualize this underground world, making it the central theme of the design. Through the use of holograms, visitors will be able to experience Istanbul's subterranean history.
The windowed structures integrated into the playgrounds and thematic gardens will evoke historical memories for both adults and children. The park's elevated buildings, including thematic gardens, amphitheater seating areas, and playgrounds, aim to provide visitors with a sense of vertical movement—feeling both higher and lower as they explore the space.
Additionally, seating areas shaped like water curves, along with blue lighting in the thematic gardens, represent the element of water, further enhancing the park's immersive experience.



# LAYERS OF BOSPHORUS



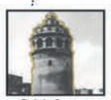
18th century Rumeli Fortress

1880 Anadolu Fortress

Küçüksu

1993 Beylerbeyi Palace

1854 Dolmabahçe Palace



Galata Tower

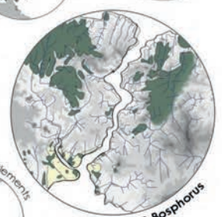
Maiden Tower

Blue Mosque & Hagia Sophia

green system

topography

water system

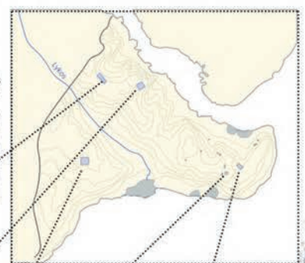


1853 Bosphorus

first settlements

## BYZANTINE CISTERNS IN THE HISTORICAL PENINSULA

The archeologist Dr. Kerim Altuğ's detailed map of the 154 cisterns and underground maps of Sultanahmet and its surrounding.



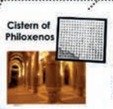
Cistern of Aetius



Cistern of Aspar

1966

2021



Cistern of Philoxenos

Cistern of Basilica

Cistern of Mocius

In order to meet the water needs of Istanbul, water transmission lines that supply water to the city have been built since the 2nd century. Open cisterns and magnificent cisterns such as Yerebatan, Binbirdirek and Şerefiye represent the main public initiatives of the Early Byzantine period capital. The number of closed cisterns in Istanbul is much higher than open cisterns.

historical peninsula

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## CISTERNS' USE IN HISTORY

meeting place for government meetings

water storage

secret passage used in wars

## TECHNOLOGICAL LAYER

Another Istanbul

This mobile application is a game in which the underground corridors in the historical peninsula of Istanbul. It was inspired by the archeologist Dr. Kerim Altuğ's detailed map.

In the game, it is attempted to find **154 cisterns.** About the cisterns found, the user is asked **questions** based on guesswork or **historical information.** With every correct answer given, the user earns points. Thus, historical knowledge is also reinforced.

Some cisterns that can survive today and are safe to enter can be visited and extra points can be earned by **QR code** in their entrances to the app. The players are ranked according to the points earned in the game, and the user who reaches a certain score gets **discounts at museum entries** in Istanbul.



# ON HISTORY PARK

## DESIGN STRATEGY

In the design decisions, the usage purposes of the park were determined according to the user profile.

**ACCESS**
wood trail

**REST**
pergola

**REST**
sitting areas with table

**REST**
bench

**ACTIVE**
playground

**ACTIVE**
performans area

## PLAN

SCALE: 1:200 N

Project Decisions

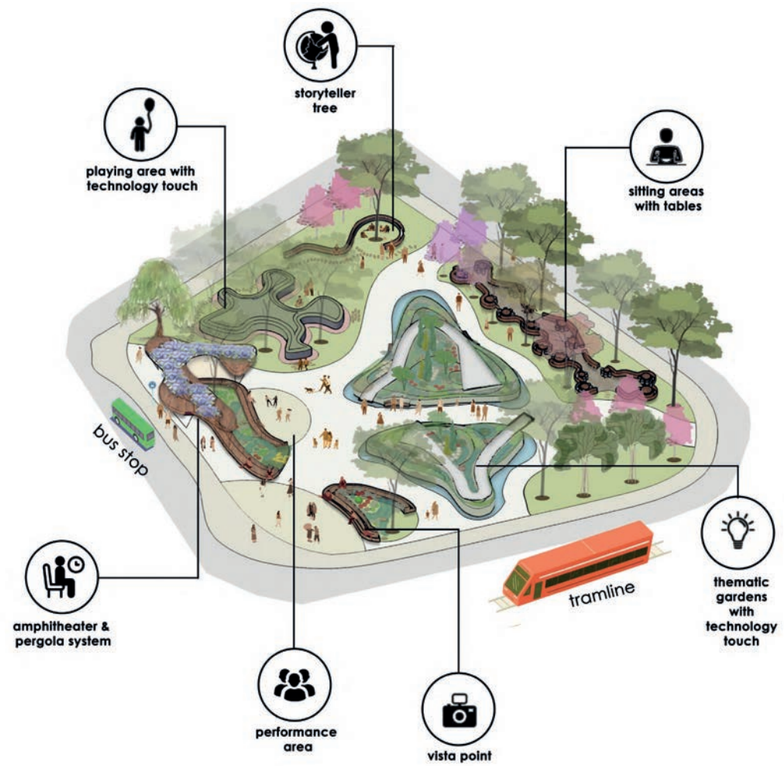
a. User Profile:
The primary users of the park include tourists and families with children, due to its proximity to historical landmarks. Additionally, students from nearby schools, including a university, high school, and primary school, are considered key users. Local residents, based on demographic factors, are also an important user group.

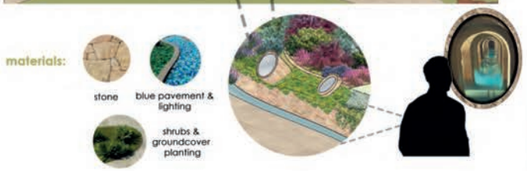
b. Functions:
To ensure smooth pedestrian circulation, the pathways are interconnected with pedestrian crossings. After analyzing the needs of the user profile–such as seating areas, landscape viewing spaces, performance areas, children's playgrounds, and thematic gardens–the functions were determined based on environmental considerations, including sunlight and wind direction.

c. Design Principles:
The design adheres to several key principles:

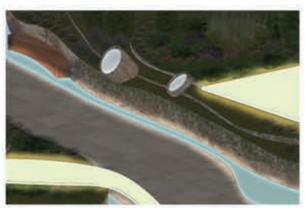
Historical Visual and Sensory Memory
Sustainable Nature
Sense of Community
Technological Integration
Physical Wellbeing

d. Technology Layer:
In the elevated thematic gardens, various plant species are incorporated, with glazed structures that give the impression of viewing the underground. This feature serves as a hologram, showcasing the historical traces of the site, which are digitally rendered by the designer.






inspired:



The theme is supported by lighting elements where the feeling of water flowing on the ground of the thematic gardens is seen.

PERGOLA

In the double-sided seating area, those sitting in the pink part can both watch the sea view and wait in this area due to its connection with the bus stop.

materials:

inspired:

PLAYGROUND

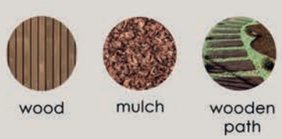
materials:

inspired:

As in the thematic gardens, there are hologram windows reached by climbing walls in the children's playground.
The playground has a slope suitable for children 6-7 years old.

There is a fairy tale tree in the park that tells children historical information about Istanbul's underground history, such as water cisterns and old waterways.
For this, an area for children has been created around the old plane tree in the area.

materials:

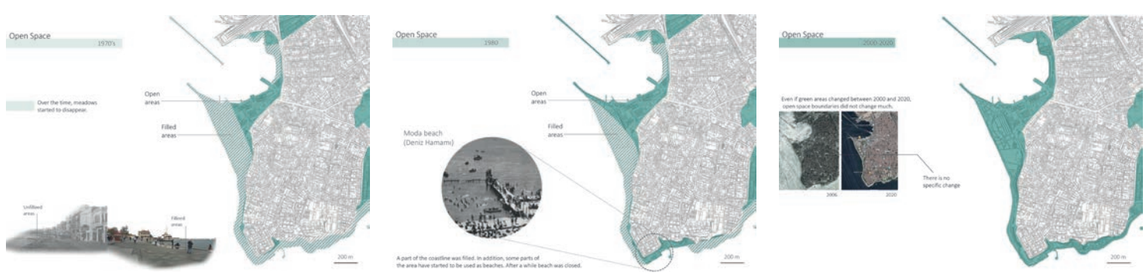



inspired:

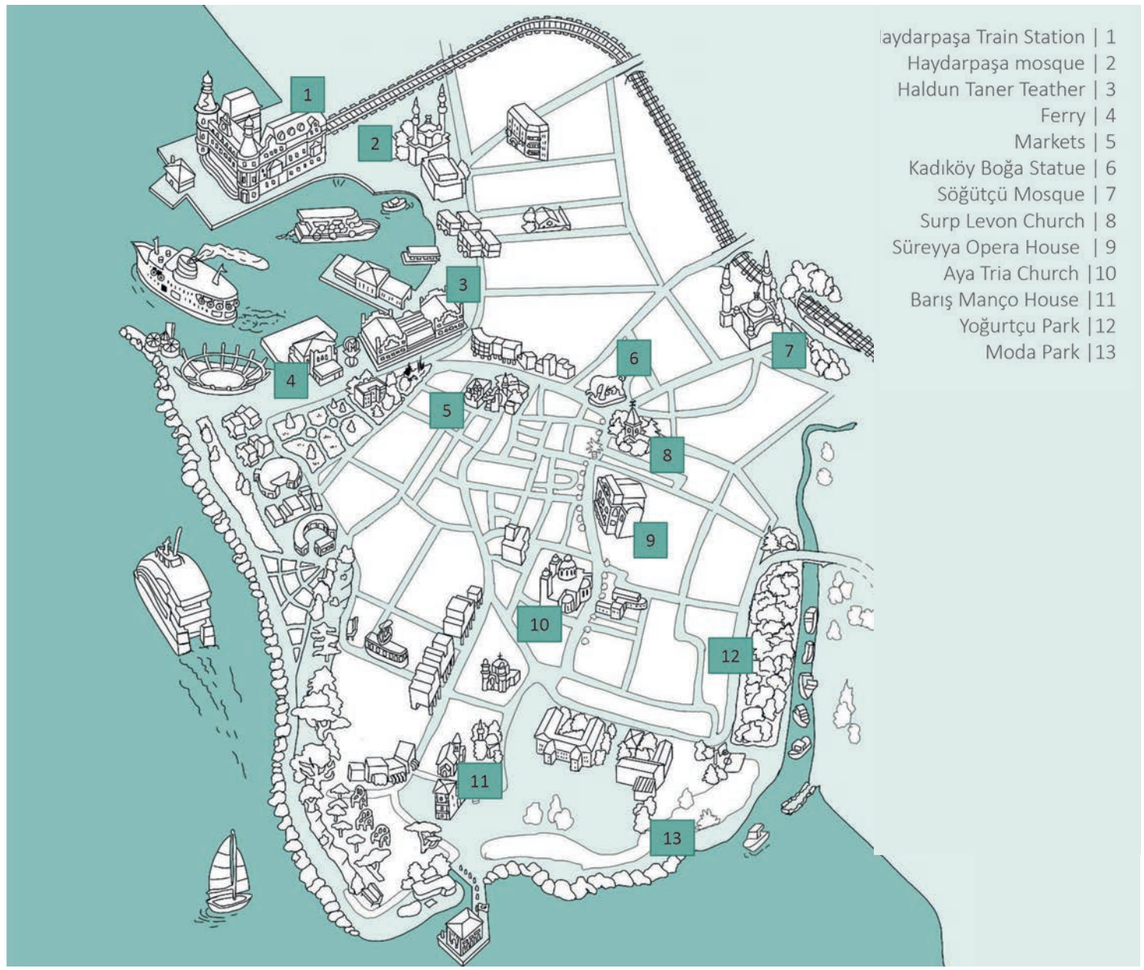
# Transformative Spaces

Nergis Şenkaya, İremnur Alaca, Rebeka Kayakoparan

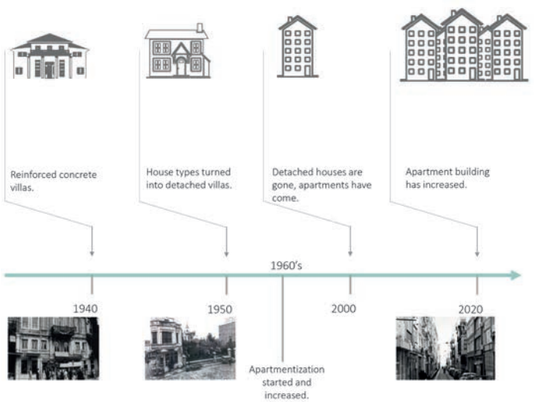
*"Transformative Spaces" was produced within the scope of Landscape Design 1 carried out by Assist. Prof. Ikhwan Kim and Res. Assist. Nergis Aşar under the title "Transformative Spaces" in the spring semester of 2020-2021.*

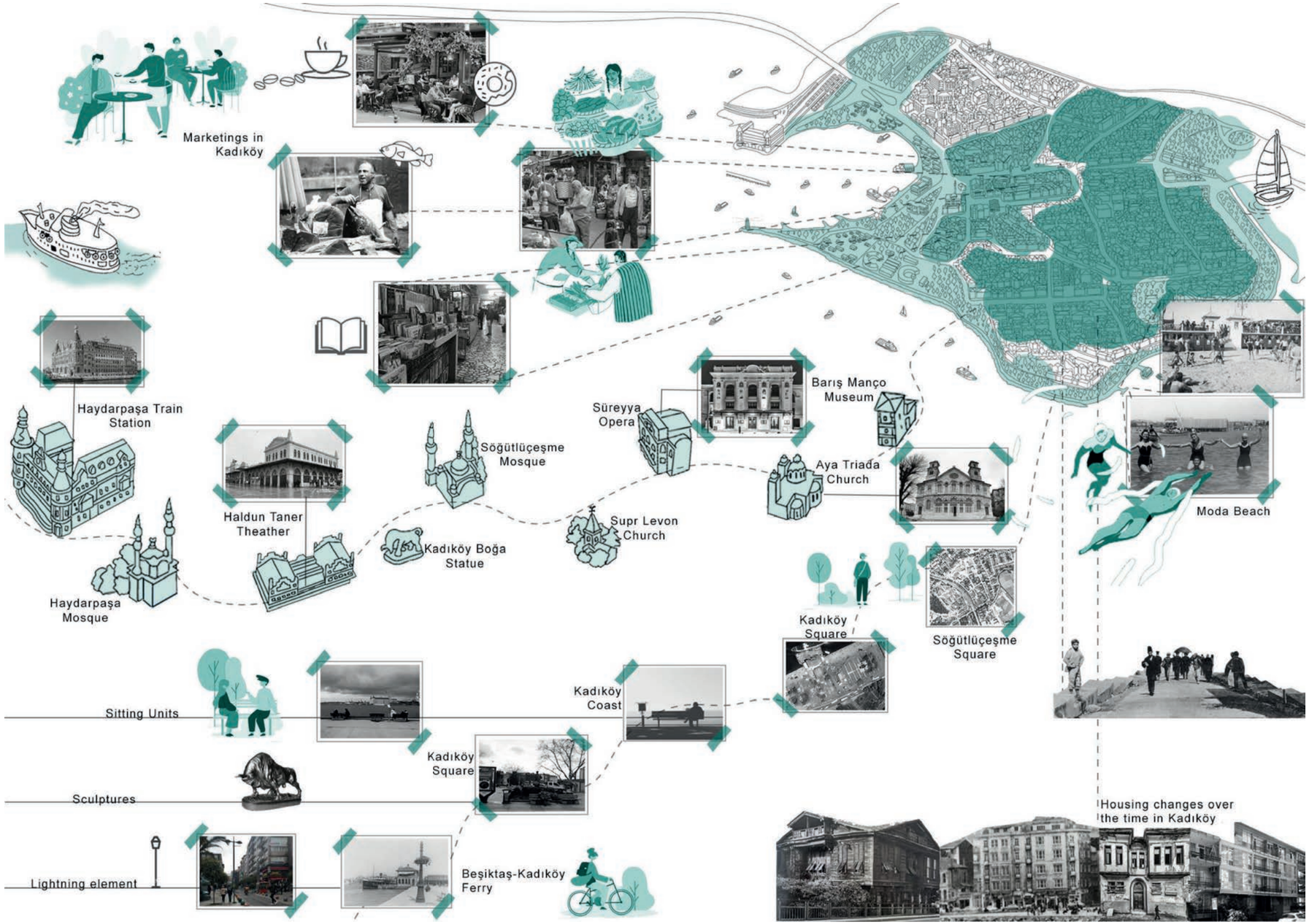




Ziya Osman Saba, Mesut İnsanlar Fotoğrafhanesi Değişen İstanbul, İstanbul: Varlık Yayınları, 1992
Cahit Kayra, Kadıköy Rüzgârları, İstanbul: Boyut Kitapları, 1997



# Transformative Spaces

Nergis Şenkaya, İremnur Alaca, Rebeka Kayakoparan

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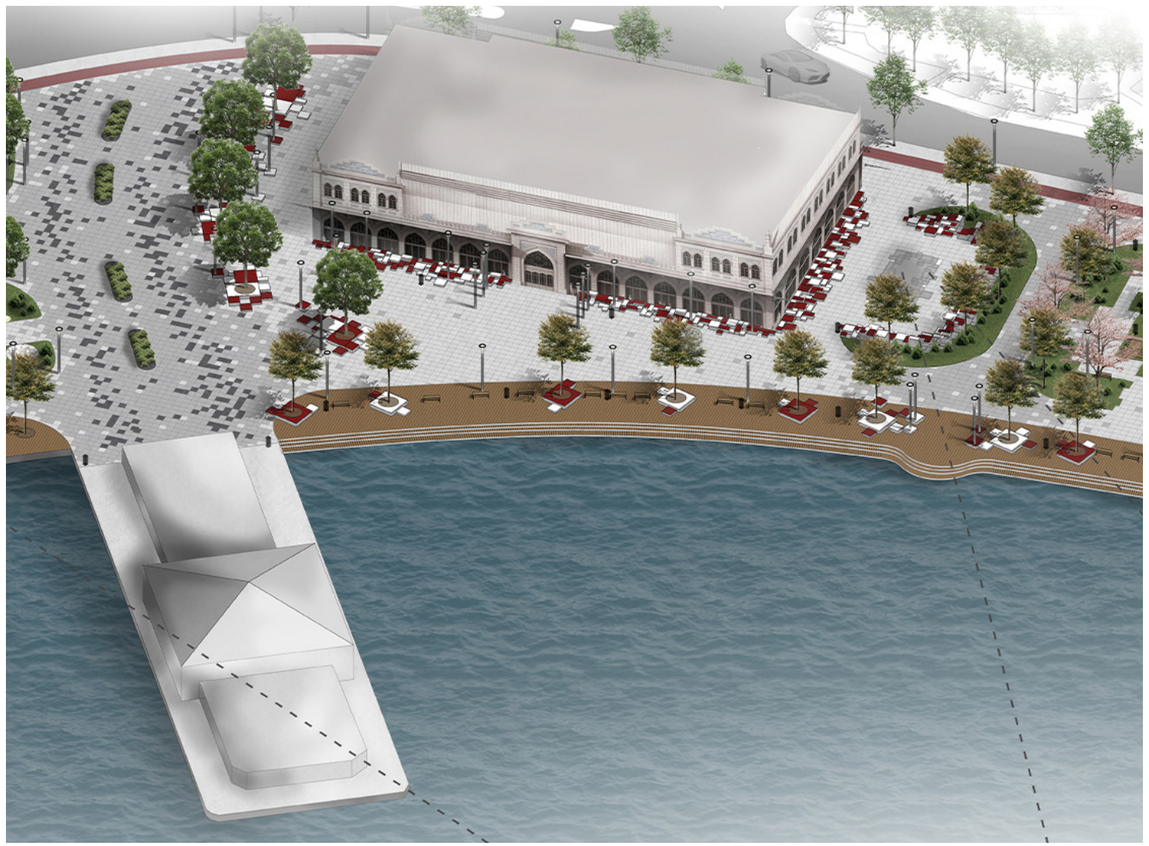
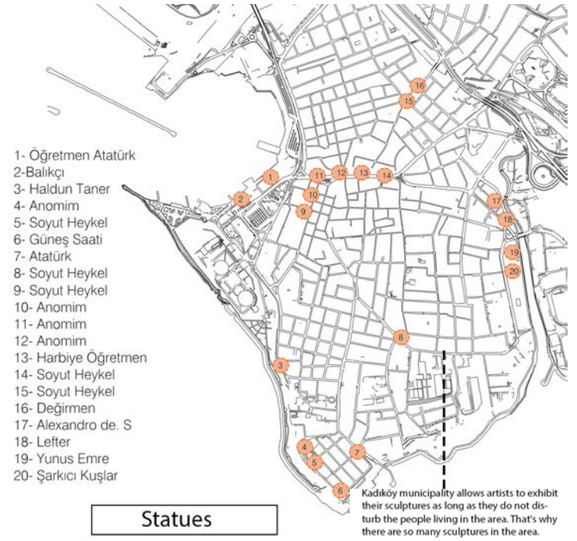
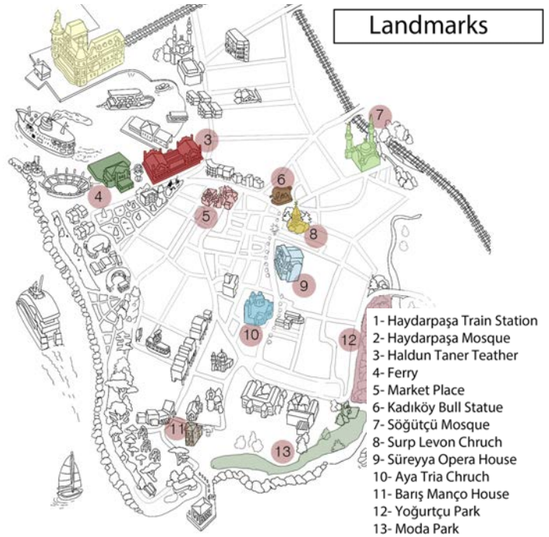
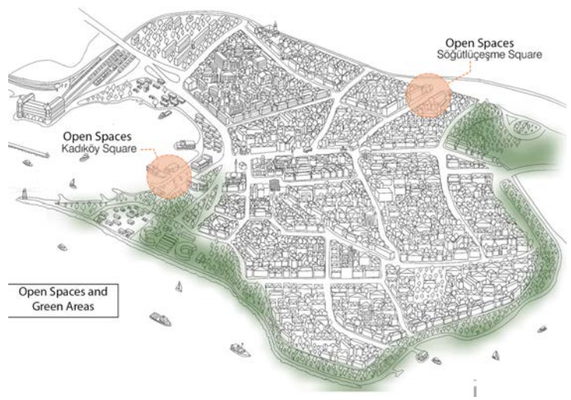
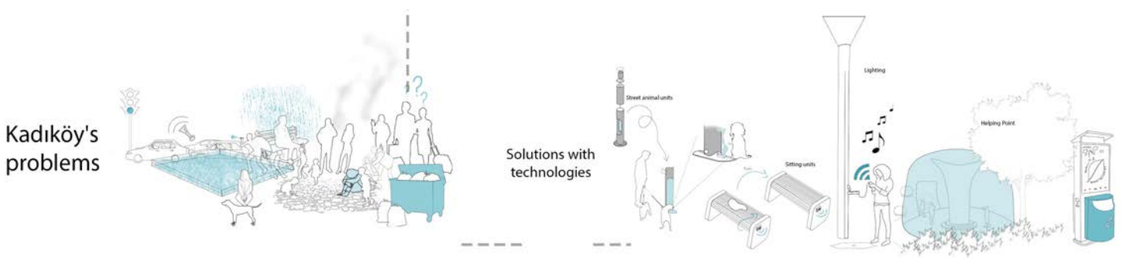




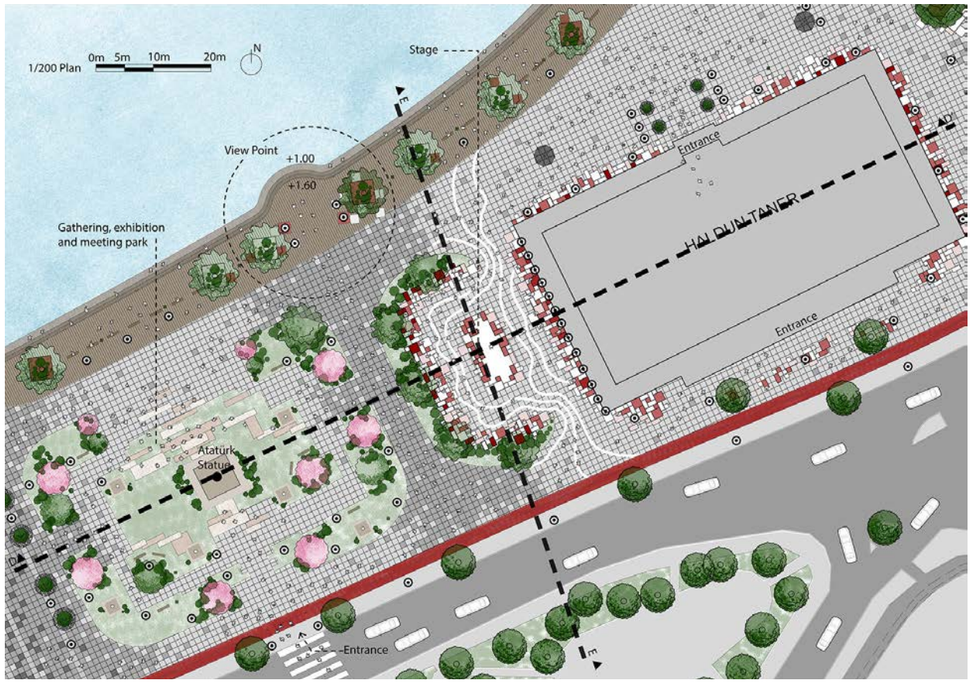


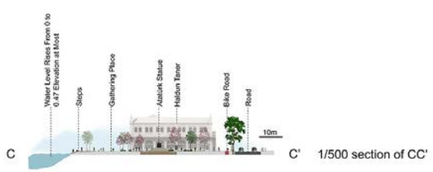



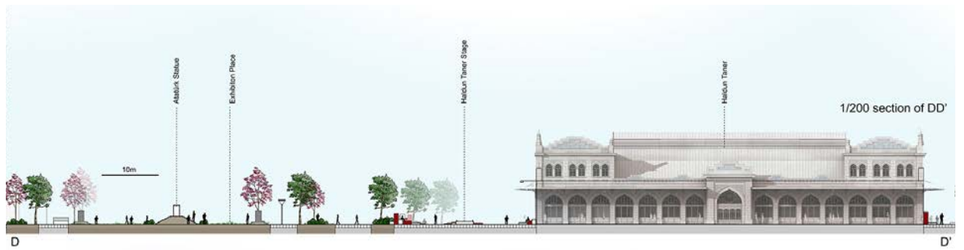
1/500 Plan
Hills for watching the view
Old buffets
New Metro Station
FERRY
Stairs
Stage
Bicycle road
Gathering, meeting and exhibition park
View Point
HALİDUN TANER
Resting Park

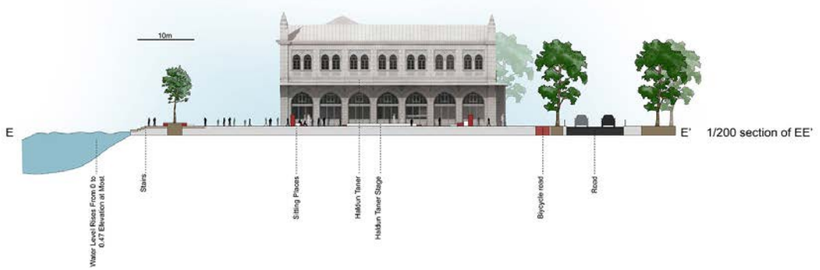

1/200 Plan
0m 5m 10m 20m
Stage
View Point
+1.00
+1.60
Gathering, exhibition and meeting park
Entrance
HALİDUN TANER
Entrance
Atatürk Statue
Entrance

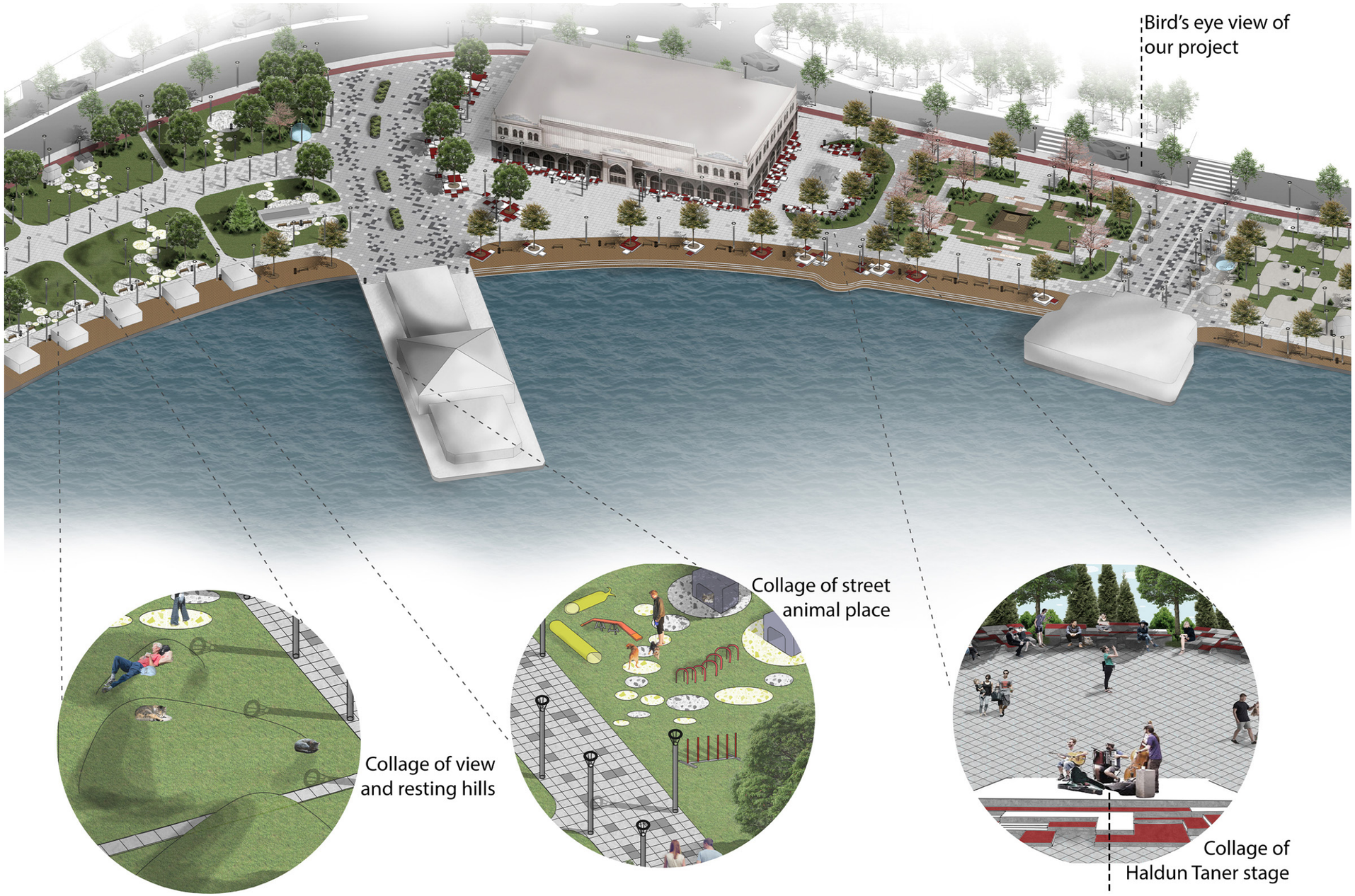
Ferry Station
Halidun Taner
Ferry Station
New Metro Station
Hills
Hills
Buffet
Buffet
10m
A
A'
1/500 section of AA'

Buffet
Resting Park
Helping Point
Ferry Station
Atatürk Statue
Halidun Taner Stage
Halidun Taner
Big Park
Road
10m
B
B'
1/500 section of BB'


Water Level Rises From 0 to 4.4 / Elevation in Most
Shops
Gathering Place
Atatürk Statue
Halidun Taner
Bike Road
Road
10m
C
C'
1/500 section of CC'


Atatürk Statue
Exhibition Place
Halidun Taner Stage
Halidun Taner
1/200 section of DD'
10m
D
D'

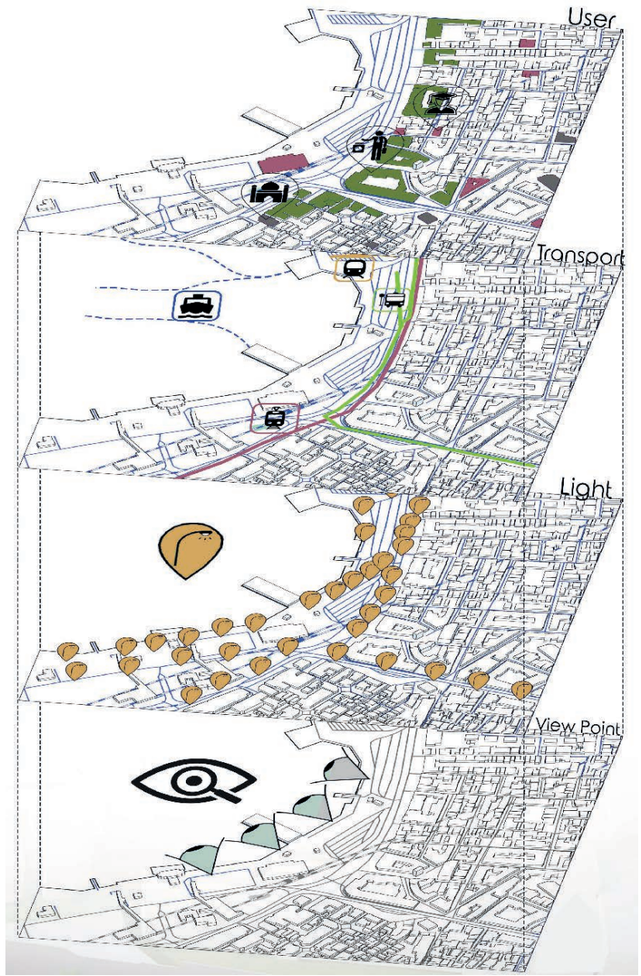

10m
E
E'
1/200 section of EE'
Water Level Rises From 0 to 4.4 / Elevation in Most
Stairs
Sitting Places
Halidun Taner
Halidun Taner Stage
Bicycle road
Road


Bird's eye view of
our project
Collage of street
animal place
Collage of view
and resting hills
Collage of
Haldun Taner stage

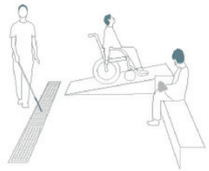
# Kadıköy Coastal Band | 2031

İrem Karabulutlu, Almira Endican, Alperen Atmaca

*"Kadıköy Coastal Band | 2031" was produced within the scope of Landscape Design 1 carried out by Assist. Prof. Ikhwan Kim and Res. Assist. Nergis Aşar under the title "Transformative Spaces" in the spring semester of 2020-2021.*



Equipment was added to the design to help cats, dogs and birds meet their basic needs, spaces were designed for conservatory students to relax during their breaks and take their lessons outdoors, areas were added for people watching the theater or waiting for the bus.



We added ramps where it is necessary, sitting areas were placed for the elderly, children or disabled people to rest at least every thirty meters, and flooring for visually impaired people was added to the entire area.

How?

How?

Why?

It was very important for us because of the density and importance of the area that every living thing's right to live is one of the prominent principles of this design. There were no designs that appealed to each of the human types found in the area, and either the plants or animals living in the area were not considered sufficiently.

Equal

Accessibility

Why? In design, it was one of our priorities to be usable and experienceable, that is, accessible for everyone. It has been decided that it is not appropriate in public space and square designs to create spaces that cannot be used by every living thing in an area that is open to all kinds of people and is so dense.

Design Goals

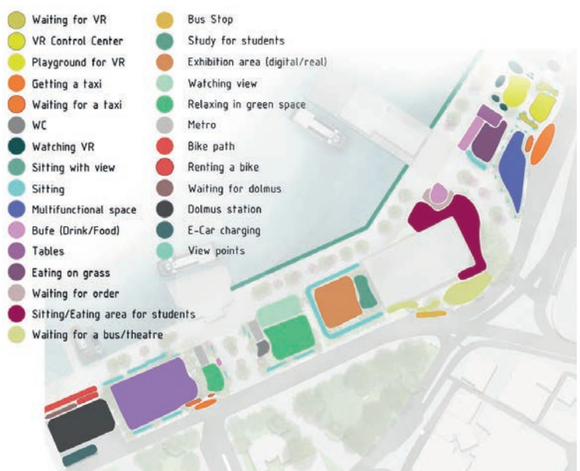
Ecological

Why?

There is a continuous green corridor line above and below the Kadıköy square. This green corridor is divided in Kadıköy Square. Connecting the upper and lower green corridors was a prominent element in the design, as we know the continuity of the greenways and their ecological importance to our planet. At the same time, Kadıköy was a rich area in terms of plant species in the past, but with urbanization, we started to see these endemic species less and less. Bringing these plant species back to Kadıköy and strengthening the ecology of the region has been one of our priorities.

How?

In the design, importance was given to increasing the green area and the relationship of this green area with the remaining green patches and corridors on a large scale is seen. In addition to the ecological effects of the greening of this area, its effects on human psychology are also very important.




Technologies

## Virtual Reality

-Virtual reality space is suitable for use by people of all ages. Whether you want to play, plan a trip, participate in a new event and much more can be done in this area.

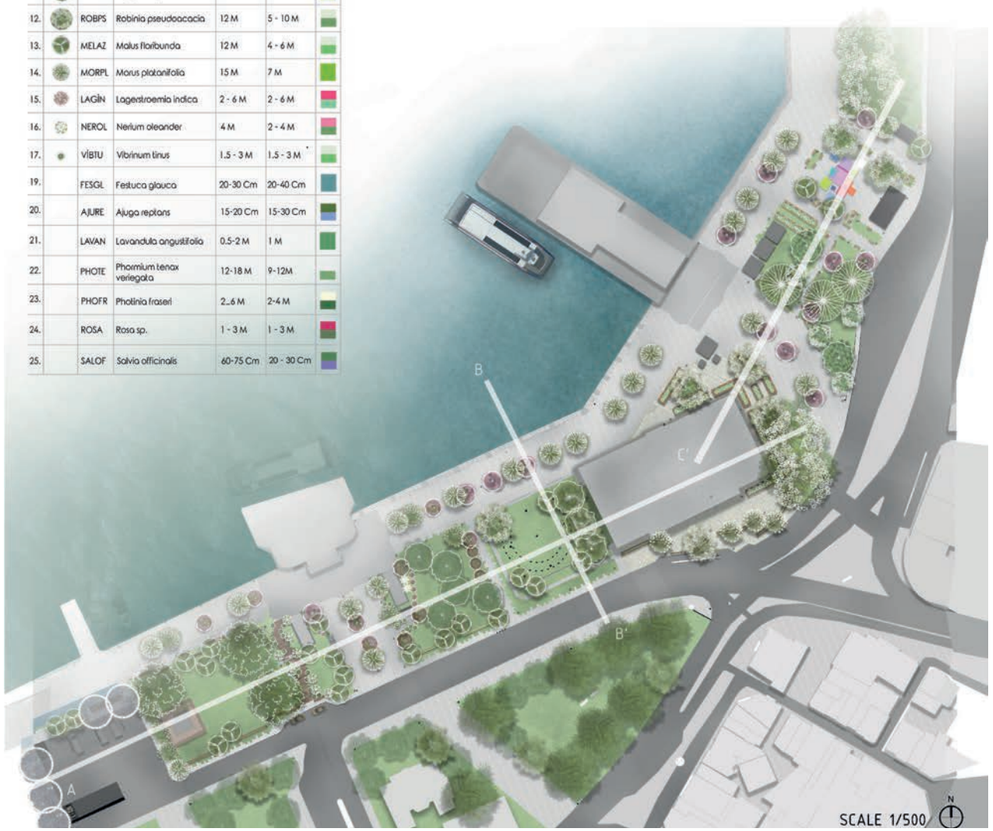
## E-Exhibition

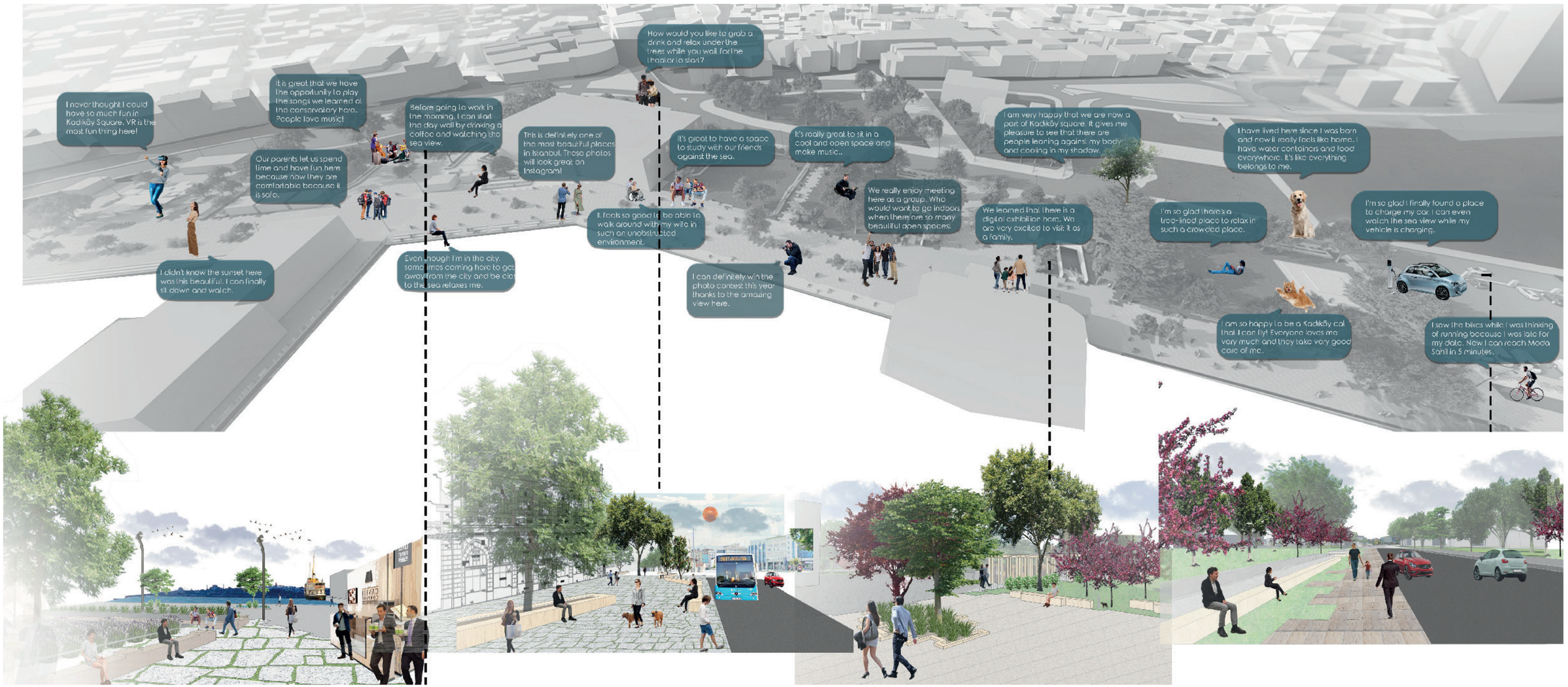
-A space where conservatory students' works and different arts from around the world can be exhibited. It is an area that will be used a lot with weekly outdoor movies and different events.

## Car Charge Station

-We enable electric vehicles to charge

| | Symbol | Code | Plant Name | Height | Width | Color |
|---|---|---|---|---|---|---|
| 1. | | PLAOR | Platanus orientalis | 40 - 50 M | 20 - 25 M | |
| 2. | | GRERO | Grevillea robusta | 10 - 30 M | 10 - 20 M | |
| 3. | | ACENE | Acer negundo | 10 - 25 M | 10 - 15 M | |
| 4. | | TİLTO | Tilia tomentosa | 20 - 30 M | 20 - 30 M | |
| 5. | | QUERO | Quercus robus | 20 M | 25 M | |
| 6. | | JACMİ | Jacaranda mimosifolia | 25 M | 15 M | |
| 7. | | PRUCE | Prunus cerasifera pissardii | 8 - 12 M | 4 - 8 M | |
| 8. | | ACEPA | Acer palmatum | 2 - 6 M | 2 - 4 M | |
| 9. | | CERSİ | Cercis siliquastrum | 5 - 15 M | 8 - 10 M | |
| 10. | | LAUNO | Laurus nobilis | 5 - 15 M | 5 - 12 M | |
| 11. | | MAGGR | Magnolia grandiflora | 8 - 30 M | 4 - 15 M | |
| 12. | | ROBPS | Robinia pseudoacacia | 12 M | 5 - 10 M | |
| 13. | | MELAZ | Malus floribunda | 12 M | 4 - 6 M | |
| 14. | | MORPL | Morus platanifolia | 15 M | 7 M | |
| 15. | | LAGİN | Lagerstroemia indica | 2 - 6 M | 2 - 6 M | |
| 16. | | NEROL | Nerium oleander | 4 M | 2 - 4 M | |
| 17. | | VİBTU | Vibrinum tinus | 1.5 - 3 M | 1.5 - 3 M | |
| 19. | | FESGL | Festuca glauca | 20-30 Cm | 20-40 Cm | |
| 20. | | AJURE | Ajuga reptans | 15-20 Cm | 15-30 Cm | |
| 21. | | LAVAN | Lavandula angustifolia | 0.5-2 M | 1 M | |
| 22. | | PHOTE | Phormium tenax variegata | 12-18 M | 9-12M | |
| 23. | | PHOFR | Photinia fraseri | 2..6 M | 2-4 M | |
| 24. | | ROSA | Rosa sp. | 1 - 3 M | 1 - 3 M | |
| 25. | | SALOF | Salvia officinalis | 60-75 Cm | 20 - 30 Cm | |



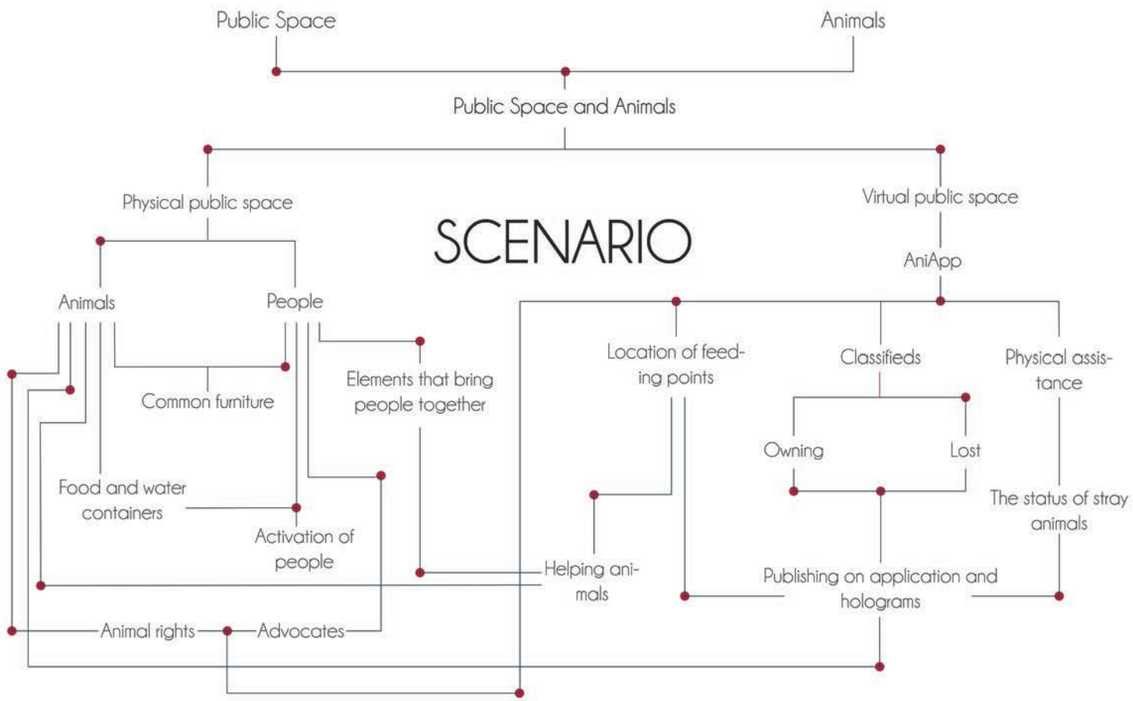

I never thought I could have so much fun in Kadıköy Square. VR is the most fun thing here!
It is great that we have the opportunity to play the songs we learned at the conservatory here. People love music!
Before going to work in the morning, I can start the day well by drinking a coffee and watching the sea view.
How would you like to grab a drink and relax under the trees while you wait for the theater to start?
Our parents let us spend time and have fun here because now they are comfortable because it is safe.
This is definitely one of the most beautiful places in Istanbul. Those photos will look great on Instagram!
It's great to have a space to study with our friends against the sea.
It's really great to sit in a cool and open space and make music..
I am very happy that we are now a part of Kadıköy square. It gives me pleasure to see that there are people leaning against my body and cooling in my shadow.
I have lived here since I was born and now it really feels like home. I have water containers and food everywhere. It's like everything belongs to me.
I didn't know the sunset here was this beautiful. I can finally sit down and watch.
Even though I'm in the city, sometimes coming here to get away from the city and be close to the sea relaxes me.
It feels so good to be able to walk around with my wife in such an unobstructed environment.
We really enjoy meeting here as a group. Who would want to go indoors when there are so many beautiful open spaces.
We learned that there is a digital exhibition here. We are very excited to visit it as a family.
I'm so glad there's a tree-lined place to relax in such a crowded place.
I'm so glad I finally found a place to charge my car. I can even watch the sea view while my vehicle is charging.
I can definitely win the photo contest this year thanks to the amazing view here.
I am so happy to be a Kadıköy cat that I can fly! Everyone loves me very much and they take very good care of me.
I saw the bikes while I was thinking of running because I was late for my date. Now I can reach Moda Sahil in 5 minutes.

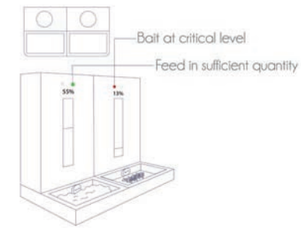
# AniPark

Tuğba Kurt

*"AniPark" was produced within the scope of Landscape Design 1 carried out by Selen Aksoy, MSc. and Res. Assist. Nergis Aşar under the title "PublicScape" in the spring semester of 2020-2021.*

## Synthesis

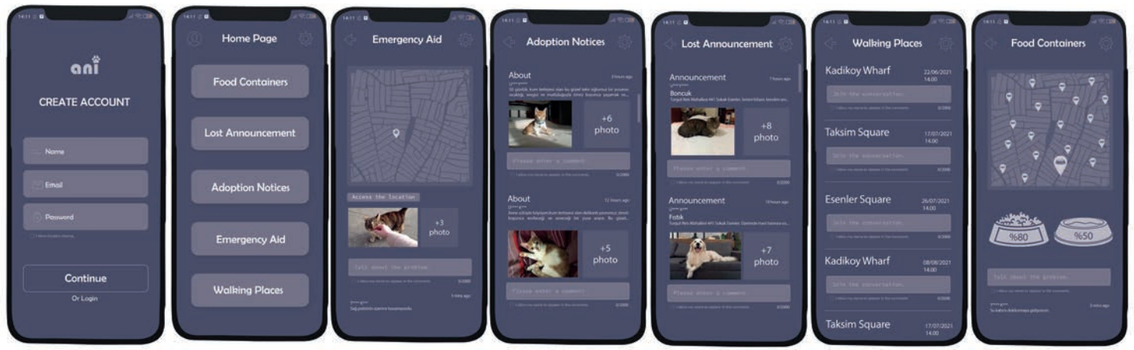




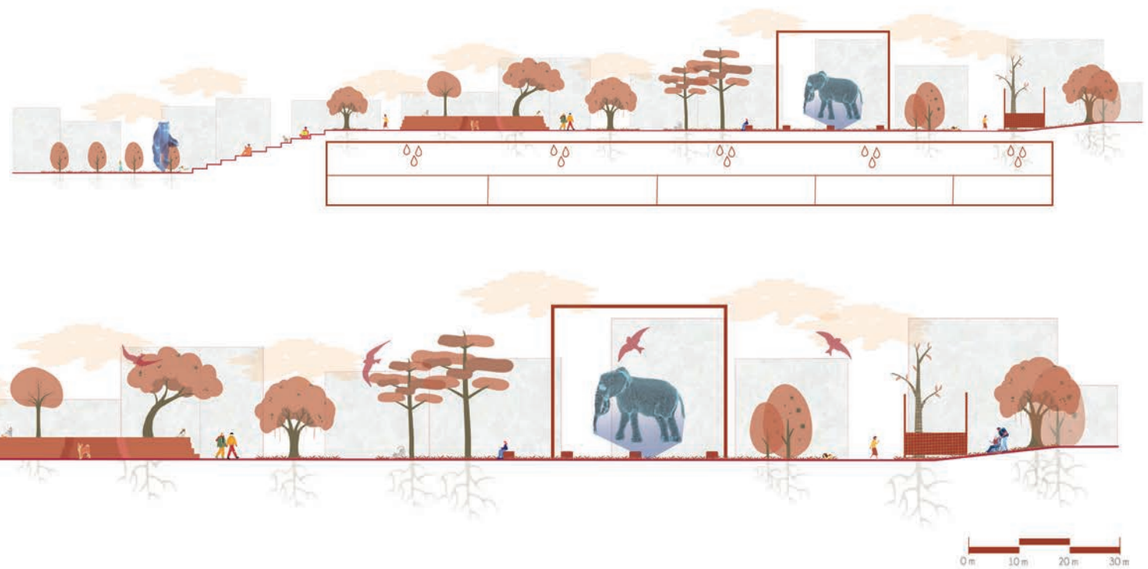
Feeder and drinker to hang on trees for birds.

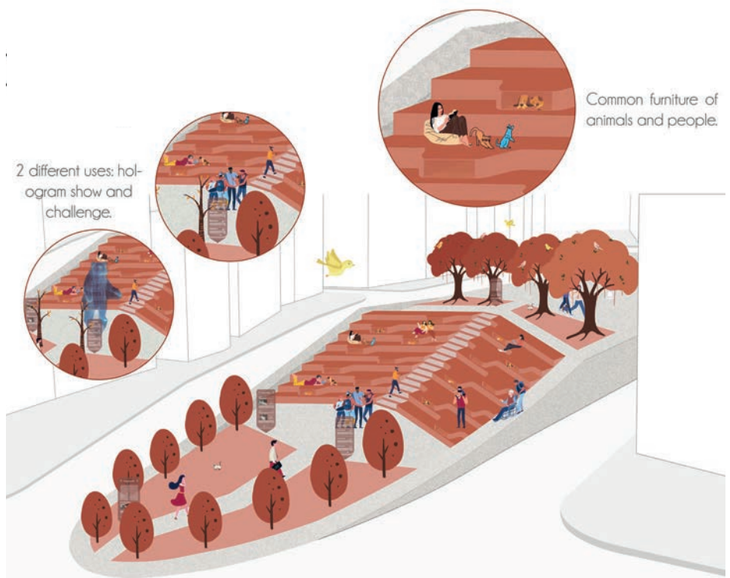
With the elevation we have made on the soil surface, animals can play with the slope here, while at the same time, they can use the space formed under it as a nest.

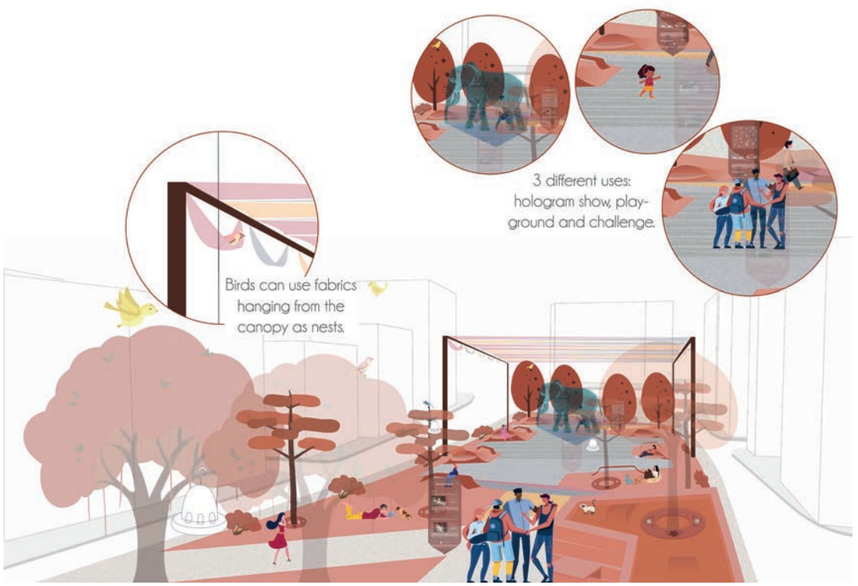
With the Anipark app, you will be able to see the animals in need of help around the park, check the status of the feeding points, follow the losat and appropriation notices, and acess the locations and dates of the walks. In addition, you will be able to instantly informed of these situations with the hologram signs in the park.




By accumulating rain water under the park, the energy needed by the park will be met from here. Thus, it will be a self-sufficient park, without the need for extra energy.




Common furniture of animals and people.
2 different uses: hol-ogram show and challenge.


3 different uses: hologram show, play-ground and challenge.
Birds can use fabrics hanging from the canopy as nests.

Informing people with hologram signs.
Common furniture for people of all ages and animals

# More Esenler

Rümeysa Yapar

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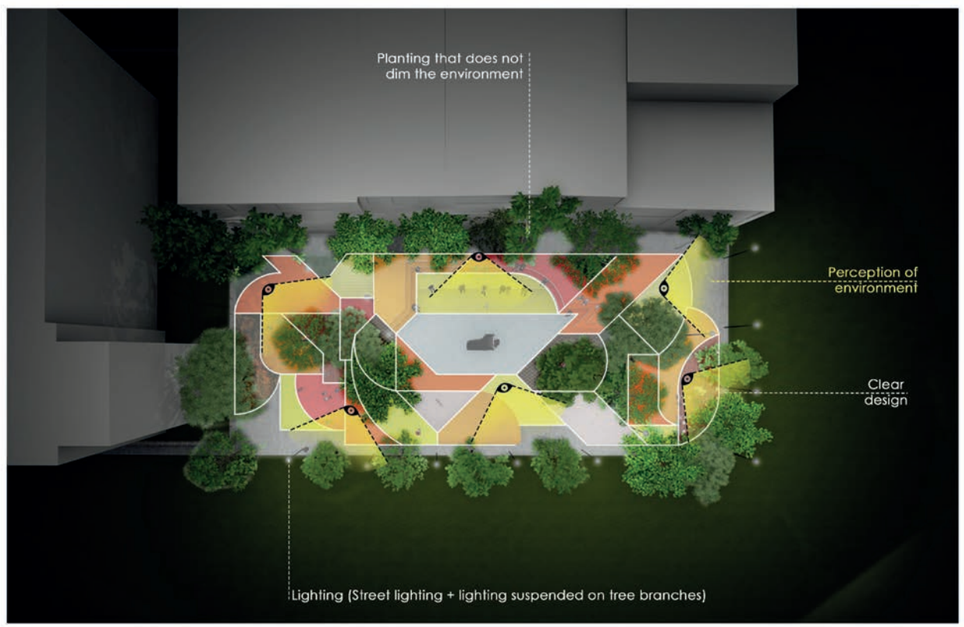
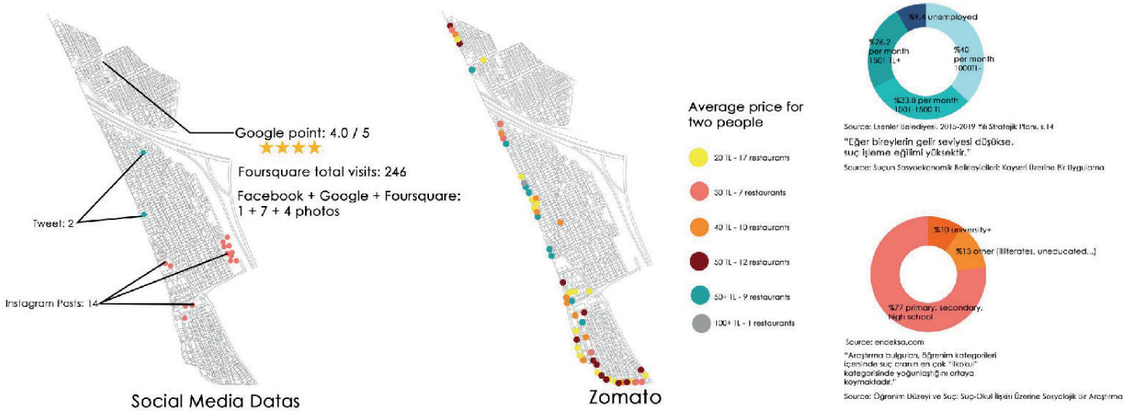
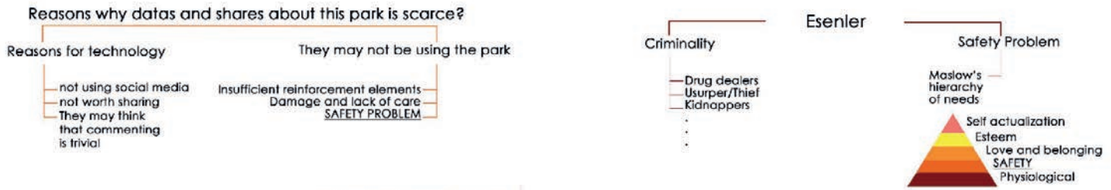


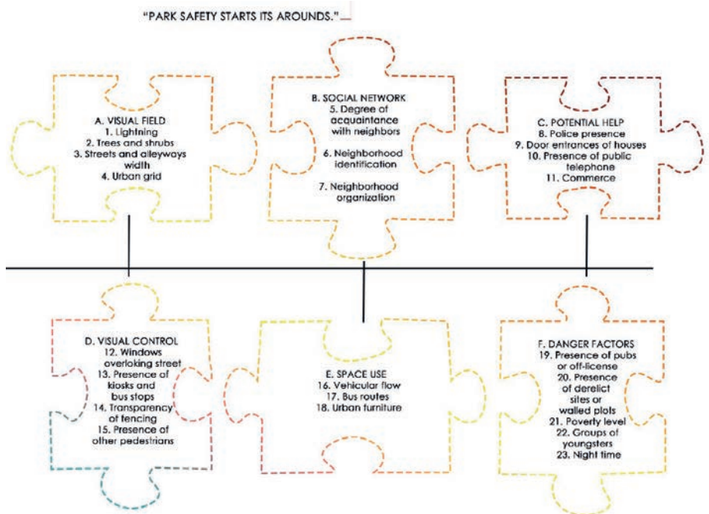


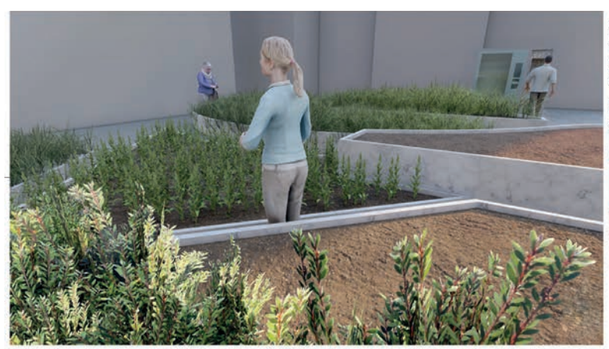

## Physical Analysis

## Digital Analysis





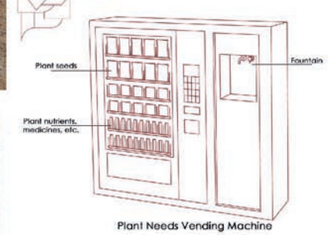



Catalog of Plants Suitable for Cultivation in This Area

## Community Garden

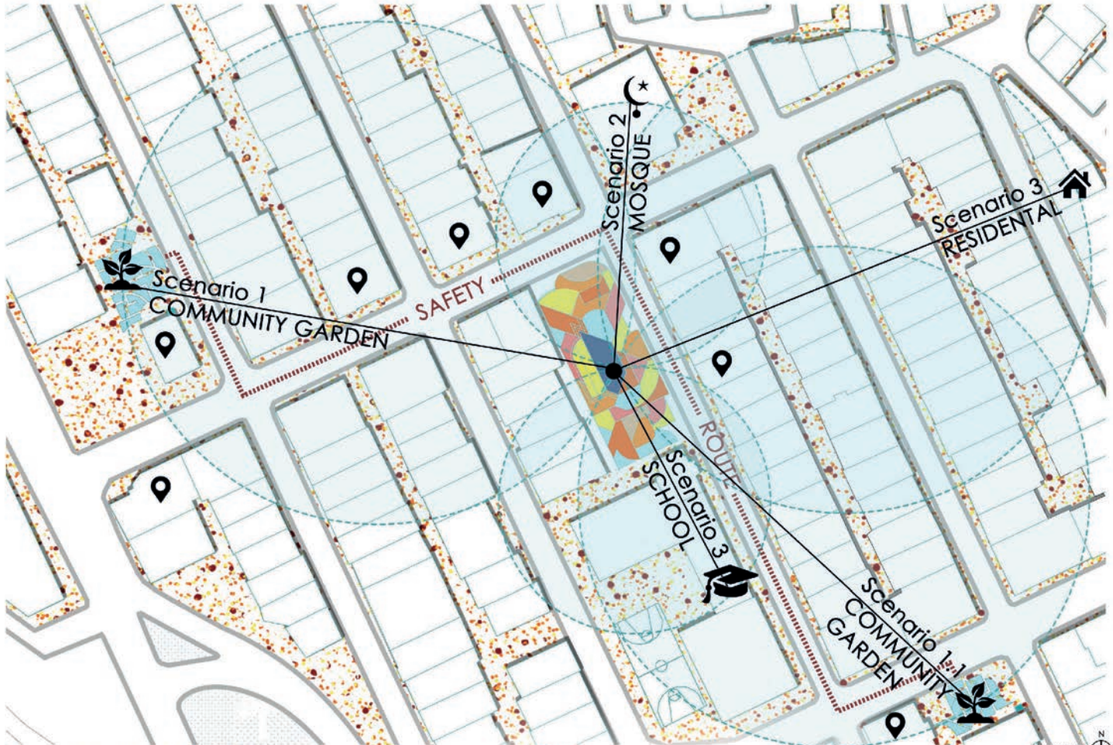
Dysfunctional and secluded areas create unsafe spots in the city. The recycling of these points supports the theory that "safety begins around the park." Community gardens, which are often available to the public, will increase the presence of people on this route. A natural safe route will be formed around the park.

The design of the park and community gardens is a whole, and the floor painting creates a trail for people to be on this route and leads people.

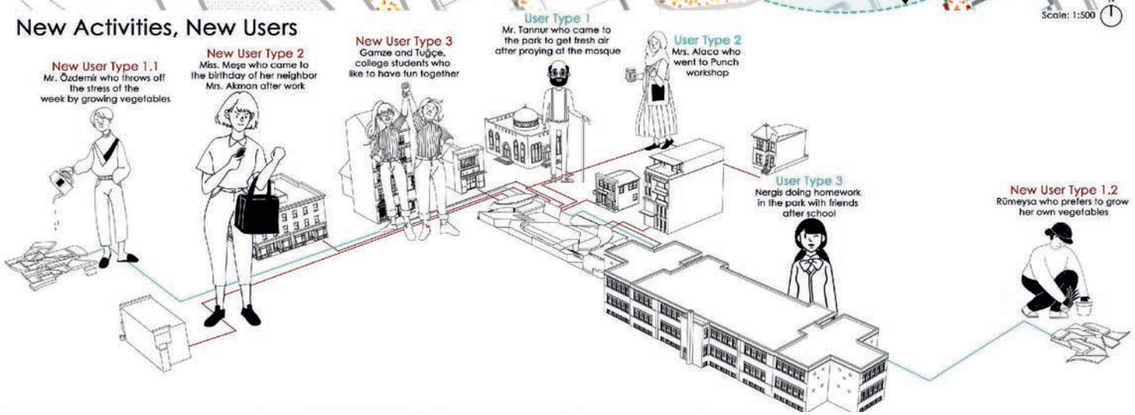


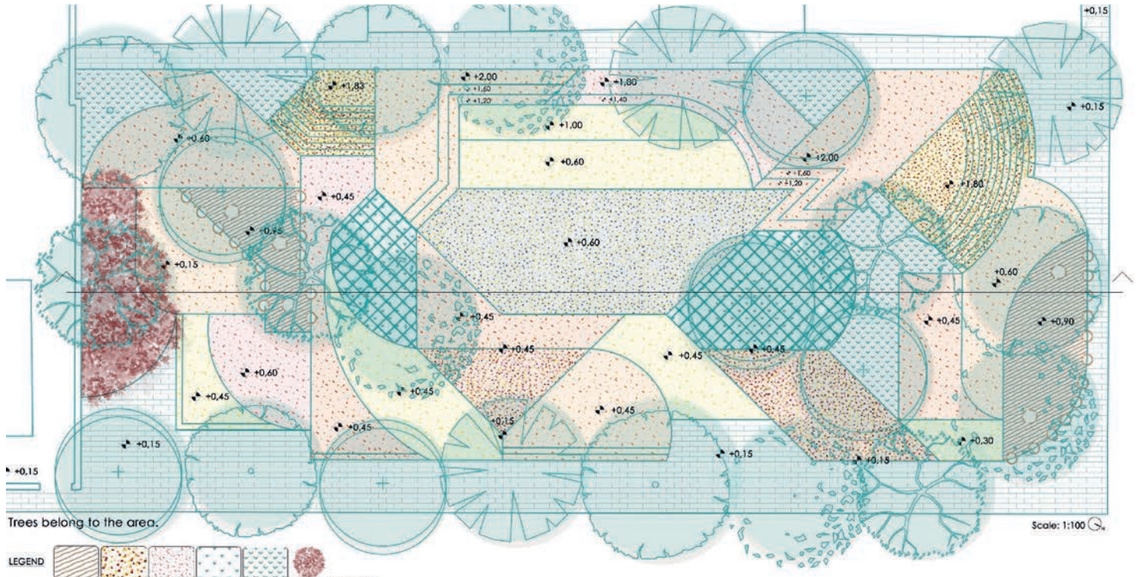

Plant Needs Vending Machine

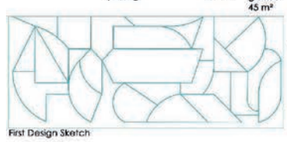


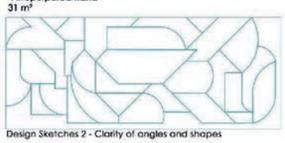



## New Activities, New Users







First Design Sketch


Design Sketches 2 - Clarity of angles and shapes

Design Sketches 3 - Determination of details

Design Sketches 4 - Space utilization strategy

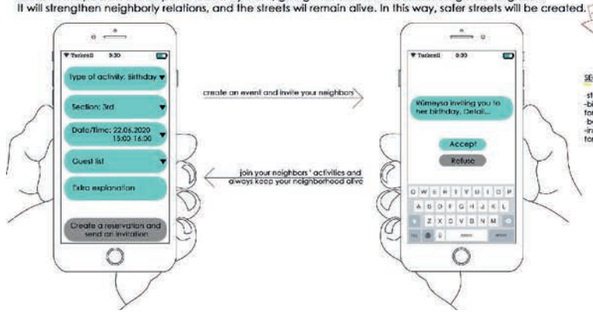
## Safety Route and New Use of The Park

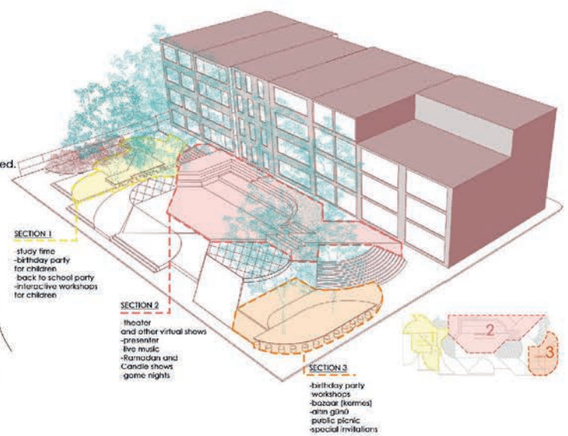
*"When there are people present in a public space such as city streets, it strengthens the space and inspires social cohesion." - Jane Jacobs*

So it is necessary to increase the density of people on the streets. Being able to attract more people to the park creates a safer route. Therefore, thanks to the flexible design that all users can use, the number of daily visitors of park will increase.

The safe route is a natural route formed by the density of people around this park because it is among the points that have the potential to attract users. In addition to mosques, primary schools and commercial spaces,nooks and crannies are being recycled and turned into community gardens, and the use of streests is increasing.

The new use of this park was designed to keep the streets alive. Residents can book the designated areas of this park on the day and time they want, giving their own events and inviting their neighbors. It will strengthen neighborly relations, and the streets wil remain alive. In this way, safer streets will be created.



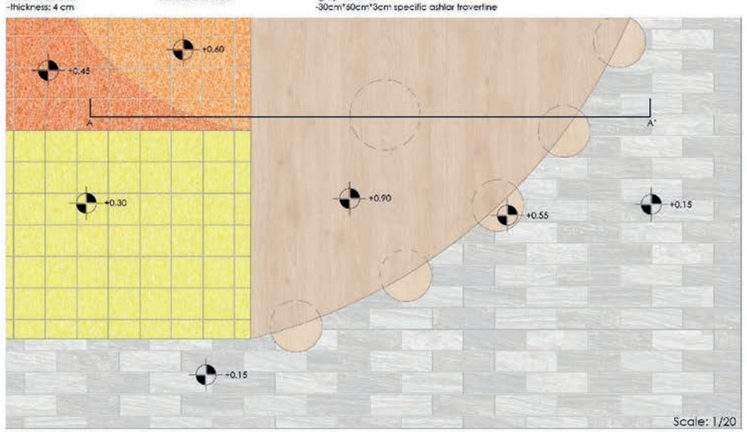



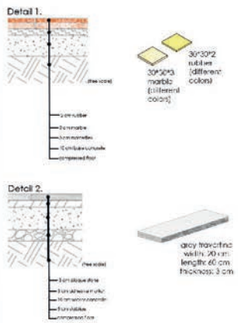
## Materials and Detail Drawings

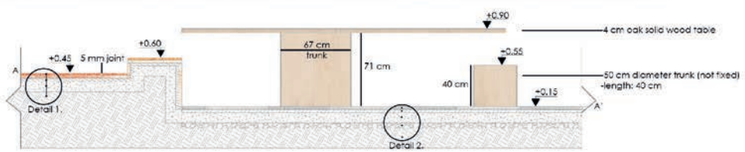
**Wooden table**
-solid wood-oak
-thickness: 4 cm

**Platforms**
-marble and ruber

**Paving**
-grey travertine
-30cm*60cm*3cm specific ashlar travertine



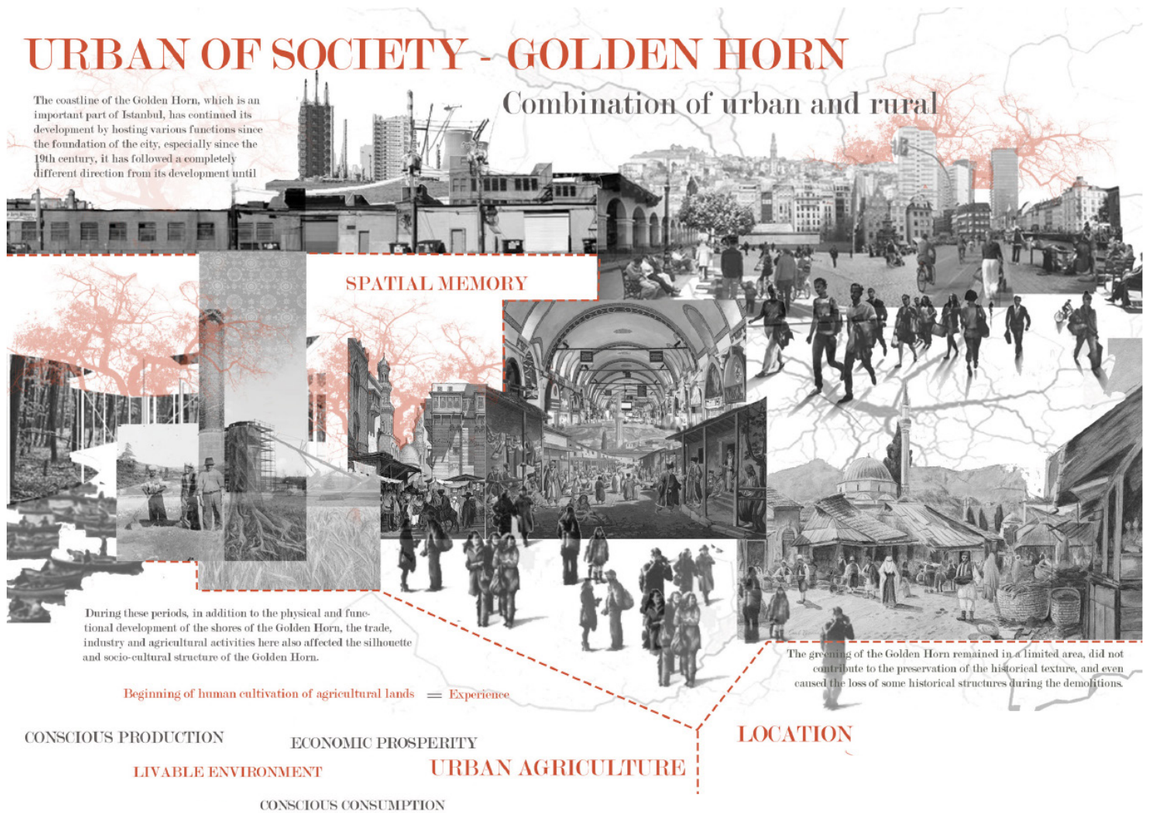



# Golden Horn

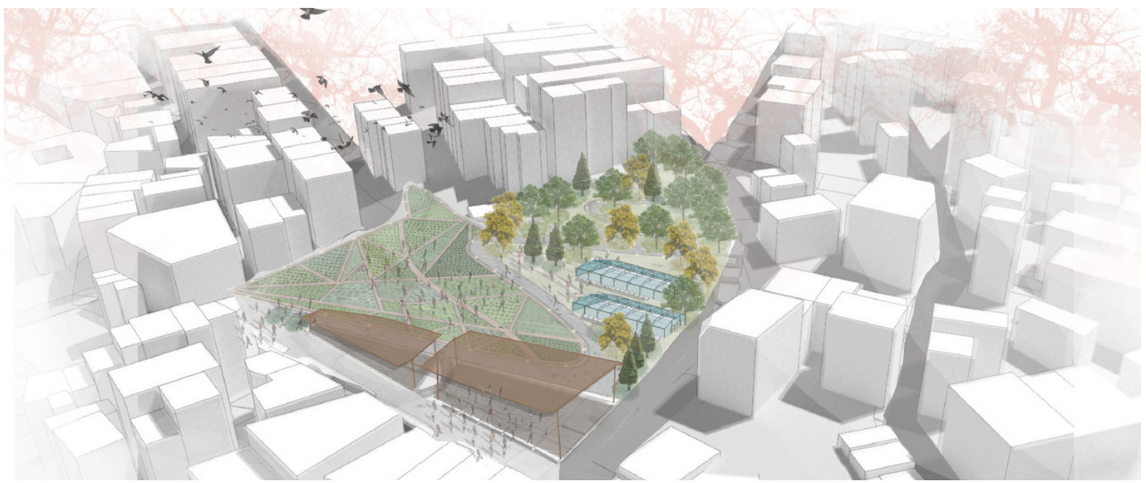
Dilara Kılıç

*"Golden Horn" was produced within the scope of Landscape Design 1 carried out by Dr. Meliz Akyol and Res. Assist. Başak Akarsu under the title "Social Ecology & Ethics" in the spring semester of 2021-2022.*




The industrialization process, which has been ongoing since the 19th century, along with urban planning studies, has severely impacted the urban transformation of the Golden Horn. Although the Golden Horn is one of the key tourist destinations in Istanbul today, it has lost its identity over time and is losing its value due to improper development. In this context, the Golden Horn should regain its former vitality and renew its historical memory.

As the meeting point of cultural diversity and the primary hub of social life, cities are an integral part of the collective memory. For this reason, urban memory has become an important area of study in social history, particularly over the last century. The relationship between urban memory and space is enriched by individuals' perceptions of urban space and their differences. Istanbul, with its socio-cultural structure, can be considered the primary place of life. The aim is to unite the fragmented social structure, support the city's economy, and, at the same time, revive the memory of the place by reintroducing commercial activities from the Ottoman period.



In this context, urban agriculture will play both a unifying and preservative role in maintaining the historical significance of the area. Once a place of intense agricultural and social activity, the Golden Horn is now more tourist-oriented. The introduction of a pottery section here will help continue old traditions while offering a shared activity for both locals and tourists.

In this area, where agriculture and gardens are located, the market section will promote the area as a marketplace, supporting the local economy and showcasing the products grown there to the public. Farmland will remain to encourage people to farm and to help revive the memory of the place. This garden, which will increase the permeable surface of the Golden Horn, will contribute economically while also fostering socialization.

## Market Place

With the urban agriculture in the Golden Horn, local people and tourists will meet at a common point. The gardens located here will encourage the local people to produce and at the same time provide a development for the Golden Horn. The products that are actively produced in the gardens with the participation of the public and tourists will be offered for sale in the open market area, thus promoting local products.

In addition, the potter who takes place here will bring together a common activity for the public and tourists in order to restore the former vitality of the place. The structure proposed here is designed to adapt to the area and increase the green texture rather than the general pottery appearance.

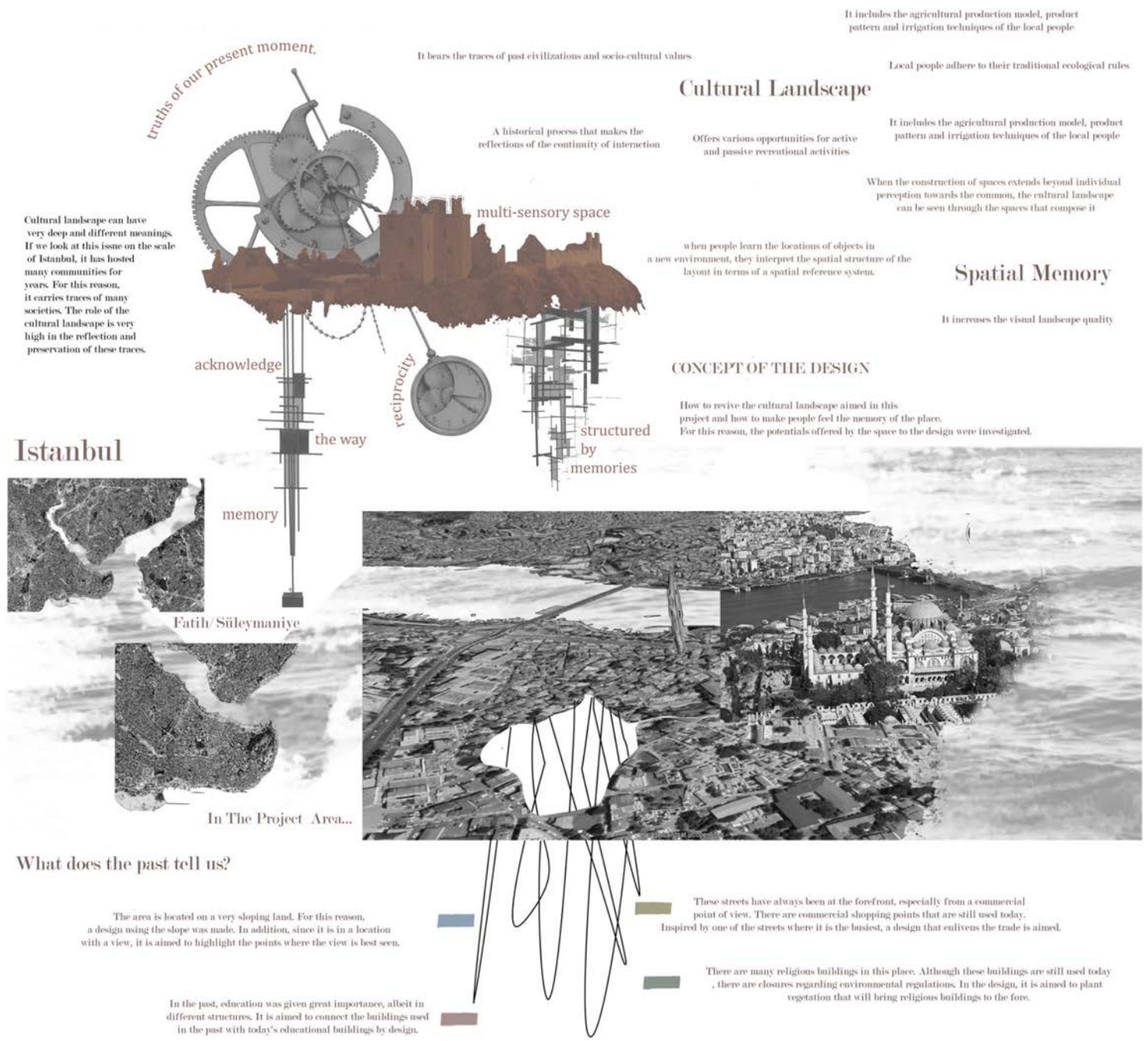
## Orchard

## Workshop Area

# Traces of Time

Meryem Gülbahar Okan

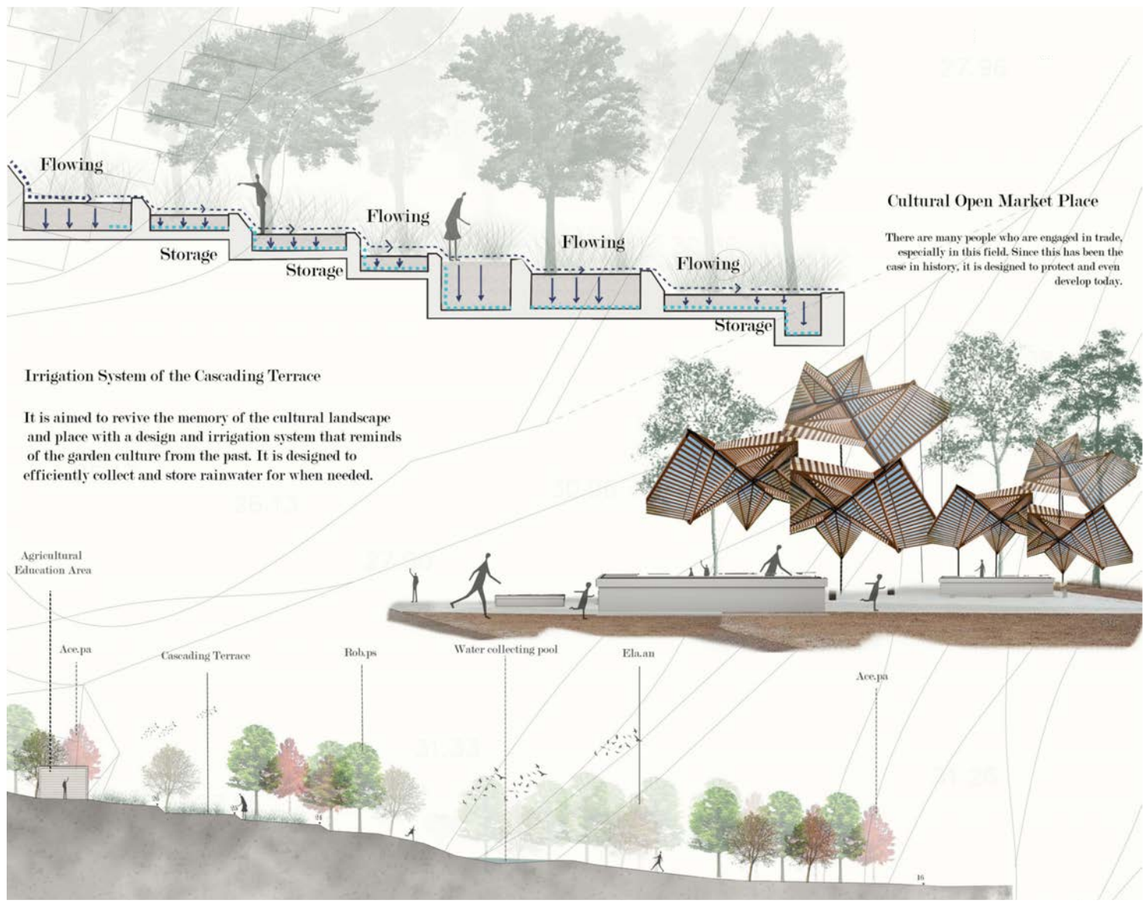
*"Traces of Time" was produced within the scope of Landscape Design 1 carried out by Dr. Meliz Akyol and Res. Assist. Başak Akarsu under the title "Social Ecology & Ethics" in the spring semester of 2021-2022.*



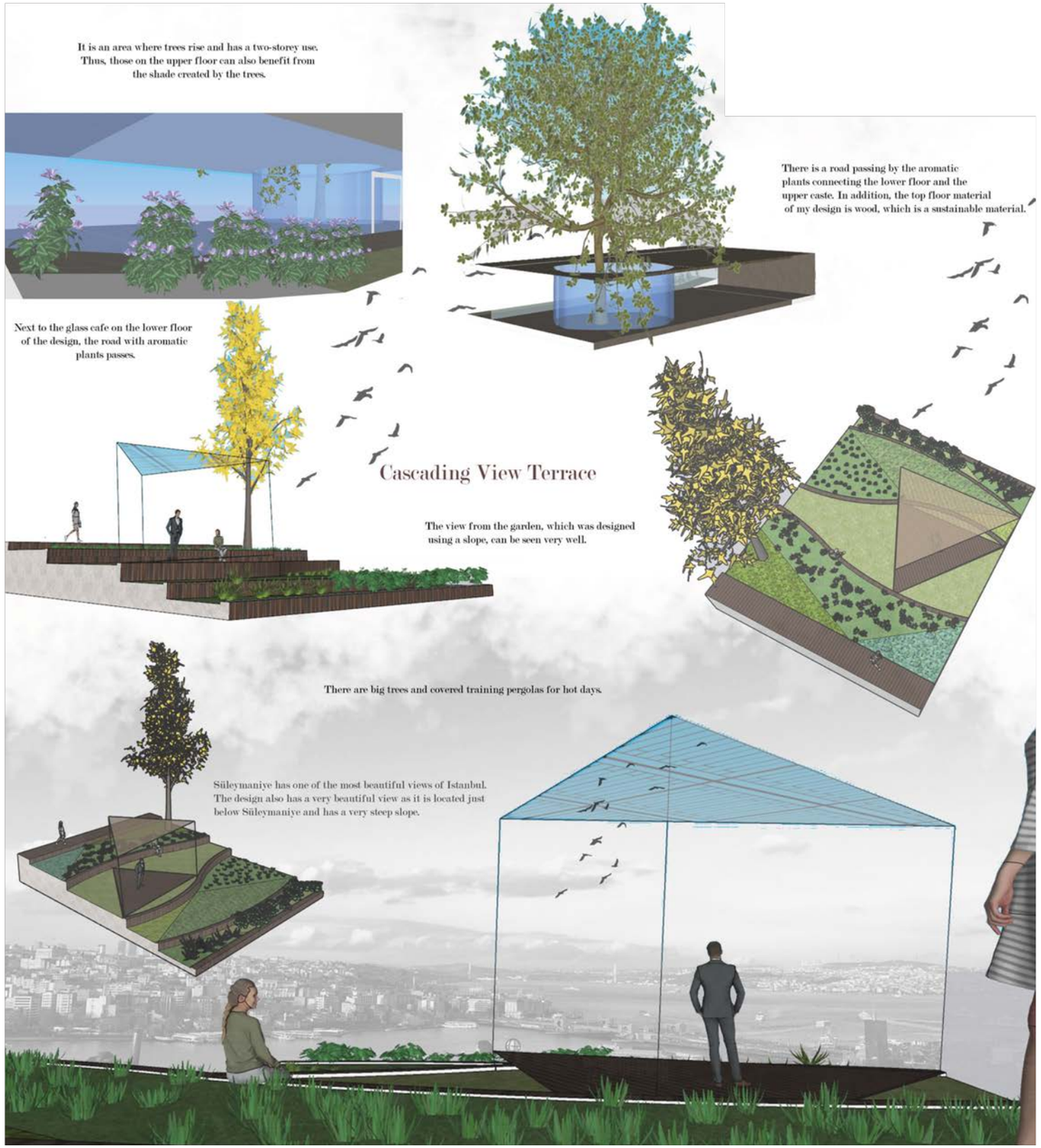
Spatial memory reflects the present reality. At the same time, it is shaped by the accumulation of past memories, guiding the present. For this reason, spatial memory is considered multi-layered. Different societies attribute different meanings to various values. When a living space is a shared space, this situation allows events experienced at different times to become collective memories. In other words, the same spaces can hold different meanings in different periods. By understanding this, we can better grasp urban memory.

In the past, the Golden Horn was known as a port, trade, and industrial area. Over time, this character has disappeared. Later, a green space was created through various arrangements, but it became disconnected from the city. In this project, the goal is to incorporate the city's past memories, experienced at different times, into the design. For this reason, the memory of buildings that are on the verge of extinction along the road to Süleymaniye Mosque, chosen for this project, has been brought into the present. Concrete structures like Süleymaniye, Haliç Bridge, and many other historical buildings carry the memories, symbols, and experiences of the past like a soul.

The road to the Golden Horn carries an abstract quality that emphasizes the cultural memory of each designed area. Therefore, the design should reflect the spirit of the space throughout its history. This road serves as a bridge between the past and the present. One of the design's objectives is to offer an experience that allows people to witness the memory of a road that has dramatically changed over time. During this process, the design aims to make users forget they are on a sloping area, revealing the view of the Golden Horn gradually, step by step.



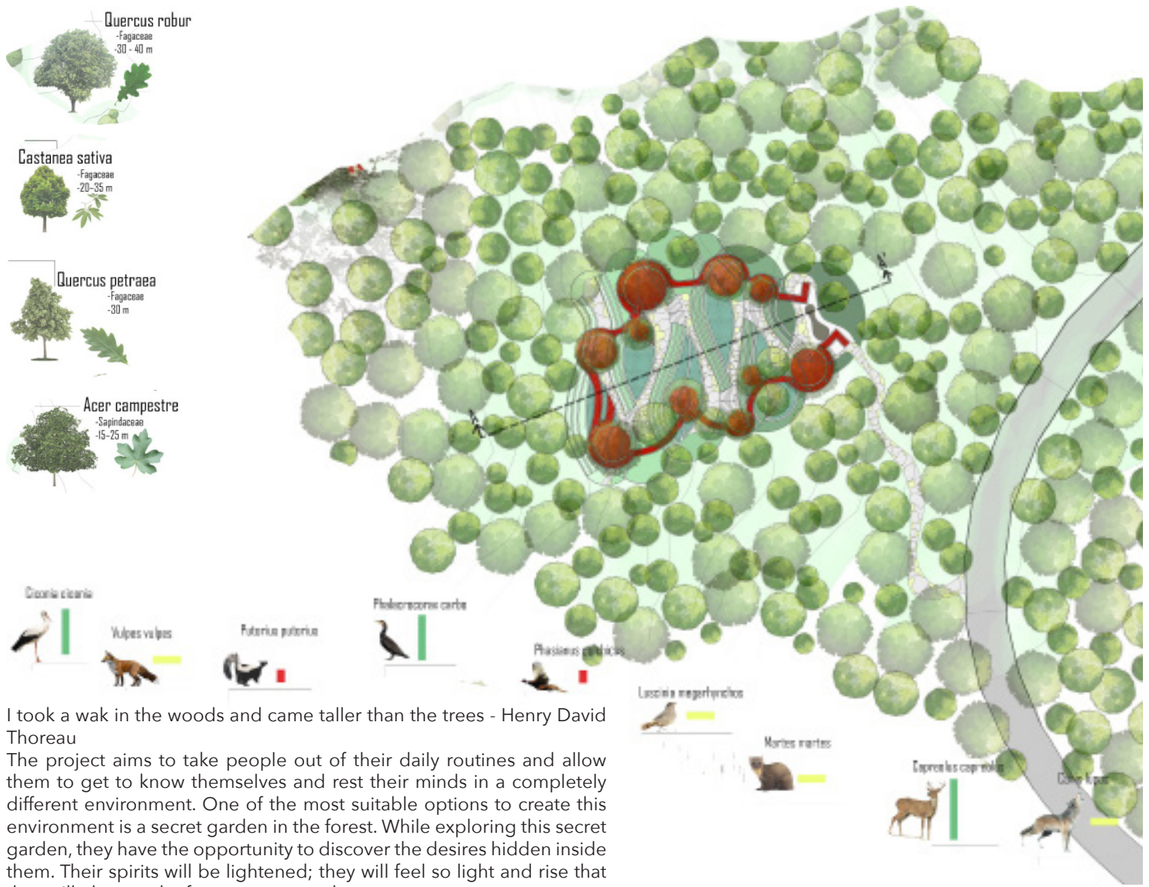


# Taller Than The Trees

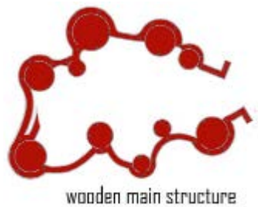
Halime Sude Kervan

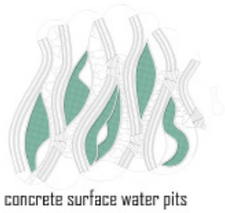
*"Taller than the trees" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Hüseyin Ögçe under the title "Groundwork" in the spring semester of 2021-2022.*

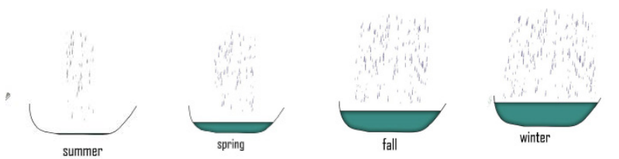


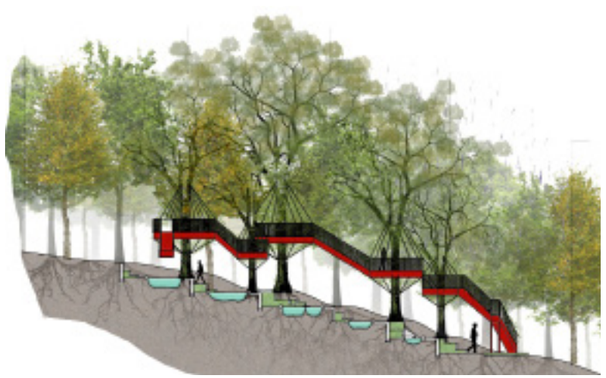

I took a wak in the woods and came taller than the trees - Henry David Thoreau
The project aims to take people out of their daily routines and allow them to get to know themselves and rest their minds in a completely different environment. One of the most suitable options to create this environment is a secret garden in the forest. While exploring this secret garden, they have the opportunity to discover the desires hidden inside them. Their spirits will be lightened; they will feel so light and rise that they will observe the forest even over the trees.

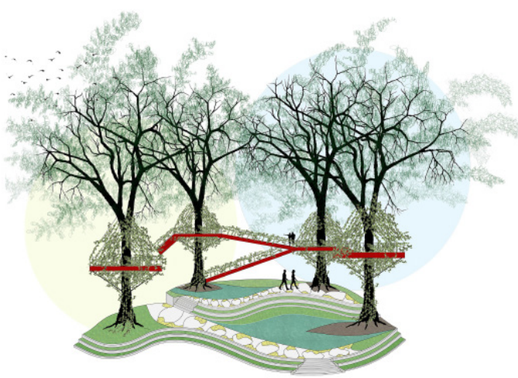
Rise is represented by the structure place on the trunks in the project. People feel as big as trees by getting rid of the troubles that suffocate them and make them feel small. The fact that the garden rises gradually with steps also represents this rise. The water pits used in the middle give people the opportunity to watch themselves from the outside. With the precipitation rate, it receives the water, depending on the season, in the pits increases and decreases, and it can disappear in dry periods. With changes in water levels, people are given the message that everything in. lise is temporary.







# Fern Gardens

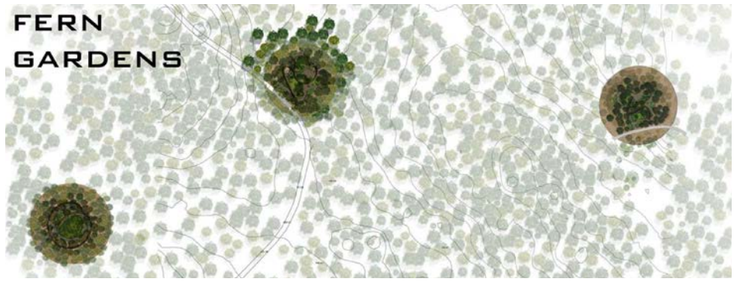
Yelda Nur Özcan

*"Fern Gardens" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Hüseyin Ögçe under the title "Groundwork" in the spring semester of 2021-2022.*

Tees are prominent in the Belgrade forest. Ferns also live in this forest, which contains many plant varieties. Although they are inconspicuous, they are very important for the forest ecosystem. For this reason, the use of ferns in the gardens exaggeratedly brought them to the fore. At the same time, by changing the topography, elevations greater than human scale were created in some parts. This makes people feel small in the garden. There are three different garden alternatives. What these gardens have in common are primarily ferns. Artificial hillocks used to increase dominance, There are different types of pedestrian bridges so that people can see the garden from above and create a nice walking experience.



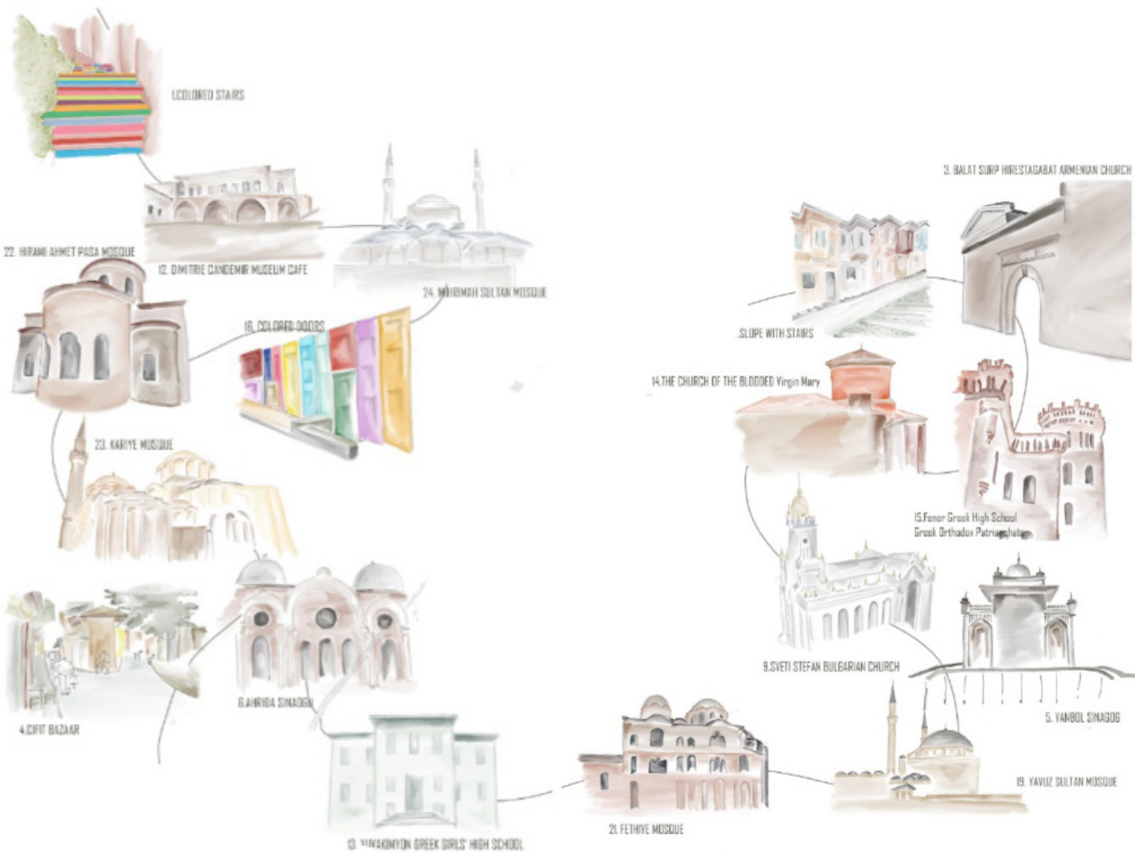




# Safe Space Bond

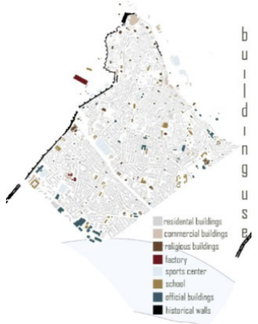
Berra Kafalıer / İrem Melek Akın / Sude Çetinkaya / Caner Öner

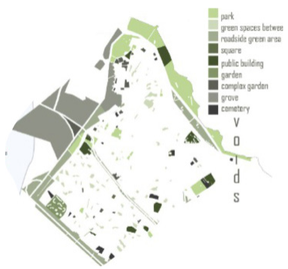
*"Safe Space Bond" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Hüseyin Öğçe under the title "Groundwork" in the spring semester of 2021-2022.*

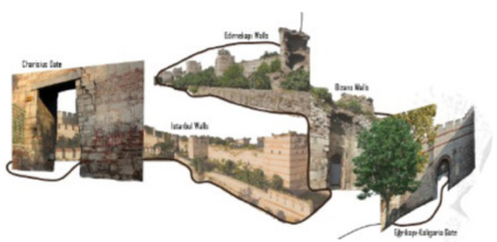


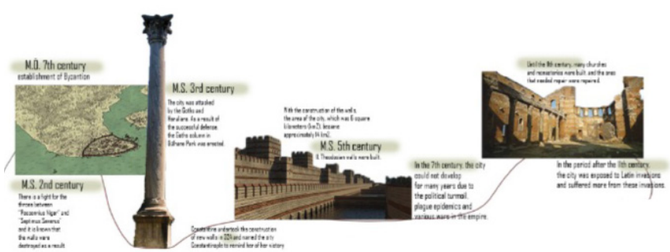


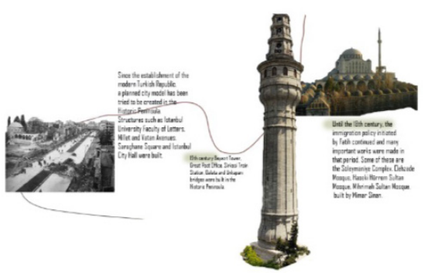








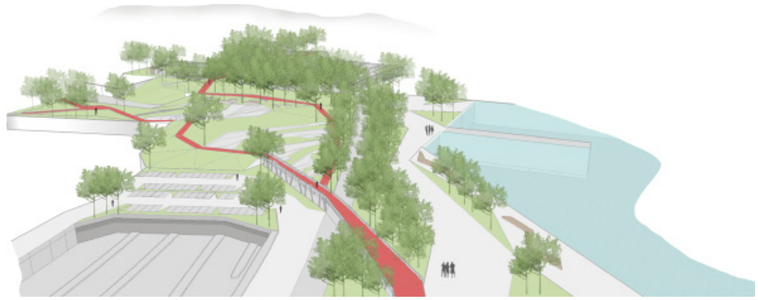



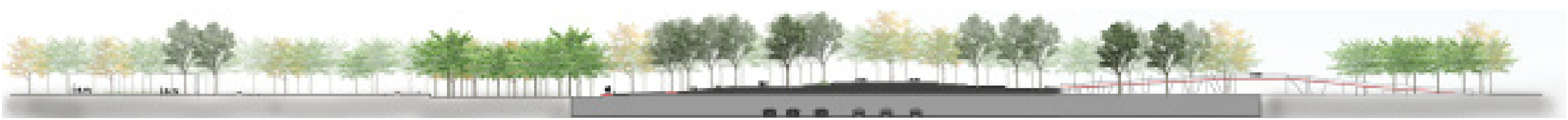
# High Green

Halime Sude Kervan

*"High Green" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Hüseyin Ögçe under the title "Groundwork" in the spring semester of 2021-2022.*

In the Fatih district, green areas are mostly located on the outskirts. Our group's concept is to create a green infrastructure that continues the green axis both on the periphery and within the district. The High Green project aims to connect the coastal and inland green areas, forming a unified whole. This integrity is achieved by using a geometric pattern throughout the design.
This overpass project links the coast and the interior through an ecological corridor. Pedestrians can easily cross the street using ramps that facilitate quick passage. In addition to serving as a pedestrian overpass, the project offers many functions. It helps alleviate the parking problem in Fatih by providing a parking lot, while its green spaces contribute to ecological life. At the same time, these areas offer people a chance to relax and breathe in nature.
One of the key elements of the design is the combination of wooden and concrete steps. These steps create spaces where people can spend time. The height differences in the steps give the design a dynamic look and incorporate bird gardens. These bird gardens allow users to observe the birds of Istanbul. Plants in the gardens are specifically chosen to attract birds.Additionally, a playground for children has been designed, making use of the height differences seen throughout the project. The inclusion of a basketball and football field for young people ensures the area appeals to all age groups.

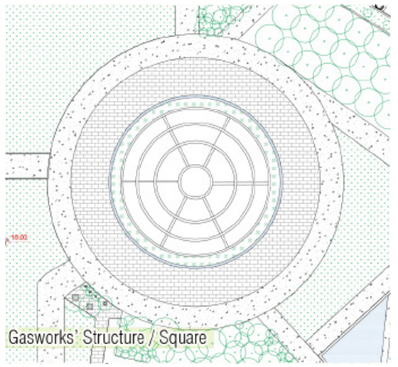


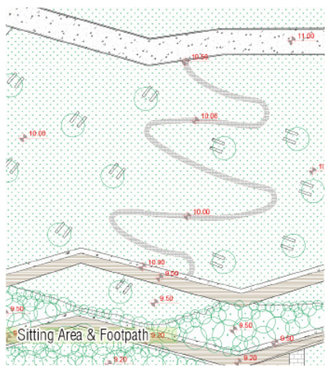


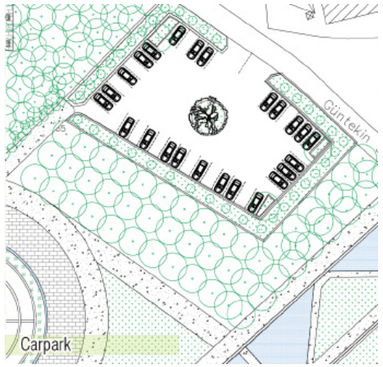
# Bottom of the Wall

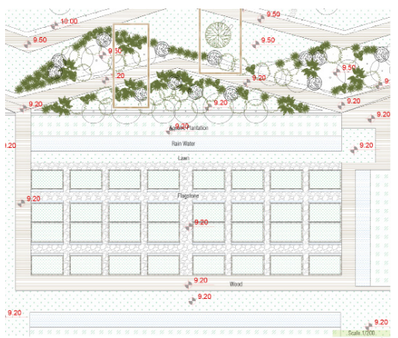
Cansın Lal Gürler

*"Bottom of the Wall" was produced within the scope of Landscape Design 1 carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Hüseyin Öğçe under the title "Groundwork" in the spring semester of 2021-2022.*



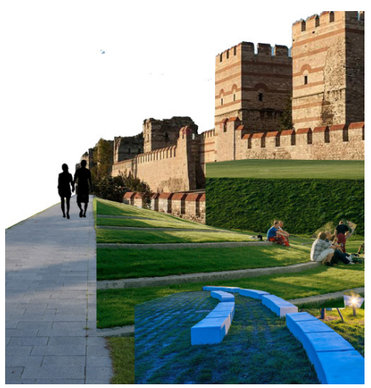



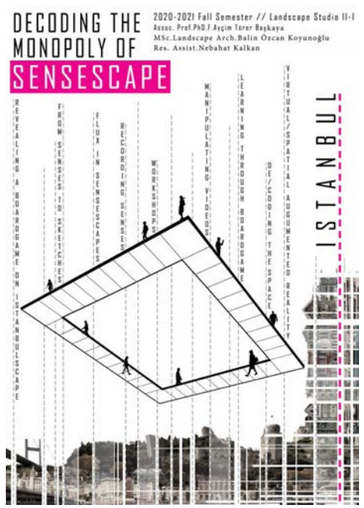



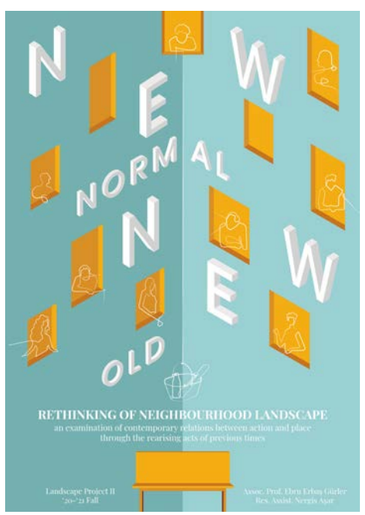



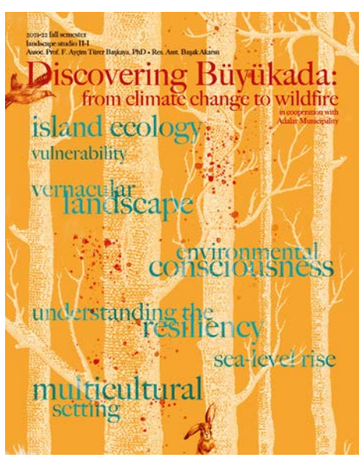
The project area is located in the lower left corner of the historical peninsula, encompassing the Yedikule, Aksaray, Koca Mustafapaşa, Sümbülefendi, and Cerrahpaşa districts. This area is home to many significant historical artifacts, including land and water city walls. To better understand and analyze the site, we studied the buildings, the voids within the area, the interactions of these voids with their surroundings, building heights, and conducted shadow analyses.

After the analysis, it was found that the voids in the area are either enclosed spaces within building complexes or ruins between buildings. Upon careful modeling and examination, these voids were deemed inefficient for use in the design proposal. As a result, other areas that could be used more effectively for the design were considered. The goal is to carry the green spaces along the project area's borders and the coastline into the interior parts of the city through roadways. The design also aims to support the area's green spaces with a blue-green infrastructure, ecological landscapes, and community open spaces/social landscapes. The area adjacent to the city walls has been designed as a wide meadow to avoid overshadowing the city walls, providing a comfortable space for people to use. Additionally, a truck farm has been integrated into the area to connect the project with its surroundings and reinforce regional culture and interaction.







*PROJE II*

# LANDSCAPE DESIGN II

## Proje II Stüdyo Felsefesi

Peyzaj tasarımı 2 proje stüdyosu, öğrencilere kentsel ölçekte bütüncül ve sistematik düşünme becerisinin kazandırılmaya çalışıldığı ilk stüdyodur. Bu nedenle temel amacı, herhangi bir yerleşim ya da kent parçasına dair üst ölçekten alt ölçeğe kadar inen yelpazede bağlamsal ve mekansal olarak bütüncül bir tasarım kurgusunun oluşturulmasıdır. Bu kapsamda stüdyo, kentsel ölçekte karmaşık tasarım problemlerine yönelik çözüm üretebilmeyi, alandaki farklı katmanları, sorun ve potansiyelleri günümüz kent dinamikleri, kullanıcı ihtiyaçları ve güncel konular ile birlikte yorumlamayı ve tasarıma girdi oluşturacak şekilde kullanmayı; özel alanlardan kamusal alanlara kadar değişen farklı ölçeklerde farklı temalarla şekillenen mekanların üretilmesini ve de yapısal ve bitkisel tasarımın geliştirilmesine yönelik tasarım problemlerinin ele alınmasını hedeflemektedir.

Projeyi başarı ile tamamlayan öğrenciler, kent içerisinde yer alan parçacıl kullanımları, içerisinde yer aldığı sistem ile birlikte düşünebilme; farklı katmanlar ve farklı kullanımlardan kaynaklanan karmaşık tasarım problemlerini çözebilme; mekanı sadece kendi içerisinde değil, bağlantılı olduğu diğer üst ve alt mekanlar ile birlikte düşünerek tasarlayabilme (bütüncül mekan organizasyonu); kente dair temel analizlere hakim olma; stüdyonun ana bağlamı ya da üst teması ile bağını koparmadan tasarımı alt ölçekleri kadar indirebilme; alanın doğal ve yapısal verilerine uygun tasarım çözümleri ve detayları geliştirebilme becerilerini kazanmaktadır.

Proje süreci boyunca stüdyo, etkileşimli bir üretme, öğrenme ve öğretim ortamı olarak görülmektedir. Yürütücü ve öğrenciler bir arada bu etkileşimi sağlayan paydaşlardır. Bu nedenle öğrencilerin sürece etkin katılımı, gerek kendi aralarındaki gerekse yürütücüler ile olan paylaşımları ve bu paylaşımlar üzerinden proje geliştirmeleri stüdyonun temel meselesidir. Sistem yaklaşımının kavranması için dönem boyunca öğrenciler genellikle tek bir proje konusu üzerinde çalışmaktadırlar. Stüdyo süreci ayrıca stüdyo içi ve dışı atölyeler gerekli görülen konularda uzman seminerleri ve teknik gezilerle desteklenmektedir. Değerlendirme ise yıl içinde yapılan jüriler ara teslimler ve eski sınavı üzerinden yapılmaktadır.

## *Landscape Design II Studio Philosophy*

*The Landscape Design II project studio is the first studio where students are encouraged to develop holistic and systematic thinking skills at the urban scale. Its primary objective is to enable the creation of a contextual and spatially comprehensive design framework that spans from macro to micro scales for any settlement or urban fragment. Within this scope, the studio aims to address complex design problems at the urban scale, interpret the various layers, issues, and potentials of the site in conjunction with contemporary urban dynamics, user needs, and current issues, and use these interpretations as inputs for design. Additionally, it seeks to generate spaces shaped by diverse themes across scales ranging from private to public spaces and to address design challenges related to structural and vegetative design development.*

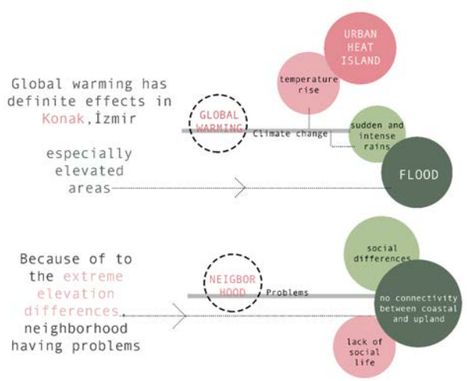
*Students who successfully complete the project will acquire the ability to consider fragmented uses within the urban fabric as part of the broader system they belong to; resolve complex design problems arising from different layers and uses; design spaces not only in isolation but in connection with related upper and lower spatial scales (holistic spatial organization); perform fundamental urban analyses; translate design ideas into smaller scales without losing connection to the studio's main context or overarching theme; and develop design solutions and details aligned with the natural and structural characteristics of the site.*

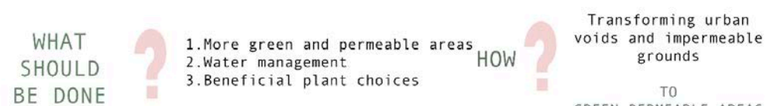
*Throughout the project process, the studio is envisioned as an interactive environment for production, learning, and teaching, where both instructors and students act as stakeholders facilitating this interaction. Therefore, active student participation in the process, both in peer-to-peer exchanges and in collaborations with instructors, and the development of the project through these interactions are central to the studio's pedagogical approach. To ensure comprehension of the systems approach, students typically work on a single project theme throughout the term. The studio process is further enriched by in-studio and external workshops, expert seminars on relevant topics, and technical site visits. Evaluation is carried out through juries, interim submissions, and final assessments conducted during the semester.*

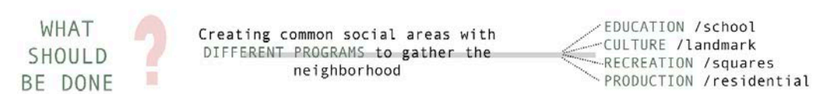
# Social Steps

Güliz Yalçın

*"Warm(n)ing Izmir: Social Steps" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Arzu Güler, Res. Assist. Çisem Demirel and Res. Assist. Merve Aydınlı under the title "Warm(n)ing Izmir: Adaptive Design Strategies for Global Climate Change" in the fall semester of 2018-2019.*

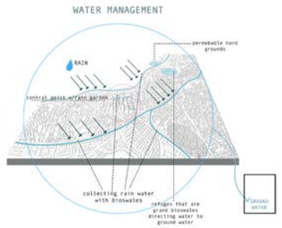


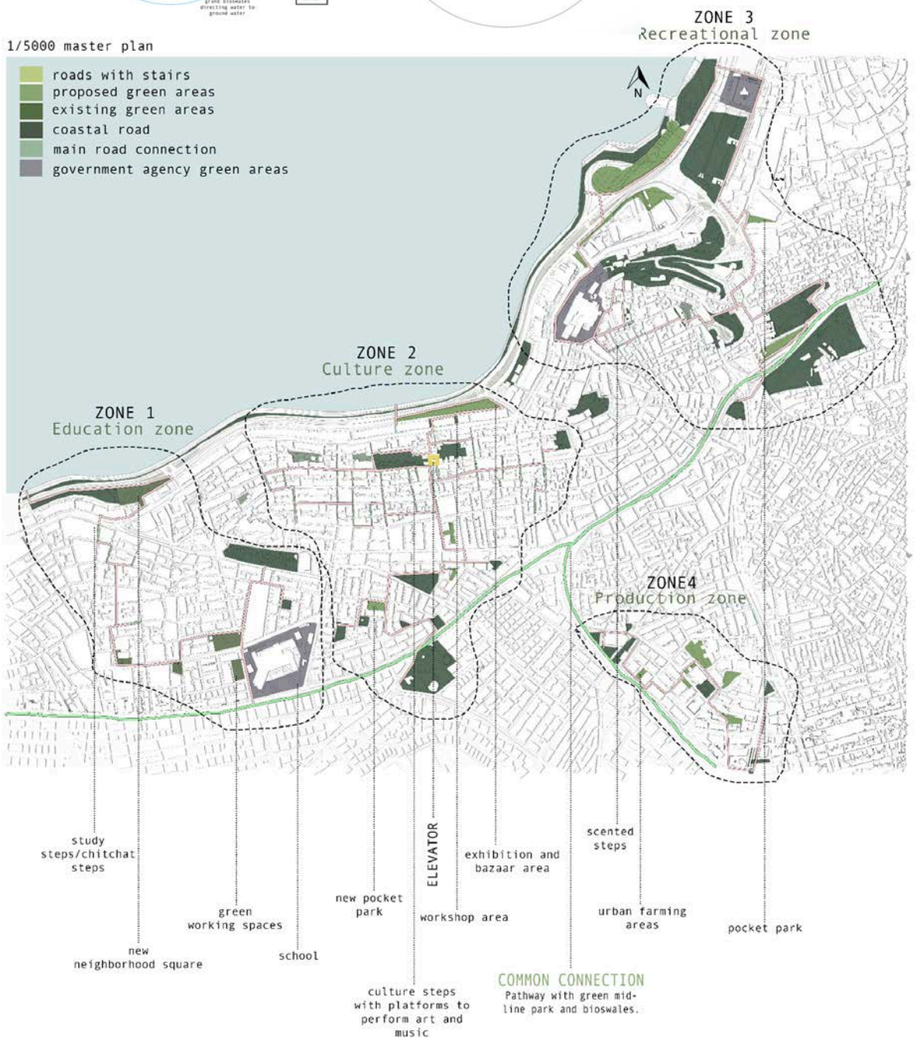



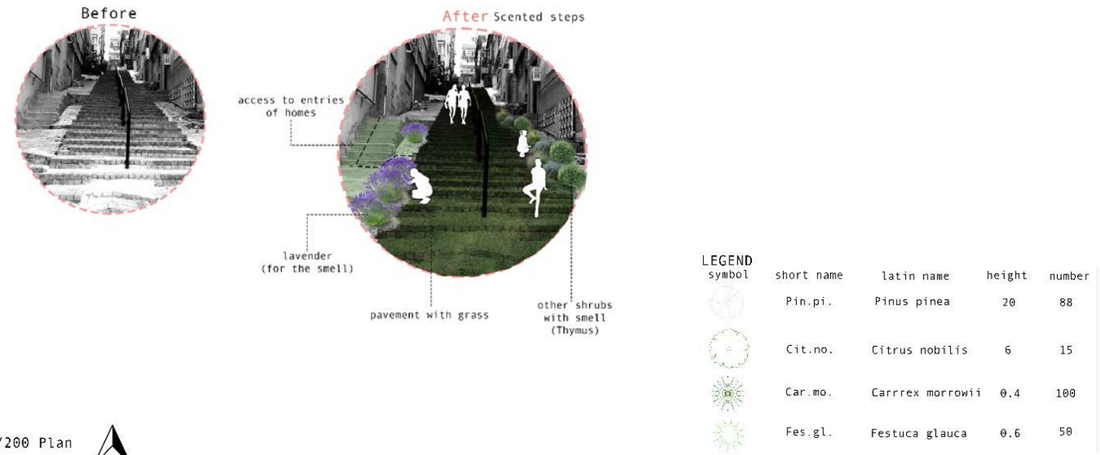









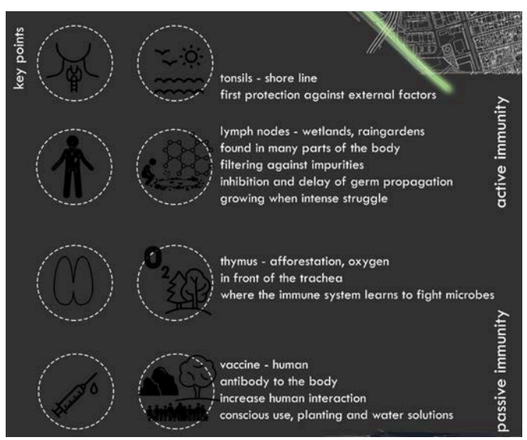

LEGEND

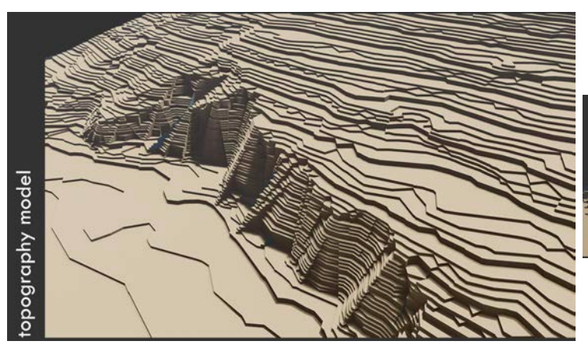
| symbol | short name | latin name | height | number |
|---|---|---|---|---|
| | Pin.pi. | Pinus pinea | 20 | 88 |
| | Cit.no. | Citrus nobilis | 6 | 15 |
| | Car.mo. | Carrrex morrowii | 0.4 | 100 |
| | Fes.gl. | Festuca glauca | 0.6 | 50 |

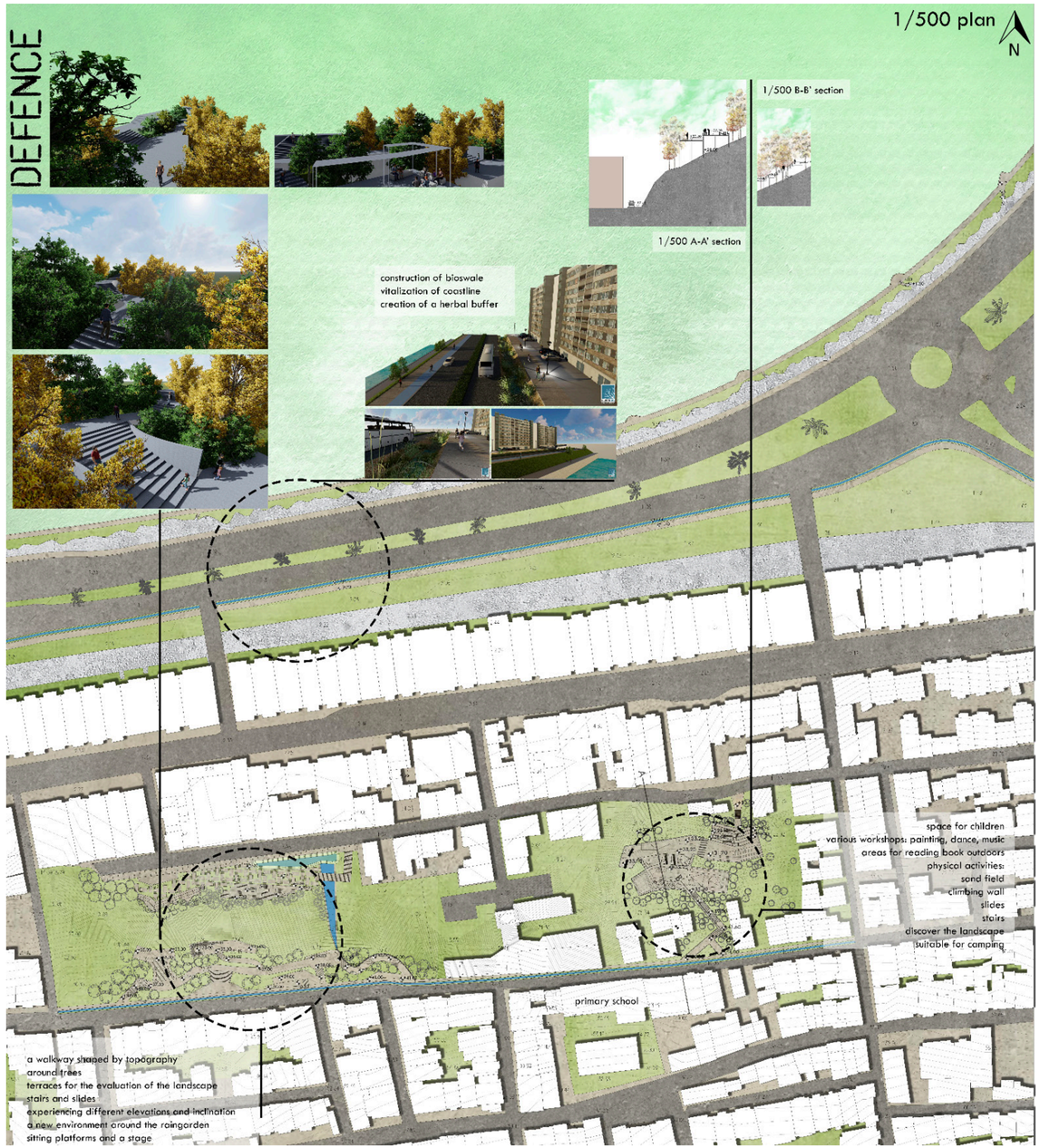
# Defence

Edanur Utkan

*"Defence" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Arzu Güler, Res. Assist. Çisem Demirel and Res. Assist. Merve Aydınlı under the title "Warm(n)ing Izmir: Adaptive Design Strategies for Global Climate Change" in the fall semester of 2018-2019.*

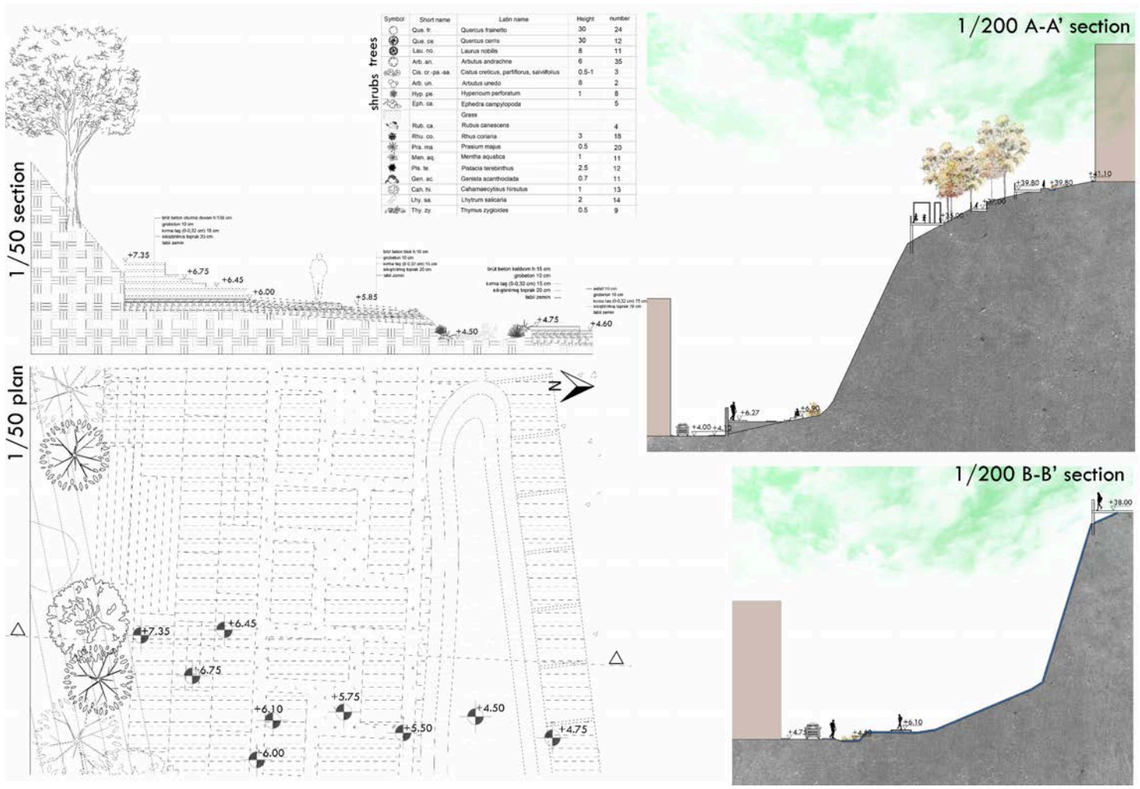






'ARM(N)ING IZMIR ADAPTIVE DESIGN STRATEGIES FOR GLOBAL CLIMATE CHANGE

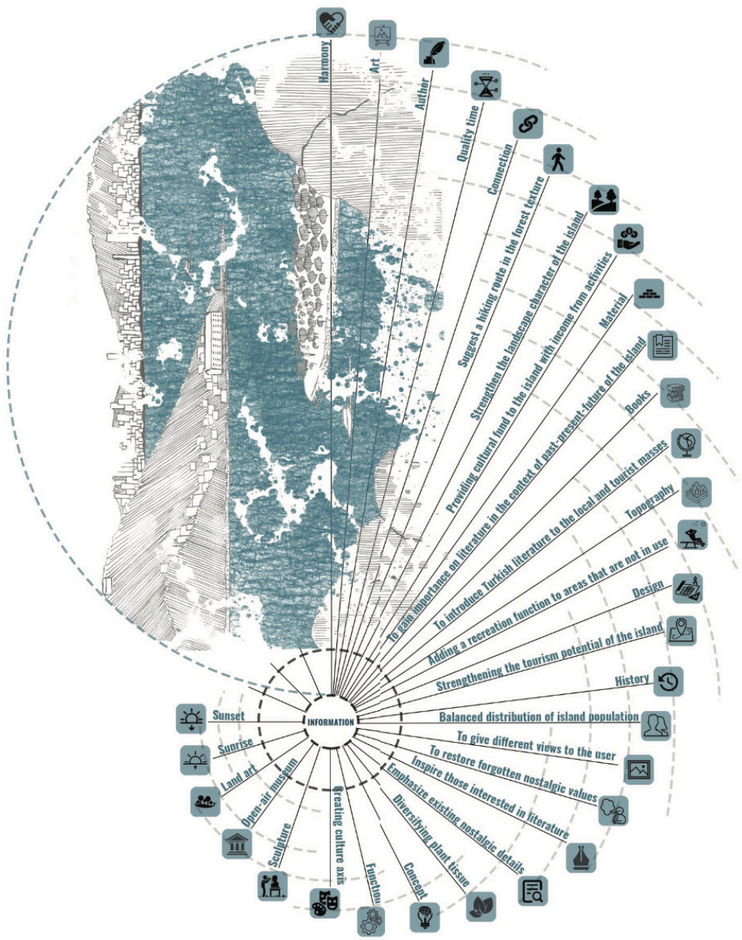
WARM(N)ING IZMIR
DEFENCE
1/200 plan
N
305. Street
Şehit Nihatbey Street
Dario Moreno Street
concrete block
150*300 cm
wooden deck
30*300 cm
wooden deck
30*100 cm
concrete
Hürriyet Elementary School


1/50 section
1/50 plan
shrubs trees
Symbol
Short name
Latin name
Height
number
Quercus frainetto
Quercus cerris
Laurus nobilis
Arbutus andrachne
Cotus creticus, parrtiflorus, salvifolius
Arbutus unedo
Hypericum perforatum
Ephedra campylopoda
Grass
Rubus canescens
Rhus coriaria
Prasium majus
Mentha aquatica
Pistacia terebinthus
Genista acanthoclada
Cahamaecytisus hirsutus
Lhythrum salicaria
Thymus zygioides
1/200 A-A' section
1/200 B-B' section

# Chain of Literature

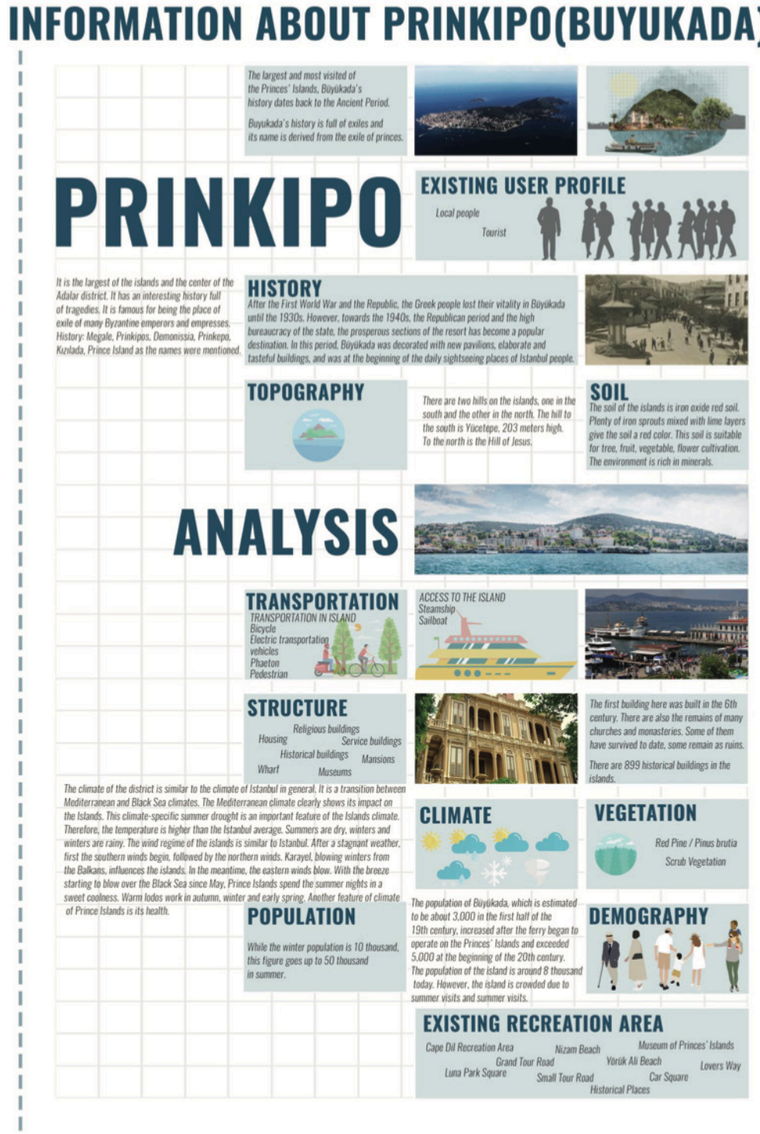
Gizem Yağmur Gölbaşı

*"Chain of Literature" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. F. Ayçim Türer Başkaya and Res. Assist. Çisem Demirel under the title "Atlas of Literature Istanbul" in the fall semester of 2019-2020.*







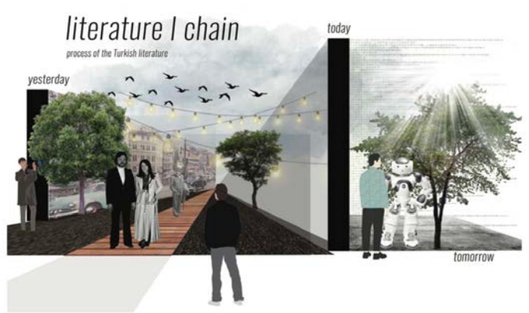

From the past to the present, this project has been developed with a focus on the richness of literature, cultural traces, and both tangible and intangible heritage. Initially conceived on the scale of Istanbul, the project was planned to gradually narrow down to the scale of the island and conclude accordingly.

First, both group and individual analyses were conducted to gather information about the study area, followed by an in-depth examination of literature within the conceptual framework. The project specifically explored the historical trajectory of literature, leading to the development of a self-managed project system.

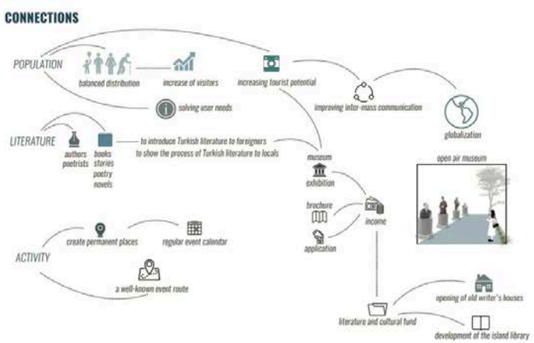
The primary objective of the project was to design an open-air museum aimed at fostering greater engagement among the island's general population while introducing both local and international visitors to the processes and identity of Turkish literature.

## KEYWORDS

## COLLAGE OF CONCEPT




## CONCEPTUAL STRATEGY




With reference to the processes of literature, the project was structured under four main headings. The design prominently features the concept of a three-period park and a museum, spatializing the evolution of Turkish literature across the past, present, and future.

The Present Park serves a daily function, providing a space where individuals and groups can sit, relax, write, draw in solitude, and observe the sunrise from an area conceptualized as a "sunrise terrace." The Future Park incorporates an interactive walking route shaped by contemporary influences, where users play an active role in the narrative. Here, the visitor becomes the primary reference point, creating their own story by selecting their preferred path.
In the section of the project designated exclusively for museum purposes, the natural topography plays a guiding role. The design features square-shaped axes running parallel to one another, connected by stairways that adapt to the terrain's slope. These axes are equipped with statue bases, where sculptures will be arranged following a mixed-concept approach. The primary objective is to create an exploratory experience, allowing visitors to engage with the space freely without being constrained by chronological or period-specific knowledge.





## PRINCE ISLANS AND PRINKIPO MAPS

Early 19th century engraving by Melling on the Princes' Islands (Tuğlacı, 1989)

Engraving showing the Princes' Islands at the end of the 18th century (Carbognano, 1993)

Market boats providing transportation to the islands at the end of the 18th century and the first half of the 19th century (Tuğlacı, 1989)

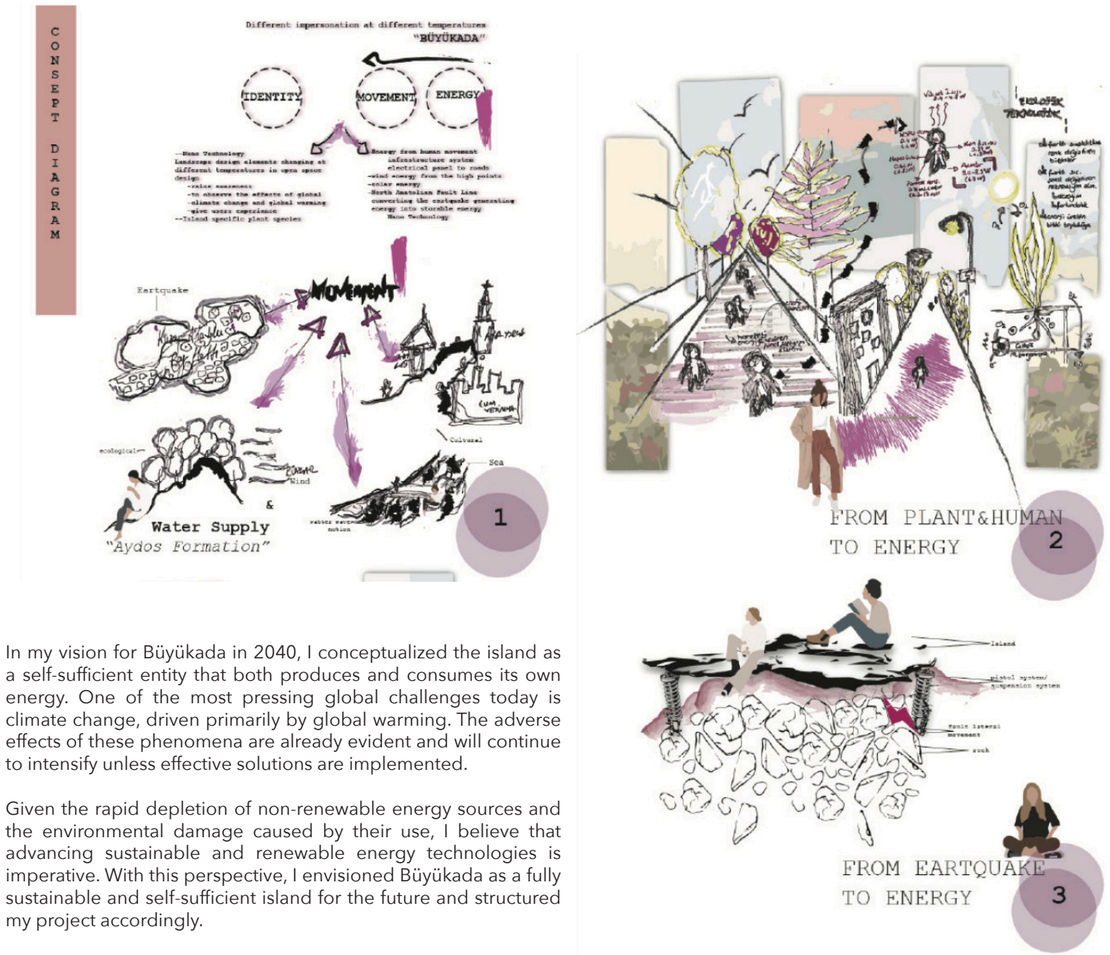
Picture of one of the passenger ferries of the Şirket-i Hayriye (Tuğlacı, 1989)

The studied area features a dense red pine ecosystem. Consequently, plant species that thrive in acidic soil were predominantly selected. The primary material used in the project is wood, aligning with the concept of nature and sustainability. n the History Park, nine distinct periods of Turkish literature have been interpreted through axial representations: Pre-Islamic Period, Islamic Period, Turkish Folk Literature Period, Divan Literature Period, Tanzimat Literature Period, Servet-i Fünun Literature Period, Fecr-i Ati Literature Period, National Literature Period, and the Literature of the Republican Period. These axes, varying in length and width, converge at designated intersections, forming a series of squares.
The purpose of these squares is to establish spaces for cultural activities on the island while also providing relaxation areas within the forest. Over time, the cultural events hosted in these squares will contribute to a funding mechanism for the project's sustainability, supporting further cultural investments and enhancing the island's literary and cultural heritage. The project also incorporates two viewing terraces. The Sunset Terrace, which is thematically linked to the past park, evokes a sense of nostalgia. This terrace offers panoramic views of Dilburnu, Heybeliada, and Istanbul. To facilitate movement throughout the site, circulation has been resolved with a network of stepping stones, which seamlessly connect the terraces and squares to the main road at various points, ensuring accessibility and continuity across the design.

# Eco-Energy Island

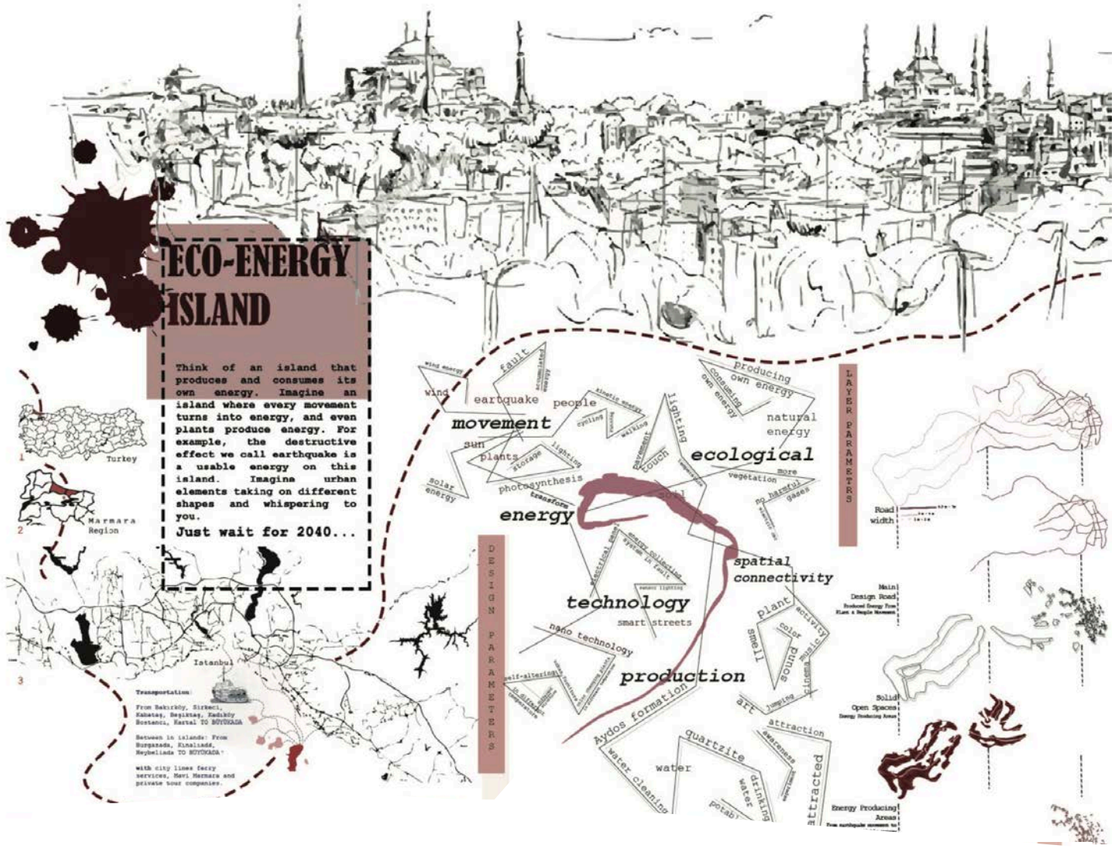
Begüm Karademir

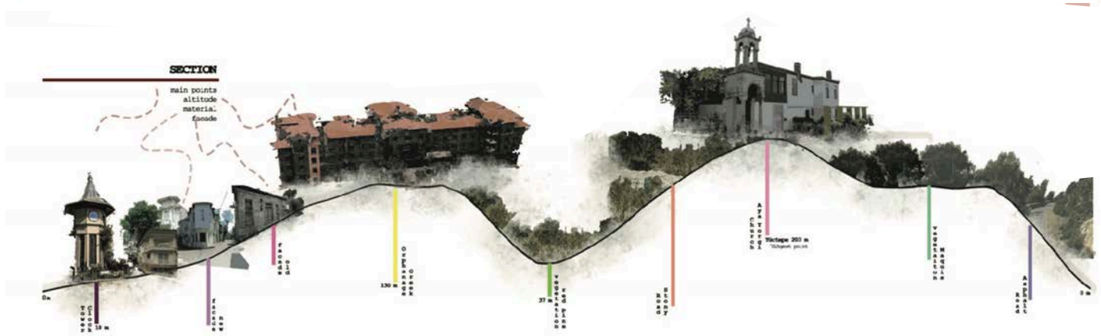
*"Eco-Energy Island" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. F. Ayçim Türer Başkaya and Res. Assist. Çisem Demirel under the title "Atlas of Literature Istanbul" in the fall semester of 2019-2020.*




In my vision for Büyükada in 2040, I conceptualized the island as a self-sufficient entity that both produces and consumes its own energy. One of the most pressing global challenges today is climate change, driven primarily by global warming. The adverse effects of these phenomena are already evident and will continue to intensify unless effective solutions are implemented.

Given the rapid depletion of non-renewable energy sources and the environmental damage caused by their use, I believe that advancing sustainable and renewable energy technologies is imperative. With this perspective, I envisioned Büyükada as a fully sustainable and self-sufficient island for the future and structured my project accordingly.



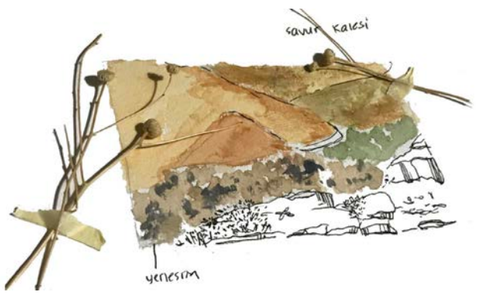
I conducted research on energy generation from human movement and discovered that this system has been successfully tested on a frequently used pedestrian path in England. Utilizing the piezoelectric system, this technology converts kinetic energy into electrical energy by harnessing the movement of people and the pressure applied to the ground during walking. Studies indicate that an individual's average of 4,000 steps per day can generate approximately 9-10 kWh of electricity, which is sufficient to meet the daily energy needs of a household. Based on this concept, I envisioned that the energy demands of homes on the islands could be met through the movement energy generated by residents and visitors.

Another proposal for Büyükada involves utilizing plant-based energy production. During my research, I came across a study conducted by Wageningen University in the Netherlands, which explores the use of electrons released during photosynthesis for energy generation. In this system, bacteria bind to these electrons, allowing for energy capture without harming the plants. By designating a specific agricultural area along the roads, crops can be cultivated to support this energy production method. At night, the energy harvested from plants can be used to power street lighting. Research indicates that 100 square meters of green space can generate enough electricity to meet the daily energy requirements of a household.

# Loop

Ece Özetlerer

*"Loop" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Arzu Güler under the title "Memo-Structural Landscapes / Savur" in the fall semester of 2019-2020.*



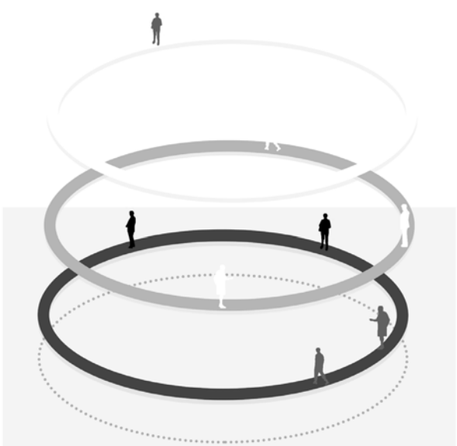

Savur is located in northern Mesopotamia, situated north of Mardin, with a total surface area of 1,049 square kilometers. The district is connected to the city center by a 47 km asphalt road, and the Savur Stream flows through it. The region experiences a mix of Mediterranean and continental climates, characterized by cold winters and hot, dry summers. Most of the annual precipitation occurs during the spring months. The district's natural vegetation primarily consists of shrubs and bushes. Beyond its geographical and climatic characteristics, Savur holds significant cultural value. Due to its multilingual and multi-faith communities, the region is recognized as an important site within global cultural heritage. This study examines the cultural structure of Savur, emphasizing the importance of preserving and transmitting its historical and cultural heritage to future generations.

A notable example of this rich heritage is Dereiçi, a Syriac (Süryani) village, which remains one of the rare settlements housing churches belonging to the Protestant, Catholic, and Orthodox traditions. This village, with its deeply embedded history and hidden architectural treasures, serves as a remarkable testament to the region's diverse cultural and religious past.

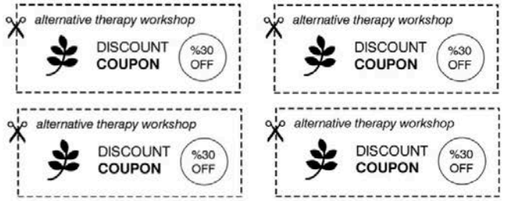
**can savur be considered as multi-cultural?**

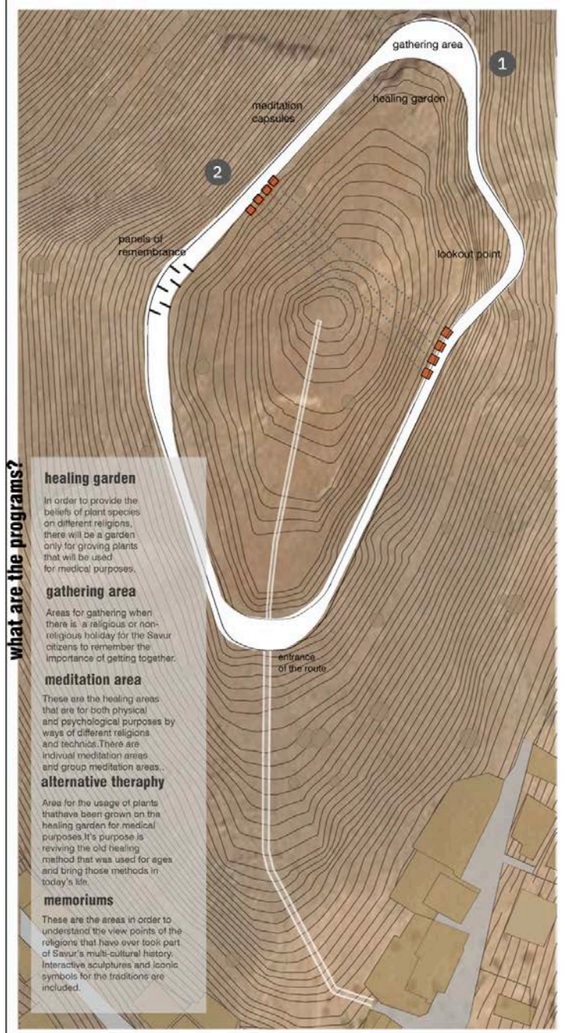
Healing refers to the practice of seeking divine intervention to cure mental or physical ailments, either as a complement to orthodox medical treatment or as an alternative to it. This process often involves an intermediary, whose intercession may play a crucial role in achieving the desired cure. In some cases, faith may be associated with a specific location, which then becomes a pilgrimage site for those seeking healing. Belief in the therapeutic power of natural springs has been both long-standing and widespread across various cultures. Similarly, spiritual healing is centered on establishing a connection to something greater than oneself, whether it be friendship, community, a sense of virtue or meaning, God, a higher power, or an awareness of higher truth, beauty, or sacredness in life.

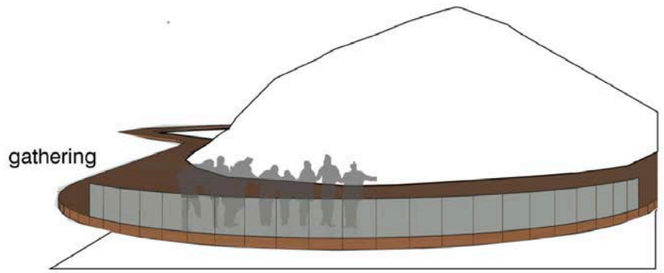
Thus, spiritual healing encompasses any experience that enables individuals to overcome isolation caused by a lack of meaning or purpose in life or by a disconnection from a higher power or a greater existential reality.

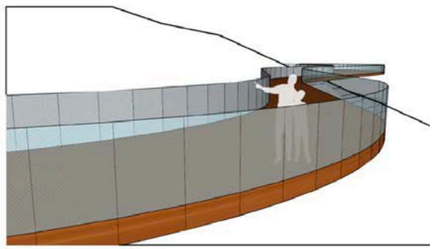


How can ypu reach spirituality in a timeless certain space?

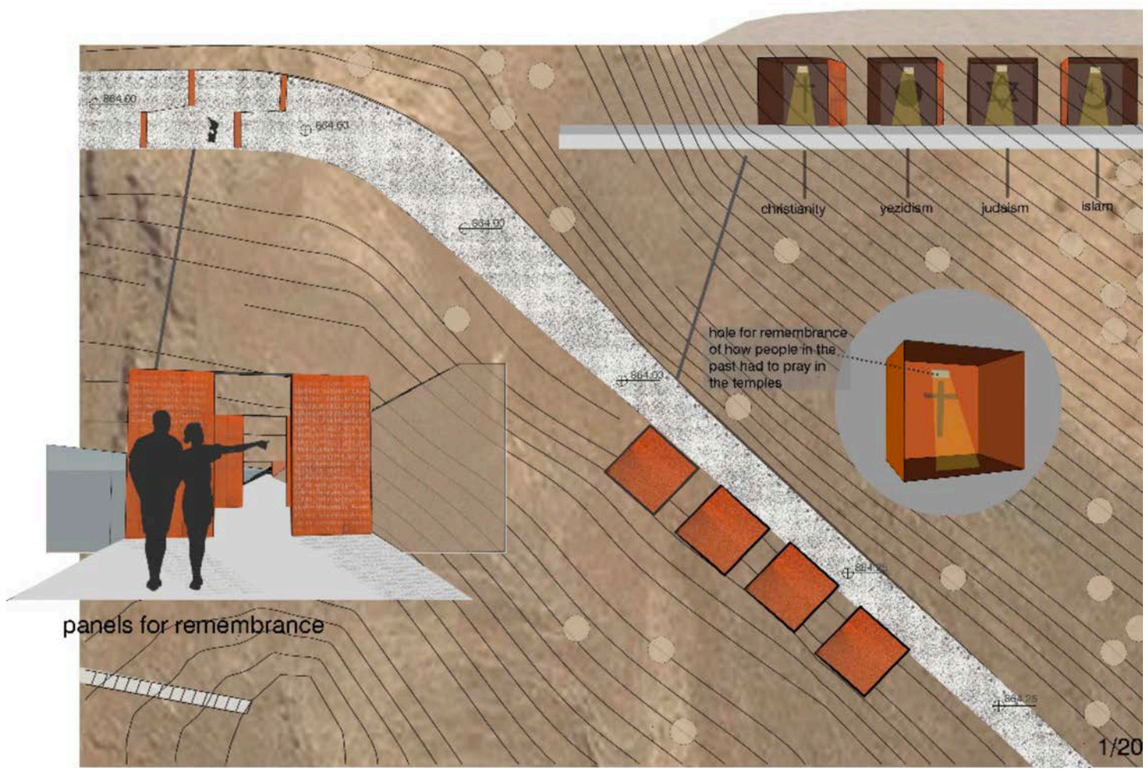


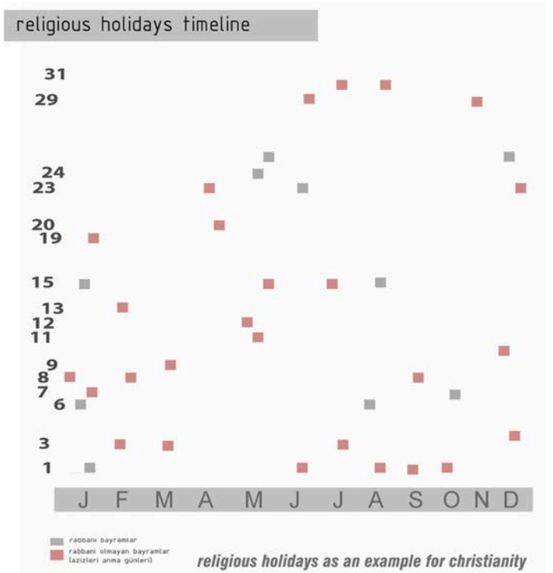





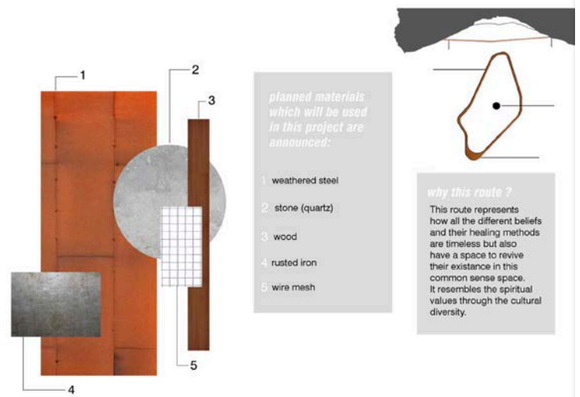
looking-out

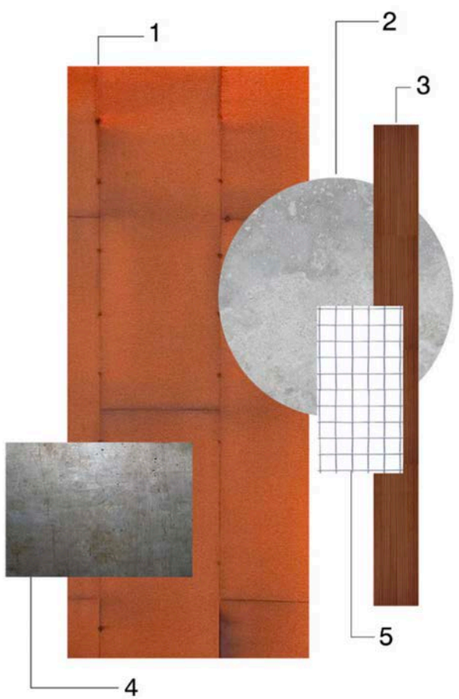



Savur is home to one of the oldest continuously inhabited urban settlements in the world. The region embodies a deeply rooted tradition of coexistence in diversity, where various ethnic and religious communities, including Assyrians, Kurds, Arabs, Mahalmis, and other groups, live in close proximity. As a result of this rich cultural mosaic, Savur has produced a wide array of cultural expressions, which can be regarded as tangible heritage. These cultural elements will be incorporated into weathered steel panels through inscriptions and symbols that reflect the rituals and beliefs of the region, serving as a testament to its historical and spiritual significance.

Meditation capsules are designed as a meditative experience integrated into a structured route that connects four distinct religious traditions reflective of Savur's historical and multicultural identity. Although these religions differ in rituals and practices, they share certain fundamental elements. One of the most significant commonalities is the sun and its influence on belief systems. To preserve the interconnection between these religious traditions and to revive the memory of Savur's religious heritage, a central opening was created as a symbolic and spatial representation of this shared spiritual connection.

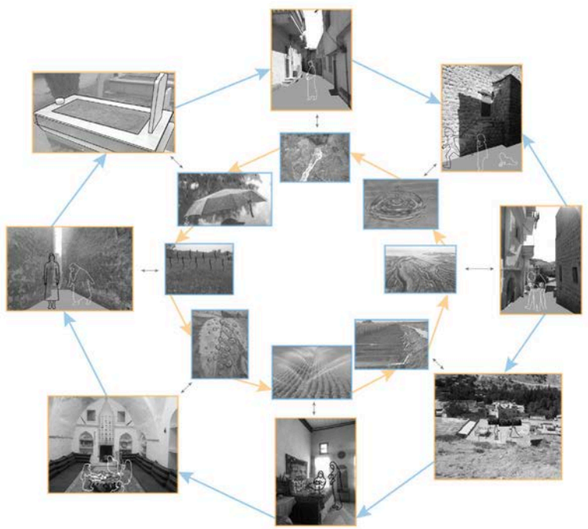


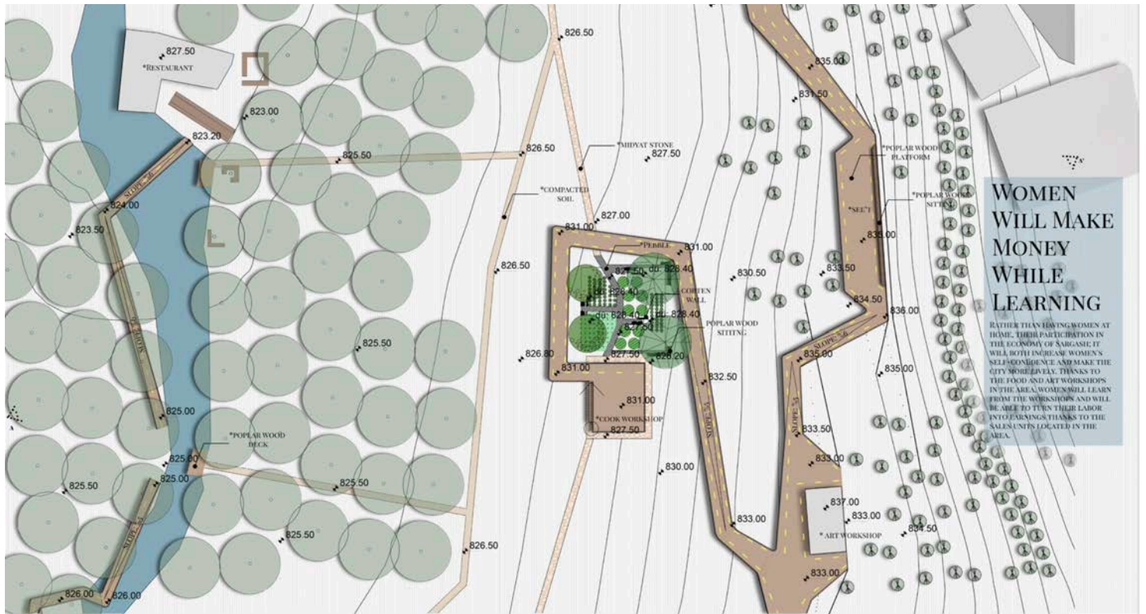



# Memory of Savur

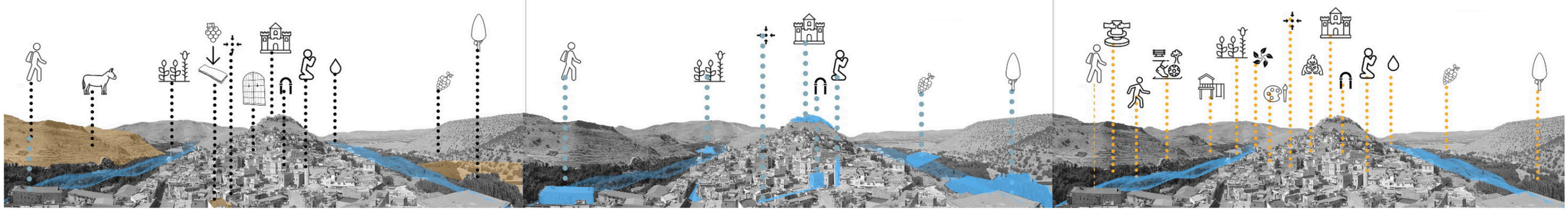
Alara İlter

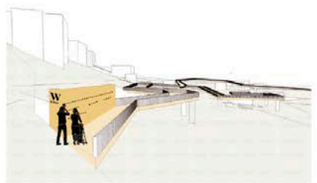
*"Loop" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Arzu Güler under the title "Memo-Structural Landscapes / Savur" in the fall semester of 2019-2020.*

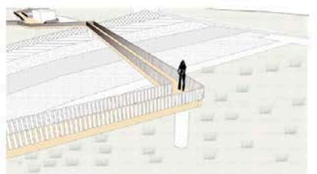


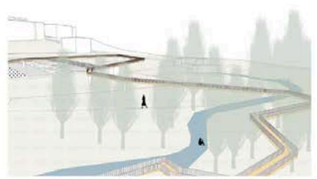


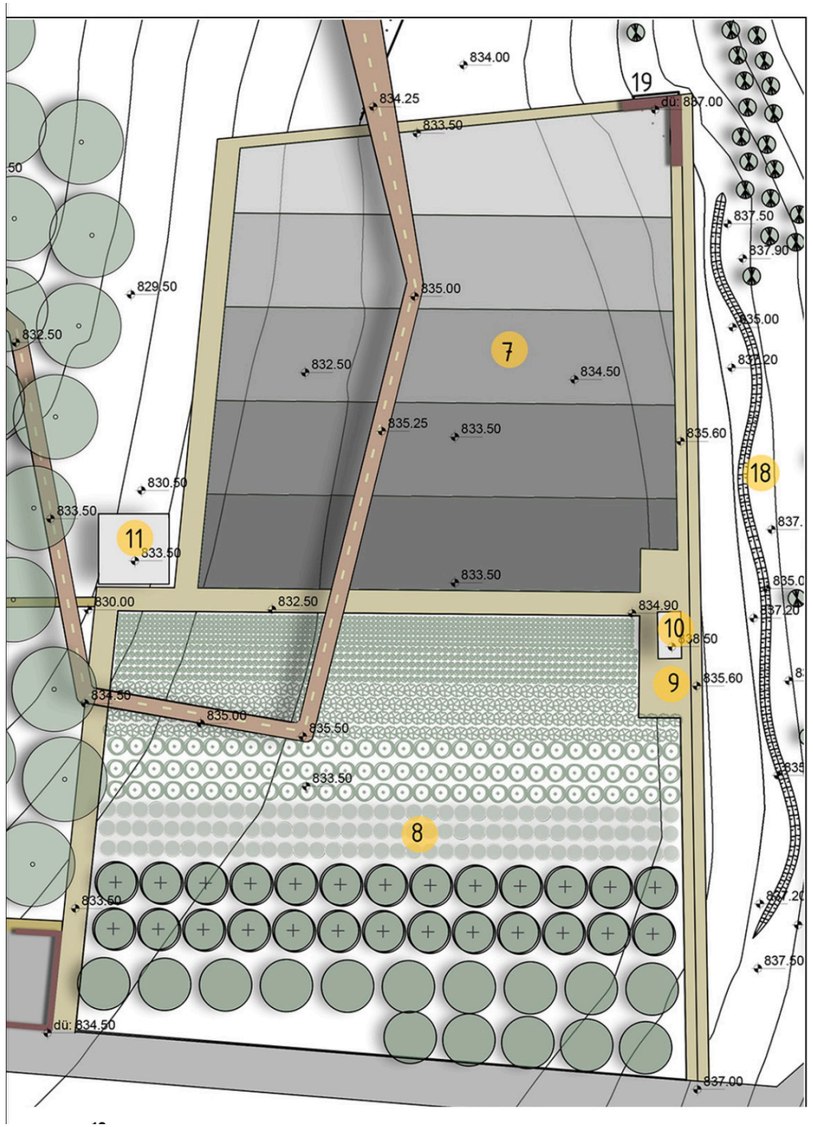

Savur is an ancient settlement built upon two hills, with the Savur Castle situated on one of them. Over the centuries, the city center has remained unchanged, preserving its historical fabric. The district's architectural heritage is concentrated in this area, featuring structures such as abbara (vaulted passageways), mosques, and old mansions. Additionally, traditional coffeehouses, where men gather for social interaction, are an integral part of daily life. Descending from the hills toward the valley, the landscape transitions into fields and poplar trees. In traditional Savur houses, water held great significance. Gates with fountains collected and distributed rainwater, while an antique form of a parental bathroom was also a common feature. Houses were constructed primarily from stone, with wooden furniture being the standard interior choice. Families traditionally cultivated their own fruits and crops, integrating self-sufficiency into their way of life. Additionally, houses included baths for women, designed with a special infrastructure to ensure privacy. In recent years, Savur has been designated as one of the Cittaslow (Slow Cities), emphasizing sustainable urban development and cultural preservation. However, for Savur to thrive and develop, active agricultural production and economic engagement are necessary. Orchards must be cultivated, and local products must be produced to sustain both the economy and cultural heritage. Furthermore, poplar farming, once a significant part of the local economy, has become increasingly unsustainable due to climate change and the unconscious overuse of water resources. Addressing these challenges will be crucial for the region's sustainable future.














The water cycle on Earth follows a continuous process: water falls to the ground as precipitation, collects in streams and reservoirs, and is later utilized for production and consumption. It then returns to the atmosphere through evaporation, completing the cycle. Some theorists have drawn a conceptual parallel between women and water, framing a notion of duality that likens the life cycle of women to the water cycle—from birth to production, consumption, and renewal. Savur has historically been a preferred settlement due to its favorable landforms, fertile soil, and proximity to vital resources. In the past, the region supported diverse agricultural practices such as mulching, viticulture, and winemaking. However, these industries have declined due to resource depletion, the loss of traditional crafts, and a lack of skilled artisans. Today, economic stagnation has led to an exodus of the younger population, as employment opportunities are scarce. For those who remain, men gather idly in coffeehouses, while women spend most of their time at home, with limited opportunities for social or economic participation. To address these challenges, a new project has been developed to revitalize an underutilized area located between the poplar groves along the Savur Stream and the main road. This initiative aims to serve the public and enhance the region's socio-economic and cultural value. The project will feature three distinct types of gardens: A tree garden, an edible plant garden, a perennial garden.

The materials selected for the project are native to Mardin, ensuring a seamless integration with the local environment. Steel has been chosen due to its rusting properties, which symbolize the passage of time and the preservation of cultural memory. Mardin stone is incorporated to reflect the existing architectural identity of the region, reinforcing the connection between the built environment and the local heritage. Additionally, naturally occurring plants from Savur have been integrated into the design, further strengthening the site's ecological and historical continuity. Through this approach, the project aspires to bridge the past and present, revitalizing Savur's cultural and economic landscape.

"A PROJECT THAT REVIVES SAVUR. PERFECT FOR SPENDING TIME WITH FAMILY."

-EBRU ERBAŞ GÜRLER

"NATURE INTERWINED. TO COME HERE, TO BE RENEWED."

-ARZU GÜLER

"VERY GOOD DEVELOPMENT FOR SAVUR. BOTH THE PUBLIC AND THE SAVUR WILL DEVELOP FURTHER."

-CEMIL AKTAŞ

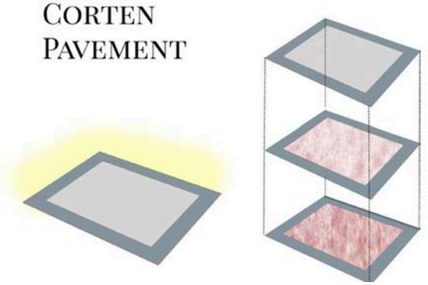
"MAKE SAVUR GREAT AGAIN"

-ALARA ILTER

Additionally, the project will incorporate cooking areas, craft-learning spaces, communal seating areas, and a restaurant. A deck will be constructed around the site, providing visitors with scenic views and immersive experiences. This initiative seeks to empower the residents of Savur, particularly women, by teaching them new skills related to food preparation, agriculture, and traditional crafts, thereby fostering greater social engagement and integration into daily life.

## MATERIALS

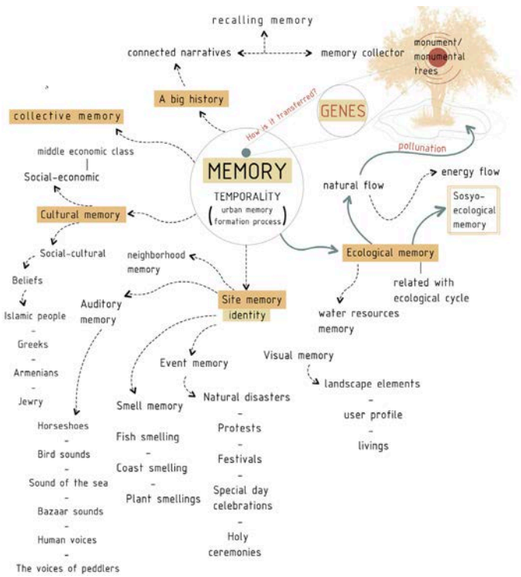
## CORTEN PAVEMENT



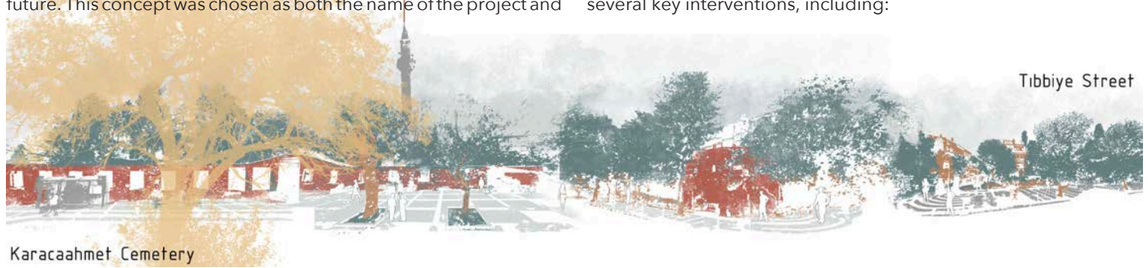
# Memstory

Nuran Kul

*"Memstory" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Nergis Aşar under the title "New Normal / New Old: Rethinking of Neighbourhood Landscape" in the fall semester of 2020-2021.*

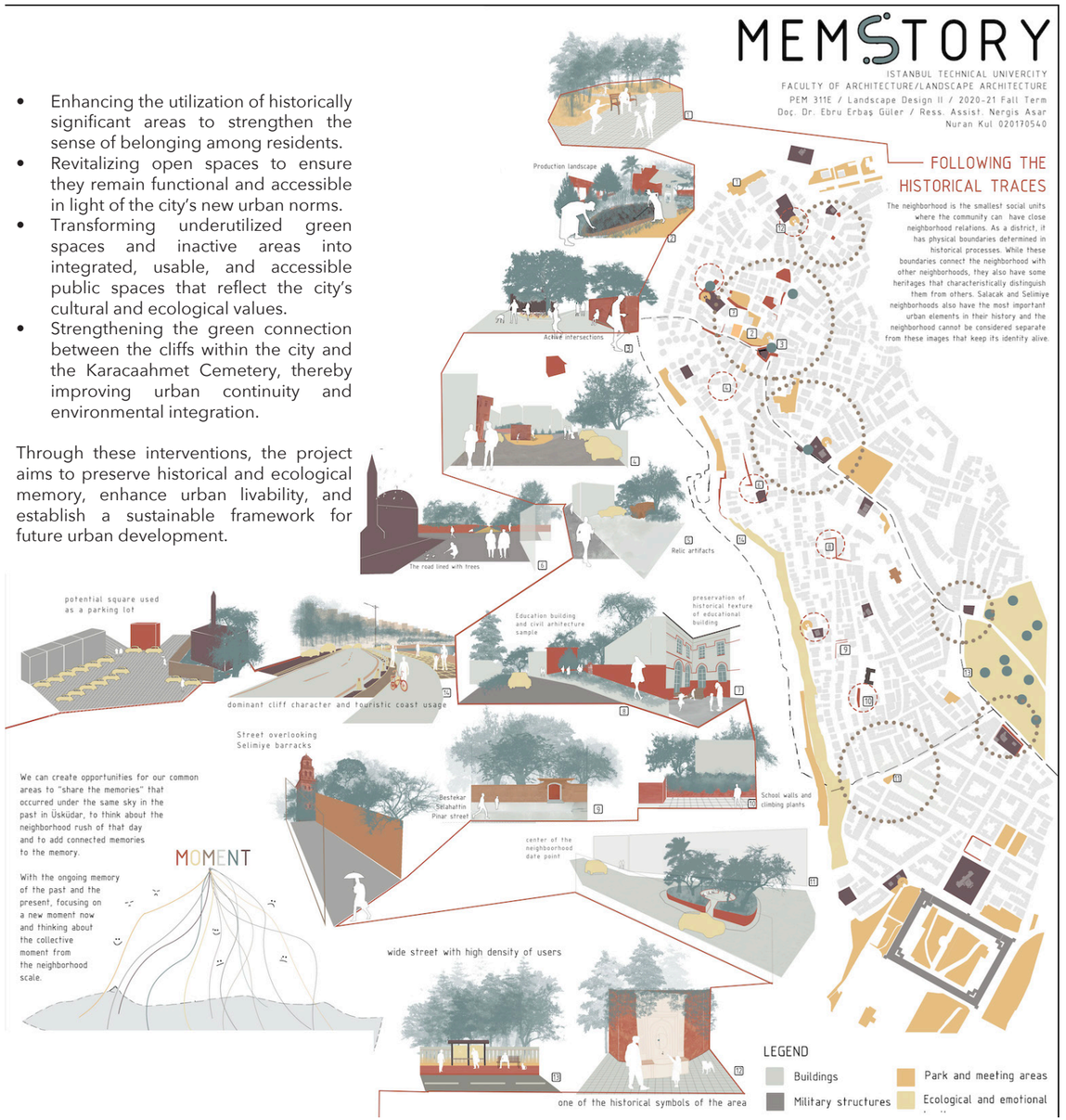


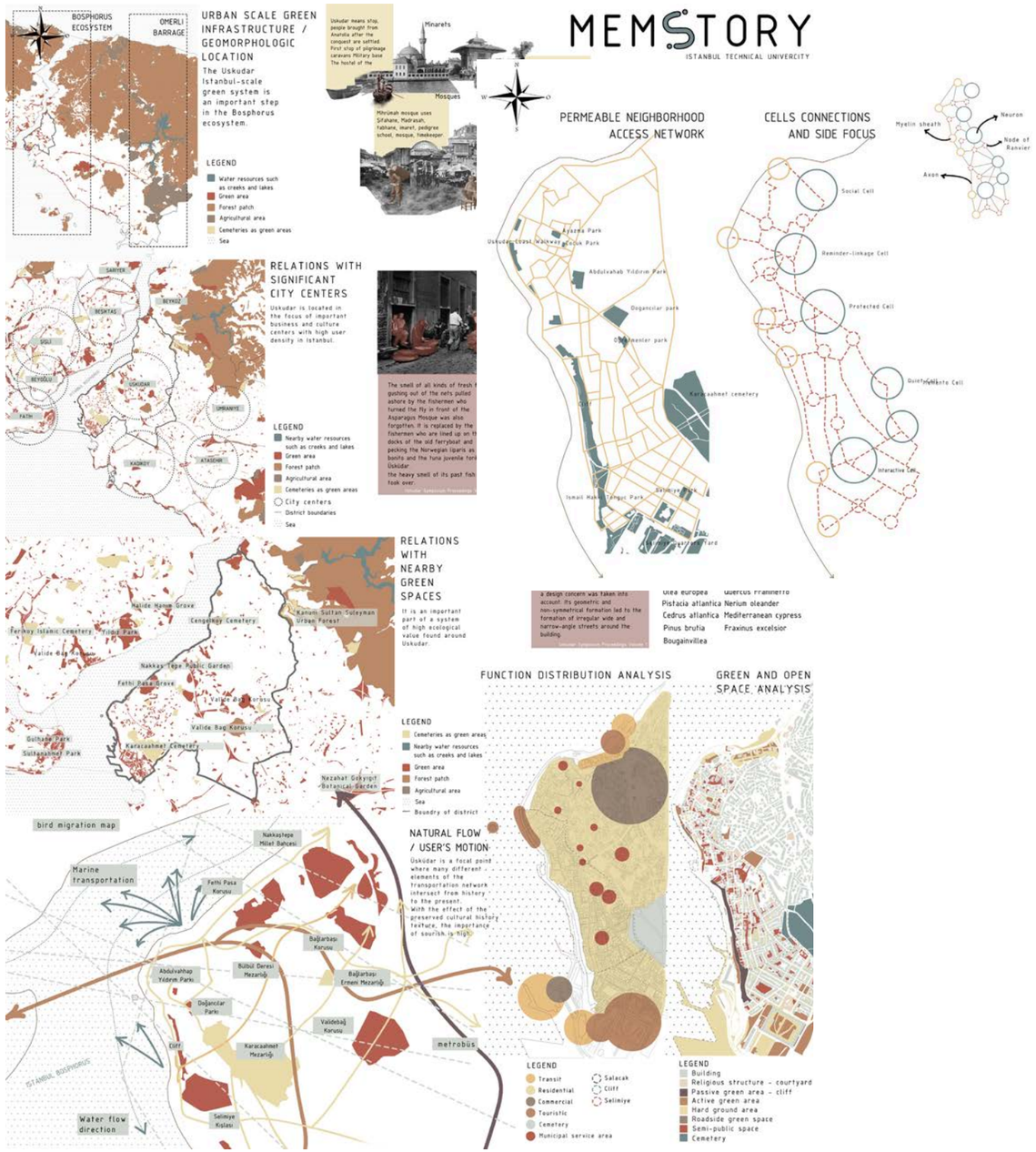

The primary objective of this project is to create spaces that preserve and convey the city's social and ecological memory, while also designing open spaces that align with the evolving norms of urban life. The project is centered around the concept of "MEMSTORY," a term that emphasizes the historical continuity of the city and establishes a connection between the past and the future. This concept was chosen as both the name of the project and its overarching theme. Through extensive spatial analysis, areas containing traces of the city's history, particularly monumental trees within neighborhoods, were identified and classified at a broader urban scale. Based on these findings, strategies were developed to enhance the green connectivity within the city by analyzing the relationships between urban open spaces. The project focuses on several key interventions, including:




- Enhancing the utilization of historically significant areas to strengthen the sense of belonging among residents.
- Revitalizing open spaces to ensure they remain functional and accessible in light of the city's new urban norms.
- Transforming underutilized green spaces and inactive areas into integrated, usable, and accessible public spaces that reflect the city's cultural and ecological values.
- Strengthening the green connection between the cliffs within the city and the Karacaahmet Cemetery, thereby improving urban continuity and environmental integration.

Through these interventions, the project aims to preserve historical and ecological memory, enhance urban livability, and establish a sustainable framework for future urban development.



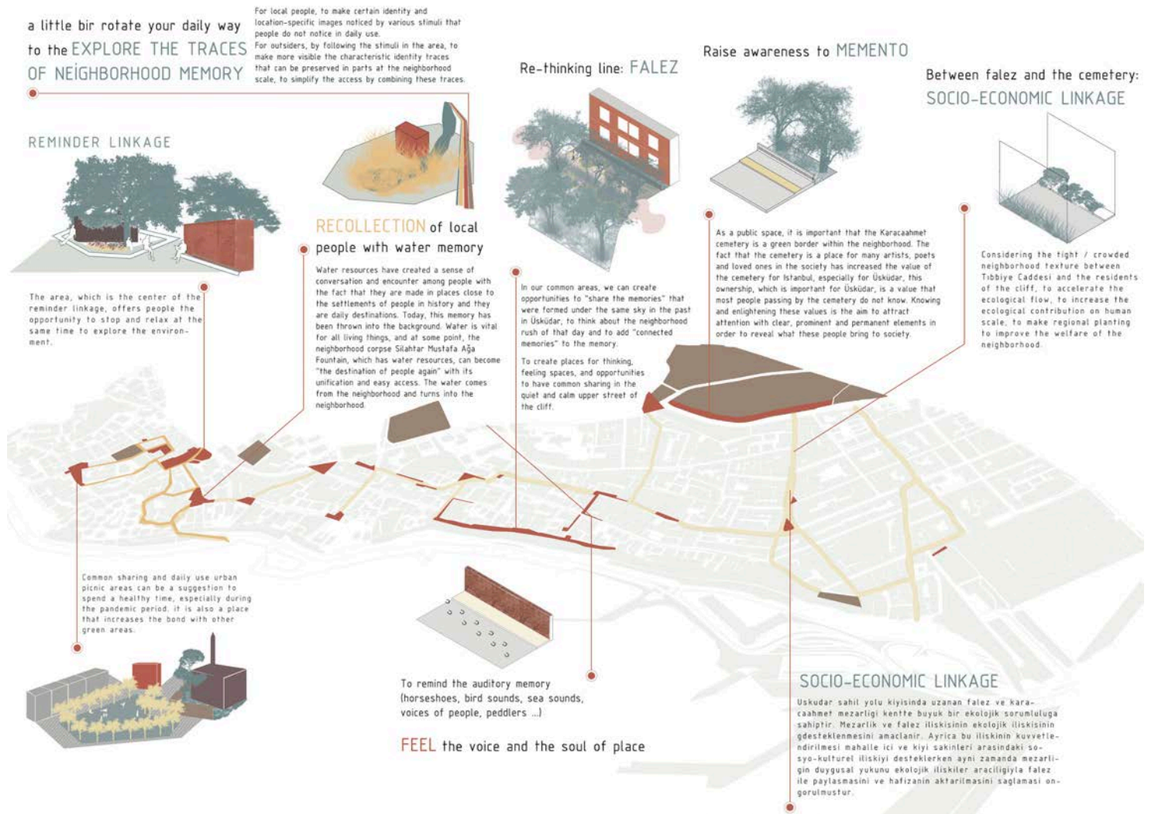







SOCIAL, ECOLOGIC AND CULTURAL

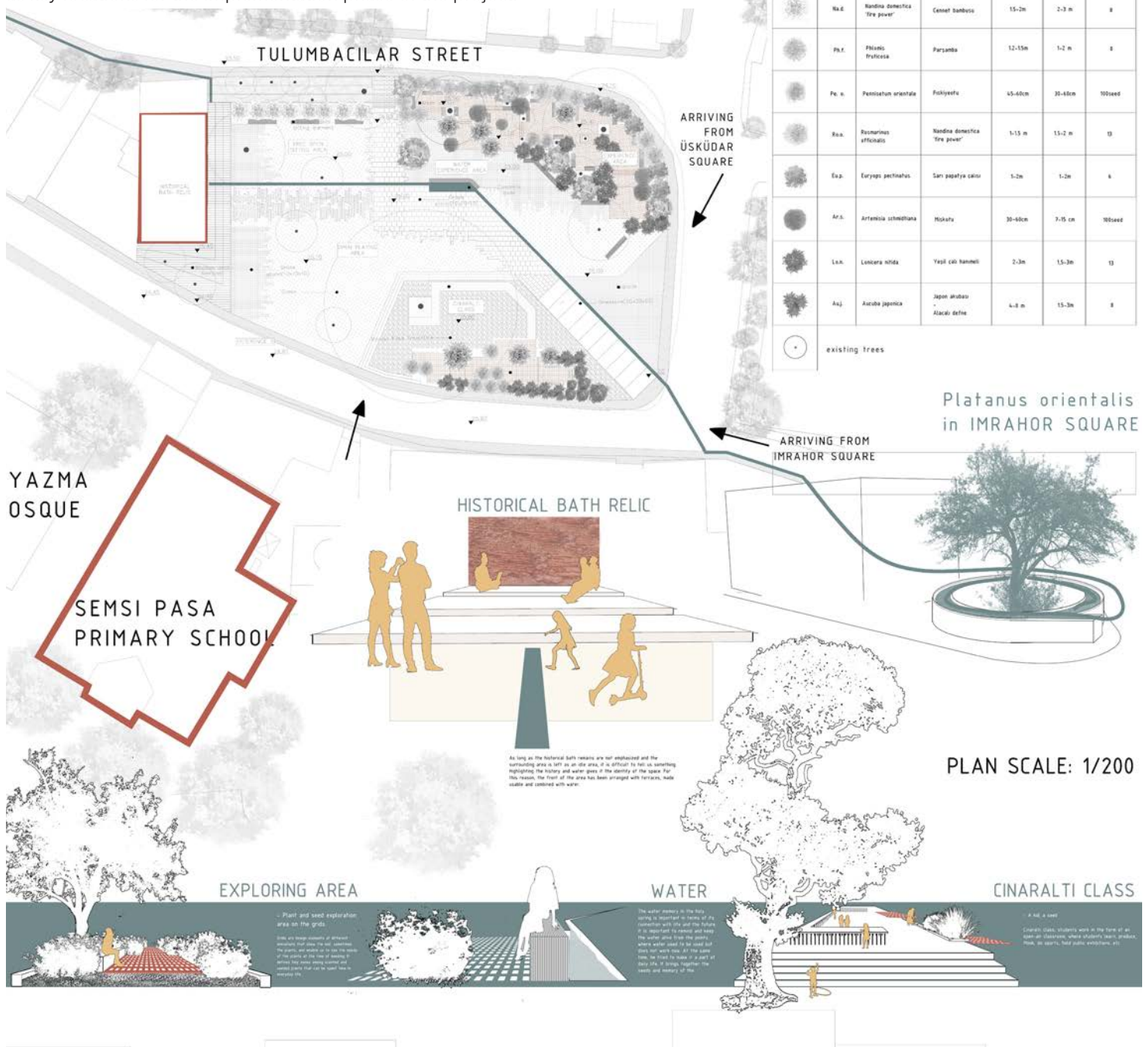
## Spatial Temporal Collective Units




GEN FLOW/NEURON CELL TO GREEN INFRASTRUCTURE

The project conceptualizes neighborhood culture as a living network, drawing inspiration from the structure and function of neuron cells in neuroscience. Just as axons connect neurons, landscape elements are envisioned as “landscape lines” that establish connections between key neighborhood focal points. In this analogy, nodes function as secondary focal points, slowing down and intensifying the transmission of connections, much like synapses in a neural network. These nodes serve as places of pause, observation, and interaction, reinforcing place-specific identity and engagement within the urban fabric. The neuron cell, which is the fundamental unit of the nervous system, plays a crucial role in transmitting information through extensive interconnections with other nerve cells. Similarly, the project integrates multiple layers of memory, history, and identity to create an interactive urban experience. The design process is guided by the act of remembering and analyzing memory, incorporating the accumulated social, cultural, and ecological layers of space. Nature facilitates this transfer of information through social and ecological mechanisms, which are inherently cell-based. Upon examining the building blocks of cells, it becomes evident that they consist of various functional components, including those responsible for conduction, storage, and transmission. The green infrastructure system follows a highly parallel structure, functioning as a biological and ecological network that supports urban resilience and sustainability. By aligning biological principles with urban planning, this project proposes an integrated approach to revitalizing public spaces through nature-based solutions.

The principles of centralization and dispersion were employed to establish inter-neighborhood connections within the project area. The concept draws inspiration from biological networks, where cells serve as key points in sustaining neighborhood culture. Axons function as landscape lines, linking cells to neighborhood focal points through nodes. Nodes, or secondary focal points, act as intermediaries that slow down and intensify the transmission of connections, facilitating pause, observation, and engagement with the urban landscape. These nodes also serve as identity markers, reinforcing the sense of place for both residents and visitors. These “lateral focal points” form an interwoven cultural network, enhancing both the social and aesthetic experience of the city. Within this framework, İmrahor Square, Ayazma Park, and Ayazma Square have been identified as key locations for the implementation phase of the project.




LEGEND

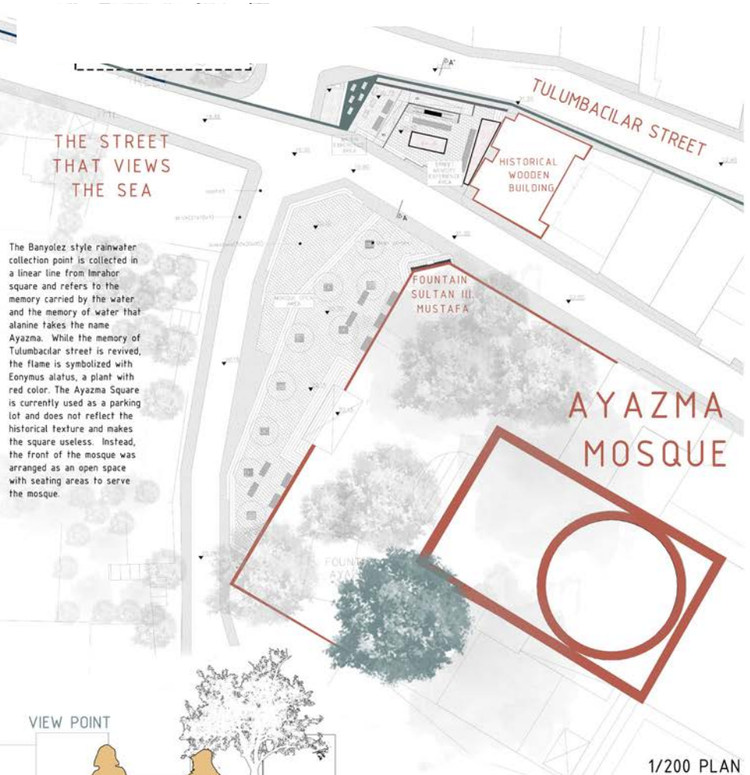
| SYMBOL | CODE | LATIN NAMES | TURKISH NAME | DIAMETER | HEIGHT | QUANTITY |
|---|---|---|---|---|---|---|
| | Ac.d. | Acacia dealbata | Gümüşi akasya | 6-8m | 15-15m | 4 |
| | Hyk. | Hypericum kalmianum | Bıldırdelikotu | 0.5- 1.5 m | 0.5- 1.5 m | 7 |
| | Nad. | Nandina domestica 'fire power' | Cennet bambusu | 1.5-2m | 2-3 m | 8 |
| | Pk.f. | Pikonia frutescea | Parsamba | 12-15m | 1-2 m | 8 |
| | Pe. n. | Pennisetum orientale | Pekiyeotu | 45-60cm | 30-40cm | 100seed |
| | Ros. | Rosmarinus officinalis | Nandina domestica 'fire power' | 1-1.5 m | 1.5-2 m | 13 |
| | Eup. | Euryops pectinatus | Sarı papatya calısı | 1-2m | 1-2m | 6 |
| | Ar.s. | Artemisia schmidtiana | Mıskatu | 30-60cm | 7-15 cm | 100seed |
| | Lo.n. | Lonicera nitida | Yeşil çalı hanımeli | 2-3m | 1.5-3m | 13 |
| | Auj. | Aucuba japonica | Japon akubası - Alacalı defne | 4-8 m | 1.5-3m | 8 |
| | | existing trees | | | | |





## TULUMBACILAR STREET

In order to revive the memory of the place, to increase the awareness of the local people about the place they live, and to bring people together by establishing the relationship between the past and the future, we set off from Tulumbacilar Street in order to create awareness of the old life of the place with a new fiction.

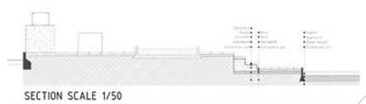


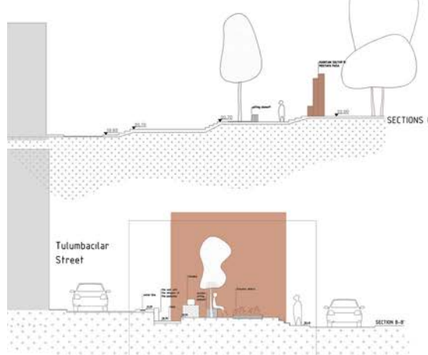

The Banyolez style rainwater collection point is collected in a linear line from Imrahor square and refers to the memory carried by the water and the memory of water that alanine takes the name Ayazma. While the memory of Tulumbacilar street is revived, the flame is symbolized with Eonymus alatus, a plant with red color. The Ayazma Square is currently used as a parking lot and does not reflect the historical texture and makes the square useless. Instead, the front of the mosque was arranged as an open space with seating areas to serve the mosque.

LEGEND

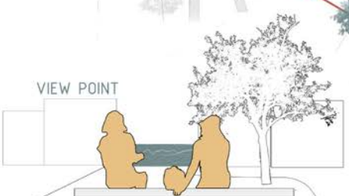
| SYMBOL | CODE | LATIN NAMES | TURKISH NAME | DIAMETER | HEIGHT | QUANTITY |
|---|---|---|---|---|---|---|
| | Li.a. | Liquidambar styraciflua | Amerikan küre çiçekli gün sığlası – Kızaran Amber ağacı | 4-6 m | 25-40 m | 10 |
| | | existing trees | | | | |
| | | Monument tree | | | | |

CONSTRUCTION DETAILS

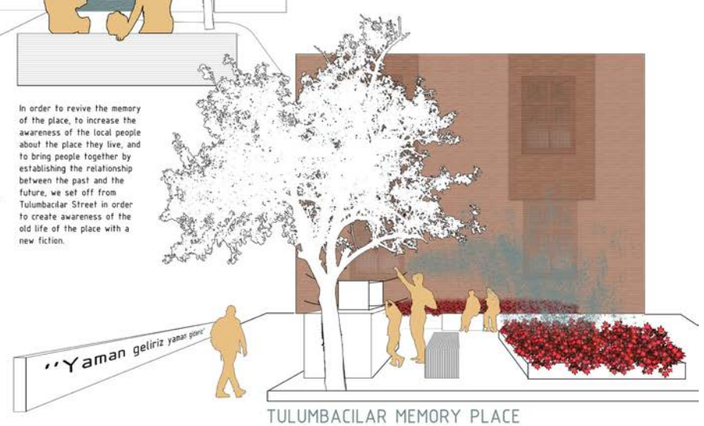



VIEW POINT



In order to revive the memory of the place, to increase the awareness of the local people about the place they live, and to bring people together by establishing the relationship between the past and the future, we set off from Tulumbacilar Street in order to create awareness of the old life of the place with a new fiction.



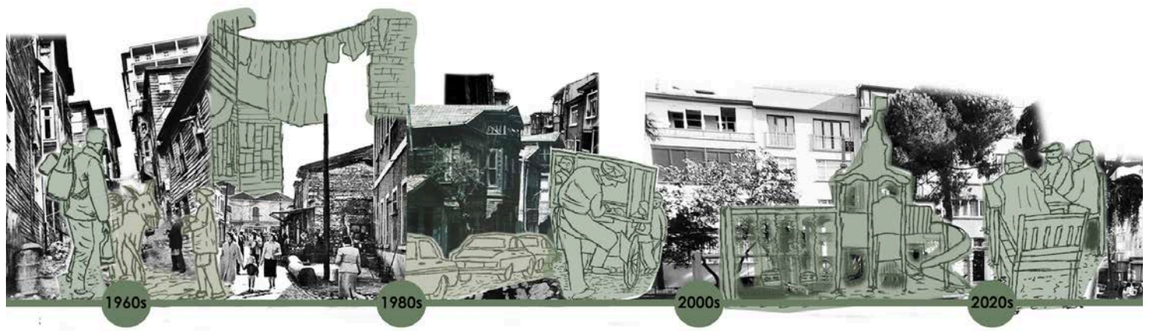

1/200 PLAN

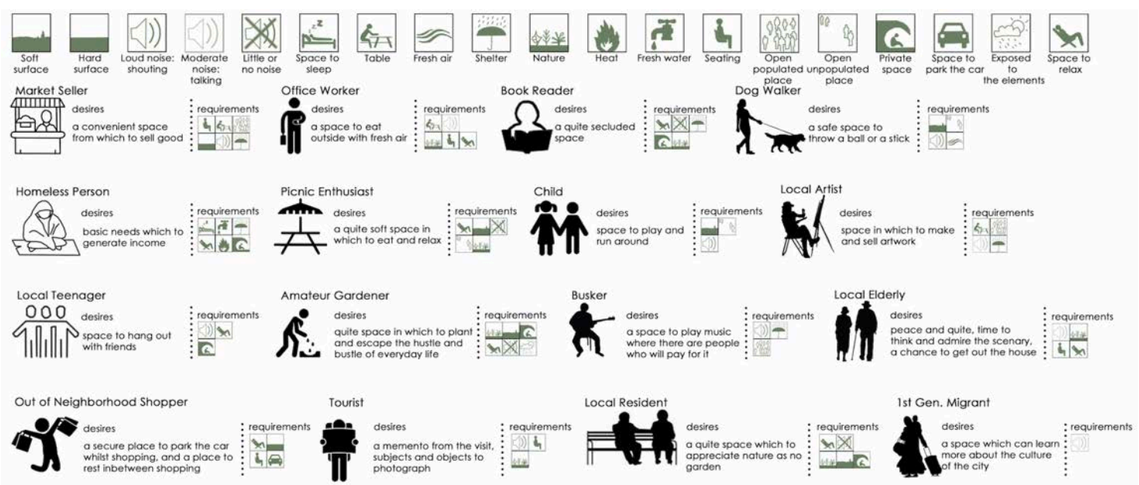
TULUMBACILAR MEMORY PLACE

# N-ormal Route

İrem Nur Yener

*"N-ormal Route" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Nergis Aşar under the title "New Normal / New Old: Rethinking of Neighbourhood Landscape" in the fall semester of 2020-2021.*





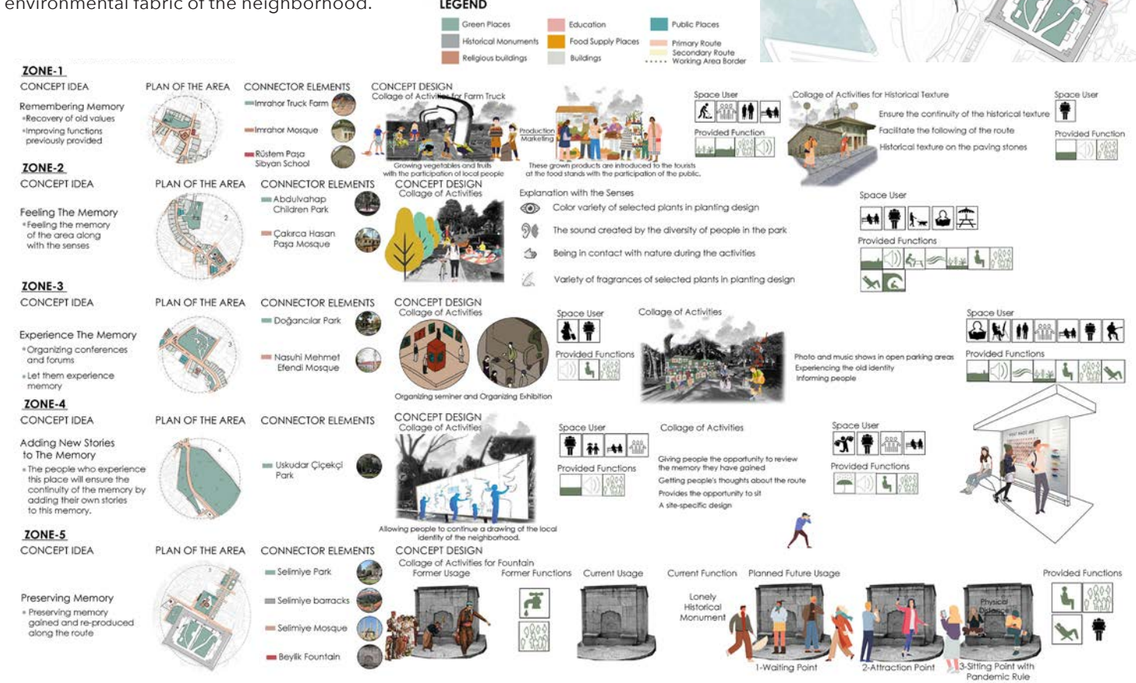



While individuals shape and transform spaces, they simultaneously preserve and sustain collective memory within them. In other words, the users of a space leave their imprints, embedding their presence into the spatial memory of the environment. In response to this dynamic, I developed a cultural route that integrates local identity, green continuity, and cultural connectivity. To determine the pathways of this route, I conducted a layered analysis, which revealed two distinct paths: The Primary Route & The Secondary Route

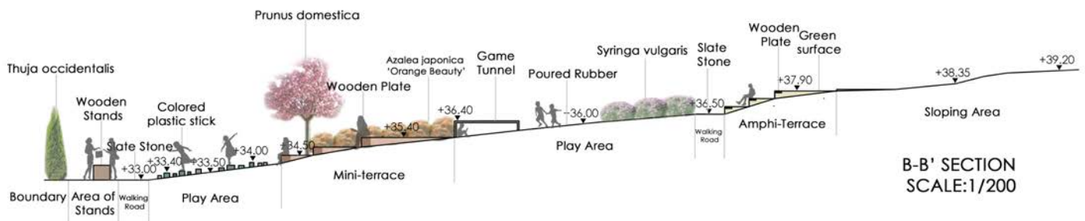
To enhance the understanding of local memory across different timeframes, I structured the Primary Route into five thematic zones, each representing a different phase of engagement with memory:

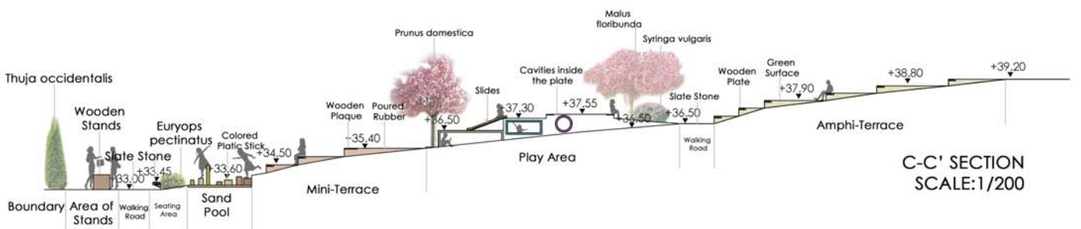
- Remembering the memory
- Feeling the memory
- Experiencing the memory
- Adding new stories to the memory
- Preserving the memory

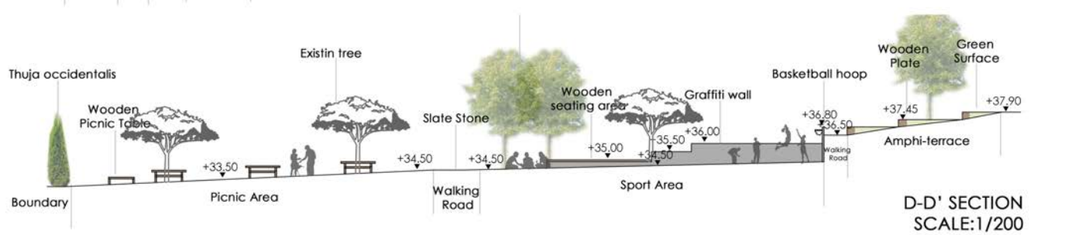
Over time, neighborhood culture has undergone significant changes. However, these changes are not always reflected in our lived experiences and memories, but rather in the transformation of spaces and means of interaction. While users leave traces of their presence, contributing to the memory of a place, today, local memory is at risk of degeneration and erasure. An analysis of green spaces within the neighborhood revealed that existing green areas are both insufficient and poorly defined. The limited amount of greenery dispersed throughout the urban fabric lacks coherence and fails to establish a meaningful ecological and social network. This project, therefore, seeks to revitalize and reconnect fragmented green spaces, reinforcing both the cultural and environmental fabric of the neighborhood.



# SECTIONS-from Abdulvahap Yıldırım Park



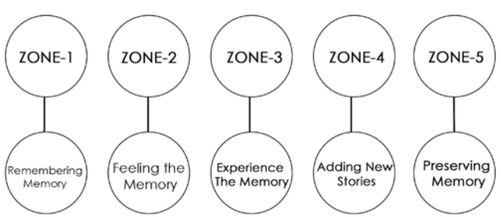



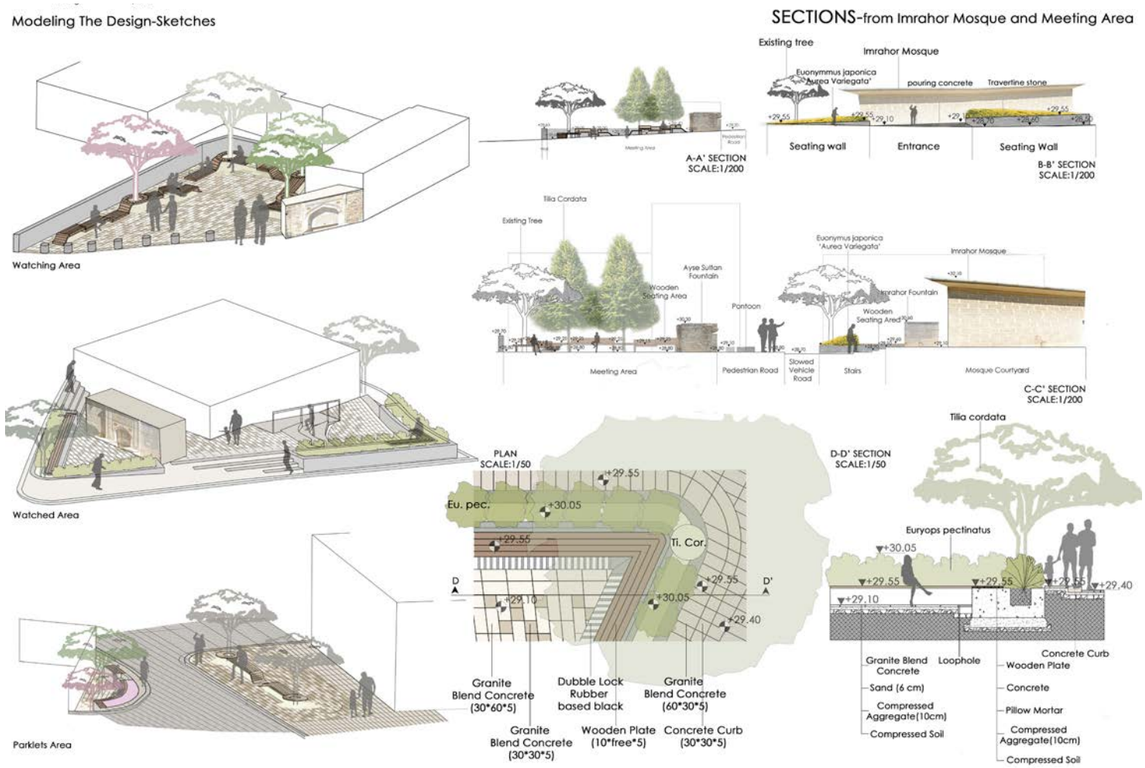



PURPOSES

1- Revitalizing Forgotten Historical Functions
2- Revealing the Local Identity
3- Transmitting Neighborhood Values to Future Generations

To achieve these objectives, the Primary Route has been divided into five thematic zones, each supported by specific functions designed to enhance the understanding of memory across past, present, and future contexts.




I chose to focus on İmrahor Mosque and Abdulvahap Yıldırım Park as key elements within the broader design framework I developed at a larger scale. Abdulvahap Yıldırım Park, located along the primary route, serves as an urban park actively used by neighborhood residents. The design intervention here aims to revitalize local memory by reinstating the "5 Tea Festival," which was previously held in the park. This initiative seeks to enhance the park's functionality, making it more responsive to the needs of the community while also ensuring its efficient use during the pandemic period.

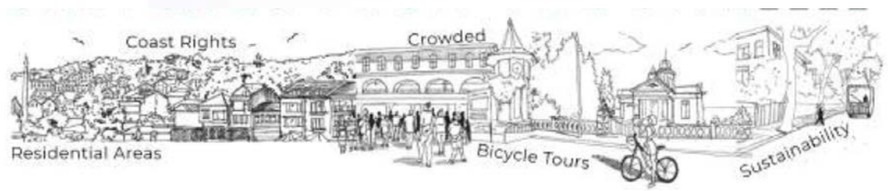
İmrahor Mosque and the fountains surrounding it possess a distinct historical character, contributing to the cultural memory of the area. To enhance residents' engagement with these architectural elements, the open space opposite the mosque has been designed as a "Watching Area," providing a designated space for visitors to observe and appreciate the historic textures. Meanwhile, the mosque and its surrounding fountains are conceptualized as the "Watched Area," emphasizing their role as focal points of cultural and historical significance.

Through these interventions, the project seeks to strengthen the relationship between public spaces and cultural memory, ensuring that historical and social elements are preserved, experienced, and actively integrated into contemporary urban life.

# Layers of Büyükada

Hande Beril Küçükler

*"Layers of Büyükada" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. F. Ayçim Türer Başkaya and Res. Assist. Başak Akarsu under the title "Discovering Büyükada: From climate change to wildfire" in the fall semester of 2021-2022.*



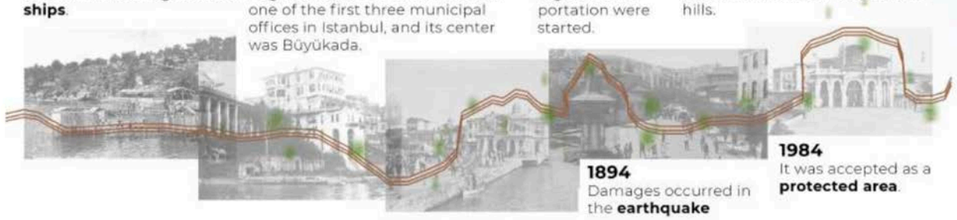

## HISTORICAL BACKGROUND OF BÜYÜKADA

**1846**
The settlement of the Turks on the island occurred with the commissioning of **small ships**.

**1861**
During the reign of Sultan Abdulaziz, the **Adalar Municipality Organization** was established as one of the first three municipal offices in Istanbul, and its center was Büyükada.

**1875**
With the arrival of **larger ships**, regular transportation were started.

**1945**
The **residentials** that started around the pier continued along the coast and move towards the hills.

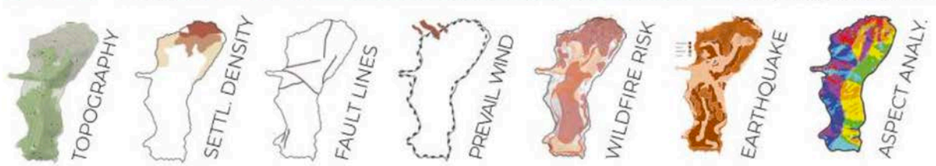


**1894**
Damages occurred in the **earthquake**

**1984**
It was accepted as a **protected area**.

## SITE ANALYSIS

SCALE: 1/50.000 N








## ISLAND ECOSYSTEM AND THREATS
## INTERVIEW WITH LOCALS

Serço Ekşiyan
Diver, 67

"Fish and crustacean species have **decreased**. By 1978, the lobsters had vanished. They came back in 1996, but the bugs went away in 1978 and never came back. **There are many species that have disappeared and that we have never seen again.** Under the Büyükada ferry port, hundreds of karagöz weighing 2, 2.5 kilograms lived. There is not a single karagöz anymore. 2, 3 months after the waste was thrown, I saw that the **corals** first changed their color and then **died**."

Volkan Narcı
Diver, 40

"In the past, when you looked at the sea, you **could see** the types of fish without going into the sea. The boats would go towards the places where the **seagulls** were. Because there was a lot of fish there. Fish had a **chance to live**, too."

Ercan Akpolat
Diver, 52

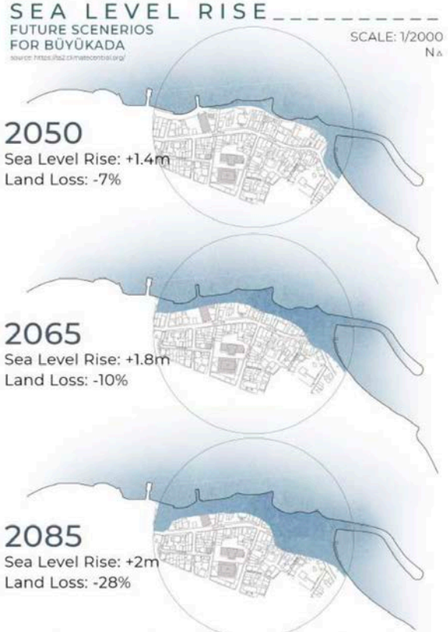
"The average lifespan of corals was 60 to 70 years. Corals died due to **excavation and spillage of waste**. If we can create a protected area here, **we can protect all marine animals for the future**."

Ocak, H., (2018). 'Denize borçluyuz', Cumhuriyet Gazetesi, Interview.

## SEA LEVEL RISE

FUTURE SCENERIOS FOR BÜYÜKADA

SCALE: 1/2000
N



**2050**
Sea Level Rise: +1.4m
Land Loss: -7%

**2065**
Sea Level Rise: +1.8m
Land Loss: -10%

**2085**
Sea Level Rise: +2m
Land Loss: -28%

### BULKHEAD
A-A' section, scale: 1/100

(-) no major flood protection
(-) erosion of seaward seabed
(-) loss of intertidal habitat

### REVETMENT (ANROŞMAN)
B-B' section, scale: 1/100

**(+) mitigates wave action**
(-) no major flood protection
(-) loss of intertidal habitat

### SEAWALL RAMP
C-C' section, scale 1/100

**(+) prevents storm surge flooding**
(-) erosion of seaward seabed
(-) loss of intertidal zone

## PROJECT AREA

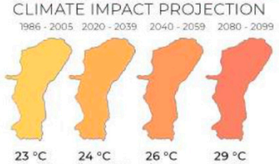
SCALE: 1/2000
N

## TSUNAMİ RISK

IMPACT AREA (3M)

## TEMPERATURE

CLIMATE IMPACT PROJECTION




source: https://impactlab.org/

## DESIGN STRATEGIES_____

### CIRCULATION DEVELOPMENT

+ SIDEWALKS
+ BIKE LINE
+ SERVICE ROAD

the existing site **lacks accessibility and walkability**. There should be different ways to develop a **circulation system** within the site. **Sidewalks and bike lanes** connect the site to the surrounding housing and recreational programs.

### THEMATIC GARDENS

The thematic garden allows people passing by to form a memory of smell belonging to Büyükada.

### EXHIBITION AREA

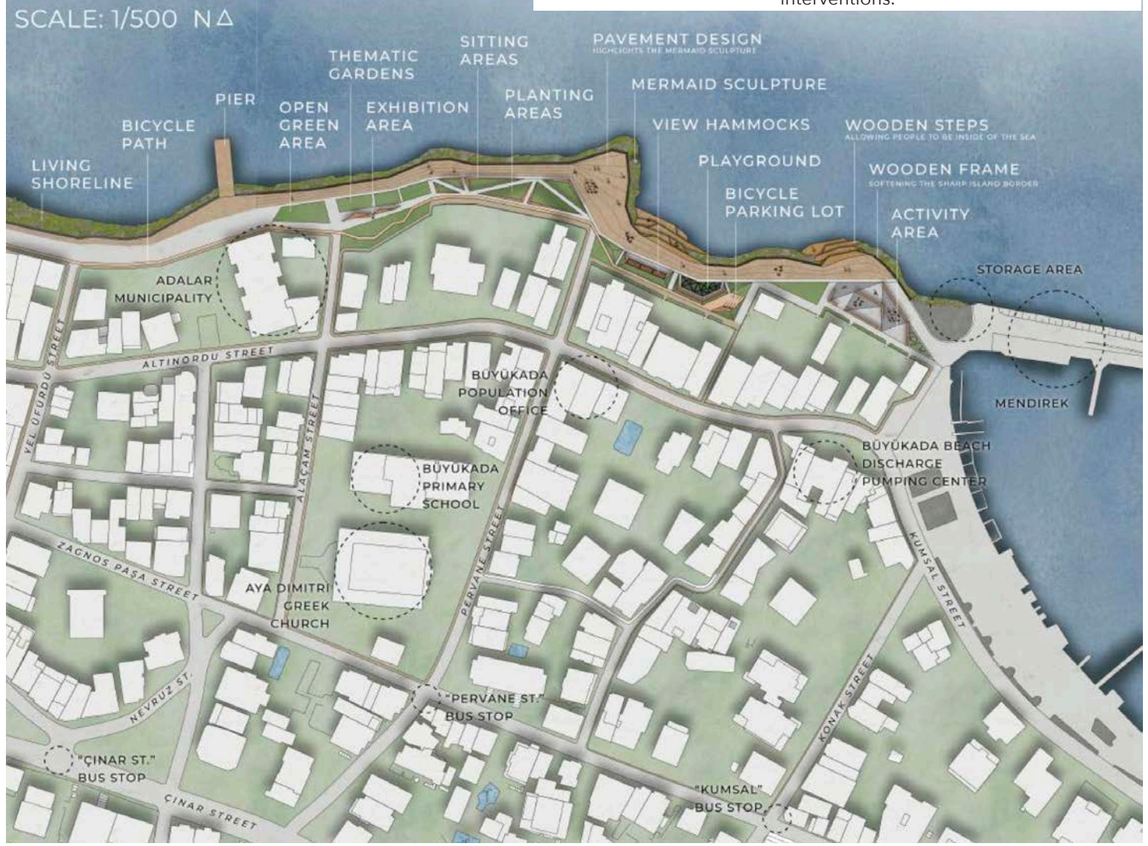
This exhibition area is defined between two green spaces. It creates a nice venue for temporary exhibitions on Büyükada.

### VIEW HAMMOCK

This area offers people both a more comfortable resting area and a viewing opportunity.

## OFF-SITE CONSIDERATIONS AND DESIGN FUNCTIONS

SCALE: 1/500 N

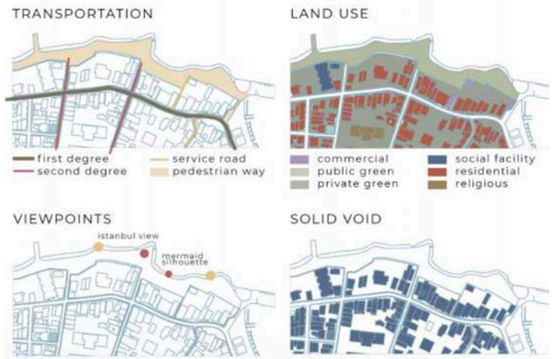



The studio focused on investigating and exploring the ecosystem of Büyükada, particularly in relation to climate change and wildfires. The primary objective was to develop environmentally conscious design approaches while understanding the concept of resilience, considering the island's local characteristics, multicultural identity, and ecological vulnerability.

As a starting point, the various layers of Büyükada's landscape were examined through a series of analytical techniques, including site surveys and field excursions. These methods enabled a comprehensive understanding of the island's natural and cultural dynamics, serving as a foundation for designing adaptive and sustainable interventions.



## 1/1500 SCALE DIAGRAMS




## A-A' ELEVATION

SCALE: 1/300

## MASTER PLAN

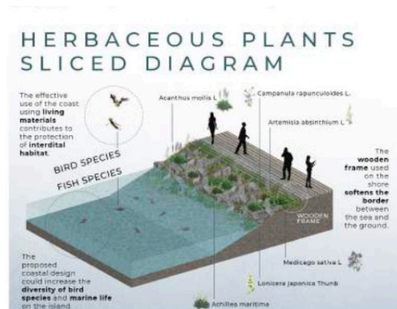
SCALE: 1/300 N

The environmental risks associated with the local landscape were thoroughly analyzed, with a focus on understanding how the impacts of climate change could be mitigated through landscape design. Within this framework, cultural and environmental awareness was approached as an integral spatial layer, influencing design decisions at multiple levels.

Additionally, the study explored alternative future scenarios for the island, particularly in response to rising sea levels and their potential consequences. Following this research phase, these issues were set within a multi-scale design context, ensuring a comprehensive and adaptable approach.

As a result, the project successfully addressed complex design challenges by developing detailed hardscape and softscape solutions, integrating resilient landscape strategies to enhance the island's ecological and spatial sustainability.

There is very limited historical information regarding pre-Byzantine settlements on Büyükada. One of the most significant antiquities discovered on the island was a collection of gold coins belonging to Philip II of Macedon, father of Alexander the Great. This treasure, consisting of 207 gold coins, was unearthed in 1930 near the Greek Orthodox cemetery in Karacabey and is currently housed in the Istanbul Archaeology Museum.



During the Byzantine era, similar to the other Princes' Islands, Büyükada became well known for its prisons and monasteries. Over seven centuries of Byzantine rule, political and religious conflicts, particularly throne struggles, led to the exile and torture of numerous princes, princesses, and religious figures on the island.

A month and a half before the Ottoman conquest of Constantinople, Fatih Sultan Mehmed's naval commander, Baltaoğlu Süleyman Bey, besieged Kınalıada, Burgazada, and Heybeliada. Due to its fortified castle, Büyükada managed to resist for a short period before eventually surrendering. Following the Ottoman conquest, the islands experienced a period of peace and stability. The local population primarily engaged in fishing and agriculture, while monks residing in monasteries and churches sustained themselves by producing handmade religious artifacts.

The Büyükada Gülistan Street Park Project seeks to develop a comprehensive design proposal for the efficient and sustainable use of the island's coastline. The project follows a strategic design approach built upon three key elements:

- Shoreline Management – Ensuring the long-term resilience and sustainability of the coastal area.
- Multifunctional Open Spaces – Creating versatile public spaces that serve the community's social, cultural, and ecological needs.
- A Public Circulation System – Establishing accessible and interconnected pathways that enhance community engagement while reconnecting critical ecological zones along the shoreline.

The ultimate goal of this proposal is to enhance ecological diversity while providing a well-integrated and aesthetically pleasing coastal environment. Recognizing the vital role of coastal ecosystems for future sustainability, the project aims to balance human activity with ecological preservation, ensuring that Büyükada's natural and cultural heritage remains protected for generations to come.

## PLANT LEGEND

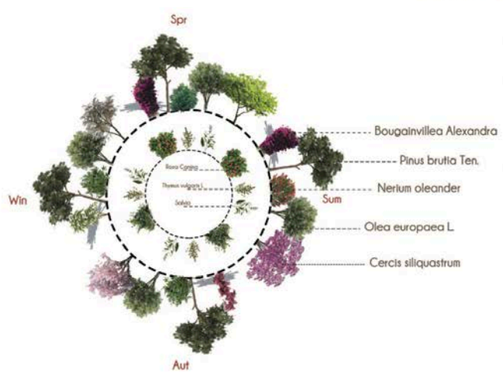
| | Nu | Sym | Code | Latin Name | Common Name | Height | Width | Qu |
|---|---|---|---|---|---|---|---|---|
| TREES | 1 | | Pop. al | Populus alba | *Ak Kavak* | 30-40m | 2m | 2 |
| | 2 | | Pau. to | Paulownia tomentosa | *Tüylü Pavlonya* | 10-12m | 7-8m | 1 |
| | 3 | | Cot. co | Cotinus coggygria | *Duman Ağacı* | 2 - 4 m | 3-5m | 1 |
| | 4 | | Ela. an | Elaeagnus angustifolia | *Kuş İğdesi* | 4-6m | 3m | 9 |
| | 5 | | Cor. ma | Cornus mas | *Kızılcık* | 2.5-3.5m | 2.5-3.5 | 1 |
| | 6 | | Syr. vu | Syringa vulgaris | *Adi Leylak, Leylak* | 1.2-1.5m | 2.1 m-2.4m | 9 |
| | 7 | | Sop. ja | Sophora japonica 'pendula' | *Sofora* | 2.5m | 2.5-3m | 3 |
| SHRUBS | 8 | | Hib. ro | Hibiscus rosa-sinensis | *Japon Gülü* | 1m | 1m | 5 |
| | 9 | | Pin. mu | Pinus mugo | *Dağ çamı* | 1-1.2 | 1-1.2m | 5 |
| | 10 | | Pit. to | Pittosporum tobira 'Nana' | *Bodur Yıldız Çalısı* | 0.8 - 1 m | 1.5-2m | 6 |
| | 11 | | Cor. al | Cornus alba 'Sibirica' | *Kırmızı Gövdeli Kızılcık* | 1-1.2 m | 1.5-2.5m | 3 |
| | 12 | | Sal. ca | Salix caprea pendula | *Keçi Söğüdü* | 2m | 1m | 6 |
| | 13 | | Car. ev | Carex evergold | *Süs Çimi* | 0.3-0.5m | 0.4-0.5m | 10 |
| HERBACEOUS PLANTS | 34 | | Aca. mo | Acanthus mollis L. | *Ayıpençesi* | 5-7cm | - | 19,1 m² |
| | 35 | | Ach. ma | Achillea maritima | *Çocukotu* | 15-25cm | - | 11,8 m² |
| | 36 | | Art. ab | Artemisia absinthium L. | *Pelin otu* | 120cm | - | 3,4 m² |
| | 37 | | Cam. ra | Campanula rapunculoides L. | *Çançiçeği* | 70cm | - | 10 m² |
| | 38 | | Eup. sp | Euphorbia sp. | *Sütleğen* | 20cm | - | 7,6 m² |
| | 39 | | Lon. ja | Lonicera japonica Thunb | *Hanımeli* | 80cm | - | 21,2 m² |
| | 40 | | Med. sa | Medicago sativa L. | *Kara Yonca* | 15-70cm | - | 9,1 m² |

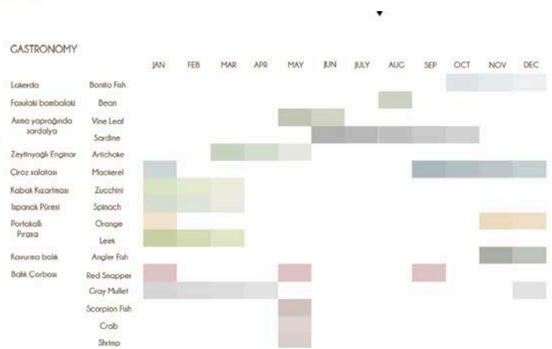
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GROUNDCOVER | 14 | | Thy. se | Thymus serpyllum | *Yabani Kekik* | 5-7cm | - | 21,2 m² |
| | 15 | | Aju. re | Ajuga reptans | *Dağ Mayası Otu* | 0.3-0.6 | 0.3-0.6m | 9,1 m² |
| | 16 | | Wis. si | Wisteria sinensis | *Mor Salkım* | 5-6m | 6-6m | 88,3 m² |
| | 17 | | Sed. ac | Sedum acre | *Damkoruğu* | - | - | 10,5 m² |
| | 18 | | Jun. ho | Juniperus horizantalis | *Sürünücü Ardıç* | 20-30cm | 2-2.5m | 34 m² |
| | 19 | | Jun. sq | Juniperus squamata 'Blue Star' | *Yayılıcı Ardıç* | 1 m | 2-2.5m | 19,1 m² |
| | 20 | | Jun. sa | Juniperus sabina | *Sabin Ardıcı* | 0.6-0.8m | 2-2.5m | 11,8 m² |
| | 21 | | Cer. to | Cerastium tomentosum | *Beyaz Çiçekli Fare Kulağı* | 0.05-0.10m | 0.6-0.8m | 3,4 m² |
| | 22 | | Jas. nu | Jasminum nudiflorum | *Sarı Yasemin* | - | 3-5m | 10 m² |
| | 23 | | Cot. da | Cotoneaster dammeri | *Herdem Yeşil Dağ Muşmulası* | 50cm | 1-1.5m | 7,6 m² |
| | 24 | | Vin. ma | Vinca major | *Büyük Cezayir Menekşesi* | 0.15-0.2m | 3-4m | 4,1 m² |
| | 25 | | Cal. of | Calendula officinalis | *Aynisefa* | 0.4m | 0.4m | 7,3 m² |
| | 26 | | Ber. th | Berberis thunbergii 'nana' | *Kırmızı Berberis* | 0.3-0.4m | 0.5-0.6cm | 9,8 m² |
| | 28 | | Cin. ma | Cineraria maritima | *Kül Çalısı, Bahçe Külü* | 0.30-0.60m | 0.8m | 7,4 m² |
| | 29 | | Wei. fl | Weigela florida variegata | *Gelin Tacı* | 1.2-1.8m | 1.2-1.8m | 6,1 m² |
| | 30 | | Lav. an | Lavandula angustifolia | *Lavanta* | 0.6-0.8m | 0.5-0.6m | 15 m² |
| | 31 | | Vib. op | Viburnum opulus | *Gilaburu, Kartopu Çalısı* | 3m | - | 12,3 m² |
| | 32 | | Sal. of | Salvia officinalis | *Adaçayı* | 0.5-0.8m | 0.6-0.8m | 15 m² |
| | 33 | | Men. pi | Mentha piperita | *Bahçe Nanesi* | 0.5m | 0.5m | 15 m² |

# Cultural Network and City Garden

Tuğba Kurt

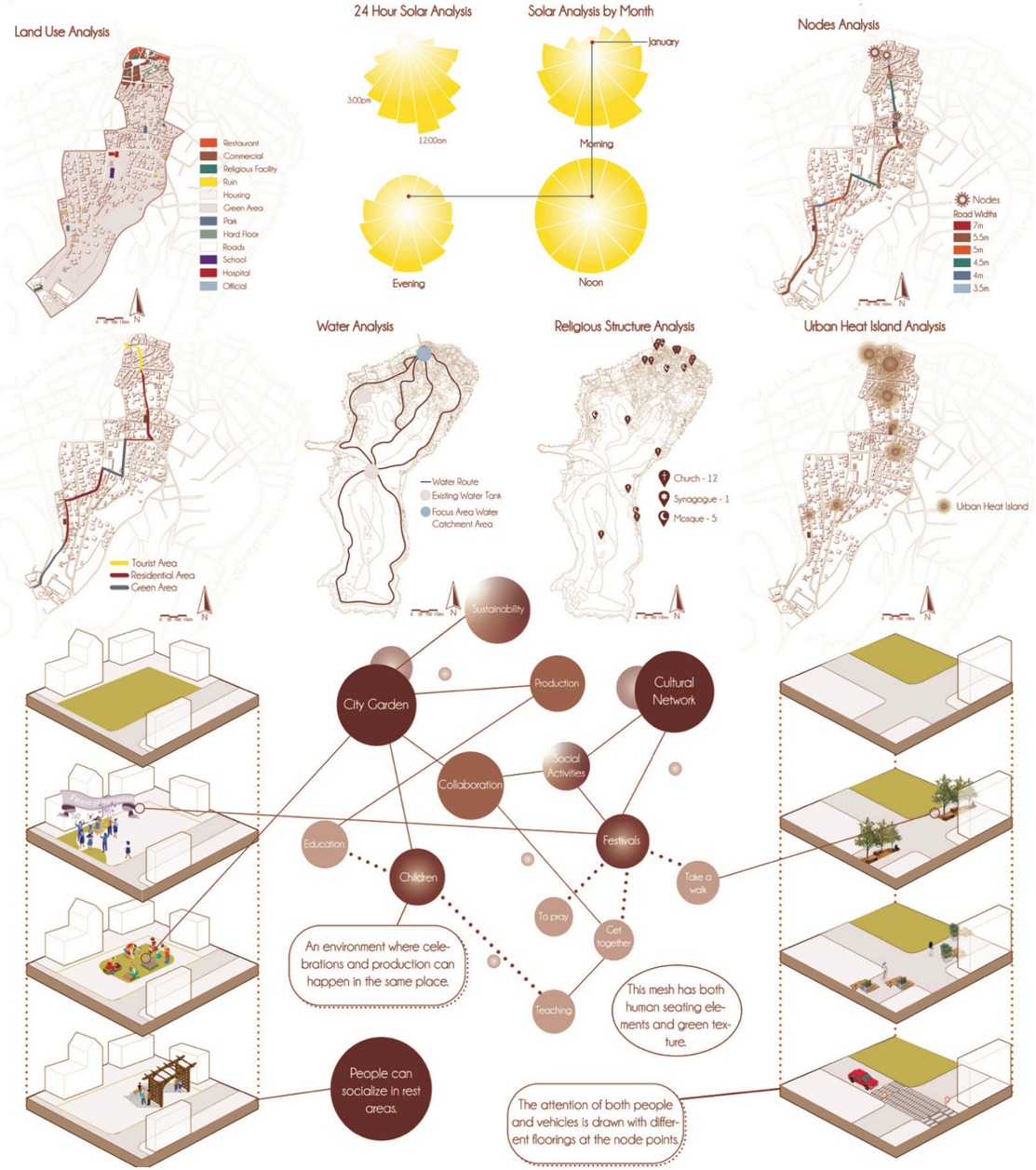
*"Cultural Network and City Garden" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. F. Ayçim Türer Başkaya and Res. Assist. Başak Akarsu under the title "Discovering Büyükada: From climate change to wildfire" in the fall semester of 2021-2022.*





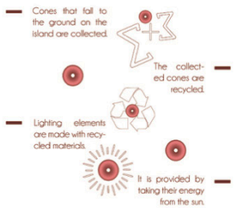


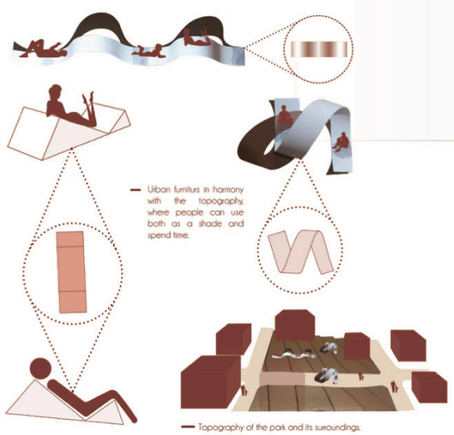
| No | Symbol | Name | Dimesions |
|---|---|---|---|
| 1. | | Interlocking Basalt Parquet Coating | 20cm x 9cm X 8cm |
| 2. | | Wood Veneer | 90cm x 9cm X 8cm |
| 3. | | Printed Concrete Coating | |
| 4. | | Interlocking Concrete Parquet Coating | 20cm x 9cm X 8cm |
| 5. | | Square Locked Stone | 8cm x 8cm X 8cm |
| 6. | | Grass Joint Cast Concrete | |
| 7. | | Solar Powered Lighting. | |
| 8. | | Portable Urban Furniture | 45cm x 50cm X 40cm |

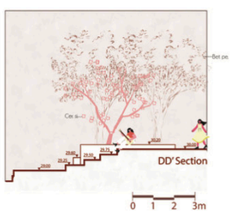
## Building Plan

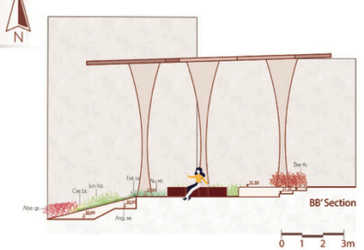
## Lighting Elements

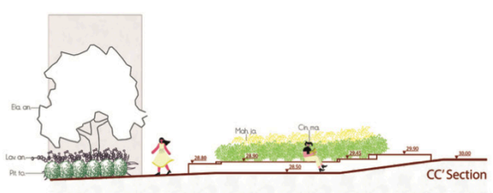


## Urban Furniture



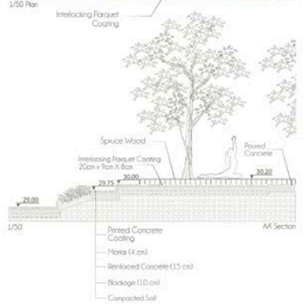



The history of Büyükada dates back to the 7th century, and over time, many different nations have settled on the island. This historical continuity has contributed to the formation of a rich and diverse cultural heritage. One of the key factors shaping this cultural diversity has been the religious beliefs of these communities. The influence of various faith traditions has further enriched the island's social and cultural fabric.

This project explores Büyükada's cultural diversity with the goal of creating shared spaces that bring people together. The study began by analyzing and graphing the special religious days observed by different communities. This analysis also included an examination of how people engage in activities on these special days, revealing common practices such as gathering, spending time together, walking, and praying in groups. Based on these findings, the project established a walking route, along which parks and public spaces were designed to accommodate these communal traditions. The following key elements were integrated into the design:

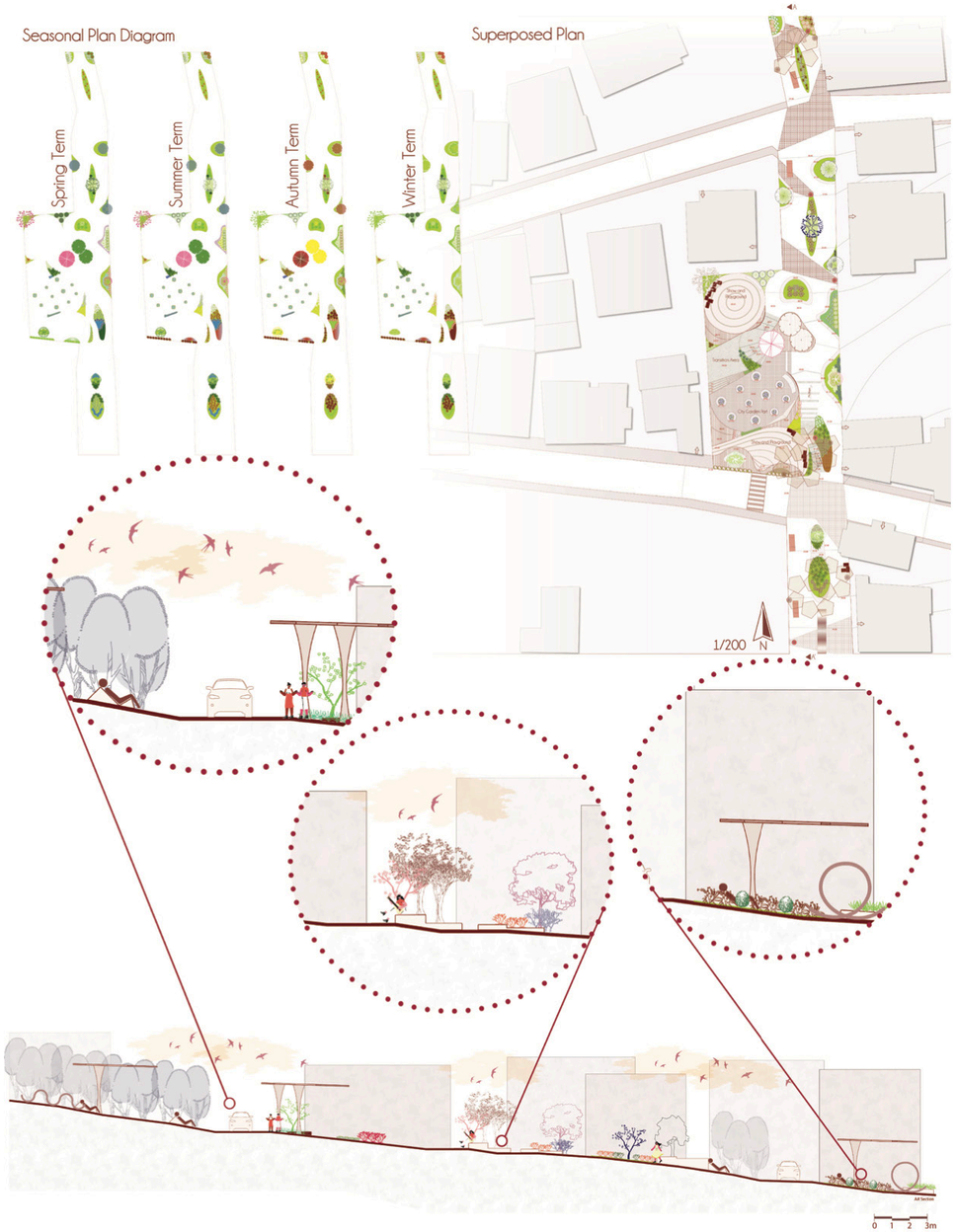
- Dedicated Spaces for Special Gatherings and Celebrations – Specific areas were designated to host celebrations and communal activities on religious and cultural occasions.
- Portable and Flexible Elements – On non-event days, these spaces incorporate temporary and movable installations, allowing them to function as exhibition areas or other flexible uses.
- Child-Friendly Design Considerations – Special attention was given to ensuring that children could actively engage in these spaces, making them inclusive for all age groups.

Ultimately, the project aims to create a dynamic and adaptable public space that accommodates both cultural traditions and everyday life, fostering a sense of community, inclusivity, and shared cultural heritage on Büyükada.

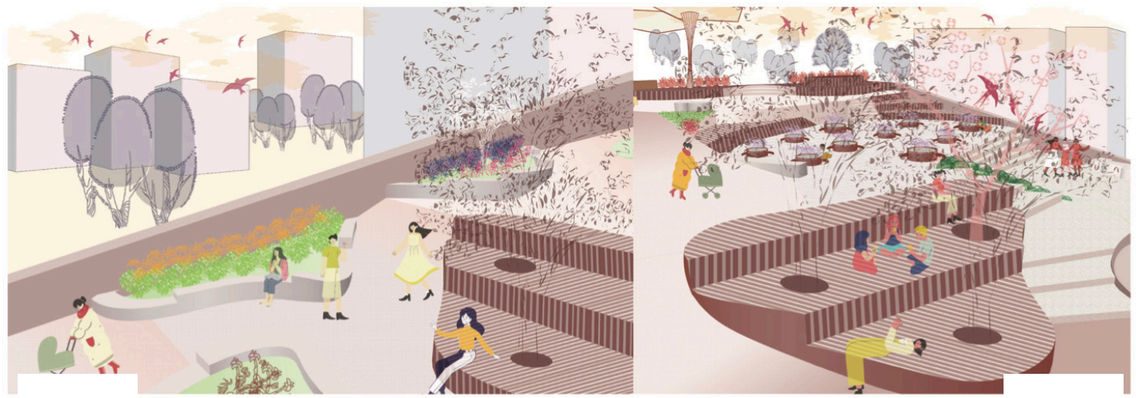



## Plant Plan

| | No | Symbol | Code | Plant Name | Turkish Name | Quantity | Height | Width |
|---|---|---|---|---|---|---|---|---|
| Trees | 1. | | Cor. al. | Cornus alba sibirica | Kırmızı gövdeli süs kızılcığı | 3 | 1-1.2m | 1.5-2.5m |
| | 2. | | Alb. ju. | Albizia Julibrissin | Gülbahşim | 1 | 6-8m | 5-6m |
| | 3. | | Bet. pe. | Betula pendula | Acılı huş | 2 | 5-6m | 4-5m |
| | 4. | | Cer. si. | Cercis siliquastrum | Erguvan | 1 | 6-7m | 4-5m |
| | 5. | | Ela. an. | Elaeagnus angustifolia | Iğde | 1 | 4-6m | 3m |
| | 6. | | Sap. ja. | Saphora japonica pendula | Sarkık dalılı japon soforası | 2 | 2.5m | 2.5-3m |
| | 7. | | Lag. In. | Lagerstroemia Indica | Oya ağacı | 1 | 4-6m | 2.5m |
| | 8. | | Sal. ca. | Salix caprea 'Pendula' | Keçi söğüdü | 1 | 2m | 1m |
| | 9. | | Mag. gr. | Magnolia grandiflora | Manolya | 1 | 6-7m | 4-5m |
| | 10. | | Vib. op. | Viburnum opulus | Gilaburu | 3 | 0.8-1m | 0.8-1m |
| | 11. | | Fat. ja. | Fatsia japonica | Japon ginarı | 10 | 0.5m | 0.5m |
| | 12. | | Alt. of. | Althaea officinalis | Hatmi | 11 | 0.6-1.5m | 0.7-0.9m |
| | 13. | | Yuk. | Yukka | Yukka | 15 | 0.5m | 1m |
| | 14. | | Auc. ja. | Aucuba japonica | Alacalı defne | 7 | 2-2.5m | 0.5-0.7m |
| | 15. | | Pho. fr. | Photinia fraseri 'Red Robin' | Alev çalısı, Fotinya | 13 | 1m | 0.5m |
| | 16. | | Pit. ta. | Pittosporum tobira nana | Bodur pittosporum | 30 | 0.4m | 0.4m |
| | 17. | | Cot. cla. | Cotoneaster dammeri | Yayılıcı dağ muşmulası | 5 | 0.5m | 1-1.5m |
| Shrubs | 18. | | Mah. ja. | Mahonia japonica | Mahonya | 7 | 0.7-0.9m | 0.7-0.9m |
| | 19. | | Jun. ho. | Juniperus horizontalis | Yatık ardıç | 31 | 0.1-0.2m | 0.5-0.7m |
| | 20. | | Cer. bi. | Cerastium biebersteinii | Yaz karı | 28 | 0.1-0.25m | 0.4-0.6m |
| | 21. | | Cin. ma. | Cineraria maritima | Bahçe külü | 24 | 1m | 0.5-0.7m |
| | 22. | | Ber. th. | Berberis thunbergii | Hanım tuluğu | 15 | 0.3-0.4m | 0.5-0.6m |
| | 23. | | Lav. an. | Lavandula angustifolia | Lavanta | 11 | 0.6-0.8m | 0.5-0.6m |
| | 24. | | Cer. al. | Cerastium alpinum | Alp boynuzu | 21 | 0.1-0.2m | 0.2-0.4m |
| | 25. | | Cot. ho. | Cotoneaster horizontalis | Dağ muşmulası | 36 | 0.3-0.5m | 1.5-2m |
| | 26. | | Abe. gr. | Abelia grandiflora | Abelya | 14 | 0.8-1m | 0.8-1m |
| | 27. | | Sal. of. | Salvia officinalis | Ada çayı | 42 | 0.5-0.8m | 0.6-0.8m |
| Groundcovers | 28. | | Fes. gl. | Festuca glauca | Mavi çim | 5 | 0.15-0.3m | 0.2-0.4m |
| | 29. | | Wis. si. | Wisteria sinensis | Çin mor salkımı | 30 | 0.5m | 3-5m |
| | 30. | | Jas. nu. | Jasminum nudiflorum | Kış yasemini | 135 | 1.2-4.5m | 0.9-1.8m |
| | 31. | | Aju. re. | Ajuga reptans | Dağ mayasılotu | 287 | 0.3-0.6m | 0.3-0.6m |
| | 32. | | Cer. ci. | Cerastium cinerea | Boynuz otu | 121 | 0.5-0.8m | 0.5-0.7m |
| | 33. | | Ver. bo. | Verbena bonariensis | Mor mine çiçeği | 71 | 0.3-0.5m | 0.3-0.5m |
| | 34. | | Vin. mi. | Vinca minor | Minyatür yapraklı cezayir menekşesi | 197 | 0.15-0.2m | 3-4m |
| | 35. | | Par. qu. | Parthenocissus quinquefolia | Amerikan sarmaşığı | 27 | 1-2m | 3-5m |

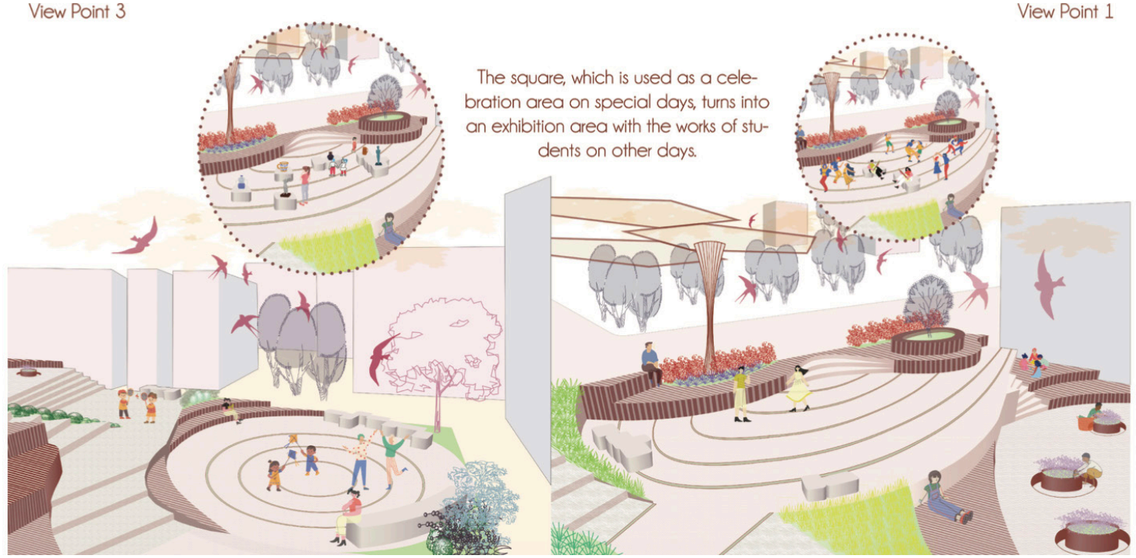



Opportunities for social interaction on the island are limited, making it essential to create spaces that foster community engagement. This project aims to enhance socialization among adults and children while promoting awareness of sustainability and recycling. To achieve this, the proposed parks will integrate urban gardens, encouraging collective participation in both production and social activities. These spaces will also serve an educational function, particularly for children, by reinforcing concepts of sustainable living and environmental responsibility. A key component of the project is the visualization of carbon dioxide emissions from different flooring materials and coatings used on Büyükada. Additionally, an interactive digital system will allow visitors to scan QR codes on various plant species to identify their Latin names. Correct identification will result in energy accumulation, which can then be used to illuminate specific locations on a digital map, enhancing awareness of energy consumption and environmental impact. The project envisions a multi-functional public space, enabling gatherings and celebrations on special occasions while functioning as an exhibition area on other days. The inclusion of urban gardens will support sustainable production and recycling initiatives, and augmented reality (AR) installations will enhance engagement by offering interactive experiences in the evening hours. By integrating technological innovation with ecological awareness, this initiative seeks to foster experiential learning, strengthen community ties, and contribute to the island's cultural and environmental sustainability.



View Point 3

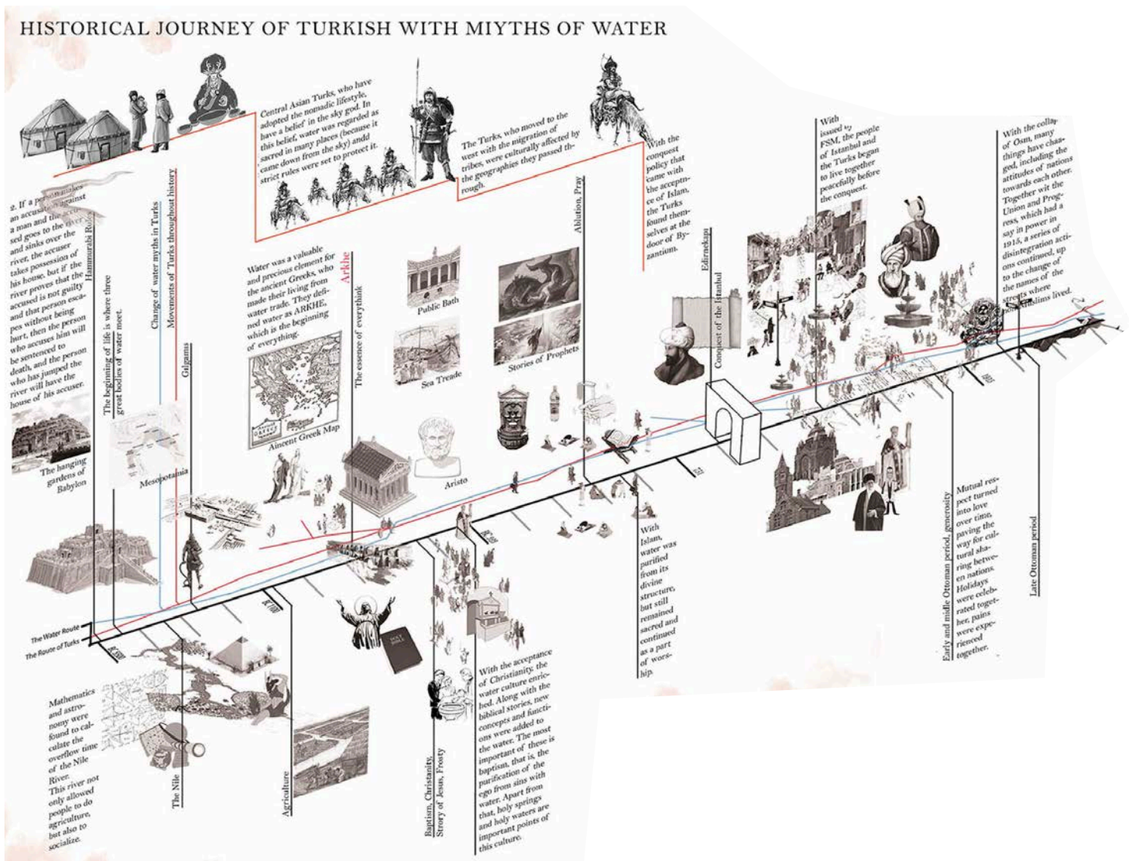
View Point 1



# Water as a Healer

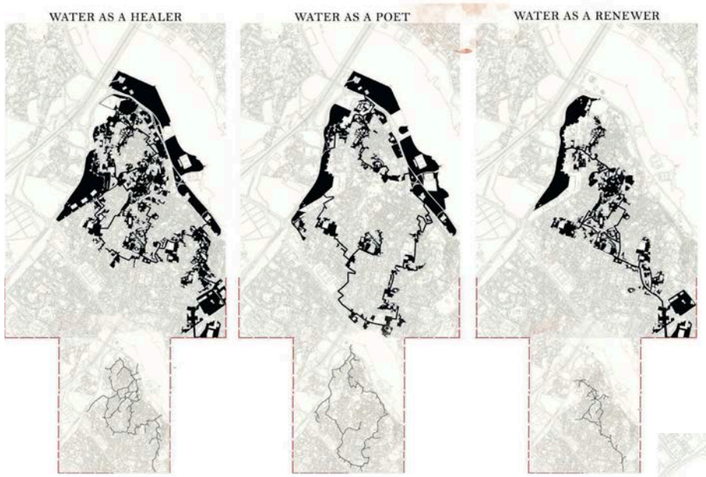
Rebeka Kayakoparan

*"Water as a Healer" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Arzu Güler under the title "Treasure Hunt: Finding the Lost Traces of Water" in the fall semester of 2021-2022.*



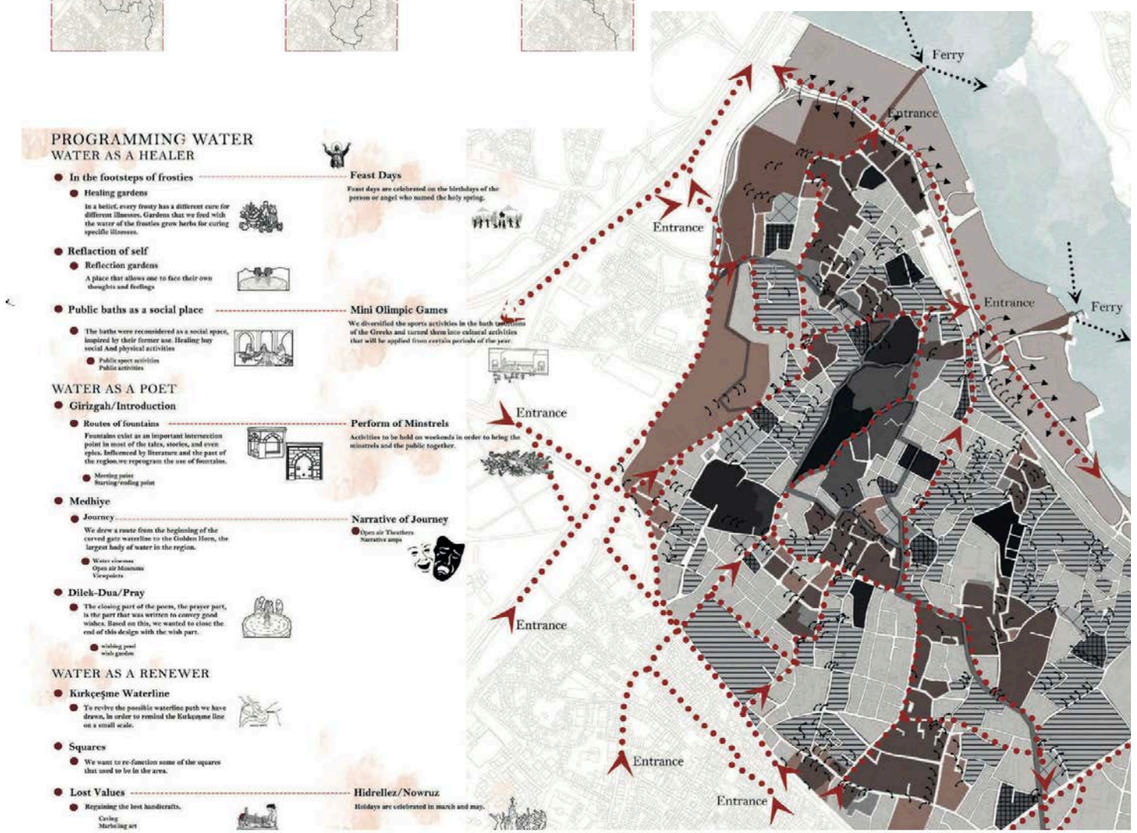




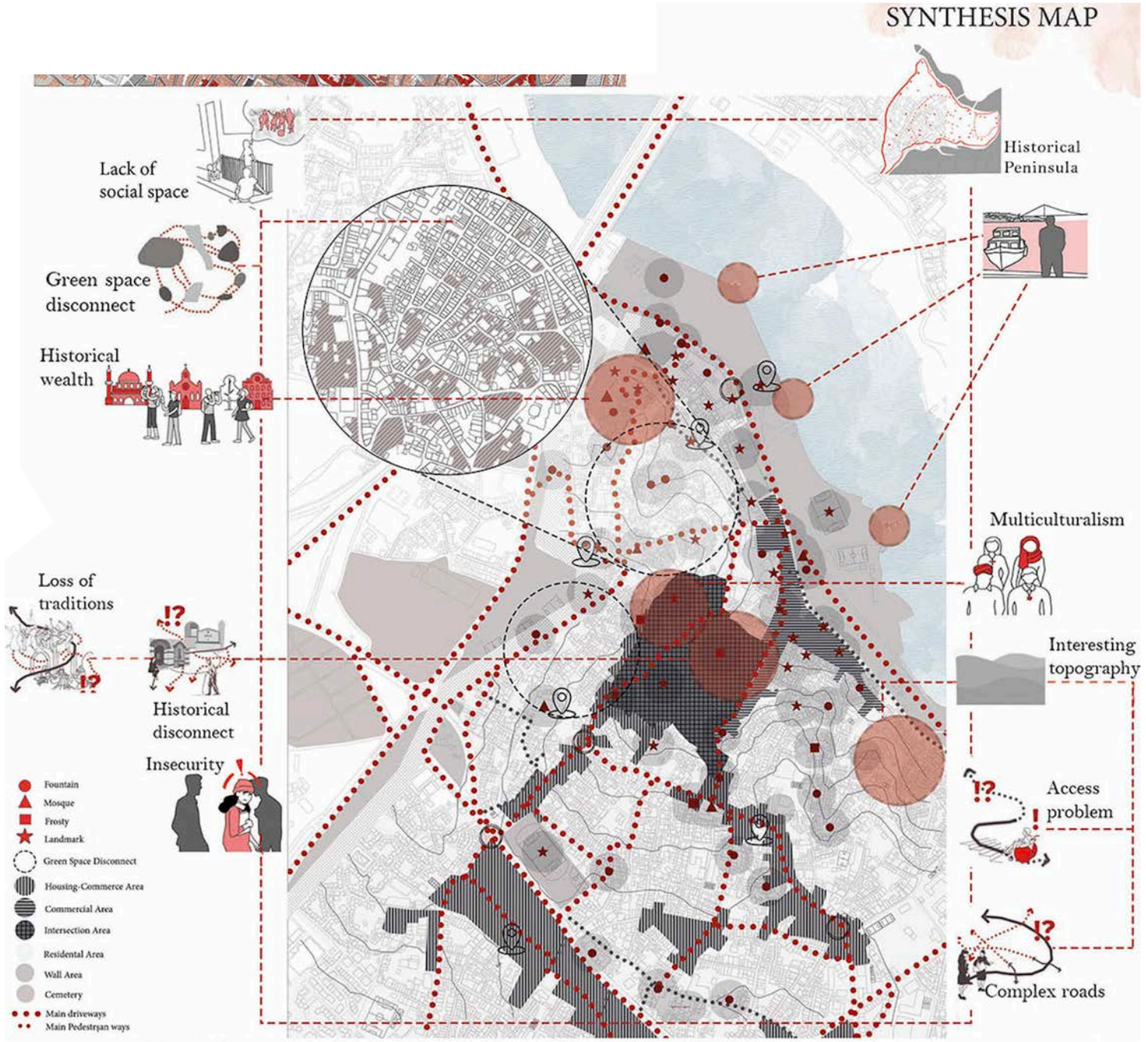

In the Aynasaray Project, we explored the cultural significance of water, shaped by the interaction of Turkish traditions with diverse cultures from Central Asia to Anatolia. Drawing from water legends, history, and literature, we analyzed its distribution from Eğrikapı to fountains, using its path to shape future routes.

Examining water as a renewing, poetic, and healing force, we developed the "Healer Route" by integrating fountains, landmarks, roads, and green spaces, emphasizing its restorative and cultural role in the urban landscape.

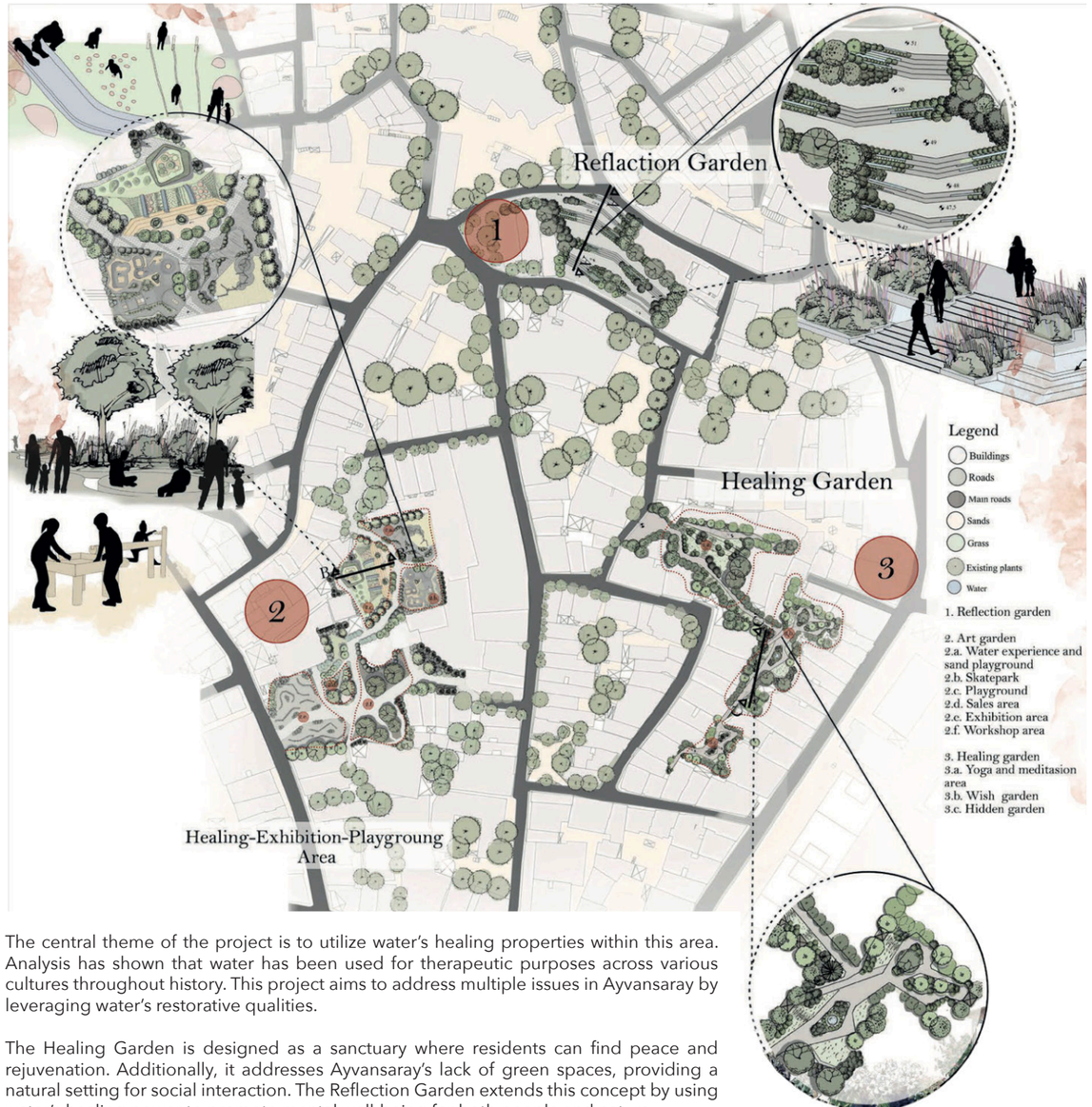


The Poet's Route was derived from an analysis of fountains, spatial usage, evacuation corridors, green areas, roads, and protected zones, while the Regenerative Route emerged from studies on Pervititch maps, fountains, the Curvikapı waterway, roads, and green spaces. The integration of these routes informed the new land use and functional zoning.Key zones include the Healing Zone, originating from the Healer Route, along with a Reflection Zone, Hammam and Mini Olympic Zone, and Holy Spring Fair Zone. The Poet's Route contributes to the Fountain Zone, Journey Zone, and Narrator Zone, while the Renewer Route shapes the Art District, Kırkçeşme District, Square District, and Hıdırellez/Nevruz District.

From these analyses, three focus areas were developed: the Healing Garden, Reflection Garden, and Art Garden. Existing vegetation was preserved, complemented by new plantings serving functions such as shade, aesthetics, privacy, screening, guidance, and rainwater management.






The central theme of the project is to utilize water's healing properties within this area. Analysis has shown that water has been used for therapeutic purposes across various cultures throughout history. This project aims to address multiple issues in Ayvansaray by leveraging water's restorative qualities.

The Healing Garden is designed as a sanctuary where residents can find peace and rejuvenation. Additionally, it addresses Ayvansaray's lack of green spaces, providing a natural setting for social interaction. The Reflection Garden extends this concept by using water's healing power to promote mental well-being for both people and nature.

This design focuses on recycling and reusing water, one of the most pressing challenges of both today and the future. By utilizing the site's topography and rain gardens, rainwater is collected and recycled, allowing water to heal itself—a core theme of the project. Additionally, the Reflection Gardens offer a tranquil environment, enriched by the aesthetic and sensory impact of the landscape.

The Art Garden is designed as a space where water-based art forms, such as marbling (Ebru), are revived through workshops and exhibitions. This area not only promotes cultural continuity but also enables the sale of handcrafted products created in these workshops.

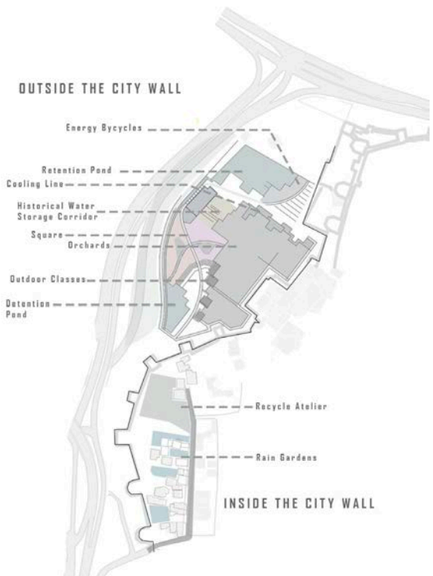
One of Ayvansaray's major issues is the lack of safe play areas for children, forcing them to play on the streets. The Sloped Playground is designed to integrate seamlessly with the existing topography, creating a natural play space for climbing, jumping, and sliding activities. A skatepark is also included, providing space for skateboards, skates, and bicycles.

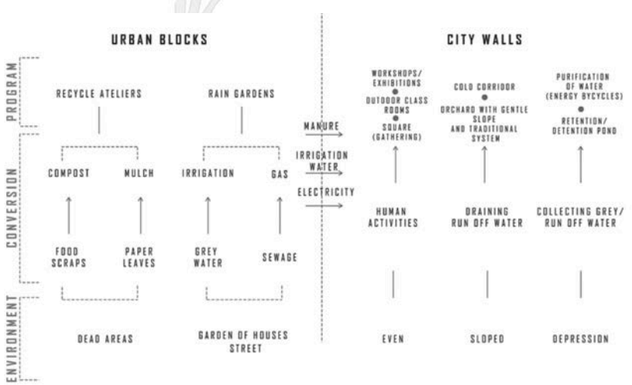
The Water Experience Area introduces an interactive space where rainwater is integrated into play and learning. A bioswale system and vegetation filter runoff from hard surfaces, while a sand pool and a water playground offer unique, multi-sensory experiences for children and visitors of all ages.

# Purifying Ayvansaray

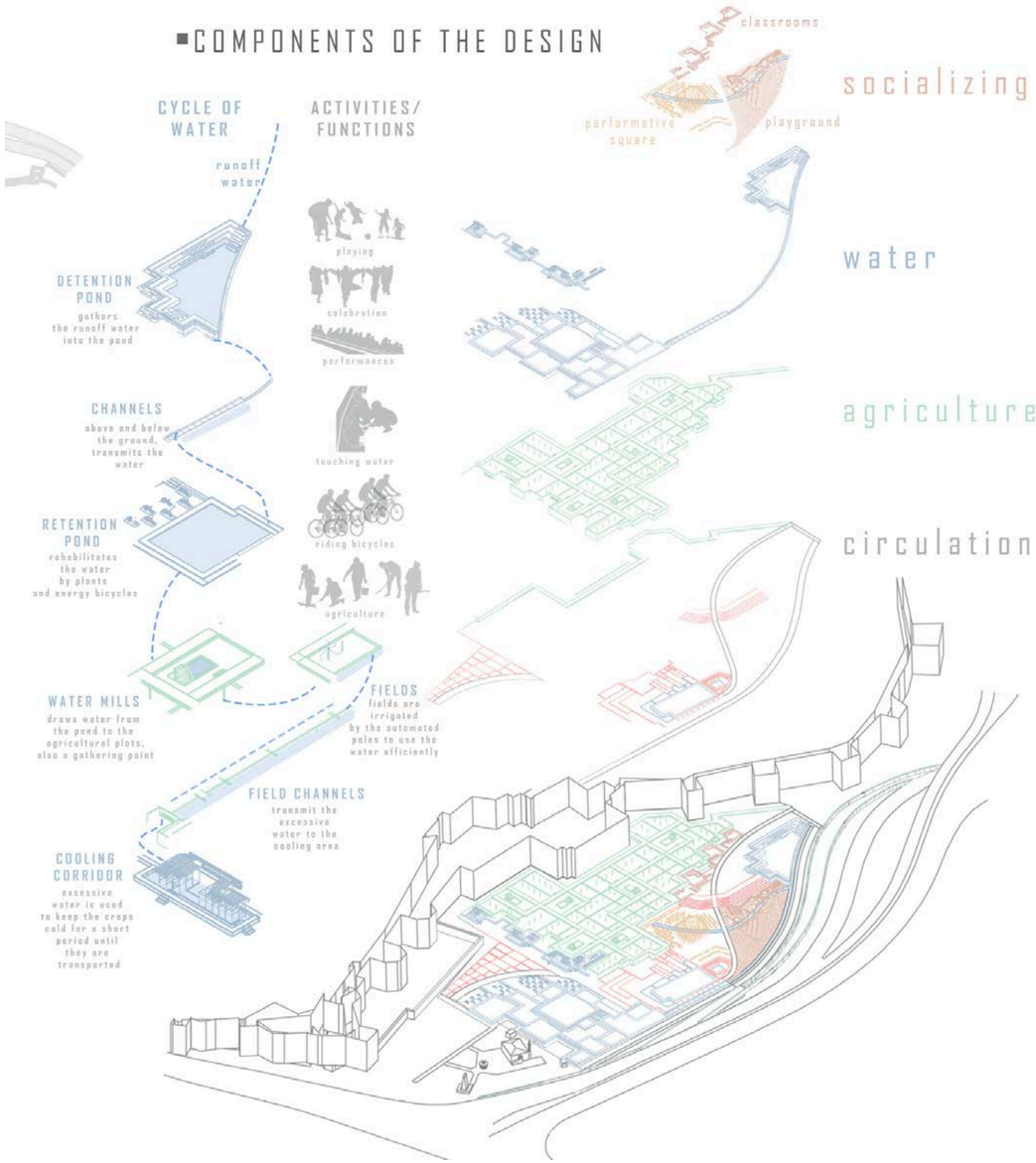
Rabia Ezgi Beyen

*"Purifying Ayvansaray" was produced within the scope of Landscape Design 2 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Arzu Güler under the title "Treasure Hunt: Finding the Lost Traces of Water" in the fall semester of 2021-2022.*





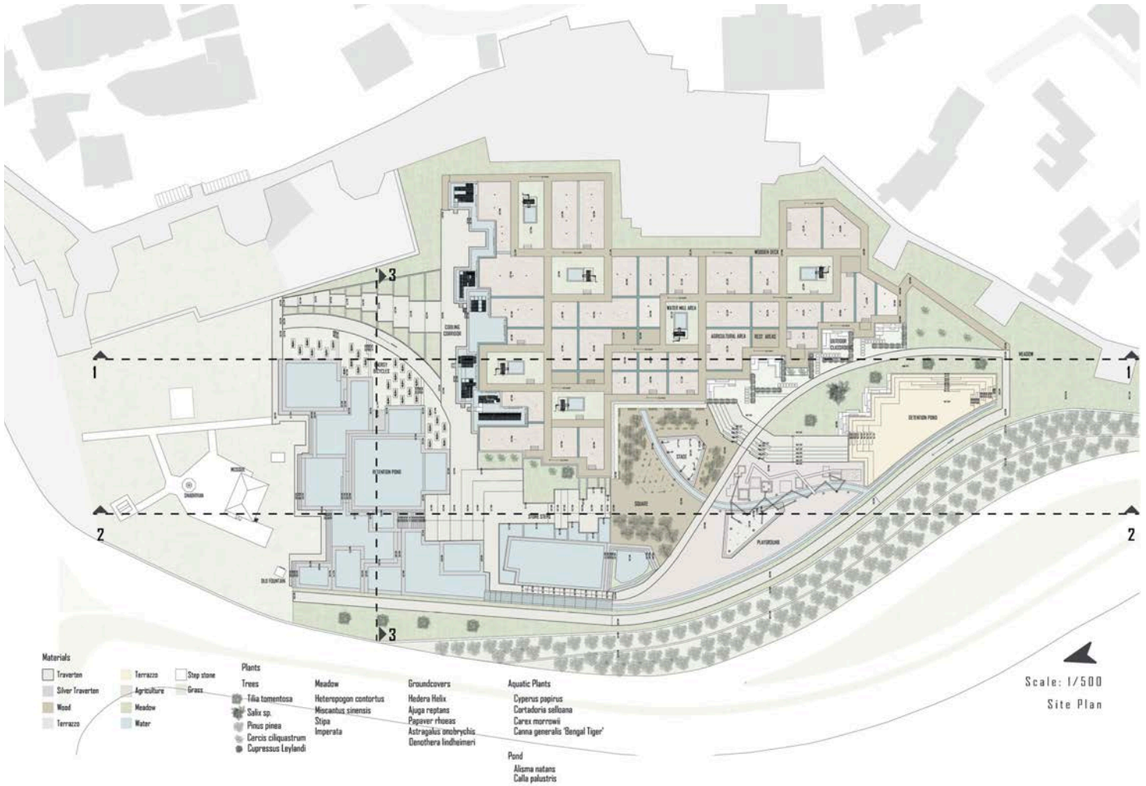
Ayvansaray holds a strategic position within the historical peninsula, playing a significant role in various aspects such as Istanbul's minority communities, the city's defense system, maritime connections, transportation routes, and historical water infrastructure. The area is distinguished by its water-related structures, including hammams, fountains, cisterns, ayazmas, mosques, and wells. These elements were once integral to daily life, serving as social and communal gathering spaces.
Today, however, many of these historic water structures have fallen into disuse as socialization patterns have shifted. Public spaces like streets and squares–which once fostered communal interaction have been largely replaced by commercialized social spaces, such as cafés and concept stores, where interaction is limited to paid experiences. As a result, human relationships have weakened, and the historic role of water as a unifying element has diminished, leading to a disconnection between people and nature. To restore social and ecological connections in Ayvansaray, a series of programs have been developed, aiming to revitalize public spaces, reintroduce water as a communal element, and counteract the negative effects that have eroded social and environmental bonds.

■Cooling Corridor

■Energy Bicycles to Purify Water

■ Retention Pond

■ Steps to Square, nearby the old water storage





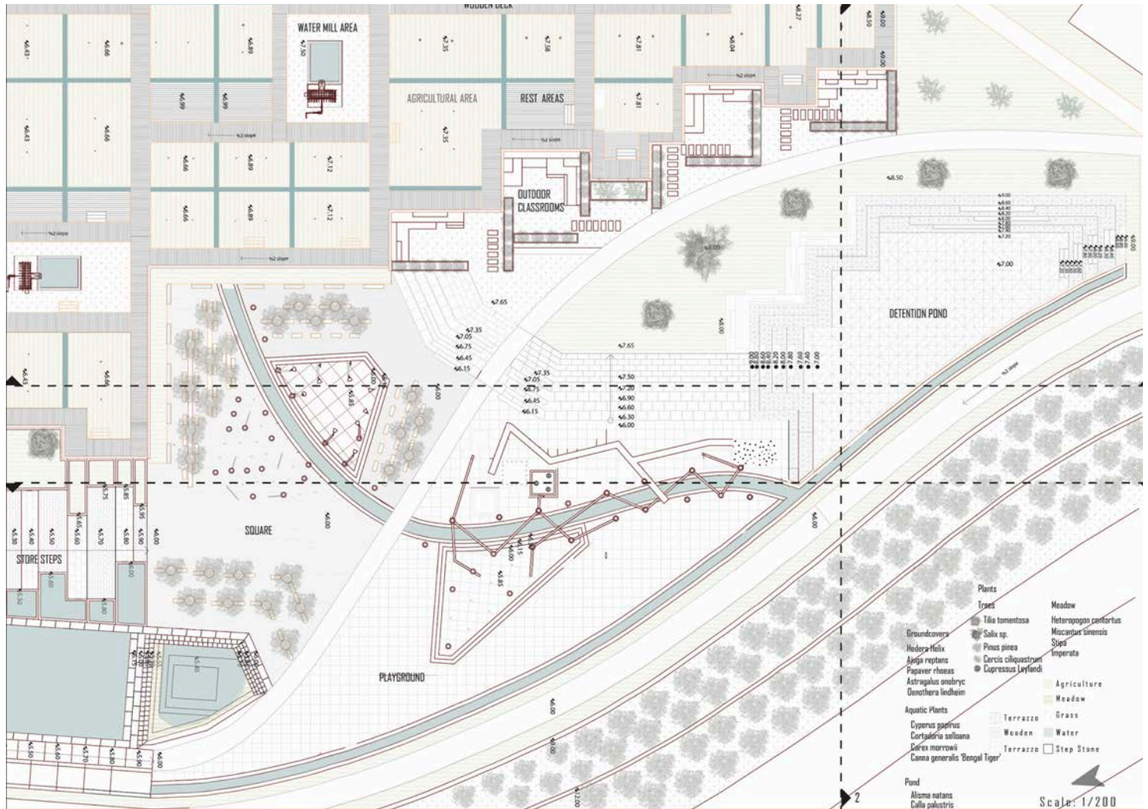

Four streets have been designated as thematic belts based on the city development plan. My focus was on the area outside the city walls, which, through group discussions, was identified as a potential orchard zone. I further developed this concept into a multifunctional space, designed to serve as both a social and gathering hub for local residents and visitors. Water is the central element in this space, functioning as a medium for community engagement. The orchard consists of several key components, including: Squares for playgrounds and performances, a detention pond for water collection before treatment, a retention pond for water purification, energy bicycles, allowing public participation in water recycling, a cooling corridor to enhance crop resilience, outdoor landscape classrooms for exhibitions, a bazaar and workshops, a gricultural fields supporting urban farming initiatives. A meandering water channel serves as a spatial guide, integrating different functions within the area. Additionally, trees are planted along the sloped roadside, creating a natural buffer between the orchard and traffic. The retention pond extends to the mosque's fountain, establishing a symbolic and functional connection between historic and contemporary water sources.

■Fields and Water Mill

■Stage

■Water Poles (exhibition area)

■Artificial Topography in the Play Square



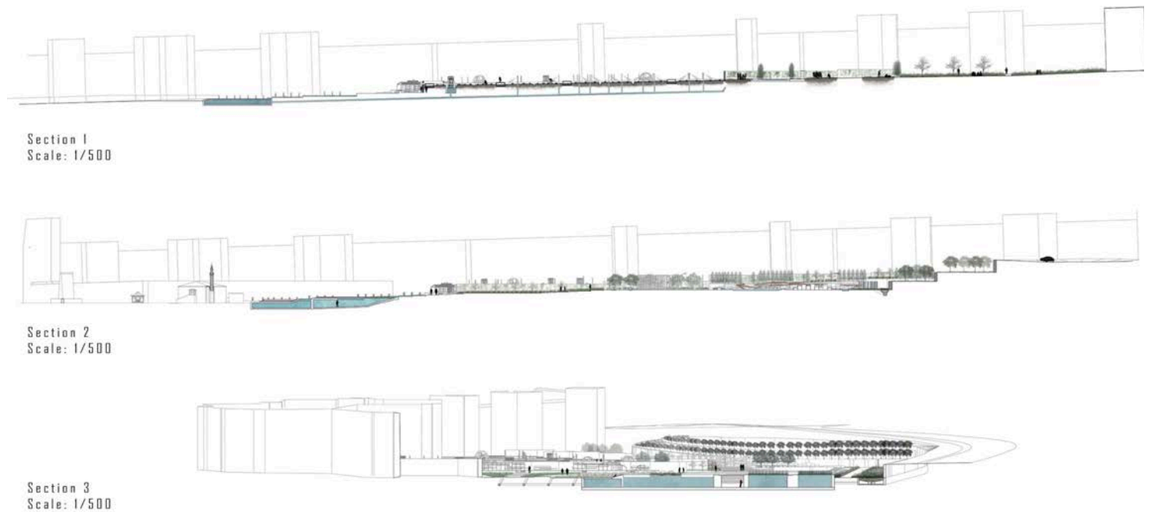

The orchard also maintains a connection with the inner side of the city walls. Available spaces within the neighborhood have been repurposed as rain gardens and recycling ateliers, where food scraps, paper, newspapers, and water are collected and transformed into fertilizers or mulch. This process directly supports the agricultural activities of the orchard.

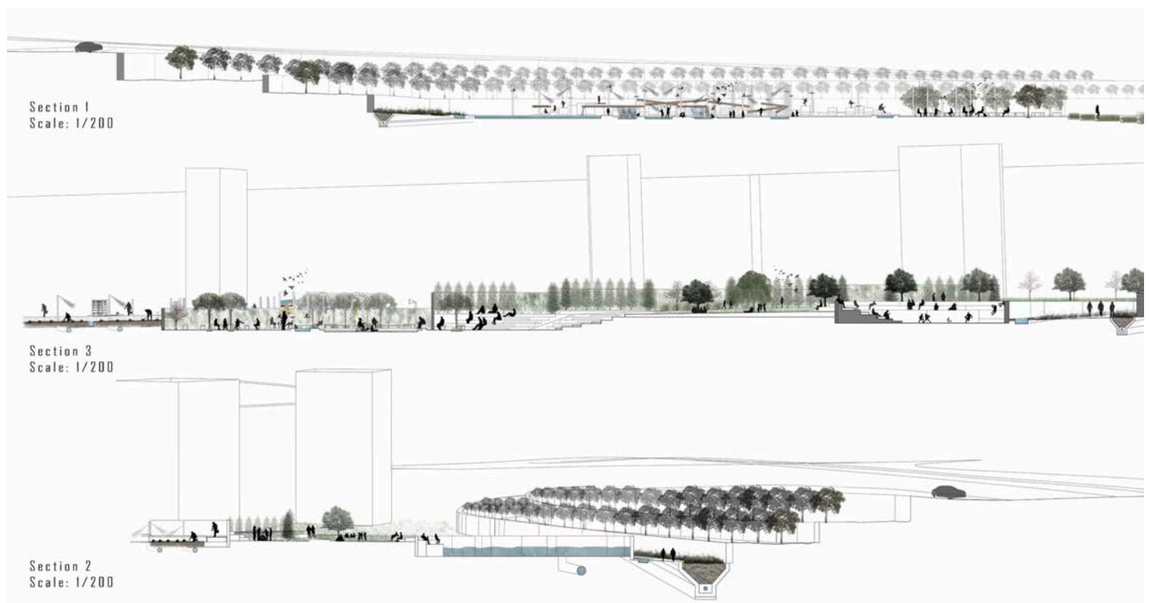
At a 1/200 scale, I designed the square, detention pond, agricultural area, and outdoor classrooms. The outdoor classrooms are open spaces intended for agricultural workshops, specifically to teach permaculture techniques. Their grass-covered surfaces allow for digging and hands-on learning.

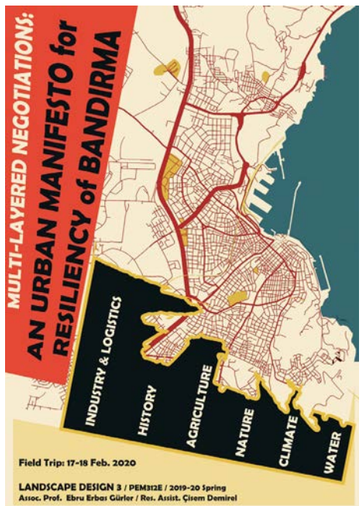
Seating steps are provided for observation and instruction. The detention pond, during dry periods, functions as both a playground and a performance/celebration space. To enhance engagement and vibrancy, terrazzo was selected as the primary surface material due to its colorful, durable, and program-appropriate qualities.

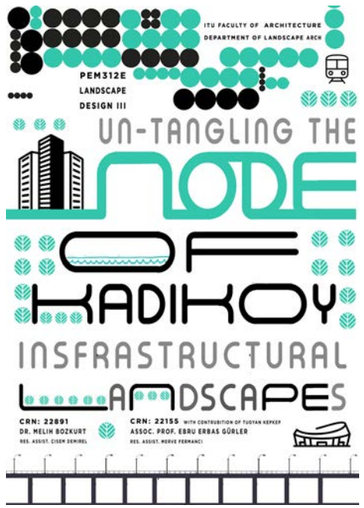
The square's playground also features terrazzo flooring, incorporating two contrasting colors to capture attention. One half consists of an artificial topography encouraging physical activity, while the other half integrates interactive water play through operable channels and water poles. On the opposite side of the square, water poles serve dual purposes: an interactive water experience and an exhibition space. The lighting elements, designed in harmony with the water poles, also serve as structures for hanging exhibition materials. Additionally, they incorporate bowls and perches for birds, enhancing biodiversity.

The agricultural area is structured to channel excess water through the topography using slope and strategically placed water channels. Water flows from the fields into the channels, eventually reaching the cooling area, where it helps preserve crops before transport. After serving this function, the water is redirected to the retention pond, ensuring efficient water management and sustainability.





*PROJE III*

# LANDSCAPE DESIGN III

## Proje III Stüdyo Felsefesi

İTÜ Mimarlık Fakültesi Peyzaj Mimarlığı Bölümünde 6. yarıyıl öğrencilerine verilmekte olan Peyzaj Tasarımı 3 Projesi; peyzaj tasarımı, planlaması ve yönetimi bağlamında kentsel açık alan sistemi içerisinde kitlesel büyüklüğünün yanı sıra stratejik öneme de sahip olan açık alanları, bir sistem yaklaşımı içerisinde ele almaktadır.

Ögrenci üretimlerinin, kent ölçeğinden başlayarak ilçe, mahalle ve yerel ölçeğe varan bir kurguya sahip olması istendiğinden, çevre sorunlarına yönelik kaygıların ilham verişinden hareket ederek stüdyonun teması ve alanı her yıl farklı bir yerel yönetim birimi ile işbirliği içerisinde tanımlanmaktadır. Stüdyoda; ekstrem topoğrafyalar, çevresel dinamikler açısından kırılganlık, çok ölçeklilik, çok işlevlilik, peyzaj karakteri ve yeşil altyapı anahtar kelimeleri üzerinden hareketle dayanıklı peyzaj üretimleri gerçekleştirilmesi hedeflenmektedir.
Stüdyo süresince öğrenciler; onlara sunulan disiplinlerarası kurgudaki seminerler, teknik geziler ve tartışma ortamlarından faydalanarak bireysel üretimleri olan tek bir projeyi kapsamli bir sekilde ele almaktadırlar.

Öğrencilerin, riske duyarlılığı peyzaj mimarlığı üretimleri üzerinden hareketle geliştirmekte oldukları çalışmaları, dönem içerisinde dört ara jüri ve iki eskiz sınavı ile değerlendirilmektedir. Stüdyo çalışmaları sonucunda, öğrenciler; kavramsal ve fiziksel altyapısı güçlü, kentsel peyzaj yönetiminin içerdiği üst ölçekten başlayarak yapısal ve bitkisel tasarım problemlerinin detay ölçeğine kadar çözümlenmiş olduğu bir kurguda uygulanabilirliğe sahip projeler üretebilmek konusunda beceri kazanmaktadırlar.

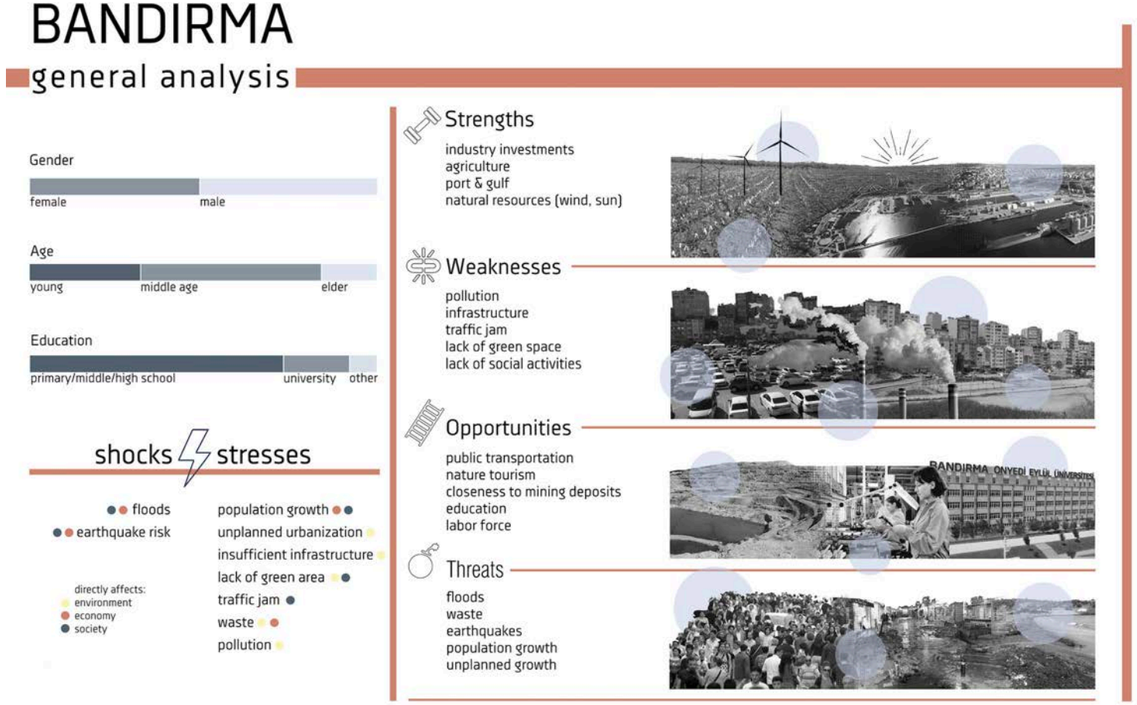
## *Landscape Design III Studio Philosophy*

*The Landscape Design III Project, offered to 6th-semester students in the Landscape Architecture Department of ITU's Faculty of Architecture, focuses on urban open spaces that are not only significant in scale but also strategic in importance within the context of landscape design, planning, and management. The course adopts a systems-based approach to address these spaces within the broader urban open space system.*
*Given the expectation that student outputs should follow a narrative extending from the urban scale to the district, neighborhood, and local scales, the theme and project site are defined each year in collaboration with a different local government unit. This approach is inspired by concerns related to environmental challenges. The studio aims to produce resilient landscapes by focusing on key concepts such as extreme topographies, environmental vulnerability, multi-scalarity, multifunctionality, landscape character, and green infrastructure. Throughout the studio process, students engage with a single, comprehensive project, benefiting from interdisciplinary seminars, technical field trips, and interactive discussions. These resources provide a framework for students to critically explore and develop their individual design projects in depth.*
*The evaluation of student work is conducted through four interim juries and two sketch exams during the semester. By the end of the studio, students gain the ability to produce projects that are conceptually and physically robust. These projects are characterized by their applicability and integrate solutions to structural and vegetative design challenges at a detailed scale while addressing larger-scale issues of urban landscape management.*

# Symbiosis

Aylin Önal

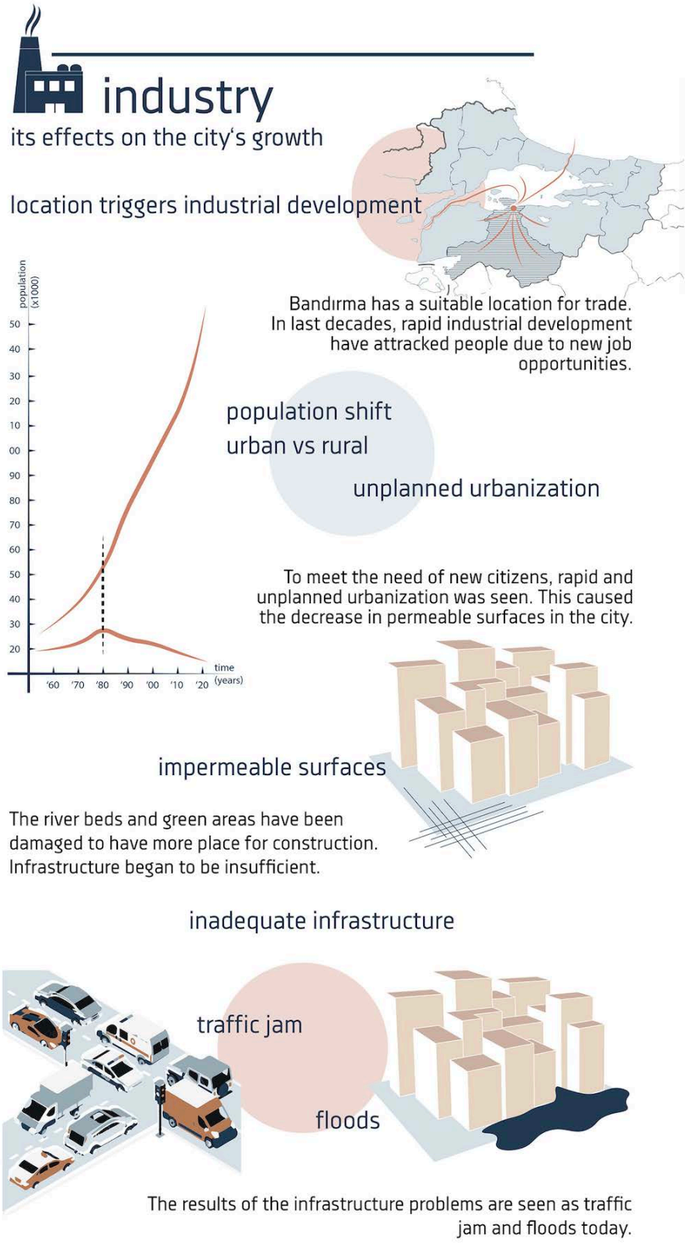
*"Symbiosis" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Çisem Demirel under the title "Multilayered Negotiations: An Urban Manifesto For Resiliency of Bandırma" in the spring semester of 2019-2020.*




Bandırma is a district with a history dating back thousands of years and is currently experiencing significant urbanization effects. While its location is convenient for transportation, the unplanned growth and typical urban problems have been exacerbated by industrial development. The main stresses affecting Bandırma include population growth, lack of infrastructure, lack of permeable surfaces, traffic congestion, waste, and pollution. Additionally, floods frequently occur after heavy rains.

Future plans for Bandırma emphasize industrial investments. However, without comprehensive resilience strategies, these investments may exacerbate existing problems. Therefore, the main goal of the project is to mitigate the issues caused by industry so far and to establish symbiotic relationships based on mutual benefits among the various elements in Bandırma, including industry. These relationships are divided into three categories: industry-agriculture, industry-society, and society-agriculture.





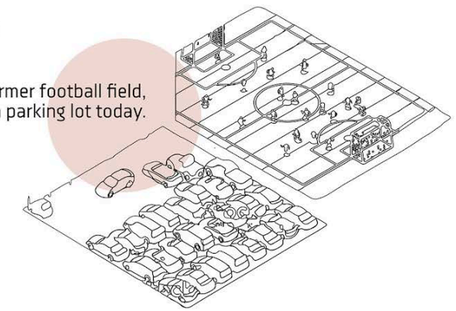

The industry-agriculture relationship is based on the concept of industrial ecology, which involves cycles between the inputs and outputs of production activities. The output of one production process can serve as the input for another, promoting a circular economy and reducing waste.

In the industry-society relationship, the concept of industrial ecology is adapted for public application. Non-hazardous wastes are recycled through collective production and made available for public use. This approach turns public spaces into areas created by the community itself.

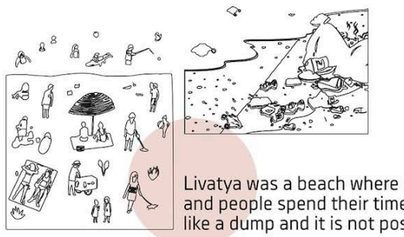
The society-agriculture relationship aims to strengthen the rural economy by enabling rural producers to reach urban consumers directly, without intermediaries. This connection helps to support local agriculture and ensures that the benefits of production are shared more widely.

# change in social configuration & lifestyle

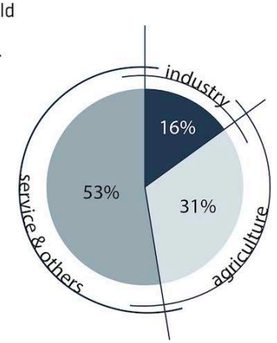
Migrations caused changes in social configuration & lifestyle such as changing public place usage.



Cin Çukuru, former football field, is a parking lot today.



Livatya was a beach where swim-races were held and people spend their time. But today it looks like a dump and it is not possible to swim there.




Today, the amount of people working in industry is just 16%. With the further development Bandırma is going to attract more people and the problems are going to be more complicated to solve. The only way for a healthy growth is the sustainable industry which minimizes its negative effects and benefits the city rather than to harm.

There are huge investments for industrial development in Bandırma and it is aimed to be one of the most significant industrial cities in the region.

**Bandırma'ya 40 milyon metrekare OSB kuruluyor**

Balıkesir'in Bandırma ilçesinde, Türkiye'nin sanayisini omuzlayan Marmara Bölgesi, yeni bir OSB'ye daha ev sahipliği yapacak.

**Bandırma'da sanayi için bin fabrikalık yer ayrıldı**

Balıkesir - Çanakkale İmar Planı'nda sanayi için 48 bin dönüm yer ayrıldı. Kimyacılar bölgede 30 bin dönüme özel ihtisas bölgesi kuracak. Toplamda ayrılan alan dolduğunda Türkiye'nin en büyük endüstri bölgelerinden biri ortaya çıkacak



# resilience in bandırma

a city that has reciprocal and mutually beneficial relationships with its macro and micro ecosystems

symbiotic city

Industrial ecology explores the assumption that the industrial system can be seen as a certain kind of ecosystem. After all, the industrial system just as natural ecosystems, can be described as a particular distribution of materials, energy, and information flows.

industrial ecology

closed-loop system

circular economy

symbiosis for resilience

to maintain a relationship between society and industry, social activities such as pottery workshops or gastronomy activities can be realized.

RECYCLING
recycling could turn into a collective production to increase public participartion and awareness

production

social activities

industry

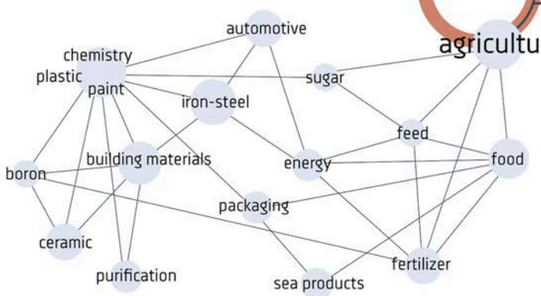
society

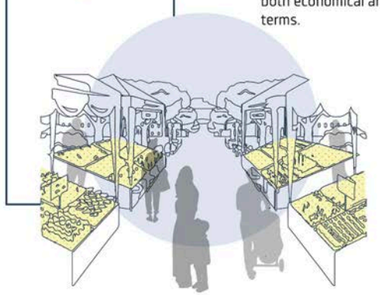
agriculture

urban

rural

to bring together the people from urban and rural, marketplaces play a key role on both economical and social terms.



In line with the sub-strategies derived from these main ideas, analyses for the city were conducted to identify regions where problems are concentrated. The most prominent of these is Cin Çukuru, located in the city center. This area, which has been used as a football stadium for many years, holds significant social value in the city's memory. However, as the stadium's capacity became inadequate, it was relocated to the city's periphery.
Consequently, Cin Çukuru, after being left idle for many years, has now become a car park. The area's inclined topography and lack of permeable surfaces result in mud accumulation after heavy precipitation, making its usage problematic.
Adjacent to this area are two significant buildings. One is the old power station, which has been converted into a cultural center after restoration. The other is an old hospital building that has been transferred to the university to be converted into a city museum. These two structures establish the area as a culture-oriented public center.

It is seen that low areas on the topography do not have the capability of water absorption due to the dense settlement, which cause water to flow directly to the square on the coastline and cause floods.

Livatya

in Ottoman period, tile and brick quarries

in 60s, municipal beach, swimming races

in 80s, only a football field and a wedding hall left, limited usage, unsafe

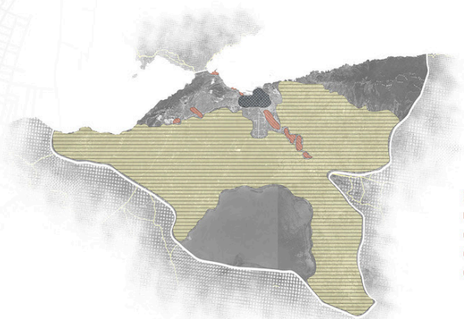
today, discharge of domestic waste

Cin Çukuru

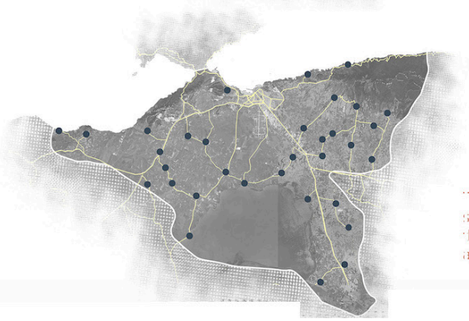
football field, local matches, supporters

significant for the citizen's memory

after the construction of another football field, the area turns into a parking lot but because of the topograpfy and insufficient infrastructure, floods occur on the area



Most of the Bandırma's land is used for agriculture. Agricultural development also should be considered as well as industrial development.



There are many small settlement around city center that earn their living from agricultural activities.



# strategies

## cohesion

goal 1:
creating a social bound between society and industry

strategy 1:
social activities that makes industry a part of society's identity
_handcraft workshops (i.e. ceramic)
_recycling workshops - regularly

goal 2:
eliminating the existing negative effects of industry

strategy 2:
while designing urban space for the social activities above, using desing strategies that eliminate problems generated after the industrial development
_water management with bioswale areas
_diverse social activity opportunities such as sport fields and playgrounds

goal 3:
maintaining urban-rural connection

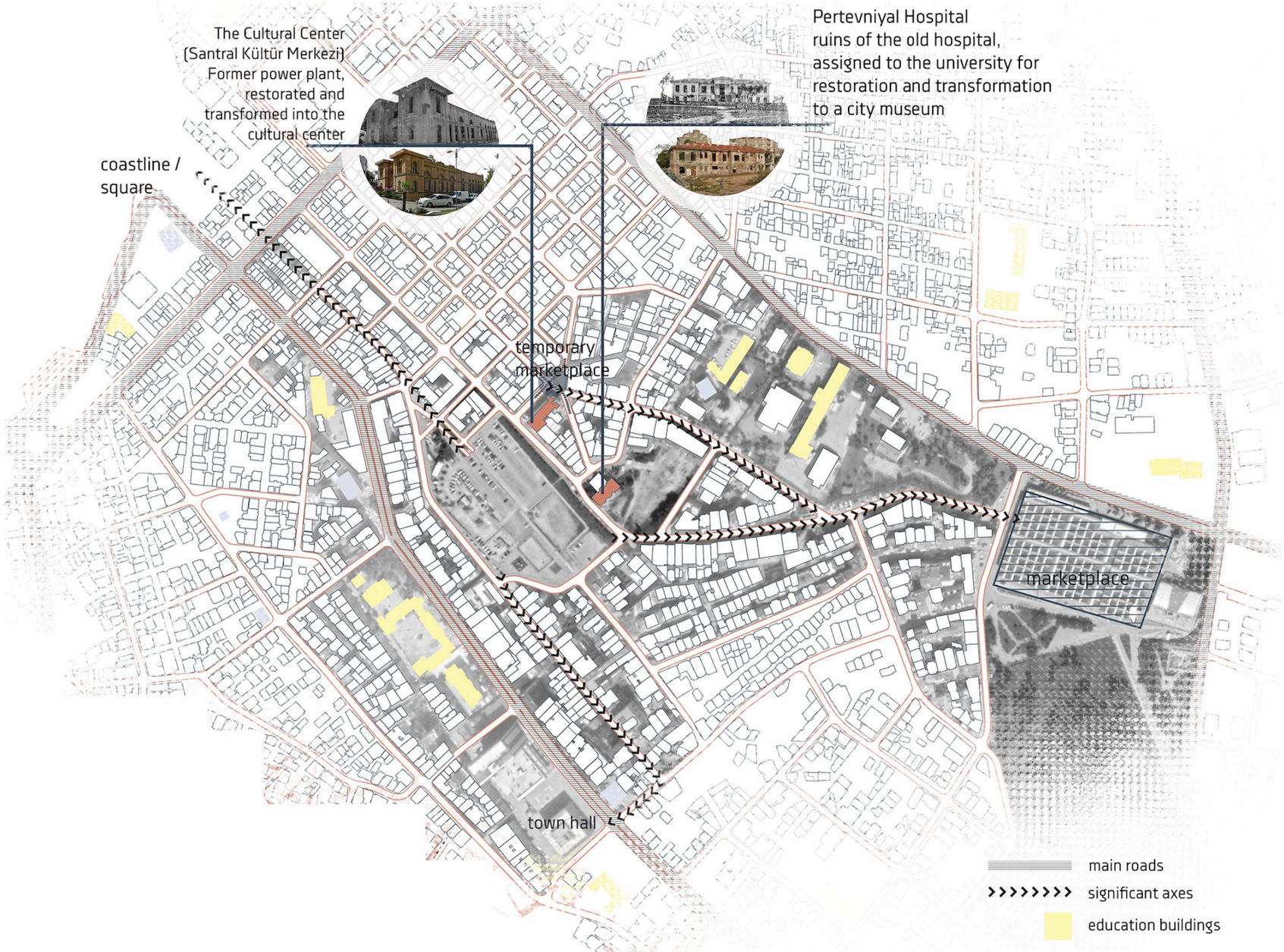
strategy 3:
creating opportunitiy for farmers to sell their products directly to the people in the center without extra costs
_classification of farmers in Bandırma's villages according to their product type and amount
_marketplaces in city centers for farmers

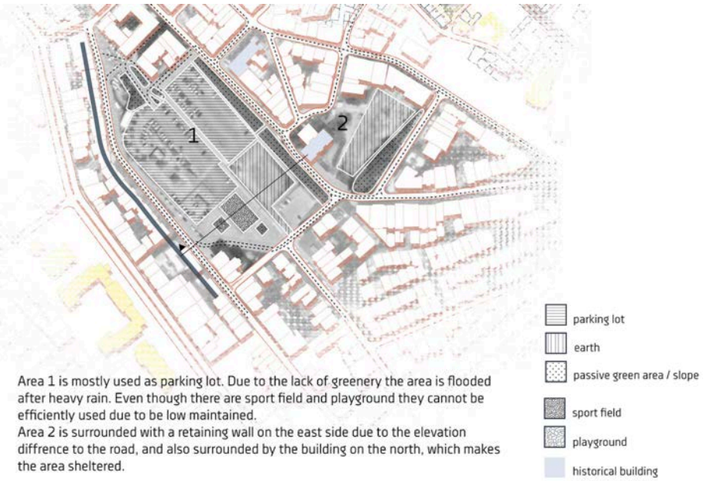
## flow

goal:
providing material and energy flow in economy

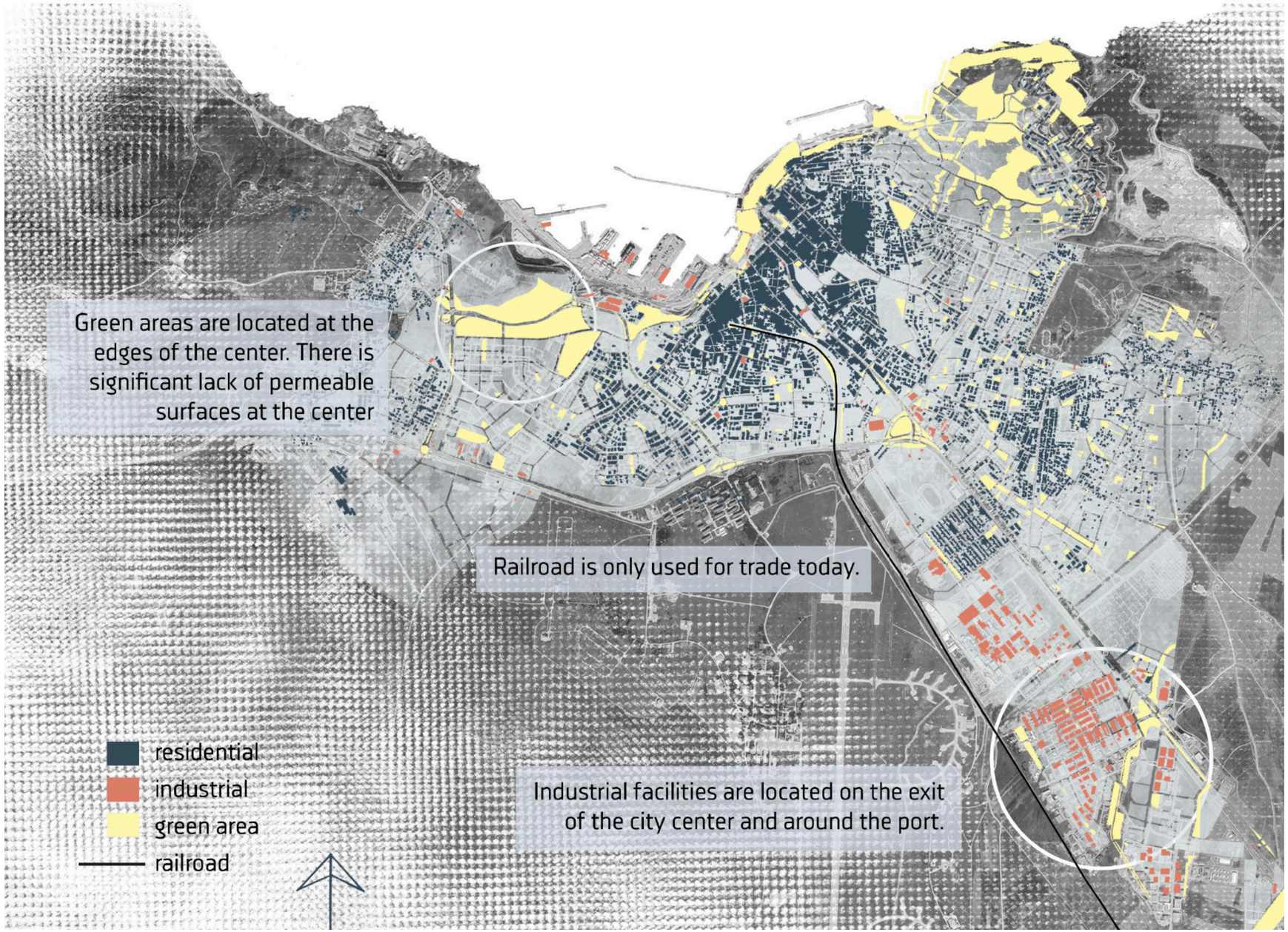
strategy 1:
application of policies towards material transfer between industrial and agricultural activities as well as general consumptions in the city
_specification of reusable material
_collection and classification of waste

strategy 2:
integration of urban waste to this circular system
_urban furniture made from recycled material
_using urban gray water in irrigation




Area 1 is mostly used as parking lot. Due to the lack of greenery the area is flooded after heavy rain. Even though there are sport field and playground they cannot be efficiently used due to be low maintained.
Area 2 is surrounded with a retaining wall on the east side due to the elevation diffrence to the road, and also surrounded by the building on the north, which makes the area sheltered.




In this context, the design decisions considered for the area are as follows:
Parking Needs: Due to the significant need for parking in the area, this function has been largely preserved, with a portion of the parking moved underground.

Rain Gardens: Rain gardens were created in the direction from which the water flows. This section has fewer human activities compared to the rest of the area, allowing for better water management and natural filtration.

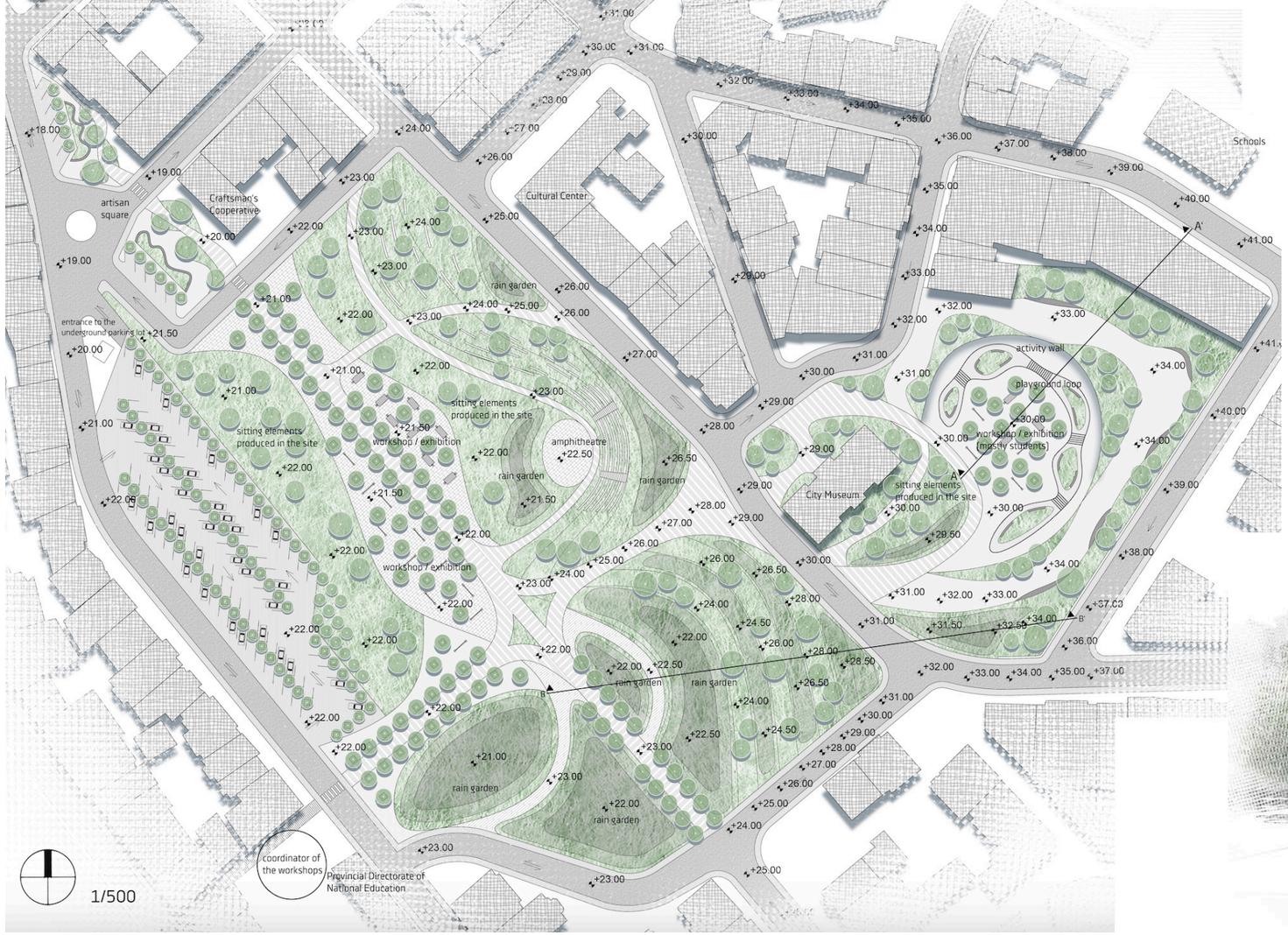
Topography and Access: To address the access issues posed by the topography, a ramp was constructed to divide the area into two, creating a new topography. One side of this ramp features rain gardens, while the other side includes an amphitheater. The amphitheater serves both the cultural center's activities and events held by Bandırmaspor fans, who continue to celebrate in this area.

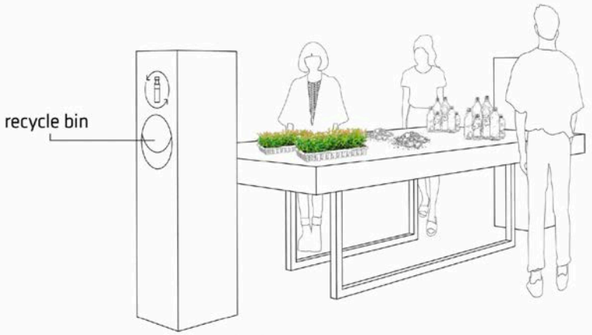
Workshop/Exhibition Structures: Structures for workshops and exhibitions were established to support the industry-society relationship. These structures allow for the collection of plastic, glass, paper, and other waste materials. Regular workshops, coordinated by the District Directorate of National Education, transform these structures into workplaces and later into exhibition spaces. They are strategically positioned along the main axis to attract passersby.

Urban Furniture: Urban furniture on the green surfaces will be created by the community, fostering a sense of ownership and creativity.

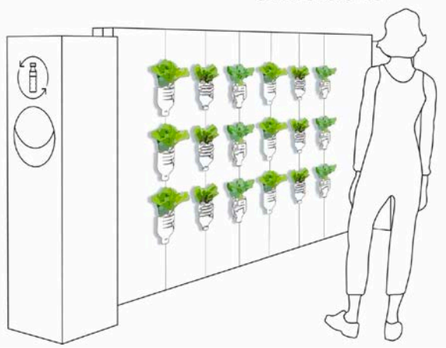
Educational and Play Areas: The area adjacent to the city museum is primarily intended for children and students, given its educational function. It includes an educational and continuous playground, along with a wall where children and youth can express their creativity. Various installations using waste materials and street art, such as graffiti, are encouraged. Additionally, workshop/exhibition structures in this area are designated for use by children and students from nearby schools.

parking // this function has been significantly preserved
rain gardens // fewer human activities compared to the rest of the area
amphitheater // both for the activities of the cultural center and the events of Bandırmaspor fans, who are still making celebrations in this area
workshop & exhibition structures // for the productions to be carried out in the context of the industry-society relationship
urban furniture // to be created with the productions of people
educational function // educational and continuous playground, activity wall



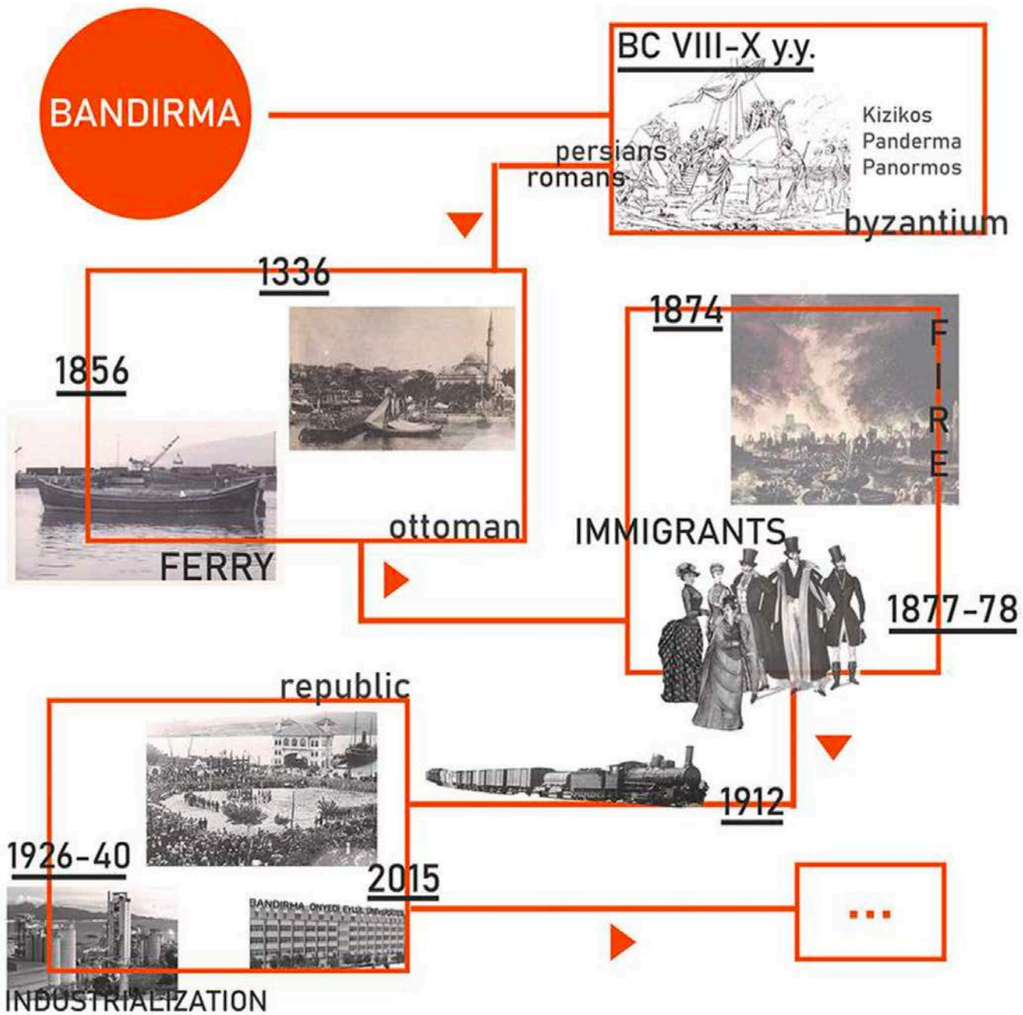

workshops & exhibitions



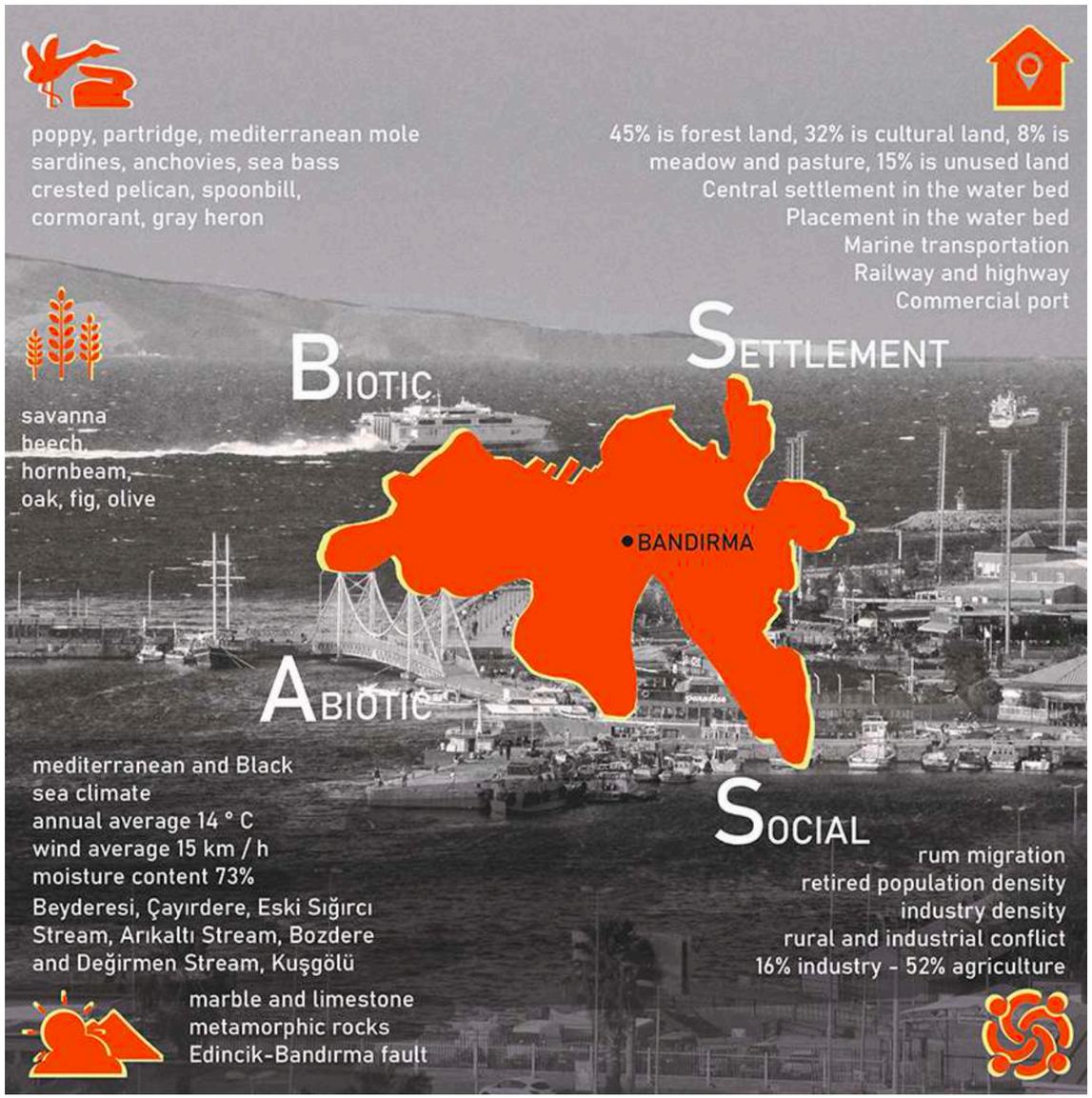
# Revitalizing

Ecem Cengiz

*"Revitalizing" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Çisem Demirel under the title "Multilayered Negotiations: An Urban Manifesto For Resiliency of Bandırma" in the spring semester of 2019-2020.*

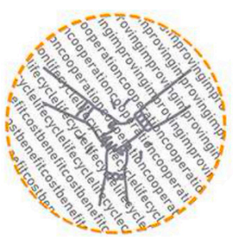
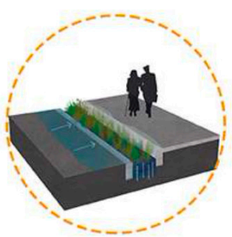




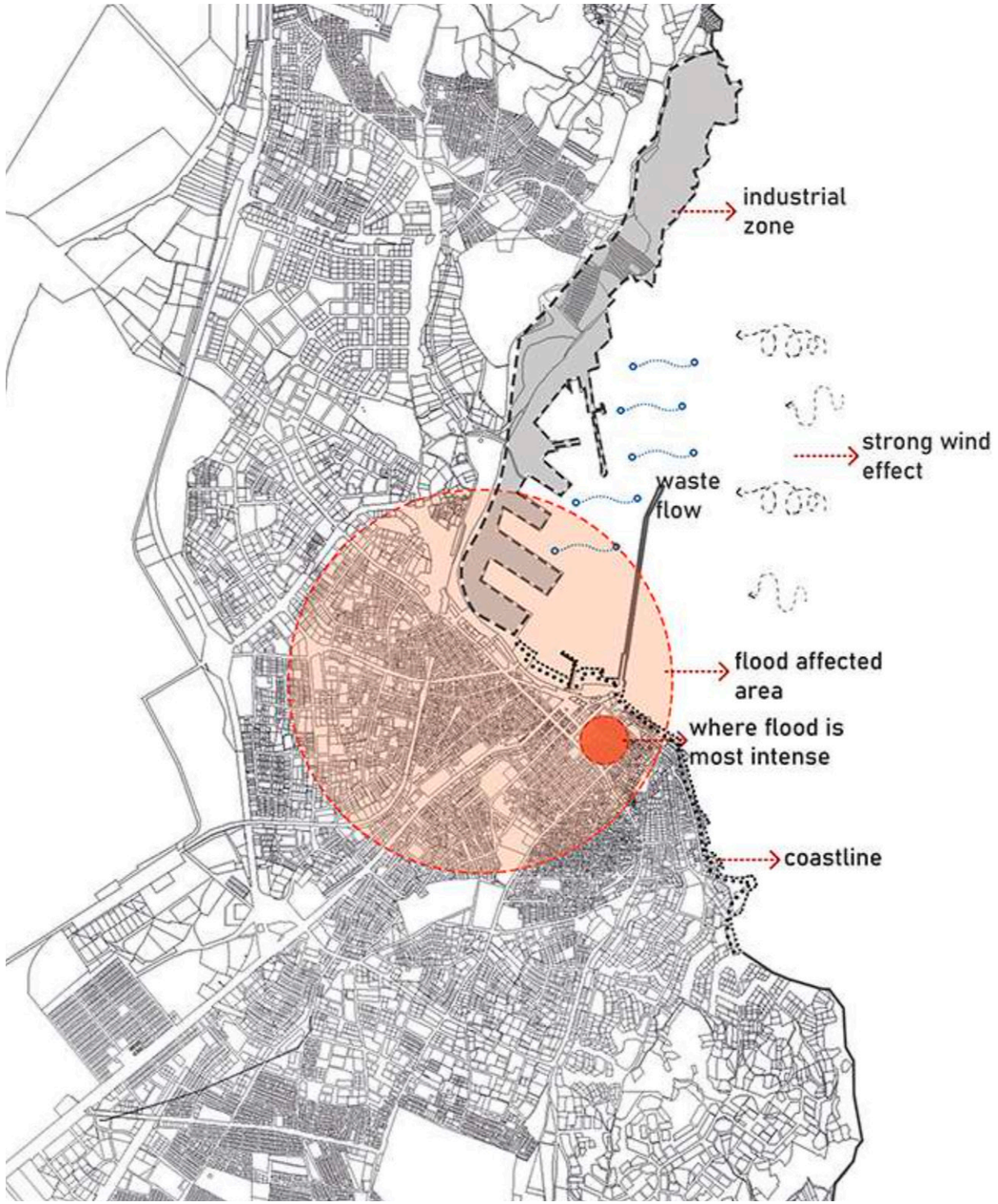
# SHOCKS AND STRESSES

Problems:

| 01 » Aging Infrastructure, Infrastructure failure | 02 » Inadequate Infrastructure | 03 » Lack Of Social Cohesion | 04 » Floods, coastal erosion, sea level rise | 05 » Energy Insecurity | 06 » Water Insecurity | 07 » Traffic Congestion |
|---|---|---|---|---|---|---|
| Sustainable development goals: | | | | | | |
| Keywords: | | | | | | |
| ● EARLY DIAGNOSIS<br>● SUSTAINABLE<br>● EFFICIENT | ● COMMERCE → FINANCE<br>● GOVERNMENT → PUBLIC<br>● INDUSTRY → UTILITIES<br>● SOCIAL ACTIVITY → SERVICES<br>● SOCIETAL PROBLEMS → INADEQUACY | ● INTEGRATED<br>● SUPPORTING<br>● INEQUALITY<br>● EDUCATION | ● CLIMATE CHANGE → CLIMATOLOGY<br>● SOCIETAL PROBLEMS → EMERGENCIES<br>● SOCIETAL PROBLEMS → INADEQUACY | ● CONSERVATION → CONSERVATION<br>● GOVERNMENT → PRIVATE<br>● RESOURCES → ENERGY<br>● SOCIETAL PROBLEMS → SCARCITY | ● INSECURITY<br>● SCARCITY<br>● CONFLICT<br>● MANAGEMENT INEQUALITY | ● ACCESSIBILITY<br>● TRANSPORTATION<br>● COMMUNITIES |
| Causes: | | | | | | |
| • population growth<br>• migration<br>• urbanization<br>• climate change<br>• need clean water<br>• waste water | • Inadequate basic services<br>• Weakness of public works<br>• Unavailable public facilities | The OECD(Organisation For Economic Co-Operation And Development) looks at social cohesion through three lenses:<br>• **social inclusion:** inequalities, polarization and poverty levels<br>• **social capital:** levels of trust and civic engagement<br>• **social mobility:** the degree to which people can or believe they can change their position in society. | • Global warming<br>• Climate change<br>• Infrastructure issues<br>• Unplanned settlement<br><br>• Homelessness<br>• Household pests<br>• Soil erosion by water<br>• Infrastructure damage<br>• Declining agricultural land<br>• Deterioration of the physical condition of objects | • Physical factors<br>• Cost of exploitation and production<br>• Technology<br>• Commercial disregard of social responsibility<br>• Lack of integrated energy resource management<br><br>• Exploitation of difficult and environmentally sensitive areas<br>• Economic and environmental costs<br>• Food production<br>• Industrial output | • Growing population which is the main cause of water insecurity.<br>• Urbanization and industrialization which have increased the consumption of water.<br>• Wastage and injudicious use of water.<br>• Over-exploitation and mismanagement of water resources.<br>• Unequal access to water resources.<br>• In post green revolution era, the commercial crops which are grown more, consume more water. | • Environment<br>• Mechanical<br>• Human<br>• Infrastructure |
| |  | |  | | | |
| Solutions: | | | | | | |
| • Energy and recycling facilities can generate electricity to power it by converting sewers into energy.<br>• When "**technology and location**" are collaborated, sustainable studies emerge.<br>**ATTENTION**<br>• avoiding contaminated ground<br>• visual impact of structures on the local area<br>(!) Aging infrastructure brings risks with respect to potential failure and environmental compatibility. | • Repair existing systems<br>• Improving infrastructure<br>• Limiting availability of public facilities<br>• Increasing availability of public facilities<br>• Set up systems for voluntary cooperation<br>• Perform life-cycle and cost-benefit analysis of infrastructure systems | • Integrating society<br>• Integrating social communities<br>• Supporting to social club<br>• Supporting to expending global social awereness<br>• Supporting to cohesive social patterns | • Adapting to climate change<br>• Checking seasonal flooding<br>• Planning for flooding<br>• Greenhouse gas reduction<br>• Use of solar and wind energy<br><br>Each time there are more rains than the drainage system can take, there can be floods. Sometimes, there is heavy rain for a very short period that result in floods. In other times, there may be light rain for many days and weeks and can | • Renewable energy<br>• Biomass<br>• Wave power and tidal power<br>• Geothermal<br>• Solar power<br>• Wind power | • Education<br>• Recycle water<br>• Advance technology related to water conservation<br>• Improve practices related to farming<br>• Improve sewage systems<br>• Support clean water initiatives | • Optimise traffic-light management<br>• Extend residents parking zones<br>• Improve cycling infrastructure<br>• Improve bus services<br>• Creating appropriate transport systems |

The focus of this project was on urban resilience.
A resilient city is one that is prepared to handle and overcome shocks by protecting its fundamental functions, structure, and identity against any disruptive factors.
Cities are exposed to numerous shocks and stresses; they have strengths, weaknesses, threats, and opportunities. The more thoroughly these are analyzed and addressed, the more resilient a city will be. I believe that a city's resilience is closely linked to the satisfaction of its residents and environmental conditions. The cleaner the environment, the healthier the people will be. The more legible and attractive the city, the more socially active its residents will be. Accessibility and sustainable mobility, which are key factors of livability, significantly impact resilience. My approach to resilience in Bandırma has been through revitalization. Just as resilience cannot be achieved through a single factor, revitalization cannot be accomplished with a single element. For me, resilience is not solely about designs and techniques involving inanimate factors. Cities are like living organisms: they are born, develop, and encounter various positive and negative internal and external factors, to which they react. Over time, cities may become unable to respond positively to these factors, leading to problems. This affects not only the buildings and infrastructure but also the people, animals, and nature within the city.

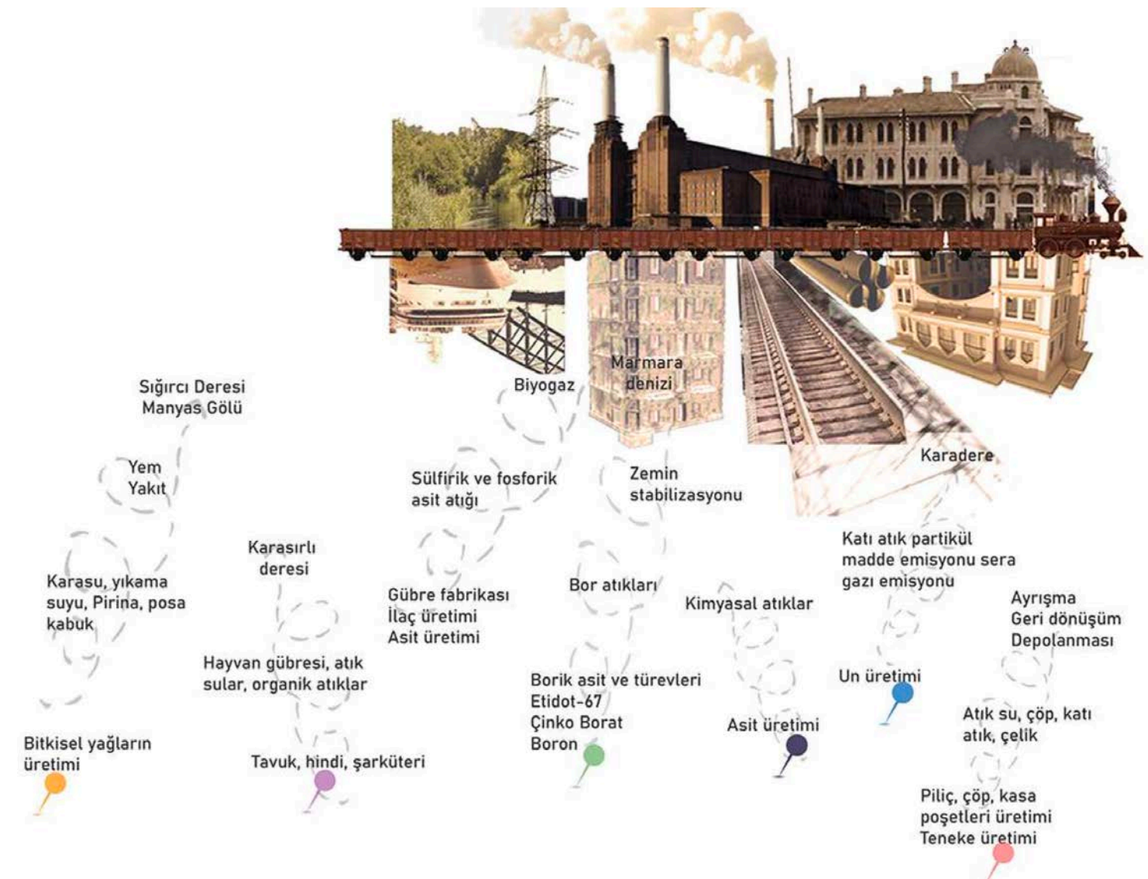
Therefore, if we want a city to be livable and sustainable, we must develop solutions that integrate all these layers cohesively.




I named this process “revitalizing.” When addressing durability in Bandırma, I began with this keyword. Just as resilience cannot be realized with a single factor, revitalization cannot be achieved through one element alone. Bandırma’s industrial intensity is an undeniable fact with serious effects. Since I cannot eliminate it, I must integrate it. The biggest problems I identified are waste management, flood risk, and the lack of integration between the seaside and the city.

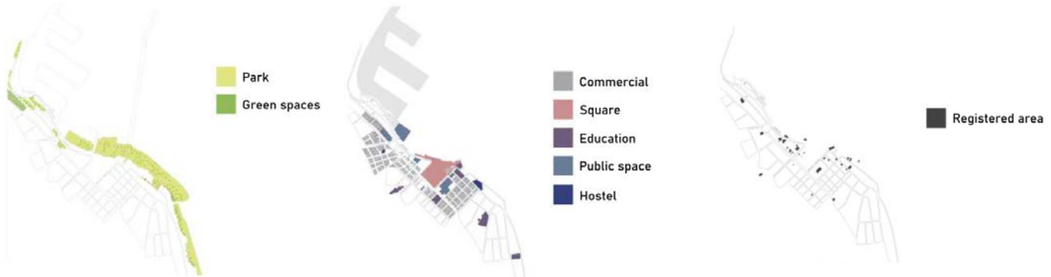
Bandırma’s infrastructure is old and inadequate, and the high percentage of impermeable surfaces causes blockages and flooding from waste. Sewage waste is discharged directly into the bay, causing marine pollution. This situation discourages people from using the waterfront and harms marine life. Therefore, my goals are to remove waste, redesign the flood risk areas, and bring the natural beauty of the seaside back to the people.

Choosing a focal point is crucial for initiating this process. The intersection of water, waste, and flood risk serves as an ideal starting point. For this reason, I selected an area that will integrate the coastline into the city. I applied designs and techniques aimed at not only mitigating these issues but also providing a pleasant and healing environment for people to enjoy.

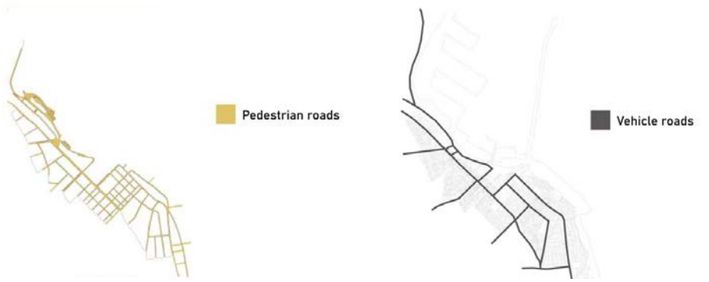


# SITE ANALYSIS

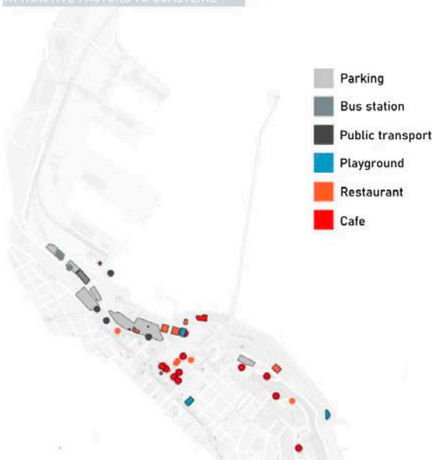
## LANDUSE ANALYSIS



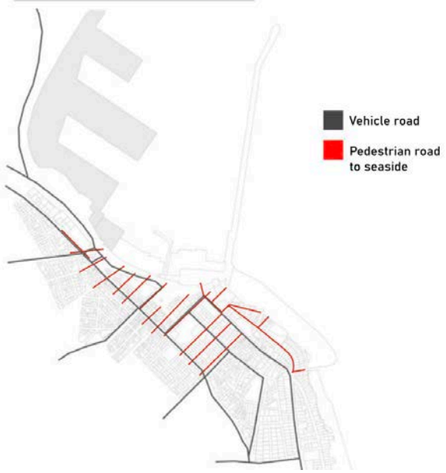

## TRANSPORTATION ANALYSIS




## ATTRACTIVE FACTORS TO COASTLINE




## OVERLAP OF TRANSPORTATION TYPES



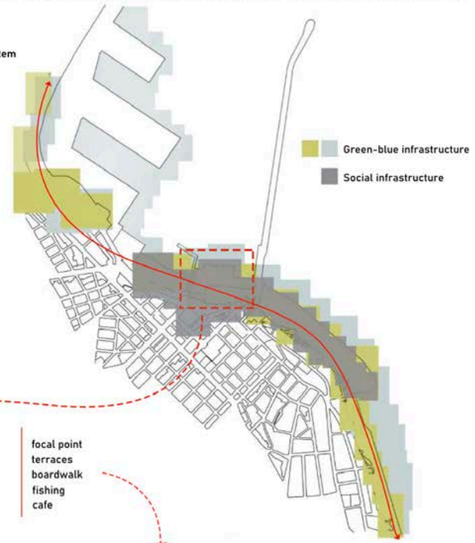



# REVITALIZING

THE WATERFRONT BECOMES THE ZONE THAT CONNECTS THE SOCIETY AND NATURE

## BLUE-GREEN INFRASTRUCTURE

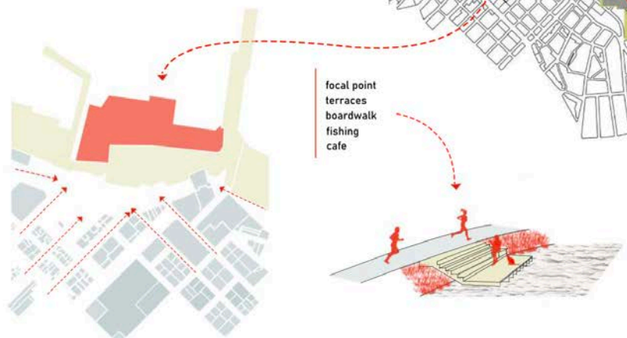
- The use of existing coastline to construct flood resilience system
  - Bioswale
  - Rain water harvesting areas
  - Aquatic planting
  - Filtering systems
  - Coastal planting
  - Aquatic plant species for water purification
  - Buffer strip to filter flood water and sedimentation



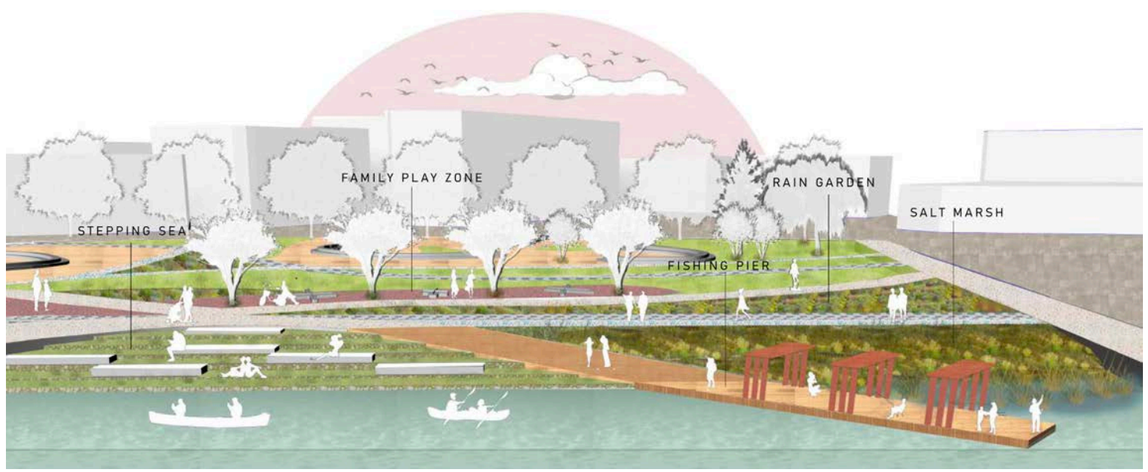

## SOCIAL INFRASTRUCTURE

- Encouraging the public to ensure the protection of ecology and reflect the identity and image of Bandırma
  - Waterfront
  - Cafe
  - Seating
  - Fish farming
  - Learning area

## TECHNIQUES:




## Design inspiration:

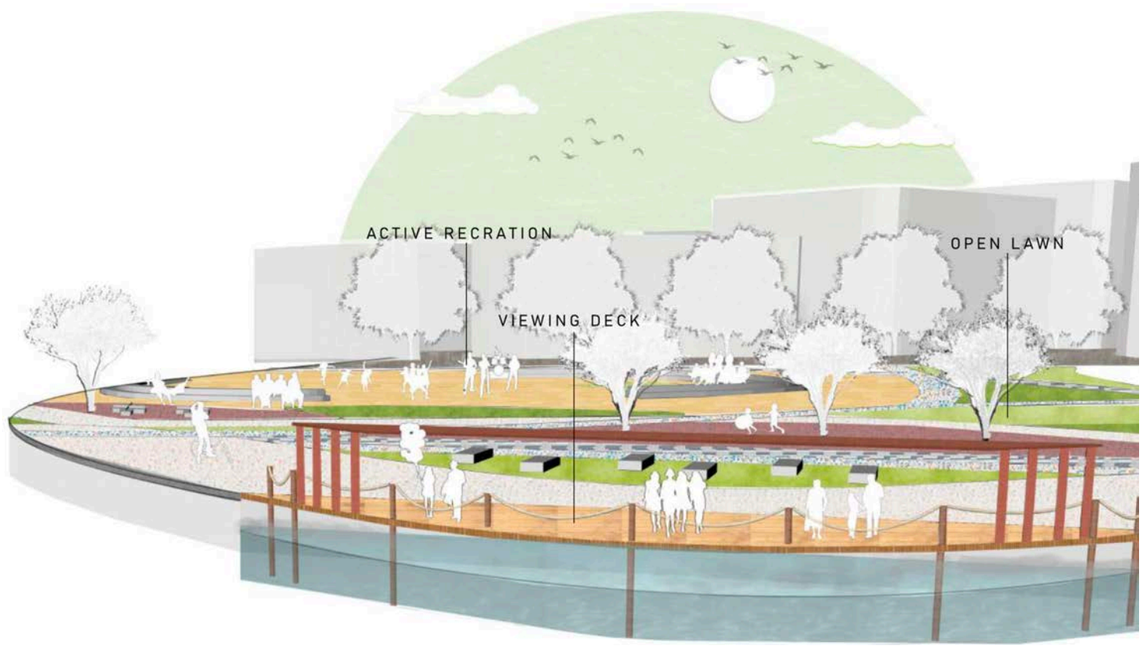



In this project, the concept of urban resilience is examined under three key topics: floods, waste, and connectivity. Bandırma frequently experiences floods, resulting in both financial and environmental damage. To address these issues, a comprehensive project has been developed.

A space was designed to strengthen the connection with the seashore, allowing people to spend more time there. A salt marsh was created to help remove waste and prevent flooding. Rain gardens and increased green areas were implemented to ensure effective water collection.

Large green spaces were designated for people to spend time comfortably. Plant species such as Salix babylonica, Liquidambar orientalis, and Laurus nobilis were used in the area. These plants were chosen for their shading, visual screening, and wind-breaking properties, as well as their flood prevention and water and air cleaning capabilities.

Detention ponds have become one of the most effective solutions for stormwater management. They excel at slowing runoff, containing sediment, collecting trash, and removing pollutants. Moreover, they are often cost-effective and provide a touch of nature in an otherwise concrete-dominated environment.

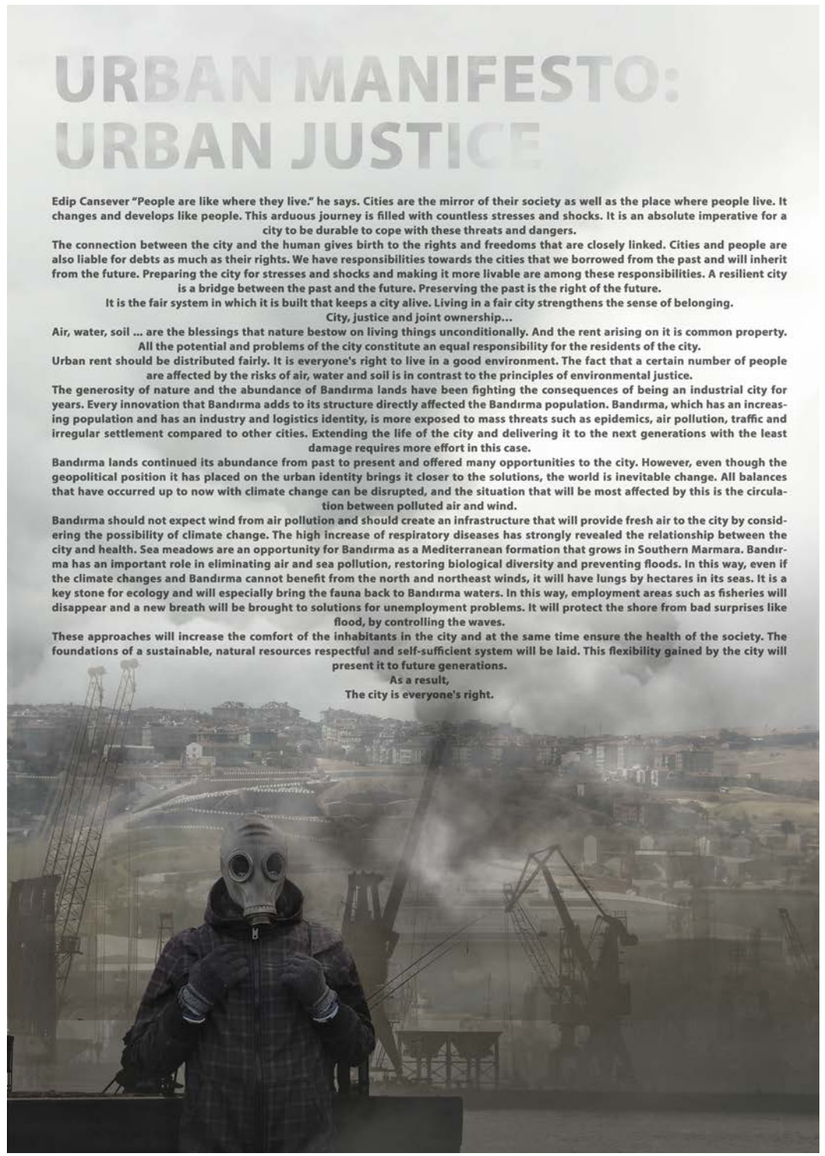


# The Manifest

İrem Güvenç

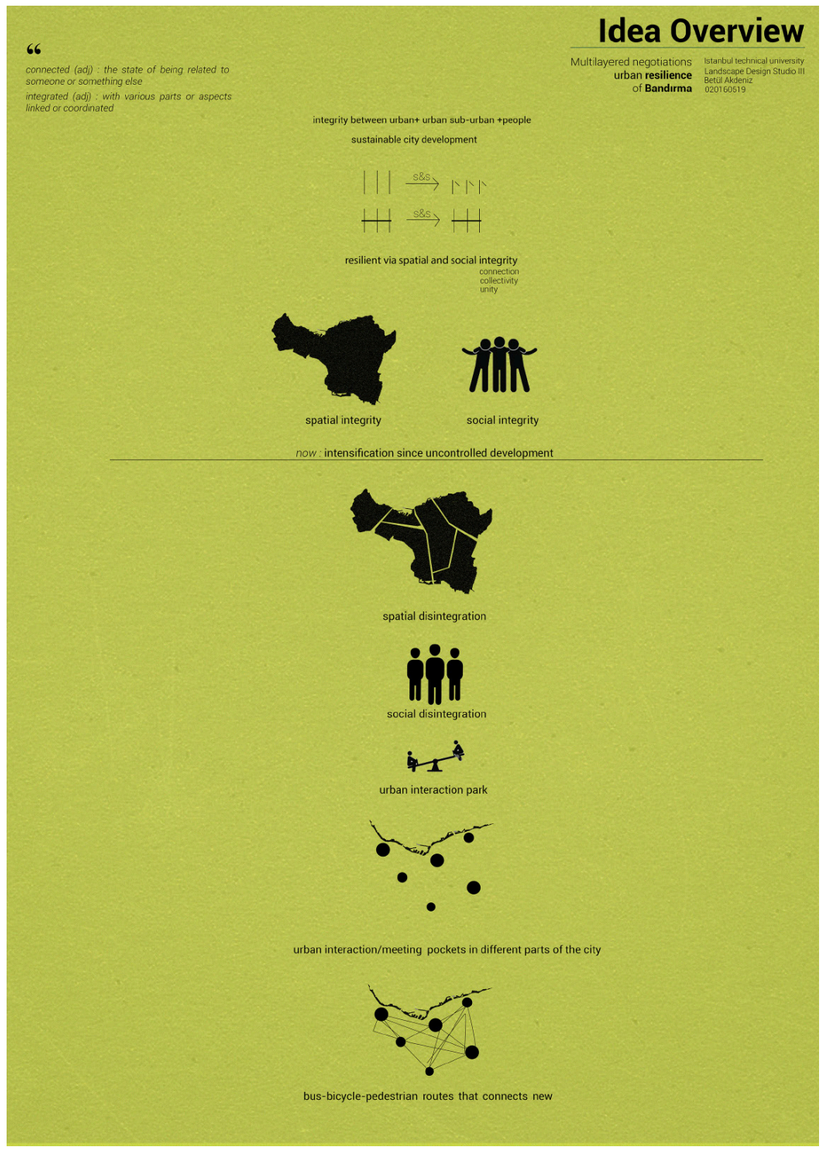
# Urban Manifesto: Urban Justice

Gizem Yağmur Gölbaşı



# Idea Overview

Betül Akdeniz






# Manifest

Rümeysa Merve Öksüz

manifest

# Ban dırma

is a city under **industrial** pressure. Its history, culture and natural data have been overshadowed by this pressure. Plus, the fact that Istanbul started to receive the industrial rent and its population increased in parallel with this, as well as seasonal population changes are a serious problem for the resistance of Bandırma. As a result, the resistance of the city of Bandırma is decreasing. Against this, a measure must be taken for Bandırma.

This pressure of the industry should be alleviated without

## destroying identity

features. Because it is not a single feature of a city that makes it a city. There are many factors that make up the identity. The sustainability of the city should be ensured by creating a system where all these factors will work together. For this purpose, any element that threatens its sustainability and resistance should be prevented and its impact should be reduced. Action plans should be created for this attachment Bandırma. These should be examined in the context of Social, Infrastructure and Natural data, and suggestions for them should be presented. Goals should be determined respectively.

## 1. Goals in the social context

Goal 1
• Activities will be organized where the new population will learn about the existing areas.
• The ecological and historical data of the draft will be fully transferred and the population will be made conscious in this direction.

Goal 2
• Its historical infrastructure is very high, but its industrial identity has been overshadowed by industrialization becoming dominant. For this, the relationship of historical places with the environment will be provided.
• Accessibility will be provided.
• Elements that reflect the identity features of historical places will be added.

Goal 3
• Festival areas will be determined.
• Potential openings will be identified.
• Special areas and specialized venues will be created for cultural activities.

## 2. Goals in the infrastructure context

Goal 1
• The factory areas will be removed from the city center
• As the population increase will bring an increase in energy use, energy production areas will be created from wastes.

Goal 2
• Since there will be traffic density at certain points in direct proportion to the population increase, the main streets will be rearranged.
• New alternatives will be produced for the transportation line.

Goal 3
• Renewable energy sources will be distributed to the inner part of the city and the wind potential in the coastal area will be transformed into energy with small solutions.

## 3.Goals in the natural context

Goal 1
• The points where the natural identity is dominant will be determined
• Intersection areas where identity can be integrated will be determined and human-nature interaction will be provided from intersection areas.

Goal 2
• Integration of potential gaps in the city with natural identity will be ensured.
• Green corridors and this integration will be transferred to narrow spaces.
• Pocket parks will be created.

Goal 3
• The expansion of the urban wall will be arranged in a way that will be homogeneous with nature.
• The orientation points of the city will be determined
• Borders will be described.

In line with all these goals, the main goal is to reduce the pressure of the industry in Bandırma and prevent the **stresses and shocks** that the population will create.

Also, to ensure that Bandırma establishes a

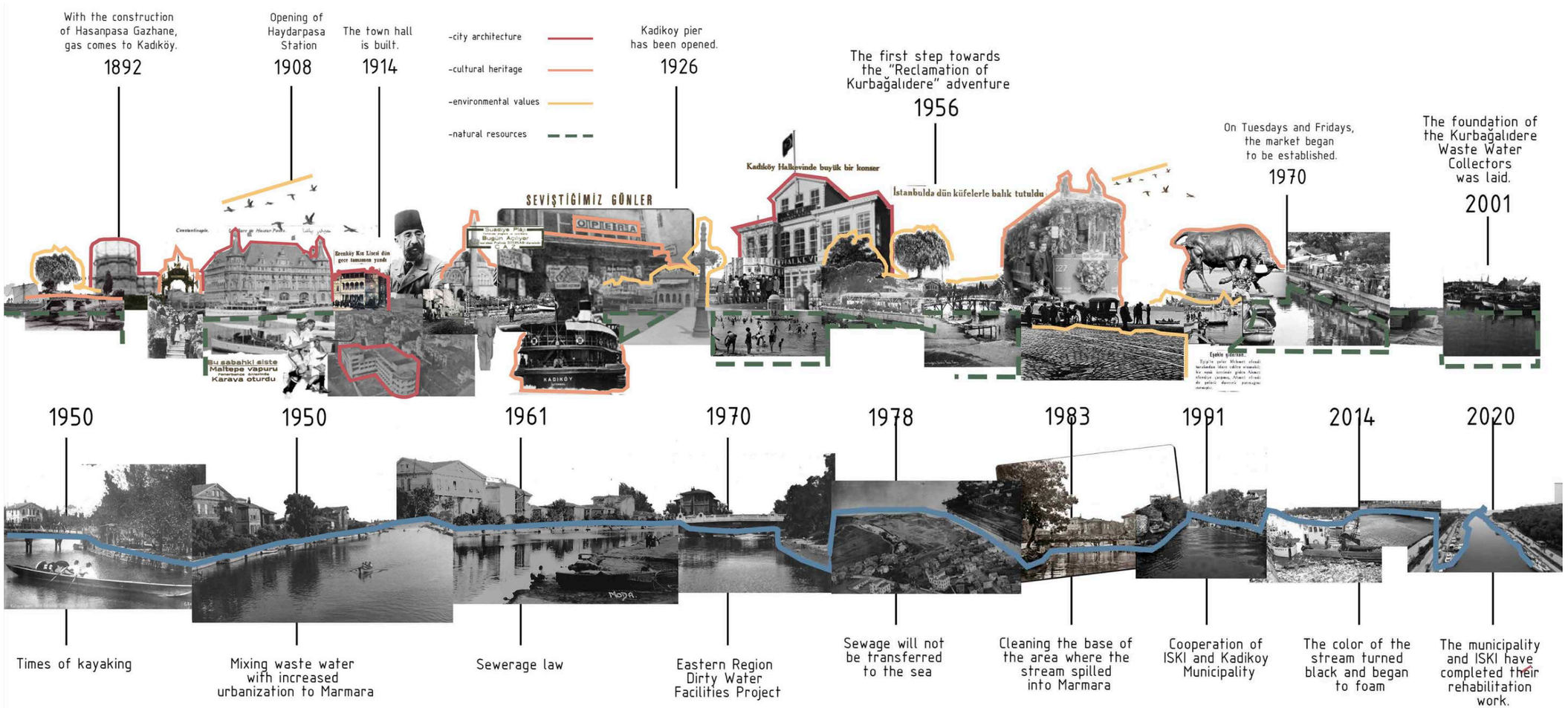
## link

with its identity features. In this way, **nature will infiltrate the city**. **Culture will revive in the city.** The wastes seen as a problem and the serious wind in the coastal area will be an **energy source for the city.**

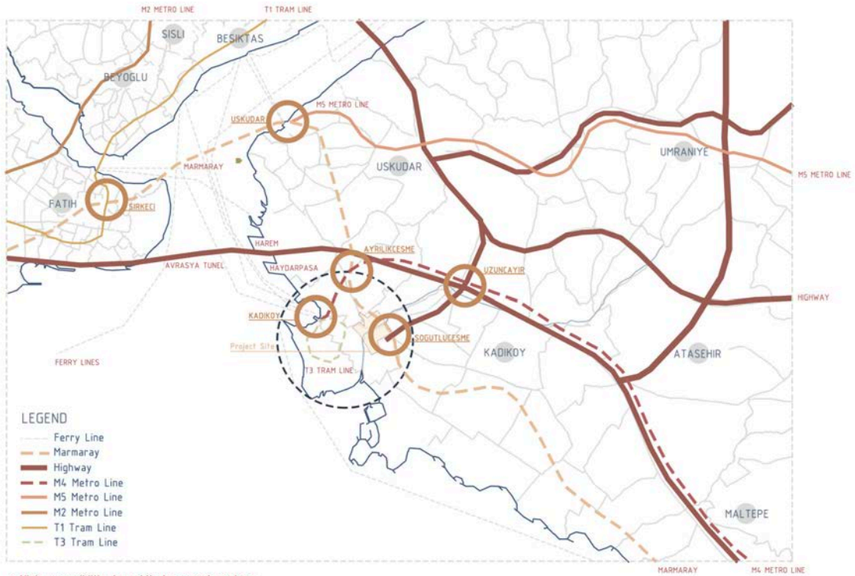
# Re-Water

Zehra Betül Doğan, Nuran Kul, Begüm Beste Ege, Zeynep Aydın

*"Re-Water" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Melih Bozkurt and Res. Assist. Çisem Demirel under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*
*First part of the project were conducted in a collaboration with parallel studio which carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Merve Aydınlı.*



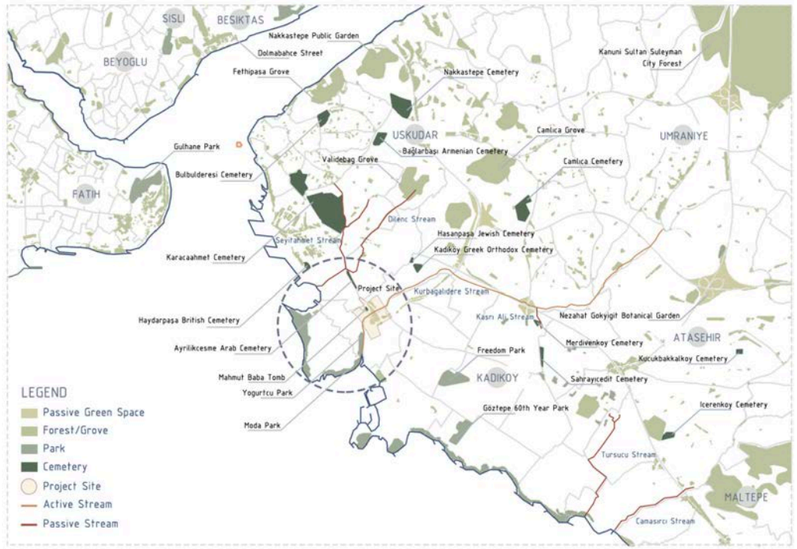
## TRANSPORTATION NETWORK AT CITY SCALE




* High accessibility to public transport centers
* Lots of different ways to use as transportation method

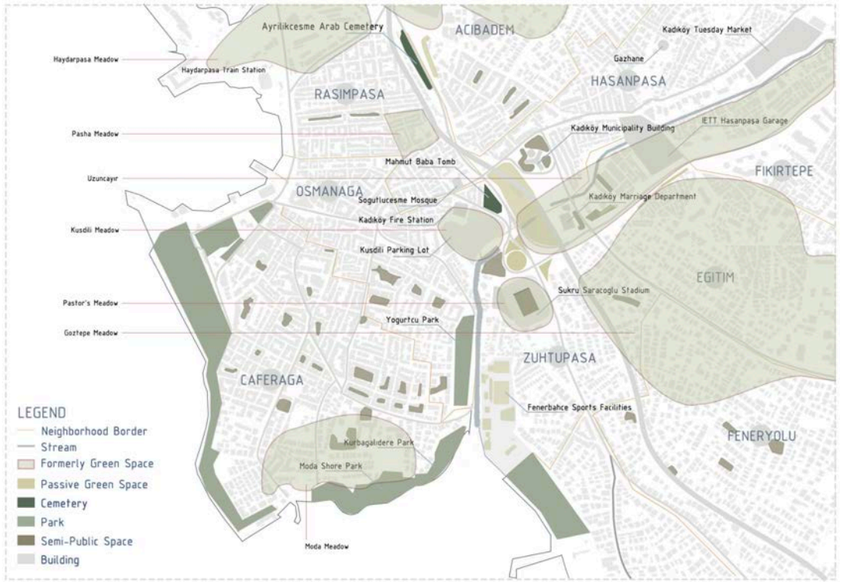
## ACCESSIBILITY-INTERSECTION-TRANSPORTATION PLAN OF THE AREA

## GREEN AREA DISTRIBUTION AT CITY SCALE

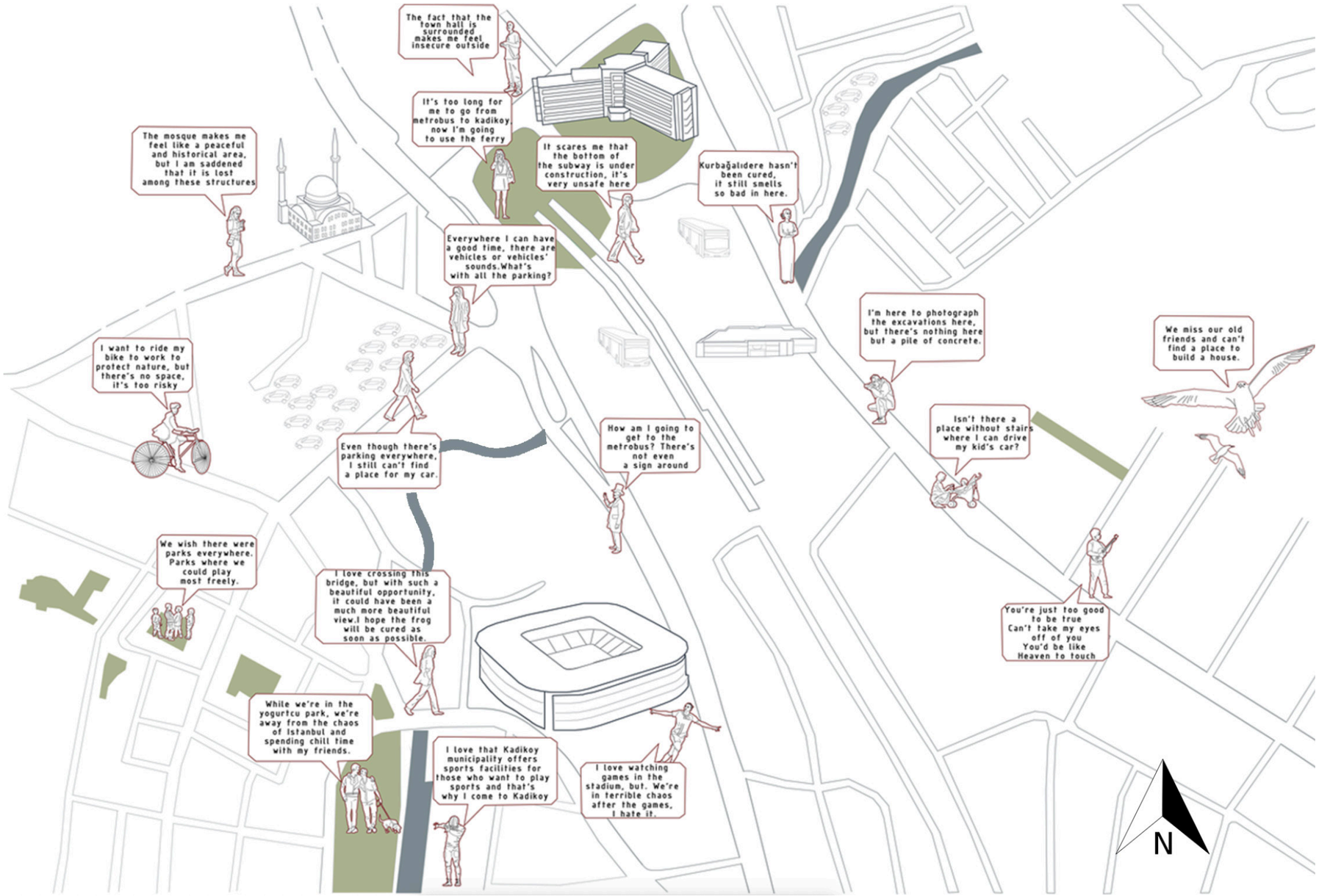



* The passing of a valuable **water element** at the city scale through the area
* Green area character accumulated in the coastal line
*The density of **cemeteries** in the existing green areas means that it was protected thanks to the people who lived here in th

## GREEN SPACE DISTRIBUTION-FORMERLY GREEN SPACES OF THE AREA



# EVALUATION OF THE AREA WITH THE USER'S THOUGHTS



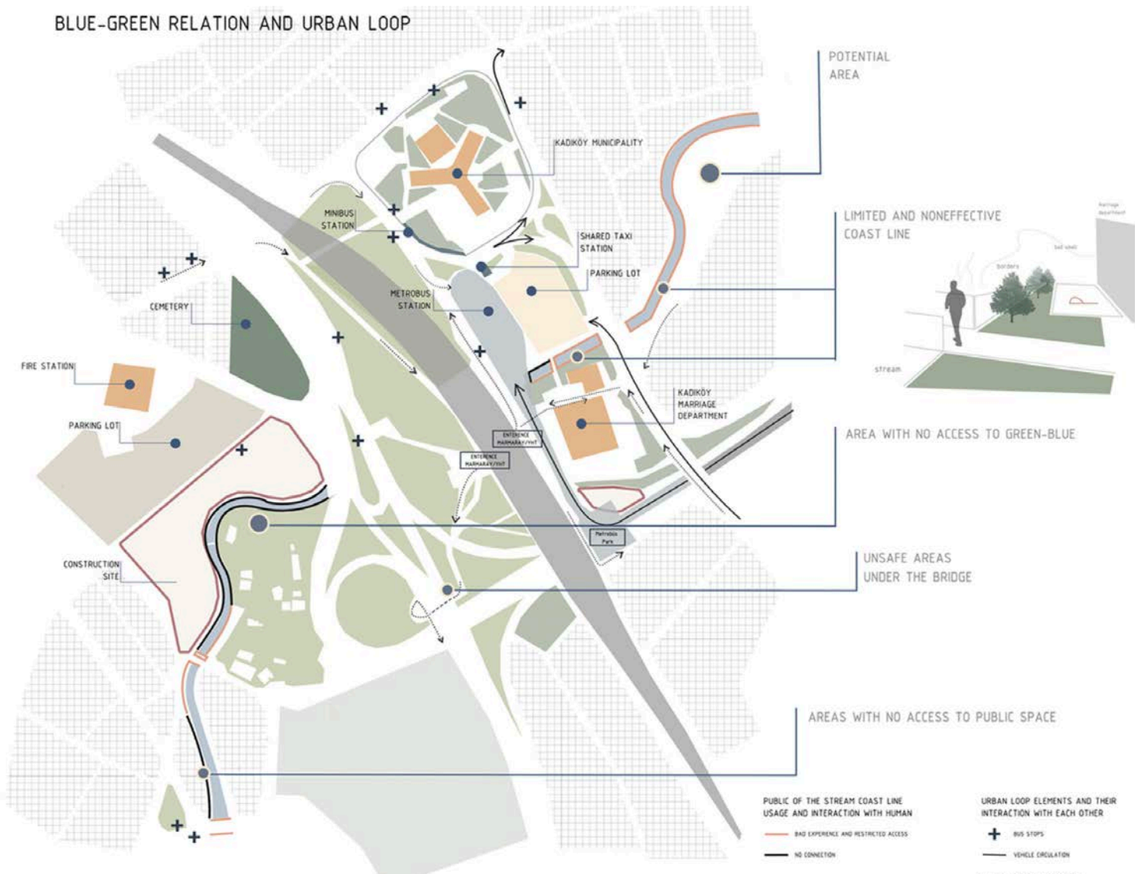

To understand the area, we examined the historical changes of Kurbagalidere through a historical analysis. While the transportation network shows that many different transportation routes intersect around the area, this feature enhances accessibility at a macro scale but causes issues at a micro scale.

The green-blue system analysis revealed that Kurbagalidere, an urban river space, holds significant ecological importance for Istanbul. Kurbagalidere's status as a natural and cultural heritage site, coupled with its recreational potential, underscores its importance for urban sustainability. Coastal habitats in cities act as biological chains and life corridors, with water serving as a vital connecting element.

From a philosophical perspective, the concepts of "listening to water" and "learning from it" were highlighted. Over time, water has lost its binding role due to changing relationships with it. For water to regain this feature and facilitate social interaction, it must develop a mutually nourishing relationship with the city.

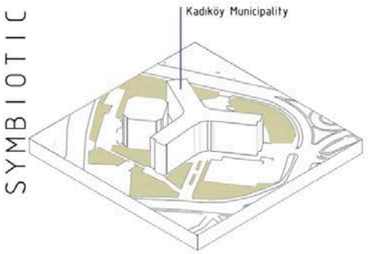
In continuing our conceptual approach, which emphasizes learning from water and enhancing urban sustainability through water socialization, we designed spaces integrated with a mobile application. These spaces focus on sustainability and awareness, adhering to principles such as increasing permeable surfaces and creating water-friendly borders.

## BLUE-GREEN RELATION AND URBAN LOOP



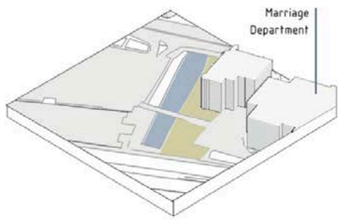

## DISSECTION OF THE ELEMENTS THAT FORM THE CITY IN KADIKOY IN TERMS OF SYMBIOTIC RELATIONSHIPS

SYMBIOTIC



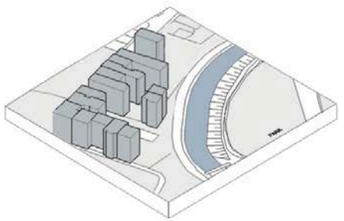

SEMI PUBLIC SPACES --- OPEN SPACES

The green areas of municipal buildings, which are semi-open public spaces, are areas that are not accessible to people in daily use as they are closed areas.




WATER --- GREEN AREAS

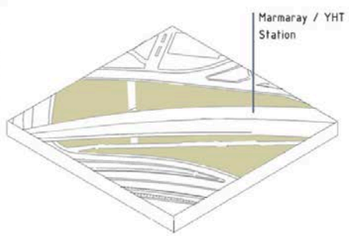
The water systems that could not be sufficient for the rapidly increasing urbanization caused some malfunctions and started to cause the present stench of Kurbagalıdere. As a result, the reclamation of the stream was decided and the huge concrete, which was the reason for the separation of green and blue, was filled into the stream bed and its shores.



WATER --- UNCONTROLLED URBANIZATION

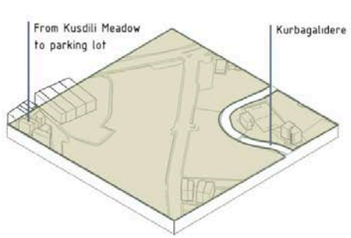
Water is a natural element that cannot be controlled due to the fact that our country does not have a good infrastructure system. While the natural stream in Kurbağalıdere should have been the source of life for Kadıkoy, it was stuck in concrete and could not fulfill its duties.

SOCIALIZATION



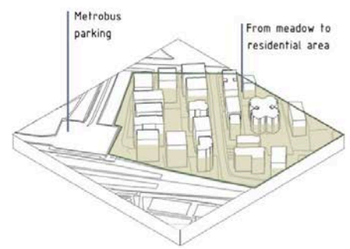

CARWAYS --- PEDESTRIAN ACCESIBILITY

The damaged open area settlements in Söğütlüçeşme affect people mostly in terms of accessibility. It is a problem for the city dwellers, who are on the move every day, to find their way in the areas left over from the vehicle roads.




CULTURAL HERITAGE --- UNCONTROLLED URBANIZATION

Söğütlüçeşme area is an area where we have difficulties in reading the traces of history concretely and therefore it can be called an area that has become unidentified. Many cultural values have disappeared and become history.




GREEN AREAS --- UNCONTROLLED URBANIZATION

While Söğütlüçeşme was home to many meadows, namely a large green ecosystem, according to history read from Pervititch maps, today this green is reduced to very small areas.

RELATIONS

# LEARN FROM WATER

Stream systems are **hydrological systems** for urban life,
**biological chains** connecting habitat areas and **living corridors** that protect the physical environment health of basins.

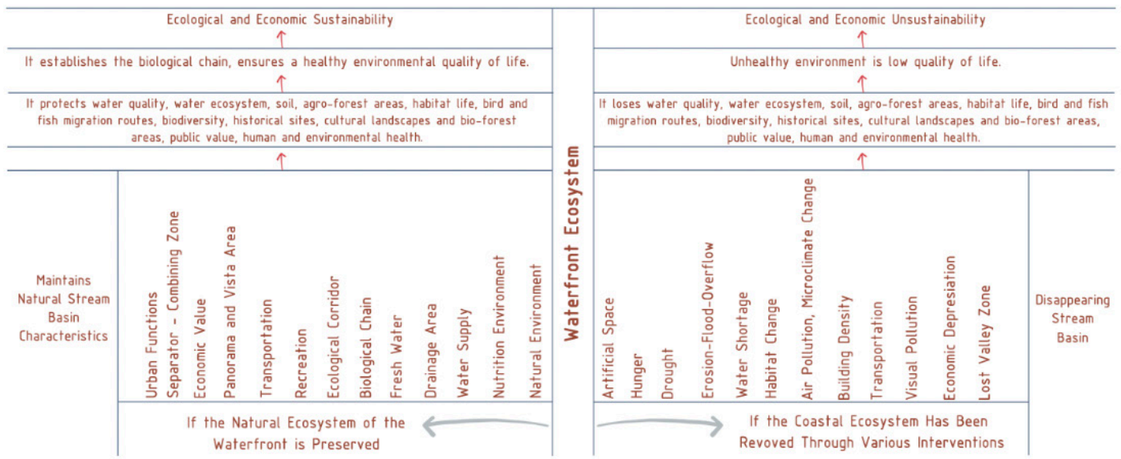
Water

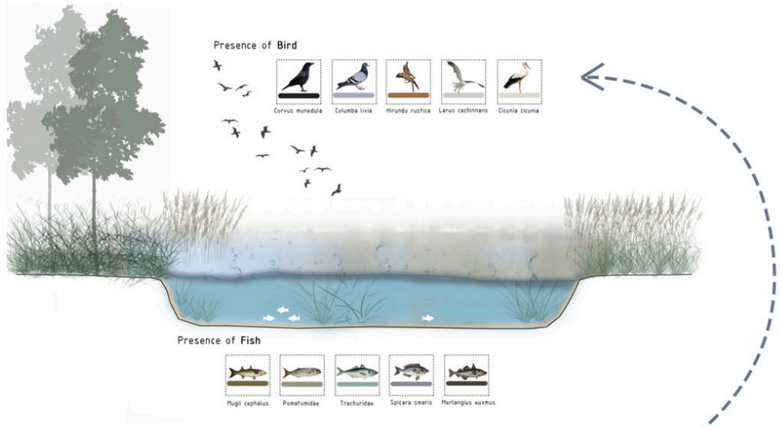
Coastal Habitat

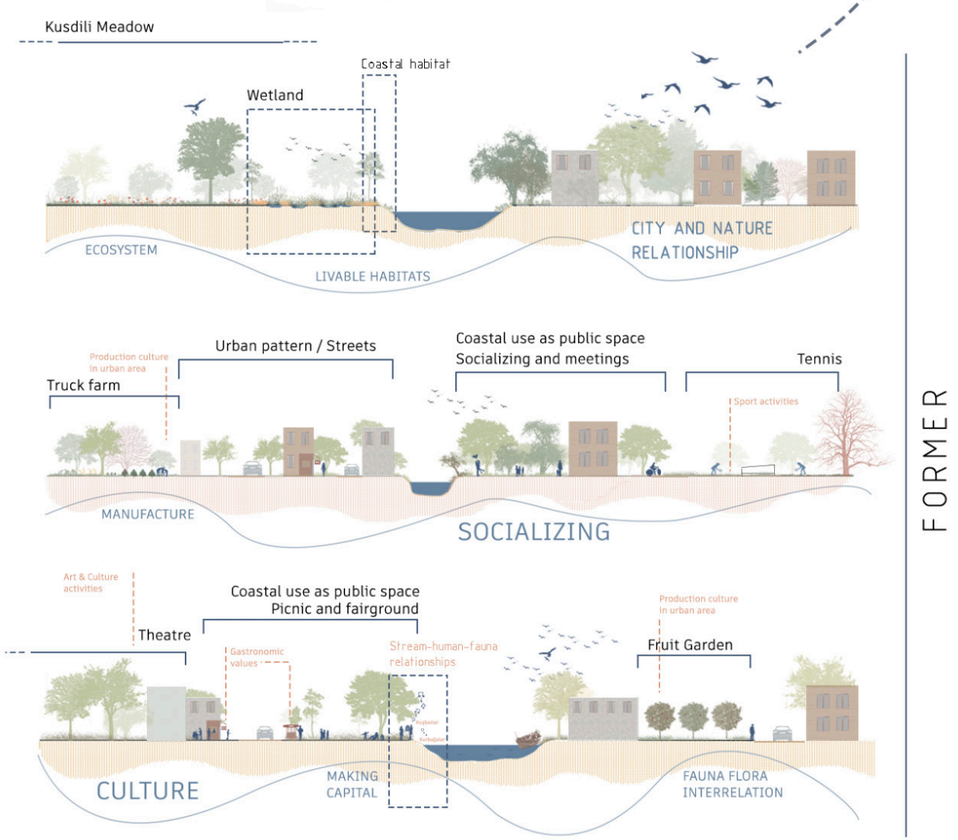
Binding Element

**The Unifying Feature of Water**

## Environmental Impact Characteristics of the Stream Structure





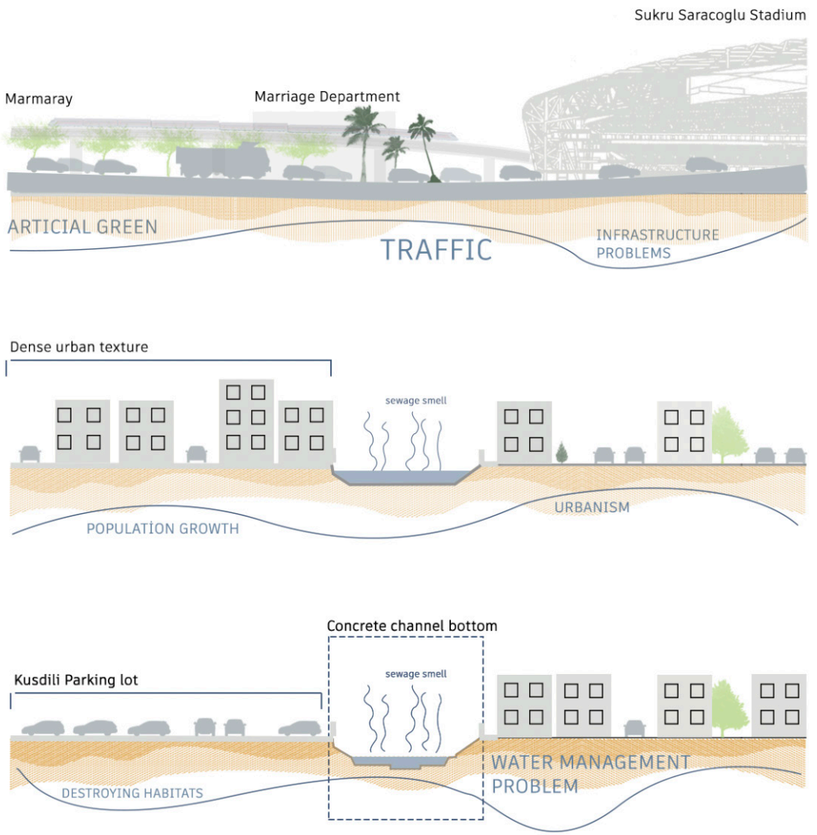




FORMER



The design of Kusdili Meadow includes a ladder system to provide access to terraces, which will regenerate the coastal habitat and enhance human interaction with water. The meadow area, aimed at reviving the character of Kusdili Meadow, includes a rain garden to filter rainwater collected from the city, allowing it to complete its atmospheric cycle and reach the stream.

For system continuity, the area was planned to serve as a common and stakeholder space. Efforts were made to design spaces catering to stakeholder needs and to increase permeable surfaces in these areas. Ecological niches with wildflowers, which hold significant historical value for the meadows, are positioned in the station area to allow flora and fauna to find habitats again. A feature was designed to allow users to earn points through games at kiosks located at the exits of these niches, which can be used in the exhibition unit. The parking area was restructured with permeable flooring, and a waiting and resting area was created near the river line.




TODAY

Aim

To **redefine the relationships** by giving water a new and **sustainable** identity with **ecological** and holistic interventions that we will bring by taking advantage of **past experiences** of the **sociality** lost by wrong interventions.

## 1

Restoring coastal habitats and ensuring **coastal continuity** and sustainability

- Ensuring the **coastal continuity**
- Identification of plant species in the area to create a **riparian zone**
- To ensure that **flora and fauna** elements find a living space in the area

AQUATIC HABITAT NESTING AREA

WATER THERAPHY STATION

ECOLOGICAL NICHE

## 2

To restore the **binding feature** of water to the city

- Diversification of areas with a uniform landscape character in the area according to their **topographic potential**
- Defining **recreational functions** by creating **coastal habitat** around the water
- Restoring the completed **atmospheric cycle** that exists in the **water's memory**
- Use of water in public spaces with **ecological solutions**

THEMATIC HERBAL GARDENS

Seasonal activity and social area **functions developed in the past around the water**, adapting to today's conditions

WATER FRIENDLY BORDERS

LEADING WATER LINE

## 3

To ensure that users play a role in contributing to **urban sustainability**

- Defining common usage areas that appeal to **different users**
- Defining areas where **groups of special interests** can come together
- Planning **awareness activities** about water

VISTA POINT TERRACE

CONTINUOUS COAST PROMENADE

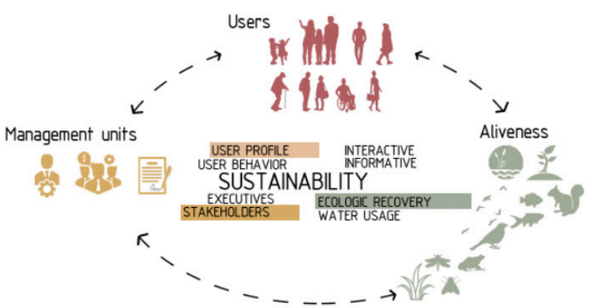
INTERACTIVE INFORMATIVE HABITAT

## 4

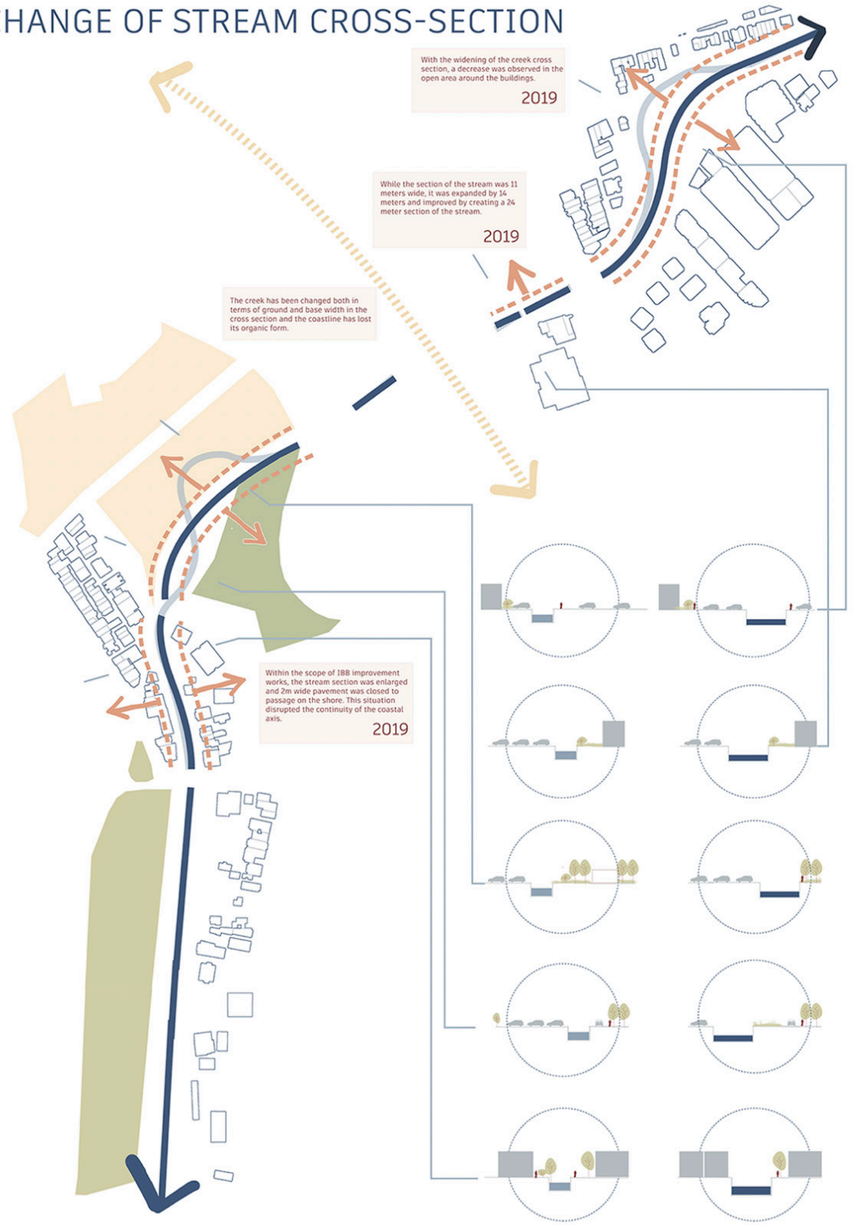
Managing the field in cooperation with **partners and stakeholders** for the continuity of the system and ensuring economic sustainability

- Determining and managing the stakeholders and their responsibilities in **maintenance and management**
- Positioning units that will contribute to **economic sustainability**
- Long term usage and finance of existing fundings
- Integrating into planning policies

EKONIT

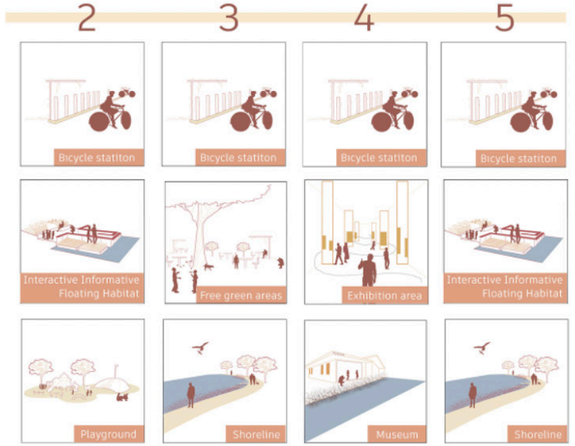


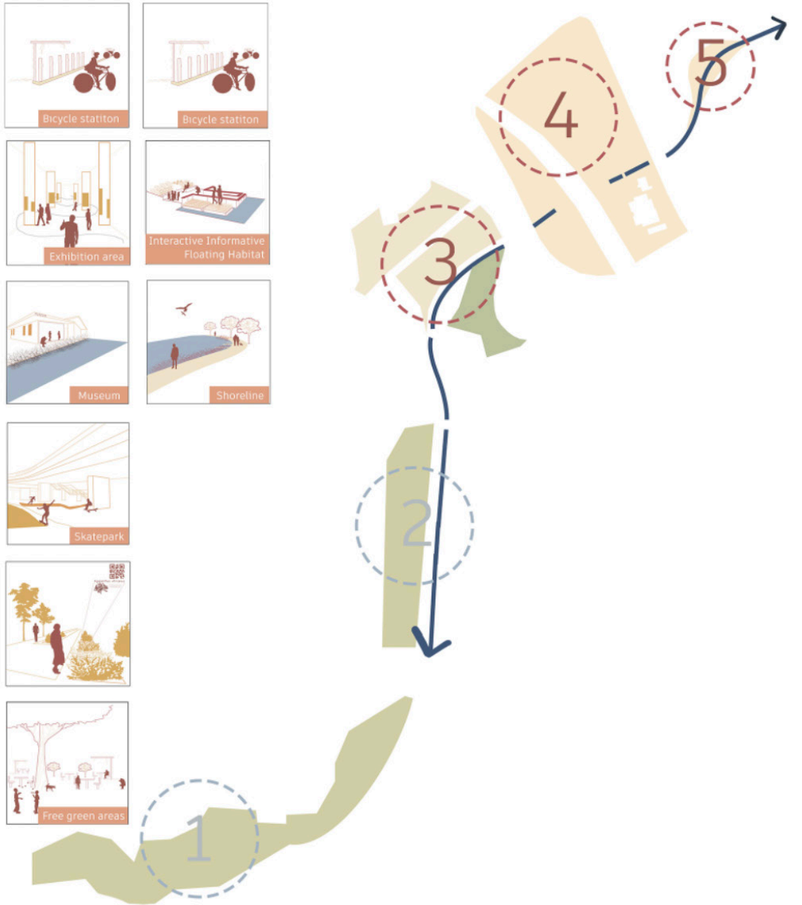
# CHANGE OF STREAM CROSS-SECTION



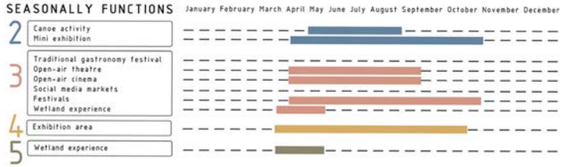



# FUNCTIONS DIAGRAM and PROGRAM



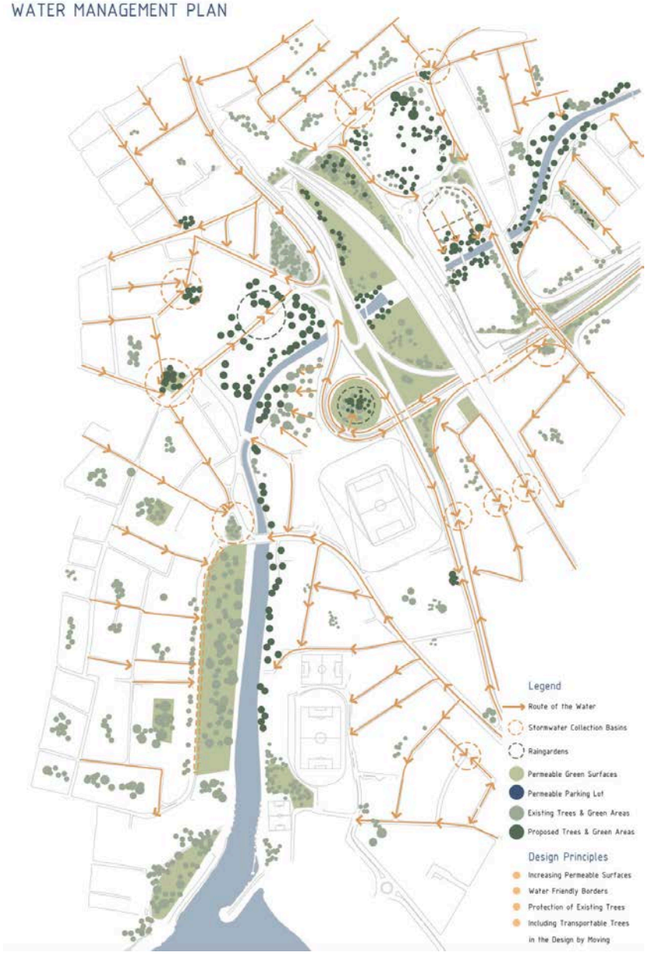



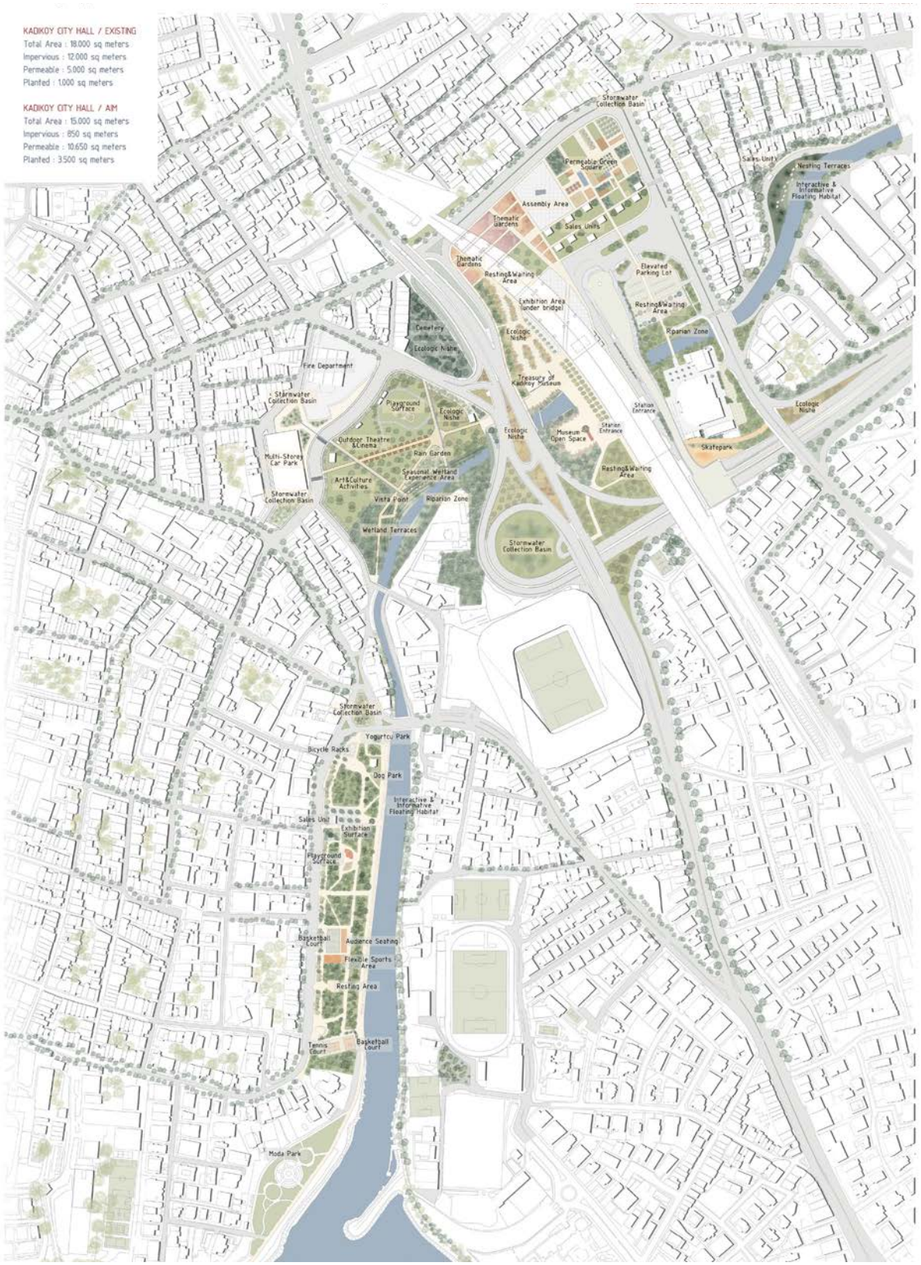

**SEASONALLY FUNCTIONS**



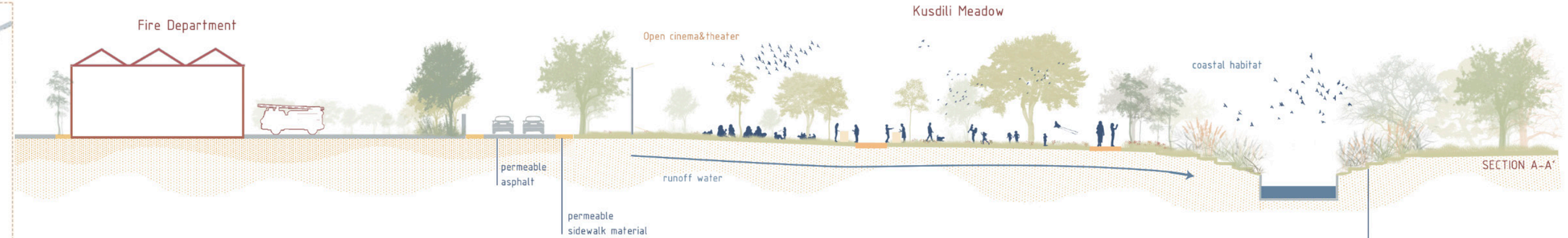

**PERMANENT FUNCTIONS**

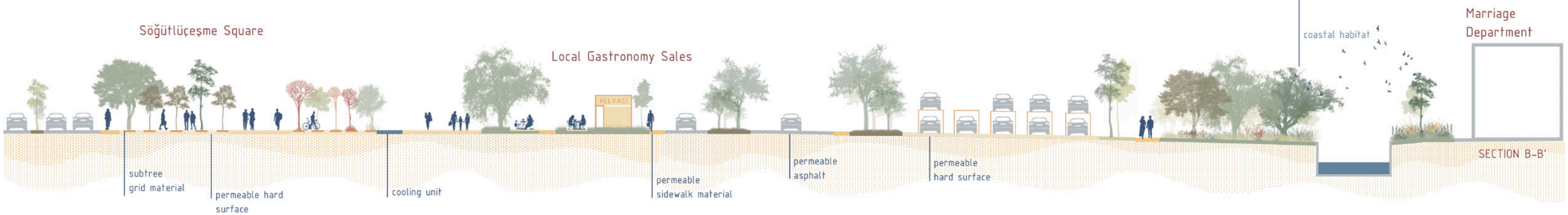
## WATER MANAGEMENT PLAN

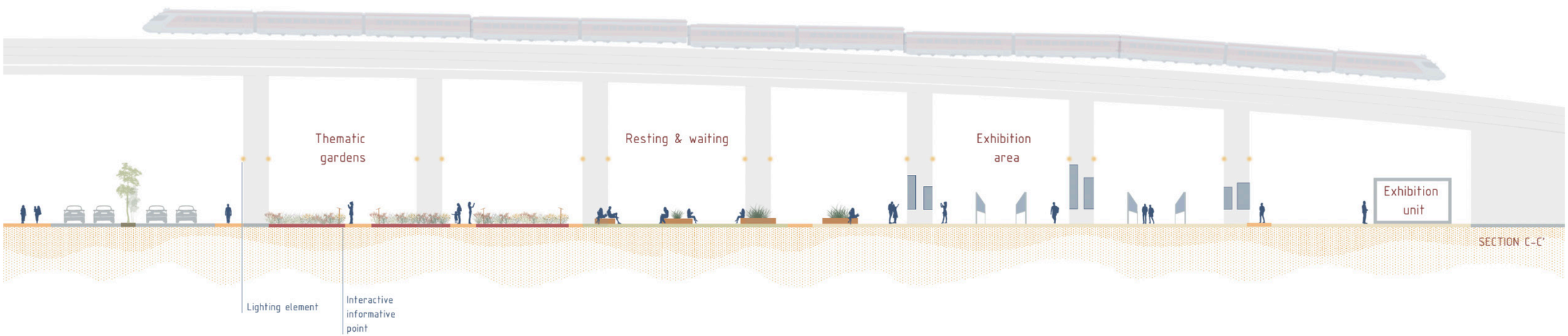




A
A'
B
B'
C
C'


Fire Department
Kusdili Meadow
Open cinema&theater
coastal habitat
permeable asphalt
permeable sidewalk material
runoff water
SECTION A-A'
riparian zone


Söğütlüçeşme Square
Local Gastronomy Sales
HELVACI
Marriage Department
coastal habitat
subtree grid material
permeable hard surface
cooling unit
permeable sidewalk material
permeable asphalt
permeable hard surface
SECTION B-B'

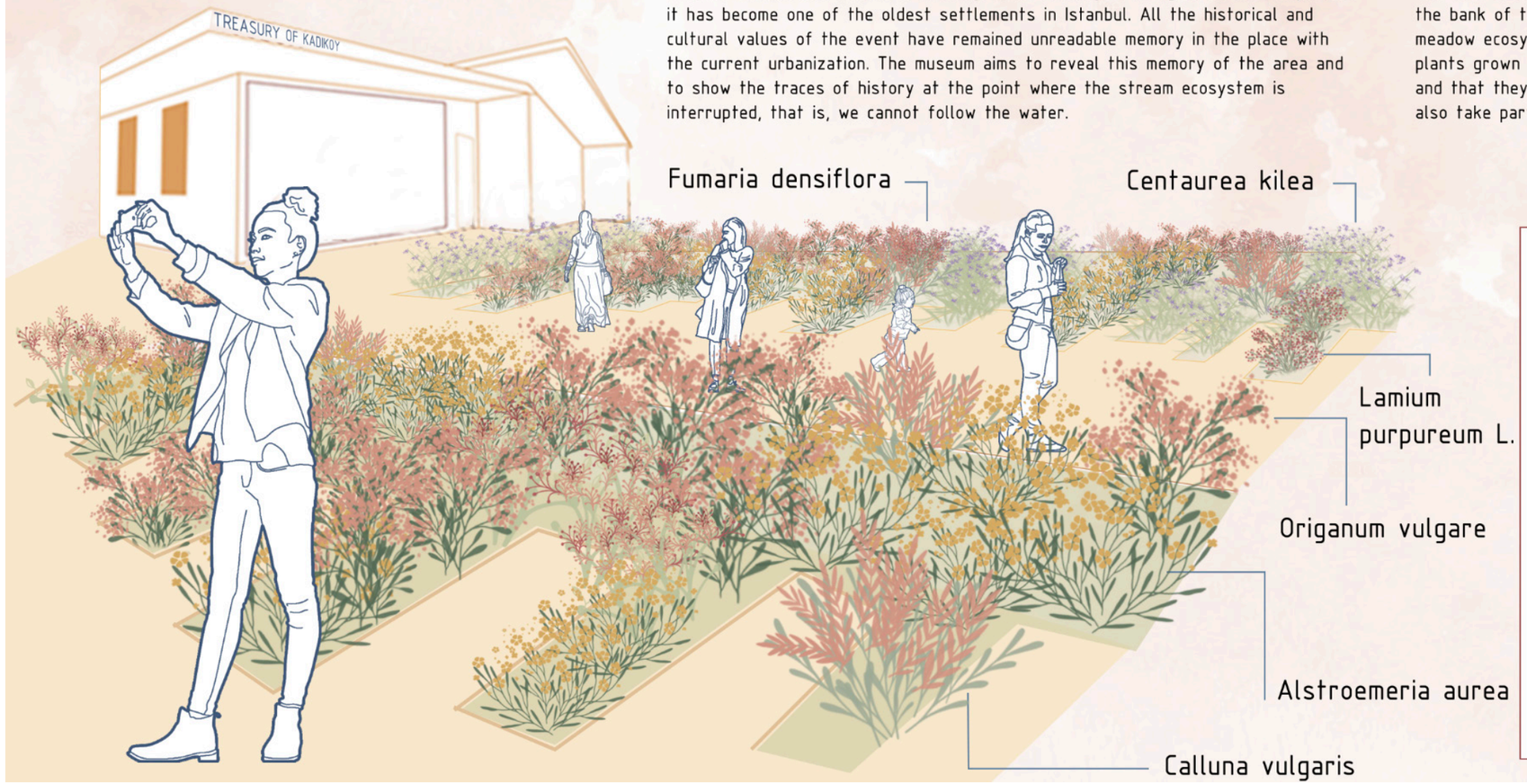

Thematic gardens
Resting & waiting
Exhibition area
Exhibition unit
SECTION C-C'
Lighting element
Interactive informative point

## TREASURY OF KADIKOY MUSEUM

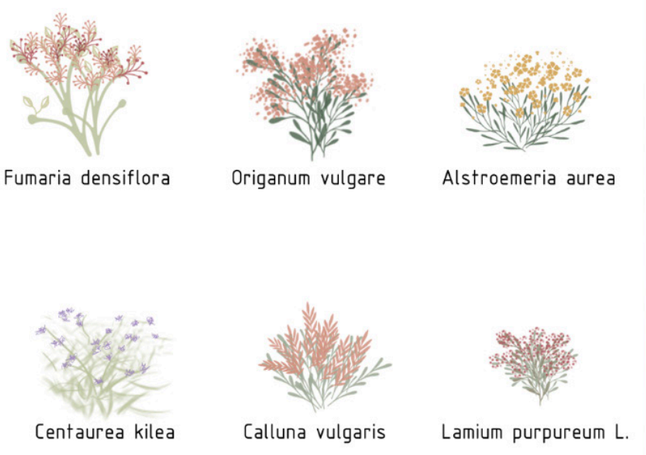
The Treasury of Kadıköy museum is home to many hidden intangible and concrete cultural and natural values of Kadıköy. Since Kadıköy is a region on the Bosphorus, it has become one of the oldest settlements in Istanbul. All the historical and cultural values of the event have remained unreadable memory in the place with the current urbanization. The museum aims to reveal this memory of the area and to show the traces of history at the point where the stream ecosystem is interrupted, that is, we cannot follow the water.

## TREASURY OF KADIKOY MUSEUM GARDEN AS ECOLOGICAL VALUE

The ecosystems that develop around the water bring with them different landscape characters. Thematic gardens that will strengthen the memory of the area being on the bank of the stream and the water following the topography to create the meadow ecosystem in this area were proposed. Care was taken to ensure that the plants grown in the gardens are suitable for the local and Bosphorus ecosystem and that they are colorful and fragrant plants that attract birds. These plants also take part in cleaning the water and filtering it before it goes to the stream.



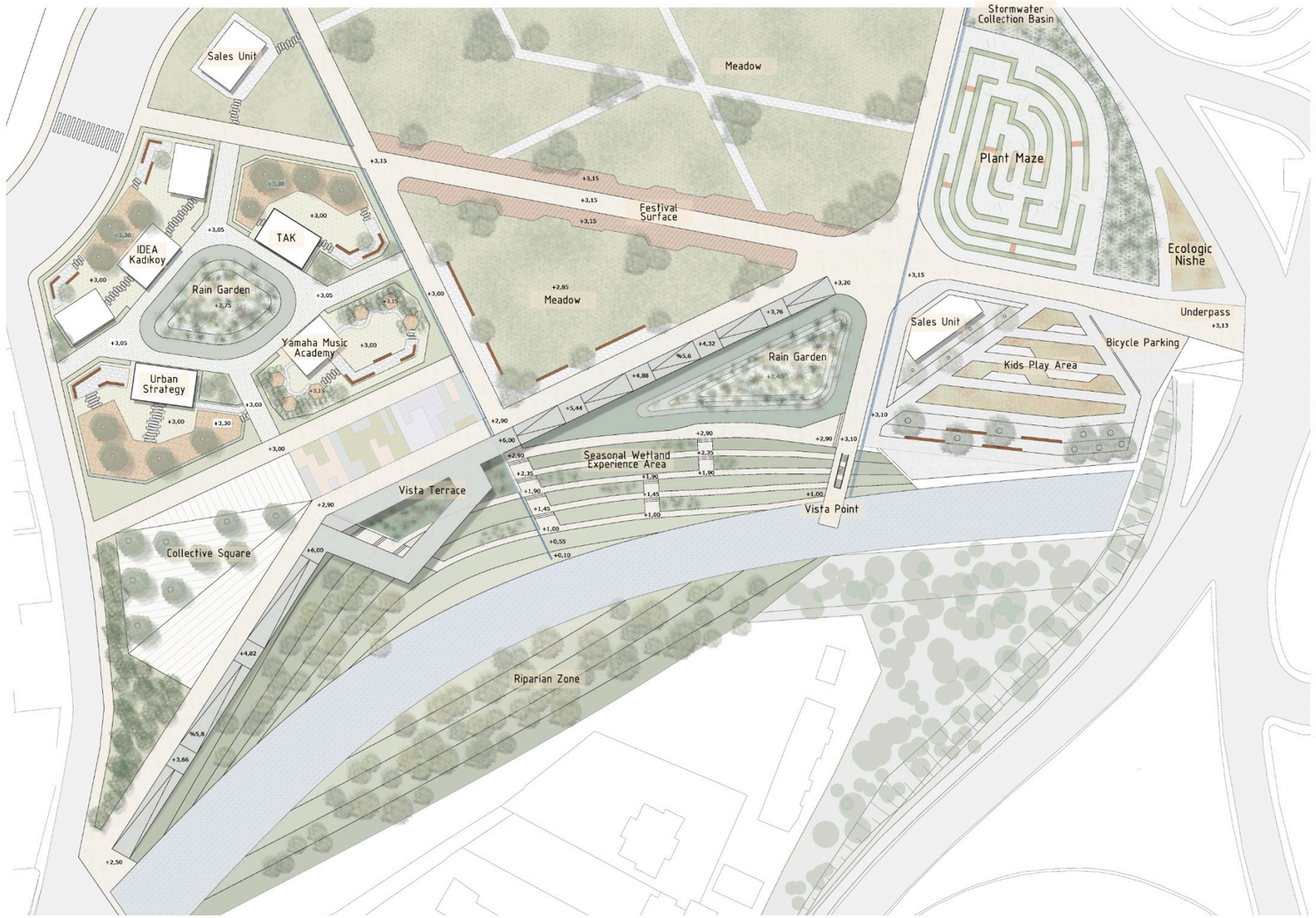

### Meadow Plants

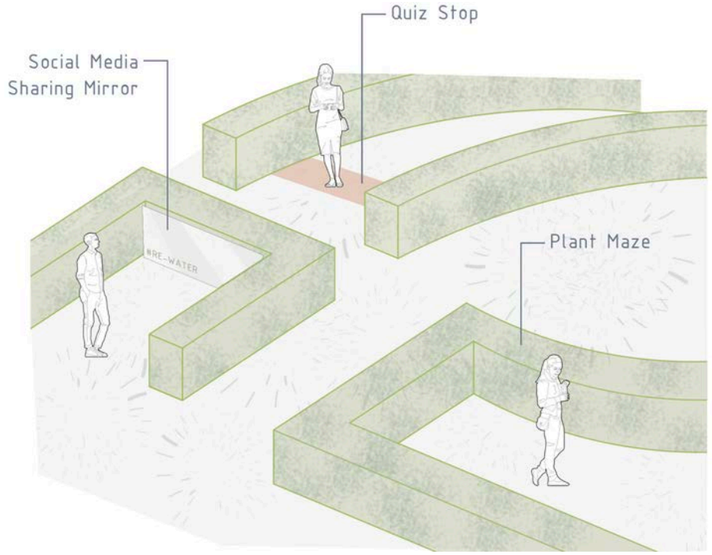


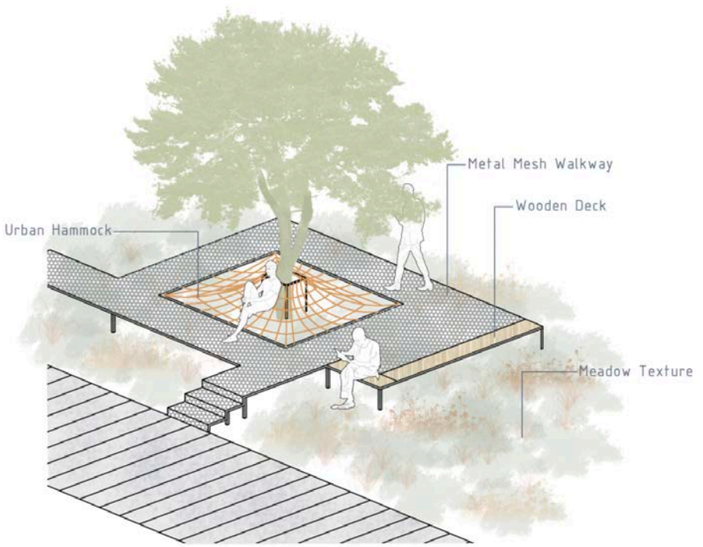
# Re-Water

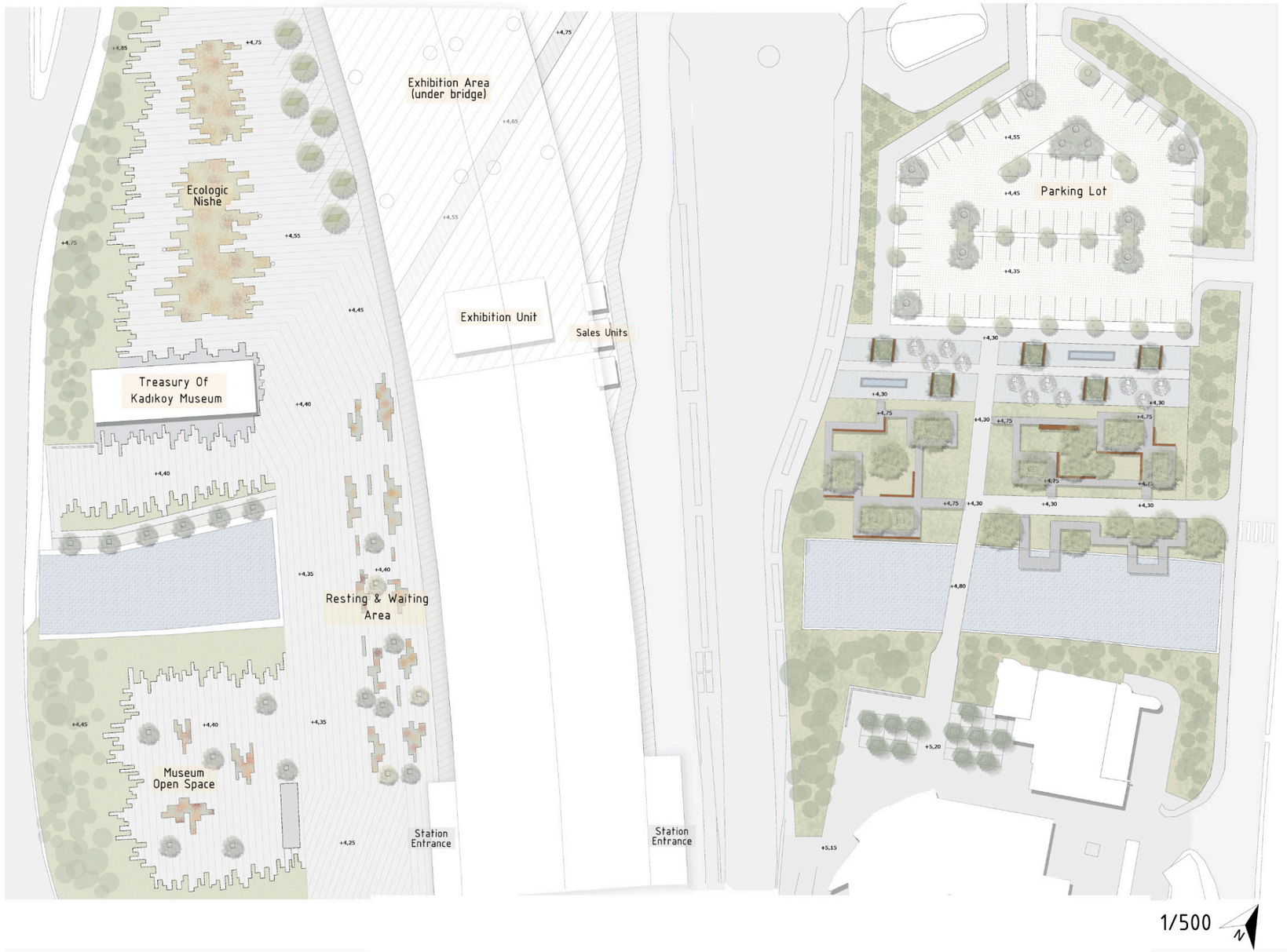
Zehra Betül Doğan

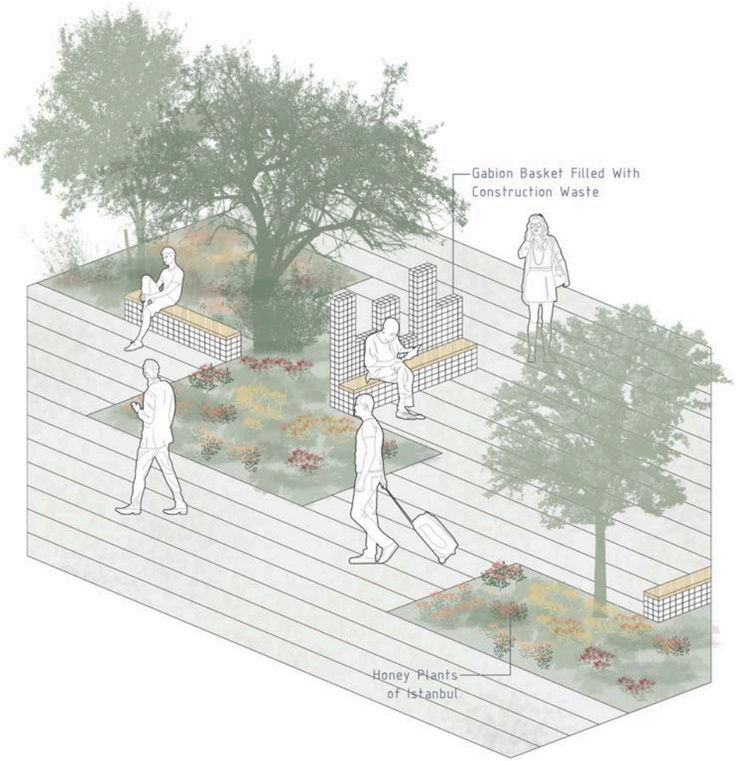
*"Re-Water" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Melih Bozkurt and Res. Assist. Çisem Demirel under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*

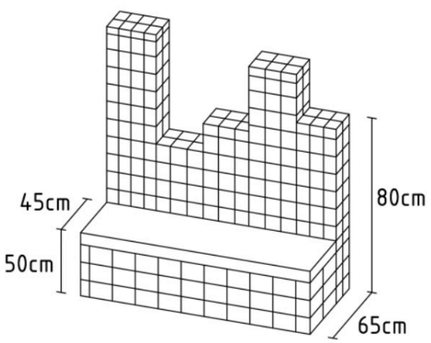


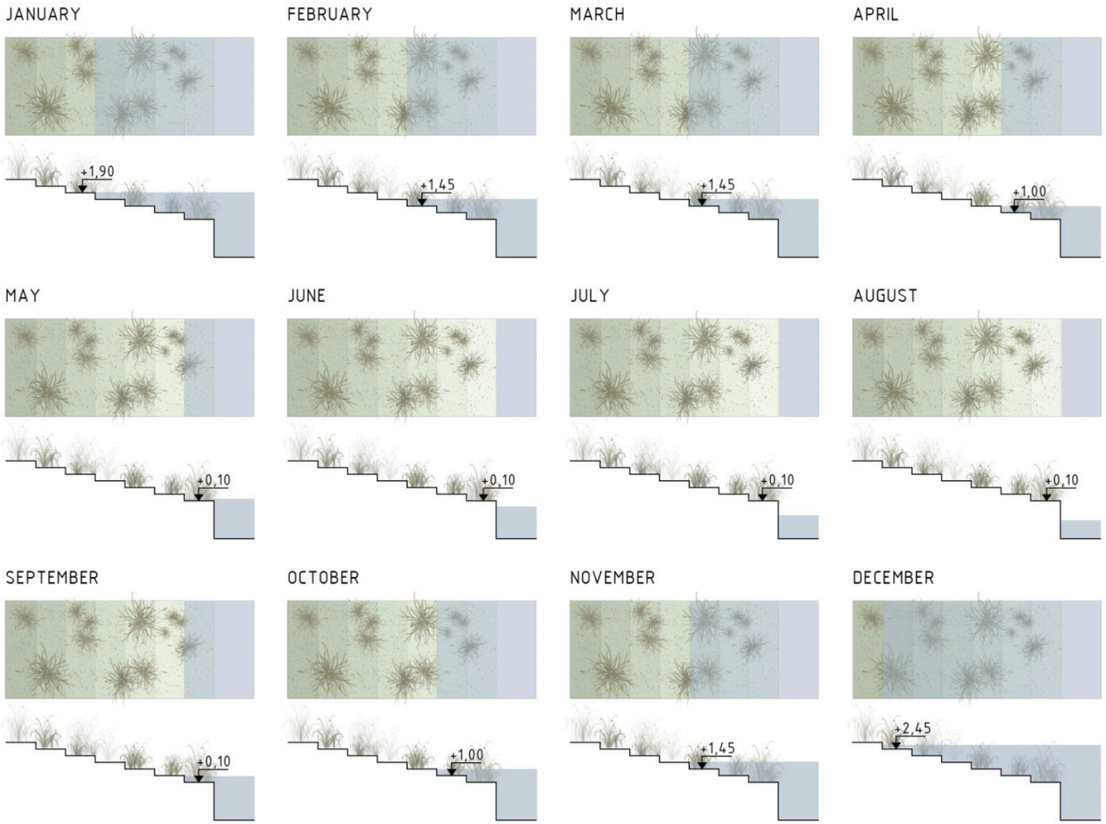




Exhibition Area
(under bridge)
Ecologic
Nishe
Exhibition Unit
Sales Units
Parking Lot
Treasury Of
Kadıkoy Museum
Resting & Waiting
Area
Museum
Open Space
Station
Entrance
Station
Entrance
1/500

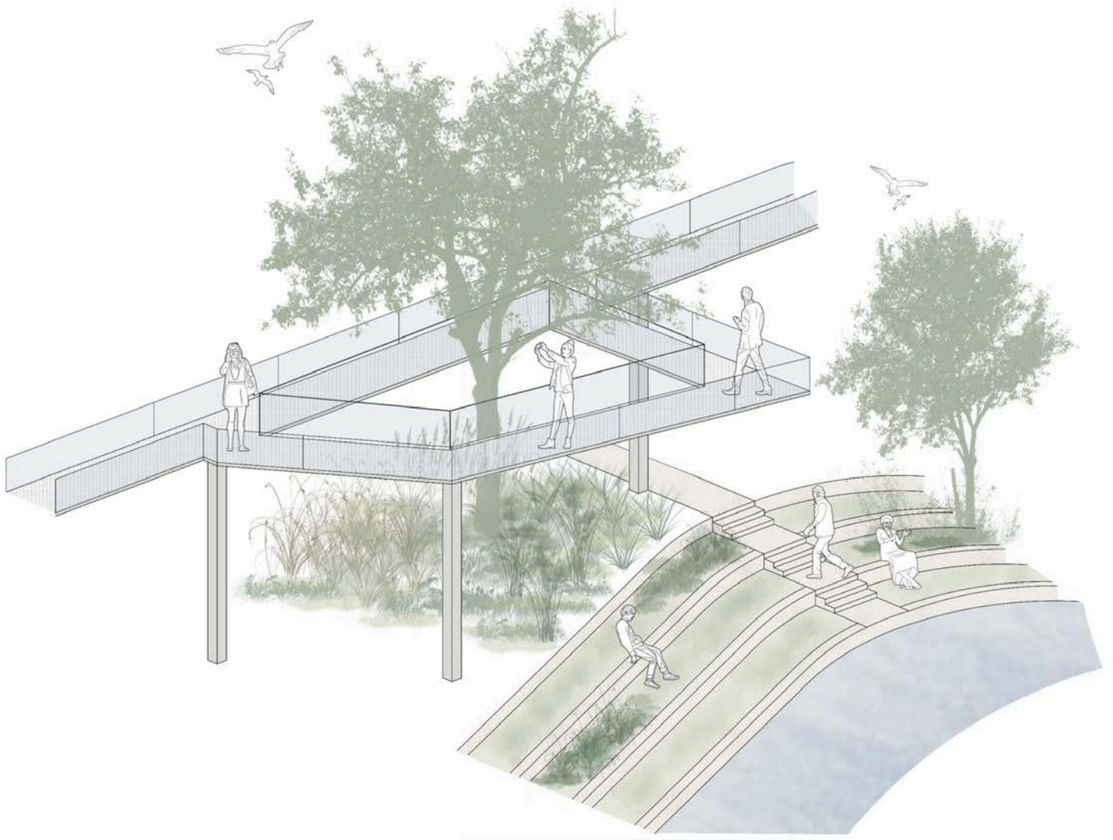

Gabion Basket Filled With
Construction Waste
Honey Plants
of Istanbul


45cm
50cm
80cm
65cm

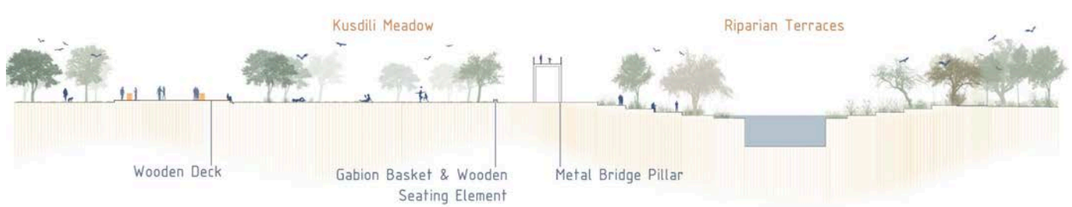
## WATER LEVEL CHANGE BY MONTHS

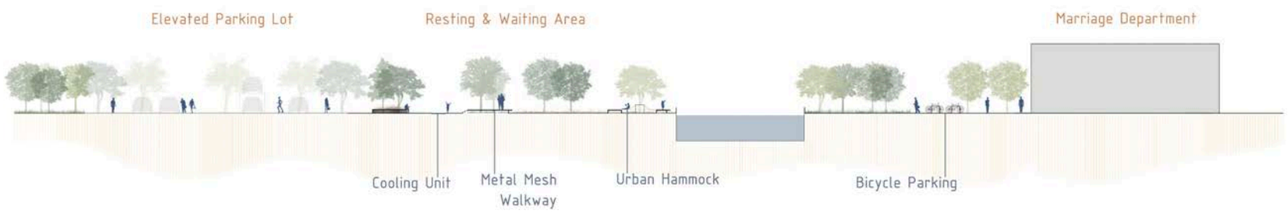








# Re-Water

Nuran Kul

*"Re-Water" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Merve Aydınlı under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*

Project, the Söğütlüçeşme region of Kadıköy, one of the oldest historical settlements in Istanbul, is considered. Upper scale analyzes in the region have progressed by holding on to historical readings and inferences, spatial memory and the value of water in the space. By making inferences from the old and new relationship of the region with water, it is emphasized that water is an instructive element in the region and the basis of the ecological cycle in the design of the area.
Aim: To redefine the relationship by giving water a new and sustainable identity with ecological and holistic interventions that we will bring by taking advantage of past experiences of the sociality lost by wrong interventions.

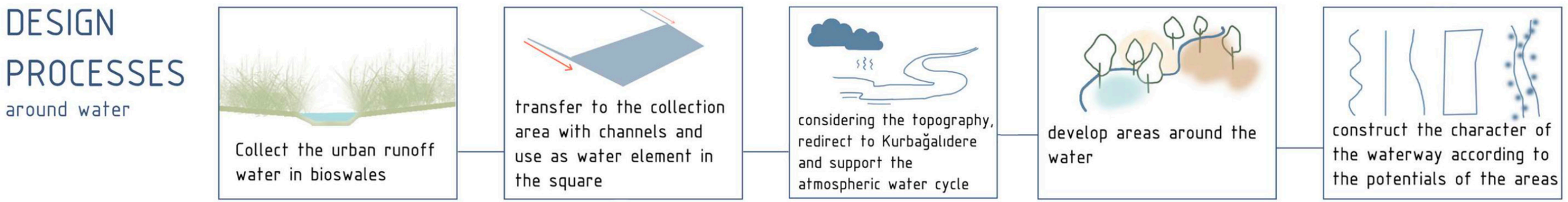
Goals:
1. Restoring coastal habitats and ensuring coastal continuity and sustainability

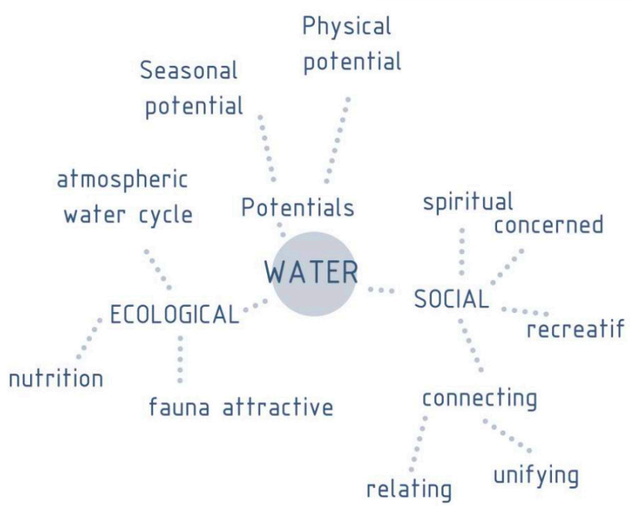
2. To restore the binding property of water to the city

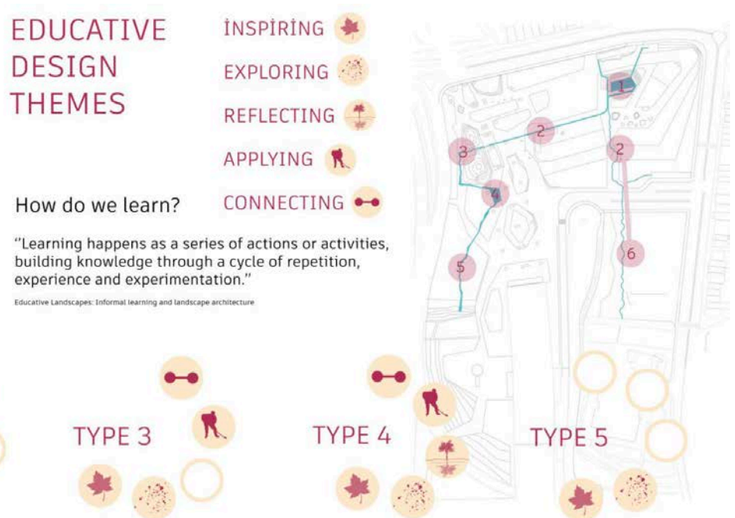
3. To enable users to play a role in contributing to urban sustainability.

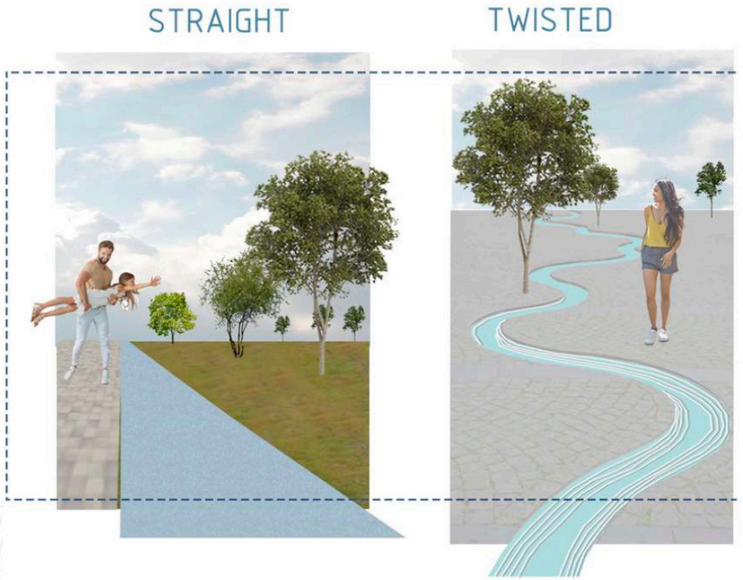
4. Managing the field in cooperation with partners and stakeholders in order to ensure the continuity of the system and economic sustainability.

1/2000 upper scale decisions:
- Creating nesting areas on the shore
- Creating rain gardens in the right locations to filter rainwater and ultimately return the water to the stream
- Creating water-friendly borders
- Contributing to the ecological value of the area with different landscape characters
- Creating a continuous shoreline
- Creating informative and interactive coastal habitats
- To determine points in order to provide a participatory role in the field and to support it digitally
- Determine the management scheme of the area
- Rearranging paths for accessibility

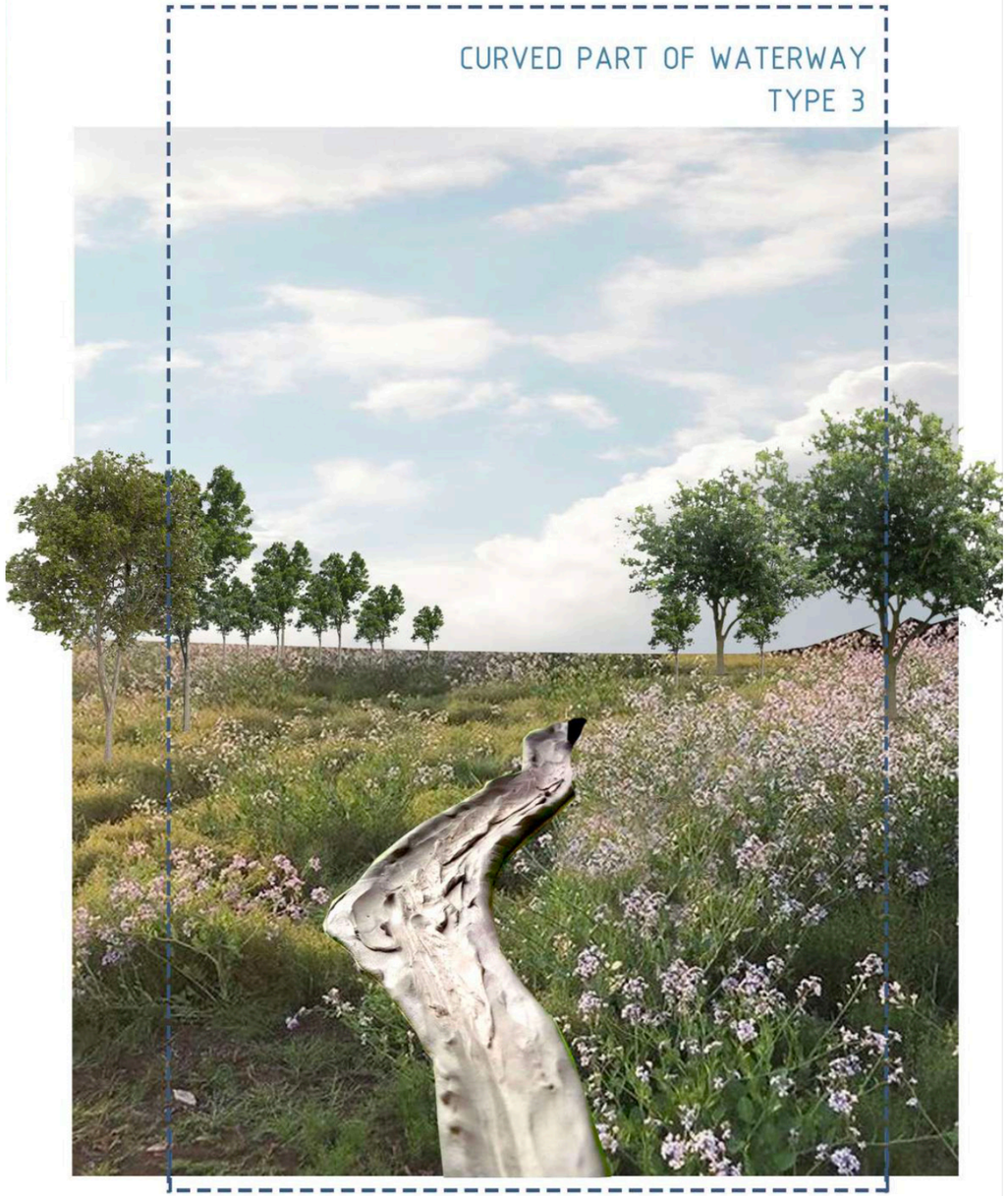





STRAIGHT
TWISTED

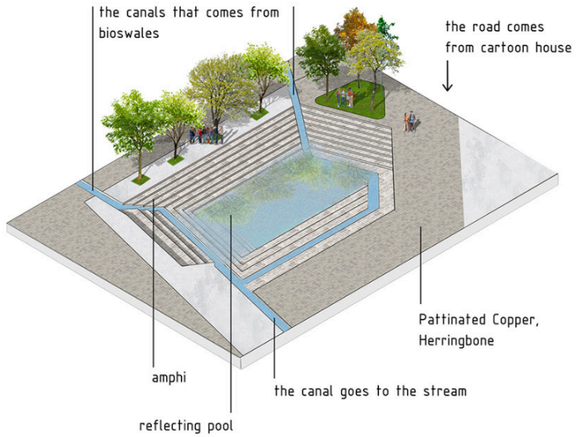
STEPS
NATURAL


CURVED PART OF WATERWAY
TYPE 3

# SEASONAL CHANGES IN WATER COLLECTING AREA

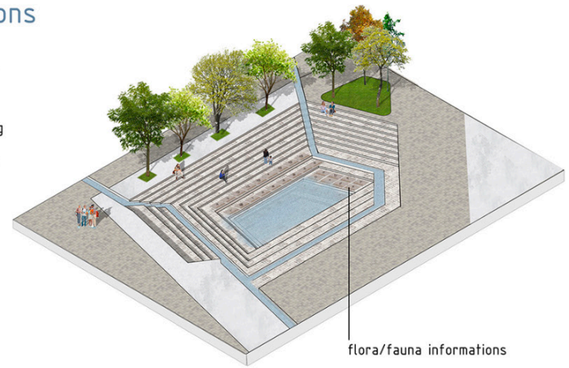
## Wet season

The rain water in the city is filtered and collected in a clean way in the rain gardens to the water collection area in the square. While at the maximum elevation, the information inside the pool is not read, the pool is seen as reflective.



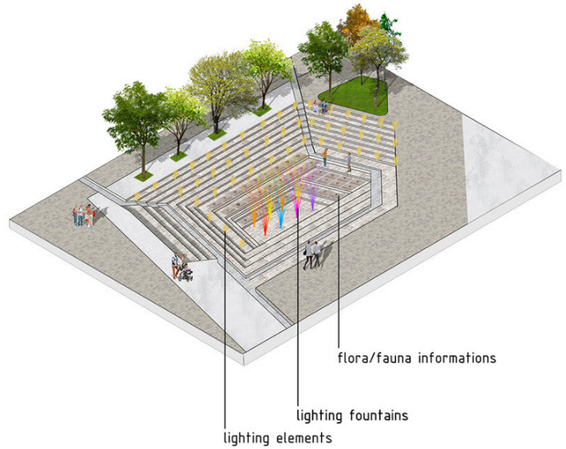

## Interim seasons

In spring, the pool is filled to a certain height and a flora and fauna information is visible. According to the changing water levels, the flora and fauna information of different seasons are revealed in their own season. In this way, the pool is not only a place of experience, but also turns into an ecological teaching through water.

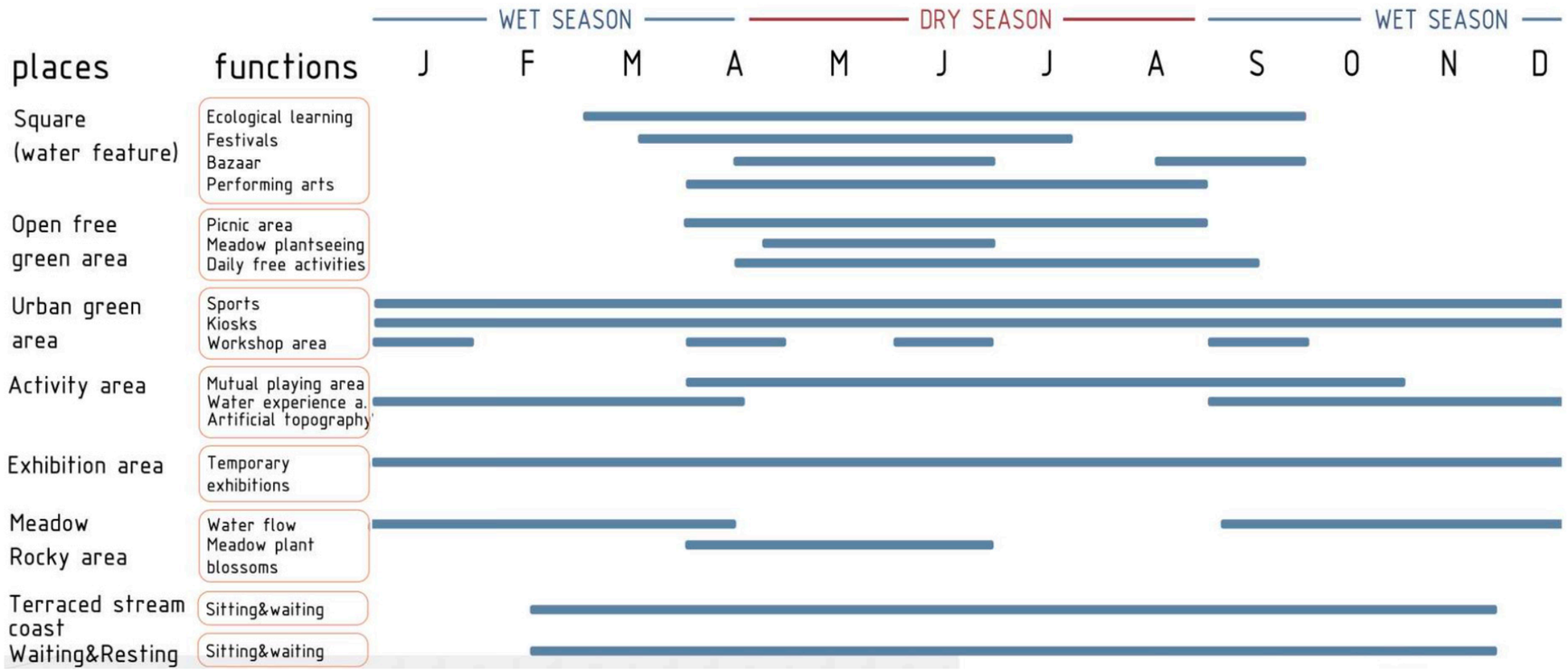


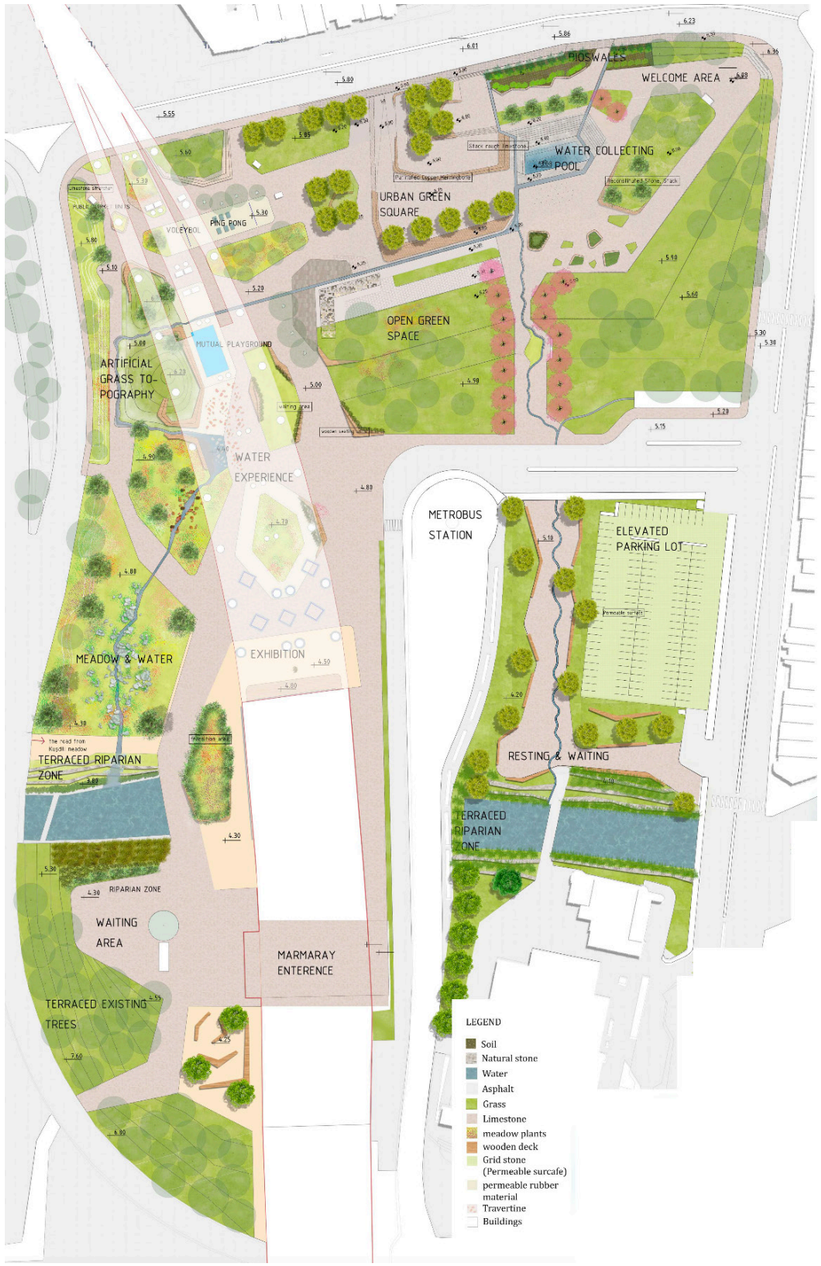

## Dry season

During the dry months, the flora and fauna information is fully legible. When there is no water in the pool, the space is an opportunity for performance artists. At night, it creates interesting and safe experience areas in the city square with lighting.



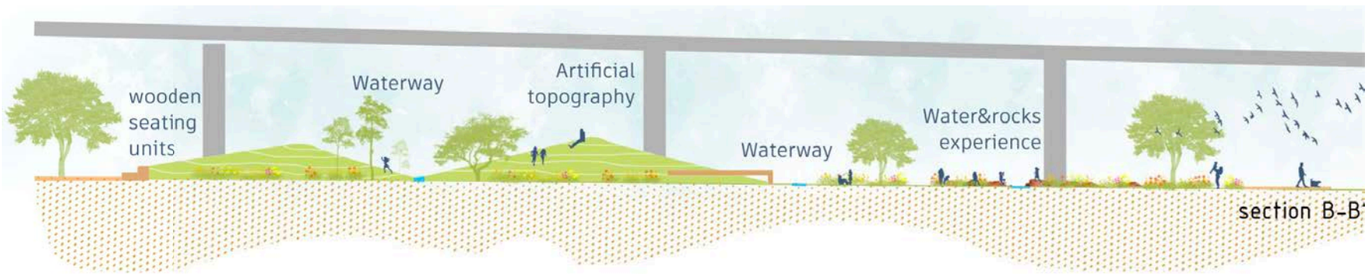

## WATER MANAGEMENT PLAN



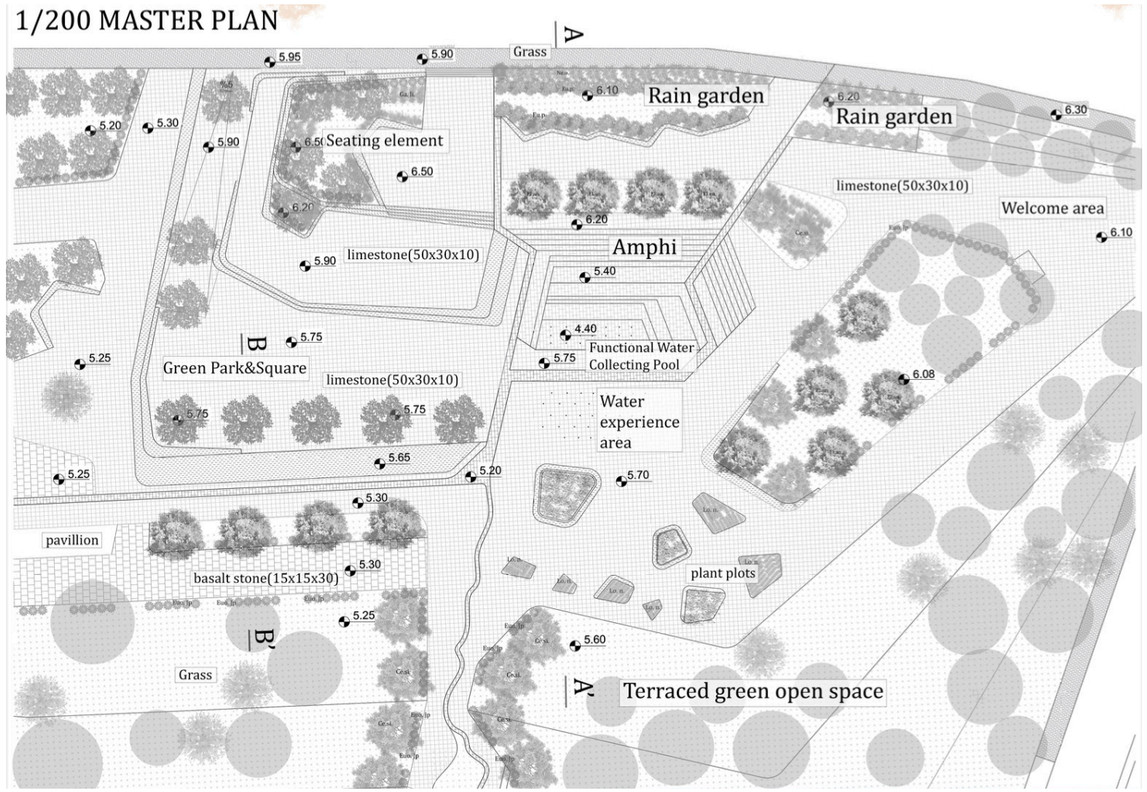

BIOSWALES
WELCOME AREA
WATER COLLECTING POOL
URBAN GREEN SQUARE
VOLEYBOL
PING PONG
OPEN GREEN SPACE
MUTUAL PLAYGROUND
ARTIFICIAL GRASS TO-POGRAPHY
WATER EXPERIENCE
METROBUS STATION
ELEVATED PARKING LOT
EXHIBITION
MEADOW & WATER
TERRACED RIPARIAN ZONE
RESTING & WAITING
TERRACED RIPARIAN ZONE
RIPARIAN ZONE
WAITING AREA
MARMARAY ENTERENCE
TERRACED EXISTING TREES
LEGEND
Soil
Natural stone
Water
Asphalt
Grass
Limestone
meadow plants
wooden deck
Grid stone (Permeable surcafe)
permeable rubber material
Travertine
Buildings

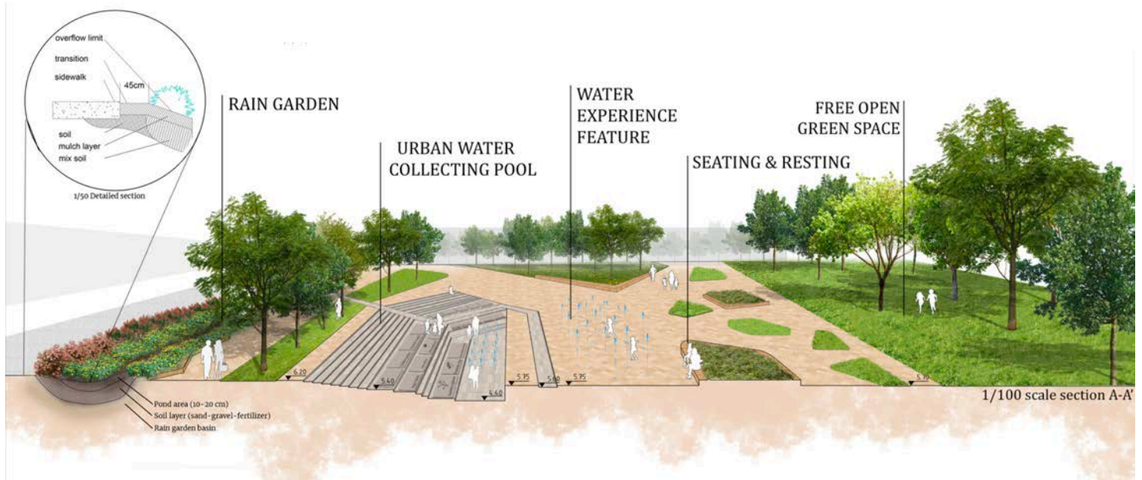
Pavillion
Education
section D-D'

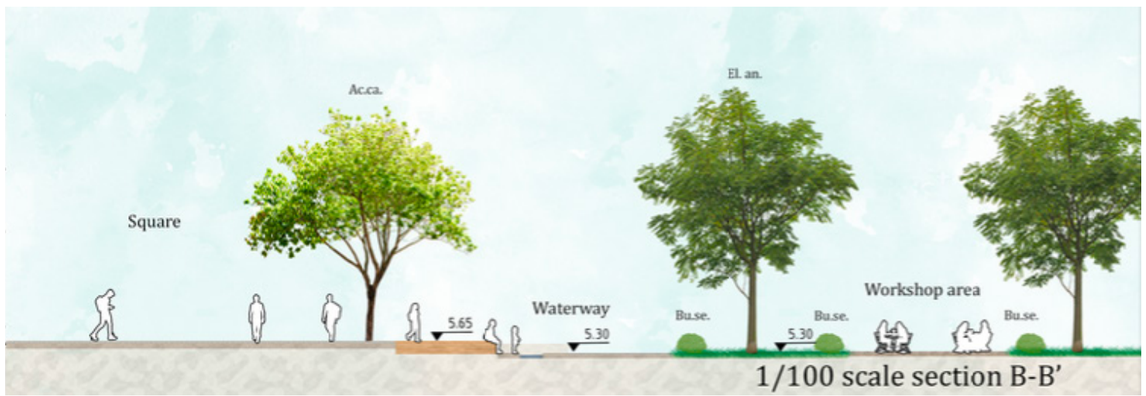
under bridge
experience
section A-A'
Water collecting


wooden seating units
Waterway
Artificial topography
Waterway
Water&rocks experience
section B-B'

Waterway
section C-C'



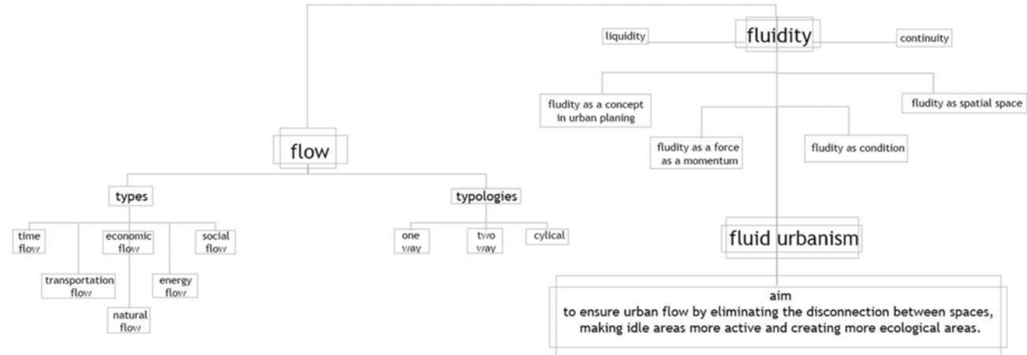

| SYMBOL | CODE | LATIN NAMES | TURKISH NAME | DIAMETER | HEIGHT | QUANTITY |
|---|---|---|---|---|---|---|
| Trees | | | | | | |
| | | | | | | Existing habitat |
| | El. an. | Eleagnus angustifolia L. | Kuş iğdesi | 5 - 7 m | 5 - 7 m | 13 |
| | Ac. ca. | Acer campestre | Ova akçaağacı | 3 - 4 m | 3 - 20 m | 10 |
| | Ce.si. | Cercis siliquastrum | | 1 - 1.5 m | 7 - 15 m | 13 |
| | Ac.ca. | Acer campestre | | 5-7 m | 10-15 m | 14 |

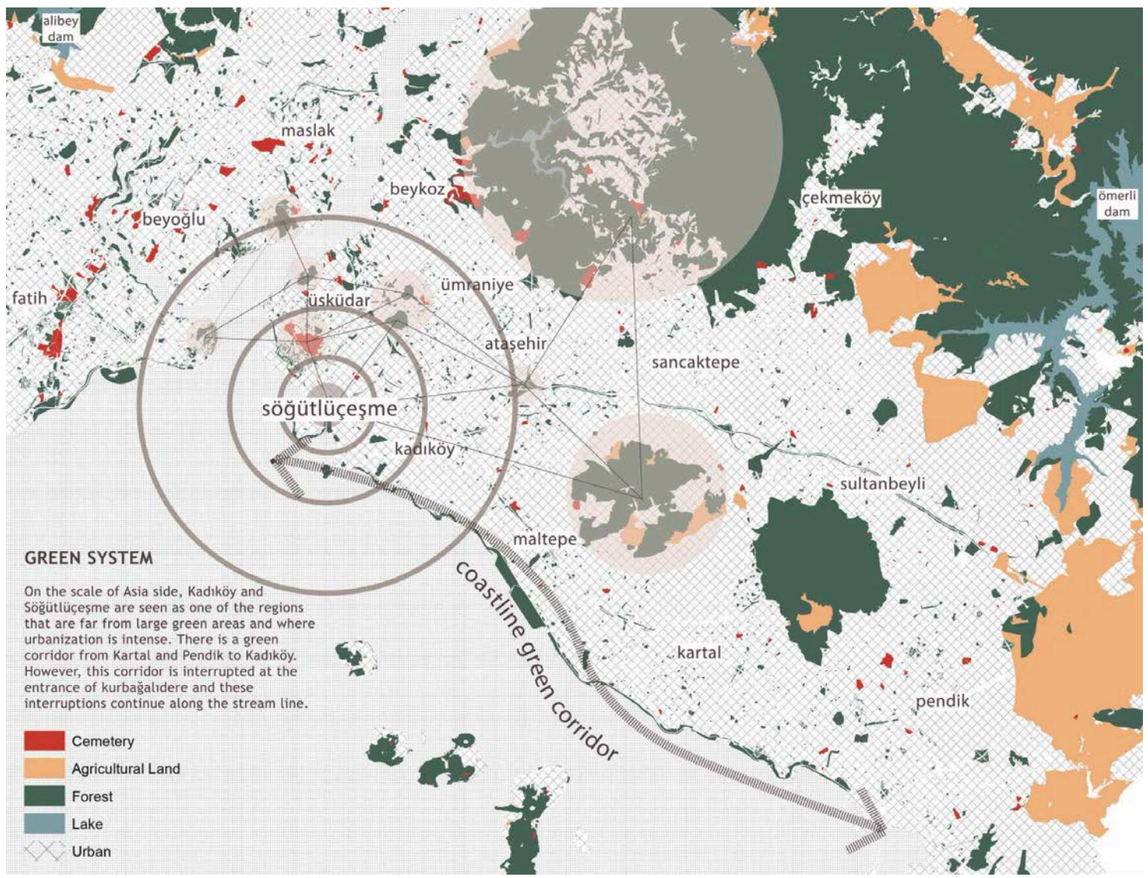
| SYMBOL | CODE | LATIN NAMES | TURKISH NAME | DIAMETER | HEIGHT | QUANTITY |
|---|---|---|---|---|---|---|
| Shrubs | | | | | | |
| | Eu.p. | Euryops pectinatus | Sarı papatya çalısı | 1 - 2 m | 1 - 2 m | 52 |
| | Py. co. | Nerium oleander | Zakkum | 2.5 - 3 m | 2.5 - 3 m | 4 |
| | Euo. Jp | Eonymus japonica | Altuni taflan | 2.5 - 4 m | 2.5 - 4 m | 205 |
| | Lo. n. | Lonicera nitida | Çalı hanımeli | 4 - 6 m | 4 - 6 m | |
| | Ga. li. | Gaura lindheimeri | Gavura çiçeği | 0.9 - 1.5 m | 1-2 m | 14 |
| | Bu.se. | Buxus sempervines | Adi şimşir | 1 - 2 m | 1 - 5 m | 22 |

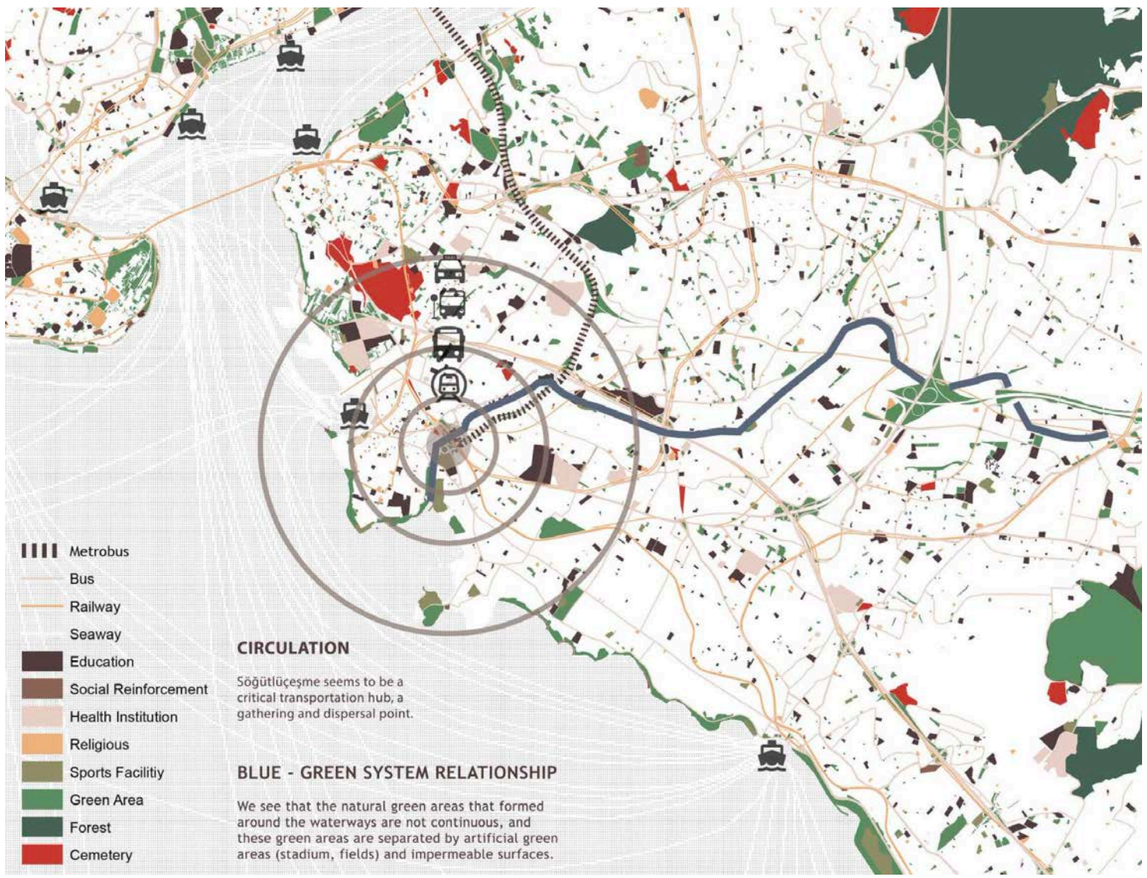
# Let It Flow

Kübranur Akkabak, Sedef Ülkü Yıldırım, Melike Cemre Okuyucu, Saliha Aydoğar

*"Let It Flow" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Melih Bozkurt and Res. Assist. Çisem Demirel under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*
*First part of the project were conducted in a collaboration with parallel studio which carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Merve Aydınlı.*



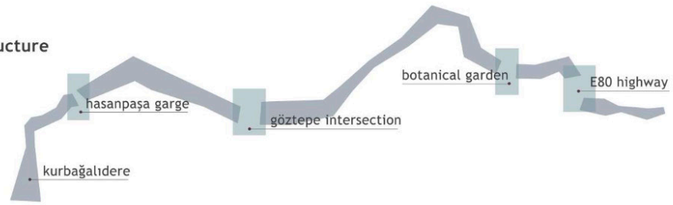



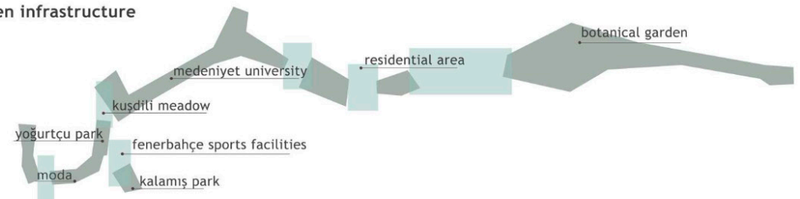
## BLUE - GREEN SYSTEM RELATIONSHIP ON KURBAĞALIDERE

One of the important elements of Kadıköy and Söğütlüçeşme is Kurbağalıdere. The blue - green system along the stream line is divided by various hardscapes. Car parks and intersections are the main factors in dividing this system. It is also necessary to consider social life with the blue-green system. In addition, the main roads and highways that go along with the stream line cause the interruption of social life. While there is vehicle continuity along the stream line, there is no pedestrian continuity. It also has no human water connection.

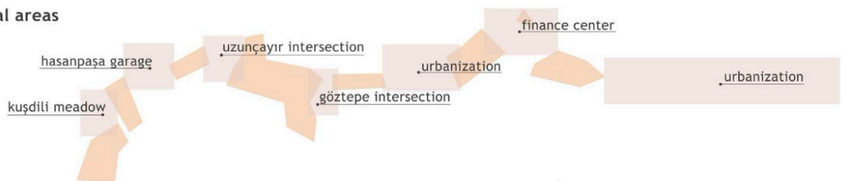
### blue infrastructure

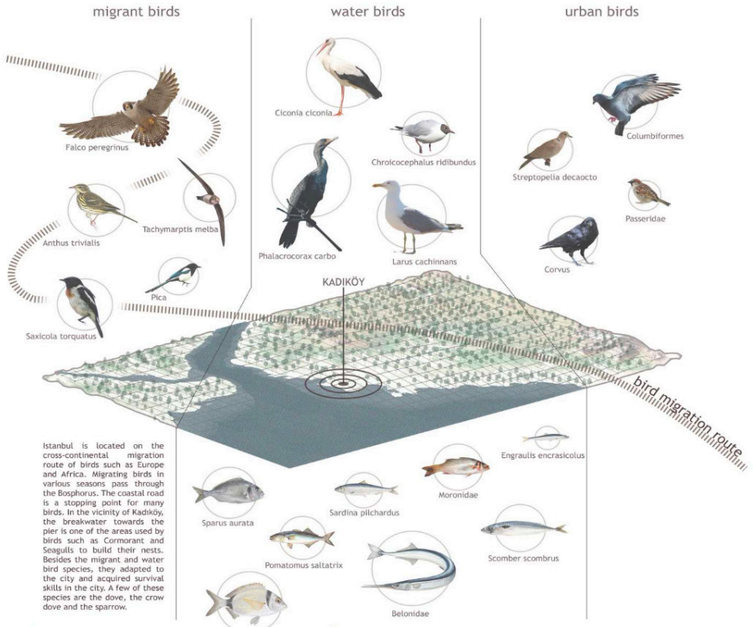


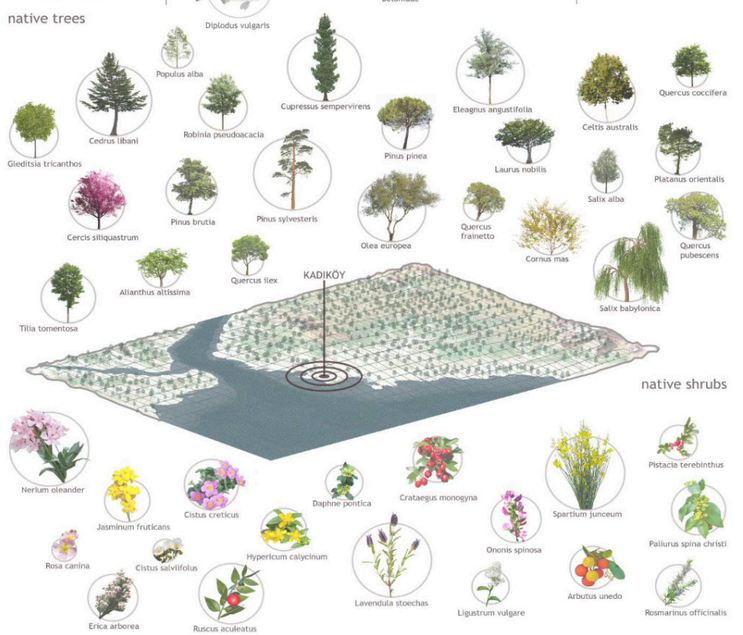

### green infrastructure



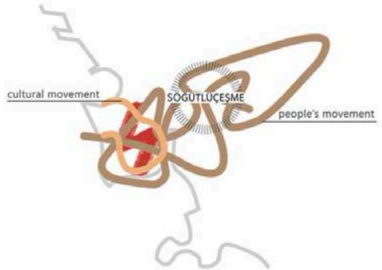

### social areas





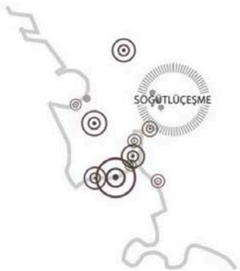



## SOCIAL FLOW



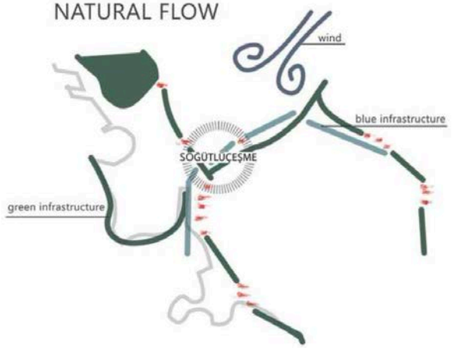

There seems to be a strong social flow in this region, as there are cultural venues in the area and it is a transportation node..

## TIME FLOW



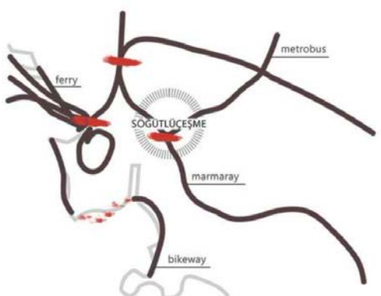

In public spaces, people spend most of their time in the Moda Beach, Yoghurt Park and Kadıköy Bazaar area. Various transportation stops such as Kadıköy dock area and Söğütlüçeşme are considered as areas where there is rapid movement and people come and pass.

## NATURAL FLOW




It was observed that the green areas and the stream that provided the natural flow in the region were interrupted in various places.

## CIRCULATION FLOW

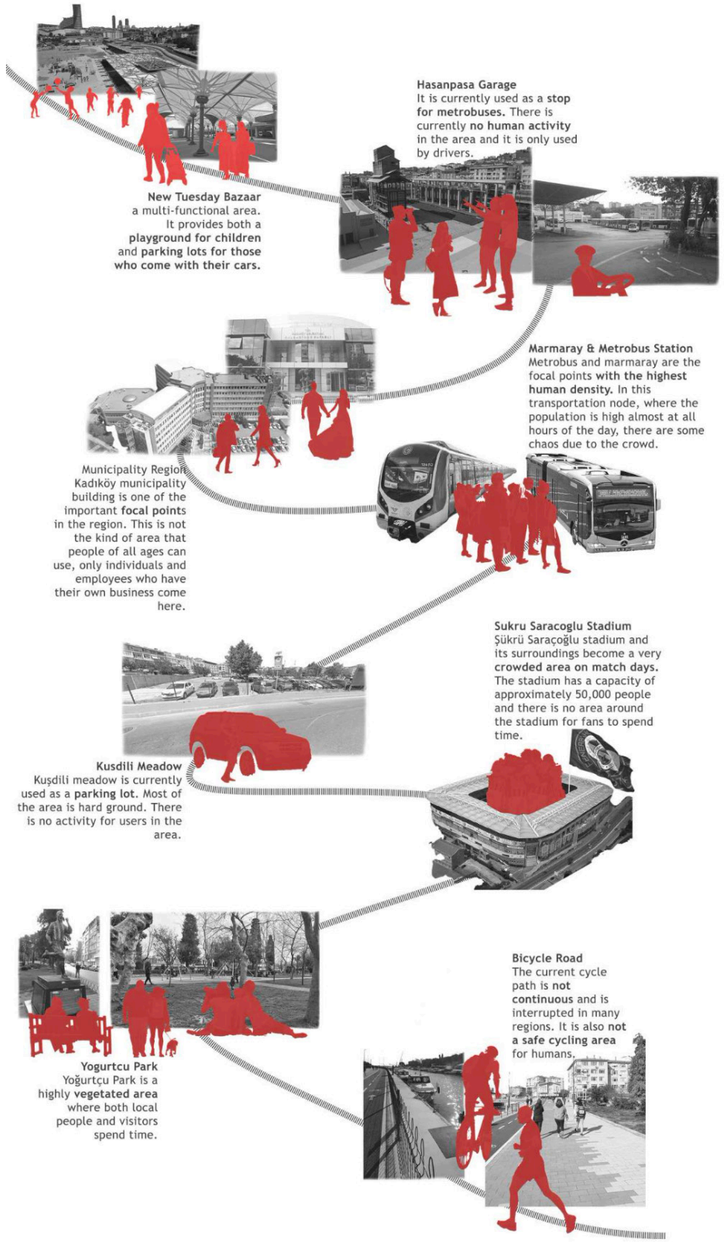



The points where various transportation vehicles intersect form the nodal points. In addition, the bicycle path on the coastal road is interrupted.

## ECONOMİC FLOW

Shopping centers, marketplaces and bazaar areas in the area were considered as elements forming the economic flow..





**New Tuesday Bazaar**
a multi-functional area. It provides both a **playground for children** and **parking lots for those who come with their cars.**

**Hasanpasa Garage**
It is currently used as a **stop for metrobuses.** There is currently **no human activity** in the area and it is only used by drivers.

**Marmaray & Metrobus Station**
Metrobus and marmaray are the focal points **with the highest human density.** In this transportation node, where the population is high almost at all hours of the day, there are some chaos due to the crowd.

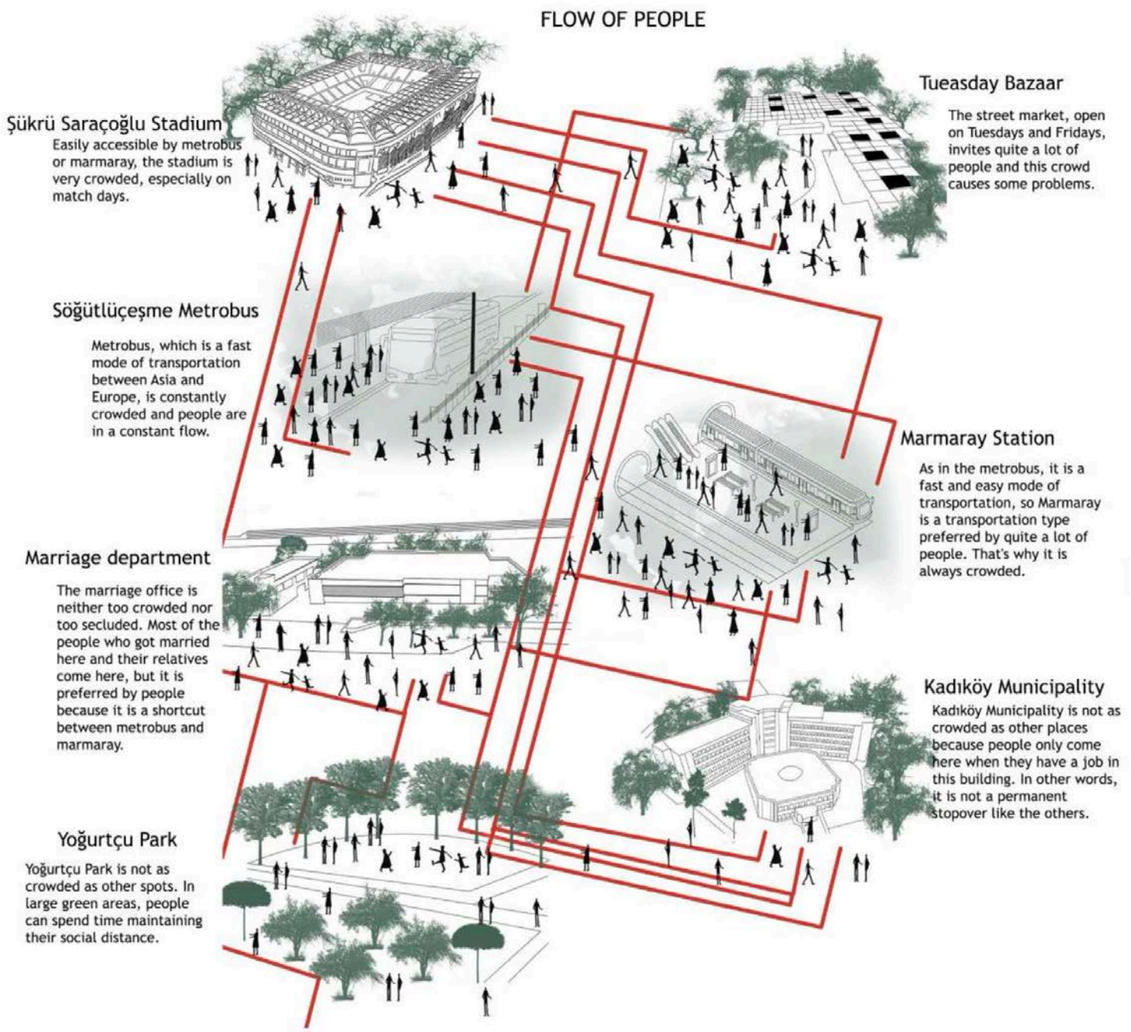
Municipality Region
Kadıköy municipality building is one of the important **focal points** in the region. This is not the kind of area that people of all ages can use, only individuals and employees who have their own business come here.

**Sukru Saracoglu Stadium**
Şükrü Saraçoğlu stadium and its surroundings become a very **crowded area on match days.** The stadium has a capacity of approximately 50,000 people and there is no area around the stadium for fans to spend time.

**Kusdili Meadow**
Kuşdili meadow is currently used as a **parking lot.** Most of the area is hard ground. There is no activity for users in the area.

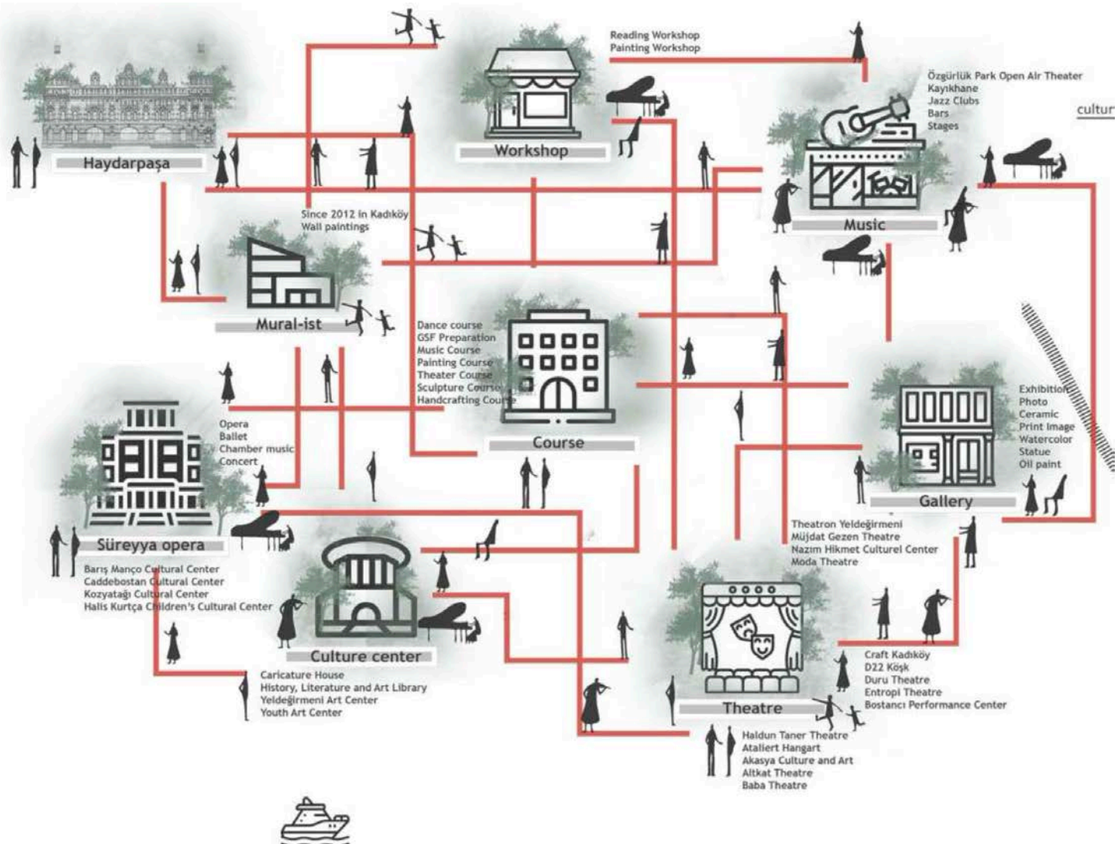
**Yogurtcu Park**
Yoğurtçu Park is a highly **vegetated area** where both local people and visitors spend time.

**Bicycle Road**
The current cycle path is **not continuous** and is interrupted in many regions. It is also **not a safe cycling area** for humans.

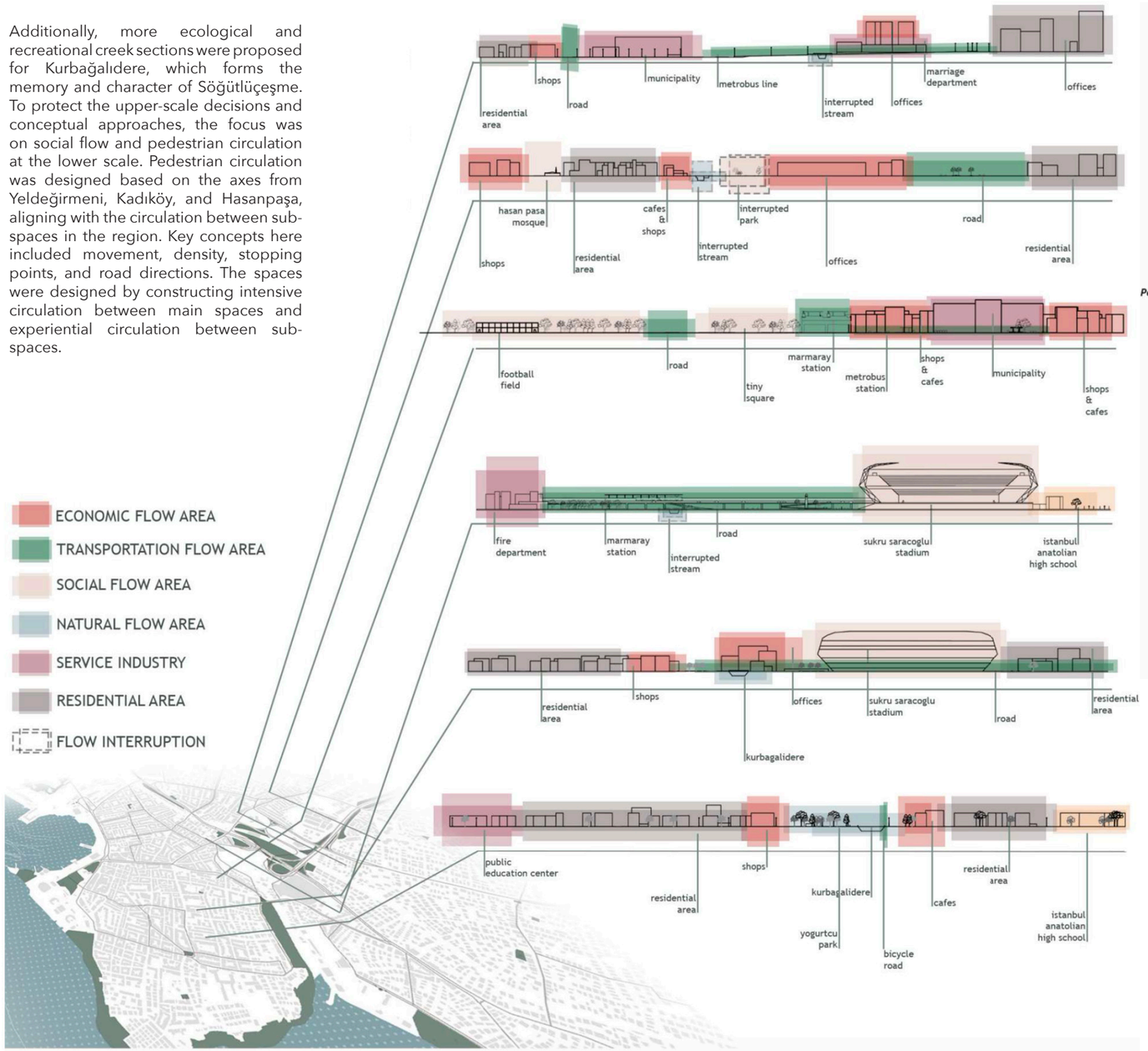


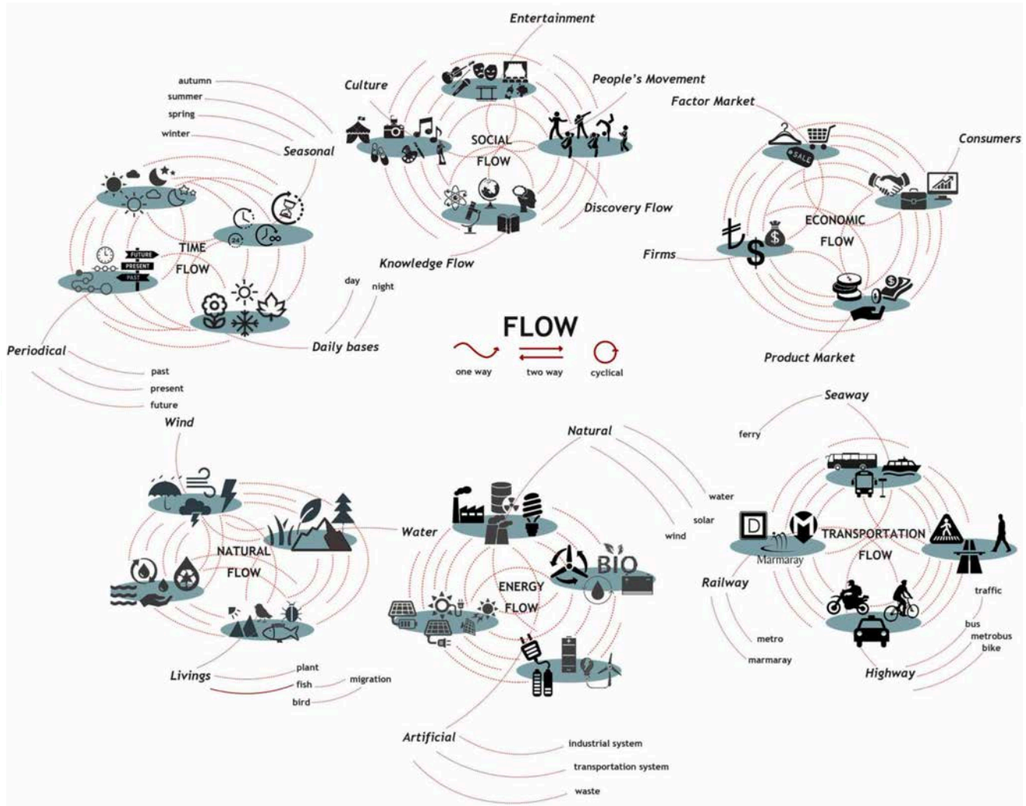

When examining the history, memory, and local culture of Kadıköy, it becomes evident that it has a multi-layered structure. With its social fabric, transportation hub, and characteristic environment, this region was approached through the concept of flow. The area was analyzed using sub-concepts such as natural, social, circulation, economic, energy, and time flows that support this flow concept, and recommendations were made accordingly.

The project's aim was to enhance urban flow by eliminating the disconnection between spaces, activating idle areas, and creating more ecological zones. Various sub-strategies were identified to support this aim. These strategies include ensuring accessibility and circulation flow, improving water management, promoting biodiversity, creating multi-functional areas, and ensuring public safety.

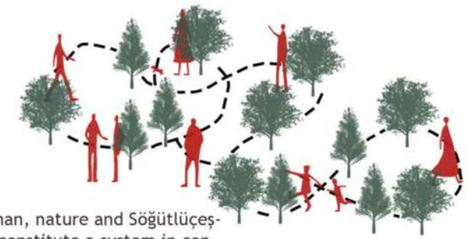


Additionally, more ecological and recreational creek sections were proposed for Kurbağalıdere, which forms the memory and character of Söğütlüçeşme. To protect the upper-scale decisions and conceptual approaches, the focus was on social flow and pedestrian circulation at the lower scale. Pedestrian circulation was designed based on the axes from Yeldeğirmeni, Kadıköy, and Hasanpaşa, aligning with the circulation between sub-spaces in the region. Key concepts here included movement, density, stopping points, and road directions. The spaces were designed by constructing intensive circulation between main spaces and experiential circulation between sub-spaces.



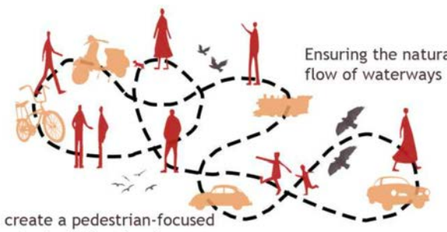




Due to the heavy pedestrian flow to the Marmaray region, a main axis was established there, with surrounding spaces evaluated according to the potential of Kadıköy and the Marmaray Bridge. Skateboard culture and wall murals reflecting Kadıköy were incorporated under the bridge. For security under the bridge, cafes and kiosks were designed to ensure an evening presence of people. Since the area between the cafes is situated between transportation hubs like Marmaray Bus and Metrobus, transition areas were expanded to allow better circulation, and seating and waiting areas were designed. These areas include thematic gardens, such as perennial gardens, offering different experiences and inclining walls for leaning and lying down.
Additionally, pockets in some areas enhance mutual communication for crowded groups.
In the Kurbağalıdere creek line, starting from Yoğurtçu Park and continuing through Kuşdili Meadow, wooden platforms were used to enhance interaction with the stream, continuing the design language. Plant groups that leave gaps and emerge from the stream section were designed, allowing users different experiences at the upper level. Considering the Marmaray station area as a large square, a ladder and ramp system was designed using the area's level difference and slopes. An area for high-speed train passengers and a parking lot were designed for waiting cars.



Human, nature and Söğütlüçeşme constitute a system in continuity, connected to each other in a flow.

## Connectivity



Ensuring the natural flow of waterways

To create a pedestrian-focused area by including the elements that cut or do not include the mobility in the region into the fluid urbanism system

## Mobility

In order to ensure that the development of a district is not stagnant, the future-oriented, suitable, self-renewing and versatile potential of the city's existing infrastructure emphasizes the concept of a fluid city.

## Suitability

The more we design a historical and solidified city as a flexible and self-renewing place, the more fluid that space will be.

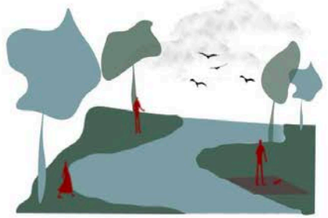
## Flexibility

# OBJECTIVES

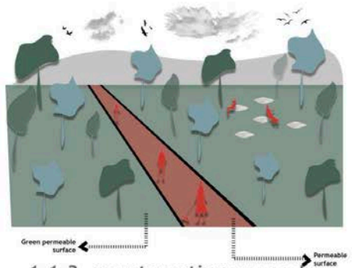
## O1. ENSURING ACCESSIBILITY

### 1.1. Enhancing accessibility to spaces

1.1.1. providing access to the stream by a ladder or a ramp

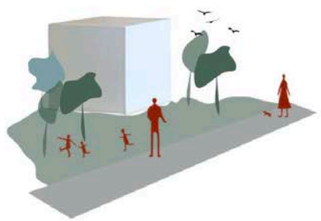


1.1.2. eliminating fences

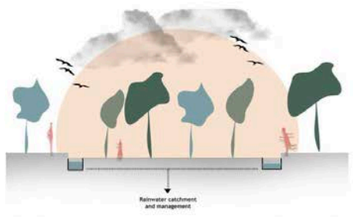



1.1.3. counteracting car parks

### 1.2. Enhancing walkability through pedestrian oriented circulation



1.2.1. integrating buffers (planting lanes, street parking or bike lanes) into bustling traffic




1.2.2. Increasing the existence and quality of the paths

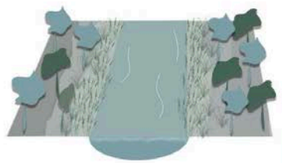
1.2.3. providing continuity on pedestrian axle and bicycle path

A new ramp and staircase system was designed while preserving the existing Metrobus underpass. Considering the ecological and recreational potentials of the former parking lot, a waiting area at the Metrobus exit and an amphitheater for open-air shows were created. The design allows circulation from the Metrobus exit to this area, enhancing the back of the amphitheater. Additionally, a meadow texture for leisure and wooden platform spaces were created, continuing the stream section's design language.
At a larger scale, the function of the town hall was changed to a cultural center. Areas for activities on both hard and soft floors were designed. A program for installation exhibitions and festivals, such as Mural İstanbul, Kad Fest, Jazzfest, and Sanatparkta festival, was organized. The Atatürk monument area was refunctioned as a square. Reflective water surfaces that collect rainwater from the cultural center roof highlight the mural paintings. The area between the cultural center and transportation hubs continued the bridge's design language with various seating and rest units. Green surfaces at different levels were designed using walls and slopes. An area was also created where products from cultural center workshops could be exchanged and exhibited monthly. Finally, an underground parking garage was designed with slope calculations for the entrance.

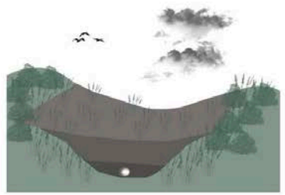


## O2. STRENGTHENING THE SOCIO-ECOLOGICAL INFRASTRUCTURE

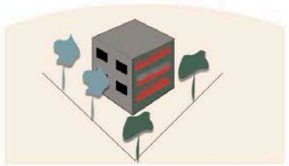
### 2.1. Developing water management



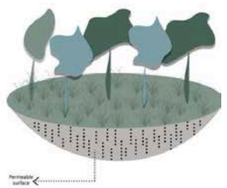
2.1.1. creating river buffers



2.1.2. creating bioswale fields



2.1.3. creating vertical farming




2.1.4. creating permeable surfaces

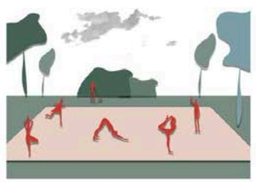
### 2.2. Enhancing biodiversity

2.2.1. enhancing diversity through native landscaping

2.2.2. creating habitats for human-damaged populations

### 2.3. Creating multifunctional spaces

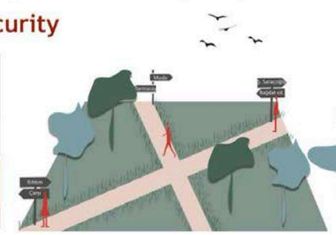
2.3.1. designing areas that atract to all ages



2.3.2. integrating multiple activities into areas

### 2.4. Ensuring public security

2.4.1. utilizing lighting elements

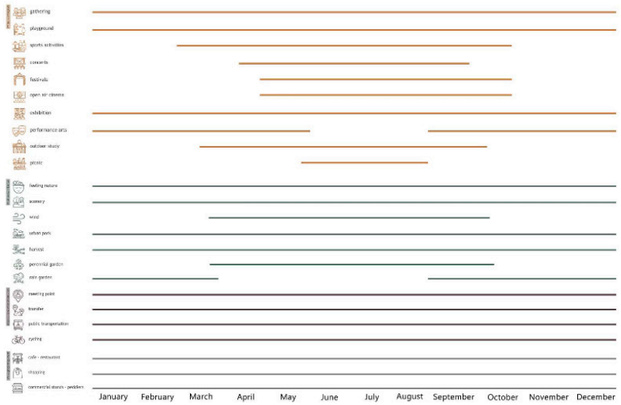


2.4.2. guiding people with signs and maps

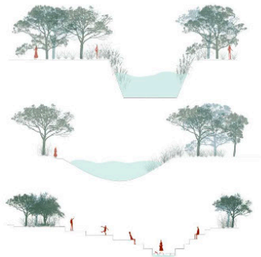
2.4.3. offering action options

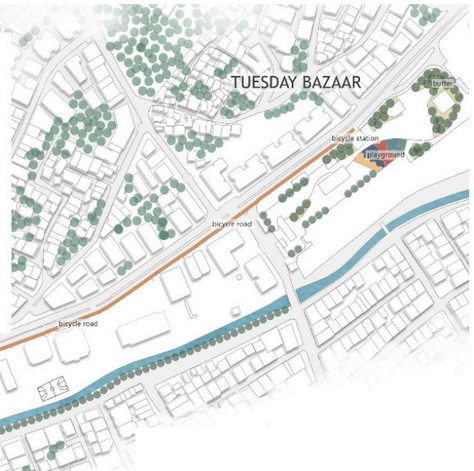
2.4.4. providing vegetative design and management (field of view)

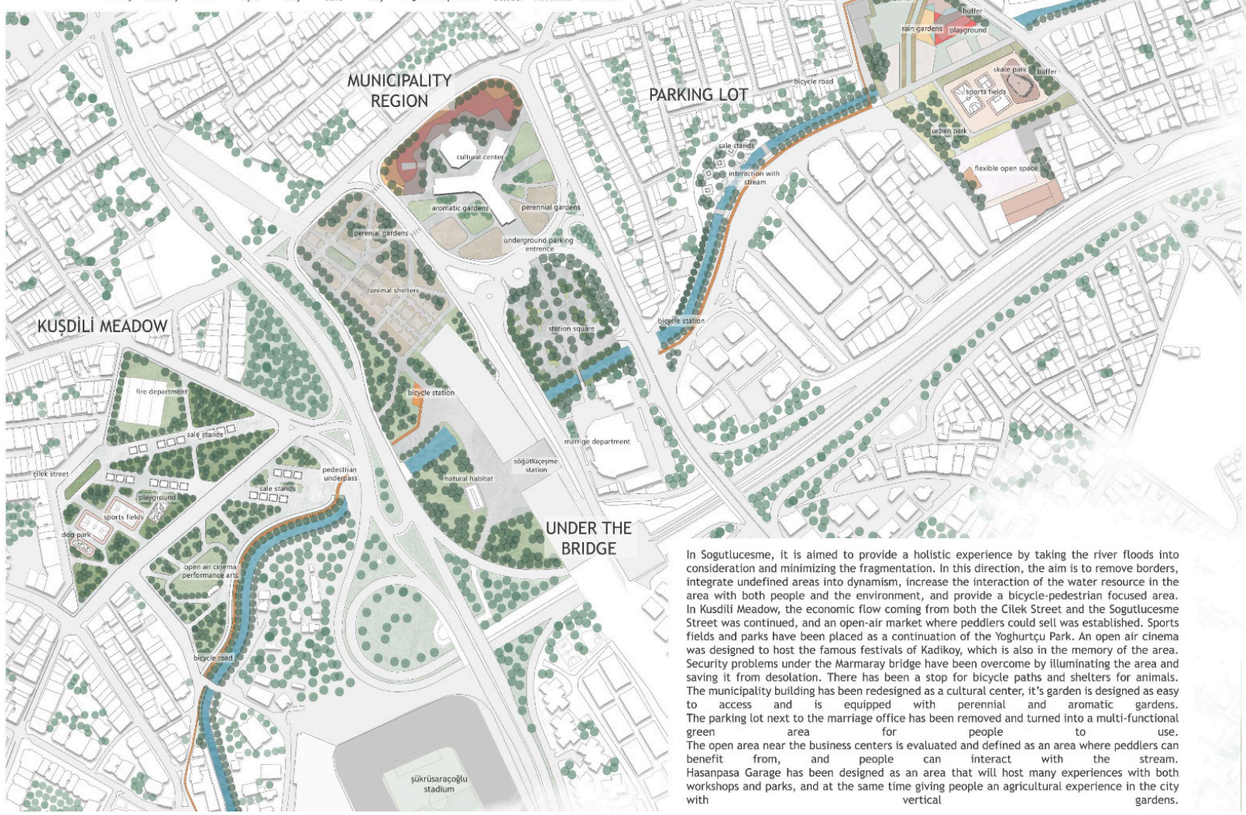
## FUNCTION AND PROGRAMME DIAGRAM



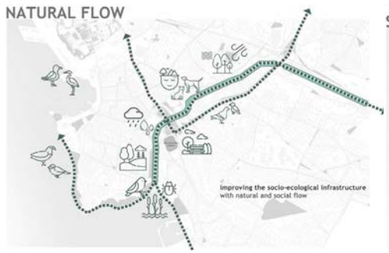

Stream sections were changed in various parts of the design that progressed along Kurbağalıdere in the study area. The sections vary in Kuşdili Meadow, Söğütlüçeşme Marmaray station and where the old car park was located. In some places the flow between man and water was provideStream sections were changed in various parts of the design that progressed along Kurbağalıdere in the study area. The sections vary in Kuşdili Meadow, Söğütlüçeşme Marmaray station and where the old car park was located. In some places the flow between man and water was provided by plants and sometimes by removing borders.

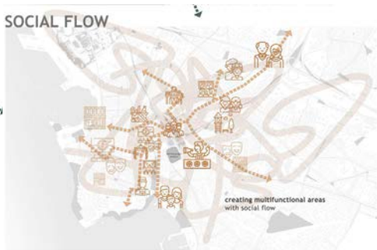


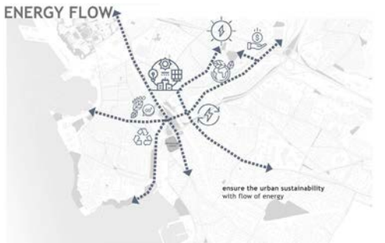


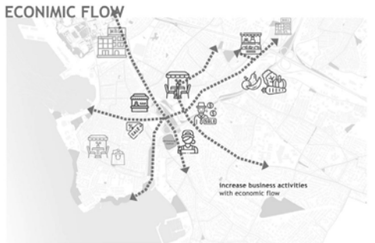


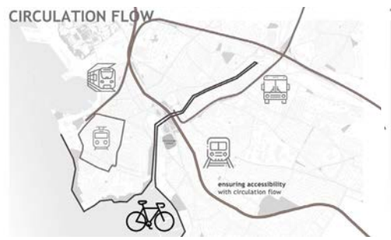

In Sogutlucesme, it is aimed to provide a holistic experience by taking the river floods into consideration and minimizing the fragmentation. In this direction, the aim is to remove borders, integrate undefined areas into dynamism, increase the interaction of the water resource in the area with both people and the environment, and provide a bicycle-pedestrian focused area. In Kusdili Meadow, the economic flow coming from both the Cilek Street and the Sogutlucesme Street was continued, and an open-air market where peddlers could sell was established. Sports fields and parks have been placed as a continuation of the Yoghurtçu Park. An open air cinema was designed to host the famous festivals of Kadikoy, which is also in the memory of the area. Security problems under the Marmaray bridge have been overcome by illuminating the area and saving it from desolation. There has been a stop for bicycle paths and shelters for animals. The municipality building has been redesigned as a cultural center, it's garden is designed as easy to access and is equipped with perennial and aromatic gardens. The parking lot next to the marriage office has been removed and turned into a multi-functional green area for people to use. The open area near the business centers is evaluated and defined as an area where peddlers can benefit from, and people can interact with the stream. Hasanpasa Garage has been designed as an area that will host many experiences with both workshops and parks, and at the same time giving people an agricultural experience in the city with vertical gardens.

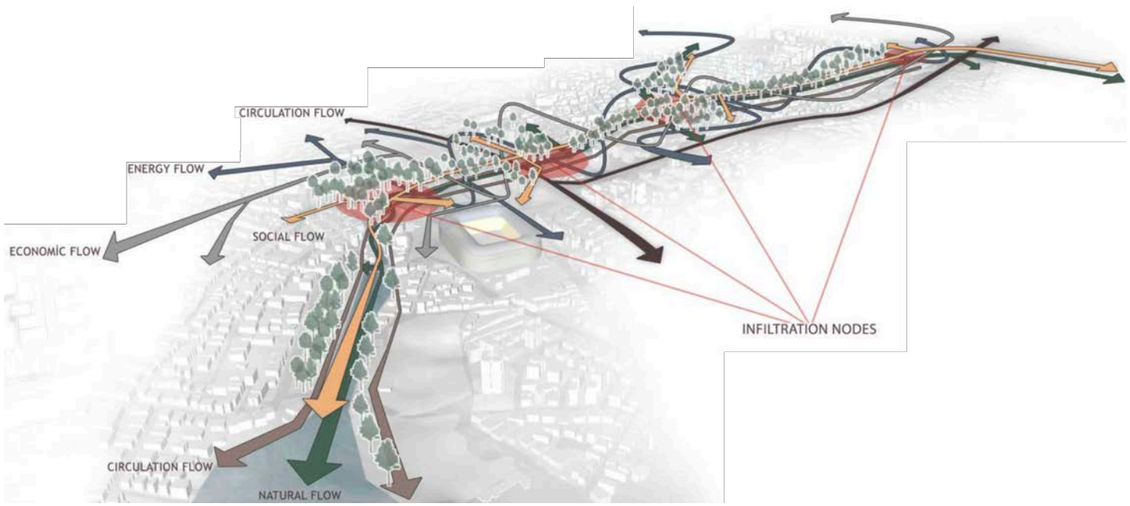


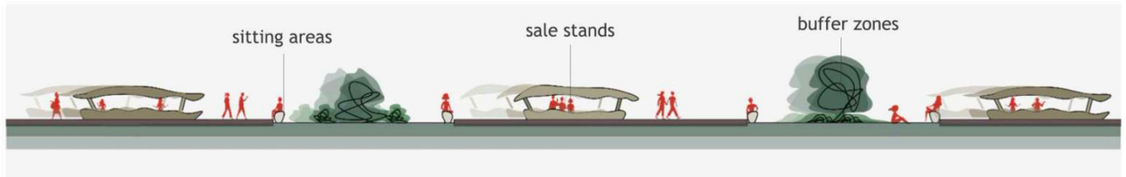



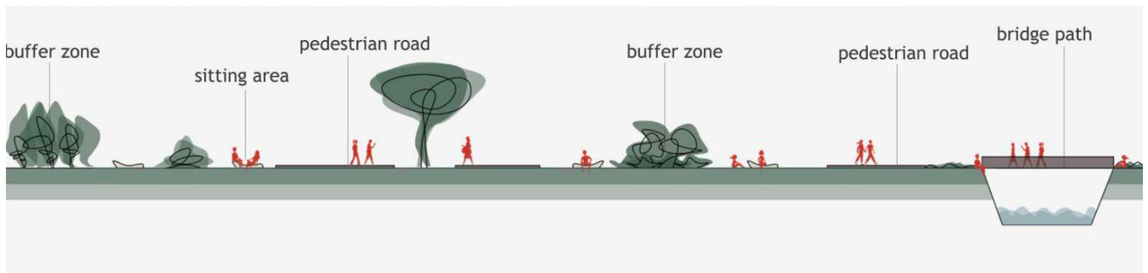



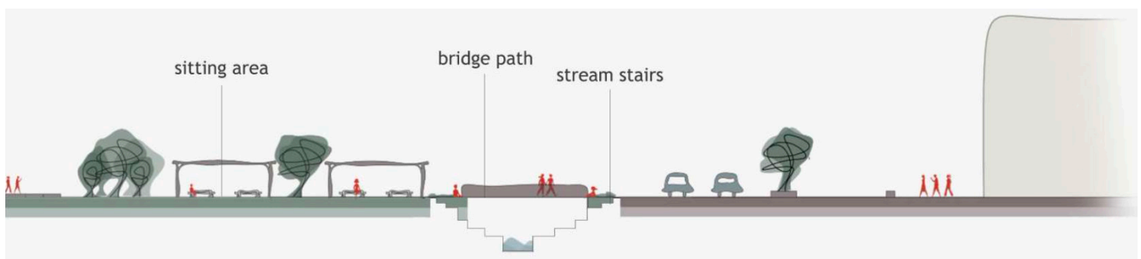



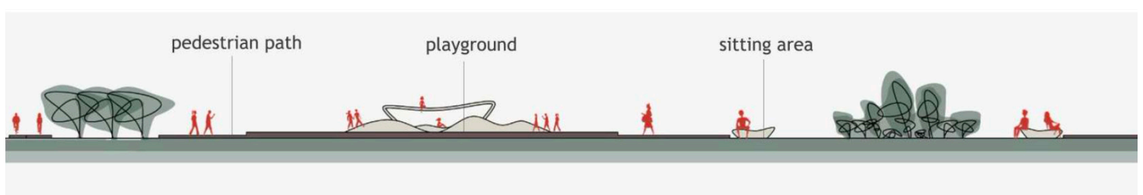



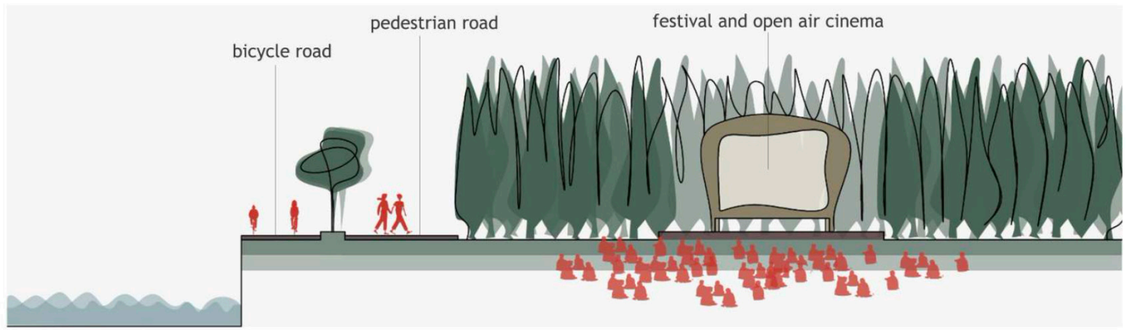



sitting areas
sale stands
buffer zones

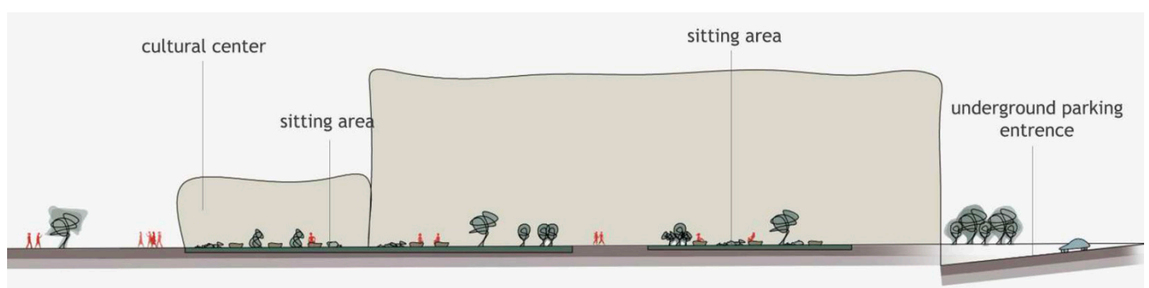

buffer zone
sitting area
pedestrian road
buffer zone
pedestrian road
bridge path

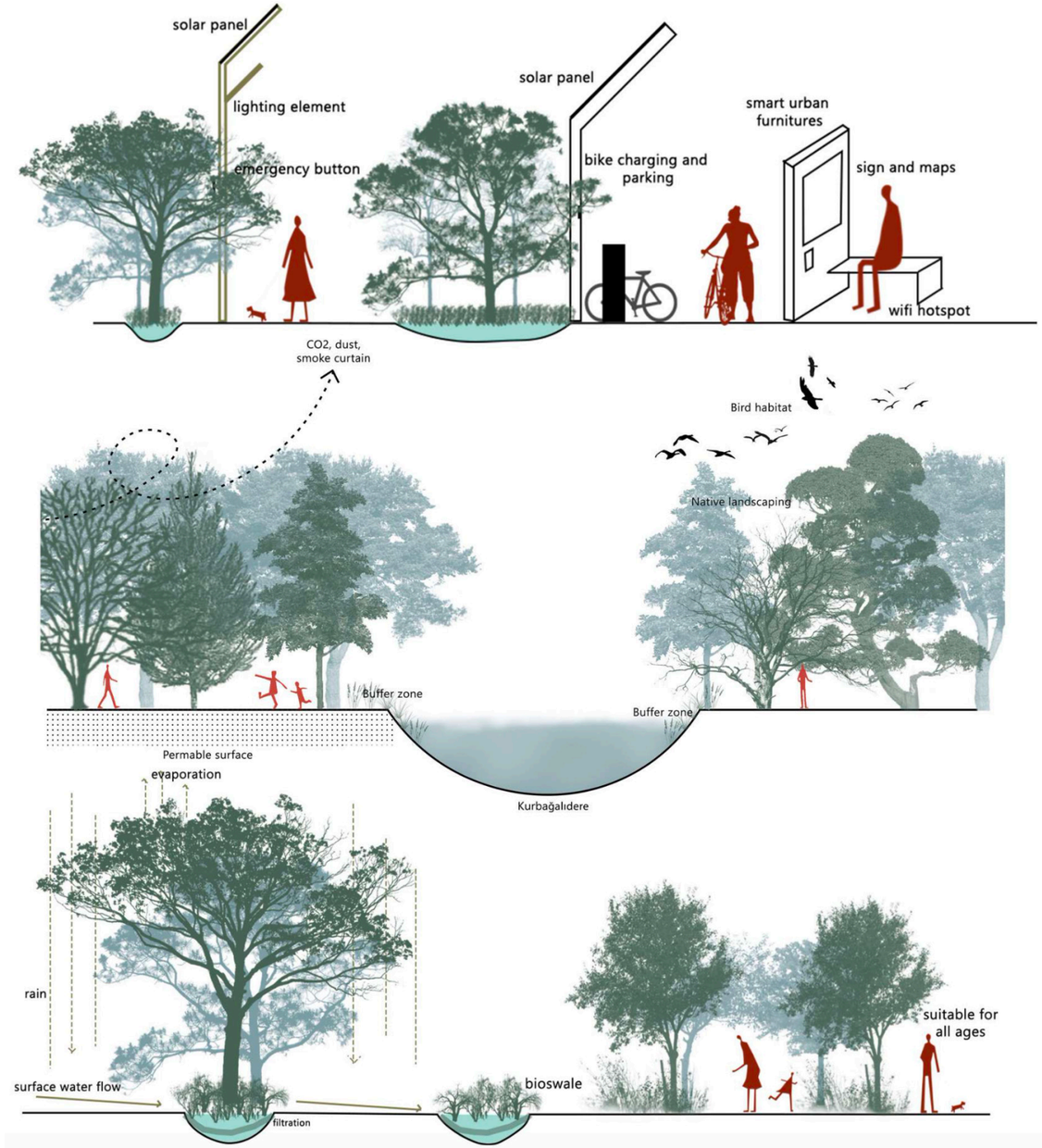

sitting area
bridge path
stream stairs


pedestrian path
playground
sitting area


bicycle road
pedestrian road
festival and open air cinema

bicycle station
buffer zone
pedestrian road
pedestrian road


cultural center
sitting area
sitting area
underground parking
entrence


solar panel
lighting element
emergency button
solar panel
bike charging and parking
smart urban furnitures
sign and maps
wifi hotspot
CO2, dust, smoke curtain
Bird habitat
Native landscaping
Buffer zone
Buffer zone
Permable surface
evaporation
Kurbağalıdere
rain
surface water flow
filtration
bioswale
suitable for all ages

UNDER THE BRIDGE

HASANPAŞA GARAGE

MUNICIPALITY REGION

PARKING LOT

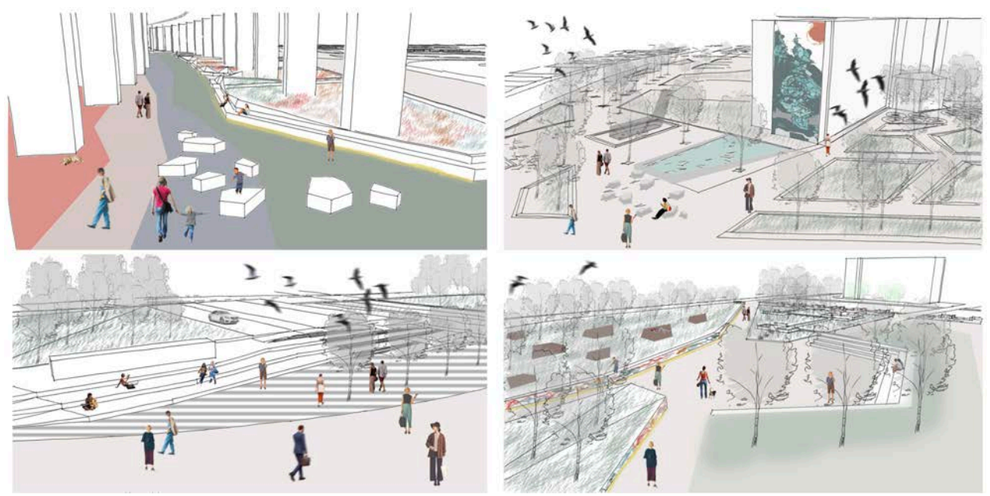
KUŞDİLİ MEADOW

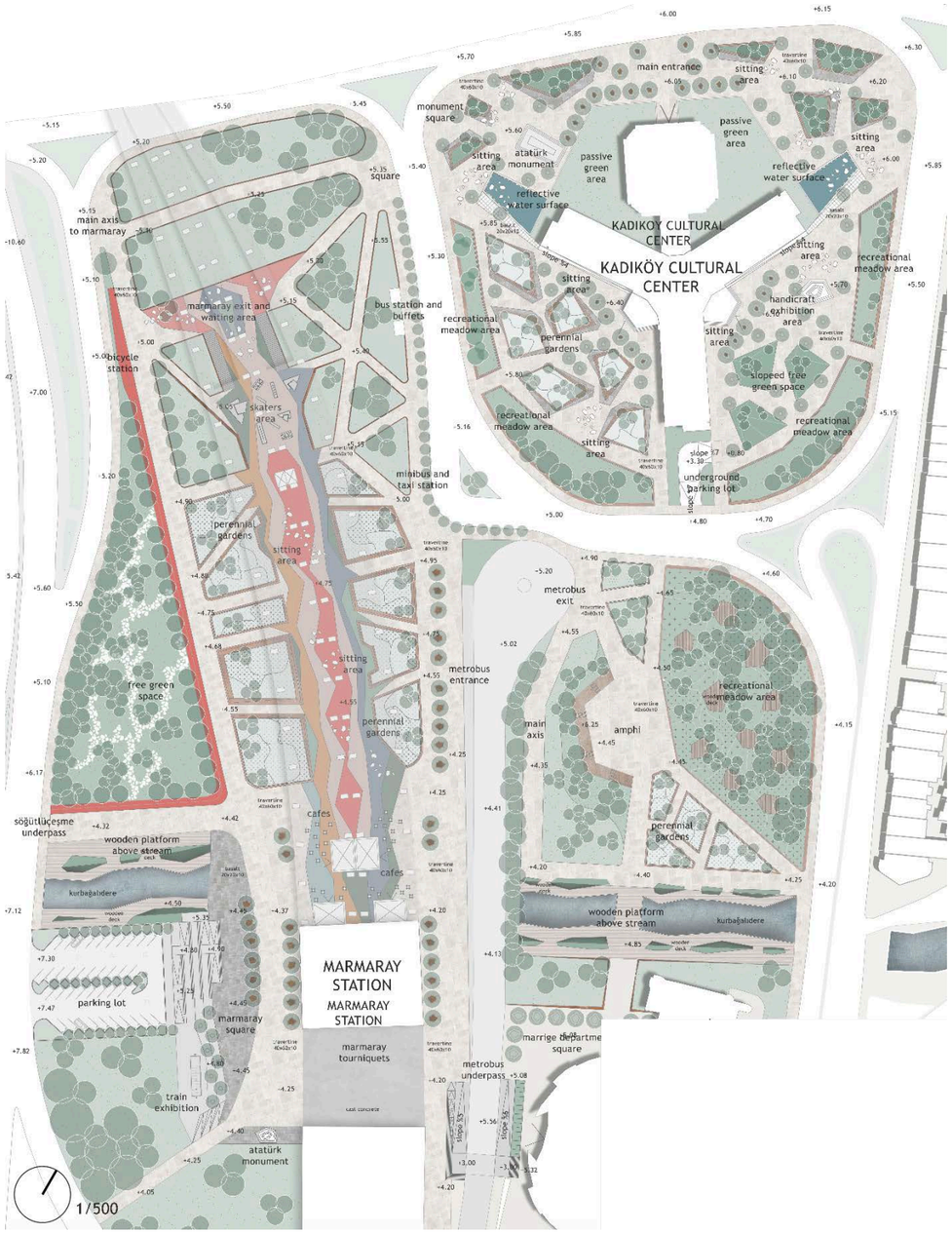
# Let It Flow

Kübranur Akkabak

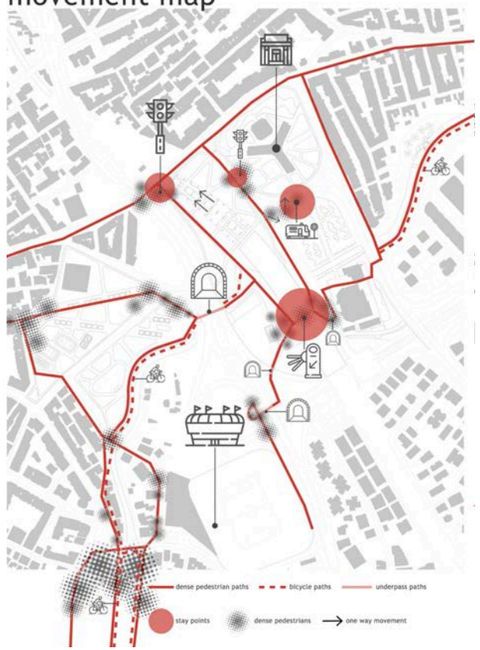
*"Let It Flow" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Melih Bozkurt and Res. Assist. Çisem Demirel under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*

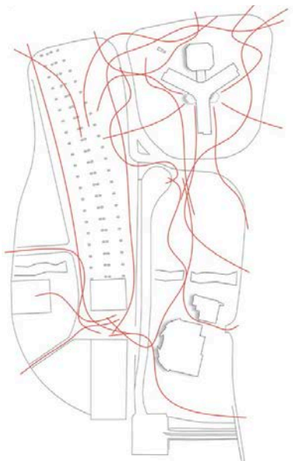
spatial activities



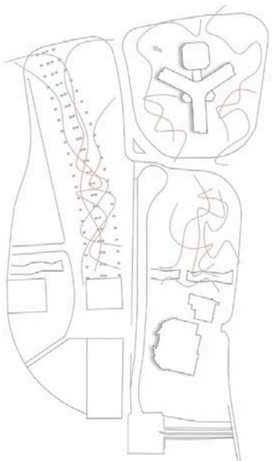


## movement map

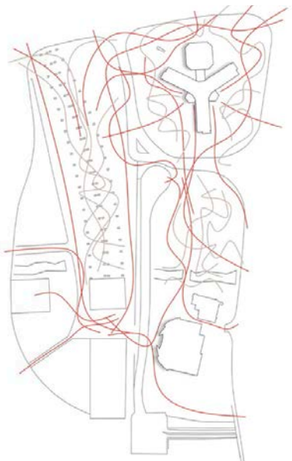


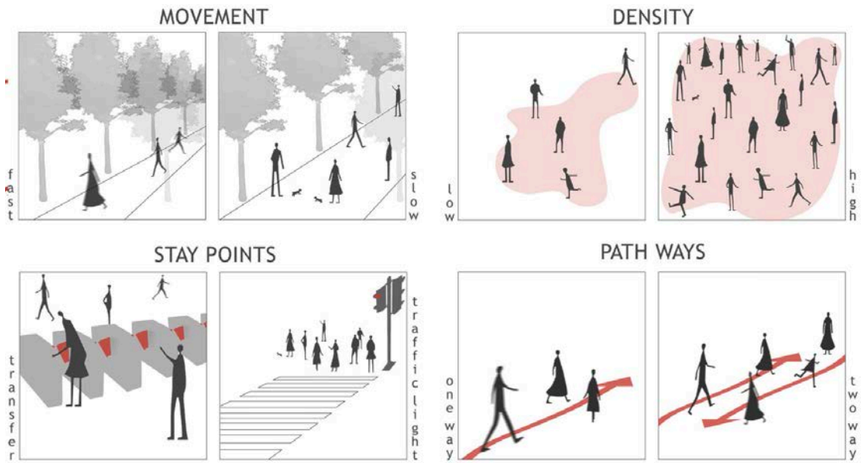
intensive circulation
between main spaces



experience circulation
between sub-spaces

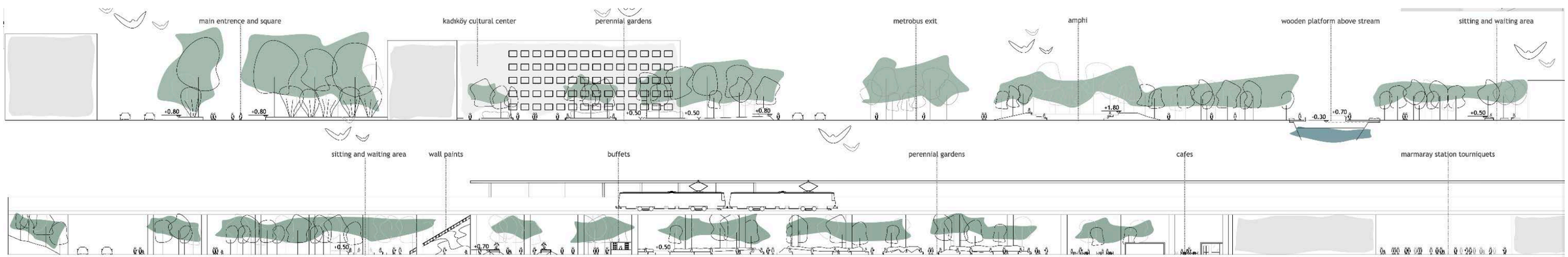


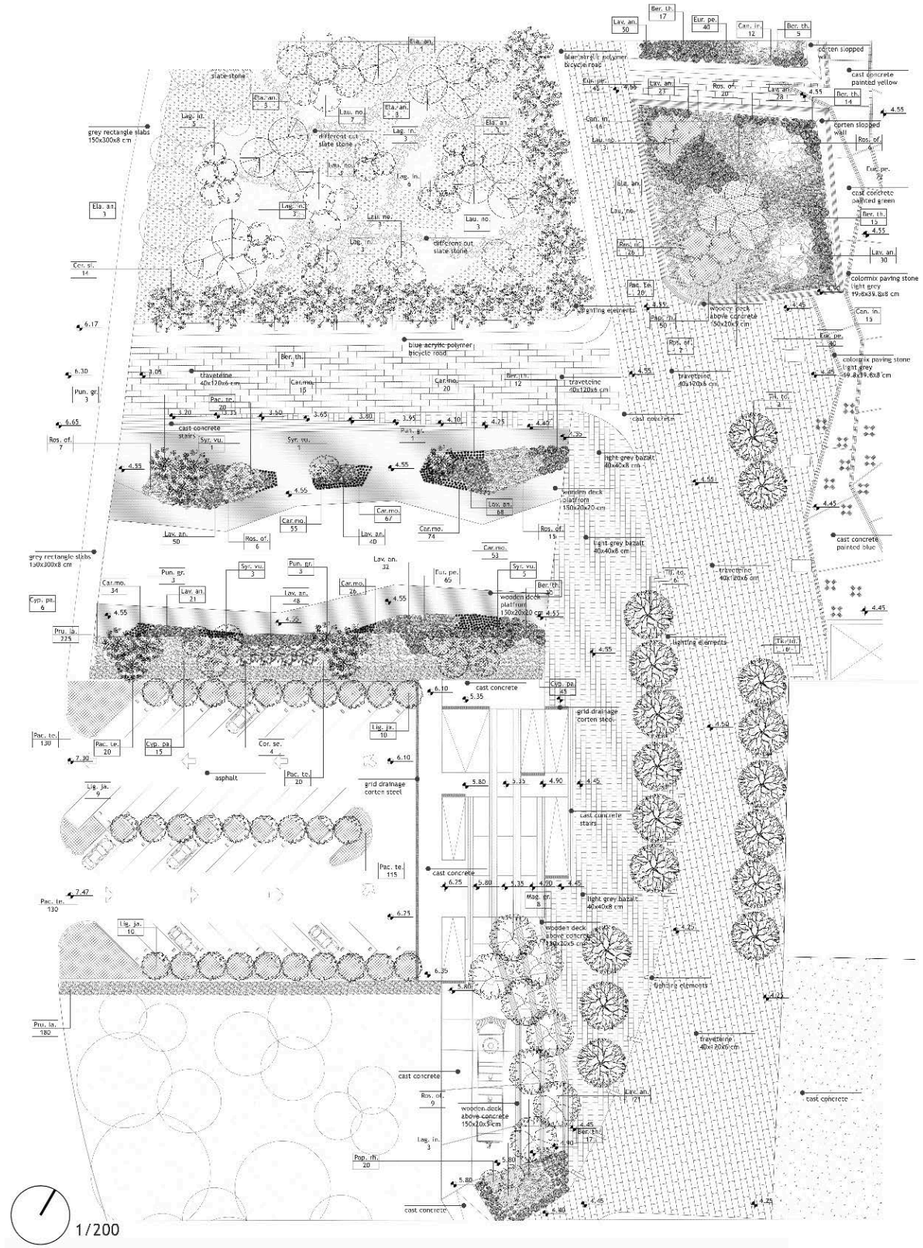
design
circulation





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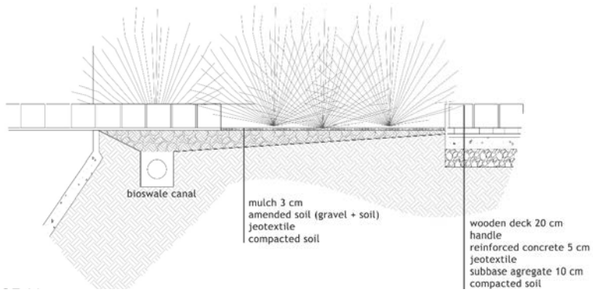
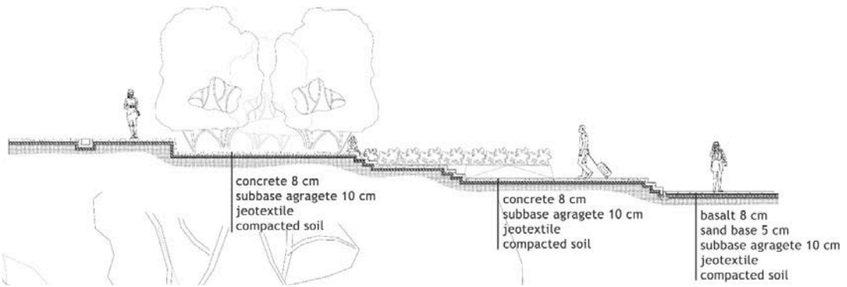
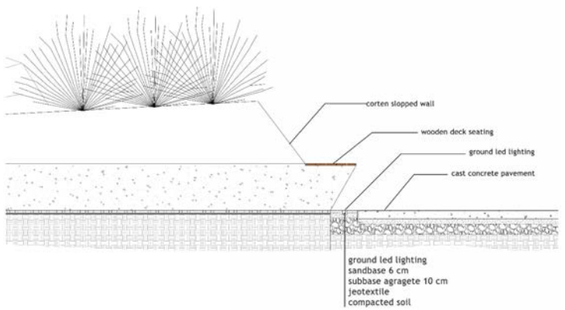
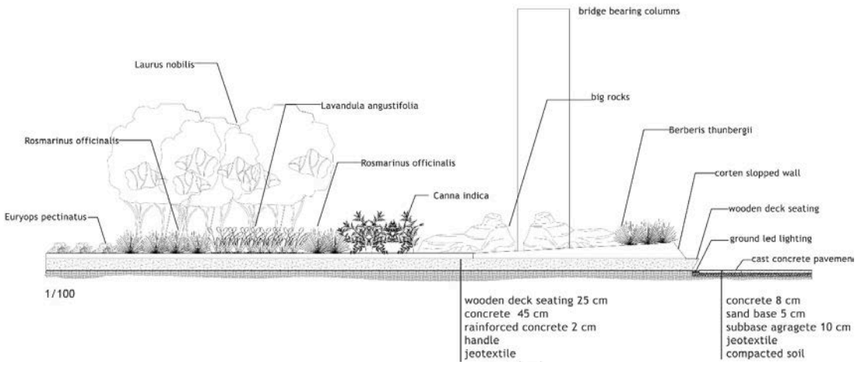
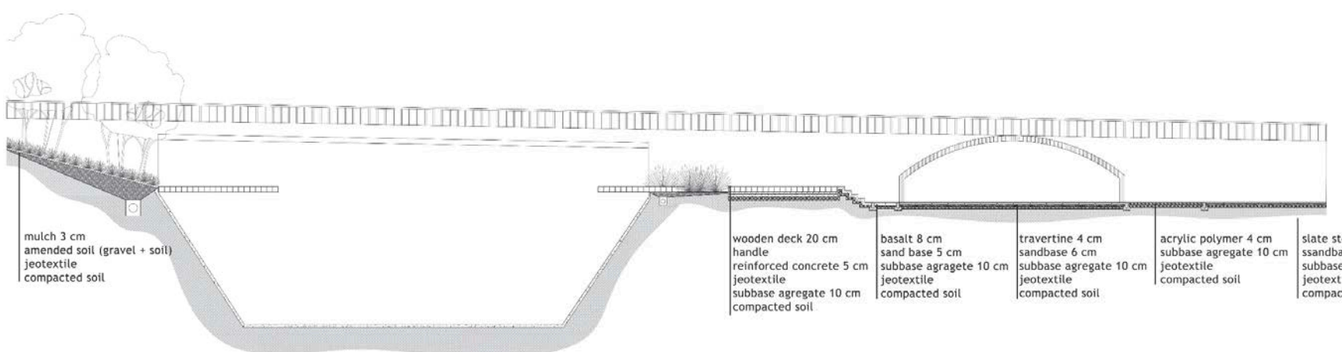

bioswale canal
mulch 3 cm
amended soil (gravel + soil)
jeotextile
compacted soil
wooden deck 20 cm
handle
reinforced concrete 5 cm
jeotextile
subbase agregate 10 cm
compacted soil


concrete 8 cm
subbase agregate 10 cm
jeotextile
compacted soil
concrete 8 cm
subbase agregate 10 cm
jeotextile
compacted soil
basalt 8 cm
sand base 5 cm
subbase agregate 10 cm
jeotextile
compacted soil


corten slopped wall
wooden deck seating
ground led lighting
cast concrete pavement
ground led lighting
sandbase 6 cm
subbase agregate 10 cm
jeotextile
compacted soil

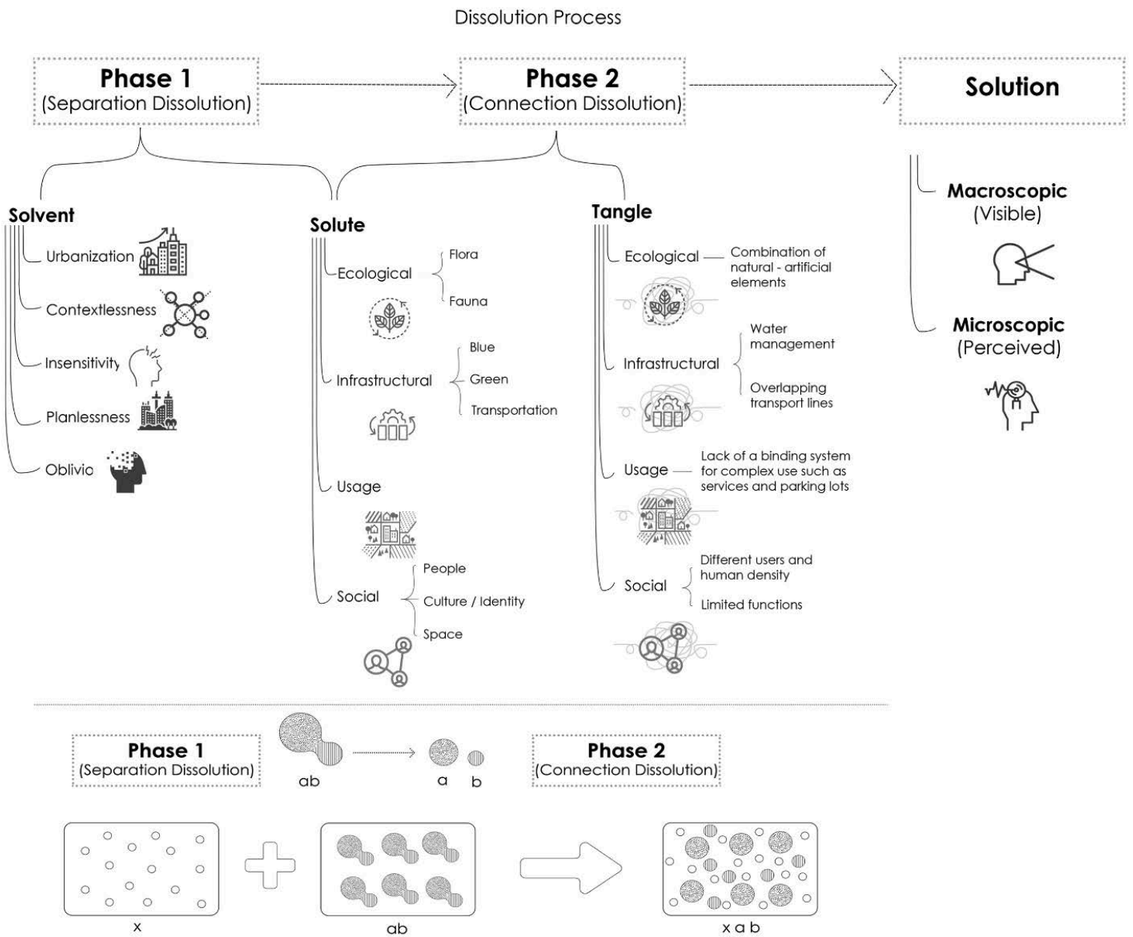

bridge bearing columns
Laurus nobilis
Lavandula angustifolia
big rocks
Rosmarinus officinalis
Berberis thunbergii
Rosmarinus officinalis
corten slopped wall
Canna indica
wooden deck seating
Euryops pectinatus
ground led lighting
1/100
wooden deck seating 25 cm
concrete 45 cm
rainforced concrete 2 cm
handle
jeotextile
concrete 8 cm
sand base 5 cm
subbase agregate 10 cm
jeotextile
compacted soil


mulch 3 cm
amended soil (gravel + soil)
jeotextile
compacted soil
wooden deck 20 cm
handle
reinforced concrete 5 cm
jeotextile
subbase agregate 10 cm
compacted soil
basalt 8 cm
sand base 5 cm
subbase agregate 10 cm
jeotextile
compacted soil
travertine 4 cm
sandbase 6 cm
subbase agregate 10 cm
jeotextile
compacted soil
acrylic polymer 4 cm
subbase agregate 10 cm
jeotextile
compacted soil
slate stone 4 cm
ssandbase 6 cm
subbase agregate 10 cm
jeotextile
compacted soil

# Dissolution

Merve Dilara Ezer, İrem Nur Yener, Melisa Albayrak, Özge Kantar

*"Dissolution" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Merve Aydınlı under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*
*First part of the project were conducted in a collaboration with parallel studio which carried out by Assoc. Prof. Melih Bozkurt and Res. Assist. Çisem Demirel.*








**Phase 1**
(Separation Dissolution)

> **History & Culture & Space** / Separation Dissolution

> **Human & Green System** / Separation Dissolution

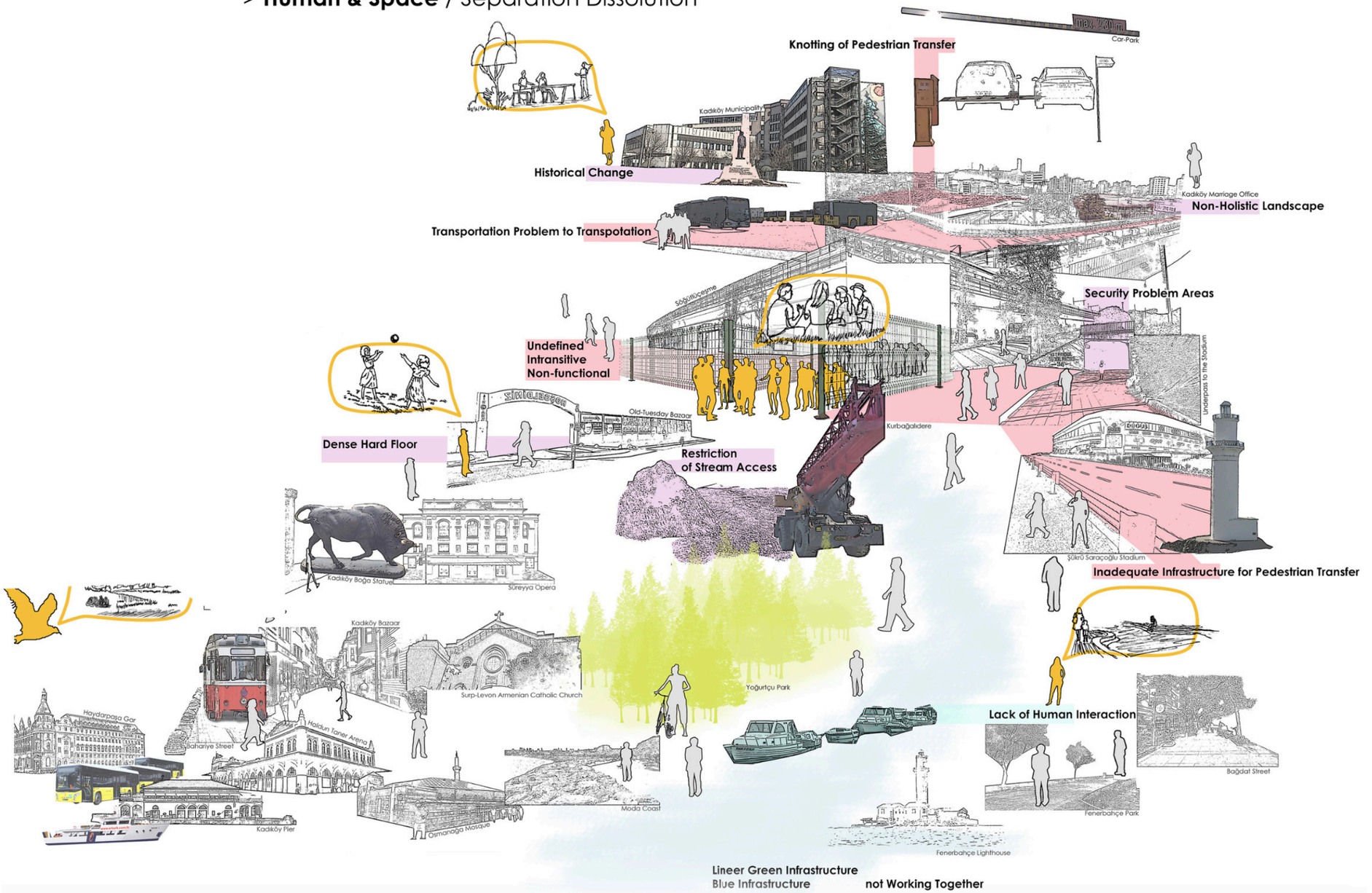
Formerly Papaz's Meadow

In the past, different activities such as playing football and having a picnic were offered to people with the combination of human and green in the papaz's meadow.

Today's Papaz's Meadow

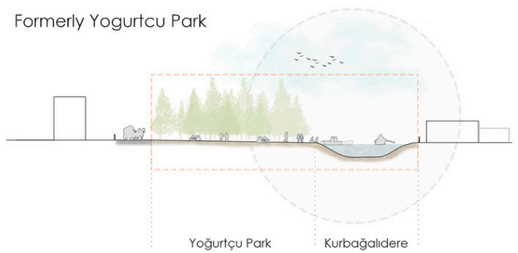
At the present time, as a result of the vehicle density and construction around the Şükrü Saraçoğlu Stadium, the degradation of nature and the green union of human beings have been dissolved.

# > **Human & Space** / Separation Dissolution



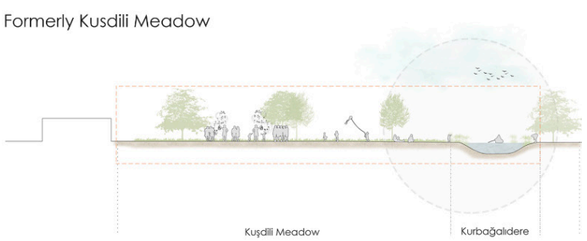
## > **Green System & <u>Blue System</u> & Human** / Separation Dissolution

Formerly Yogurtcu Park



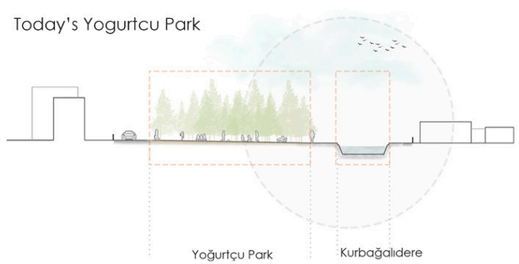

From touching the water, being able to feel it,

Formerly Kusdili Meadow



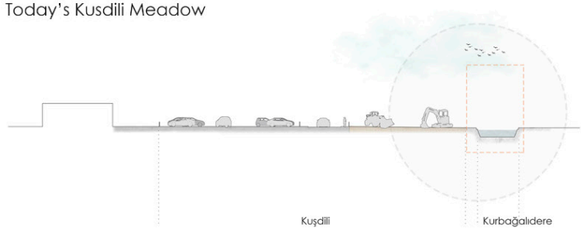

being able to experience it, interact with it;

Today's Yogurtcu Park




To pass by,

Today's Kusdili Meadow



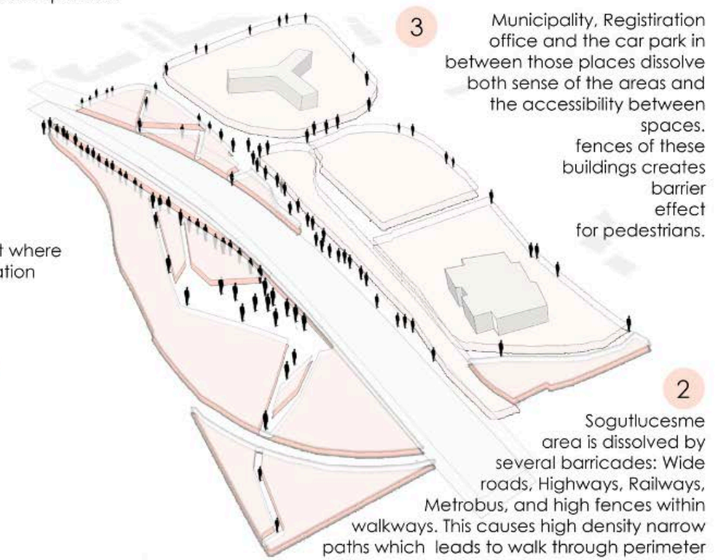

or not even being able to pass and see the water.



## > **Human & Grey Infrastructure** / Separation Dissolution

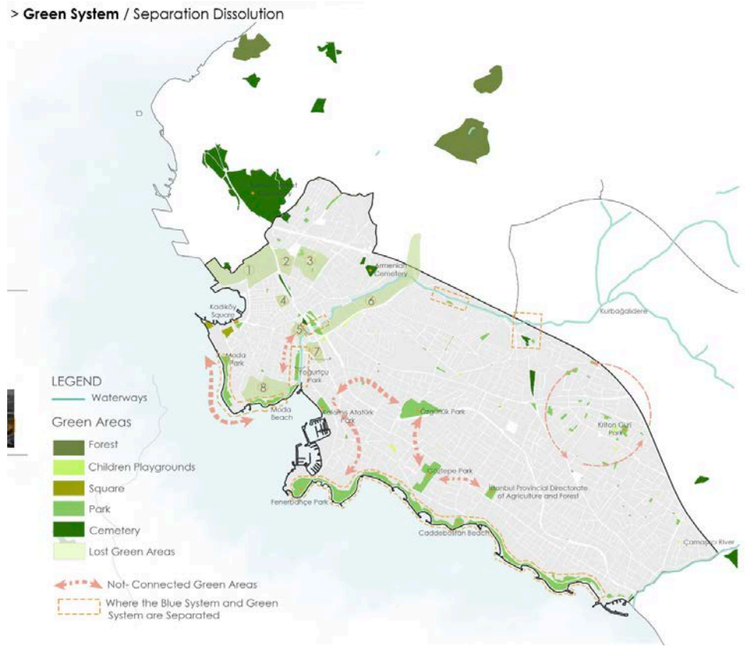
>Inaccessibility at the areas creates congestion hence increase the density at the walk ways. This inaccessibility dissolves the integration in between spaces.

1 Salipazari area is divided into two segment where both of them hinders the people's penetration

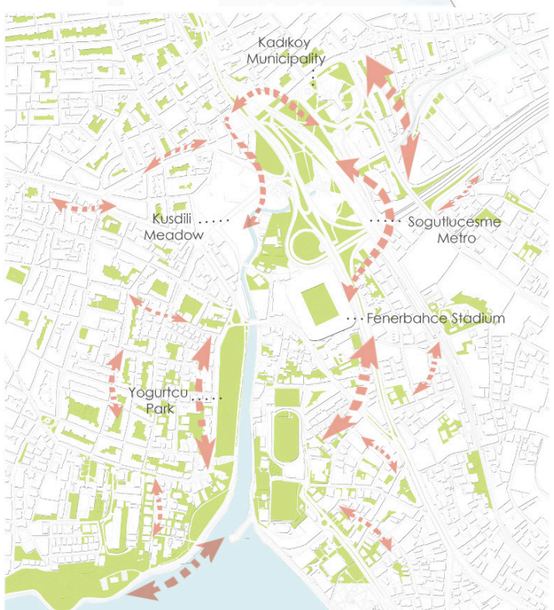


3 Municipality, Registiration office and the car park in between those places dissolve both sense of the areas and the accessibility between spaces. fences of these buildings creates barrier effect for pedestrians.

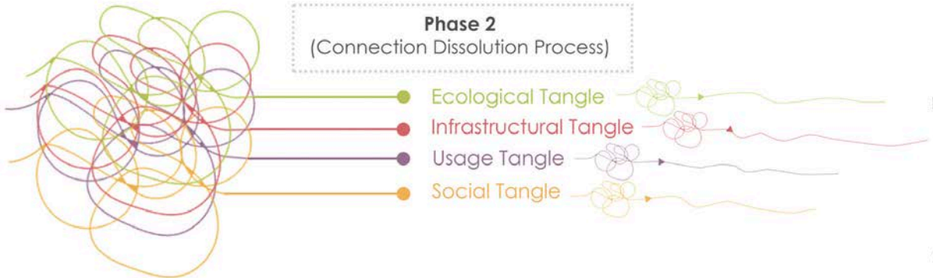
2 Sogutlucesme area is dissolved by several barricades: Wide roads, Highways, Railways, Metrobus, and high fences within walkways. This causes high density narrow paths which leads to walk through perimeter



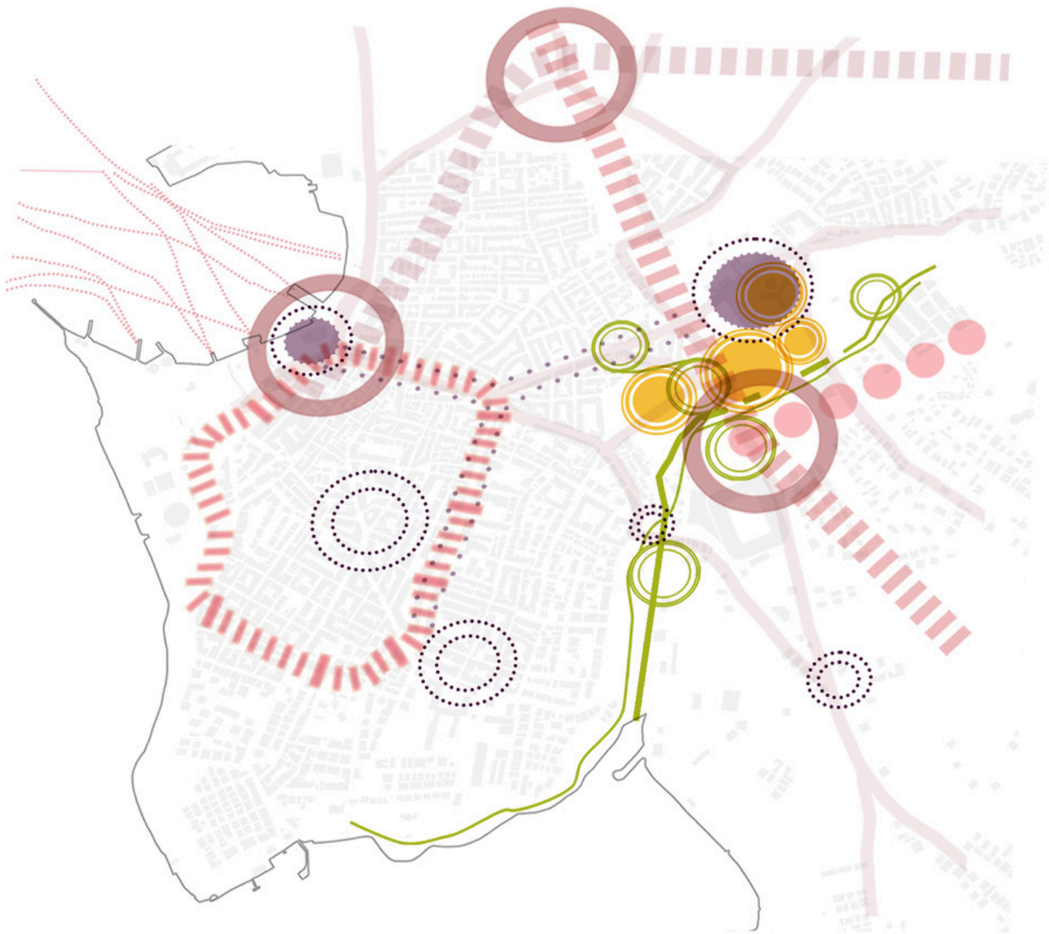

While there are dissolved green systems in the inner parts of Kadıköy on the upper scale, we see that the coastline still managed to maintain its continuity. When examined in closer scale, it is seen that the green areas in the inner regions are dissolved from each other and work completely independently, while the stream line has a certain continuity.






These 4 different tangle types undergo dissolution reaction in phase 2, in order to ensure the connectivity of the separated states in phase 1 and their specific re-functioning.



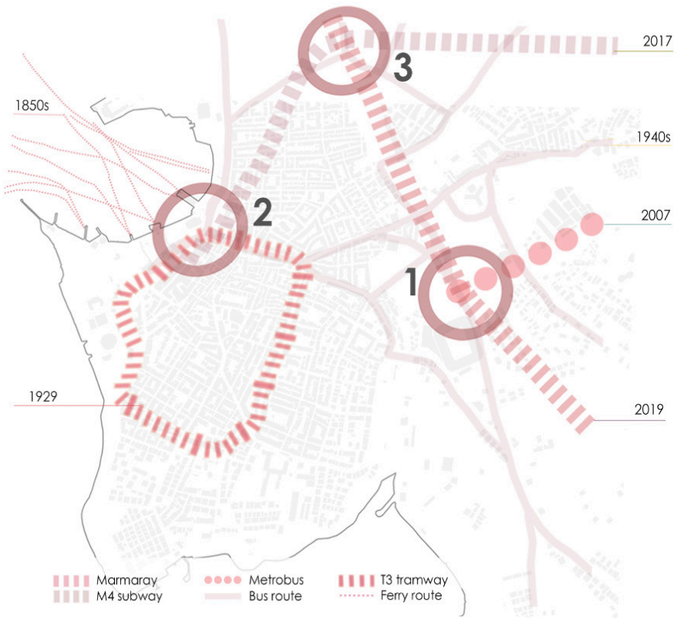
> **Ecological Tangle** / Connection Dissolution

Streets that caused the not formation of the green system

The inability of this area, which has an ecological potential, to participate in the green system due to the intense parking area

Loss of ecological value with the restriction of the blue system
Failure to manintain the continuity of the green system around the blue system

> **Infrastructural Tangle** / Connection Dissolution



1

Sogutlucesme tangle

Sogutlucesme is one of the main juction point for transportation: Marmaray, Metrobus and bus route intersect in here.

2

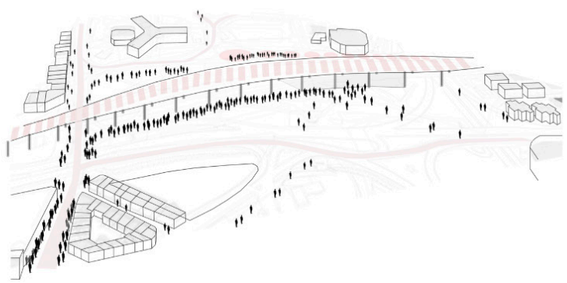
Rihtim tangle

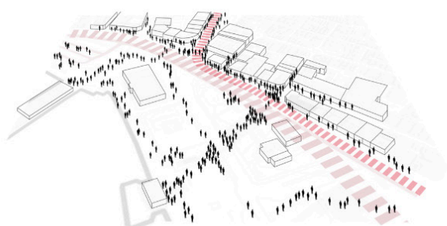
Kadikoy rihtim is a main junction point for transportation, and for meetings: Subway, ferry, and main bus station intersect in here.

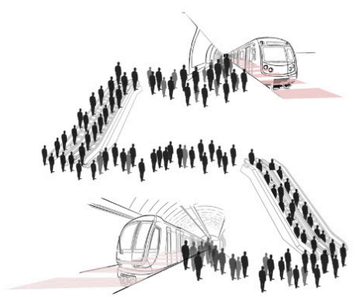
3

Ayrilikcesmesi Tangle

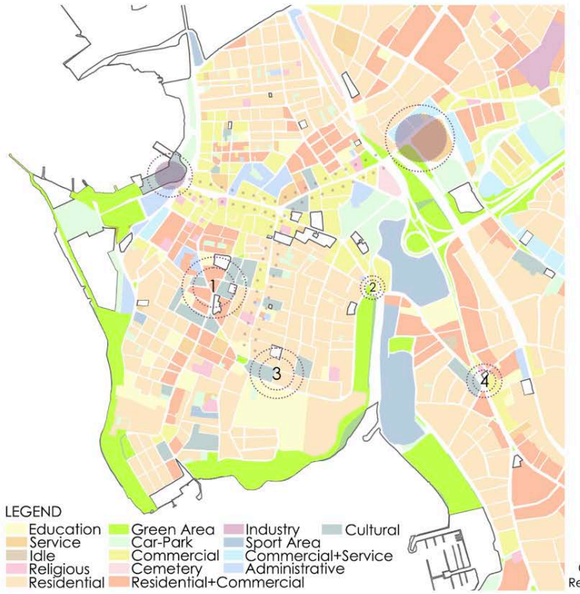
Ayrilikcesmesi is an another key junction point for transportatin: Marmaray and Subway are connected here underground.



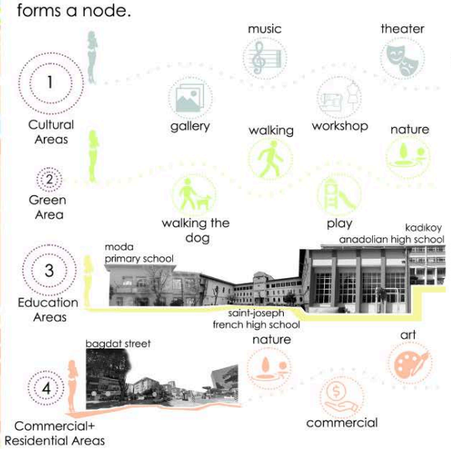


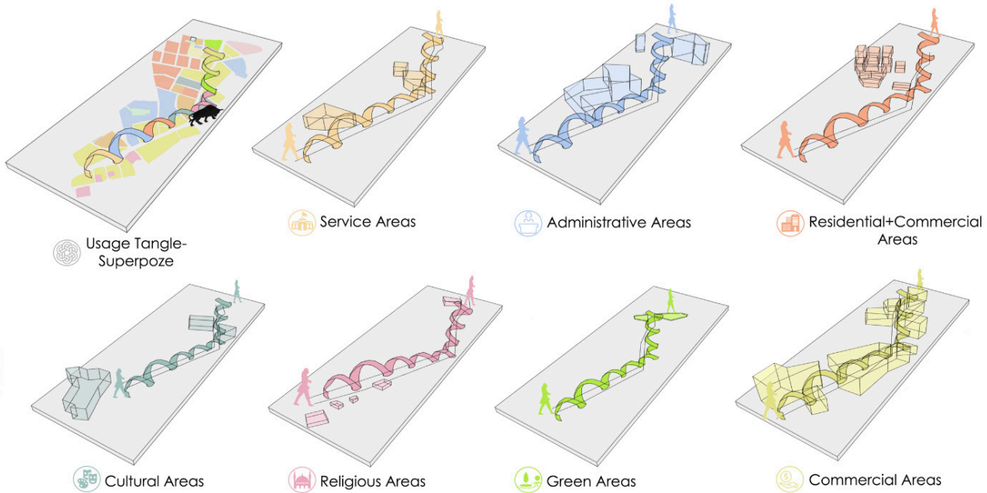


## > **Usage Tangle** / Connection Dissolution

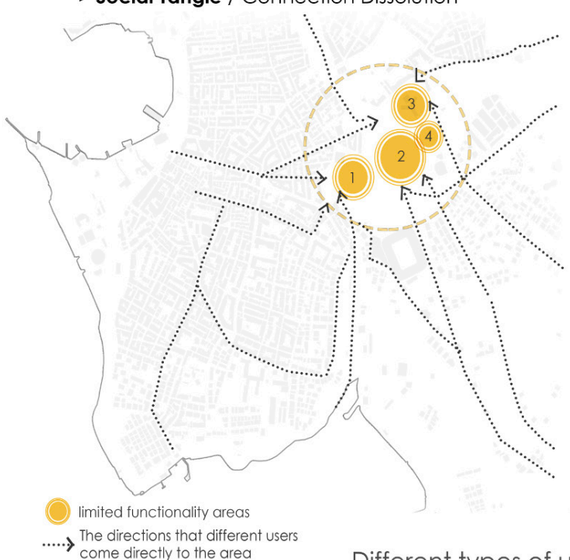


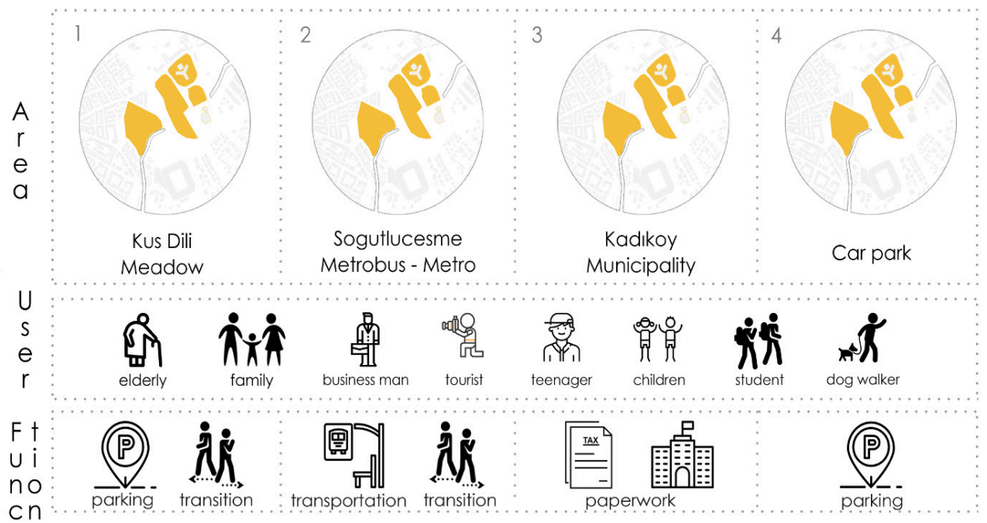

The fact that the areas with many area usage functions do not have a certain axis but are completely dissolved from each other, as well as the convenience provided by Söğütlüçeşme Avenue in terms of transportation and many field functions, this axis is used as the main axis and forms a node.

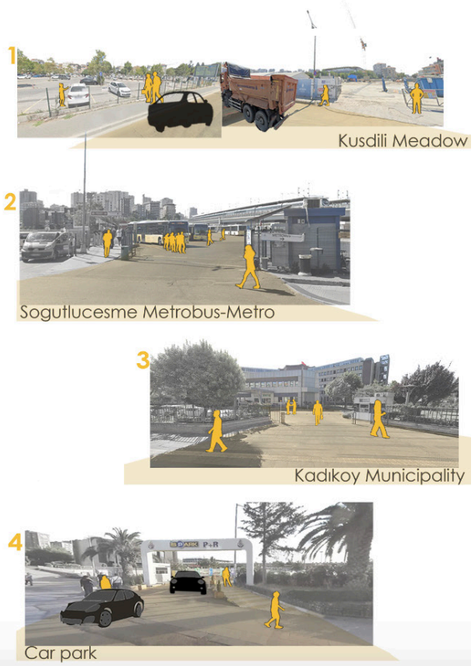



## > **Social Tangle** / Connection Dissolution




Different types of users and limited functionality causes the area to be stressful and creates a tangle.

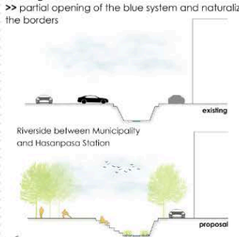
| Aim | Goal | Relation type | Tangles | Strategies | Functions | Users |
|---|---|---|---|---|---|---|
| Solving the tangle in the context of the dissolution process by the simultaneous operation of the situations identified in phase 1 and phase 2, thus establishing the relations in the area. | - Improving the unifying infrastructure potential of the area's history and restoring its ecological values.<br>- Refreshing the memory of the city with the reinforced perception of space and bringing the tangle actively to daily life. | Macroscobic (visible)<br>Microscobic (perceived) | Ecological<br>Infrastructural<br>Usage<br>Social | Green System<br>River restoration<br>Water management<br>Barrier effect<br>Focus zone connection<br>Interaction zones<br>Perceptual continuity of blue | nature, park, walking, transition, sitting<br>picnic, meeting, playground, fishing, entertainment<br>transition, park, sitting, entertainment<br>meeting, resting, gathering<br>transition, meeting, gathering, shopping, entertainment<br>transition, walking, sitting, picnic, entertainment<br>meeting, playground, resting, fishing | elderly<br>family<br>business man<br>tourist<br>teenager<br>children<br>student<br>dog walker |

## Functions in the area

### Ecological Tangle

> Establishing a green system by combining the leftover spaces and solved areas from the meadows with other green areas in Kadıköy.
>> connection with creating green corridors

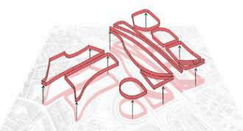
> Restoration of the ecological values of the Kurbağalıdere
>> partial opening of the blue system and naturalizing the borders




> Making water management complementary to the blue system
>> creating zones that act as sponges, bioswales and using permeable surfaces for collecting rainwater .

### Infrastructural Tangle

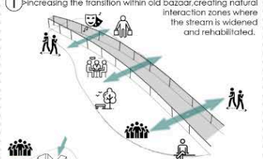
> Minimizing the barrier effect on solvent transport infrastructure
>> green system integration by opening public and semi-public spaces affected by barrier effect
>> remove or improve access interruptions
>> arrangement of the parking lot opposite the municipality, establishment of under the bridge connections, establishment of the stadium surrounding-green meadow connections



>eliminating and minimizing causes of the barrier effect

>enabling interaction and transition within and in between areas

①>increasing the transition within old bazaar,creating natural interaction zones where the stream is widened and rehabilitated.

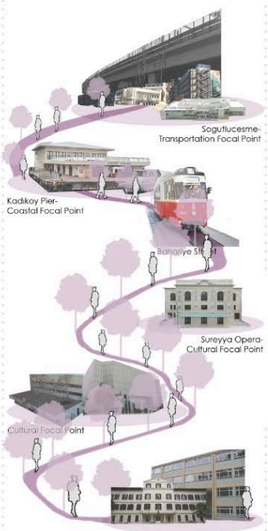


②
>increasing the transition under the railway
>creating interactive zones under the bridge, like sale points,exhibits, resting zones, take away stations...
>creating gathering zones for social activities

③
>creating gathering zones
>creating buffer zone which enables transition and natural flow
>opening the space for extended use

### Usage Tangle

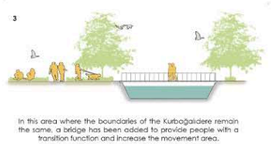
> Ensuring the connectivity of Kadıköy's focal zones from the tangle
>> creating alternative usage zones and multi-functions on newly created routes
>> creating new focal points from the integration of the green system with the gray system



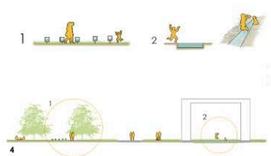

The usage area tangle hosted by the Sogutlucesme will be dispersed and diss by the axes designed for the usage func that other focal points already have. A have the function of directing to design areas and directing from designed area the same time, new focal points are cult and educational, and links between the focal points are provided.

### Social Tangle

> Creating zones where people can interact with each other and with nature in the limited functioned areas and Kurbağaldere line, which has been opened and restored.
>> ensuring the active use and ownership of the area by ensuring human integration into the restored



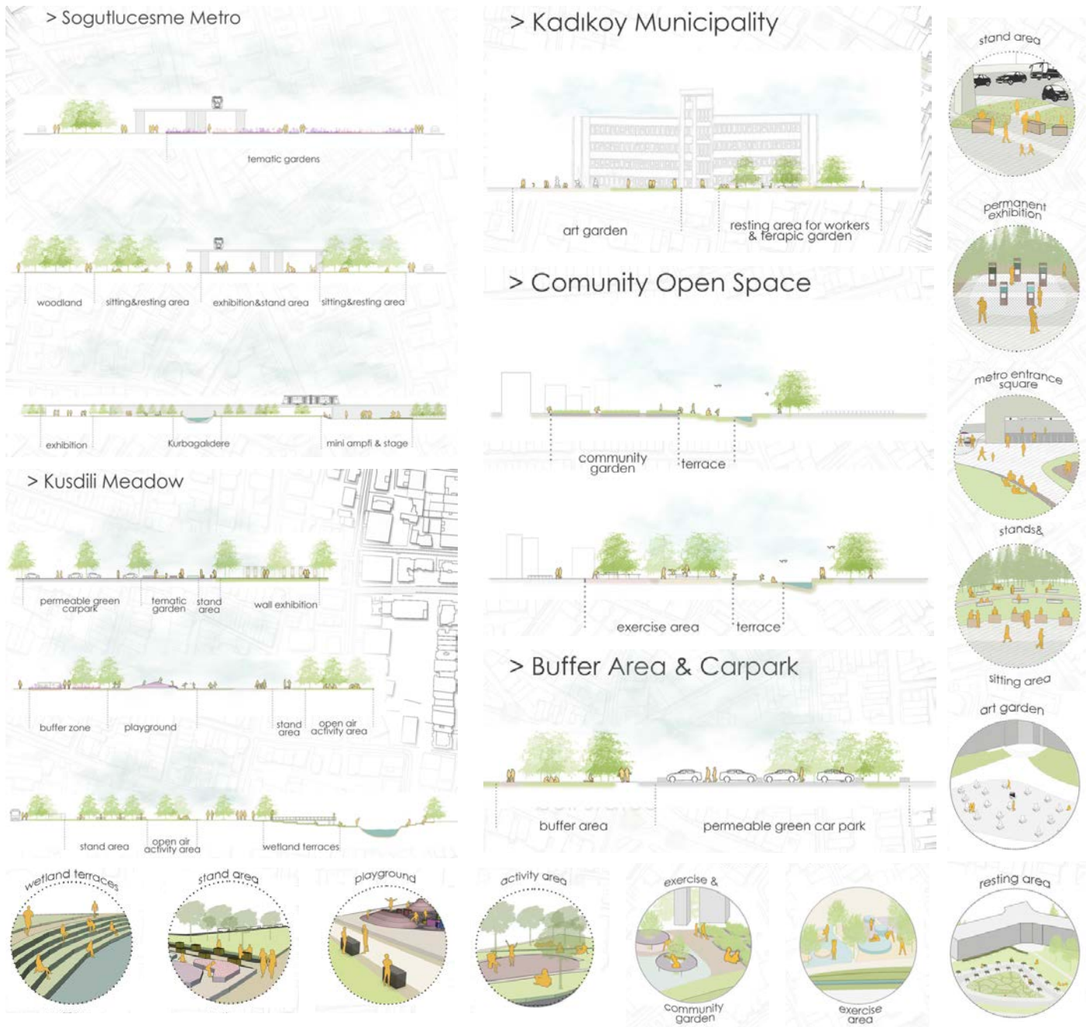

> Maintenance of blue's perception in areas where the blue system is interrupted
>> reminding people of the presence of blue with taking attention with various activities and applications.



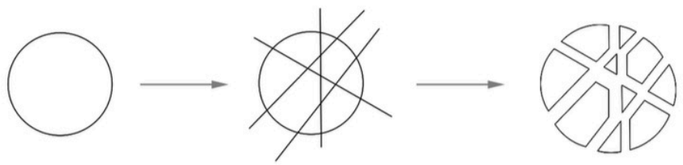
# Dissolution

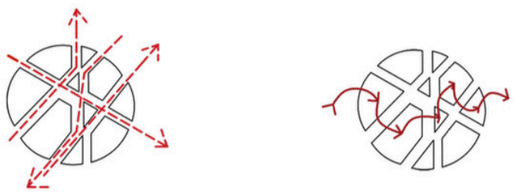
Merve Dilara Ezer

*"Dissolution" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Merve Aydınlı under the title "Un-Tangling the Node of Kadıköy: Infra(structural) Land(scapes)" in the spring semester of 2020-2021.*



# dissolution





permeability

connectivity
*stepping stones

visibility

mobility

perceptual relation
- microscobic relation-

vs.

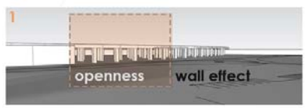
- macroscobic relation-

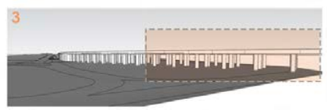
microscobic relation
*perceived-experienced
* micro-scale
*sogutlucesme (scale) -perception-perspectives

1

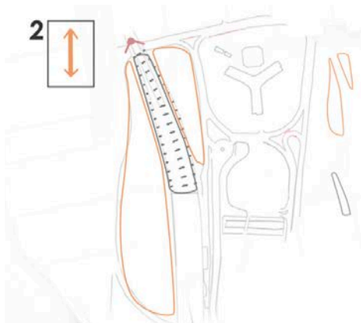
visibility ↑ mobility ↑ --> passage

visibility ↓ mobility ↓ --> activity



2



visibility ↑ mobility ↑ --> passage
*open space feeling -- fast movement

visibility-limited mobility ↓ --> activity
*slow movement -- corridor

dead-end straight corridors

different perspectives

macroscobic relation
*observable
* macro-scale
*kadikoy (scale) - characteristics - image

**Kadikoy Municipality's events**

- seminar, information
- concert
- exhibition, art, kids activities,
- festivals
- exercise, sport
- recycling -

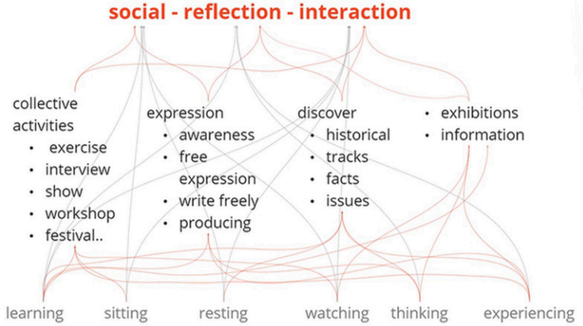
**kadikoy shop**
- social media-sharing

**Streets of Kadikoy**

- colorful streets
- murals
- graffiti
- street art
- statues
- calm
- history,old values

The character - image - social structure of Kadıkoy to be observed in Sogutlucesme, its reflection there and human interaction with the area.

social - reflection - interaction



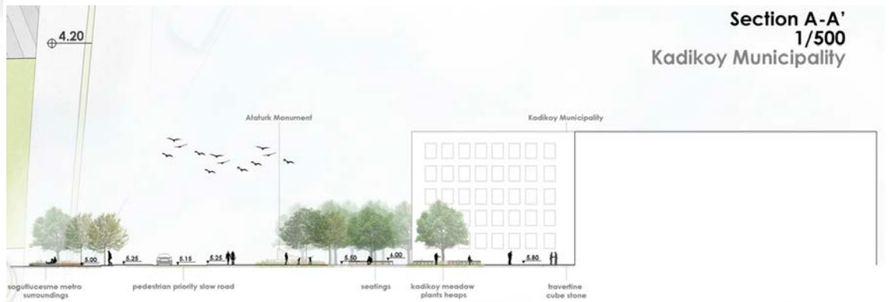
Functions

- square / meeting
- orientation
- resting
- interaction wth nature
- sitting
- bus station
- passage
- meeting / workshop
- shopping
- flexible activity area
  - collective activities
  - exercise
  - workshop
  - festivals
  - exhibition..
- cycle station
- street shows
- sitting
- woodland
- metrobus
- carpark

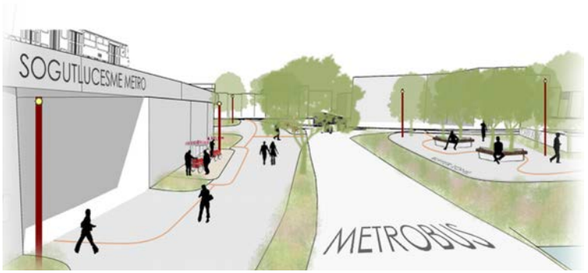
## Kadıkoy Municipality Garden

## Under Bridge Entrance

## Section A-A'
1/500
Kadikoy Municipality

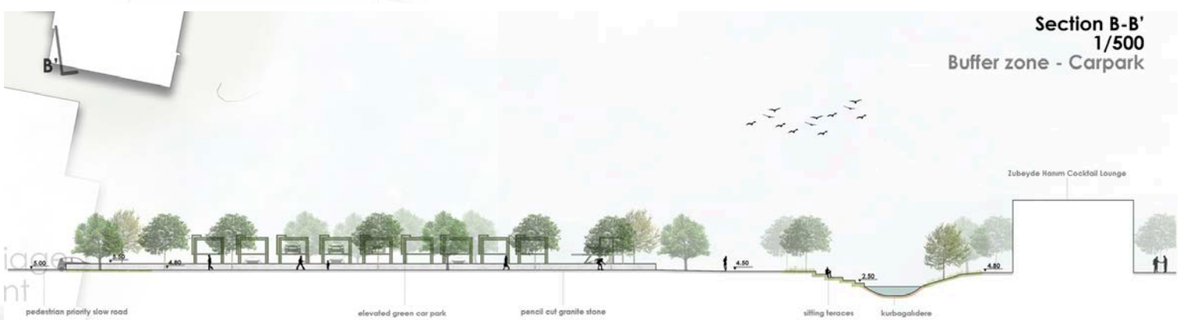



## Metro Entrance - Metrobus - Buffer zone

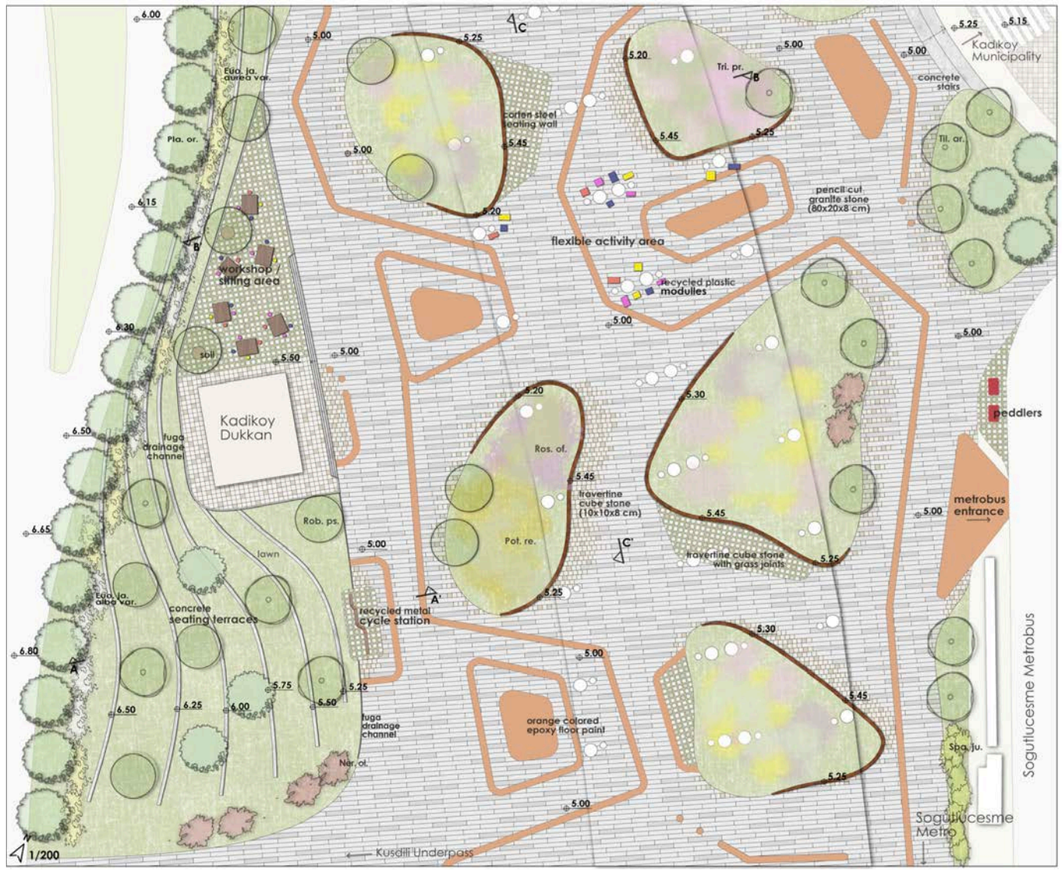


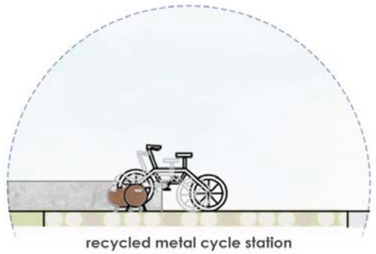

## Section C-C'
1/500
Under Soguţlucesme Metro Bridge

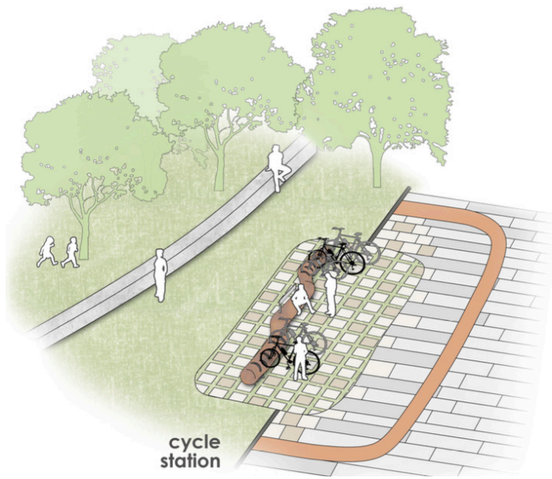
## Section B-B'
1/500
Buffer zone - Carpark



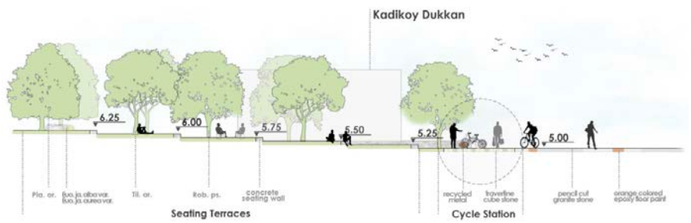

## Under the Metro Bridge



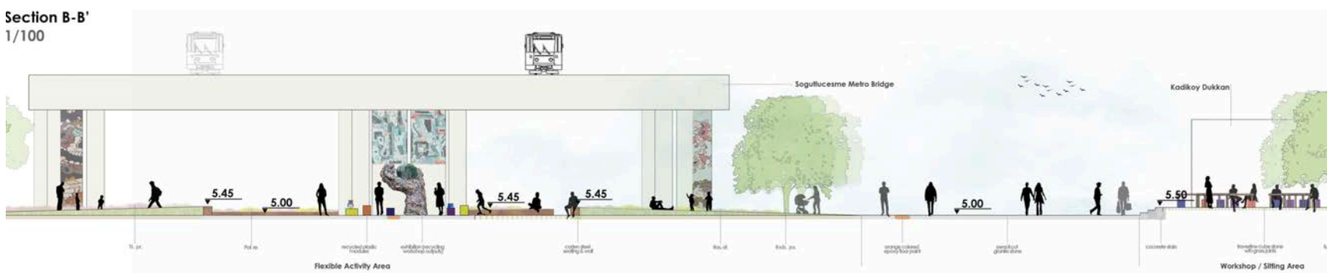




**Section A-A'**
1/200



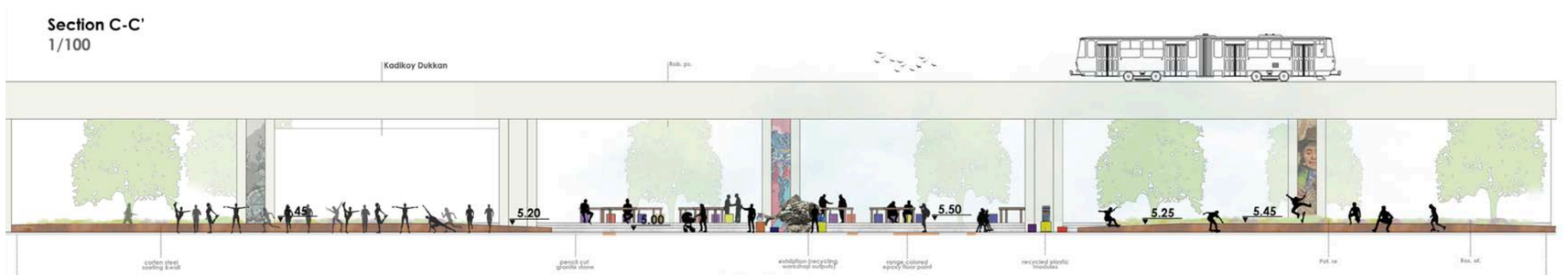

**Section B-B'**
1/100




**LEGEND**

- pencil cut granite stone
- orange colored epoxy floor paint
- travertine cube stone
- travertine cube stone with grass joint
- lawn
- corten steel
- recycled plastic modulles
- recycled metal cycle station
- Robinia pseudoacacia (Rob. ps.)
- Tilia argentea (Til. ar.)
- Platanus orientalis (Pla. or.)
- Nerium oleander (Ner. ol.)
- Eounymus japonica aurea var (Eou. ja. aurea var.)
- Eounymus japonica alba var (Eou. ja. alba var.)
- Spartium junceum (Spa. ju.)
- Rosmarinus officinalis (Ros. of.)
- Trifolium pratense (Tri. pr.)
- Potentilla reptans (Pot. re.)

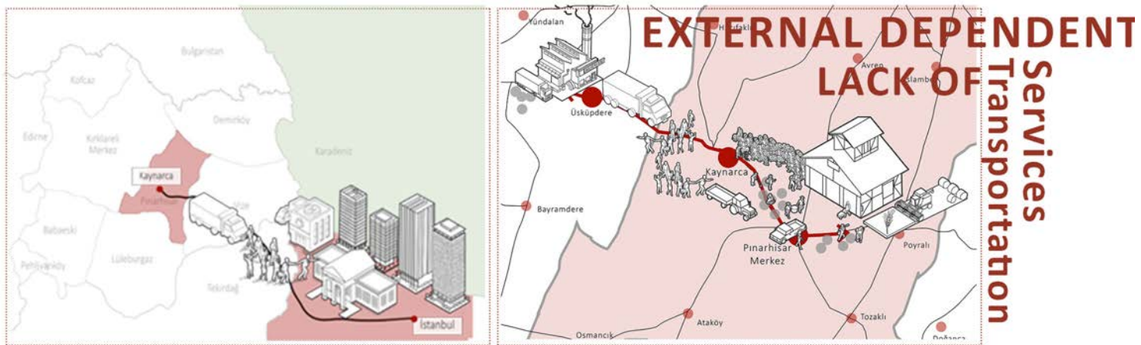
**Section C-C'**
1/100

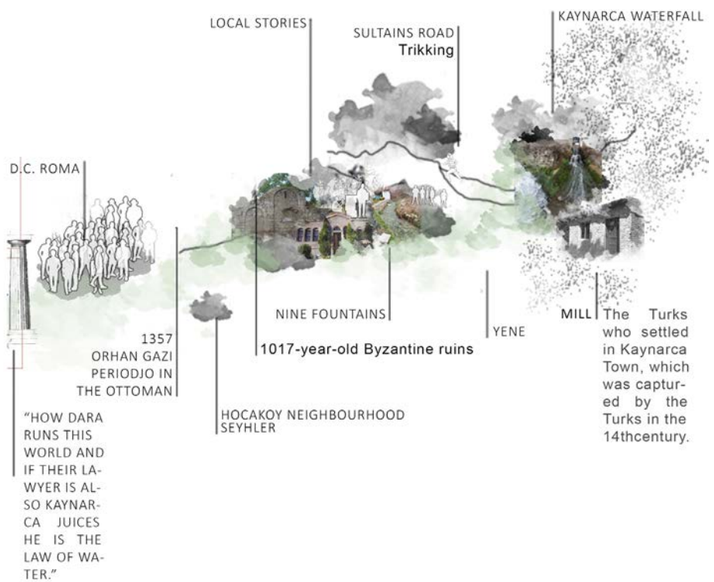


# Transformative Water

Rebeka Kayakoparan, Nergis Şenkaya, Aybüke Yarbasan, İrem Özdeş

*"Transformative Water" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Melih Bozkurt and Res. Assist. Fatma Sultan Yaman under the title "Virissis Verissa: post][new landscape scenarios for Kırklareli" in the spring semester of 2021-2022.*
*The analysis, synthesis and master plan phases of the study were produced as a group work consisting of Rebeka Kayakoparan, Nergis Şenkayal, Aybüke Yarbasan and İrem Özdeş.*

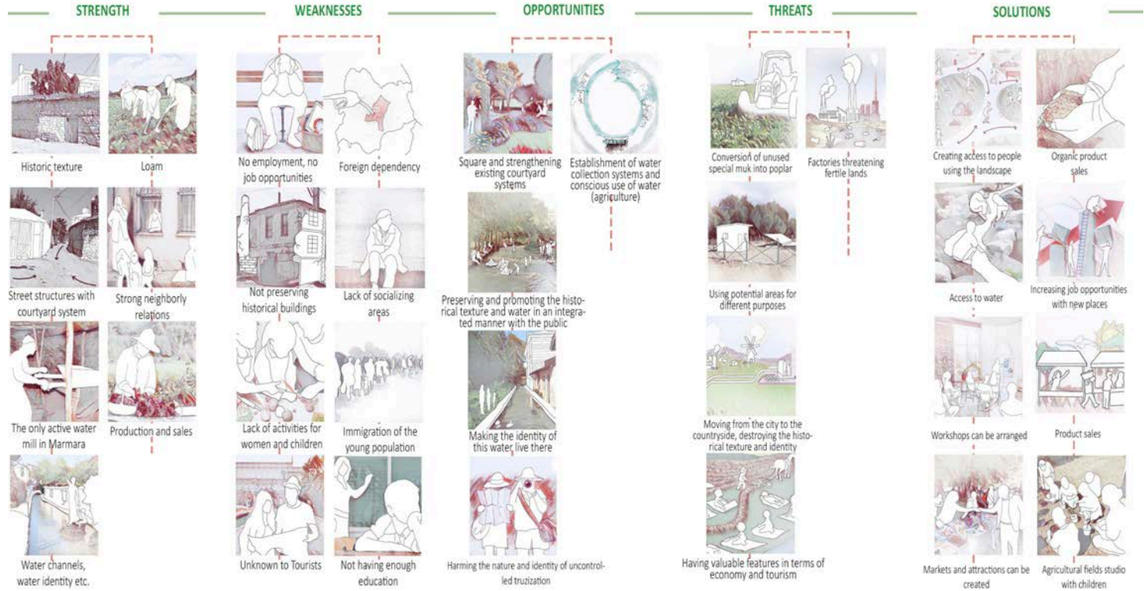


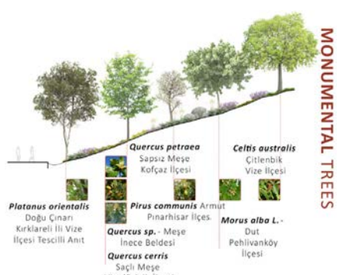



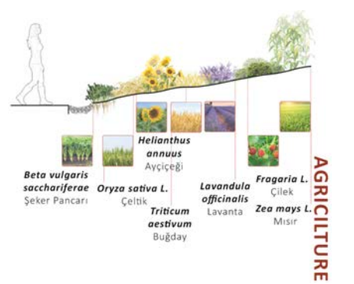

The project area, Kaynarca, is connected to the Pınarhisar district of Kırklareli and is located along the intercity road lines. Although Kırklareli Pınarhisar village has rich opportunities and a unique identity, it relies on Istanbul and the surrounding districts for essential needs such as job opportunities, school services, and health facilities, which are insufficient in the village.

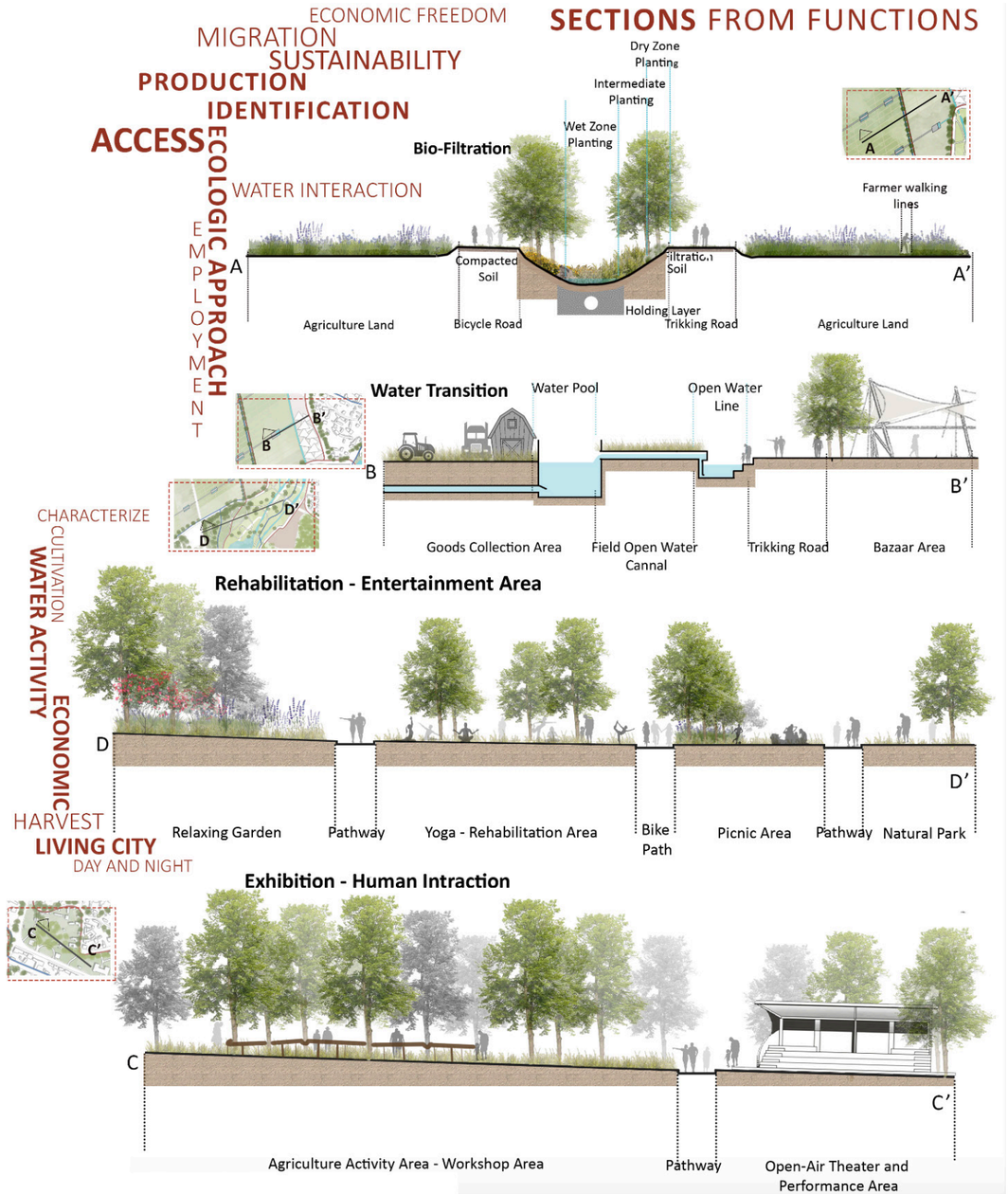
The identity and characteristics of Kaynarca are shaped by its history and local people. The area's history dates back to 515 BC. During his expedition to Scythia, the Iranian ruler Darius stayed with his army next to the boiling rivers. Darius liked this place so much that he had a column erected at the head of the water. He even said, "Just as Darius is the ruler of this world, the waters of Kaynarca are the rulers of the waters." Based on these words and its history, it is evident that the waters of Kaynarca are the most significant factor in shaping the identity of the place.









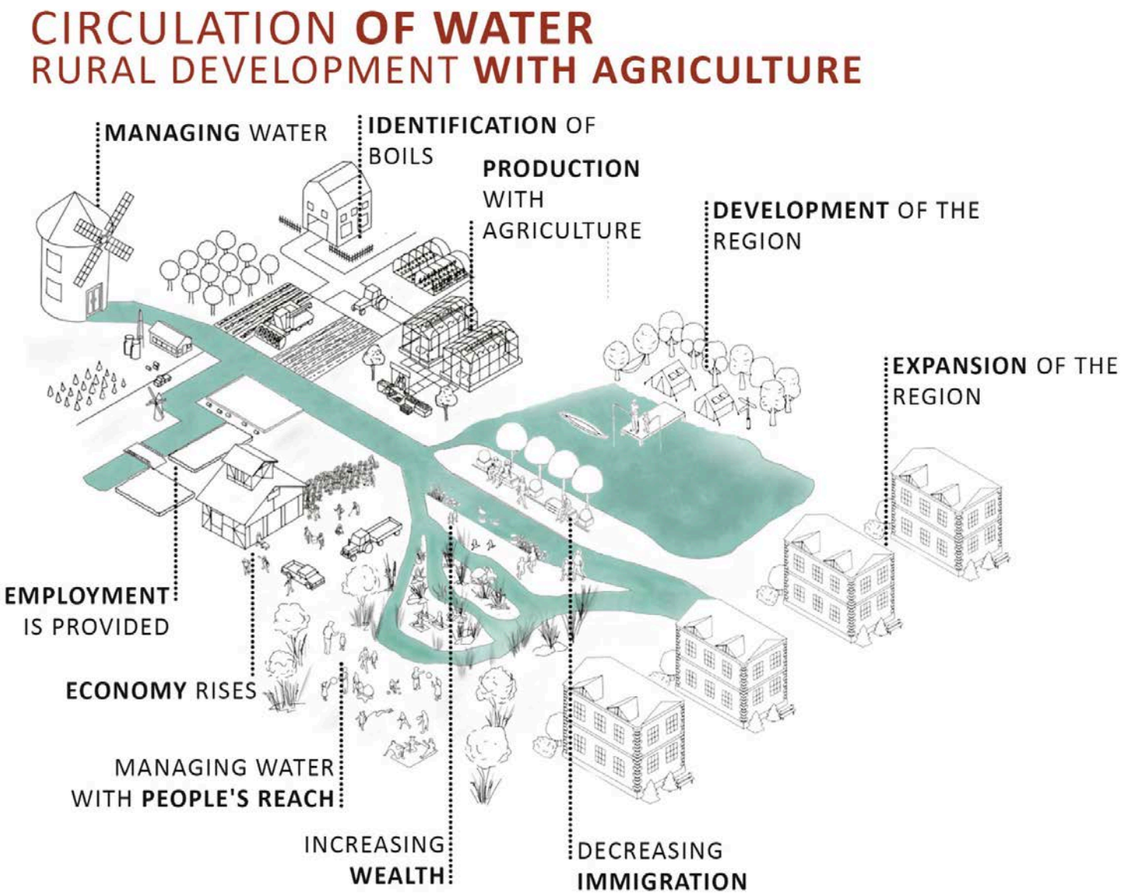

Aim: Transforming space through different uses of water.

First and foremost, agricultural lands are developed and made usable by heating the water. This approach provides employment, boosts the economy, reduces out-migration, and fosters the development of the rural city. Consequently, various functions within this field are enhanced. With these improvements, people's quality of life is elevated, and new settlements are expanded in a planned manner.

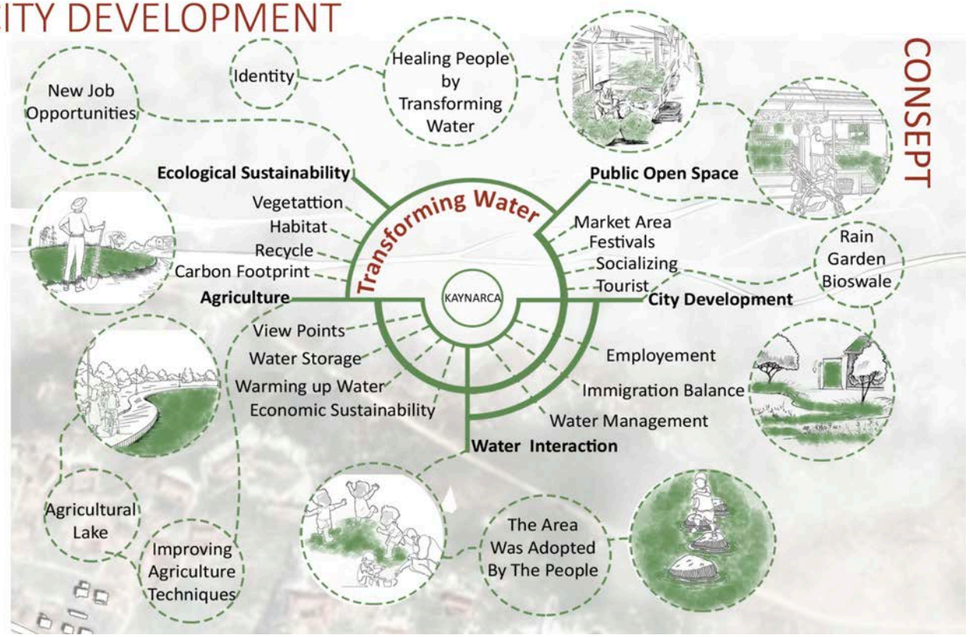
The water source in the boiling springs flows down through specific channels, aided by the topography. By creating a pond here, the water is collected, heated, and then redistributed throughout the city for different uses.Aim: Transforming space through different uses of water.

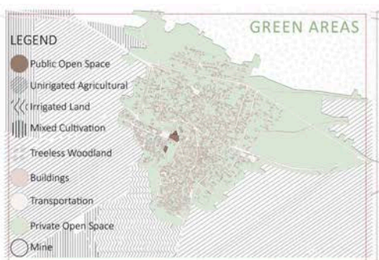
The first transformation involved the use of water in agriculture. The water was distributed to agricultural lands and its usability was enhanced by gradually heating it in specific areas. Once the water was directed to the agricultural lands, it was also utilized around the existing water channels in the village for various functions, fostering interaction among the people. This increased the quality of life and supported the development and growth of the area with boiling water sources.

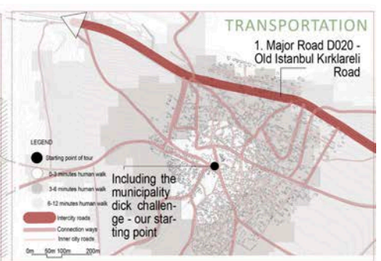
Additionally, the roads in the old settlement were widened to accommodate the needs of the people. The remaining roads were made more ecologically sustainable and functional. Moreover, a bicycle path and a trekking path around the water source were added.

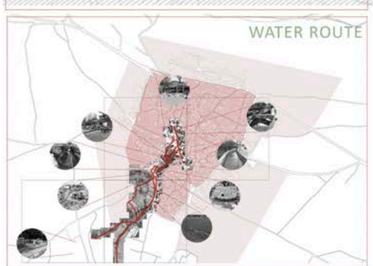


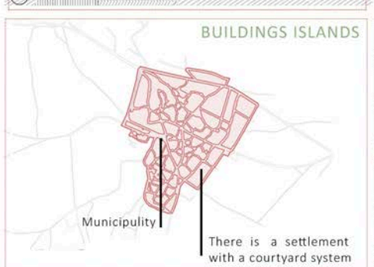
# WATER CITY DEVELOPMENT

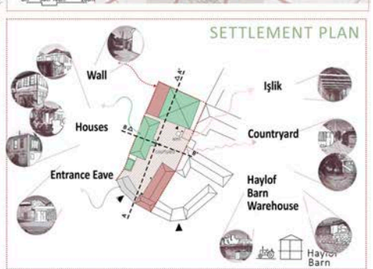


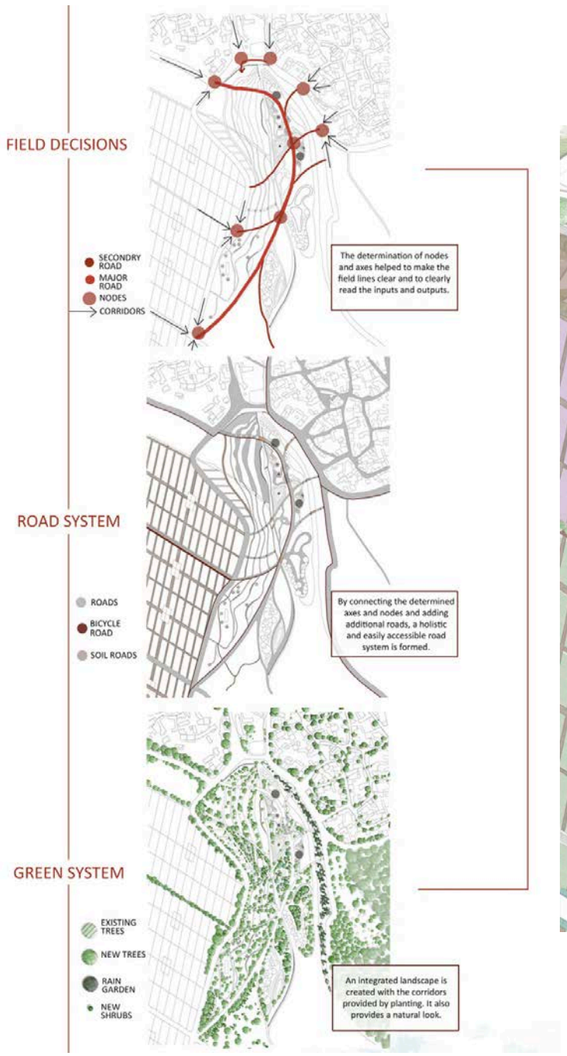


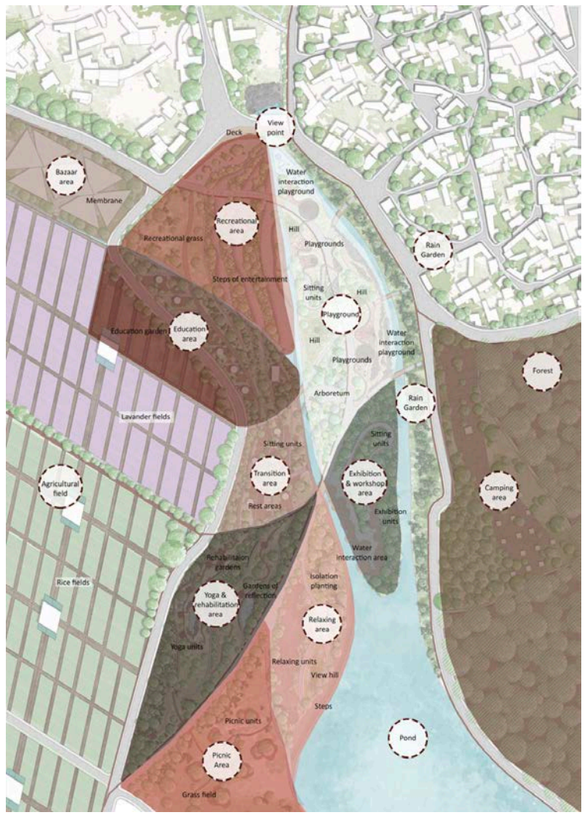



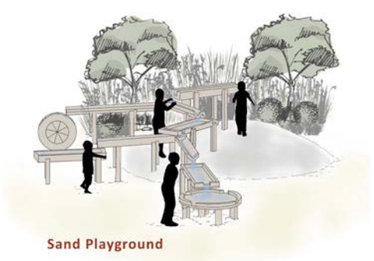



# Transformative Water

Rebeka Kayakoparan

*"Transformative Water" was produced within the scope of Landscape Design 3 carried out by Assist. Prof. Melih Bozkurt and Res. Assist. Fatma Sultan Yaman under the title "Virissis Verissa: post][new landscape scenarios for Kırklareli" in the spring semester of 2021-2022.*

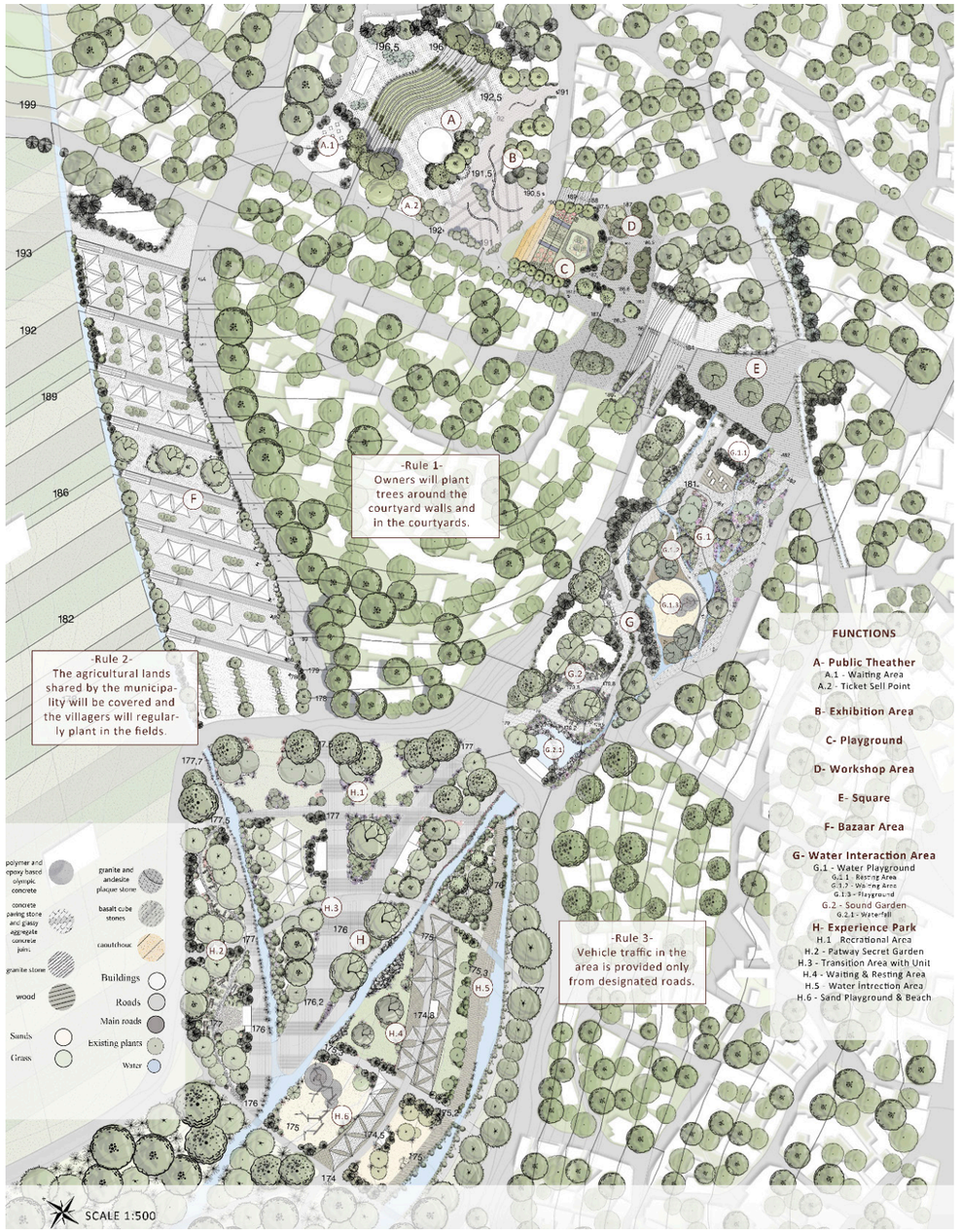


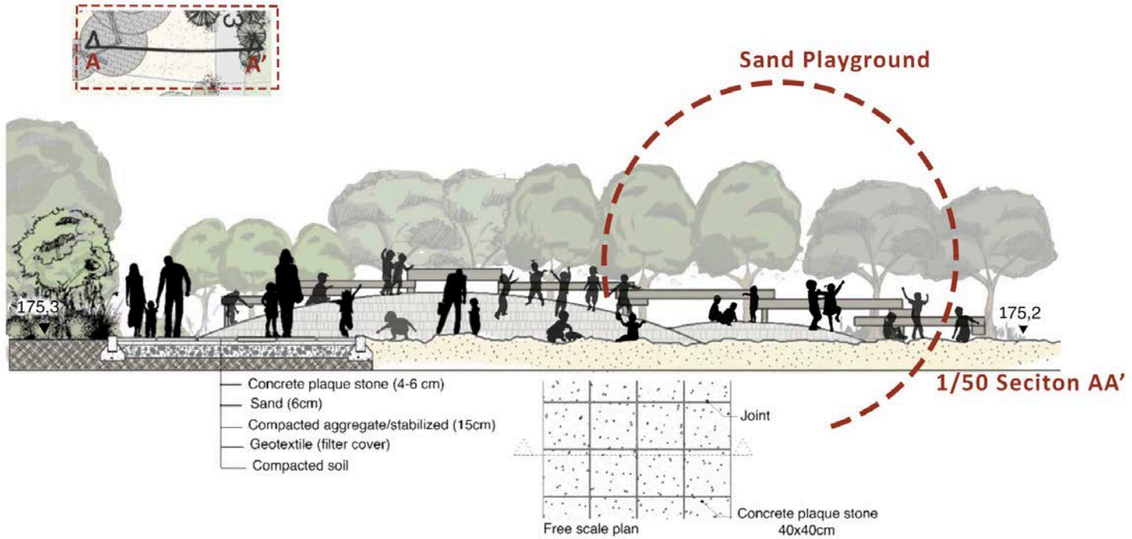
Based on these analyses, a master plan was created, and the main focus areas were determined. The focal points of the project were covered in detail, with the primary elements identified as a theater area, children's playground, workshop area, market area, water interaction area, and experience park.

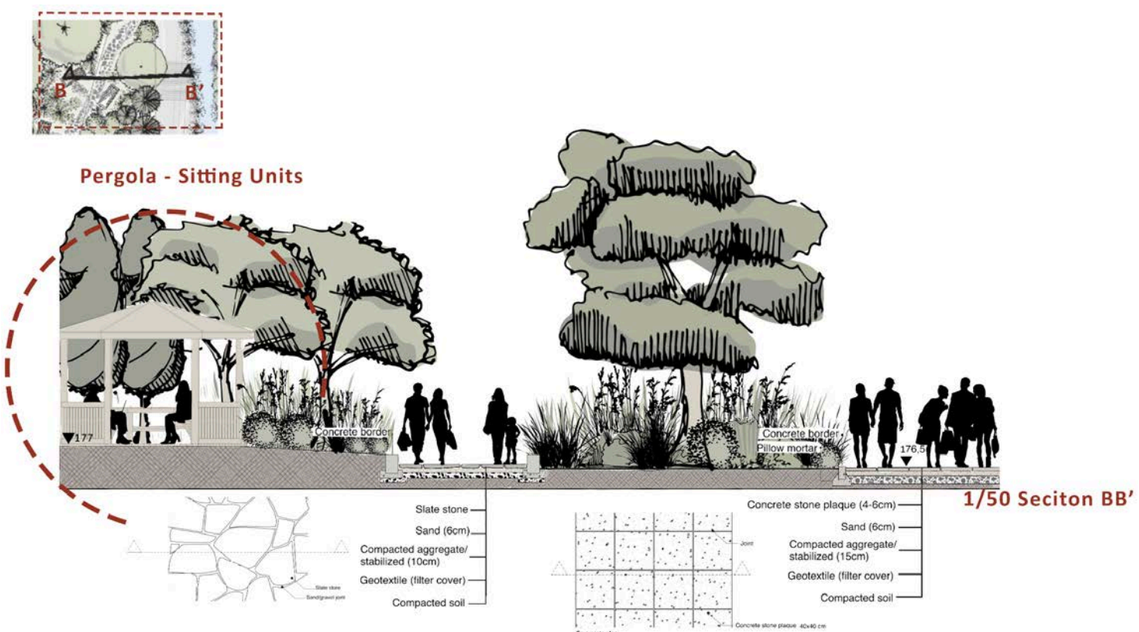
First, an open theater area was designed, intended to host acting training for women and various other performances. The design aims to create an amphitheater utilizing the natural slope of the existing topography. Additionally, there is an exhibition area where products created in the workshop area can be displayed. One of the biggest problems in the project area is the lack of places for children and women to spend time.

The aim in designing the playground is to create a compatible space without altering the existing topography. Utilizing the natural slope, various elements were created for children to engage in climbing, jumping, and sliding activities.

Additionally, there is a workshop area for art activities such as marbling and sewing workshops.



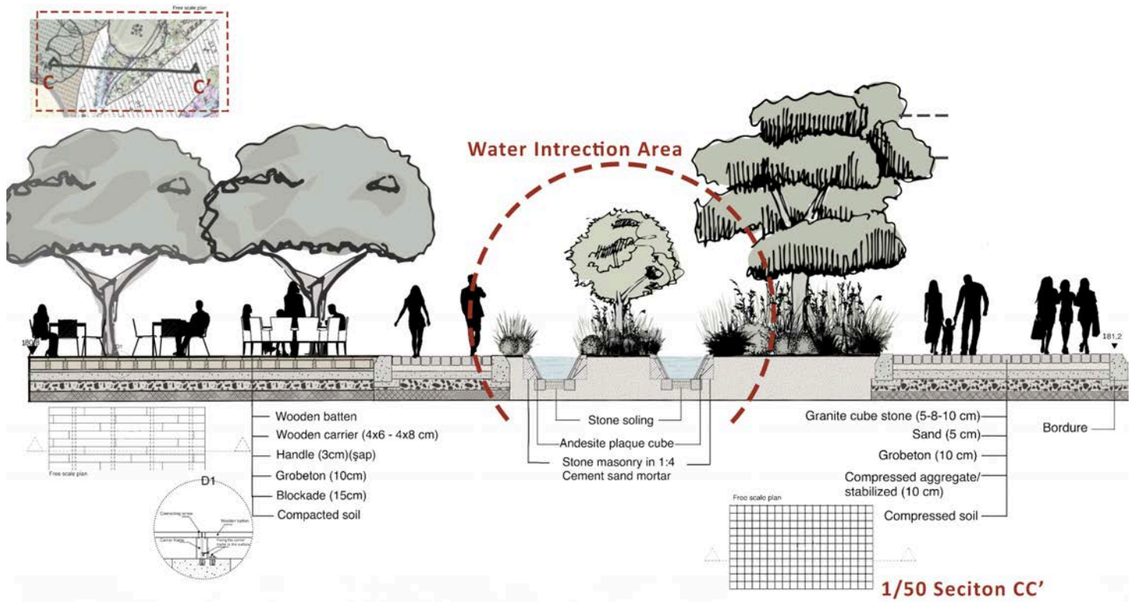


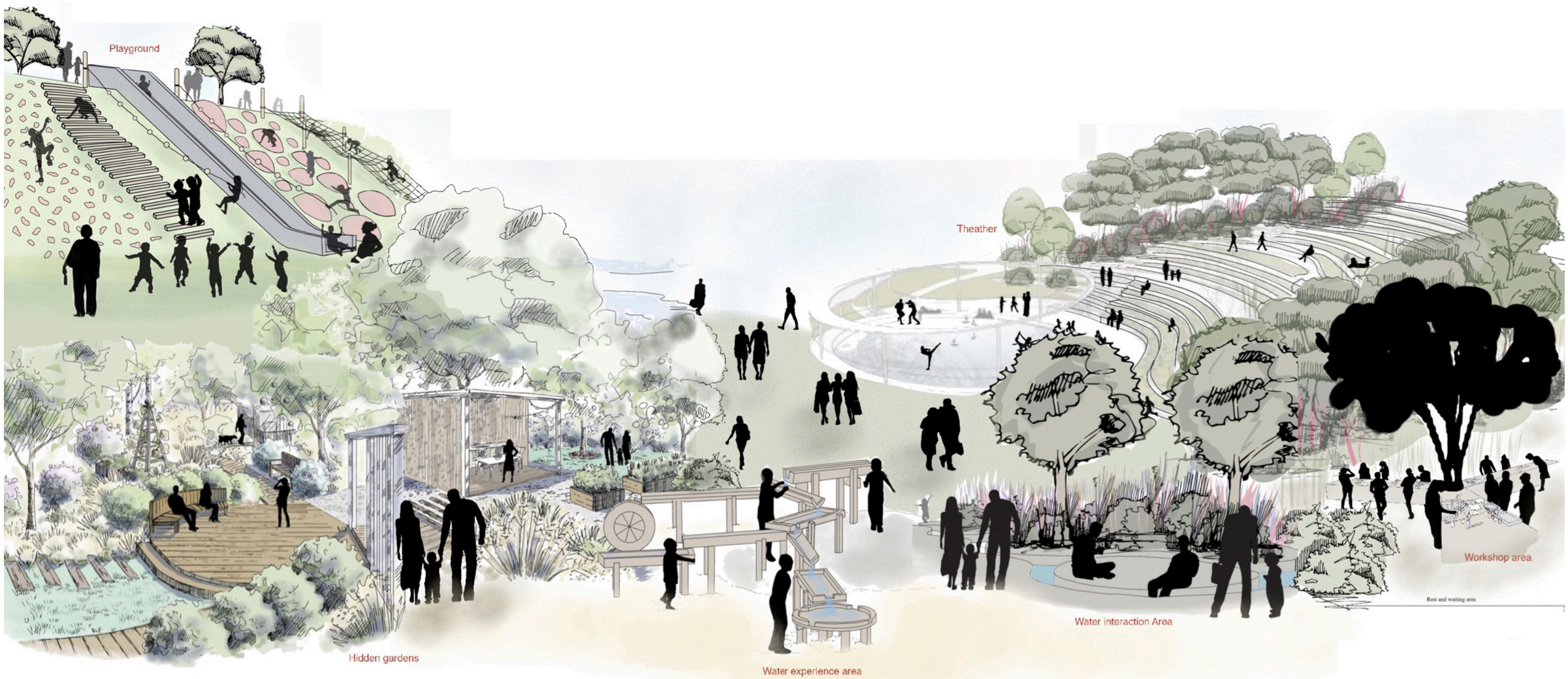






Next, there is a water interaction area. This design offers a space where people of all ages can have fun using the water channels. Rainwater can also be collected here, providing various interactive experiences with water. There is a sandbox for children and a waiting/rest area for parents. Moreover, a sound garden is designed for people to enjoy and relax.
The market area, a crucial spot for tourists, is designed as a space where agricultural products and locally produced materials are showcased to the public.

The aim here is to generate income and boost the economy by promoting locally produced goods. Finally, an experience area has been designed to include various functions such as water interaction points, exploration routes, picnic and festival areas, and playgrounds for children. The goal is for both local residents and tourists to experience different designs that reflect Kaynarca's identity and foster a connection with the region.




Playground
Theather
Workshop area
Rest and waiting area
Water interaction Area
Hidden gardens
Water experience area

# Transformative Water

Nergis Şenkaya

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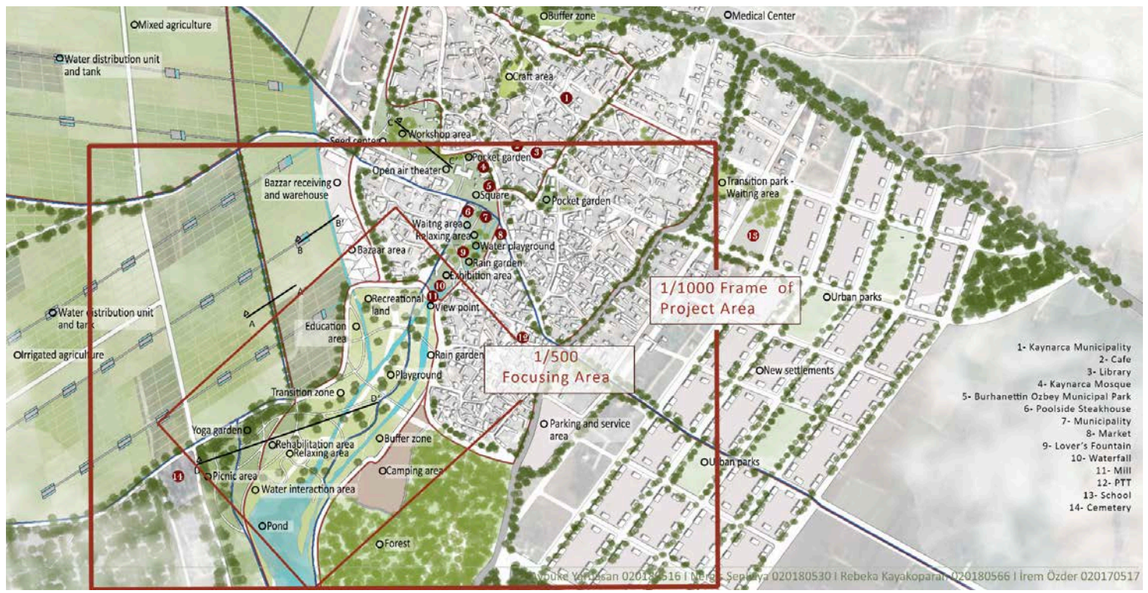
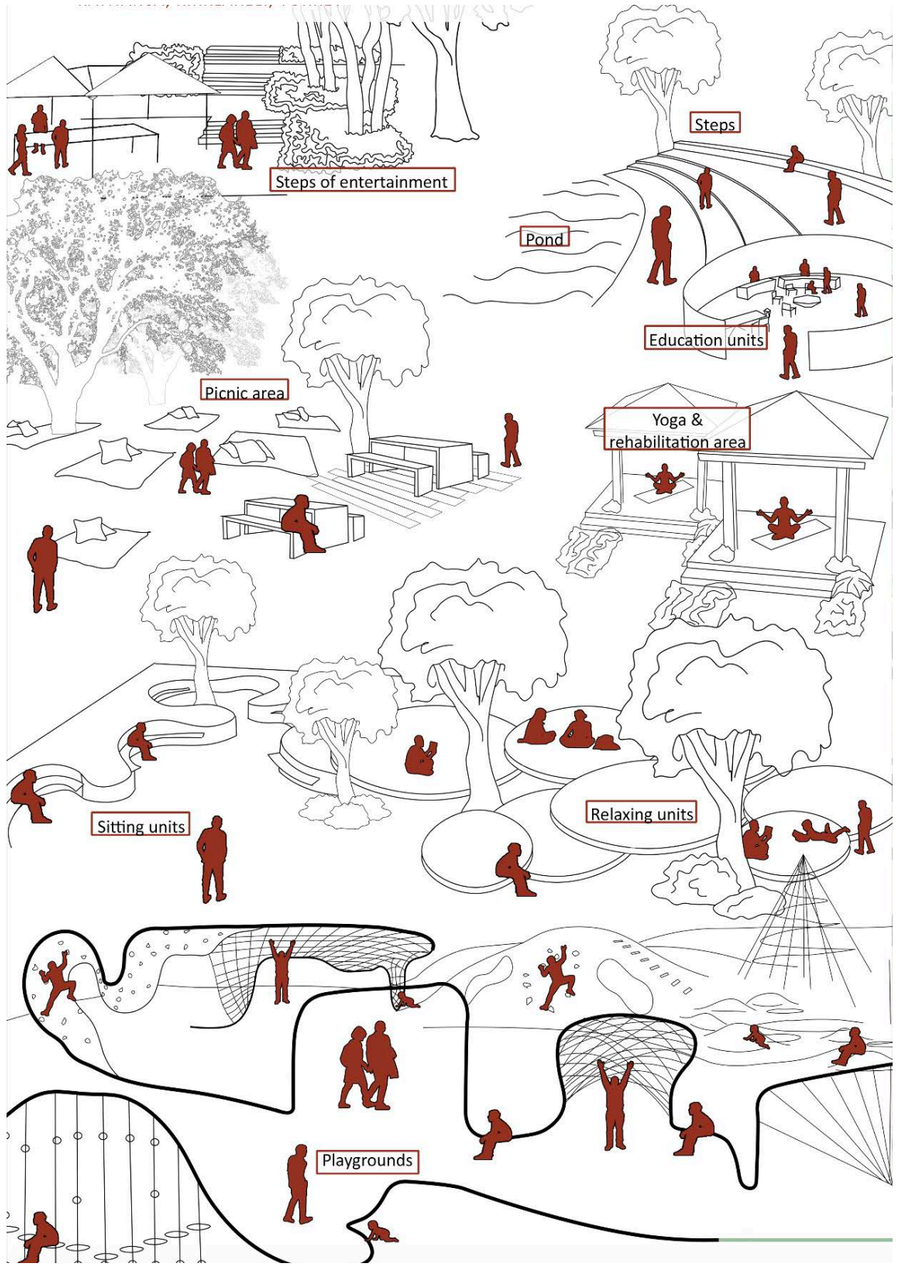
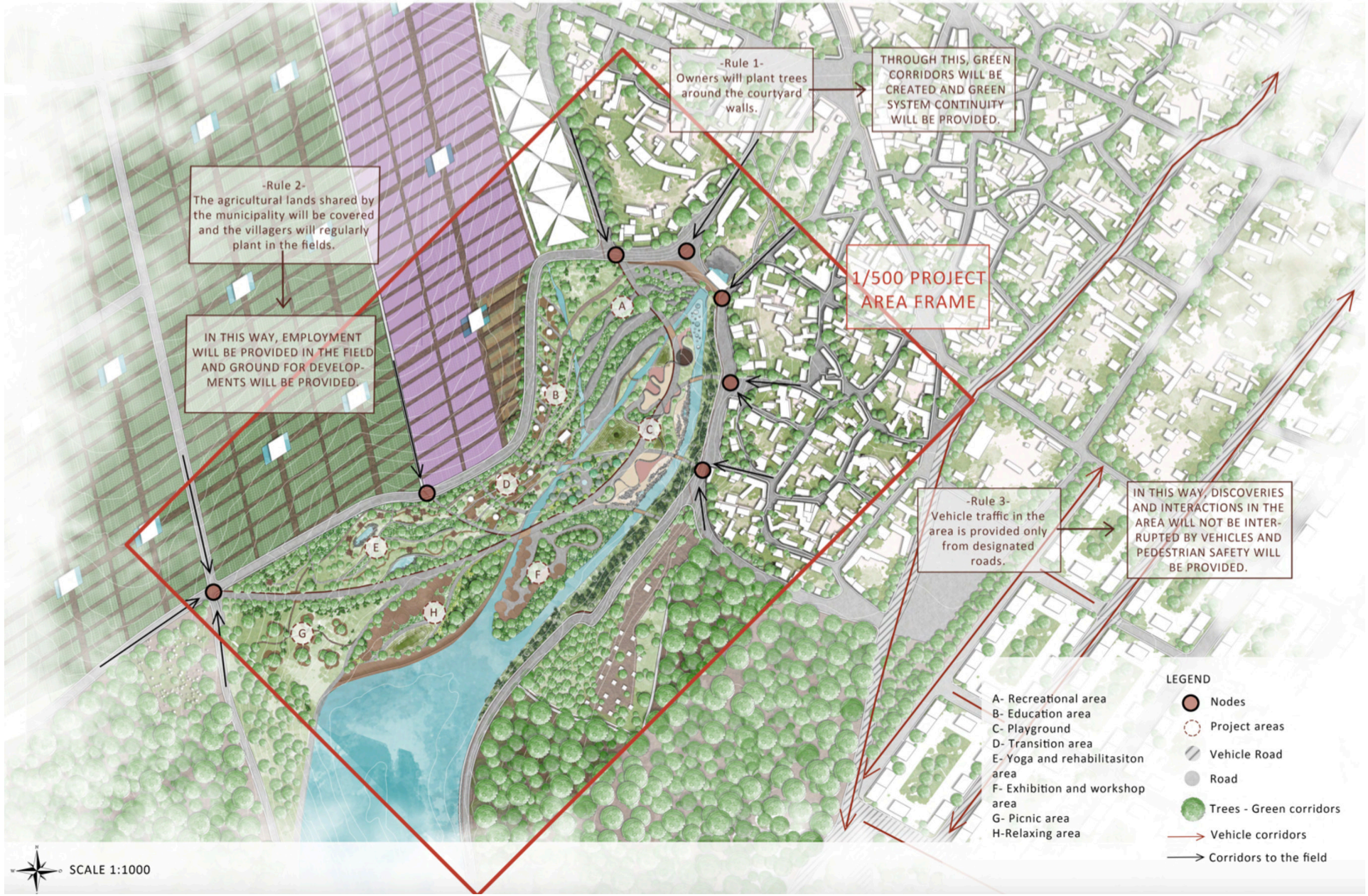



Our primary goal is to achieve efficiency by transforming the use of water. We aim to revitalize agricultural lands with increased yields and rejuvenate public spaces and interactions that are currently lacking.
Additionally, we seek to prevent migration by gradually expanding the area along a specific axis.
I established design rules, beginning with the implementation of the courtyard system.
This system mandates that property owners plant trees along the courtyard walls, creating a green corridor. This ensures that connections between the newly designed area and other regions remain intact. Through these efforts, we strive to achieve harmonious and sustainable development that benefits both the local community and the broader region.
I established design rules to regulate this system and its development. First, I utilized the courtyard system to set a rule that property owners in the courtyard must plant trees along the courtyard walls. I chose Quercus as the species for these trees because it already exists in the area and would not disrupt the natural order. Following this rule, I anticipate the creation of a green corridor, ensuring that connections between the newly designed area and other regions remain intact.
By using water efficiently, we can achieve optimal agricultural yields, which will, in turn, provide employment opportunities. The employment generated will pave the way for the development of new areas. Another rule is that vehicle entrances and exits are directed towards newly formed areas, ensuring pedestrian safety within the area. This approach prevents vehicle roads from interrupting area connections and situates spaces designed for people's tranquility away from vehicle noise.





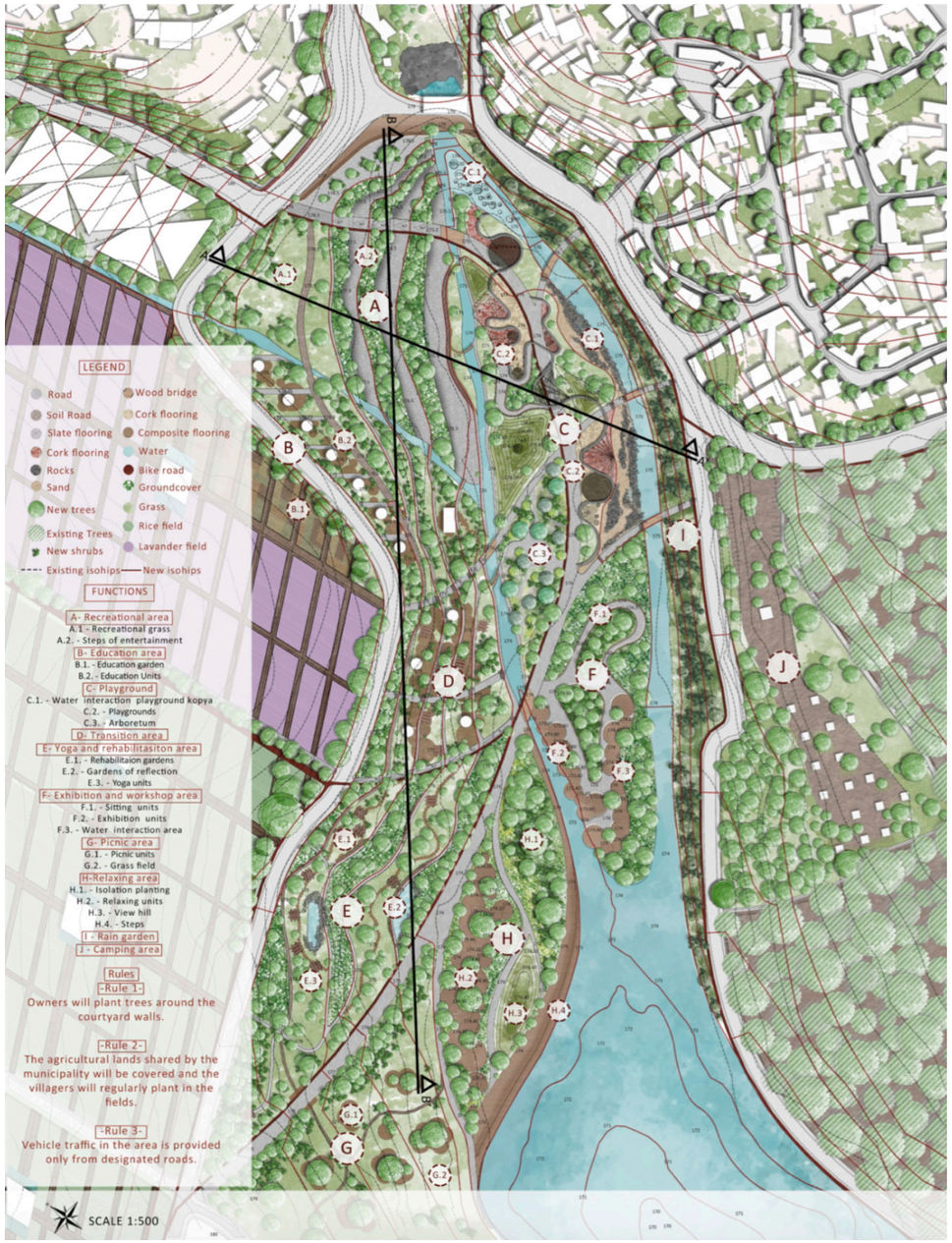

After establishing these rules, I analyzed the axes and nodes of the area to be designed and determined the functions. I identified the nodes based on the existing lines of the field and emerging features within it. Consequently, I determined a main axis that traverses the entire area from the main focus, and an axis that connects to this primary route. I also added a secondary dirt path and bike paths to accompany these axes, allowing for a complete tour of the area and enhancing the user experience.

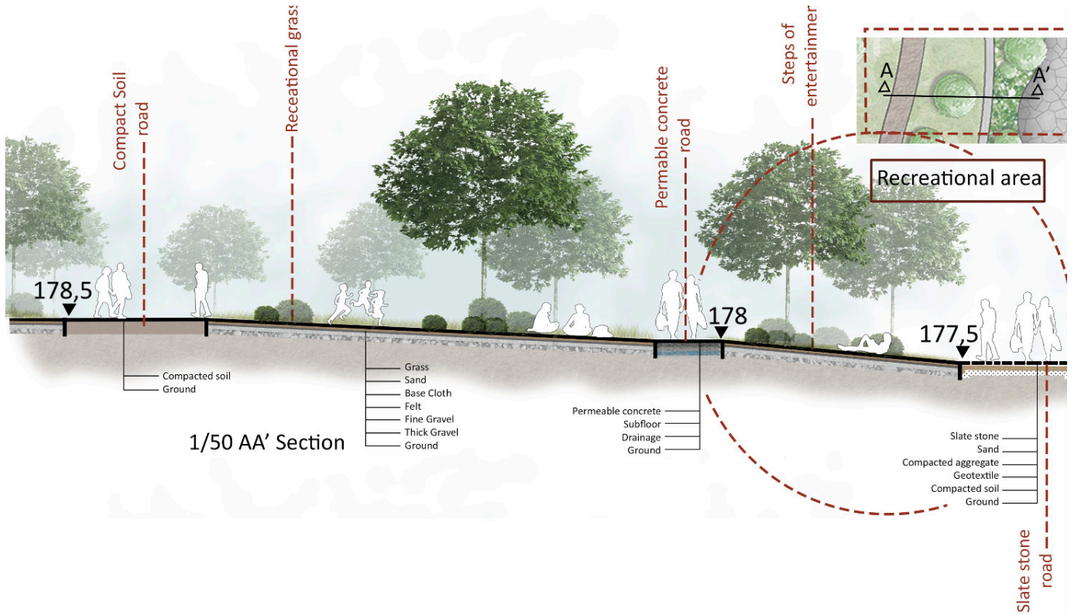
Regarding the green cover, an integrated landscape emerged from the established rules, connecting the new area harmoniously. The functions within the area consist of a natural park concept that works cohesively to address the lack of public spaces in the region.

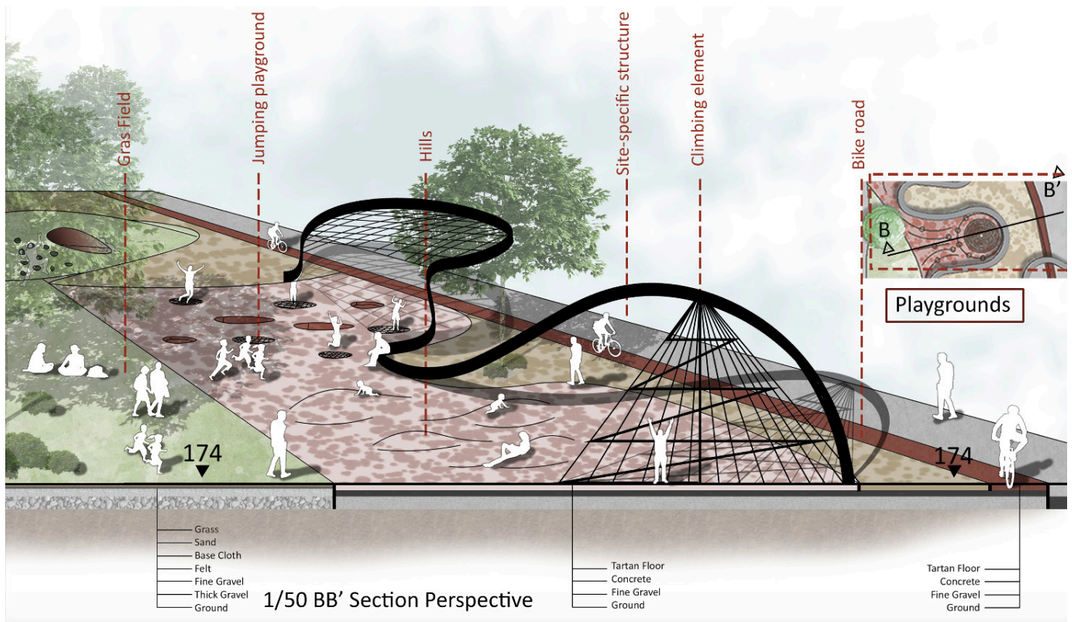
The existing water flow in the area is utilized as needed. Surrounding these water features, there are various zones with specific functions, including an entertainment area, playgrounds, an education area, a listening area, a yoga and rehabilitation area, a picnic area, an interaction area, a camping area, and a transition area. These spaces not only serve the residents but also cater to the broader community, providing diverse recreational and educational opportunities for everyone.

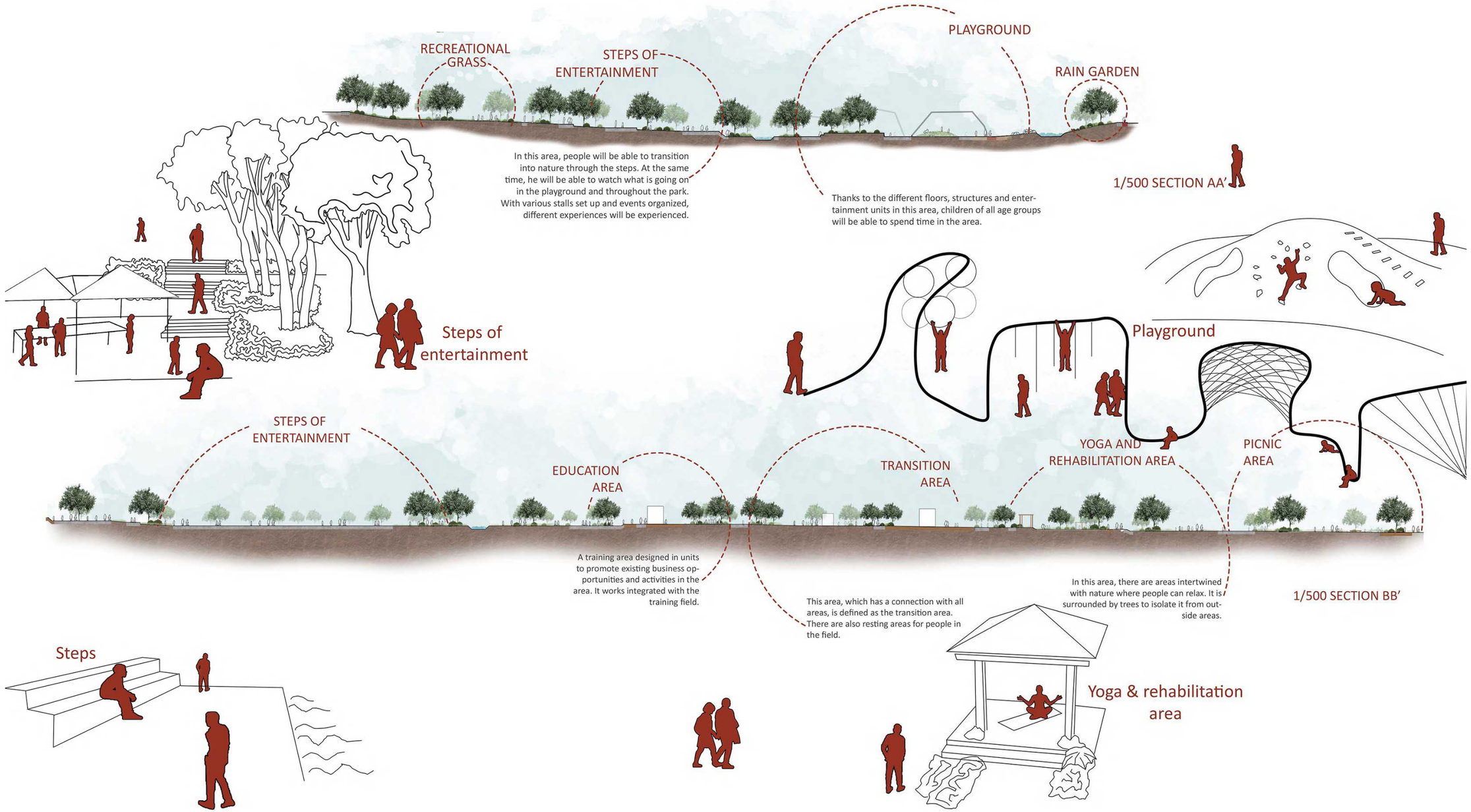
The area consists of an amusement zone, including an amusement lawn and amusement steps. Festivals and events will be celebrated here, and in the absence of events, women can contribute to their household economy by selling products at stalls set up on the steps. Additionally, visitors can sit on the steps and enjoy a view of the entire park, creating a pleasant atmosphere.

Through these interactions, arrangements, and designs, a holistic atmosphere will be created. The area will transform into an inviting space, appealing to people of all ages and fostering community engagement and enjoyment.


LEGEND
Road
Soil Road
Slate flooring
Cork flooring
Rocks
Sand
New trees
Existing Trees
New shrubs
Existing isohips
New isohips
Wood bridge
Cork flooring
Composite flooring
Water
Bike road
Groundcover
Grass
Rice field
Lavander field
FUNCTIONS
A- Recreational area
A.1. - Recreational grass
A.2. - Steps of entertainment
B- Education area
B.1. - Education garden
B.2. - Education Units
C- Playground
C.1. - Water interaction playground kopya
C.2. - Playgrounds
C.3. - Arboretum
D- Transition area
E- Yoga and rehabilitasiton area
E.1. - Rehabilitaion gardens
E.2. - Gardens of reflection
E.3. - Yoga units
F- Exhibition and workshop area
F.1. - Sitting units
F.2. - Exhibition units
F.3. - Water interaction area
G- Picnic area
G.1. - Picnic units
G.2. - Grass field
H-Relaxing area
H.1. - Isolation planting
H.2. - Relaxing units
H.3. - View hill
H.4. - Steps
I - Rain garden
J - Camping area
Rules
-Rule 1-
Owners will plant trees around the courtyard walls.
-Rule 2-
The agricultural lands shared by the municipality will be covered and the villagers will regularly plant in the fields.
-Rule 3-
Vehicle traffic in the area is provided only from designated roads.
SCALE 1:500


Compact Soil road
Receational grass
Permable concrete road
Steps of entertainmer
A
A'
Recreational area
178,5
178
177,5
Compacted soil
Ground
Grass
Sand
Base Cloth
Felt
Fine Gravel
Thick Gravel
Ground
Permeable concrete
Subfloor
Drainage
Ground
Slate stone
Sand
Compacted aggregate
Geotextile
Compacted soil
Ground
Slate stone road
1/50 AA' Section


Gras Field
Jumping playground
Hills
Site-specific structure
Climbing element
Bike road
B
B'
Playgrounds
174
174
Grass
Sand
Base Cloth
Felt
Fine Gravel
Thick Gravel
Ground
Tartan Floor
Concrete
Fine Gravel
Ground
Tartan Floor
Concrete
Fine Gravel
Ground
1/50 BB' Section Perspective


RECREATIONAL GRASS
STEPS OF ENTERTAINMENT
PLAYGROUND
RAIN GARDEN
In this area, people will be able to transition into nature through the steps. At the same time, he will be able to watch what is going on in the playground and throughout the park. With various stalls set up and events organized, different experiences will be experienced.
Thanks to the different floors, structures and entertainment units in this area, children of all age groups will be able to spend time in the area.
1/500 SECTION AA'
Steps of entertainment
Playground
STEPS OF ENTERTAINMENT
EDUCATION AREA
TRANSITION AREA
YOGA AND REHABILITATION AREA
PICNIC AREA
A training area designed in units to promote existing business opportunities and activities in the area. It works integrated with the training field.
This area, which has a connection with all areas, is defined as the transition area. There are also resting areas for people in the field.
In this area, there are areas intertwined with nature where people can relax. It is surrounded by trees to isolate it from outside areas.
1/500 SECTION BB'
Steps
Yoga & rehabilitation area

# Transformative Water

Aybüke Yarbasan

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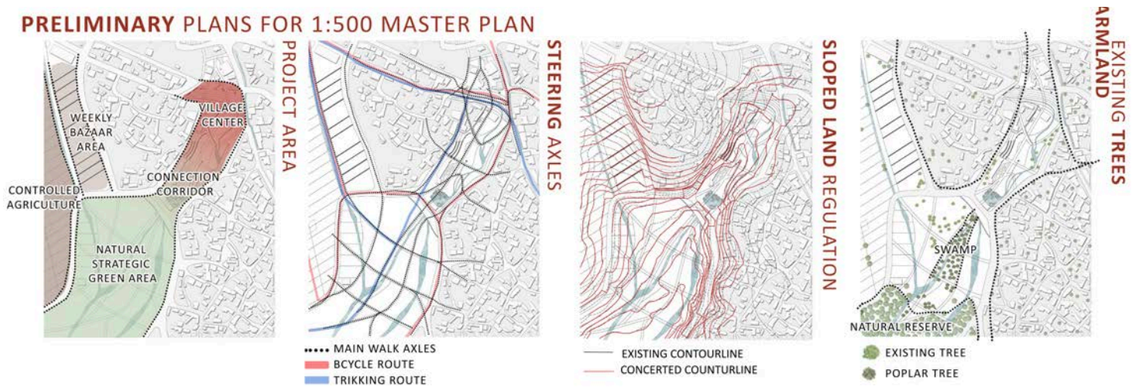
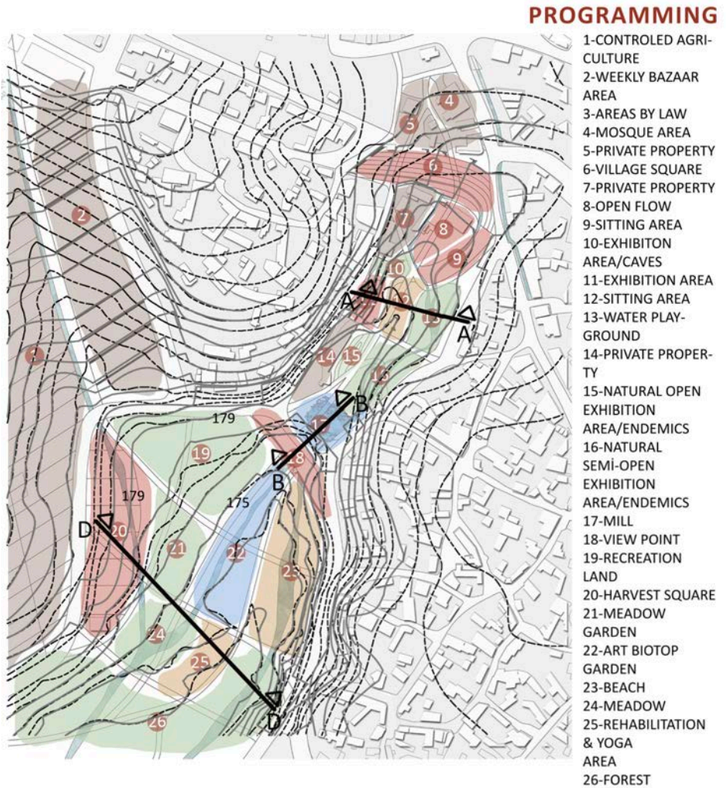
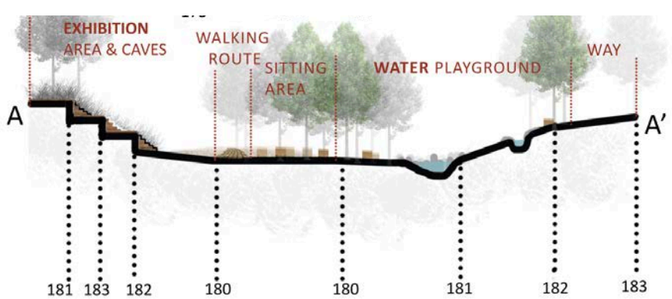
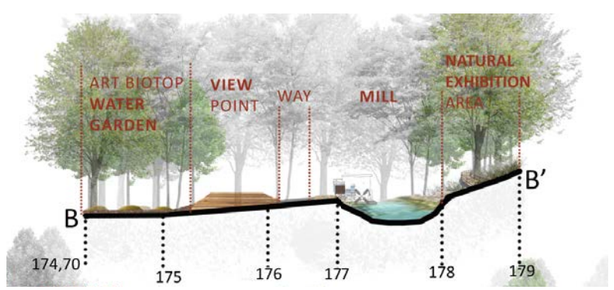


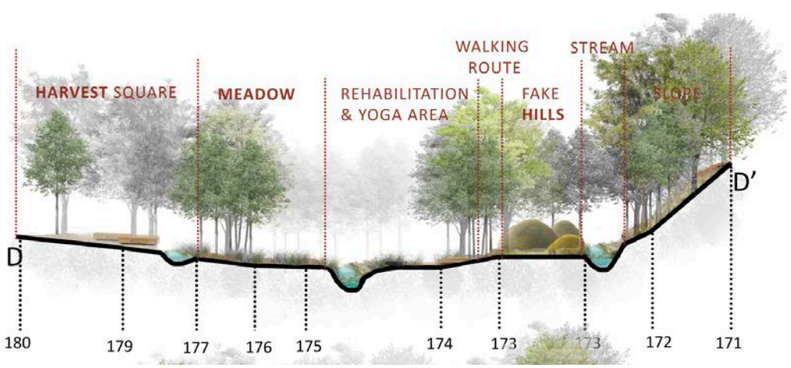

The solutions derived from these efforts can be summarized as creating an accessible landscape for people, ensuring access to water, engaging the community with workshops and activities, teaching local culture, producing organic products and creating sales points, generating business opportunities, and preserving agricultural heritage. I analyzed Kaynarca's botanical infrastructure by categorizing it into three groups: endemic species, monumental trees, and plants historically used and currently still used in agriculture. Endemic species continue to thrive in hot springs and open green areas, and the density of monumental trees remains quite high. However, many agricultural products are no longer cultivated due to the decline in farming activities.

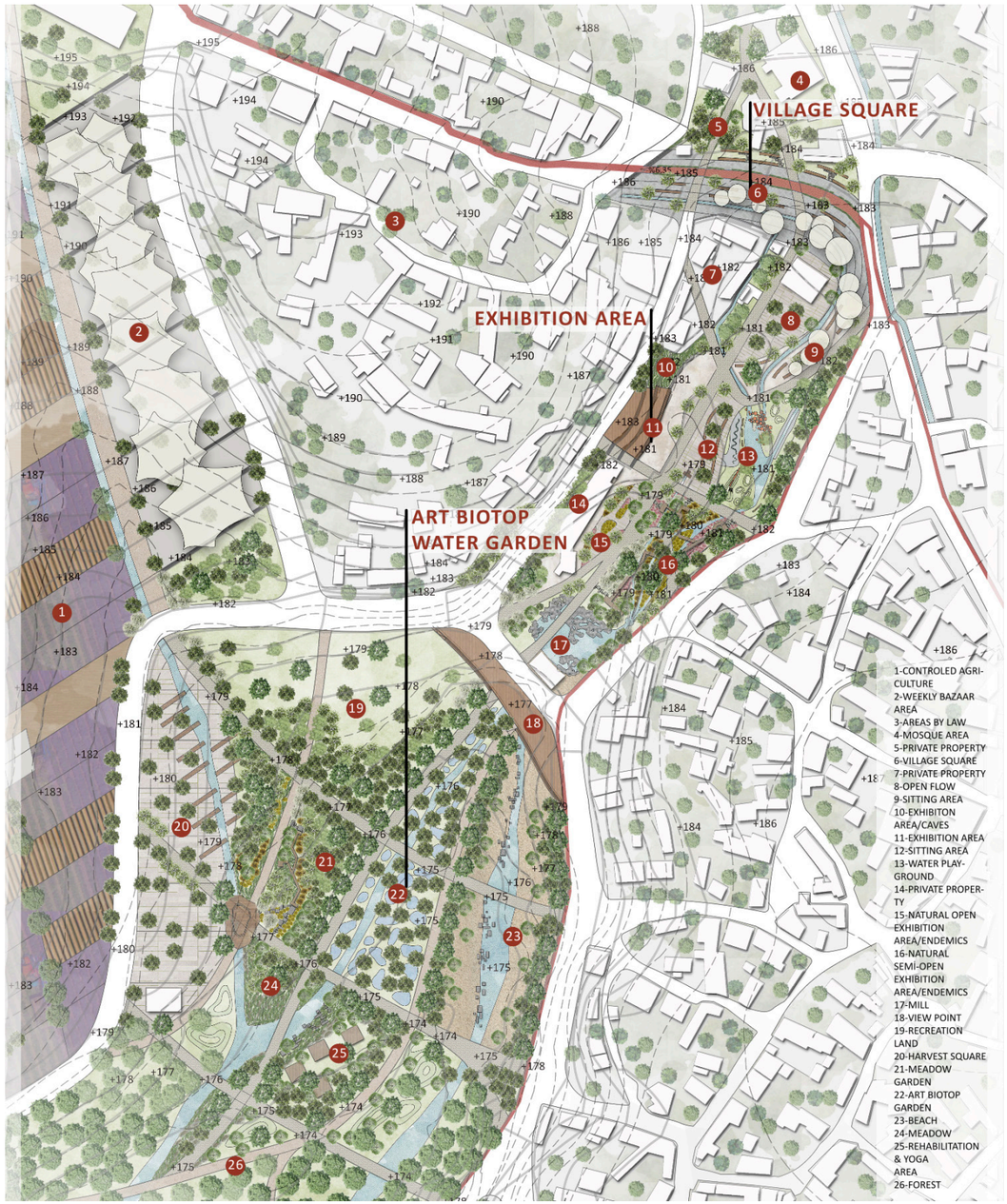


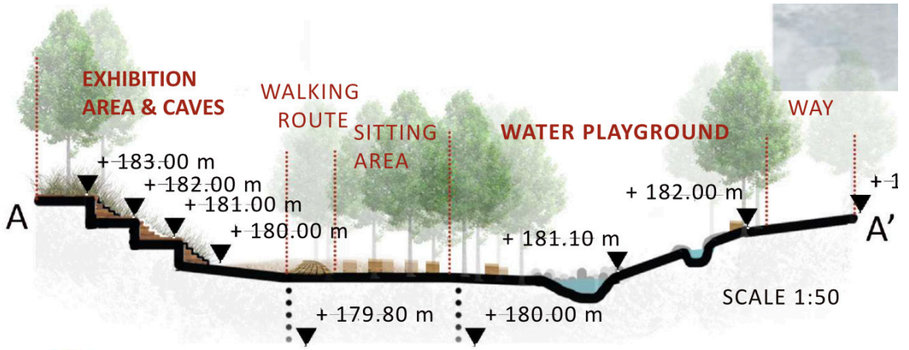

UNDERSTANDING **TOPOGRAPHY**

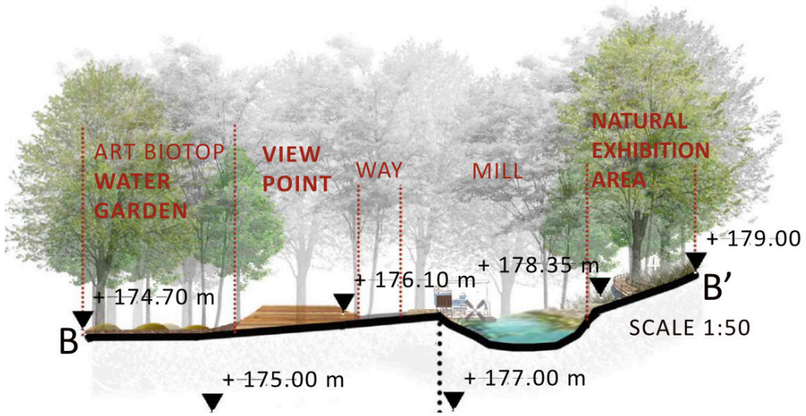


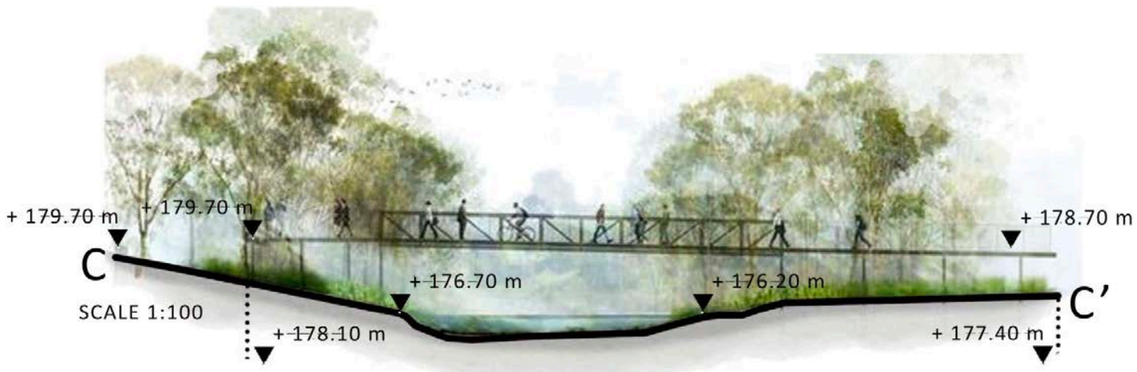



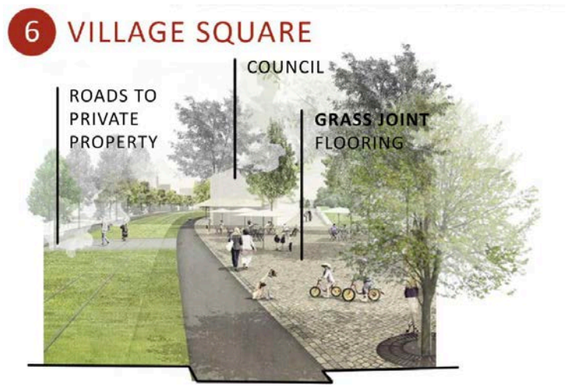

VILLAGE SQUARE
EXHIBITION AREA
ART BIOTOP
WATER GARDEN
1-CONTROLED AGRI-CULTURE
2-WEEKLY BAZAAR AREA
3-AREAS BY LAW
4-MOSQUE AREA
5-PRIVATE PROPERTY
6-VILLAGE SQUARE
7-PRIVATE PROPERTY
8-OPEN FLOW
9-SITTING AREA
10-EXHIBITION AREA/CAVES
11-EXHIBITION AREA
12-SITTING AREA
13-WATER PLAY-GROUND
14-PRIVATE PROPER-TY
15-NATURAL OPEN EXHIBITION AREA/ENDEMICS
16-NATURAL SEMİ-OPEN EXHIBITION AREA/ENDEMICS
17-MILL
18-VIEW POINT
19-RECREATION LAND
20-HARVEST SQUARE
21-MEADOW GARDEN
22-ART BIOTOP GARDEN
23-BEACH
24-MEADOW
25-REHABILITATION & YOGA AREA
26-FOREST

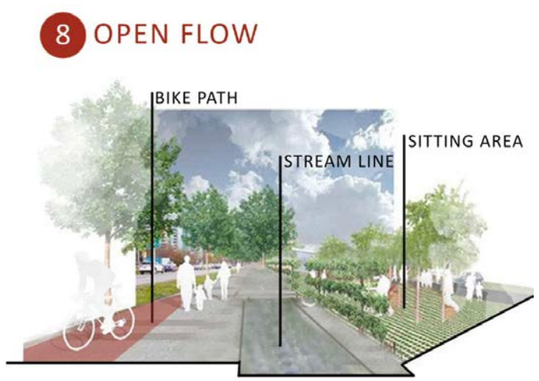

EXHIBITION AREA & CAVES
WALKING ROUTE
SITTING AREA
WATER PLAYGROUND
WAY
A
A'
+ 183.00 m
+ 182.00 m
+ 181.00 m
+ 180.00 m
+ 179.80 m
+ 180.00 m
+ 181.10 m
+ 182.00 m
SCALE 1:50

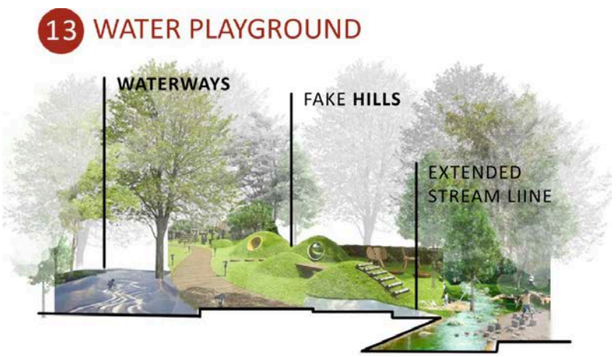

ART BIOTOP
WATER GARDEN
VIEW POINT
WAY
MILL
NATURAL EXHIBITION AREA
B
B'
+ 174.70 m
+ 175.00 m
+ 176.10 m
+ 177.00 m
+ 178.35 m
+ 179.00
SCALE 1:50


C
C'
+ 179.70 m
+ 179.70 m
+ 176.70 m
+ 176.20 m
+ 178.70 m
+ 178.10 m
+ 177.40 m
SCALE 1:100

I planned to revitalize the area by organizing festivals and events throughout the year in Kaynarca. Some of these include the Winter Festival, Sugar Beet Cultivation Festival, Strawberry Harvest, Water Festival, Rice Cultivation Festival, Bike Festival, Sunflower Festival, and Orienteering events.
This landscaping project is developed based on the needs of the people, providing a framework for implementing these festivals and events. I aimed to design more accessible social activity areas by dividing them into various sub-functions. These include a weekly bazaar area, controlled agriculture zones, a new village square, open flow areas, an exhibition and event area, a water playground, sitting areas, natural species exhibition areas, a wooden deck with a mill view, a meadow garden, a beach, a rehabilitation and yoga area, the Art Biotop water garden, and Harvest Square.
In the village square, I used shading elements to create a landmark feature that emphasizes the village center and establishes it as a key node. The Art Biotop water garden is designed to enhance the natural topography by transforming a previously swampy area into a series of small pools that allow water absorption, creating natural functions within the landscape.
Additionally, by developing the trekking route in the area, I ensured it passes through the village. I also created a bicycle route that allows for a complete tour of the village, including natural landscapes and fields, with rental points at specific locations.

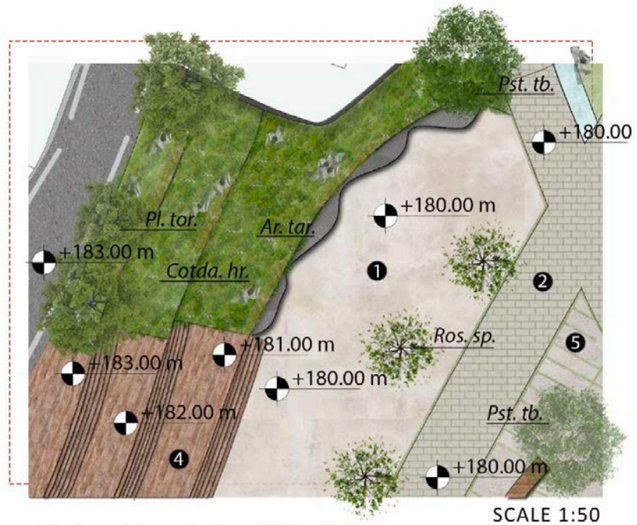


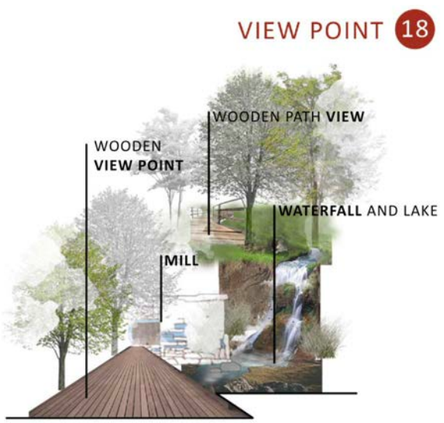



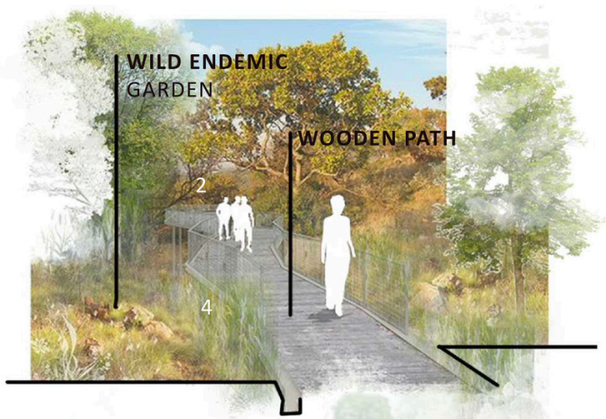





My aim was to establish natural green corridors in the village through specific rules. One such rule mandates that homeowners with a garden of ten square meters must plant two trees per ten square meters. This initiative is intended to strengthen the village's green infrastructure.
Among the proposed landscaping works, I also suggested new road types that are more sustainable and ecologically beneficial. By incorporating one or two bioswales on the streets, I aimed to collect water and create green corridors.
For planting, I focused on using species native to the Kırklareli region, including monumental trees and endemic plants. Trees were strategically used for sound shielding, security, wind shielding, and most importantly, providing shade. In the endemic gardens, I created wooden platform routes to enhance the experience of visiting these natural species gardens.
For the village square, I used basalt cube stone, while the main connection roads feature basalt cube stone with green joints. The bike paths are covered with tartar ground, seating areas with granite plaque stone with green joints, and other areas with a combination of wood, sand, and slate with grass joints.



# Palimpsest Kaynarca

R. Ezgi Beyen

*"Palimpsest Kaynarca" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Gizem Aluçlu under the title "Virissis Verissa: post][new landscape scenarios for Kırklareli" in the spring semester of 2021-2022.*



Kaynarca

Edirne-Kaynarca-İstanbul

Transportation

Industrialization



Streams

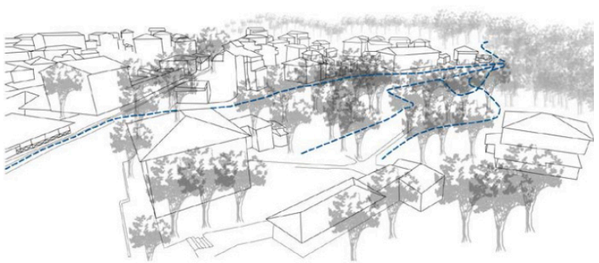
Kaynarca is a town in Kırklareli, located right in the middle of the transportation network between Istanbul and the Thrace region. Kaynarca, named after its boiling spring waters, is famous for its waterfall and stream, attracting tourists during certain periods. In addition to its natural attractions, the town has ancient caves and churches that are thousands of years old. However, it is primarily known for its stream, and its historical sites remain largely unrecognized.

Despite attracting many tourists, the town experiences emigration, and agricultural activities have declined. Considering these factors, it has been concluded that Kaynarca faces social and economic collapse, and the importance of preserving nature has been overlooked. Efforts to improve Kaynarca's social, economic, and natural cycles involve a program network integrating these three main aspects.

The programs are designed to spread throughout the town, aiming to disperse the crowds around the creek and encourage visitors to explore the entire town and interact with locals.

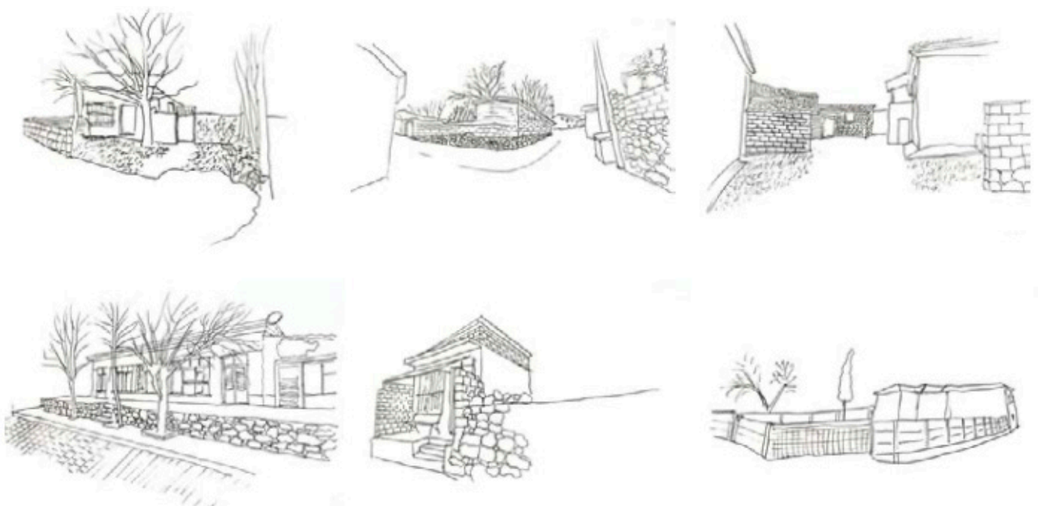
In line with these objectives, various places such as wetlands, squares, inner courtyards, small plazas within the settlement, a market axis, an open kitchen, a soil school, a festival axis, and a gastronomy axis were identified and designed.

## Space and Continum



Perspective view of the center of Kaynarca - the trail of the waterway

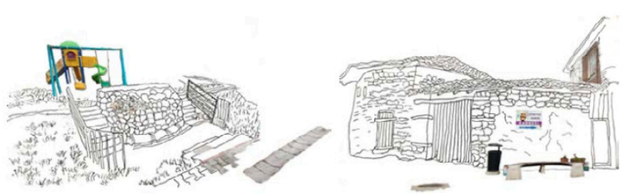
Spaces around the river



Sketches about voids in the area

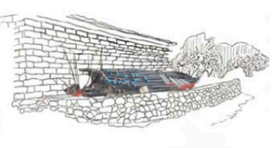
## Spatial Disconnections

Infrastructural Disconnections



Unqualified Spaces

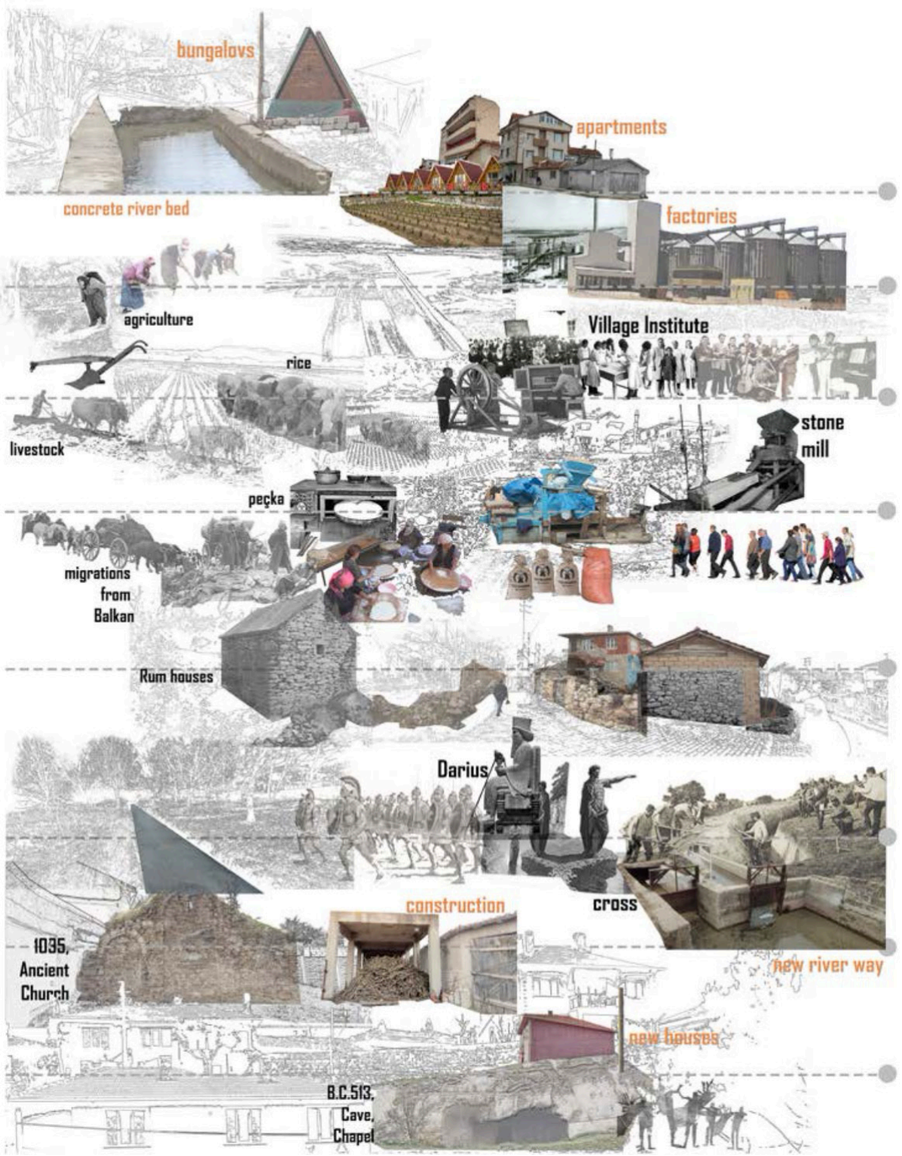
Material Disconnection



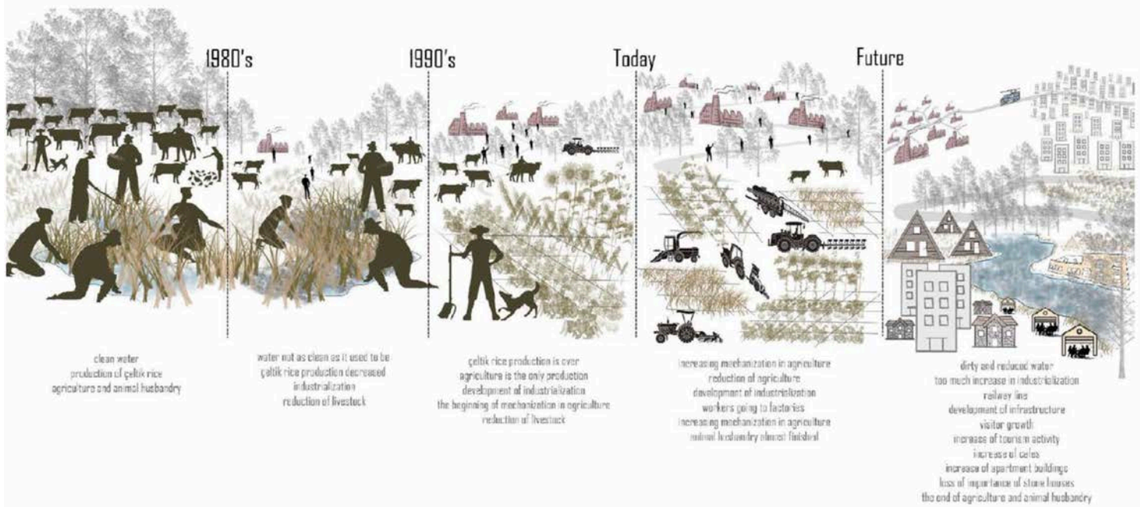
Usage Disconnection

Undefined Spaces

# PALIMPSEST FEATURE OF KAYNARCA




## FEATURE SENARIO: URBAN DYSTOPIA




Kaynarca is a village in Kırklareli, situated between Istanbul and the city center, and close to the borders of the Thrace region, offering significant opportunities. Positioned at the junction of multiple routes, it is highly accessible. The village takes its name from its springs, which attract many visitors to see the springs, waterfall, and river. While people enjoy the river, they are often unaware of the caves and church dating back to ancient times, which contribute to the palimpsest structure of the area.

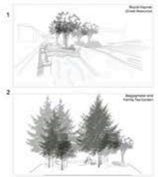
While attracting many visitors, Kaynarca simultaneously experiences significant emigration of young people due to a lack of job opportunities.

Social life is also quite inactive outside of the summer and spring seasons. The condition of the natural environment in the village has deteriorated. Decreased water levels and increased pollution have diminished agricultural practices compared to the past.

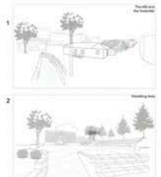
## GOAL1: SOCIAL IMPROVEMENT

**Problem: The countryside is not included in social life, social life gathered in one spot.**

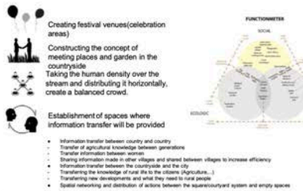
Social life in past and today



Existing meeting points



Existing meeting points

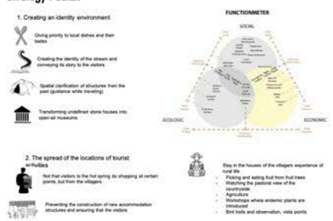



Strategy pack 1: Social pack

## GOAL2: ECONOMIC IMPROVEMENT

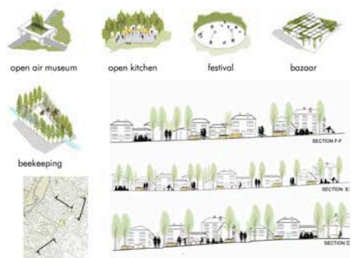
**Problem: In-village by using tourism potential revitalizing the economy**

**Strategy Pack2:**




**Potential Areas**

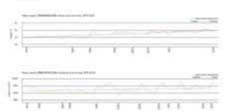
**Programs**




## GOAL3: ECOLOGIC IMPROVEMENT

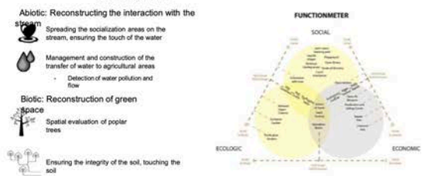
**Problem: Decoupling between the ecological layer and the space**

**Analysis**

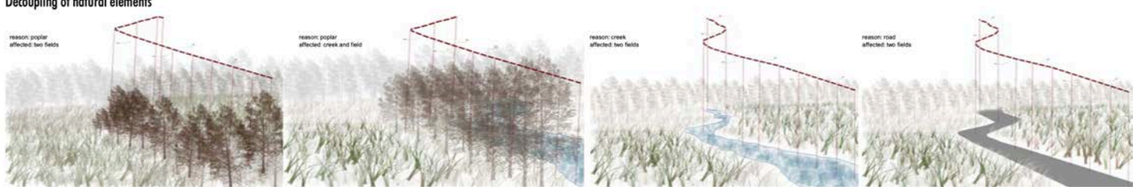


**Strategy Pack3:**

The evolution of the stream, which is an abiotic component, into a lively and social concept in interaction with humans by coming together with culture. Reconstruction of the space by reconstructing the green area, which is a biotic component, and bringing together people and culture.

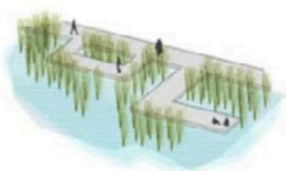



**Decoupling of natural elements**




To revitalize the area, a three-layered program has been created, focusing on social, economic, and environmental aspects. These layers overlap in some areas. The programs include an open kitchen, open library, square, open learning areas, playground, soil school, resting area, viewing area, mini squares, courtyards, and bazaar-festival-gastronomy festivals.
The goal is to distribute these programs throughout Kaynarca to help people experience the real essence of the town, beyond just the river, and to bring together rural and urban residents.
Special attention was given to the wetland, square, celebration area, and open library, which are located in close proximity to each other. Since these areas are adjacent, a seamless flow of space was created between them to guide people through the area. Each space was designed with a consistent style, using wavy forms to ensure coherence throughout the entire area.

Stage 1



Water contact pockets

Compost garden

Stage 2

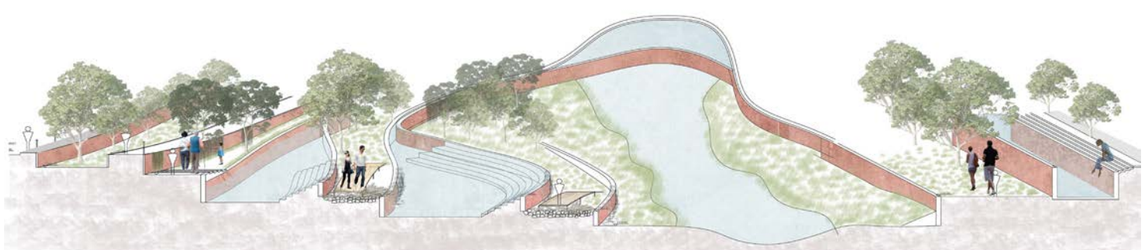
Route of discovery

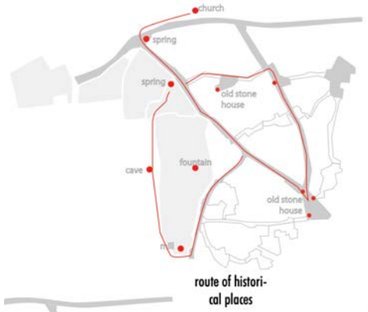
Colorful illuminations

Stage 3

Open cistern

Soil school



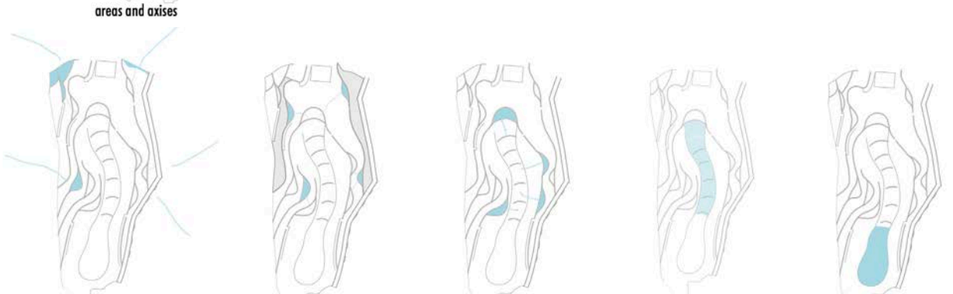



route of histori-
cal places

route of water

areas and axises

WETLAND PROCESS



1.STEP: SEDIMENTATION

2.STEP: SEDIMENTATION

3.STEP: SEDIMENTATION

4.STEP: PHYTOREMEDIATITON

5.STEP: COLLECTING IN A BIO-
LAKE

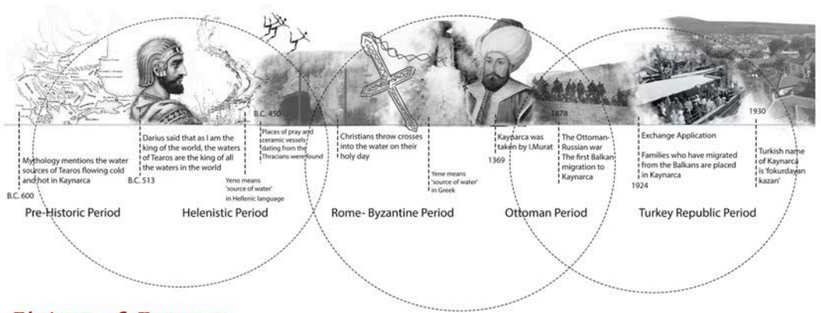
# Re-Water

Şaziye Lofcalı

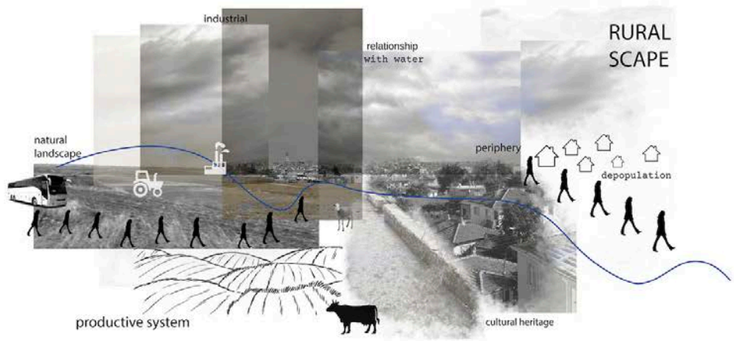
*"Re-Water" was produced within the scope of Landscape Design 3 carried out by Assoc. Prof. Ebru Erbaş Gürler and Res. Assist. Gizem Aluçlu under the title "Virissis Verissa: post][new landscape scenarios for Kırklareli" in the spring semester of 2021-2022.*

Kaynarca, a town in the Pınarhisar district of Kırklareli, has sustained itself through 'water' from past to present. The town, situated in the Ergene basin, was first settled by the water's edge. Historically, Kaynarca's fertile lands supported a community that made its living from agriculture. However, with industrialization, many industrial facilities have been established in this water basin. Within a 15-minute drive from Kaynarca, there are over ten industrial facilities, including two concrete factories. As a result, the region's economy has shifted from agriculture to industrial activities, leading to the abandonment of once-cultivated fields and empty agricultural lands. The younger population has migrated to surrounding districts. Alongside industrialization, urban elements began to emerge, causing Kaynarca to lose its distinctive identity that blends rural and urban characteristics.

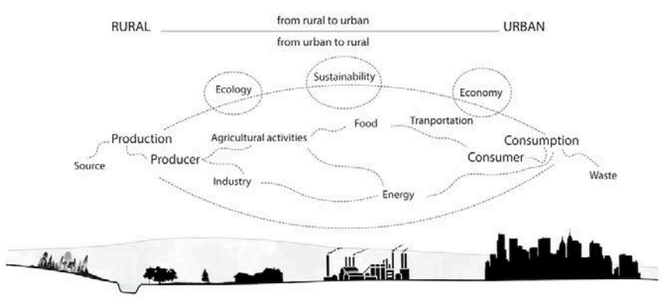
In a town known for its water identity, the natural state of water has been compromised, with water being diverted into canals. Access to and interaction with water elements within the town square and the town itself is challenging. Although water has a defined route, its flow is interrupted within the settlement, making it difficult to follow or even see. To address this, efforts were made to make water more permanent and accessible. Cross-sections were taken along the waterline, and interventions were implemented to enhance sensory experiences.



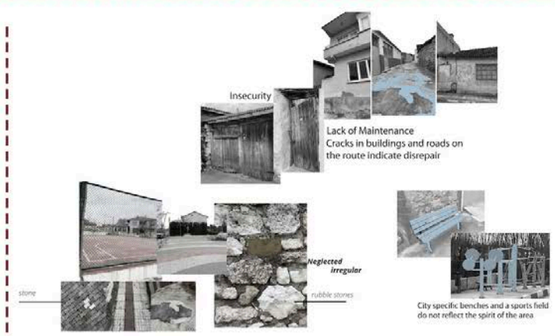

***History of Kaynarca***




***Socio-economic structure***

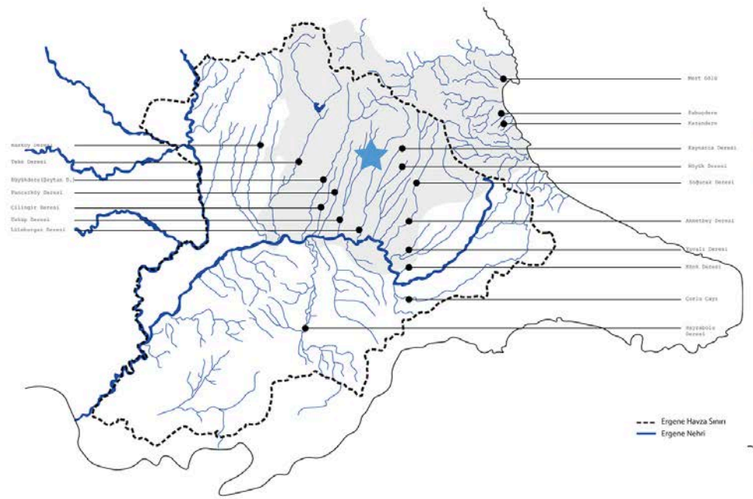



***Rural - Urban Relationship***



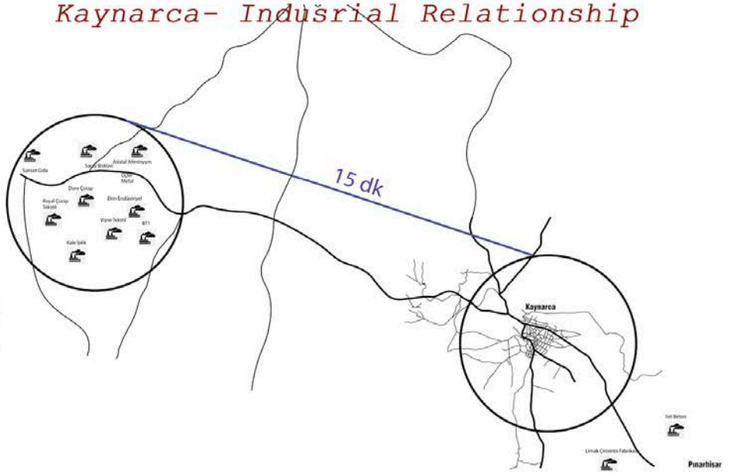

***Material & Texture***

## Ergene Water System



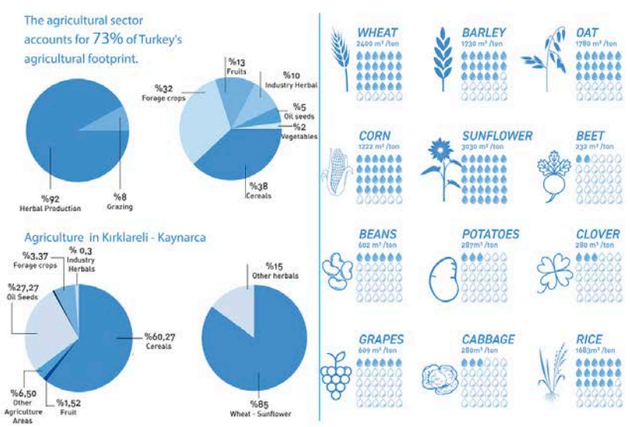

## Thracian Vineyard Route

## Kaynarca- Industrial Relationship



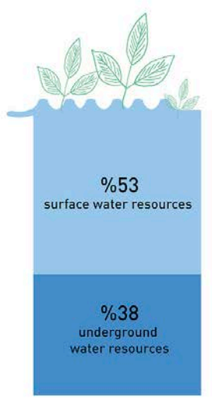


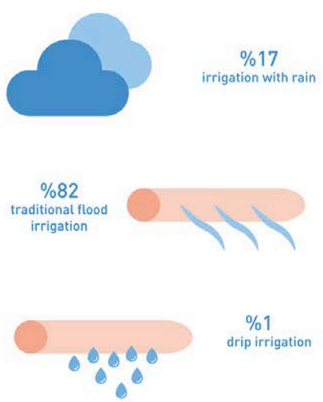

## Water Footprint



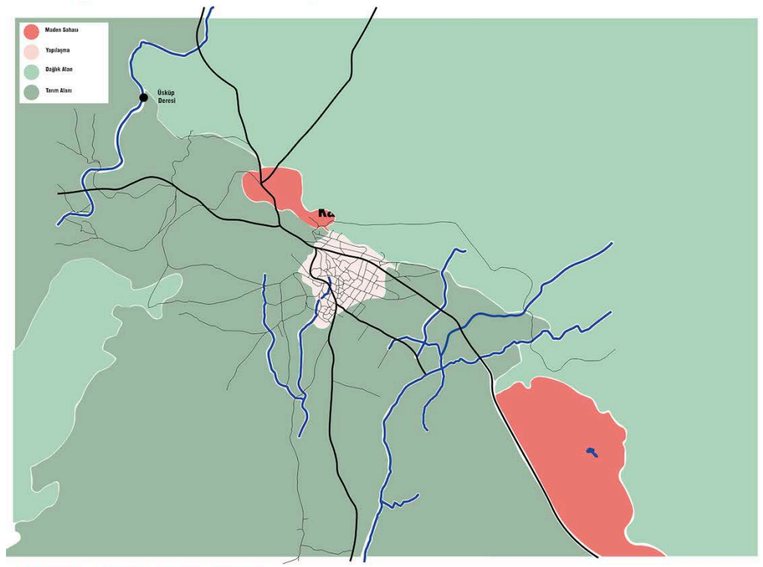






## Vegetation Map




*Plant Exchange Area*
*It includes areas where shrubby herbaceous plants are scattered together with trees and natural forest development areas. Forest regeneration or cutting areas are included.*

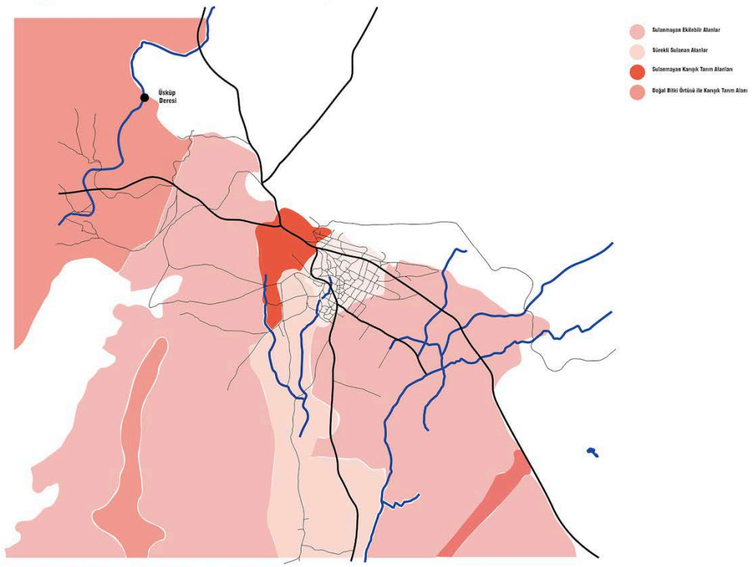
*Sparse Plant Area*
*They are steppe, tundra and infertile soil areas. They have scattered, woody and semi-woody vegetation at high altitudes.*
*- Unstable stone, rock cover on steep slopes where the vegetation rate on the surface is between 10%-50%*
*- Sub-desert steppes*
*- Limestone fields or "lapie" fields*
*- Bare soil in military training grounds*
*- Karst areas*

## Forest Map

*Coniferous Forests*
*The vegetation composition consists mainly of trees. Includes maquis and shrubs under trees with predominantly coniferous species (more than 75%).*
*- Coniferous forests that do not remain green all year (hybrid pine)*
*- Forests of young conifers*
*- Woody forests dominated by Juniperus oxycedrus/phoenica species*
*- Woodland areas with conifers*
*- Christmas pine plantations*
*- Bare spots and meadows in the forest area*

*Mixed Leaf Forests*
*The vegetation composition consists mainly of trees. Includes shrubs and shrubs under trees where neither coniferous or broadleaf species predominate.*
*- Mixed forest, wooded dunes*
*- Bare spots and meadows in the forest area*
*- Scattered heath*

## Agricultural Map

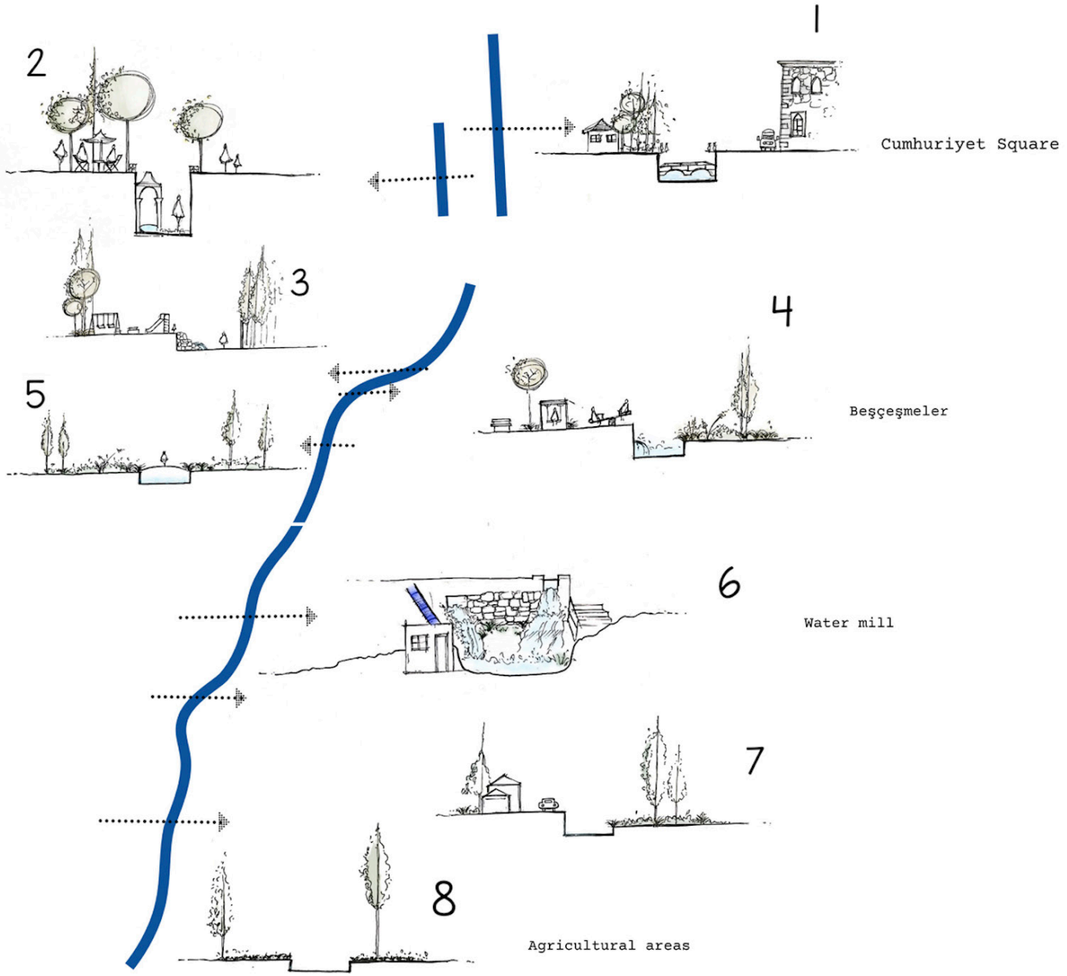



*Irrigated Arable Land*

*Cereals, legumes, feed products, rooted (subsoil) crop fields and fallow fields. Flowers, fruit trees and vegetables (whether grown outdoors or in a plastic/glass greenhouse) are included.*
*- Plants grown in flooded fields (paddy etc.)*
*- Semi-permanent crops*
*- Temporarily fallow fields*
*- Sugar cane*

*Continuously irrigated areas*

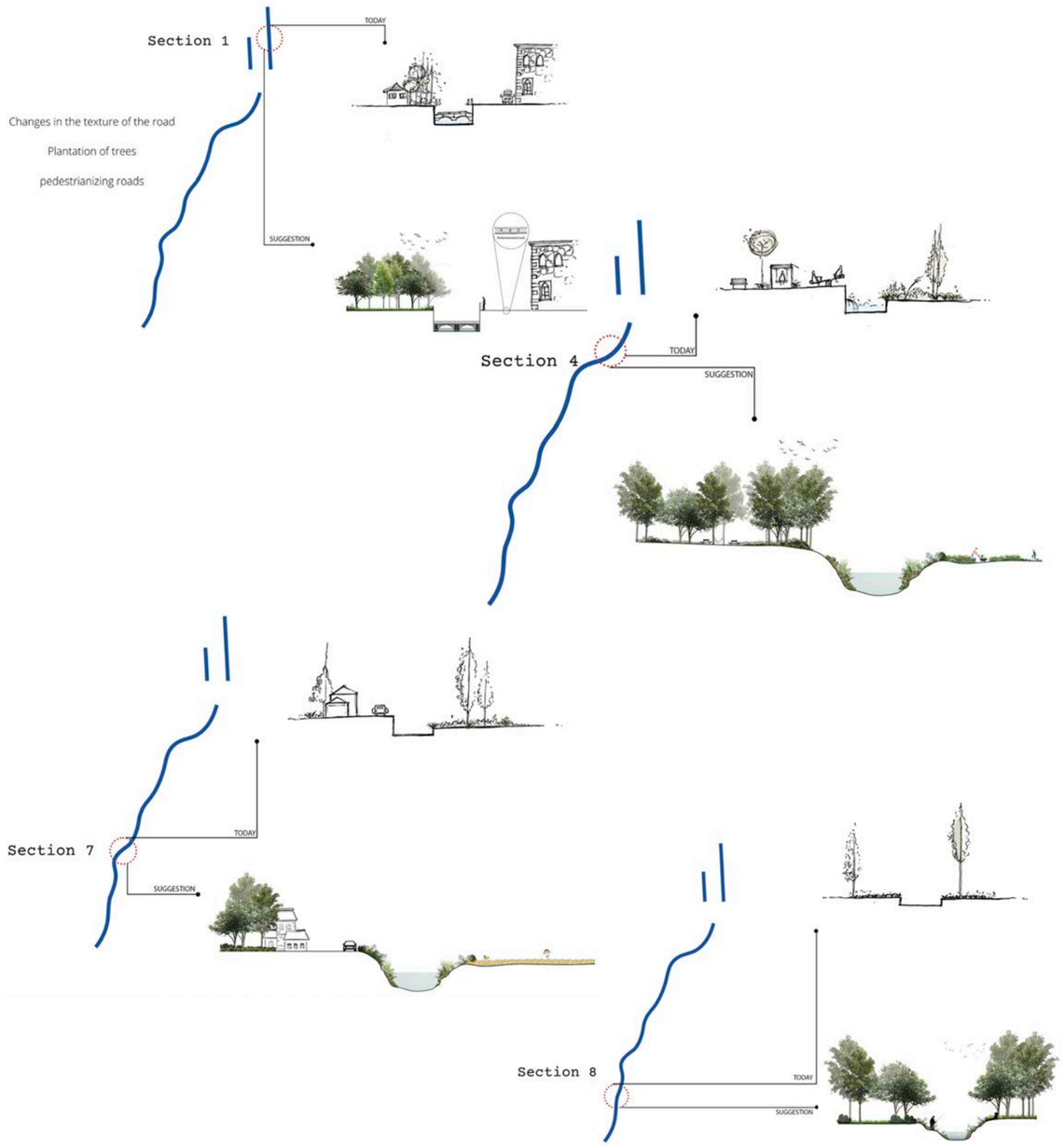
*It includes irrigated crops that have a permanent infrastructure (irrigation channels, drainage network and additional irrigation facilities) and are constantly or periodically irrigated. Most of these crops cannot be cultivated without a water supply. Irrigated agricultural lands that are irrigated sporadically are not included.*



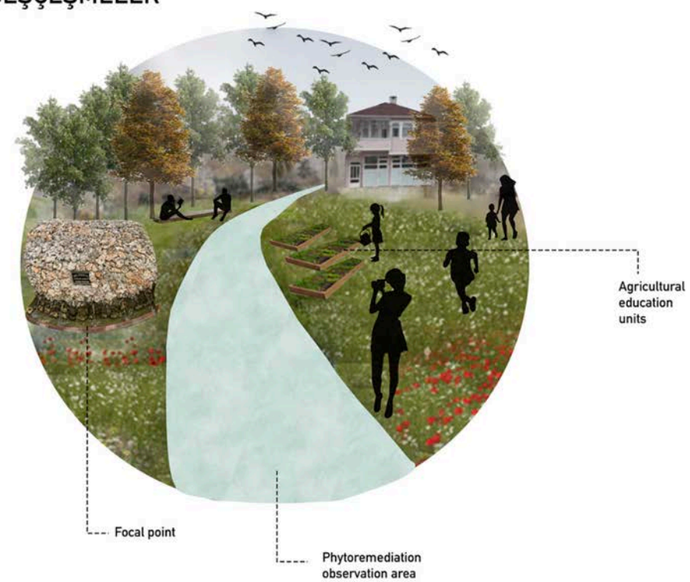

In Cumhuriyet Square, a wall obstructing the canal's water flow was removed, and a cascading system was introduced to improve accessibility. In the Beşçeşmeler region, the water flowing through the canal was naturalized and transformed into an experiential space for children. Additionally, water amphitheaters were created in various locations.

Areas where rainwater collects were identified, and storage solutions were developed. A water amphitheater was proposed for the area where rainwater accumulates, located in the old Cumhuriyet Square, now renamed Tearos Square. Kaynarca becomes a popular tourist destination, especially during the summer.



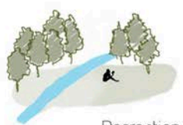


## BEŞÇEŞMELER

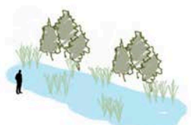



Program

Agricultural experience units for children



Recreational space



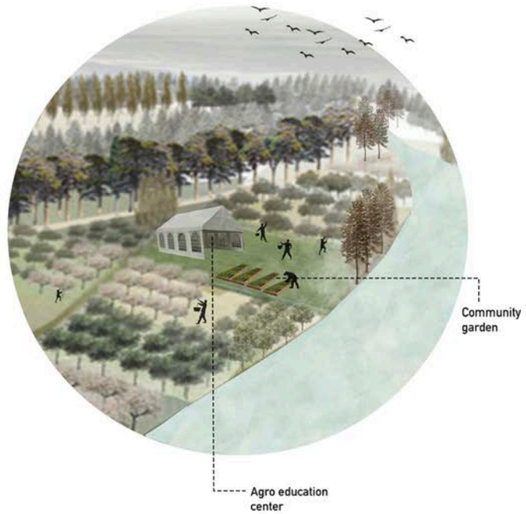
Phytoremediation observation area

Beşçeşmeler was a meeting place for women and young people.Besçesmeler, which used to be a meeting place, is now do not reflect thespirit of the area.



Cumhuriyet Square, which is currently transforming into a parking lot for tours and private vehicles, has become a safety concern due to high traffic flow posing risks to pedestrians. Consequently, the area has been pedestrianized, with roads rearranged to accommodate a two-way service road for emergency vehicles and service businesses. Access to the area is controlled, and a parking lot for ten cars is designated at the entrances. Water-permeable flooring has been chosen to enhance environmental sustainability. In the newly renamed Tearos Square, a market area has been proposed for local residents to sell their products, featuring temporary structures for market days. On days when the market is not in operation, the space will function as an amphitheater. The courtyard culture, which has developed in Thrace from past to present, has been incorporated into the town's design. Property areas have been arranged and afforested to facilitate communal use. Suggestions include a women's tavern and areas for local production, as well as common agricultural plots where residents can cultivate their own crops.

## AGRO-FORESTRY

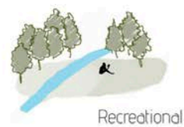



Program

Agro-edu ateliers

Community garden

Wetlands



Recreational space

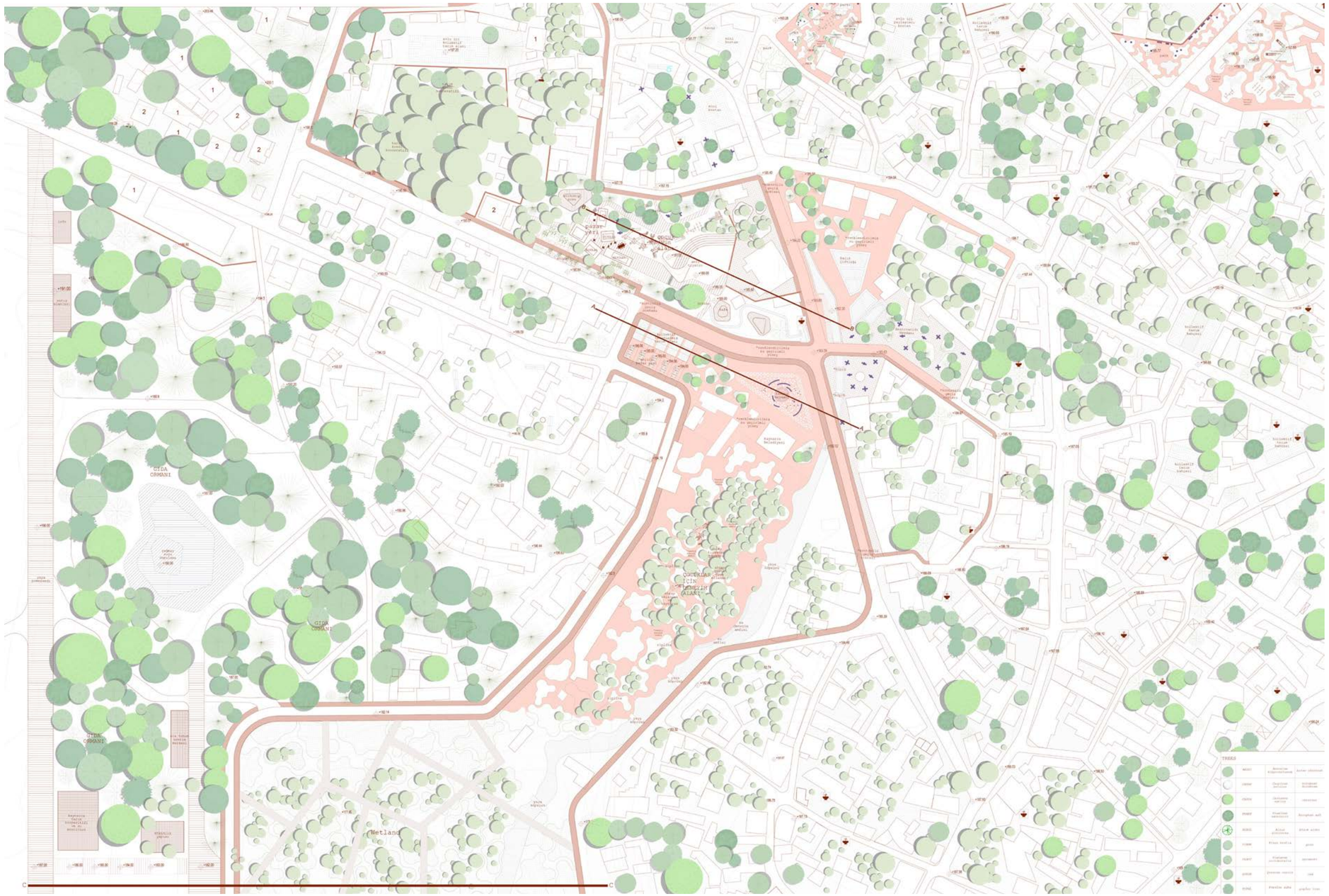
Picking fruit area

This Agricultural site is transformed agroforestry space providing socialization and production. Agroforestry area includes agro-edu center, recreational spaces and wetlands.This area is a field of learning, awareness-raising and experience



During the redesign of Cumhuriyet Square, designated spaces for cafes and restaurants have been included. To distinguish it from the main square, a different flooring material has been used. Planting is aimed at creating shaded, cool areas to provide comfort from the sun. Common-use areas in the town have been identified, including children's playgrounds with ziplines, climbing structures, and experiential spaces. These areas will feature colorful rubber and soft flooring materials.

The mosque and water features in the square behind it have been integrated to enhance their visibility and continuity. The former high school site has been terraced and redesigned, with an amphitheater proposed to utilize the site's slope. The space is intended for educational and interactive use, incorporating soft ground and afforestation. Water-efficient plant species like clover have been suggested for the soft soils.



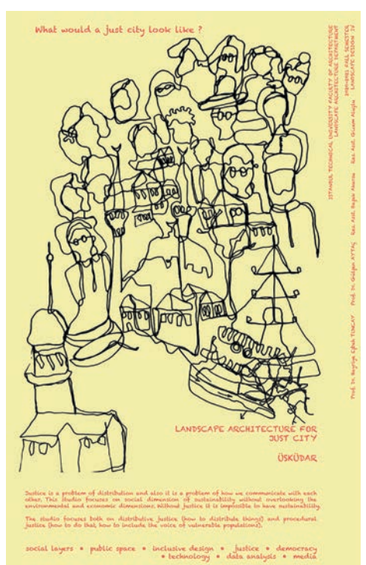

The annual 'Kaynarca Water Festival' is typically held away from the water. To address this, a new square has been proposed in the mill area for festivals and other activities, with a sales point for mill-produced goods. Various soil materials in the town have been identified, and a permeable surface has been proposed to promote water retention. This approach aims to increase the dwindling underground water reserves.

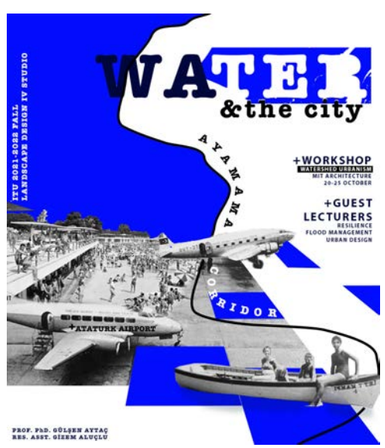
In Turkey and globally, agriculture and industry are the primary contributors to water pollution. Polluted water not only degrades soil quality but also poses significant risks to human health. With the industrialization of the Ergene basin, water and soil pollution have increased substantially. To address this, a wetland area has been proposed for phytoremediation, using plants to cleanse the water and reduce soil pollution on a regional scale. Trees in this area are chosen for their resistance to water. The wetland, which is typically wet in winter, can serve as a recreational area in the summer as water evaporates with the heat. A footbridge has also been constructed over the wetland, with part of the area designated as an experiential space for children.

In the Beşçeşmeler region, the children's playground has been redesigned with plastic play elements that complement the surrounding wood and area. Additionally, a water experience zone for children has been integrated into the playground.

Kaynarca is situated along the Thrace vineyard route extending to Çanakkale. The vineyards have been strategically positioned considering their wind and water needs. The area includes rainwater storage ponds, a production facility, restaurants, training and workshop areas, and a small hotel for guests. These developments are expected to boost visitor numbers to the town and diversify income sources, with tourism becoming a significant economic contributor alongside agriculture and industry.

It is proposed that 500 m² of currently unused fertile agricultural land per resident be converted into community gardens. This initiative aims to revitalize idle land and encourage its productive use.



*PROJE IV*

# LANDSCAPE DESIGN IV

## Proje IV Stüdyo Felsefesi

Peyzaj Projesi IV, Peyzaj Mimarlığı Lisans Eğitiminin son yılında, bitirme projesi öncesinde alınan, peyzaj mimarlığı disiplinin tüm teorik ve pratik bilgilerinin beraber kullanılması gereken kapsamlı bir stüdyodur.

Proje IV konusu ve kapsamı, içinde bulunduğumuz çağda yaşadığımız kritik meselelere, proje dahilinde verilmiş olan yer ölçeğinde, peyzaj mimarlığı disiplinin gelişen ilgi, algı, teknoloji ve ekosistem modelleri ile anlamaya ve baş edebilme yöntemi geliştirmeye çalışmaktır. Bu kritik meseleler ve alanlar; iklim krizinden kaynaklanan su krizi, yeraltı-yerüstü su seviyelerinde yaşanan değişimler, taşkınlar ve bunlara bağlı olarak etkilenen delta alanları, ıslah gerektiren dere koridorları, kıyı dolgu alanları, kentsel ve kırsal mekanlar olabildiği gibi, işlevini yitirmiş endüstriyel alanlar, terk edilmiş ıslah olmayı bekleyen maden ocakları, birincil ve ikincil afetlerden etkilenme olasılığı olan hassas tarihi alanlar, atıl alanlar, sosyal adaletin sağlanamadığı kentsel dönüşüm alanları olabilir.

Proje genel olarak 3 fazda yönetilir; İlk fazda öğrenciler, verilen "Tema" veya "Sorun" üzerinde global ve yerel boyutta incelerler. Sorunun mekana olan etkilerini ve bireylerin/toplumun nasıl etkilendiğini araştırırken, ekosistemi ve flora/faunayı değerlendirirler. Mevcut yeşil-mavi-gri altyapı sistemlerini analiz eder ve öneriler sunarlar, böylece çözüm geliştirirler, bölgenin çevresel durumu, doğal kaynakları ve altyapısı göz önünde bulundurulur. İkinci faz; vaziyet plan oluşturma ve sunum aşamasıdır. Bu süreç üstten gelen altyapısal kararların verilen mekanda kentsel veya kırsal programlara karşılık geldiği ve programın sürdürülebilirliğinin nasıl sağlanacağına dair yönteminin belirlendiği aşamadır. Üçüncü faz ise, peyzaj uygulama projesi ve detaylandırma aşamasıdır. Islah süreci, rehabilitasyon, restorasyon ve rekonstrüksiyon gerektiren konularda gerekli bilgilerin verildiği, projede kullanılan yapay ve doğal malzemeler, uygulama ve detaylandırma becerilerinin kazandırıldığı fazdır.

## *Landscape Design IV Studio Philosophy*

*Landscape Project IV is a comprehensive studio taken in the last year of Landscape Architecture undergraduate education, before the graduation project, where all the theoretical and practical knowledge of the landscape architecture discipline should be used together.*

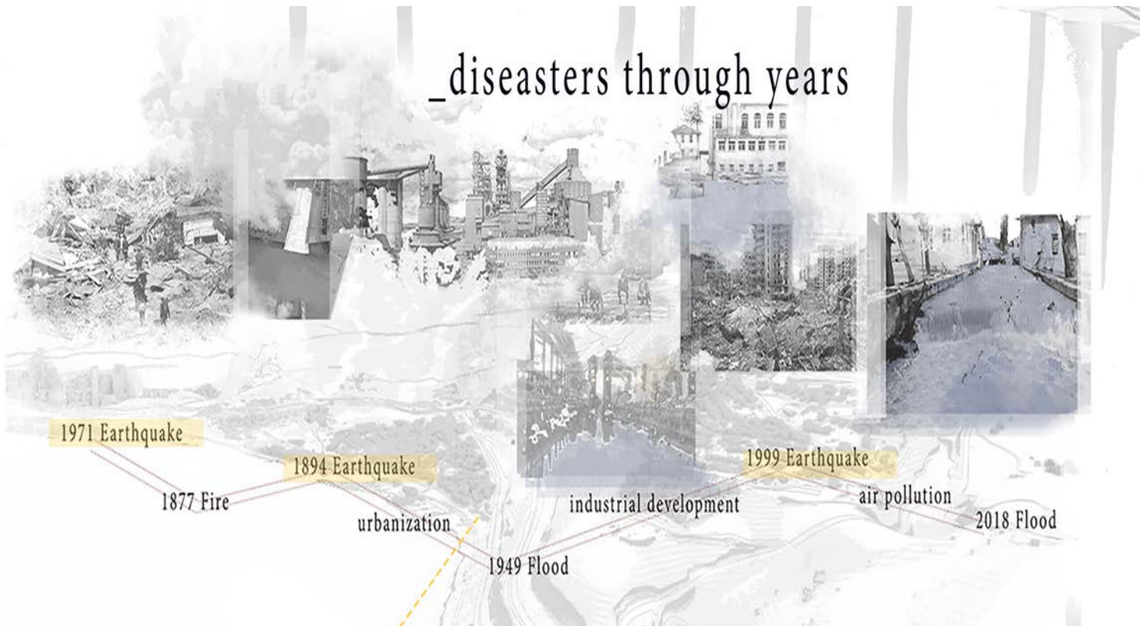
*The subject and scope of Project IV are to try to understand and develop a method of coping with the critical issues that we live in our age with the developing interest, perception, technology and ecosystem models of the discipline of landscape architecture at the scale of the place given within the project. These critical issues and areas can be water crisis caused by the climate crisis, changes in groundwater and surface water levels, floods and delta areas affected by them, river corridors requiring reclamation, coastal embankment areas, urban and rural spaces, as well as industrial areas that have lost their function, abandoned mines waiting to be reclaimed, sensitive historical areas that are likely to be affected by primary and secondary disasters, idle areas, urban transformation areas where social justice cannot be achieved.*

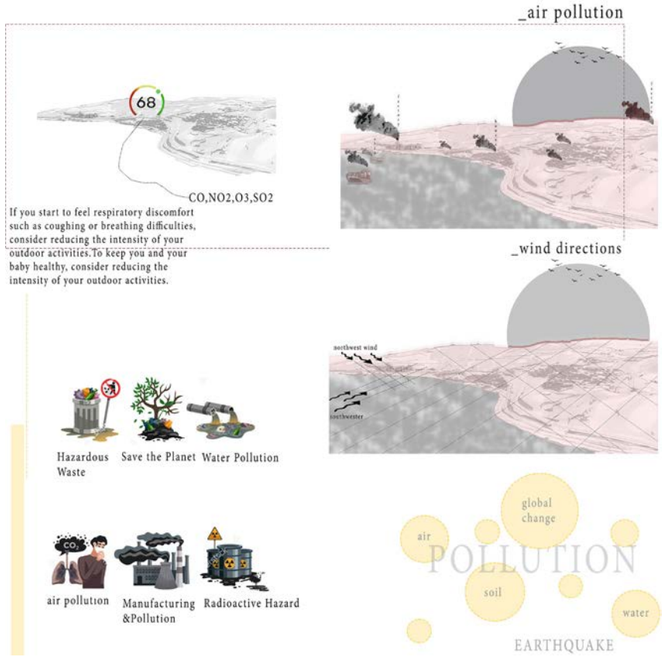
*The project is generally managed in 3 phases; In the first phase, students analyze a given "Theme" or " Problem" from a global and local perspective. They evaluate the ecosystem and flora/fauna while investigating how the problem affects the place and how individuals/communities are affected. They analyze the existing green-blue-gray infrastructure systems and provide proposals, thus developing solutions, taking into account the environmental status, natural resources and infrastructure of the region. The second phase is the site plan creation and presentation phase. This is the stage where the infrastructural decisions from the top correspond to urban or rural programs in the given space, and the method of how the sustainability of the program will be ensured is determined. The third phase is the landscape implementation project and detailing phase. This is the phase in which the necessary information is given on issues requiring rehabilitation, rehabilitation, restoration and reconstruction, artificial and natural materials used in the project, application, and detailing skills are gained.*

# Dynamic Hereke

S. Gülşah Domucukgül

*"Dynamic Hereke" was produced within the scope of Landscape Design IV carried out by Assoc. Prof. Gülşen Aytaç, PhD., Res. Assists. Merve Fermancı under the title "Weaving Landscapes" in the fall semester of 2019-2020.*

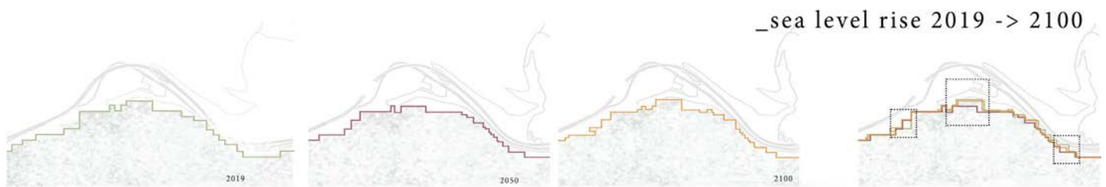


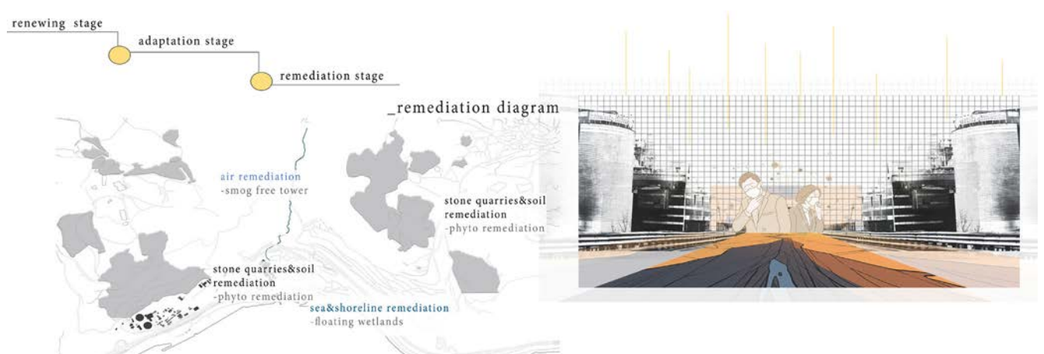



The main objective of this project is to create a dynamic city in Hereke, a region that has been heavily affected by industrial pollution and has experienced many disasters in the past. The goal is to design a resilient urban environment capable of withstanding future challenges such as disasters and pollution. To achieve this, we began by identifying the area's weaknesses, such as air, water, and soil pollution, and analyzing potential future disasters. These issues form the core of the project.

The solutions were developed in three stages: healing, adaptation, and re-use. After identifying the main problems, the next step was to explore how to create a dynamic city that could adapt to these challenges.

Hereke is significantly impacted by pollution from local industries, affecting the air, water, and soil. To address this, plant-based solutions, such as phytoremediation and floating wetlands, were proposed to clean the air and soil. Retention ponds were also suggested at key intervals to prevent contaminants from reaching the soil directly. Additionally, a greenbelt was recommended to protect the area from external sources of air pollution.



As Hereke is located in the first earthquake zone, earthquake preparedness became a key consideration. Emergency gathering areas and specialized earthquake corridors were proposed to ensure safety during seismic events. To address future water elevation concerns, especially with projections for 2050 and 2100, three critical areas were identified for adaptation. Platforms were designed to adapt to rising water levels, ensuring the continuity of important spaces even with environmental changes.

The existing cement plant, which has caused significant environmental damage, was proposed for closure. Employment from the cement factory would be redirected to other industries to reduce the negative impact on the local workforce. To further improve environmental conditions, the green spaces within the industrial park were connected through a green-oriented design, ensuring continuity between these areas. New agricultural parcels were also proposed to link fragmented farmlands, strengthening the agricultural network.

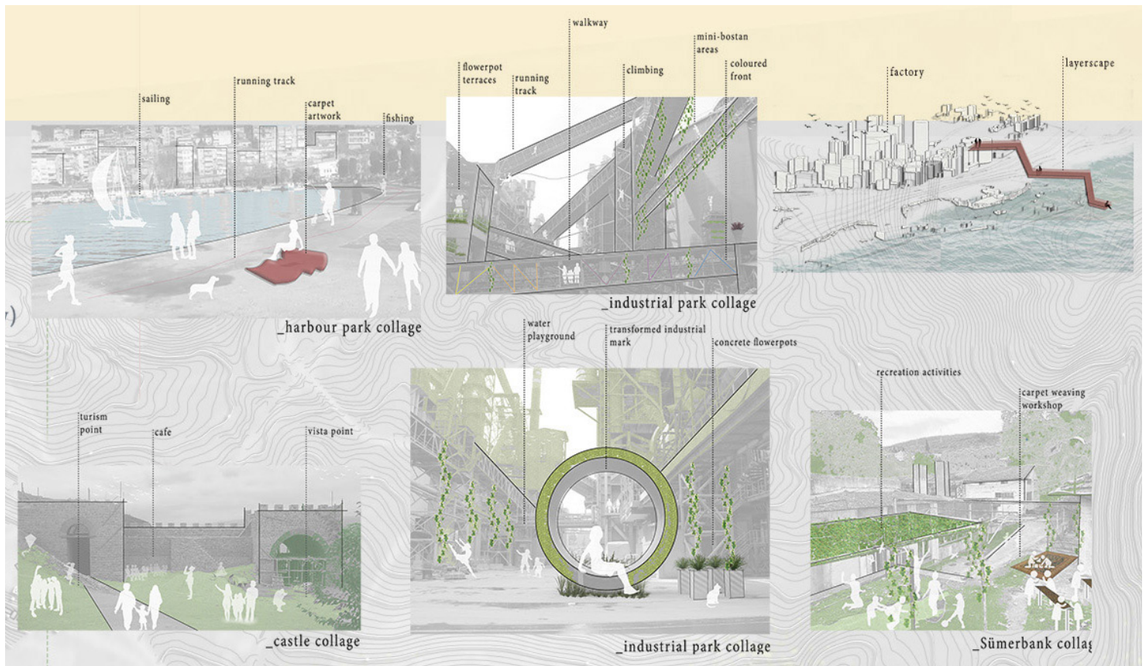
To address the disconnection between historic sites, corridors were proposed to reconnect and enhance these areas, ensuring both preservation and functionality. The Sümerbank factory, which had lost its original function, was reimagined as a space for carpet weaving workshops and recreational activities, revitalizing the area's industrial heritage while creating new community spaces.

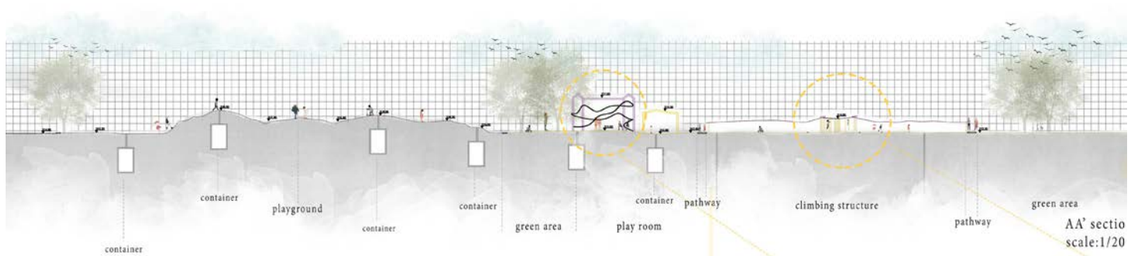
A major transportation overhaul was also proposed, including placing the heavily trafficked viaduct underground near the existing railway station. Green corridors were designed to connect quarries, improving ecological support and creating continuous green spaces.

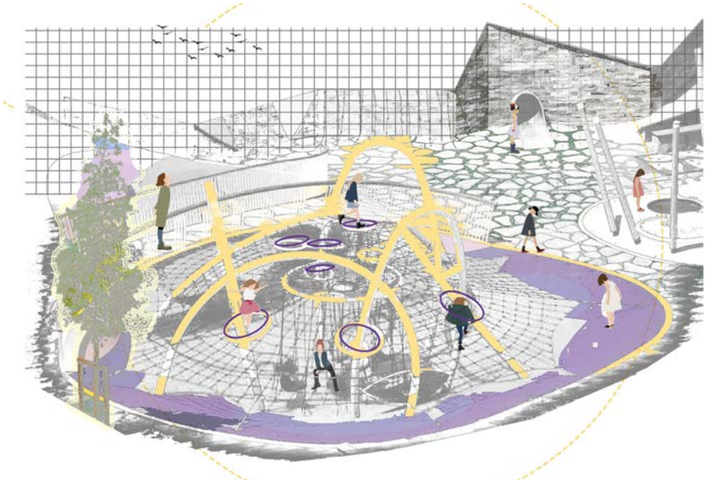
Additionally, wetland buffer zones were proposed along the creek to support the ecosystem and maintain ecological balance.

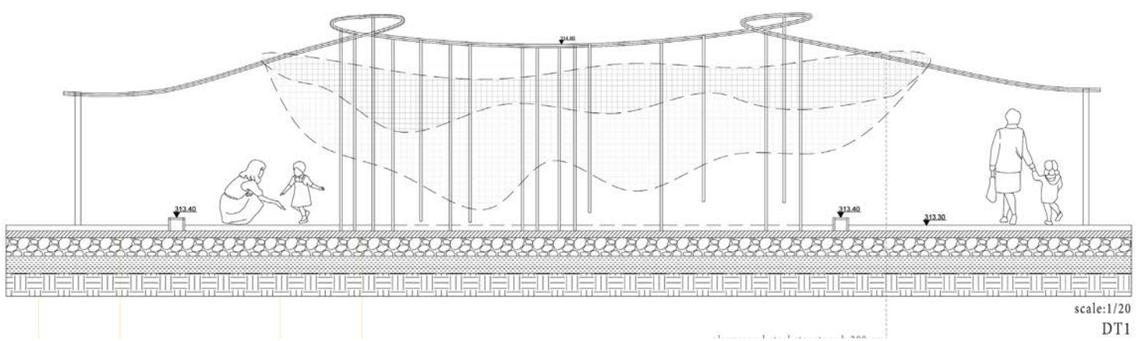
Hereke has experienced numerous earthquakes throughout its history. To mitigate the impact of future seismic events, a quarry site on the upper side of the earthquake park was rehabilitated and transformed into a multi-functional community space. This space includes children's playgrounds, paintball fields, sports facilities, skate parks, festival grounds, healing gardens, camping areas, and a neighborhood market. Underground storage was integrated into the design to provide warehouses for post-disaster supplies. The areas were designed with dual functionality, serving the community both before and after an earthquake.

In the aftermath of an earthquake, the primary needs of the community include water, food, energy, sanitation, and shelter. These needs were carefully considered in the design of the spaces to ensure they would be equipped to support the population during a crisis. Alternative energy solutions, such as solar panels, hydropower, solar energy fields, frictional energy, and energy-producing pavement systems, were proposed to ensure the community's resilience and self-sufficiency in the event of a disaster.



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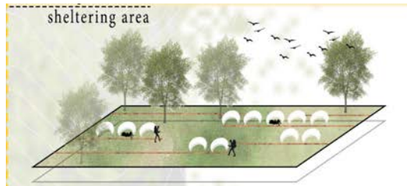
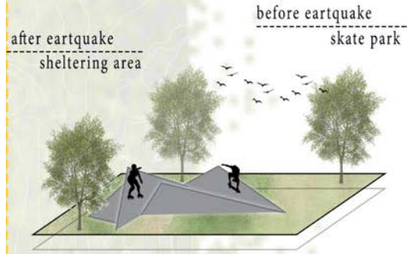
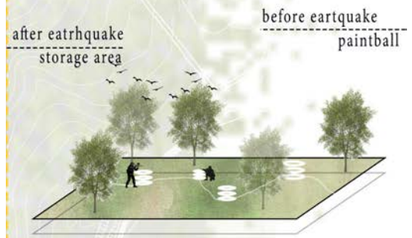
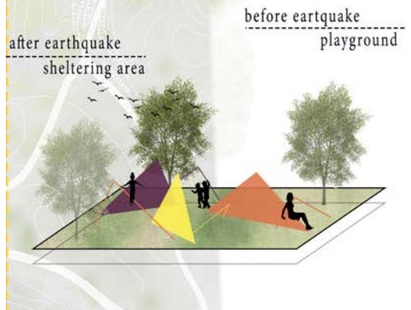
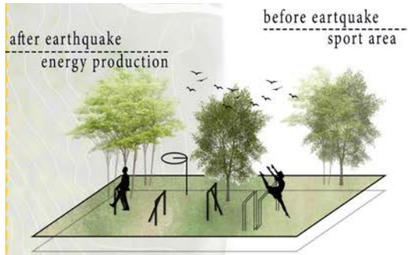

sheltering area

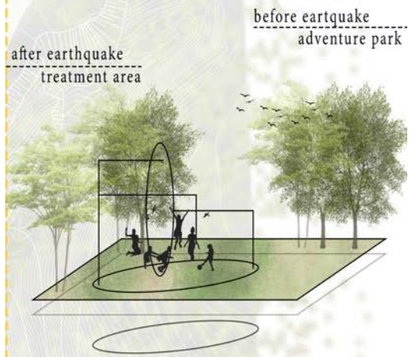

after eartquake
sheltering area
before eartquake
skate park

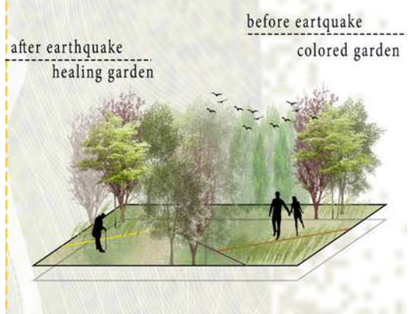

after eatrhquake
storage area
before eartquake
paintball


after earthquake
sheltering area
before eartquake
playground


after earthquake
energy production
before eartquake
sport area

after earthquake
food resources
before eartquake
agriculture

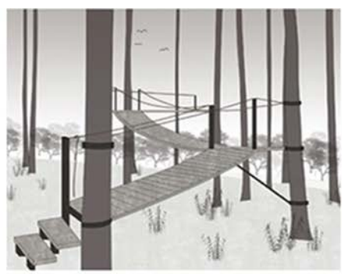

after earthquake
treatment area
before eartquake
adventure park


after earthquake
healing garden
before eartquake
colored garden

# Eco-zone

Erzi Terzioğlu, Çağla Kaplan

*"Eco-Zone" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Gülşen Aytaç, Res. Assists. Merve Fermancı under the title "Weaving Landscapes" in the fall semester of 2019-2020.*

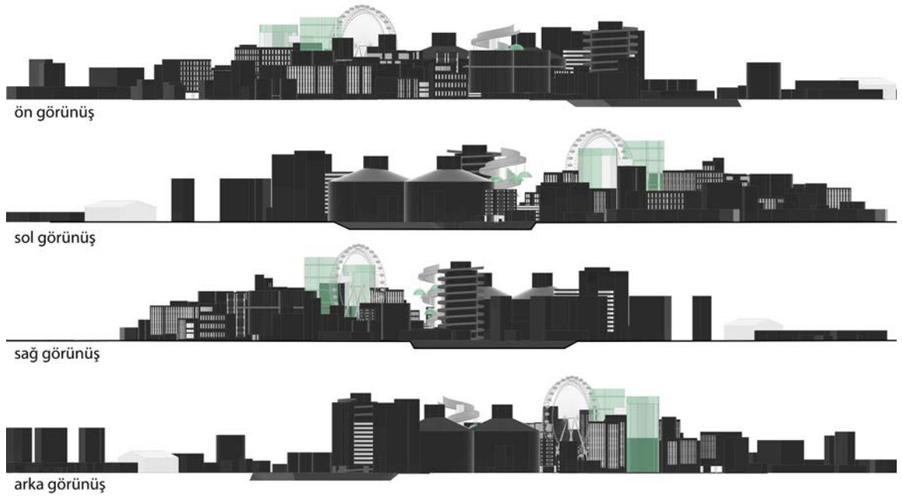


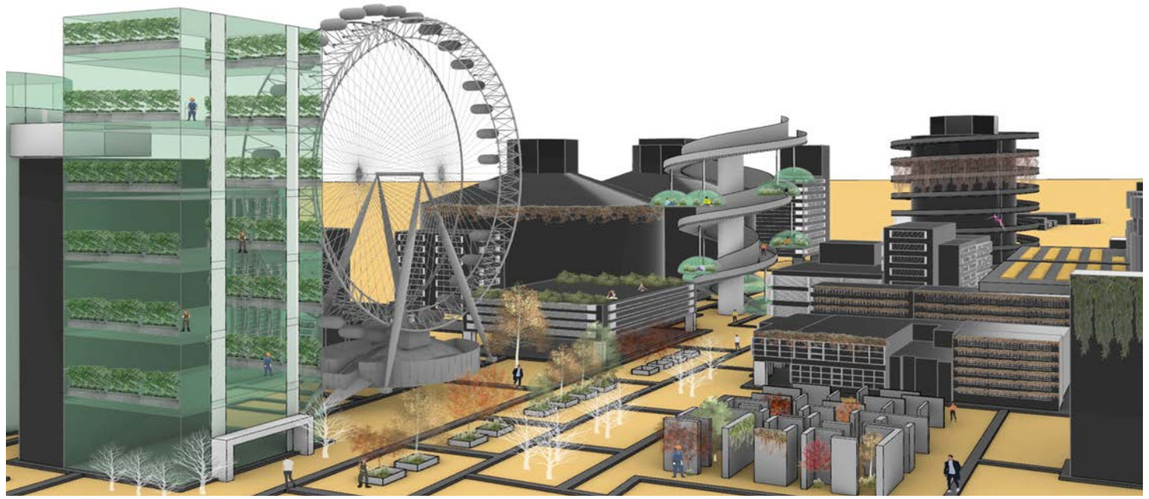
In our project area, Hereke, we began by analyzing the current situation with a future scenario in mind, looking ahead 50 to 100 years. We observed that the population and housing demand in the city continue to rise each year, as indicated by statistical data. Alongside this increasing demand for housing, we also noticed a concerning decrease in green spaces, which we aimed to address. The Nuh Çimento Concrete Factory, located in the center of Hereke, is a key functional industrial site. However, given that the factory will require renewal within the next 50 to 100 years, we proposed relocating the factory to another industrial zone within Hereke, where other factories are already situated. This relocation would allow the factory to modernize while the budget allocated for its renewal could be used to establish a new industrial zone.

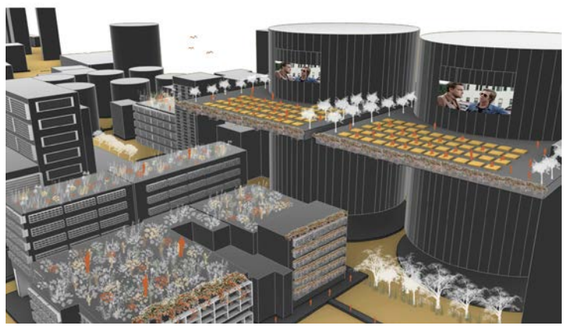
By moving the factory, we freed up valuable space in the city center that could be repurposed to meet the city's needs and made accessible for public use through various activities. Our goal was to envision a transformation of this area into an eco-city that generates its own energy, and to extend this model throughout Hereke. We started with this transformation area and expanded the strategy to other parts of the city, which we mapped out on a 1:5000 scale.

In our strategy, we created a zoning plan and developed a work-life cycle for various user groups, which we illustrated in a user diagram. This strategy also prioritized biodiversity, green roofs, compost recovery, water efficiency (including gray water use), building automation, seaweed energy production, high levels of insulation, and sustainable farming.

As part of the transformation, we repurposed the factory's silos for compost recovery. One silo was designated for organic waste, while the other was used for domestic waste incineration. The energy generated from this process was returned to the city as electricity and heat. Additionally, to support heat production in buildings, we developed a unique wall system on various facades that generates heat using seaweed. This system not only serves as a sustainable energy source but also creates an aesthetically pleasing exterior that resembles an aquarium.

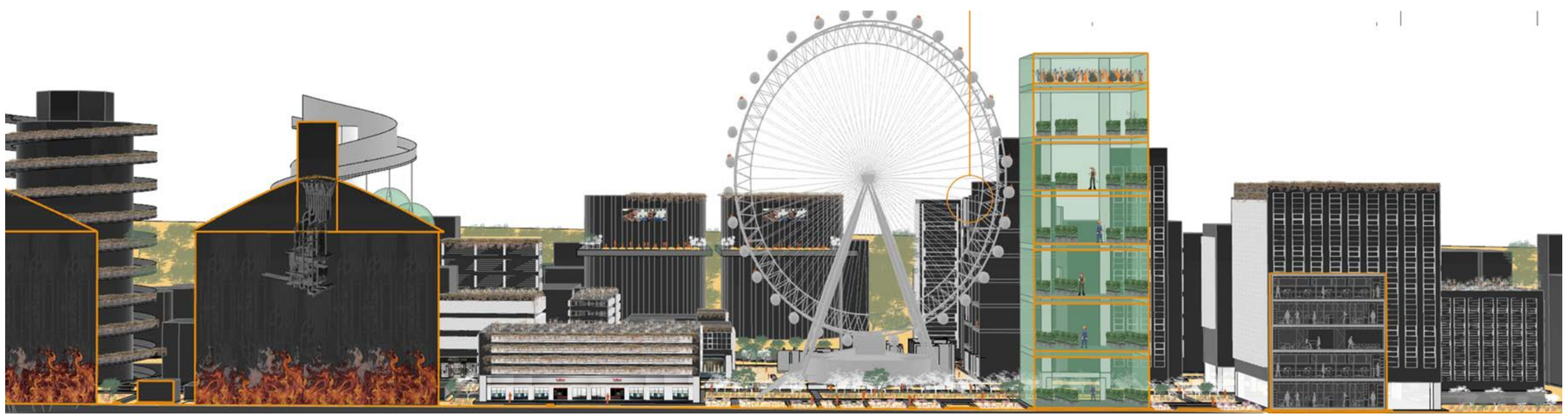












Other silos; rain water deposition and urine collection - holding areas as the vertical garden and landscaping areas used for irrigation. Bicycles have been integrated to generate energy for open spaces, offices, and schools. Additionally, energy buttons have been placed in seating areas, allowing users to press the button and produce energy. To improve accessibility, we designed walking and cycling paths throughout the area.

For sustainable farming, we established agricultural fields, vertical gardens, and botanical greenhouses. C-4 plants were used in the roof gardens. We also created an algae pool for the production of algae, which serves as a raw material for pills that help meet a person's daily nutritional needs. This approach aims to minimize consumption.

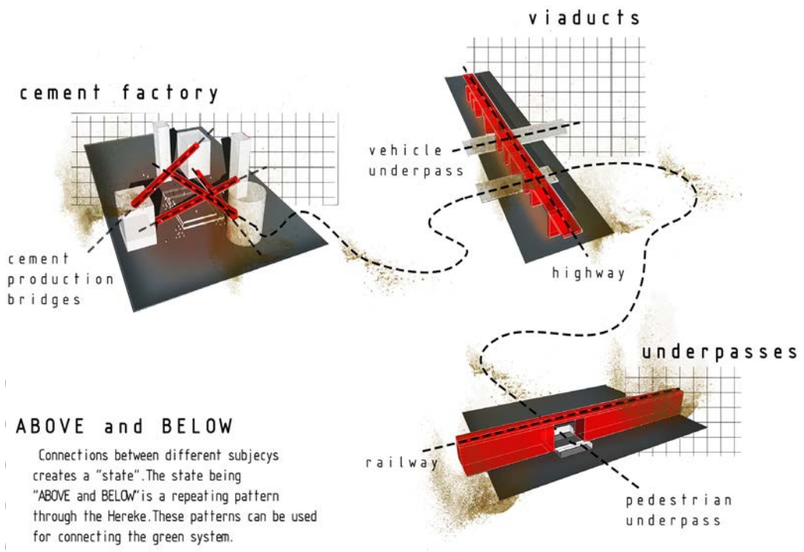
We proposed various residential typologies for the project area, carefully considering the existing demographic profile. Our housing diagram reflects these proposals, offering options for apartments, detached homes, garden-level units, and slum housing.

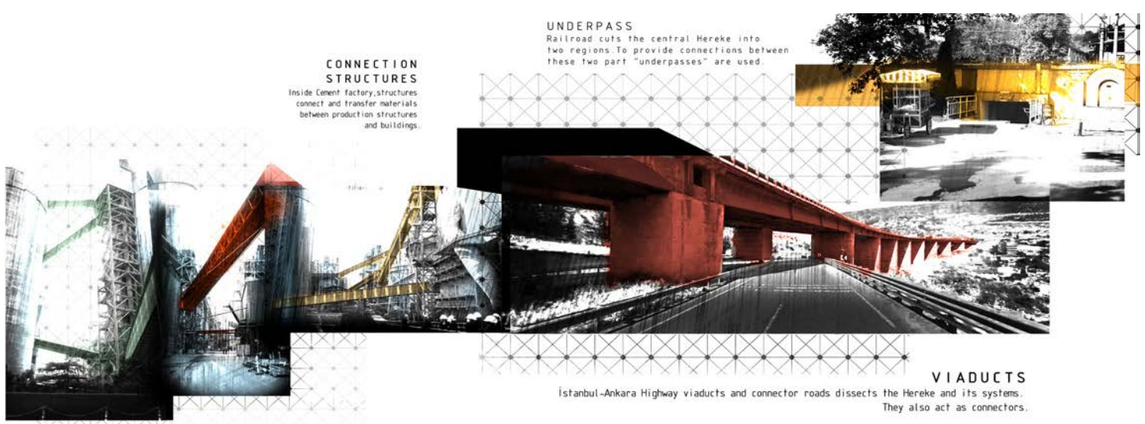
The project emphasizes public accessibility rather than a closed design. In this context, we designed essential facilities such as health units, schools, research centers, offices, and commercial markets. In addition, we created spaces for entertainment and socializing, including an open-air cinema, amusement park, recreation hubs offering different viewing experiences, a tree museum, and exhibition areas.

# Proactive Interferences

Meltem Atalay

*"Pro-active Interferences" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Gülşen Aytaç, Res. Assists. Merve Fermancı under the title "Weaving Landscapes" in the fall semester of 2019-2020.*




The project site is located on the İzmit Gulf, 60 km (45 minutes) from Kadıköy, İstanbul, making it an attractive destination for urban residents. However, the site is also just 13 km away from Dilovası/İzmit, an area known for its significant environmental pollution and the dangers it poses to residents. As an industrial region causing pollution, Dilovası also impacts the Hereke region, putting pressure on the land and threatening the local ecology with its expansion demands.

First Impressions
When observing Hereke from the coastline, key landmarks such as Nuh Cement Harbour, Nuh Cement buildings, Hereke Castle, the Hereke Viaduct, and the marina stand out. The topography of the site can also be sensed to some degree.

History of Hereke
The history of Hereke dates back to the Roman Empire and the Byzantine era. Over time, several important landmarks were added to the site, including the Hereke Weaving Factory in the 1800s and the Sümerbank Factory in the 1930s. Nuh Cement Factory also began operations in the 1960s. Other historical features include the Kaiser Wilhelm Pavilion and Hereke Castle, which were built during different periods.

Lost Values
Before the construction of Nuh Cement buildings and the operation of numerous quarries, Hereke was known for various cultural events, such as the "Cherry Festival" and "Vineyard Festival." The region was famous for its olives, cherries, lilies (around the viaduct area), Judas trees (especially near the castle), limestone, and its globally recognized fabrics and carpets.

Weaving and Planning Approach
Weaving is a key concept for both the site and the project. The tradition of weaving in Hereke began with hand looms and evolved through the use of Jacquard looms and large-scale

factory production. Weaving consists of three main components: warps, wefts, and knots. To create a pattern, a reference matrix is required. In this matrix, each square corresponds to a knot in the weaving process.

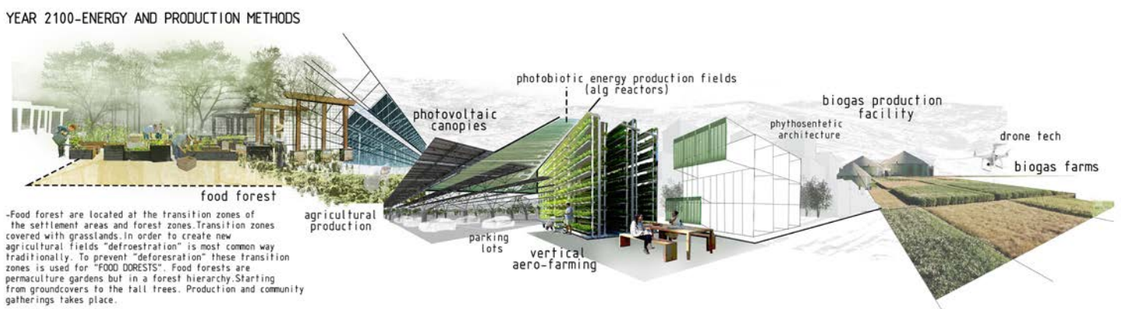
What if Hereke itself were a fabric or carpet being woven? What would its pattern matrix look like? To transform the site, we first need to examine its existing pattern matrix. By identifying troubled knots, we can eliminate them and add new knots, creating a new matrix. This new matrix will not be static; it will undergo processes and evolve into something better at various stages.

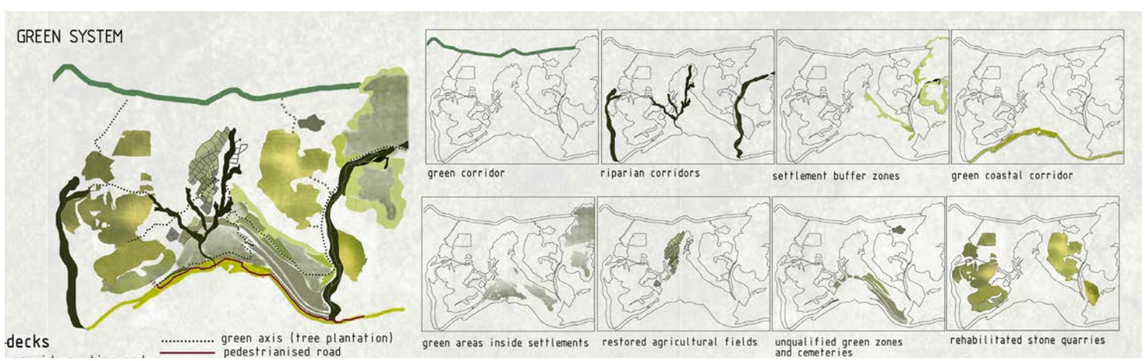
Proactive Interventions
The term “proactive” refers to anticipating needs, problems, or changes. Proactive interventions aim to address these in advance for Hereke’s future. These interventions may include taking precautions, adding features, or shaping the site over time to achieve a desired outcome—essentially “fermenting” the site into a more sustainable form.

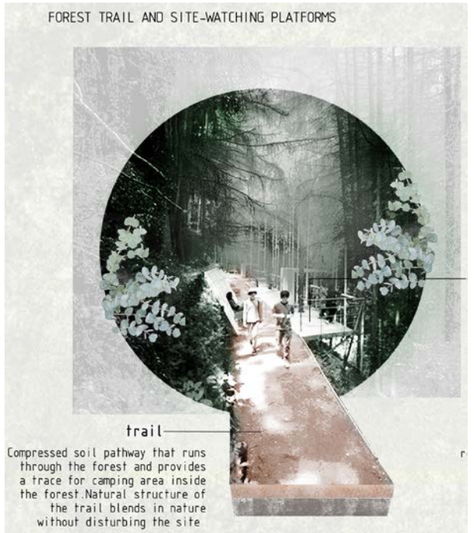
Coarse Textures of Hereke
Hereke contains six main textures: quarries, Nuh Cement Factory buildings, residential zones, the Nuh Cement Factory harbour, the coastline of Hereke, and the green system.

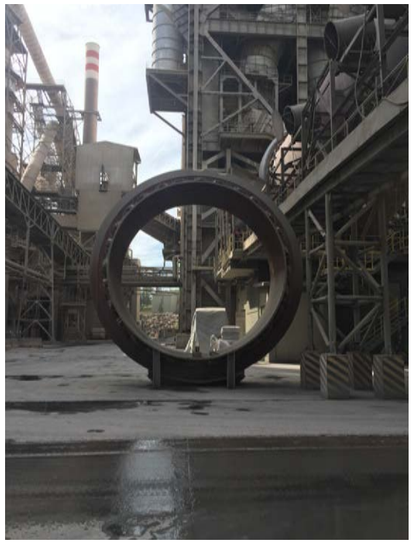
Neighbourhood Units Around the Site
Neighbourhood units are crucial to understanding the settlement typologies that are planned to be integrated into the project. Without a clear understanding of the surrounding areas, an effective approach cannot be developed. The main neighbourhood units around the site include Dilovası, Agah Ateş, Hacı Akif, Kışladüzü, 17 Ağustos, Cumhuriyet, and Yukarı Hereke. Dilovası is a significant factor due to its expanding territory and high pollution levels. On the other hand, Cumhuriyet is a recently developed area, home to a mostly southeastern migrant population, with limited social services and uncontrolled housing development.

Problems, Opportunities, and Suggestions
In Hereke’s context, problems can also be opportunities, and vice versa. To address this complex situation, the project proposes a two-phase intervention strategy:



Phase I:
Immediate closure of quarries and a succession process for decommissioning them; Gradual reduction of factory operations, with workforce transitions to cleaning activities; Elimination of factory operations and their long-term impact; Transformation of the historical center of Hereke into a residential-delta hybrid.

Phase II:
Increasing water efficiency; Material recycling; Promoting alternative energy sources; Encouraging the use of regional materials; Supporting alternative travel options; Restoring and promoting social activities.

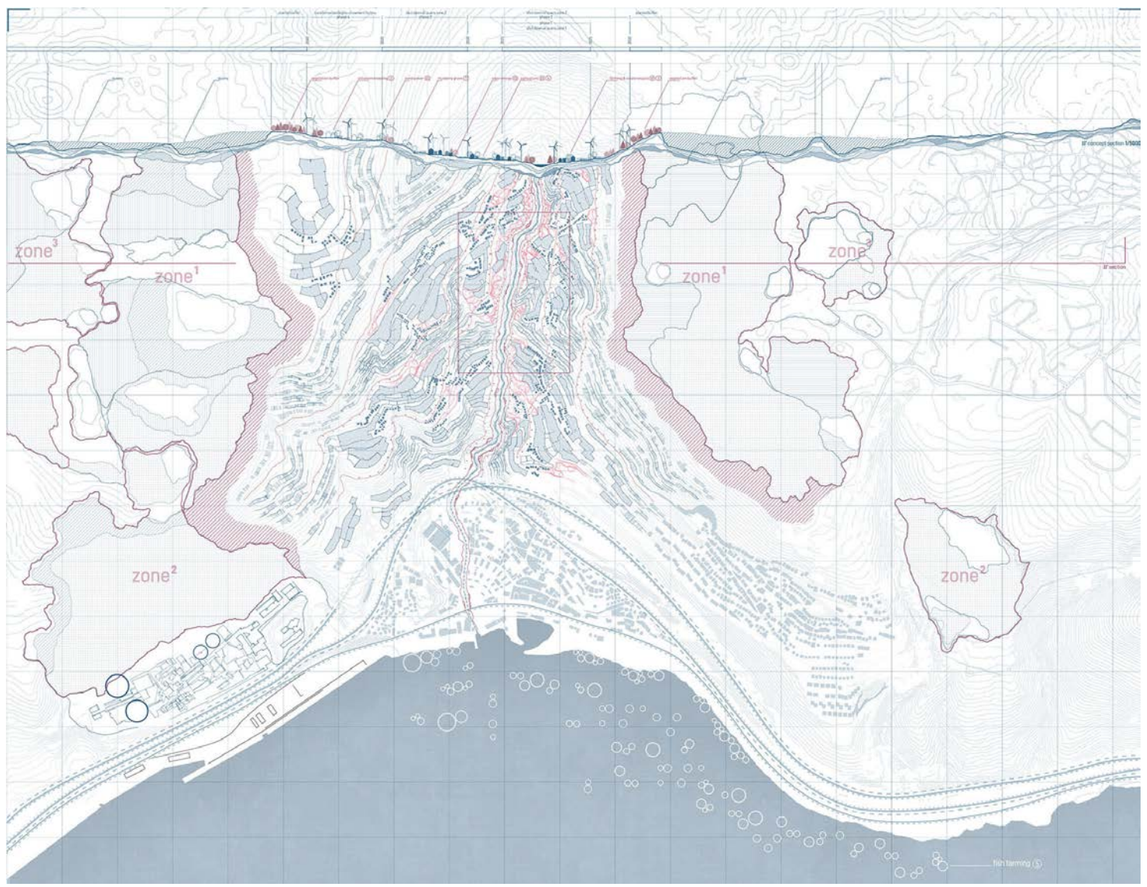
Repeating Patterns in Hereke – Above and Below
There are recurring patterns throughout the Hereke site. For instance, at Nuh Cement Factory, connection structures that transfer materials between buildings create an interconnected, woven texture. Similarly, the viaducts create intersections of roads and bridges that connect and weave spaces at different levels. The railroad in central Hereke also divides the settlement into two parts, with underpasses connecting them. These elements, which might typically be seen as barriers or separators, can function as connectors, especially in the context of green spaces.

“Connecting the greens via these elements is a key tool in our proactive intervention approach.”

# Revitalizing Hereke, Long-term Landscape Strategy_Retreiving Natural

Mehmet Bulut

*"Revitalizing Hereke, Long-term Landscape Strategy_Retreiving Natural Landscape " was produced within the scope of Landscape Design IV carried out by Prof. Dr. Gülşen Aytaç, Res. Assists. Merve Fermancı under the title "Weaving Landscapes" in the fall semester of 2019-2020.*






[current problems]_Hereke
1. misuse of a natural landscape area
2. presence of the cement factory
3. forthcoming natural reality: globak warming /high tide
4. lack of recyclable energy use and management
5. fragmented &displeased demographical structure
6. decrease of bio-diversity

[act_1] Fertile Rural Model vs. Pervasive Industry
Creating Rural Potential and Opportunities Against Heavy, Invasive Industry

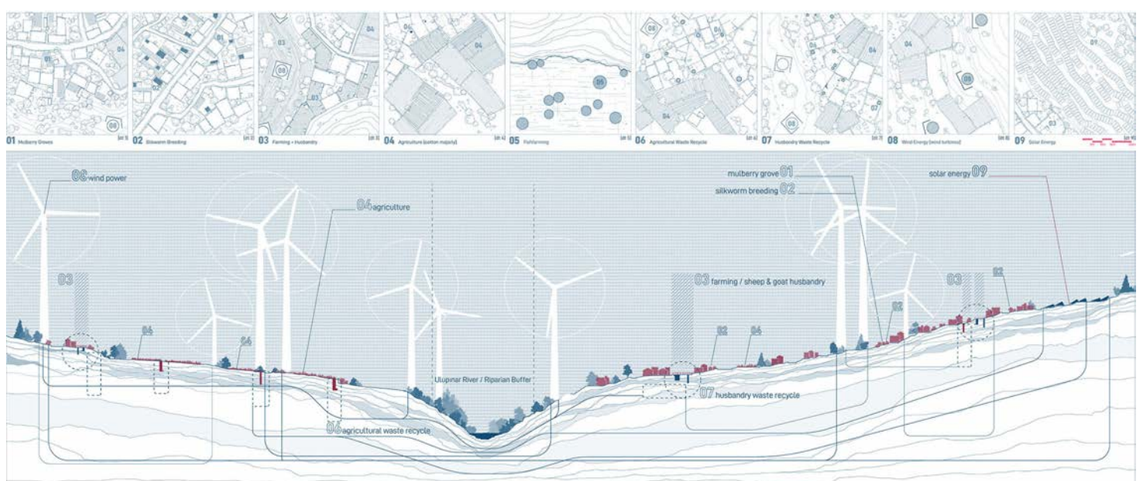
This project aims to create an alternative local economic source rooted in the original identity of Hereke by promoting agricultural and husbandry-based activities along the valley. These include mulberry cultivation, cotton production, silkworm breeding, and sheep and goat farming. By introducing this rural organization, the goal is to offer a practical and sustainable landscape element that can counterbalance the expansion and dominance of nearby industrial activities, particularly the cement factory.
This rural approach is designed as a model for the new era of our polluted ecology. It combines traditional rural characteristics with renewable energy technologies, such as wind power, solar energy, and waste recycling systems (biomass, biogas, bio-compost). Moreover, this phase of the project represents the beginning of a long-term landscape strategy, marking at least a 100-year process of transformation.

Rural Characteristics of [act]

Mulberry Grove
Mulberry fields are an essential part of the rural setting, primarily serving to feed silkworms. Since mulberry leaves are the only food source for silkworms, their cultivation is a crucial component of this rural plan. In addition to supporting silkworm breeding, mulberries will also be used in wine production, adding another layer of value to the local economy.

Silkworm Breeding
Silkworm breeding plays a vital role in reviving the carpet industry, which once thrived in Hereke but has since declined. By producing silk—the primary raw material for Hereke's famous carpets—this initiative will not only revitalize the carpet industry but also provide new employment opportunities. Silkworm breeding houses and fields will serve as productive spaces, helping to reintegrate silk production into the local economy.

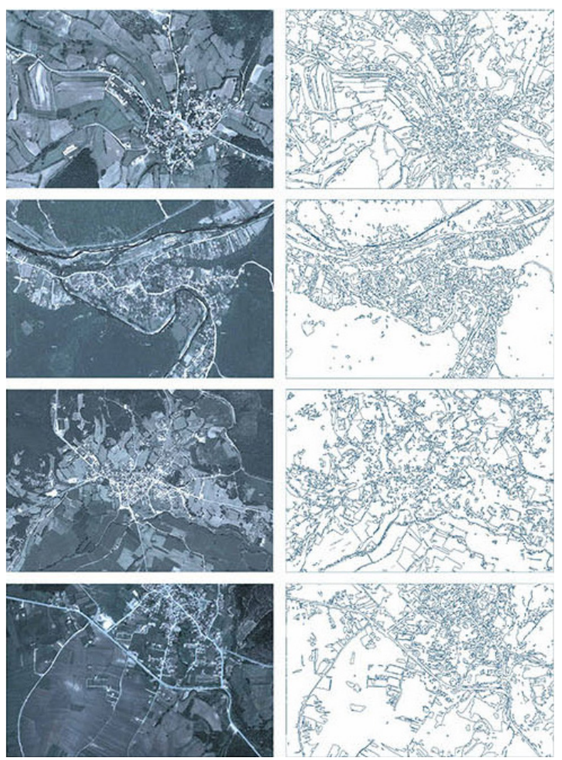




Sheep & Goat Farming
Sheep and goat farming will support the carpet industry through wool production while offering additional employment opportunities. Grazing fields, pastures, and farms will help create a sustainable rural economy and increase the value of Hereke's local agriculture. This will provide fertile, organic, and productive opportunities for daily life.

Agriculture
Agriculture is a significant asset to any rural community, and in Hereke, the focus on cotton production presents immense potential. Agriculture not only strengthens the local economy but also supports the carpet industry, offering a valuable and sustainable resource for Hereke's future.

Fish Farming / Aquaculture
Fishing has historically been an important industry in Hereke, but it has declined due to pollution caused by the cement factory. Fish farming, however, offers a sustainable alternative. By introducing aquaculture, fishermen can continue their activities offshore, and through sea-cleaning strategies, fishing will once again become a viable industry in the area.

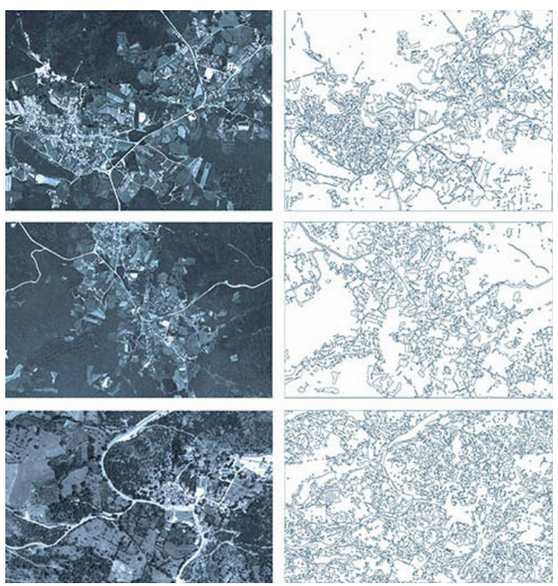


Energy Characteristics of [act_1]

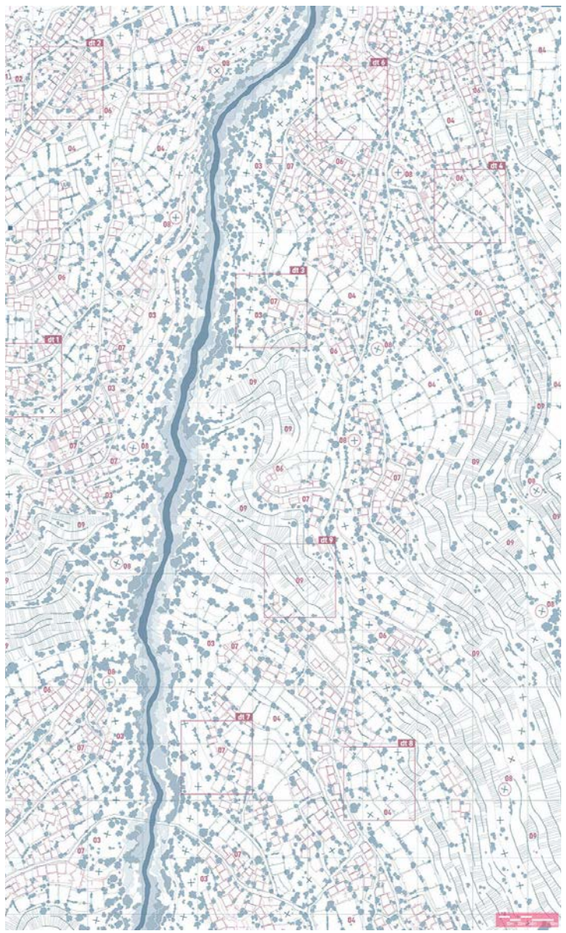
Waste Recycling Energy
Following a waste management strategy, agricultural and husbandry waste will be converted into energy through various recycling methods, such as biomass, biogas, and bio-compost. These systems will support the local energy economy and ecology, with potential for producing materials for the fish farming industry as well.

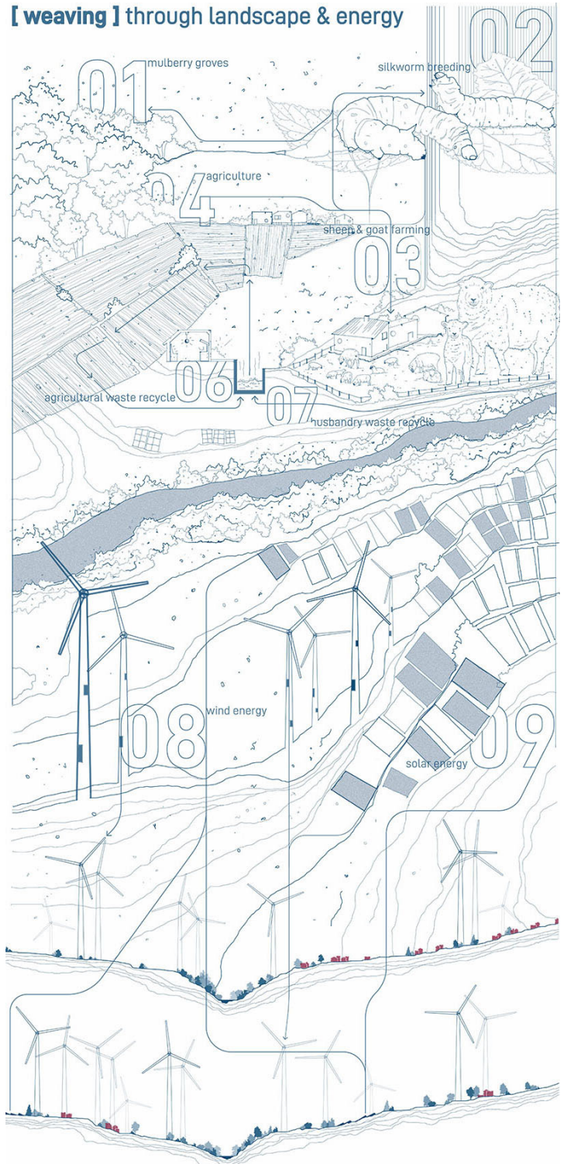
Wind Power
Wind power is an efficient and environmentally friendly energy source, particularly in areas with strong wind currents. Hereke's location, with its favorable wind conditions, is ideal for integrating wind power into the rural organization. Wind turbines—both onshore and offshore—will provide energy for various infrastructure needs, including houses, factories, agricultural activities, and farms. The turbines will also generate economic benefits, complementing other rural features in Hereke.

Solar Energy
Solar energy will be integrated into the rural model, with solar panels placed alongside the agricultural and rural features. These panels will supply electricity for essential activities, such as irrigation, household power, and farm operations. Solar energy will not only make the rural organization more self-sufficient but will also contribute to the local economy by providing clean, renewable energy.









# Loop-up

Evrim Elif Yurttaş

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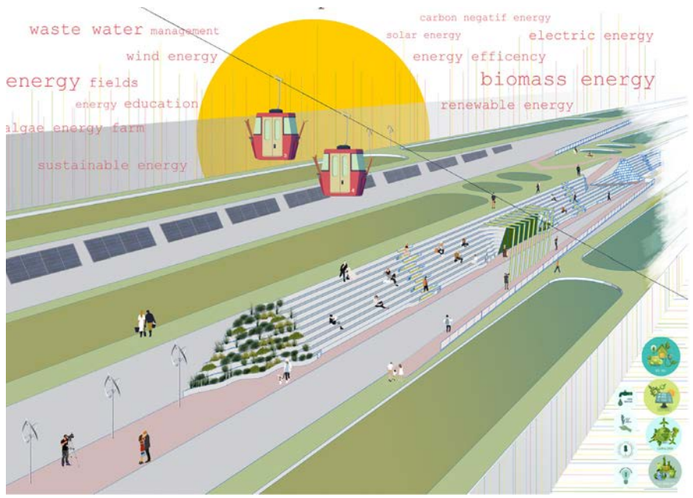
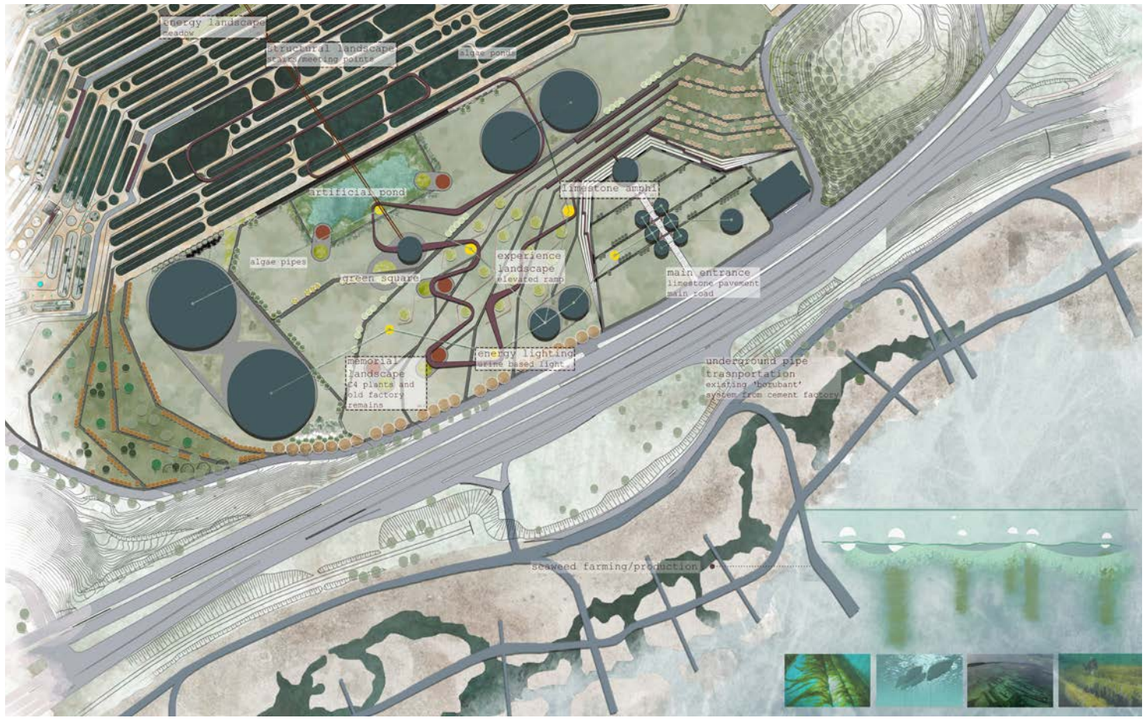







Hereke has historically been a production city, and its legacy of manufacturing continues today. In the past, Hereke's production evolved into an art form, with the city's name becoming globally renowned for its carpets. Today, its cement industry plays a significant role in the world's cement market as an engineering product.

Both of these major industries have benefitted from natural resources. The carpet industry is supported by the livestock ecosystem, and its designs are often inspired by plant leaf motifs. In contrast, the cement industry relies on the region's geological resources, which are extracted irreversibly, leaving behind significant pollution. This has resulted in a negative perception of production in the city.

However, it is possible to change this negative view of production by addressing the pollution with a new form of large-scale, sustainable production: Biomass.

Algae, which are highly efficient at carbon capture, can be produced on an industrial scale. Many of the nutrients needed for algae cultivation—such as nitrogen, phosphorus, and carbon dioxide—are pollutants that harm nature, contaminate water, and degrade soil. In areas where the factory has disturbed the landscape, such as the site of the first excavation, the existing terraces have been reorganized into a terraced system to support new production methods.

The following species of cyanobacteria have been proposed for large-scale algae production: Arthrospira platensis (spirulina) and Phaeodactylum tricornutum.

Additionally, agroforestry—a land management system in which trees or shrubs are grown alongside crops or pasture—has been proposed for areas that maintain their topographic features. Agroforestry helps to regenerate the soil and improve its health by integrating tree planting with agricultural activities. The trees will also serve as a source of biomass energy.

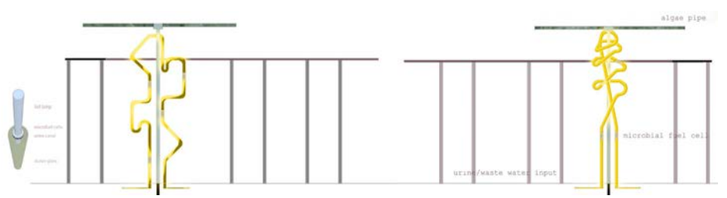
For the agroforestry system, the following species have been suggested for the Marmara region: Pinus pinaster; Pinus radiata; Pseudotsuga menziesii; Alnus barbata.

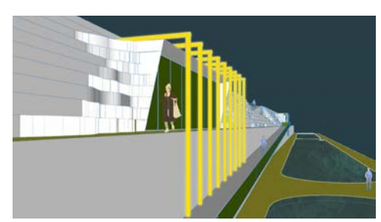
C4 plants, which are commonly used for biomass energy production, have been recommended as an alternative to algae for regenerating the soil and making otherwise idle land productive. Given the region's climatic conditions, the following species have been selected for biomass cultivation: Corn (Zea mays); Sweet corn (Zea mays sacharata); Soybean (Glycine max); Sorghum (Sorghum vulgare); Canola (Brassica napus); Miscanthus (Miscanthus giganteus); Safflower (Carthamus tinctorius); Jatropha (Jatropha curcas); Switchgrass (Panicum virgatum)

Seaweed farming offers a sustainable and renewable biomass source. Seaweeds grow faster than any land-based plants and provide numerous environmental benefits. They increase biodiversity, oxygenate the water, and improve fish stocks around farming areas.

Seaweed farming is proposed as a new recreational area along the coast, where it can also serve as a rich source of biomass. Additionally, seaweed will help mitigate pollution from the factory, which has contaminated the old port area for many years. In the İzmit Gulf, contamination from ships waiting to enter the Bosphorus has also degraded water quality. Seaweed's ability to act as a biofilter (bioremediation) can help reduce coastal eutrophication and improve water quality.

Through these efforts, Hereke can transform its industrial past into a more sustainable and ecologically positive future.

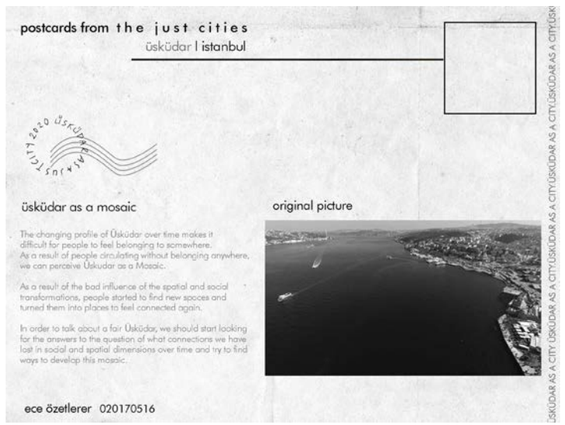


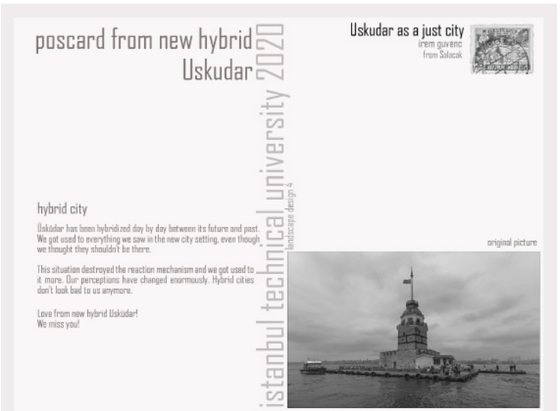


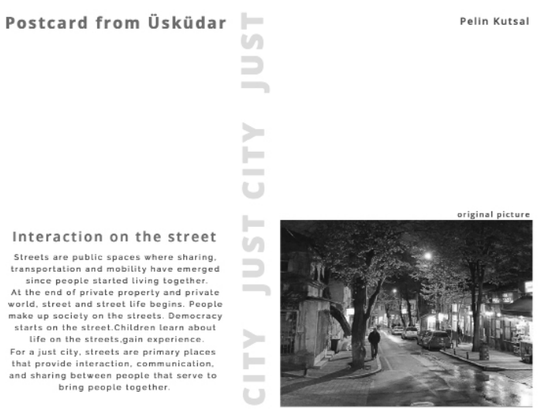
# Postcards from the just cities

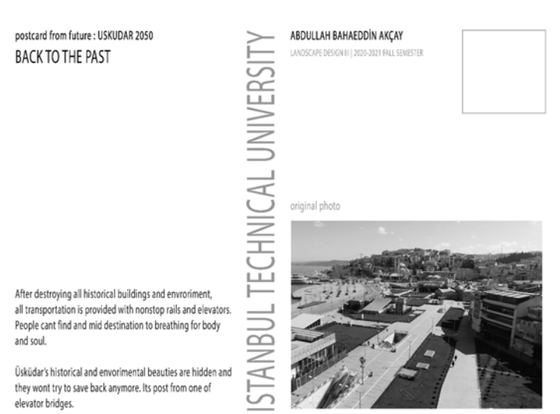
Ece Özerlerer, Pelin Kutsal, İrem Güvenç, Abdullah Bahaeddin Akçay

*"Postcards from the just cities" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. Gülşen Aytaç, Res. Assists. Başak Akarsu and Res. Assist. Gizem Aluçlu under the title "Landscape Architecture for Just City" in the fall semester of 2020-2021.*





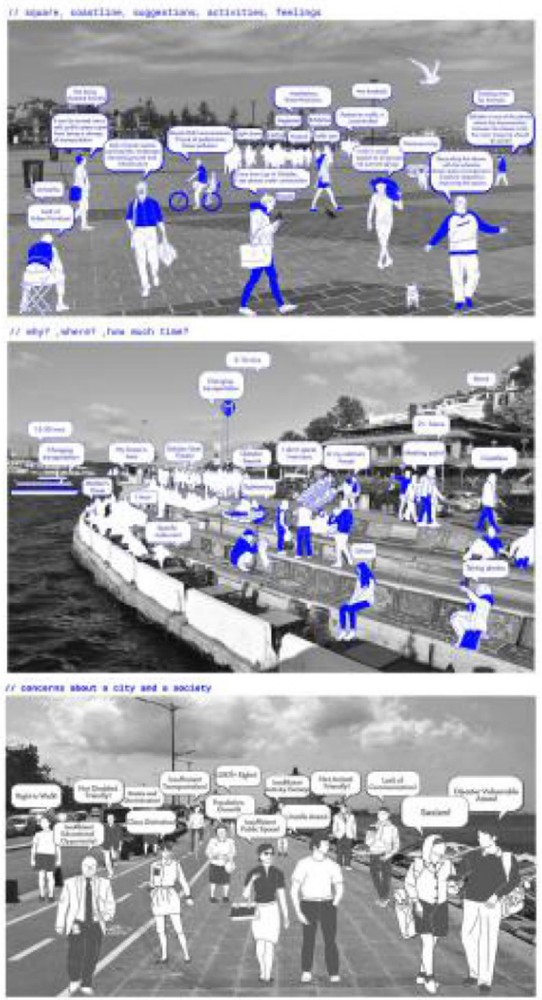




# Examining The Urban Transformation in Üsküdar

Ece Özerlerer

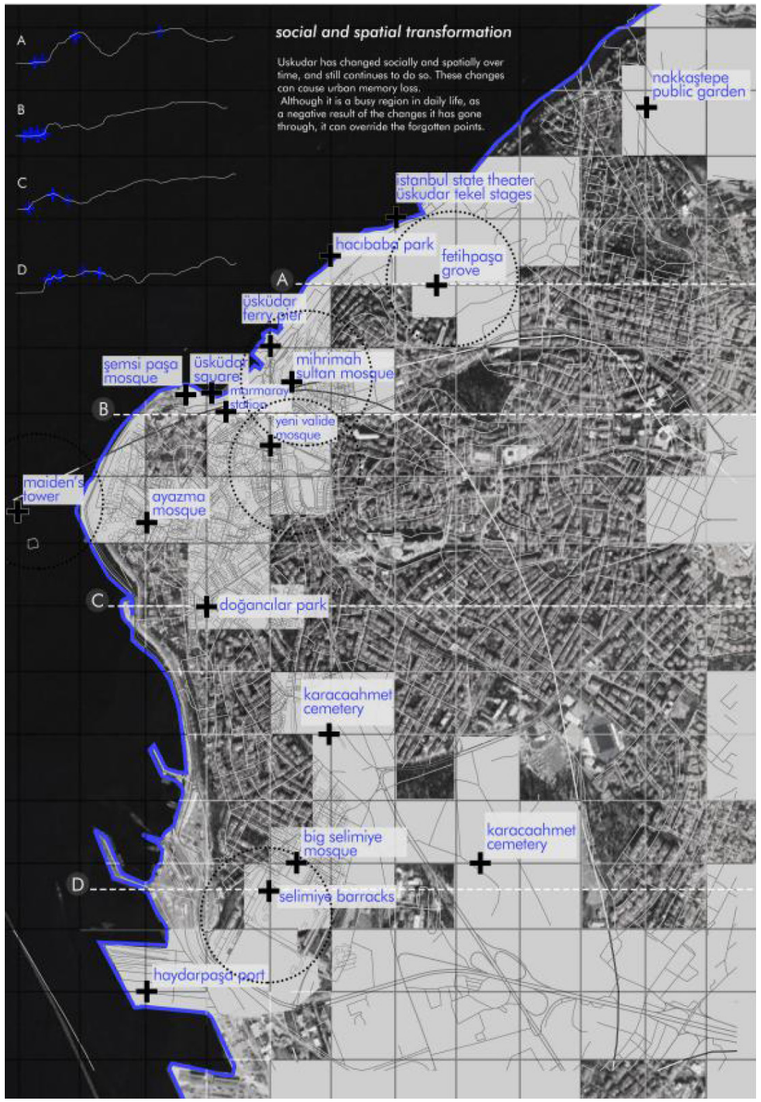
*"Examining The Urban Transformation In Üsküdar" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. Gülşen Aytaç, Res. Assists. Başak Akarsu and Res. Assist. Gizem Aluçlu under the title "Landscape Architecture for Just City" in the fall semester of 2020-2021.*

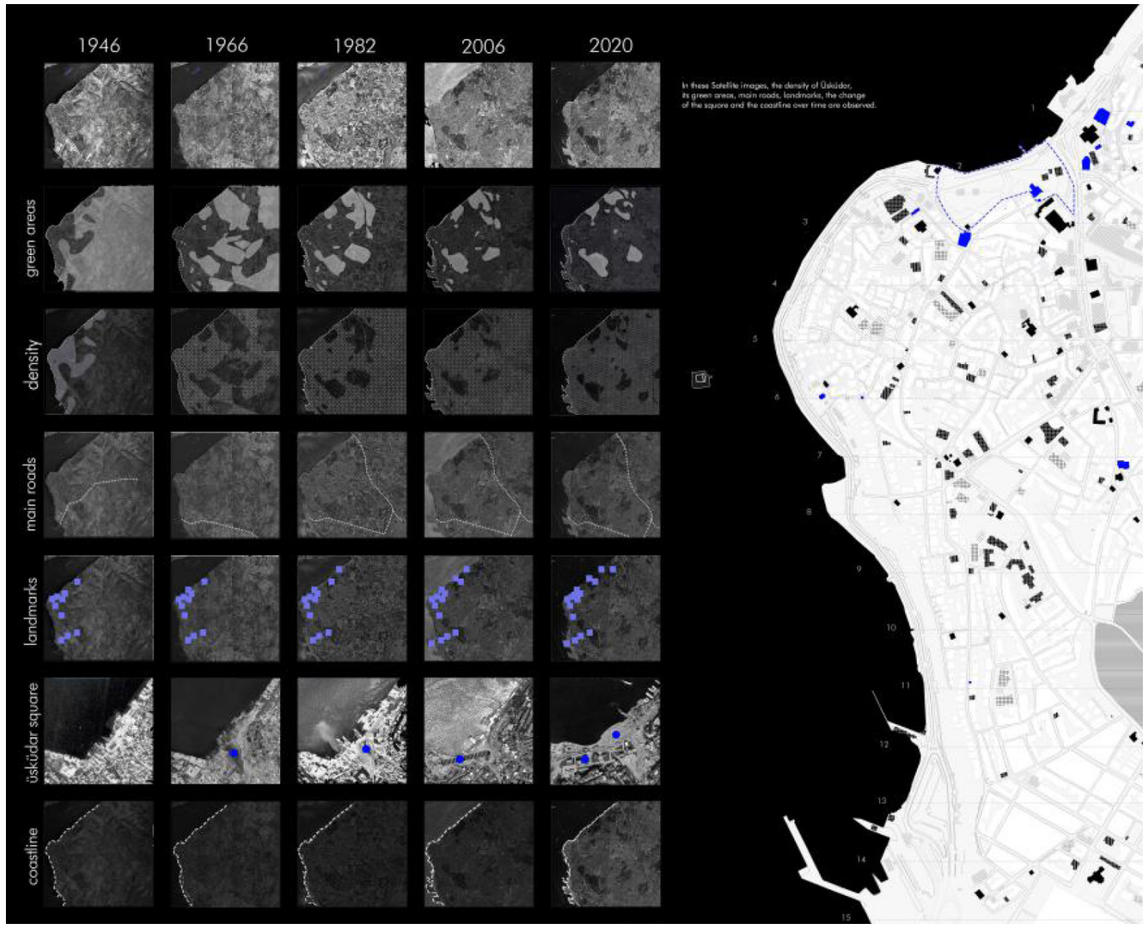


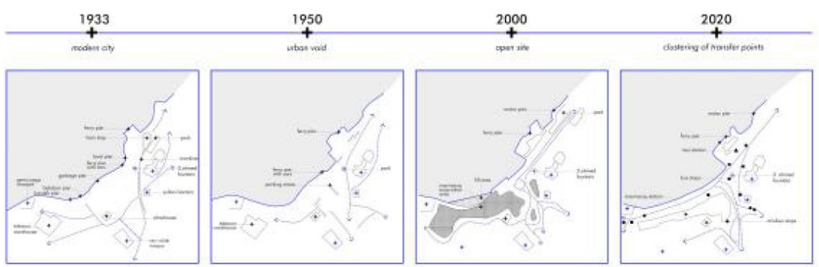

This exploration of ordinary and forgotten urban qualities examines the overlooked spaces within the everyday environment. The environment, situated between the familiar nature of the ordinary and the act of searching, reflects the spatial assumptions we impose on our surroundings. As a society, we frequently overlook the fabric of our urban environment, often neglecting these spaces mentally, despite their presence. This neglect influences how we perceive and experience these spaces.

The interconnected thresholds, edges, roads, nodes, and spatially neglected landscapes that make up the urban fabric of Üsküdar exist as ordinary and forgotten spaces within the framework of daily life. We often pass through these corridors as part of our daily routine, but we fail to recognize their significance, instead using them merely as transitional spaces. As social and spatial transformations continue to unfold, we tend to forget these everyday urban elements, losing awareness of them.

The purpose of focusing on the transformations in Üsküdar is to identify areas with potential for change and to uncover new structures and patterns within the urban fabric. This process involves not only physical intervention but also the discovery and appreciation of unnoticed features. In conclusion, to support these objectives, a design intervention has been proposed to make the busy areas of Üsküdar more engaging for people's everyday lives. Through this approach, the city square can be redefined in multiple ways.

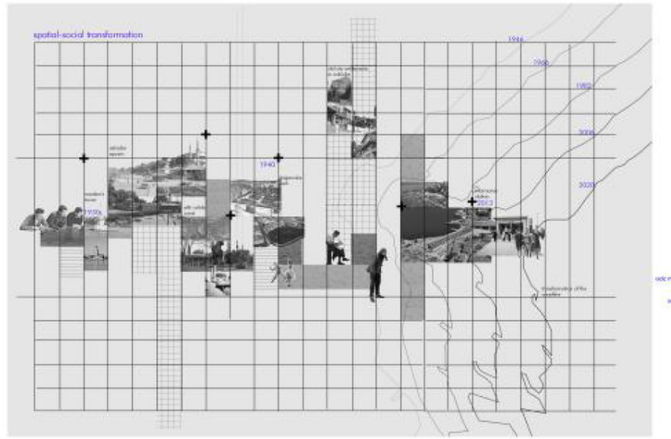


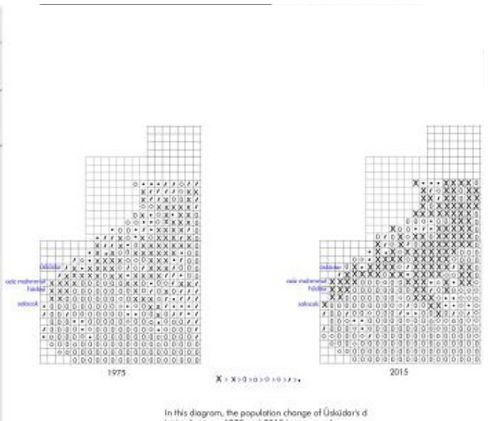


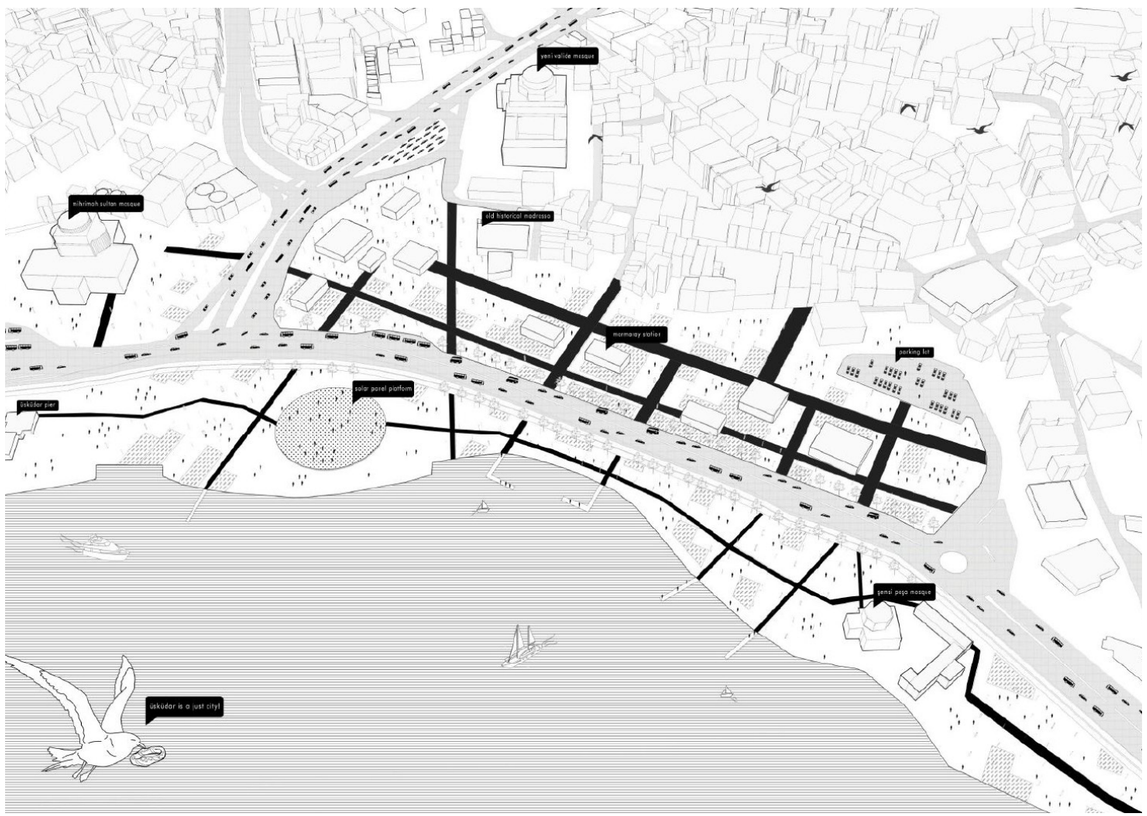

*spatial transformation of the üsküdar square*

Which factors lead to the change of the Üsküdar Square over time and the alienation from the space?
Today, Üsküdar Transfer Center; intersection of interspecies transport stations with pedestrian links, location and has a cosmopolitan user base due to its transportation at the same time carrying identity value with its historical texture is a field. On the highway; bus, minibus, minibus, private vehicle on the railway; tube-gate system Marmaray, marine on the way; Transfer by ferry and motor between different types of transport and stations by pedestrian connections and flows takes place

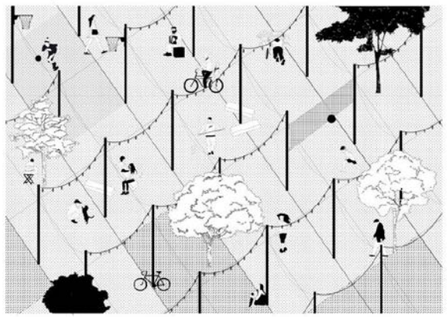


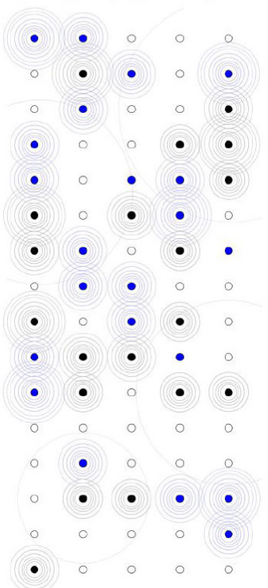

In this diagram, the population change of Üsküdar's d istricts between 1975 and 2015 is compared.



*üsküdar square*



*üsküdar just city application game*



# Üsküdar as a Just City: Landscape Architecture for Just

Mehmet Taylan Tosun

*"Üsküdar as a Just City: Landscape Architecture for Just City" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. Gülşen Aytaç, Res. Assists. Başak Akarsu and Res. Assist. Gizem Aluçlu under the title "Landscape Architecture for Just City" in the fall semester of 2020-2021.*

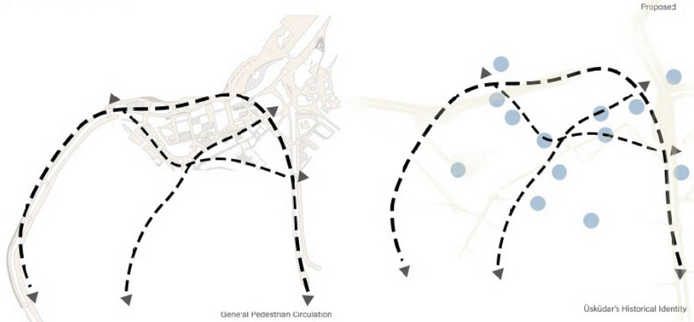
## CREATING A CONTINUOUS PEDESTRIAN CIRCULATION

PEDESTRIAN-FRIENDLY STRATEGY

For a pedestrian-oriented district, all kinds of obstacles to disrupt pedestrian circulation have been replaced with a more functional and human-scale design due to the concept.

Vehicle road lines decreased and minibus station removed because of its gaining active traffic and parking. Green patches redesigned due to continious pedestrian circulation. Random green pots and commercial businesses that blocks the historical identity of the coast and Şemsipeşa Complex, were removed.

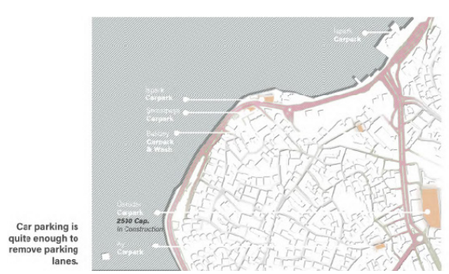
Proposed

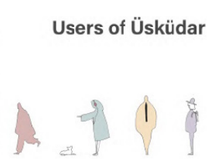



Proposed pedestrian circulation creates historical routes for every user of Üsküdar. Rather than being just a transit point, Üsküdar turns into a place to spend time emphasizing important historical textures. With the green areas used on the sidewalks, the pedestrian is separated from the view and noise of the road and concentrates on Üsküdar.

## CREATING ALTERNATIVE TRANSPORTATION

without interrupting pedestrian circulation




To create a just city,every user of the city must have an opportunity to walk, pass, spend time..etc. In proposed design now **transit user** can wait and spend their time in commercial or recreational areas in transportation zone, **tourists** can walk thcugh the historical route and coastline, **residents** and **people work in Üsküdar** can access socio-eco corridor and **fishers** have their own area at on deck at coast.

**NOSTALGIC TRAMLINE**

Nostalgic ramline is an alternative transportation to decreased vehicle roads. It has green ecologic track and pedestrian-friendly. It brings the old days of Üsküdar.

**BUS**

Bus stations relocated due to proposed pedestrian crosswalks and programmes.

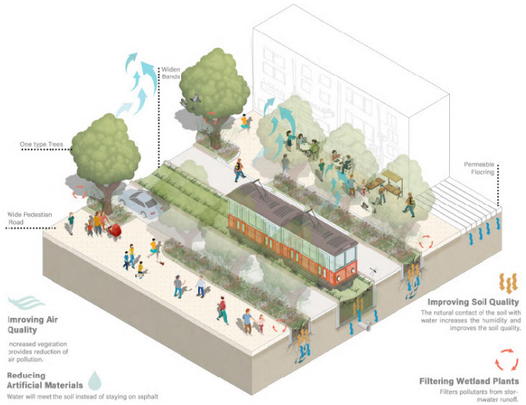
**MINIBUS / DOLMUŞ**

Minibus network removed to outside of proposed socio-ecological corridor. It is accessible at end of the area by any transportation including tramline.

## DESIGN STRATEGIES
In the Proposed Context of Socio-Ecological Corridor

### ECOLOGICAL STRATEGIES
CAR PARKS TO BIOSWALES

Two of the 4 lanes are used for parking on long streets such as Hakimiyet-i Milliye and the coastline, where the city rain water accumulates. For the health of blue and green infrastructure, car parking lanes are turned into bioswale areas. Flood risk is prevented for the city and pedestrians are given priority for the concept of a fair city.

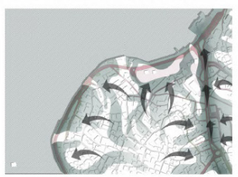



### CONNECTIVITY OF GREEN
BY SOCIO-ECOLOGICAL CORRIDOR

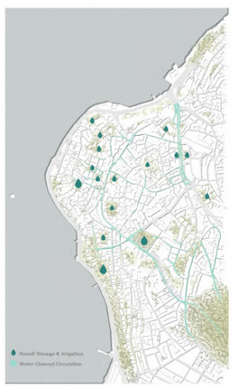
Corridor provides connectivity between small fragmented parks, green areas. To create a healty green infrastructure, there must be a connected green system.

Same species of plants to create a continous space or various shaped green areas which formed by the circulation and programmes that follow near ones to be stepping stones patches.

### ECOLOGICAL STRATEGIES
STORAGE OF RUNOFF WATER



In topcgraphically rich Üsküdar, while residential settlemants are higher, urban active streets turn into lower valleys where water is collected. With the new design proposal, the rainwater will be transferred to the new pocket parks on the hills by slope, the remaining water will be mixed into the soil with the bioswale proposal or the main streets. Infrastructures for collecting and storing rainwater will be found under green areas and made available to use in the city, and with this urban blue infrastructure, the flood problem will be solved with an ecological and economic strategy.




### PLANTING
CONSIDERING EXISTING

Proposed plants based on existing and important for urban identity. Also plants that prosed for bioswales which are wetlands.

**Platanus Orientalis**
*Oriental plane*
Deciduous tree that also is a symbol of Üsküdar. They are important for urban identity, and can create acontinuity for socio-eco. concor. There are old and monumental oriental planes.

**Euonymus japonicus aurea**
*Evergreen spindle*
Evergreen yellow shrub that existed in Üsküdar's green patches and pots give yellow color to city and create some volume. Can be used in new proposed green infrastructure.

**Carex sp.**
*Japanese sedge*
Ornamental grass that can be used in bioswales. Functional and give different colors to streets.

**Festuca glauca**
*Blue fescue*
Ornamental grass that can be used in bioswales. Functional and give blue colors to streets.

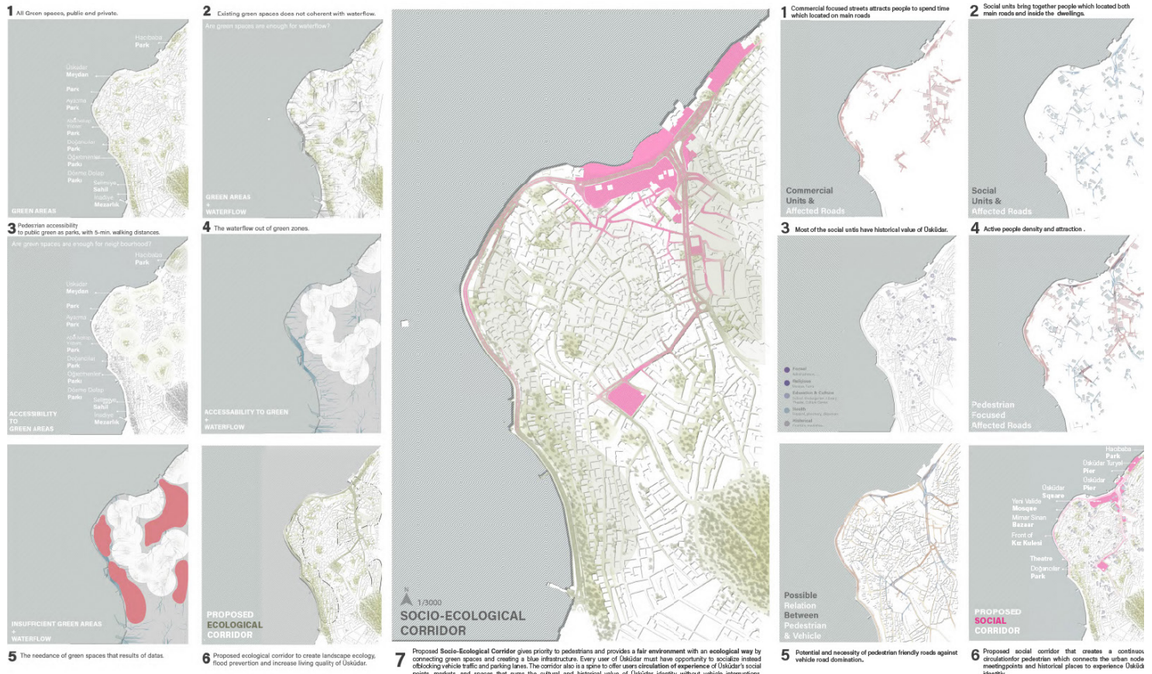
Urban justice ensures that every user has the opportunity to use the city safely. It begins when users can easily socialize, engage with the city by understanding its urban identity, and see a reflection of themselves within it. To achieve this, ecological and pedestrian-oriented design decisions must be made to create a pedestrian-friendly, human-scale district. User participation should also be integrated into the design process. The needs of users shape the city. Spontaneous motivations and actions inspire people to transform urban areas. One issue in the city is the lack of connectivity between residential areas and the coast due to traffic routes.

Landscape Ecology in Üsküdar
Green & Blue Infrastructure
When discussing urban life, it's essential to evaluate whether the city has a healthy ecological infrastructure. The areas of green space amidst the concrete urban fabric are directly proportional to the quality of life in the city. There should be accessible green socializing areas in every residential neighborhood. All green spaces—whether in medians, parks, or squares—should work together as part of a unified ecological system. The amount of green space available to users in Üsküdar is quite low and insufficient compared to the prevalence of concrete surfaces.

Flood Risk
Üsküdar is a coastal district in Istanbul with very dynamic topography. Rainwater tends to accumulate on certain sloped streets, and due to the inadequacy of Üsküdar's blue infrastructure, flooding occurs as a result.

Formation of Proposed Socio-Ecological Corridor
Key Concept
The proposed Socio-Ecological Corridor prioritizes pedestrians and creates a fair and ecological environment by connecting green spaces and establishing blue infrastructure. Every user of Üsküdar should have the opportunity to socialize, with vehicles and parking

## FORMATION OF SOCIO-ECOLOGICAL CORRIDOR
to create social democracy in Üsküdar






lanes no longer obstructing access. The corridor acts as a spine, offering users a journey through Üsküdar's social spaces, markets, and places that embody the cultural and historical identity of the district, all without vehicle interference. The regeneration of streets and infrastructure will improve the urban conditions of a new, more just city in Üsküdar. The corridor is defined by both social and ecological factors: the social corridor is determined by land use and active circulation density, while the ecological corridor is defined by existing green spaces and water flow analysis.

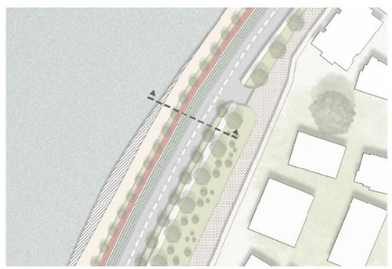
Users of Üsküdar
To create a just city, every user must have the opportunity to walk, pass through, and spend time in the proposed design. Transit users can now wait and spend time in commercial or recreational areas within the transportation zone. Tourists can walk along historical routes and the coastline. Residents and workers in Üsküdar can access the socio-ecological corridor, and fishermen have designated areas along the coast.

Design Strategies in the Proposed Context of the Socio-Ecological Corridor
For a pedestrian-oriented district, all obstacles that disrupt pedestrian movement have been replaced with more functional, human-scale design solutions. Vehicle lanes have been reduced, and the minibus station removed to prioritize active traffic and reduce parking. Green patches have been redesigned to accommodate continuous pedestrian circulation. Randomly placed green pots and commercial businesses that block the historical identity of the coastline and the Şemsipaşa Complex have been removed. Adequate parking spaces have been provided, making parking lanes unnecessary. The proposed pedestrian circulation creates historical routes for every user of Üsküdar. Rather than merely being a transit point, Üsküdar transforms into a place to spend time, highlighting its important historical and cultural landmarks. The green areas along the sidewalks separate pedestrians from the view and noise of the road, allowing them to focus on experiencing the essence of Üsküdar.

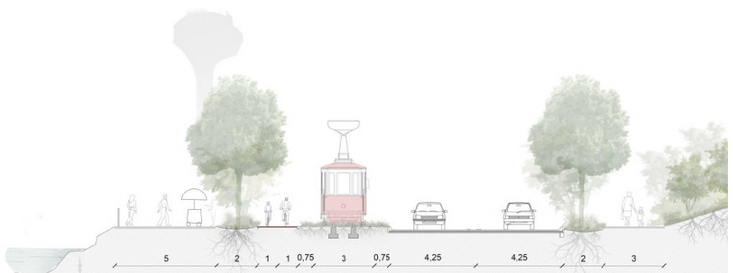
## DESIGN STRATEGIES

Road Sections of the Socio-Ecological Corridor

1/50

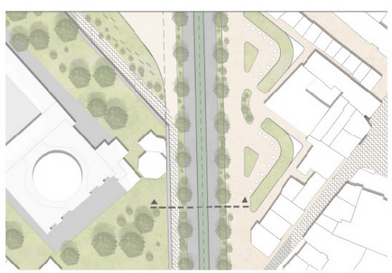


**Harem St.**

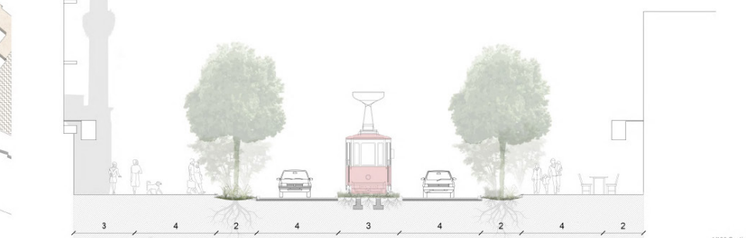



1/100 Sectio

With the pedestrian-friendly cesign of Üsküdar, the vehicle lane reduced to 2 lanes, the bioswales created on the sidewalks and same species of trees, the ecological vegetatied tram line and the bicycle path and the mobile commercial units proposed to the coastal walkway, giving everyone opportunities, emphasizing the coastline that provides Üsküdar's identity and it is aimed to meke it walkable in anytime.



**Hakimiyet-i Milliye St.**




1/100 Sectio

For the continuity and integrity of the socioecological corridor, the historical Hakimiyet-i Milliye street, which is the commercial heart of the city, has been reduced to two lanes, while the bioswale bands and the tram line continue, the vehicle road has been reduced to two lanes, a more equitable environment for more users by allowing more space for pedestrians, is targeted.

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## ÜSKÜDAR PROPOSED PLAN

1/1000

- Pedestrian Road
- Vehicle Road
- Partial Vehicle/Pedestrian Road
- Recreation/Resting Areas
- Deck Seating Area
- Proposed Green Areas
- Proposed Planting Design
- Bicycle Road
- Tram Road

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M. TAYLAN TOSUN

# New Form of Life

Zeynep Berfu Yılmaz

*"New Form of Life" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Gülşen Aytaç and Res. Assist. Gizem Aluçlu under the title "Water & The City: Ayamama Corridor" in the fall semester of 2021-2022.*

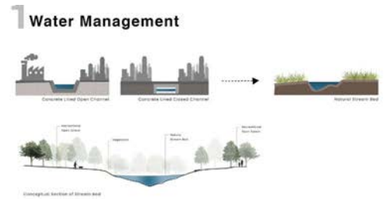
Ayamama Stream, the focus and location of this project, is situated on the European side of Istanbul. It originates from a spring in the eastern part of the Başakşehir district. The stream flows through the districts of Bağcılar and Bahçelievler before emptying into the Marmara Sea within the borders of Bakırköy. Historical sources indicate that Ayamama Stream was once surrounded by fertile agricultural land. It had many branches from its source to its mouth, serving as an important water source for the surrounding orchards, gardens, and farms.

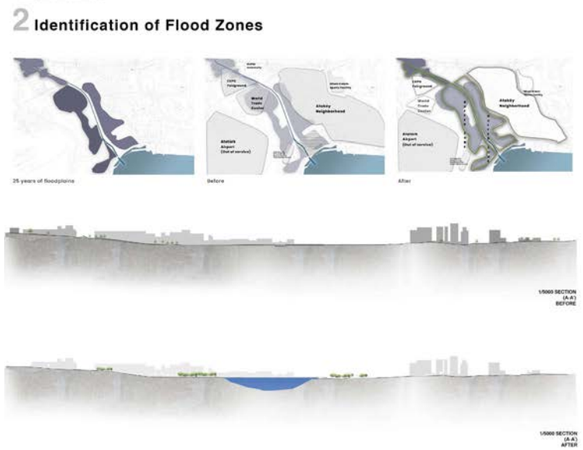
The stream was also home to several historical bridges and sacred springs dating back to the Byzantine period. However, with the surge of migration to Istanbul after the 1950s, illegal construction began to encroach upon the area around the stream. Poor urban planning led to the establishment of numerous factories and industrial facilities near the stream, resulting in significant pollution. As surrounding villages and illegal settlements evolved into the modern districts we see today, the stream's natural course was altered. The D100 and TEM highways, two of Istanbul's most important roads, now pass through the region. Most of the stream was forced underground, and its bed was narrowed.

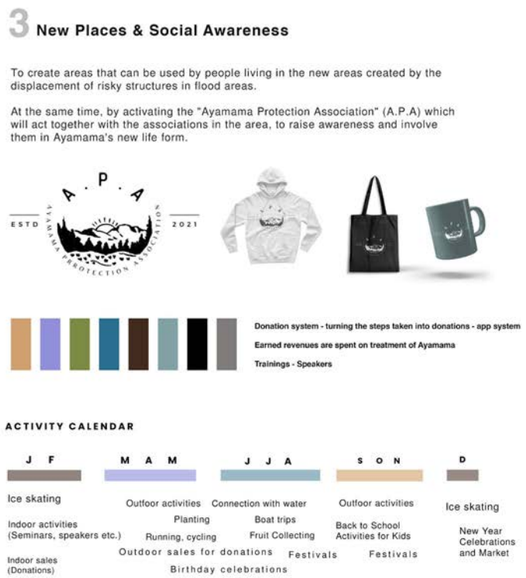
The goal of this project is to restore the stream to a condition where it no longer poses a danger to the surrounding residents, while also creating a vibrant living space that benefits both people and nature.












"A New Life Form in Ayamama" is based on three main principles: the first is "Everything Starts with Soil," the second is "Safety is Important," and the third is "New Places & New Routines."

1. Everything Starts with Soil

The first step was to prioritize the soil, allowing Ayamama Stream to flow over a permeable surface instead of the previous concrete channel. The streambed was also widened in certain areas to improve the flow rate. The vegetation on the islets formed along the stream became a crucial element in both purifying the water and sustaining the surrounding ecosystem.

2.Safety is Important

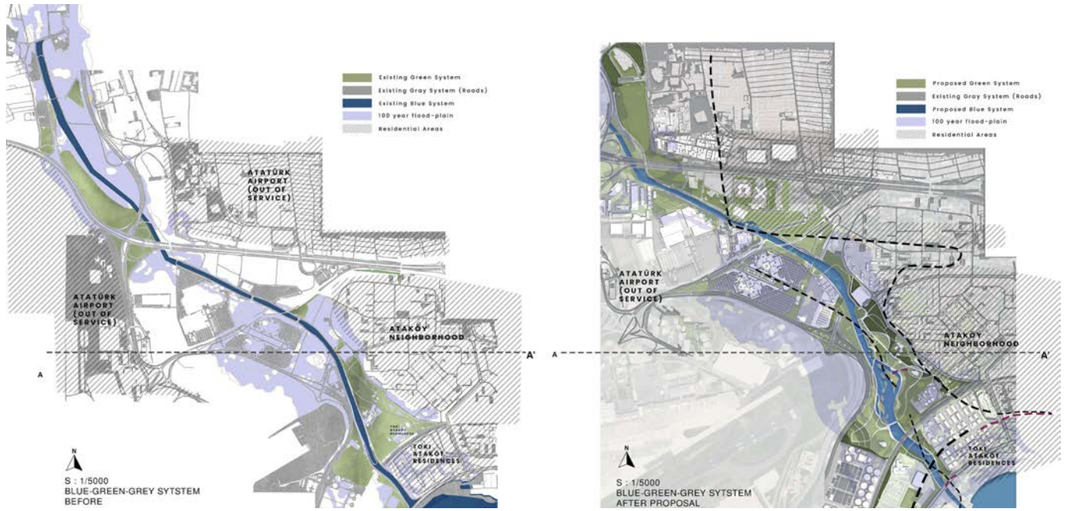
By reviewing the 100-year-old flood map of the creek, which had previously flooded during heavy rainfall, we identified areas at risk. These areas were cleared and redesigned to ensure they would pose no harm in the event of future floods. These areas are primarily sloped, vegetated regions, but they can continue to be used even during floods.

3.New Places & New Routines

Due to the pollution, poor usage, and unpleasant odor of the Ayamama Stream, there were no accessible spaces for the surrounding community. Once the creek was cleaned and restored to its natural bed, new walking paths, jogging tracks, sports fields, bridges, and functional open spaces were created, providing areas for daily use.

Additionally, new spaces were developed by relocating at-risk structures from flood zones. These areas will serve the local community, providing recreational and functional spaces. To further engage the community, the "Ayamama Protection Association" (A.P.A.) was established. This association, in collaboration with local groups, aims to raise awareness and involve residents in the stream's revitalization.

The A.P.A. includes a donation system where actions, like walking, are converted into donations via a mobile app. Revenue generated from A.P.A.-branded products and activities is used for the maintenance and improvement of the waste treatment plant and Ayamama Stream. Seasonal activities are also held, including ice skating in winter, boat trips in summer, fruit picking, festivals, and walks.




There are six main areas in the new living space created along Ayamama Creek:
1. Raingarden, Sandy Area, and Open Space
2. A.P.A. Building and Bridge to the Opposite Island
3. Sports Field for the Ataköy Neighborhood, Walking and Jogging Paths
4. Advanced Biological Wastewater Treatment Center
5. Buffer Zone and Garden Along the Roadside with a Steep Slope, Featuring a Walking Path with Access to the Opposite Island
6. A.P.A.'s Second Building and Functional Space
7. Multi-purpose Wooden Deck and Floating Platform on the Opposite Shore

Permeable materials were used throughout the park's construction. Permeable concrete and andesite stone were used for the pedestrian paths. For lighting, both tall fixtures and smaller ground-level lights were installed for security purposes. Seating areas were provided for relaxation, and open spaces were created to allow people to feel free and comfortable.

In terms of planting, Acer negundo, Acacia dealbata, and Tamarix parviflora were used along pedestrian pathways. To create a grove-like atmosphere in the urban forest, Cedrus atlantica and Populus alba were selected. Shrubs such as Pittosporum tobira "nana" and Cornus mas were also used, along with colorful and striking plants like Digitalis purpurea, Echinacea atropurpurea, Lavandula angustifolia, and Euryops pectinatus, which not only add visual appeal but also emit pleasant scents along the paths.

Aquatic plants, including Juncus effusus, Pontederia cordata, Typha latifolia, Eichhornia crassipes, and Nymphaea colorata, were incorporated to create a water source for purification, aesthetic enhancement, and to support the surrounding ecosystem.

As a result, Ayamama Stream and its surrounding areas have been transformed into a vibrant space where people can once again visit for recreational and tourist activities. This restoration has been achieved by cleaning the stream, ensuring the sustainability of the surrounding environment, and integrating thoughtful planting to support the ecosystem.

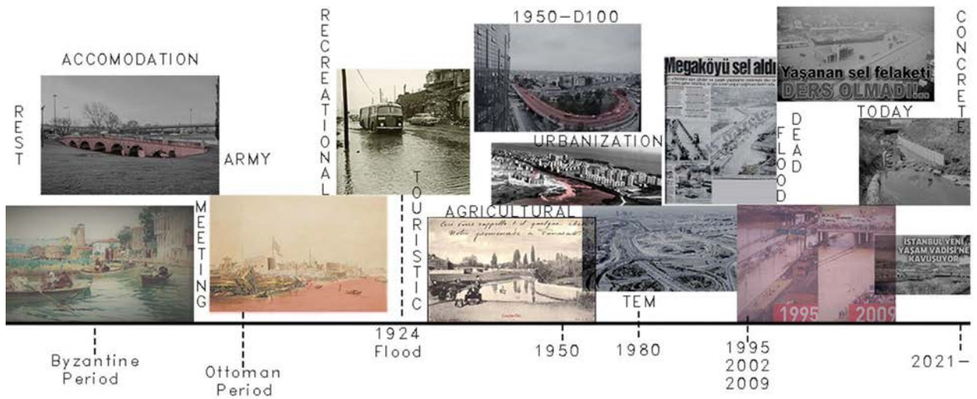
WATER PLANTS, A.P.A ACTIVITY AREA AND PEDESTRIAN CONNECTIONS (AREA 2 IN 1:1000 PLAN)

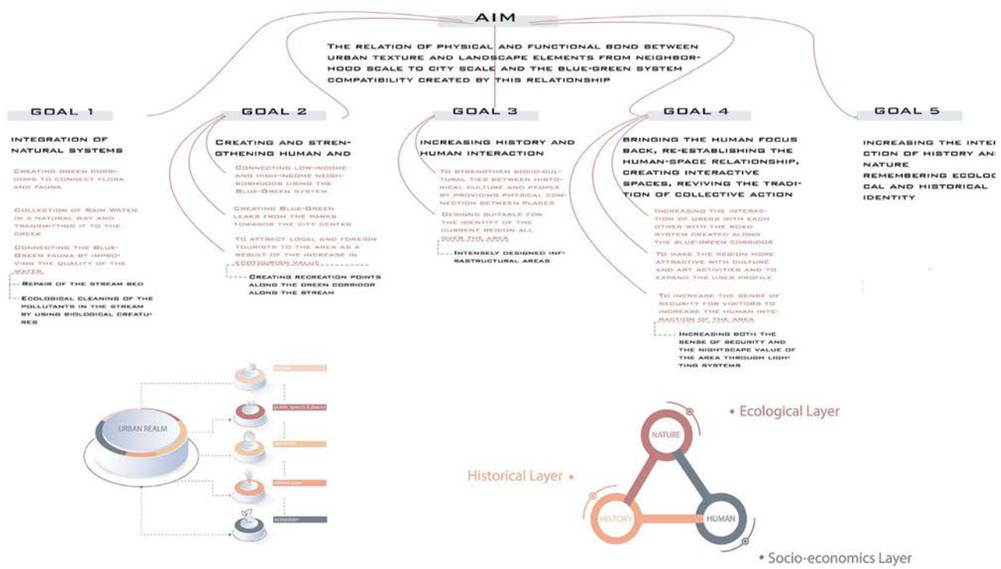
WOODEN DECK AND FLOATING PLATFORM (AREA 7)

# Re-viewing Ayamama

Beyzanur Seferi

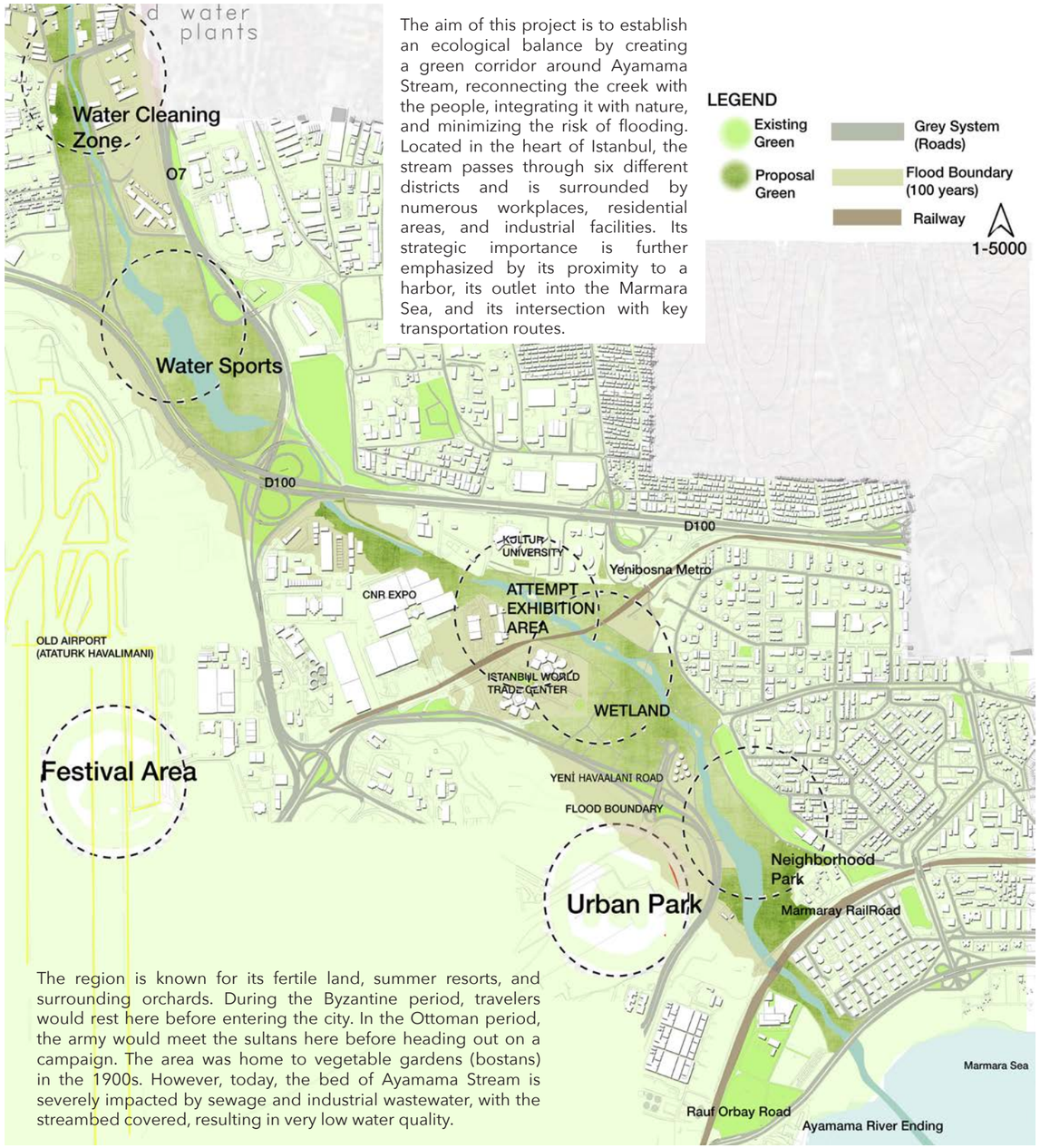
*"Re-viewing Ayamama" was produced within the scope of Landscape Design IV carried out by Prof. Dr. Gülşen Aytaç and Res. Assist. Gizem Aluçlu under the title "Water & The City: Ayamama Corridor" in the fall semester of 2021-2022.*



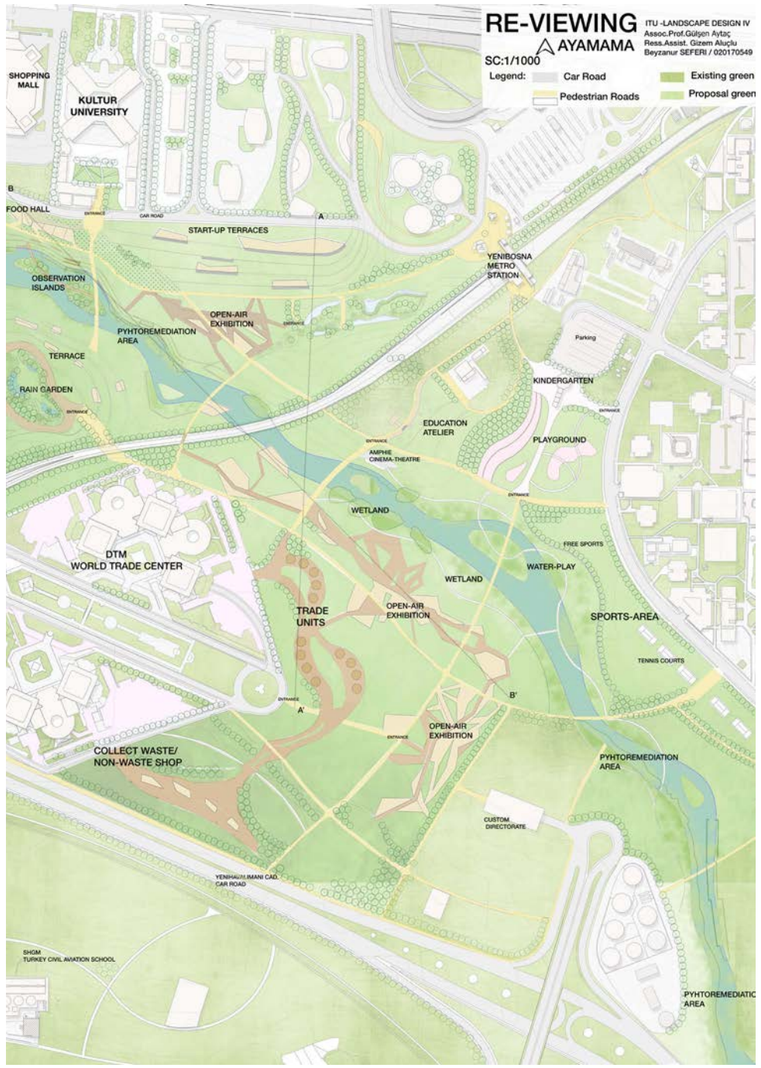





The aim of this project is to establish an ecological balance by creating a green corridor around Ayamama Stream, reconnecting the creek with the people, integrating it with nature, and minimizing the risk of flooding. Located in the heart of Istanbul, the stream passes through six different districts and is surrounded by numerous workplaces, residential areas, and industrial facilities. Its strategic importance is further emphasized by its proximity to a harbor, its outlet into the Marmara Sea, and its intersection with key transportation routes.

The region is known for its fertile land, summer resorts, and surrounding orchards. During the Byzantine period, travelers would rest here before entering the city. In the Ottoman period, the army would meet the sultans here before heading out on a campaign. The area was home to vegetable gardens (bostans) in the 1900s. However, today, the bed of Ayamama Stream is severely impacted by sewage and industrial wastewater, with the streambed covered, resulting in very low water quality.



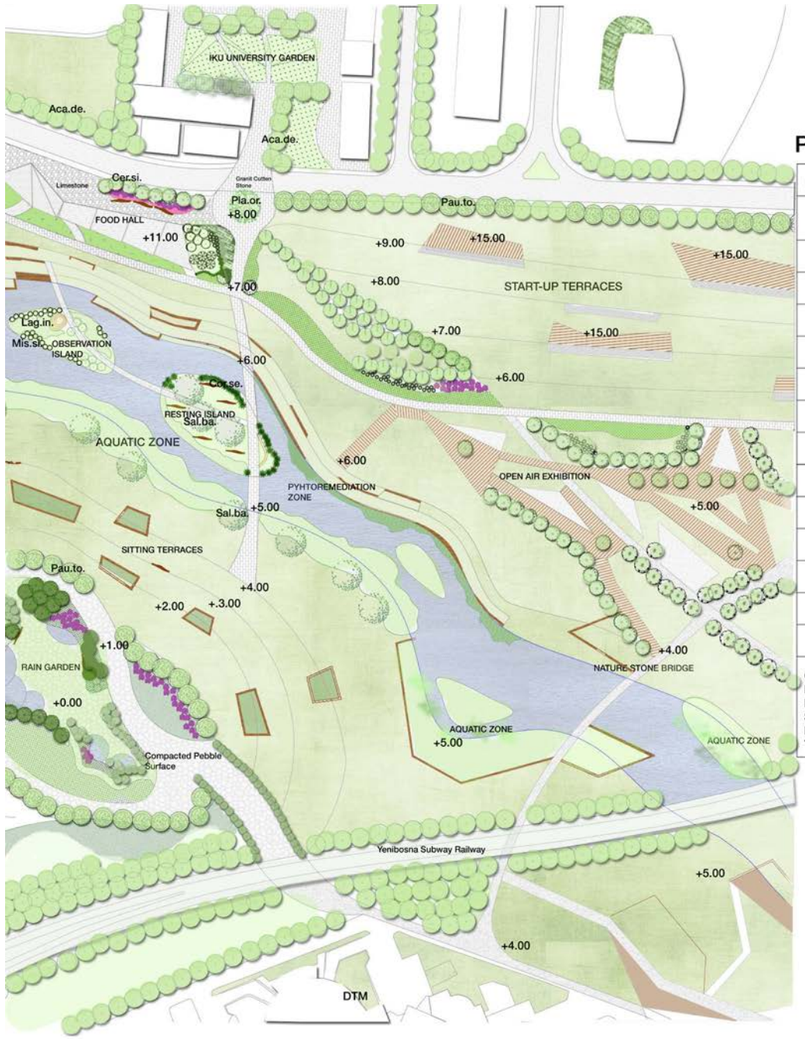

The physical conditions of the creek, coupled with the fact that approximately 50 domestic and industrial facilities in its basin directly discharge waste into the Marmara Sea, led to the primary goal of improving the creek. This involved exploring and developing better wastewater discharge methods and revitalizing both the basin and the creek. The objective was to make the urban fabric and the river corridor work together as a cohesive system, creating a public space.

In this direction, the project aimed to restore the ecological qualities of the creek corridor, transforming it into a blue infrastructure that integrates with the urban system, supported by a green corridor. The concrete bed of the stream was removed and replaced with a natural earth surface. The creek bed was widened, and islets were added to act as sponges. Wetland and bioswale areas were created at lower elevations to clean the water and reduce the risk of flooding.

At the larger scale, the focus was on integrating green systems and programs into the existing urban fabric. The 5000 plan references the history of Ayamama, incorporating functions such as urban agriculture, water sports, a festival area, and the transformation of the old airport into a forested urban park.

On a smaller scale, at the intersection of DTM, Kültür University, and CNR Expo, various connection functions were envisioned. These include Start-Up and Food Hall areas, which could be used seasonally by university students, an open-air exhibition space throughout the plan, and trade units for promoting and marketing products from Start-Up businesses. Additionally, a Non-West Unit area was established to collect, process, and sell waste generated in these zones.

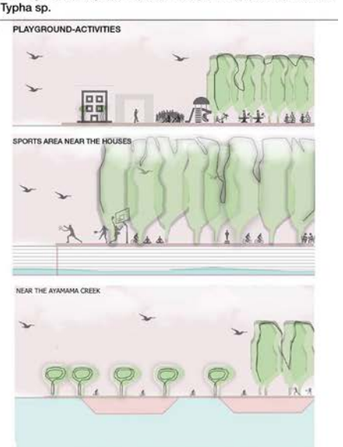
To minimize flood risk, the water flow directions were carefully mapped, and rain gardens were proposed for areas at lower elevations. Sports facilities, workshops, and children's playgrounds were located near residential areas and the stream to encourage interaction with the creek. The landscape was enriched with a variety of deciduous and evergreen trees, adding seasonal variation, while water-purifying plants helped improve the quality of the stream water.

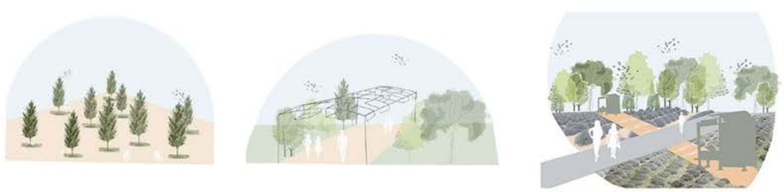



## PLANT LEGEND

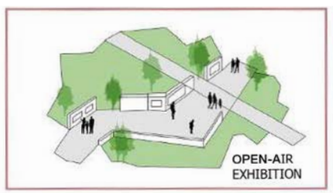
| NO | symbol | code | Latin name | Height | Width | Unit |
|---|---|---|---|---|---|---|
| 1 | | Cer.si. | Cersis siliquastrum | 5m | 6-7m | 20 |
| 2 | | Lag.in. | Lagostromia indica | 4m | 3m | 50 |
| 3 | | Pau.to. | Paulownia tomentosa | 10m | 7m | 14 |
| 4 | | Ela.ag. | Elaegnus Angustifolia | 3m | 3m | 44 |
| 5 | | Pru.se. | Prunus serasifera | 6-7m | 4m | 14 |
| 6 | | Hib.ro. | Hibiscus rosa sinensis | 0.5m | 0.4m | 40 |
| 7 | | For.in. | Forsythia intermedia | 0.9m | 0.9m | 52 |
| 8 | | Hyd.ma. | Hydrangea macrophylla | 1.2m | 0.9m | 30 |
| 9 | | Aca.de. | Acacia dealbata | 8m | 6m | 90 |
| 10 | | Sal.ba. | Salix babylonica | 10m | 10m | 9 |
| 11 | | Syr.vu. | Syringa vulgaris | 1.5m | 2.1m | 44 |
| 12 | | Alb.ju. | Albizzia Julibrissin | 6m | 8m | 35 |
| 13 | | Mis.si. | Miscanthus sinensis | 2.5m | 2.5m | 30 |
| 14 | | Mag.gr. | Magnolia grandiflora | 7m | 10m | 32 |

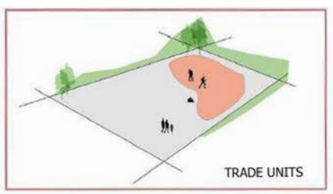
**Groundcovers:**
**Bioswale :**
Lemna minor, Eichornia crassipes, Pistia stratiotes
Salvinia natens, Typha sp., Phragmites sp.
Healing Water : Alyssum sp. , Carex sp., Iris sp., Juncus acutus
Typha sp.

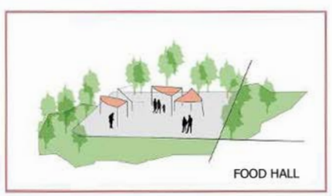


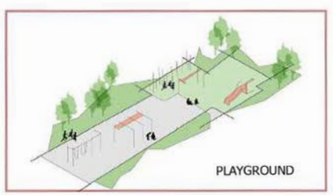
YENIBOSNA METRO
UNDERGROUND

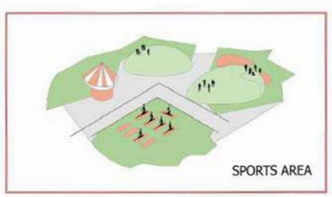

OPEN-AIR
EXHIBITION

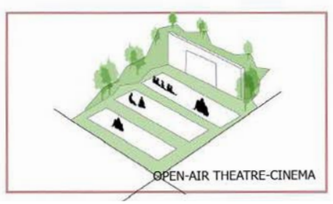

TRADE UNITS

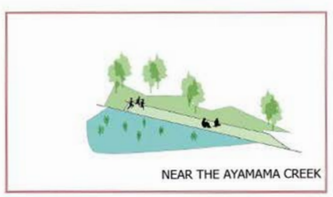

FOOD HALL

WETLANDS

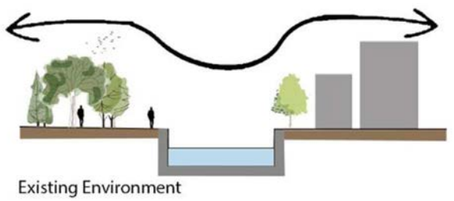

PLAYGROUND


SPORTS AREA


OPEN-AIR THEATRE-CINEMA

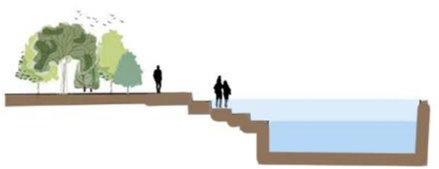

NEAR THE AYAMAMA CREEK




Existing Environment

Natural Observation Deck

Proposal Envionment



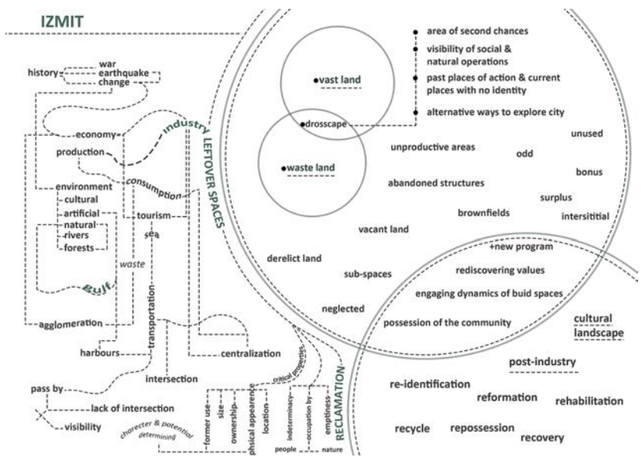
DTM
ATTEMT EXHIBITION AREA
SECTION A-A'

# Re-Incarnation

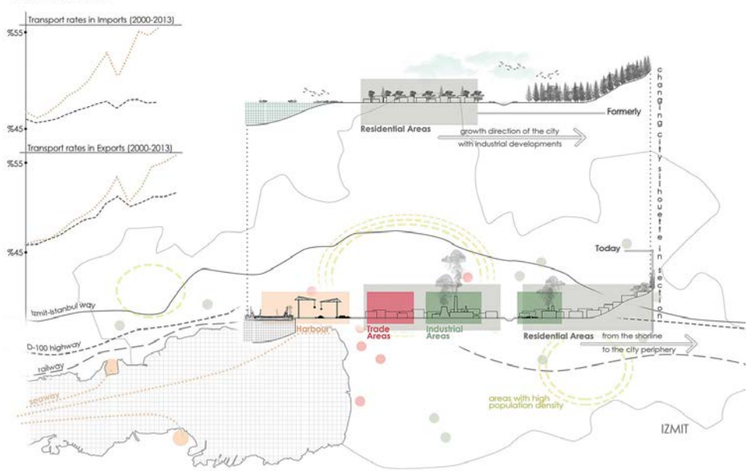
İrem Nur Yener, Merve Dilara Ezer, Melisa Albayrak, Ayşe Nur Azbay

*"Re-Incarnation" was produced within the scope of Landscape Design IV carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Nergis Aşar under the title "Reclaiming Landscape: Post-Industrial Scenarios for Gulf of Izmit" in the fall semester of 2021-2022.*

How will they reincarnate?
With considering the shoreline as a 'second chance' area and considering these areas as 'an alernative way of exploring the city', 'making social and natural situations visible' in the area.

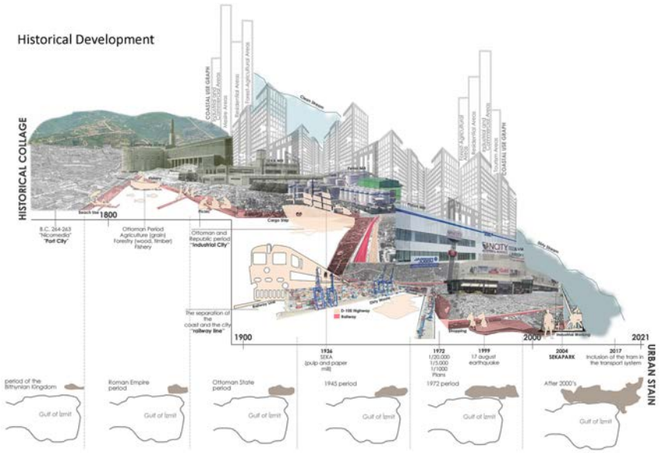


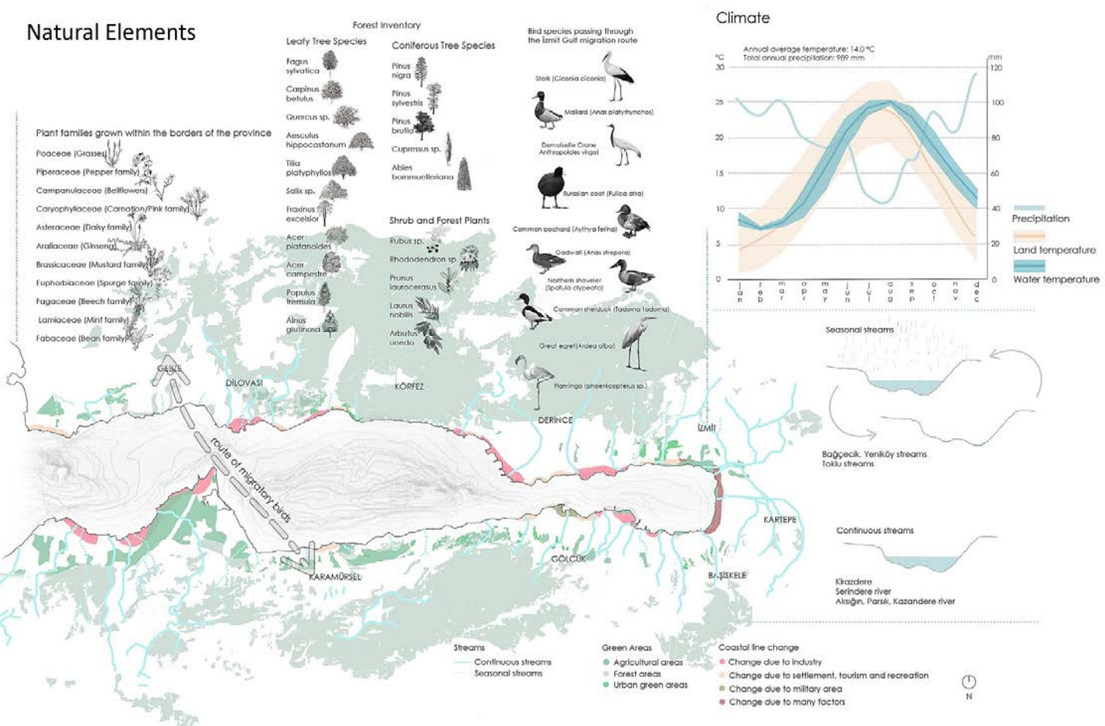

## About İzmit



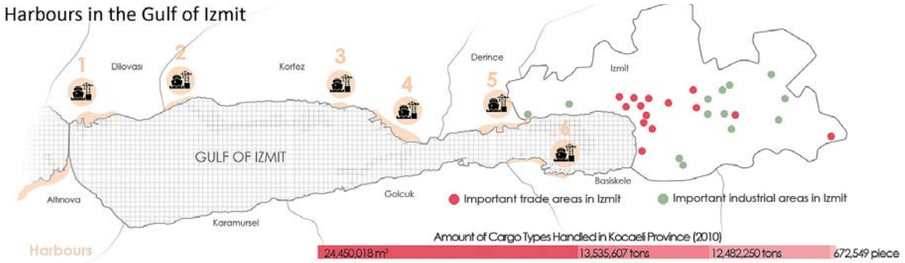

Due to the industrial and commercial activities of settlements once located along the coast, the city was pushed towards the periphery, causing urban growth to shift from the coastline outward. Subsequently, the construction of highways and railways parallel to the coast further disrupted the connection between the city and the waterfront. However, when we examine the usage of transportation routes for import and export, it becomes clear that sea routes are the most utilized, followed by highways. This trend underscores the city's commercial and industrial identity.





## Harbours in the Gulf of Izmit




Amount of Cargo Types Handled in Kocaeli Province (2010)

| 24,450,018 m³ | 13,535,607 tons | 12,482,250 tons | 672,549 piece |
|---|---|---|---|

**Harbours**

1 general cargo, liquid cargo
Ahmet Sarı Kum İskelesi
Poliport
Çolakoğlu
Yılport
Altınel
Solvertaş
Efesakport
Total

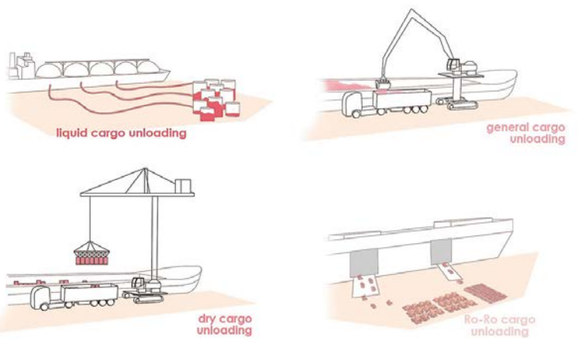
2 dry cargo
Karayolları
Kroman Çelik
Diler
Nuh Çimento

3 general cargo, liquid cargo
Evyap
Gübretaş
Turkuaz
Körfez Belediye İskelesi
Rota

4 liquid cargo
Milengaz
Tüpraş Körfez
Aygaz
İgdaş
Tüpraş İzmit
Mabaş
Opay

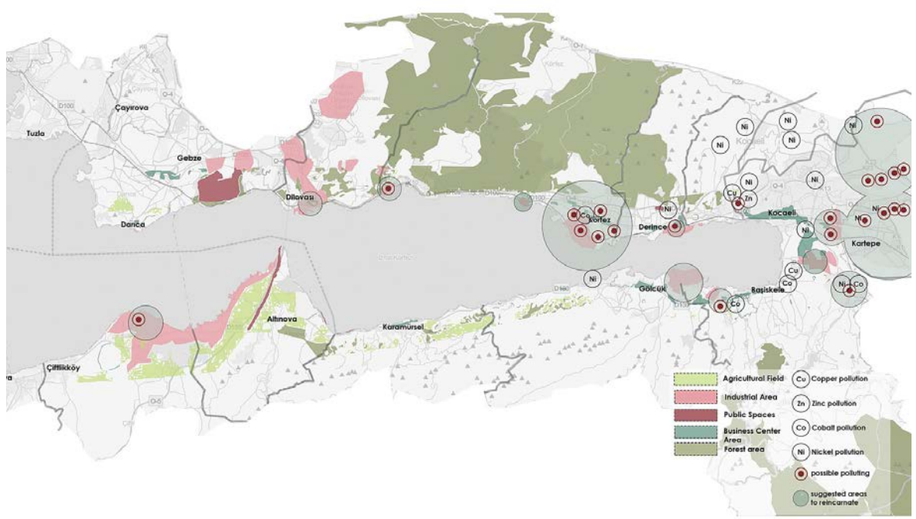
5 liquid cargo
TCDD Derince
Petrol Ofisi
Shell Derince
Tarım Koruma
Aktaş

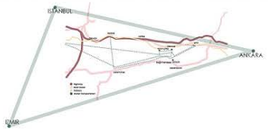
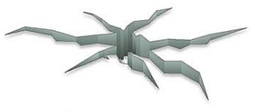
6 Ro-ro
Ford Otosan
Serbest Bölge
Autoport
Un Tersanesi
Limaş






## Areas Whose Possible Function Will Be Changed in The Future Scenario Primarily




| Strengths | Weaknesses | Threats |
|---|---|---|
| It is located in the Marmara Region, which is rich in biodiversity. |  It has the most important transportation network in the country. Being the focal and intersection point of the İstanbul-İzmir-Ankara triangle. | The limited habitable area due to the fact that the already narrow habitable areas of the north of the Körfez have been converted to a large extent. |  Being in the first degree earthquake zone and having active fault lines. |
| Having a strong geographical structure and being a natural harbor. | Having a very strong and developed industry. | Lack of storage space in ports. | There is an environmental pollution caused and will be caused by intensive industry. |
| Being a transit point between the Black Sea and the Mediterranean in sea transportation. | High potential of aquaculture. | The negative effects of the earthquake have not been completely eliminated. | Having a heavy transportation load due to being the focal point. |
| Being in the middle of the important metropolitan cities which is İstanbul and Bursa | High tourism potential | | Wetland are heavily threatened by urban development and industrial pollutants and are on the verge of extinction. |

Goal 1: ECONOMICAL
The future scenario aims to encourage new economic activities that are compatible with technology and open to the public in areas being revitalized. These areas will address the negative impact of past economic activities, which damaged the existing ecology, social life, and the city's coastal identity.

Str 1.1: Revitalize the economic activities that define Izmit's identity, which have been suppressed by industry, in line with future technological advancements.
Str 1.2: Achieve a balance between the city's existence and industrial areas through various measures.
Str 1.3: Redesign idle areas to be used for workshops and studios.
Str 1.4: Make the production and projects in the proposed new economic zones open to the public, fostering cooperation through information-sharing systems.

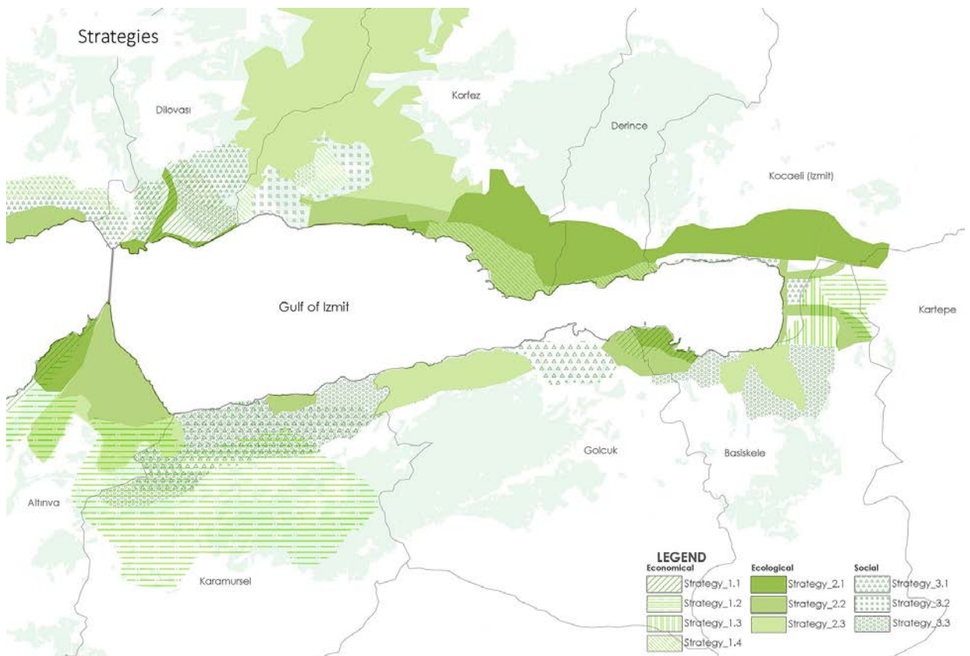
Goal 2: ECOLOGICAL
The goal is to preserve the ecological identity of the city by safeguarding its current ecological values and protecting these areas from the harmful effects of industry.

Str 2.1: Implement waste planning and management strategies to ensure ecological sustainability and prevent waste accumulation.
Str 2.2: Support the diversity of flora and fauna in these areas by conducting breeding programs and managing the site in harmony with the natural cycle.
Str 2.3: Foster ecological sociality by raising public awareness of ecological globalization through new programs.

Goal 3: SOCIAL
The objective is to strengthen social relationships among people and between people and the city.

Str 3.1: Create open, outward-facing spaces that enhance social cohesion and promote interaction between citizens, carrying this social identity into public spaces rather than closed ones.
Str 3.2: Promote abstract productions on social relations through institutions such as NGOs by relocating social facilities to open spaces.
Str 3.3: Strengthen the social connections between urban and rural areas to achieve balance between the two environments.

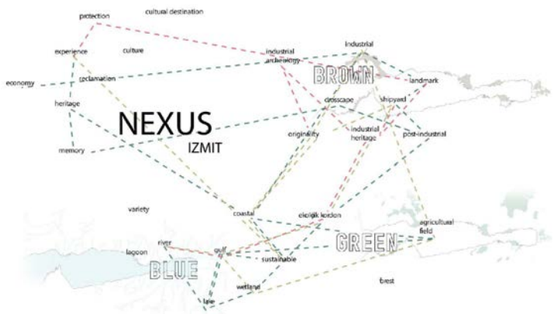




# Nexus

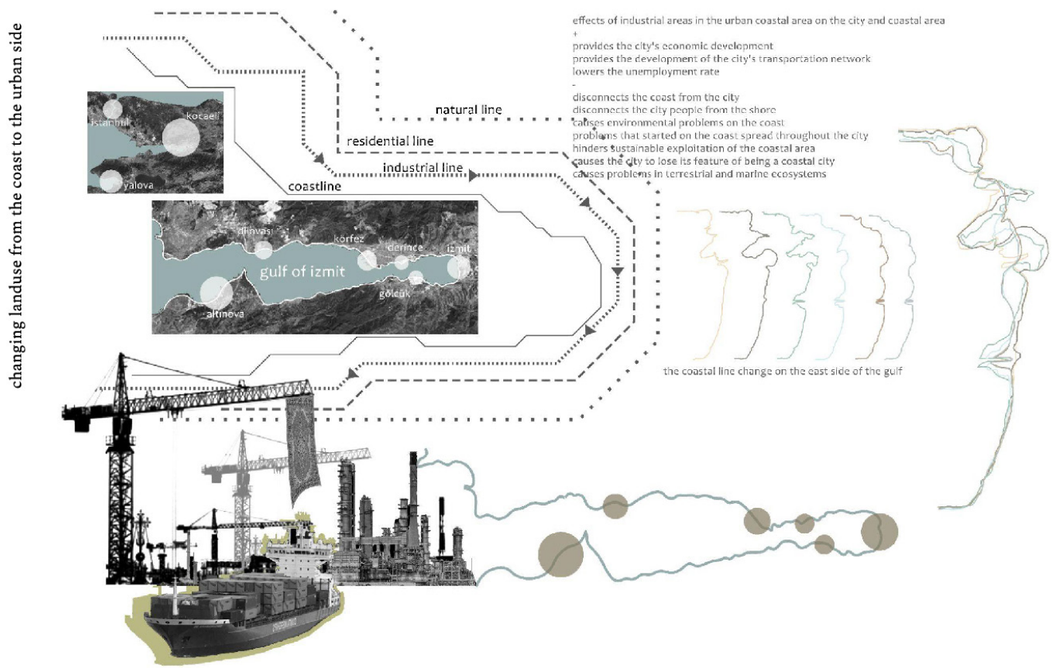
Elif Koç, Baran Yeşilgül, Kübranur Akkabak, Melike Cemre Okuyucu

*"Nexus" was produced within the scope of Landscape Design IV carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Nergis Aşar under the title "Reclaiming Landscape: Post-Industrial Scenarios for Gulf of Izmit" in the fall semester of 2021-2022.*

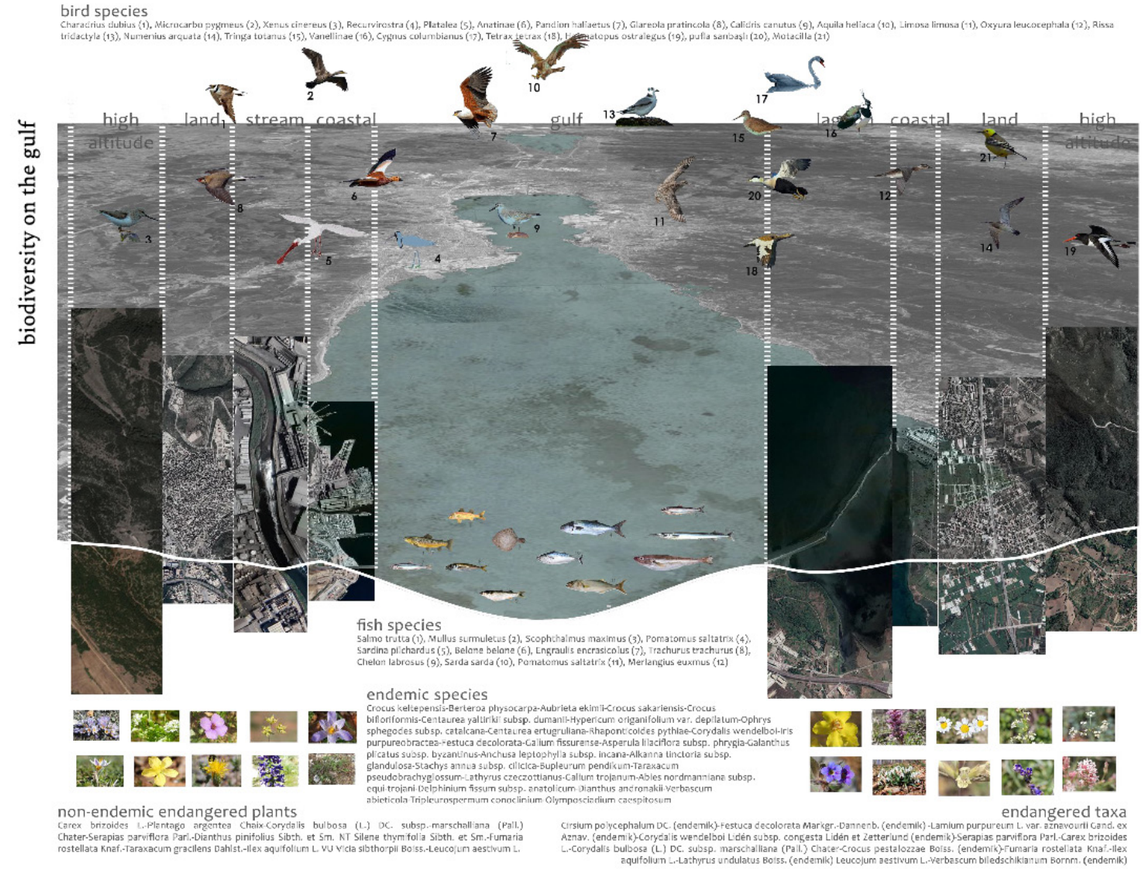


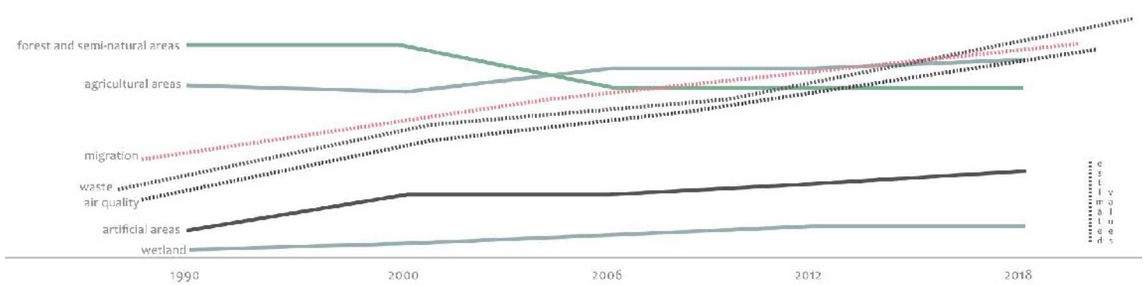

Development:
The transformation of areas currently idle and occupied by industrial zones. Regional development efforts will focus on strengthening the economic and social infrastructure within these transformed areas.

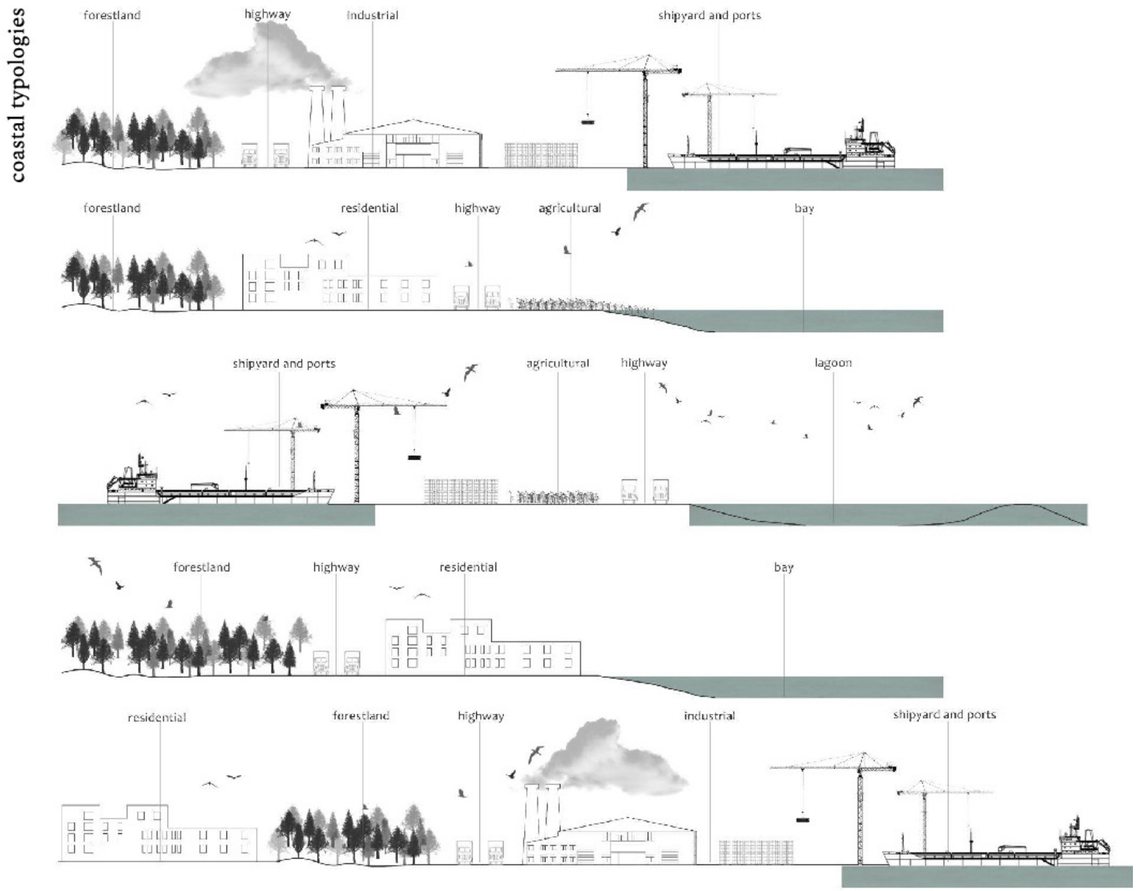
Principles:
New bay model
Global and local integration
Strategic planning
Sustainable design
New collaborations and decision-making mechanisms
Multi-sector city management





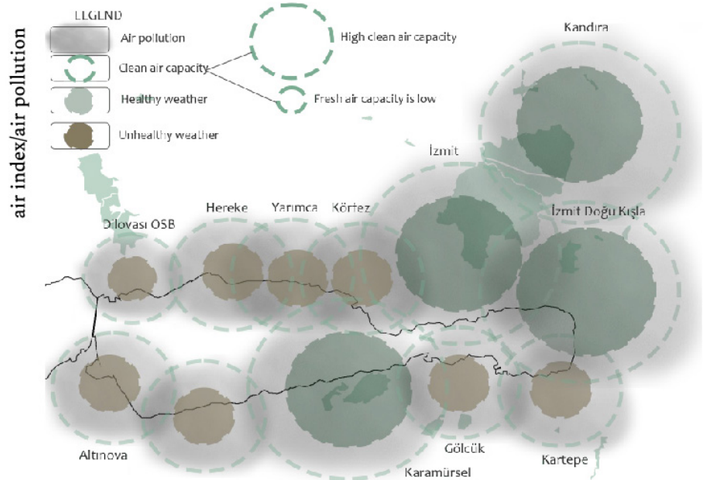








There are various types of coastal usage in the Gulf of İzmit. At different points along the shoreline, industrial areas such as shipyards and ports dominate. Moving from these areas towards the city, agriculture, residential areas, and forests follow in succession. Highways run through these regions at various points. The area is caught between the highway and the shipyards, particularly around the lagoon region, which holds significant ecological value on the coast. The division of the coastline by industrial zones and private properties disrupts the continuity of the coast, creating a barrier that negatively impacts human-water relationships and the gulf's ecosystem.



## bay area management plan

development plan

**transformation:**
transformation of areas that remain idle and occupied by industry and industrial zones

**principles:**
1- new bay model
2- global and local
3- strategic planing
4- sustainable designing
5- new collaborations and decision mechanisms
6- multi-sector city management

**development:**
regional development work to strengthen the economic and social infrastructures in the transformed regions

commerce - supporting the trade network

tourism - supporting local tourism

job oppurtunities - providing and supporting regional and sectoral job opportunities

regional plan

**spaces:**
integrating the disconnected areas

blue - guif, lagoon, streams, sapanca lake

green - city parks, natural park, agricultural areas, passive green areas

brown - ports, shipyards, industrial areas

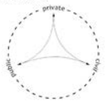
**stakeholders:**
ensuring balance and cooperation among stakeholders

In order to achieve a common vision, cooperation and coordination should be ensured in relations between institutions and stakeholders. For a sustainable city management model, Kocaeli Municipality should first strengthen its own structure and solve the works. Thematic and sectoral plans should be made and joint service projects should be developed in coordination and cooperation with the stakeholders and institutions in the city. It should develop joint service projects with associations, foundations, private sector and public institutions.

public - kocaeli municipality

private - chambers of commerce and industry

civil - NGO's and local people




**strategies:**
adoption of rehabilitation strategies to reintroduce the heritages such as industrial areas that have lost their function under the title of urban memory and bring them back into the urban character

remediation

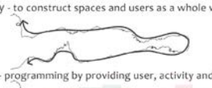
reconciliation

revelation

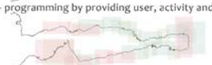
spatial strategic planning

**design:**
continuous, diverse and flexible planning strategies should be developed for the Kocaeli gulf region. New planning tools should be developed and spatial development strategies should be defined

continuity - to construct spaces and users as a whole with each other



diversity - programming by providing user, activity and spatial diversity

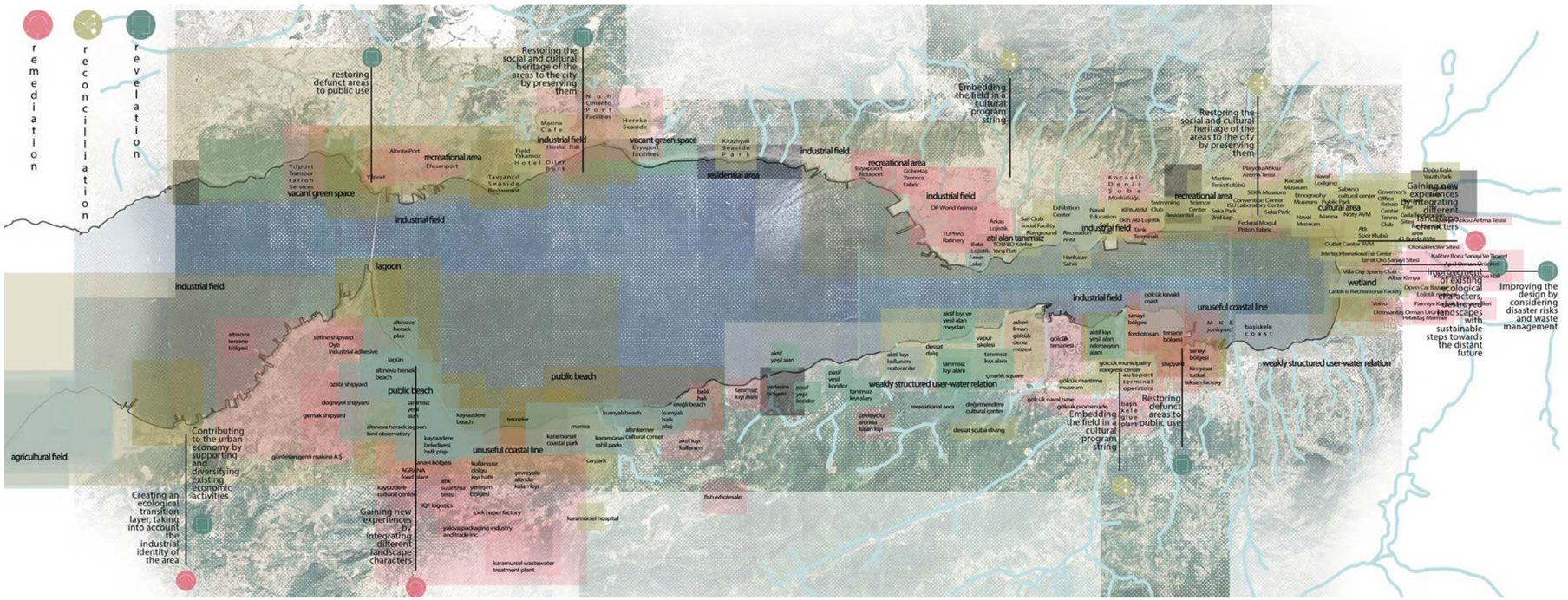


flexibility - be open to change

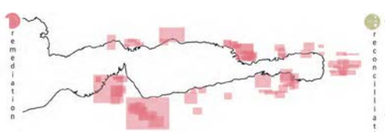
**implementation:**
strategic plans of institutions and zoning plans of municipalities should be integrated, planning and implementation integrity should be ensured

economic - public space improvements, providing available funds with a lower budget using determined methods

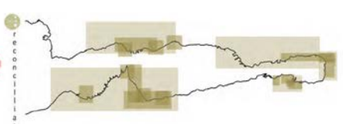
quick - initiating the project without the need to go through bureaucratic procedures, approvals and licensing



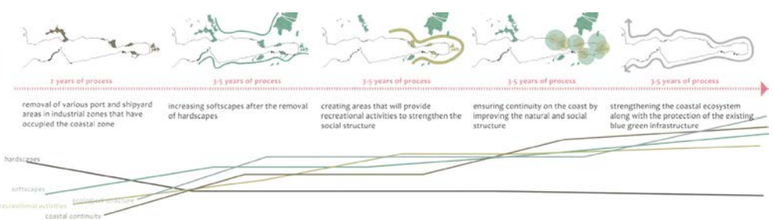
Coastal areas that have enabled the city to be defined as a coastal city's memory; To reveal the value of the city in the memory of the city by reviewing the industrial areas that made it an industrial and port city within the framework of urban memory.
In this context, industrial areas, port and shipyard areas, and passive coastal areas that have lost their function were discussed under this strategy in the



Reviewing and developing existing natural and physical structures in line with sustainable future scenarios.
In this context, in the context of Gulf of Izmit, idle areas, passive coastal areas that have lost their furnction, and destroyed natureal areas were handled under this strategy.



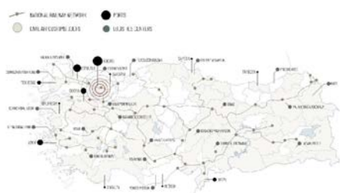
Interventions to enrich the existing interfaces by creating socio-ecological transition layers to the separations between industrial, natural and urban physical structures that are fragmented and isolated in the city, and reconciliation by strengthening internal relations between conflicting regions.
In this context, abandoned industrial areas, wetlands, beach areas and recreational areas, which have weak links with each other in the context of Izmit Bay, were handled under this strategy.



# Public Campus

Begüm Beste Ege, Nuran Kul, Zehra Betül Doğan, Zeynep Aydın

*"Public Campus" was produced within the scope of Landscape Design IV carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Nergis Aşar under the title "Reclaiming Landscape: Post-Industrial Scenarios for Gulf of Izmit" in the fall semester of 2021-2022.*



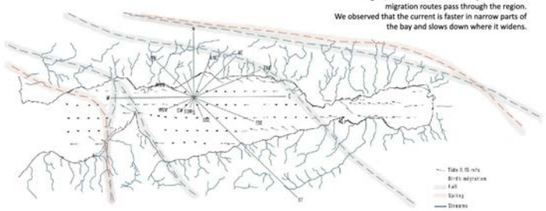
TURKEY'S LOGISTICS NETWORK

MARMARA REGION TRANSPORTATION NETWORK

KOCAELI TRANSPORTATION NETWORK

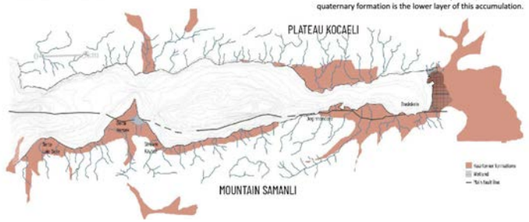
Flow

In the analysis in which we examined the flows in the region, we noticed that seasonally different bird migration routes pass through the region. We observed that the current is faster in narrow parts of the bay and slows down where it widens.

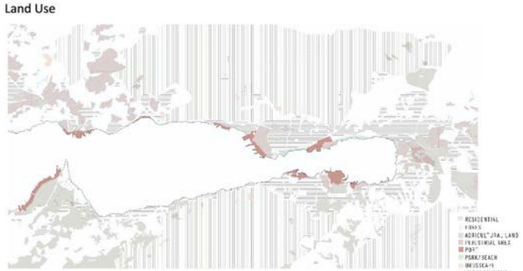


Accumulation

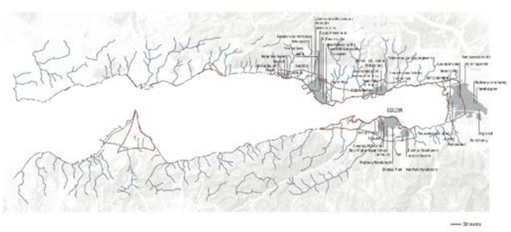
We observed that since the area is an earthquake zone, its relationship with the geographical structure originating from the accumulation in the area is important, and that the quaternary formation is the lower layer of this accumulation.



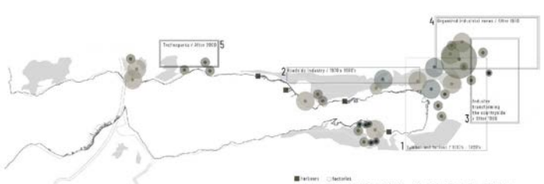

Land Use



Industry Typologies & Nature Relation



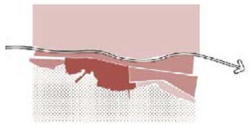
Factory Pollution Rates







## Industry And The Coast



**IP-1**
**FOREST / INDUSTRY / COAST**

**IP-2**
**SETTLEMENTS / INDUSTRY / COAST**

**IP-3**
**COAST / INDUSTRY / WATER**

Industrial facilities spread over gigantic m2 by the coast have made the relationship of the citizens with water disconnected.

**IP-4**
**EASTERN GULF / WETLAND / AGRICULTURE**

Industrial facilities built on alluvial ground and wetland in the east of the bay make the region depressed, render the coast unusable and cause ecological damage.

**IP-5**
**AGRICULTURE / INDUSTRY / HIGHWAY**

Industrial facilities spread over gigantic m2 by the coast have made the relationship of the citizens with water disconnected.

**LEGEND**
- Green Area
- Settlements
- Agriculture
- Fair / Shopping Mall
- Industry
- Water

## Ecological Asset

### 49 Family
**İzmit Floristik Liste**

### 282 Species
**İzmit Bird Species**

**50 Family**

### 45 Species
**İzmit Fish Species**

**10 Family**

### Amfibiler

**In critical hazard classes taxa found**

**Kocaeli is endangered plants (non-endemic)**

### 164 Wetland Bird

### 82+ Migratory Bird

There are no areas with very rare animal species living in the region within the borders of Kocaeli.

**Common fish species**

**Existing in the Gulf of Izmit, no longer fauna elements**

A1 - Swordfish (Xiphias gladius)

It can swim at a speed of 20 km per hour and one of the fastest fish in the ocean is one. Pre-industrialization it was found in the Gulf of Izmit.

**Common some of the species**

C1 - Sakar Make C1 - Turna C1 - Flamingo

İzmit Sulak Alanında herrası herrası her zaman yüzlerinden sayısı bir kuşlarından.

**Risk of extinction fauna elements.**

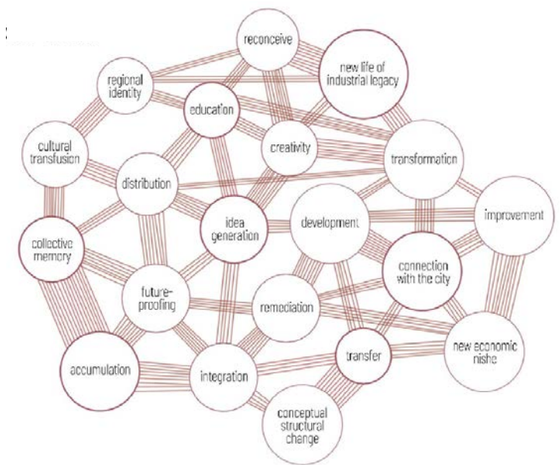
B1 - Stanchion
There is a high risk of extinction in the wild. 30% decrease in population in the last 10 years. It is seen intermittently in Winter in İzmit Wetland.

Its extinction is endangered in nature in the near future. It lives in large reeds in fresh and brackish waters. It can always be seen in İzmit Wetland

B2 - Lapwing
There is a high risk of extinction in the wild. A decrease of 30% in its population in the last 10 years. It is under protection on a European scale. It is seen in the İzmit wetland

B3 - Great Sandpiper
It is under protection on a global scale. Its extinction is quite unrealistic in nature in the near future. Migration in Kelis observed in İzmit Wetland.

As terrestrial species and assemblages of the same species; There are reptiles, birds, mammals.




GÖLCÜK ZONE
Since the Gölcük region has a settlement character close to the coast, it is suggested that the local population be considered the primary users of this area. The construction of public open and closed spaces that establish an active relationship with the coast is recommended. Due to the region's potential to interact with basic educational institutions, it is proposed that the area should accommodate information-sharing activities, such as a membership system, at various venues. It is also suggested to create ponds along the large rivers flowing into the eastern shore of the Gulf, in sections suitable for the geomorphological structure. Because the region is located on permeable areas, which are inland due to changes in sea level, these should be protected and designed as disaster assembly areas.

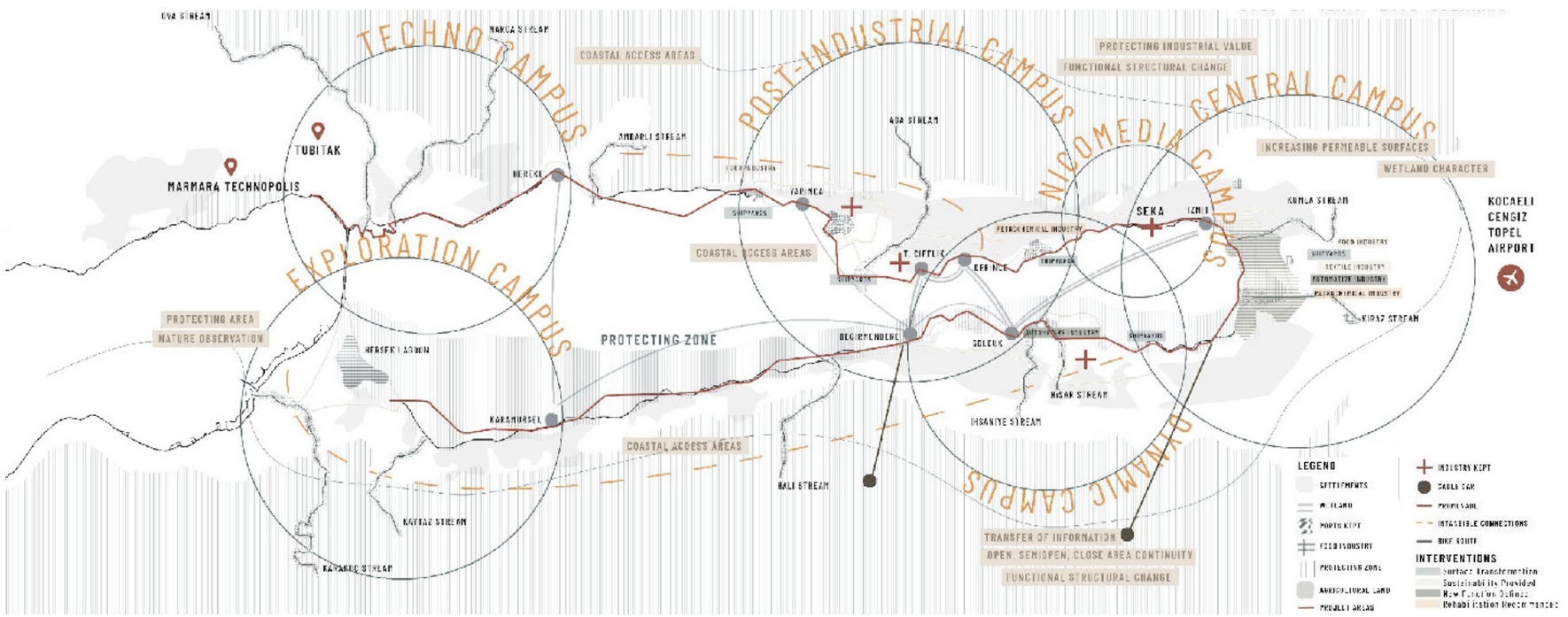
HERSEK ZONE
An important part of the ecological integrity of the Gulf of İzmit is the preservation of the natural character of the Hersek region. Therefore, in the future scenario, maintaining the natural characteristics of Hersek provides opportunities for people to experience nature within a campus setting, and for learning through observation.

EASTERN GULF ZONE
This area displays the most intense geographical accumulation within the bay. The region bears a significant burden, as it was the first settlement in İzmit, the initial area of industrial development, and is currently the city's commercial center, hosting numerous functions. Given the region's terrain, coastal environment, and settlements located on an alluvial plain, it is susceptible to flood risks. The wetlands along the coastal part of the region have been partially drained and filled, resulting in a significant loss of the city's oxygen supply. It is proposed to revitalize the destroyed wetland areas to restore natural spaces, allowing for accumulation and mitigating the region's ground depression. Additionally, a large portion of the auto industry, which occupies significant land in the region, is recommended to be removed. It is envisioned that large-scale structures, such as shopping malls and exhibition centers located on the coast, will be integrated with open public spaces.

SEKA ZONE
The SEKA Zone houses the remains of the SEKA paper factory, one of the first factories in İzmit. To preserve the industrial and architectural value of the ruins, it is suggested that they remain in the area. Open spaces that can interact with users will be designed, and new activity areas will be created by utilizing the large surface area available in the region.

KÖRFEZ ZONE
The Körfez Zone is one of the oldest settlements in İzmit and is named after the famous Hereke carpet, which is a significant cultural asset of the region. This area, constrained by mountains and the sea, is not ideal for large-scale settlement. Since it is anticipated that less physical space will be needed in the education sector in the future, it is proposed to eliminate congestion by removing some structures within the educational institutions.

DERİNCE ZONE
Derince, which takes its name from the deepest part of the coast, is a highly functional area where railway, sea, and land transportation networks intersect. It contains industrial, military, and port areas. Over time, the coast has been filled, and the industrial zones occupy the coastline the most continuously. In the past, the industrial area extended inland, but as the plan evolved, it was transformed into a residential area. According to the future scenario, it is proposed to create coastal access areas by reducing the industrial zone that heavily occupies the coastline.

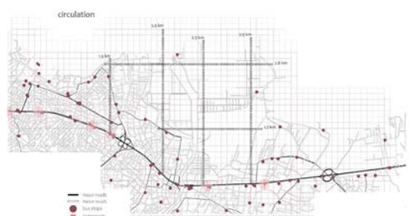


# Nexus Gölcük

Kübranur Akkabak

*"Nexus Gölcük" was produced within the scope of Landscape Design IV carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Nergis Aşar under the title ""Reclaiming Landscape: Post-Industrial Scenarios for Gulf of Izmit" in the fall semester of 2021-2022.*

The design proposal features a coastal dune structure, which is a key component of delta habitats. This area includes a variety of plant life such as aquatic vegetation, newly emergent plants, reeds, wet grasses, dry grasses, and meadows along the coast surrounding Hisar Stream. Agricultural areas are integrated within this ecosystem, connecting the coast with surrounding land. The design approach followed a process-based model, ensuring a holistic and dynamic setup. Additionally, the flood risk in Gölcük has been carefully considered, with plans showing how land usage will adapt to varying water levels.




The Ford auto industry factories, located in the coastal region of Gölcük, represent one of the largest commercial production hubs in the area. However, the region is situated along the northern Anatolian fault line, which poses an earthquake risk. Additionally, the coastline has been filled in over time and is now at risk of submersion due to rising sea levels caused by climate change. The key natural element contributing to the blue-green system of the pond, frequently visited by birds, is the stream. Unfortunately, the industrial facilities situated near the stream contribute to its pollution, further exacerbating the environmental challenges.

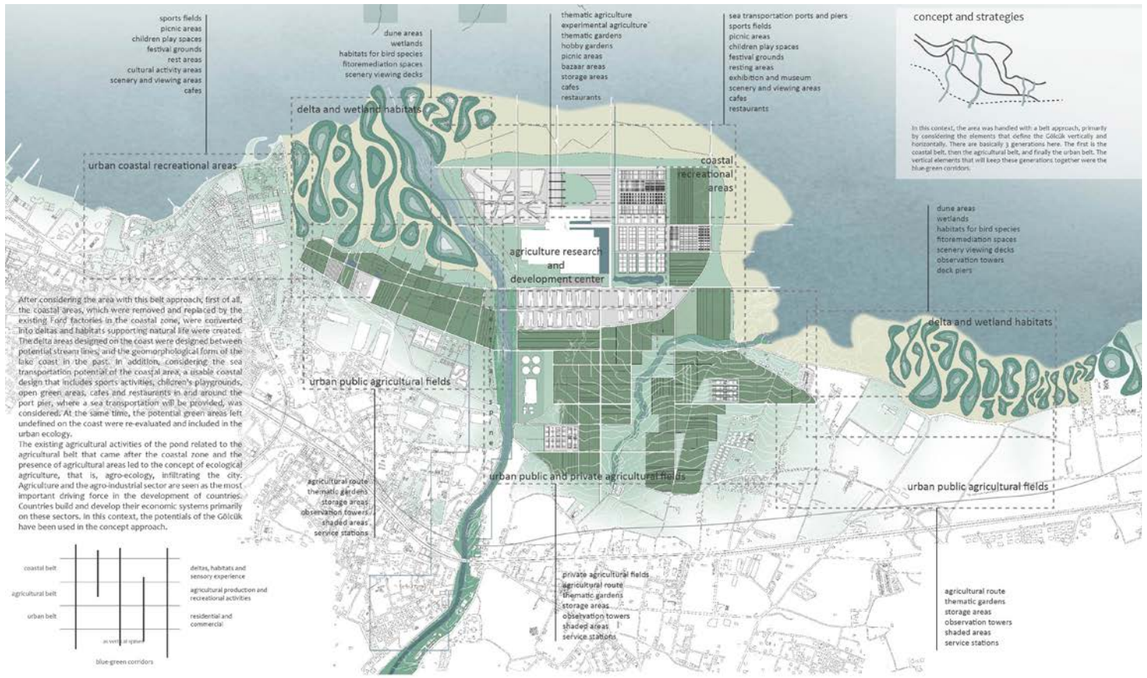
Upon reviewing the open green spaces around the pond, city parks along the beach are prominent, yet there are also undefined areas with potential for development. Behind the Ford factory lies a large expanse of farmland, showcasing two distinct modes of production: industrial and agricultural.

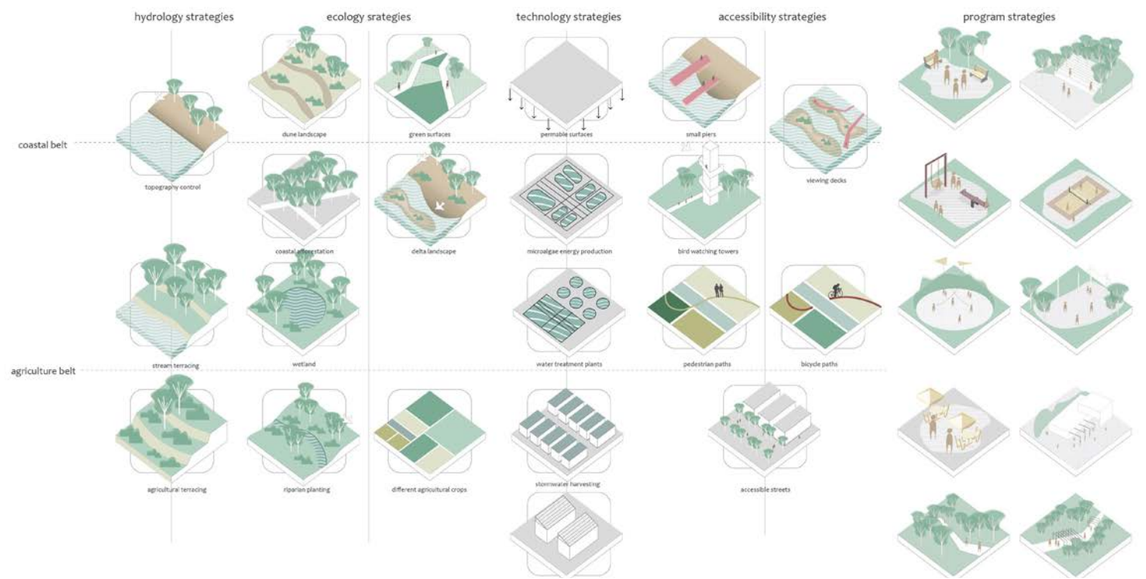
To address these issues, the proposal includes several key decisions: improving green spaces along the existing streamlines, uncovering the ecological value of the underutilized coastal areas, and transforming the existing industrial zones with a compromise strategy.

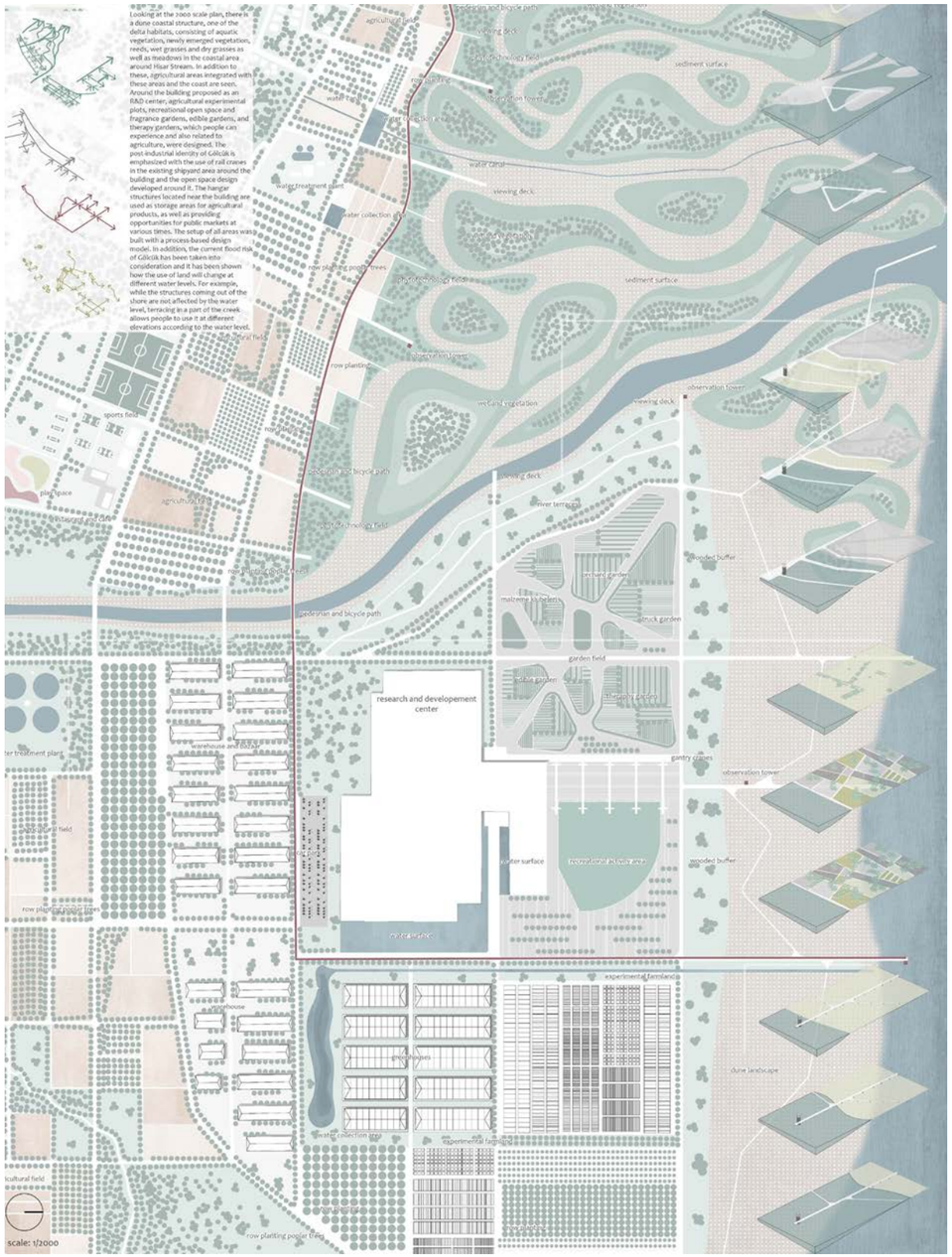
The design approach adopted is a "belt" strategy, which integrates both vertical and horizontal elements that define the Gölcük region. This strategy identifies three primary zones: the coastal belt, the agricultural belt, and the urban belt. The blue-green corridors serve as the unifying vertical elements that connect these zones.

The first step in this approach is the transformation of the coastal areas, which were previously filled and occupied by Ford factories, into deltas and habitats that support local wildlife. The delta areas are designed along the lines of potential streams, mimicking the historical geomorphological form of the lake coast. Additionally, given the coastal area's sea transportation potential, a design for a multifunctional coastal space has been proposed. This includes sports facilities, children's playgrounds, open green spaces, cafes, and restaurants, as well as a port pier that will support sea transport activities.

Furthermore, the previously undefined green areas along the coast are being re-evaluated and integrated into the broader urban ecology plan, ensuring that they contribute to the environmental and social vitality of the region.



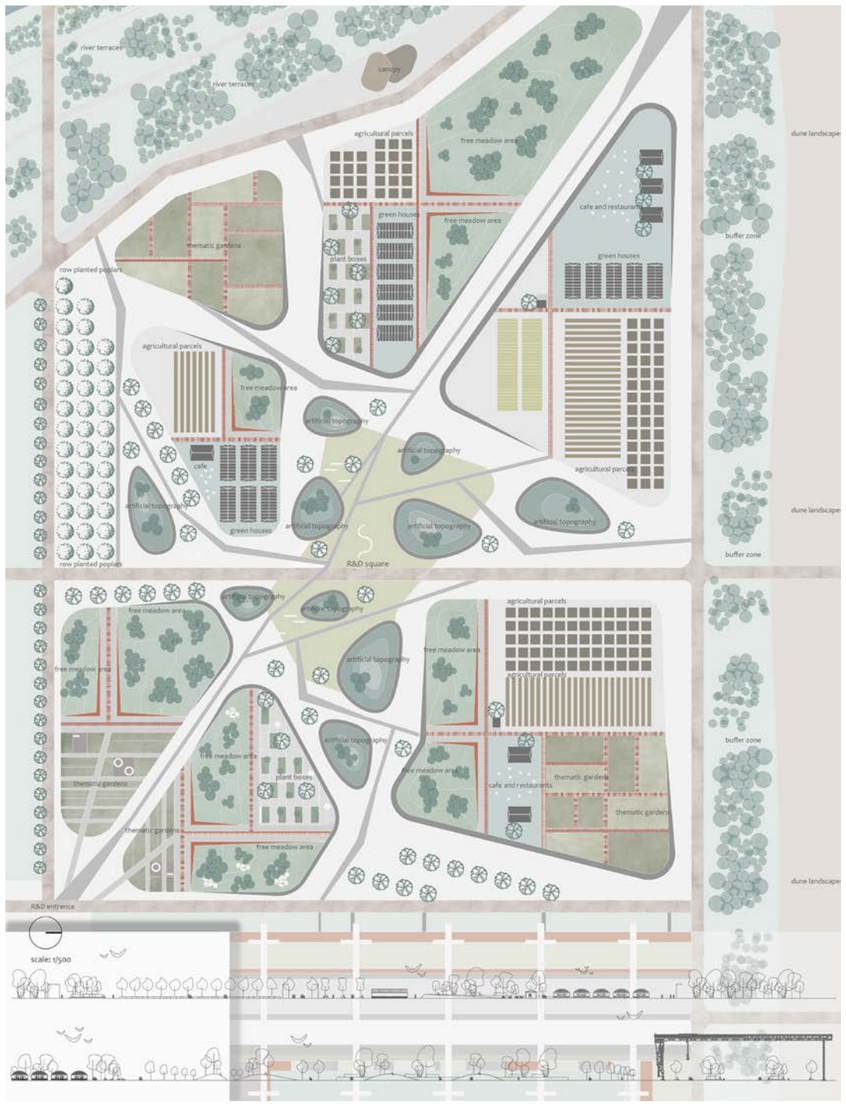


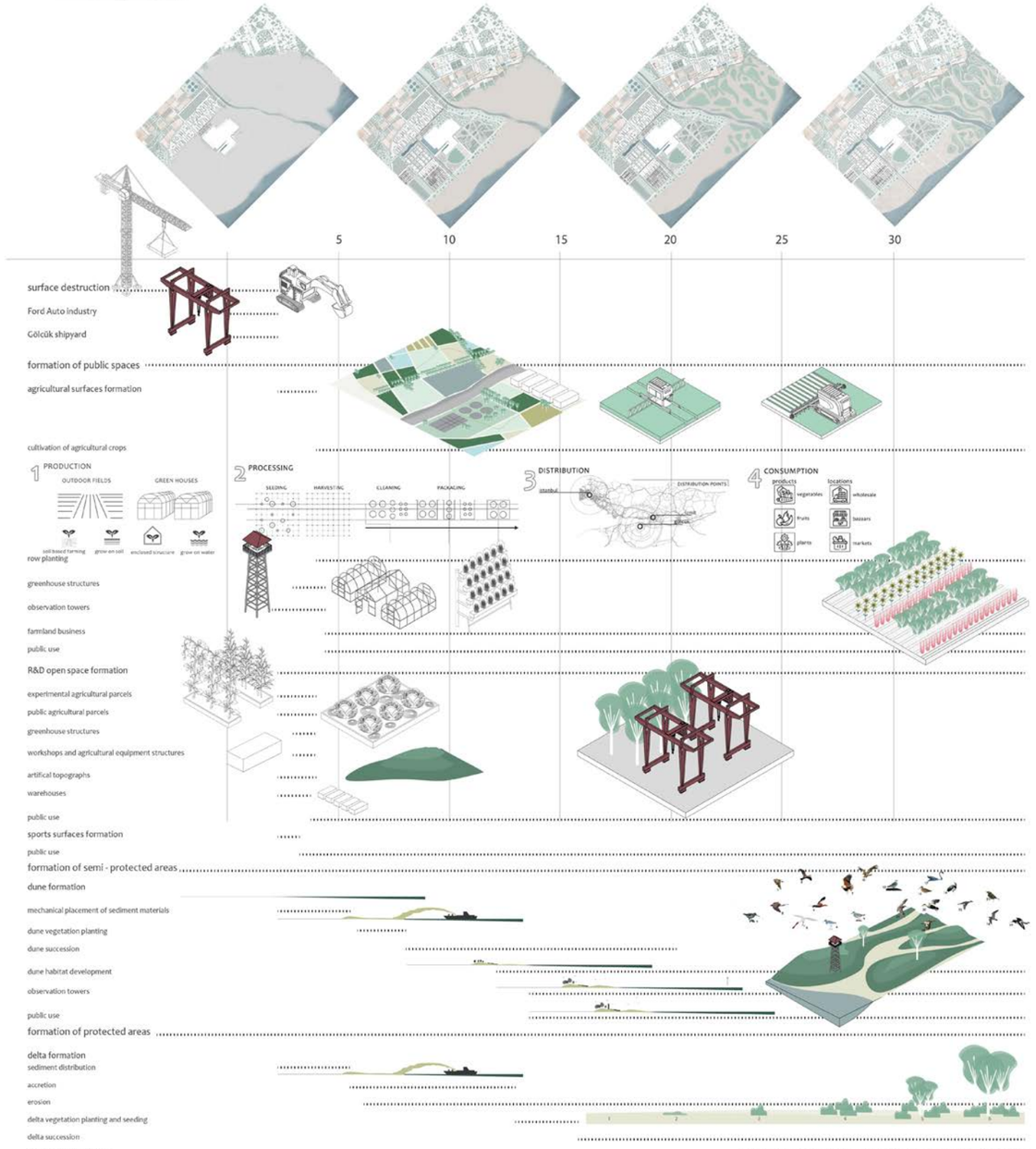





Three basic improvement strategies have been identified to improve, correct, and enhance the area, including upper-scale decisions. The first is phytoremediation, a type of phytotechnology under the remediation strategy, aimed at using plants and related soil microbes to reduce the toxic effects of pollutants and filter agricultural wastes from the water.

The second strategy is succession, part of the reconciliation strategy, which focuses on the change process in the species structure of the ecological community over time to reveal the region's ecological values. The final strategy is agricultural ecology, which aims to reconcile with the industrial identity of the region.




5
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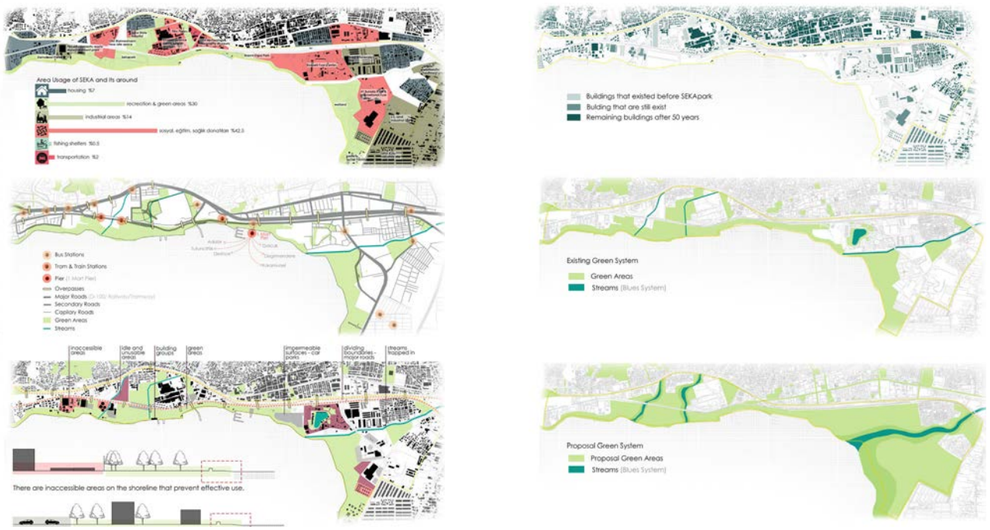
surface destruction
Ford Auto industry
Gölcük shipyard
formation of public spaces
agricultural surfaces formation
cultivation of agricultural crops
1 PRODUCTION
OUTDOOR FIELDS
GREEN HOUSES
soil-based farming
grow on soil
enclosed structure
grow on water
row planting
greenhouse structures
observation towers
farmland business
public use
2 PROCESSING
SEEDING
HARVESTING
CLEANING
PACKAGING
3 DISTRIBUTION
DISTRIBUTION POINTS
4 CONSUMPTION
products
locations
vegetables
fruits
plants
wholesale
bazaars
markets
R&D open space formation
experimental agricultural parcels
public agricultural parcels
greenhouse structures
workshops and agricultural equipment structures
artifical topographs
warehouses
public use
sports surfaces formation
public use
formation of semi - protected areas
dune formation
mechanical placement of sediment materials
dune vegetation planting
dune succession
dune habitat development
observation towers
public use
formation of protected areas
delta formation
sediment distribution
accretion
erosion
delta vegetation planting and seeding
delta succession
delta habitat development

# Cycle of Land

Merve Dilara Ezer

*"Cycle of Land" was produced within the scope of Landscape Design IV carried out by Assoc. Prof. Meltem Erdem Kaya and Res. Assist. Nergis Aşar under the title "Reclaiming Landscape: Post-Industrial Scenarios for Gulf of Izmit" in the fall semester of 2021-2022.*

Drosscape areas, where industries and factories will be removed after 50 years, can be considered as "second chance areas," where social and natural operations can be made visible as a collective effort. Building on these ideas, we coined the term "Reincarnation" and, using this concept, we analyzed the conditions of the area by asking how they were, how they are, and how they will be.



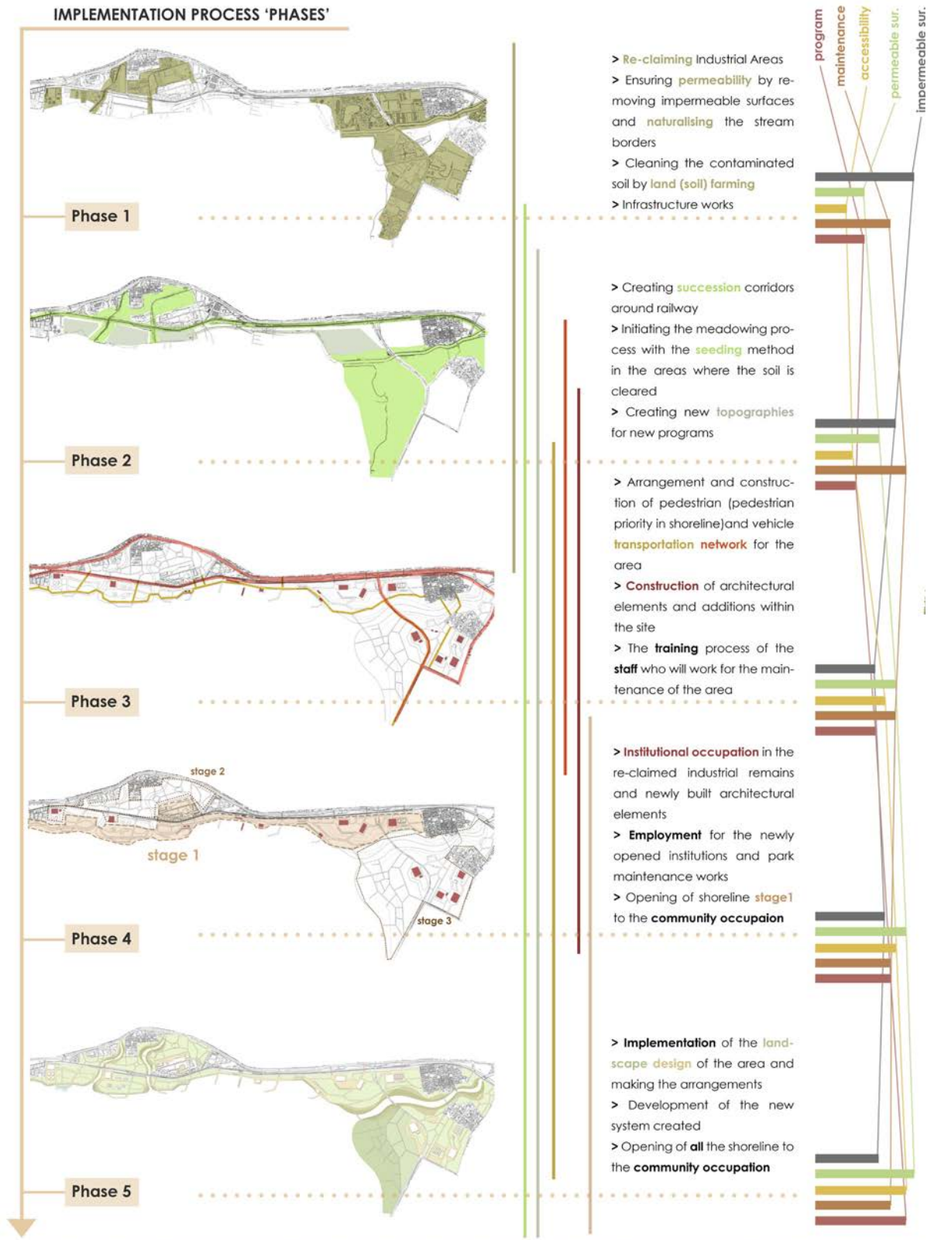

When I started working individually, I wanted to rethink the term "Reincarnation" while analyzing the Izmit SEKA region, which is my focus area. I found that reincarnation is typically defined as the life cycle of an essence. However, I wanted to address the essence as the land we live on–the 'earth'–and view the cycle of life in reincarnation as the 'Cycle of Land.' I realized that a significant production factor (industry) had been eliminated from the area and thought that this production activity could be combined with the landscape. From this, I coined the term 'Productive Landscapes' and built my design around it.

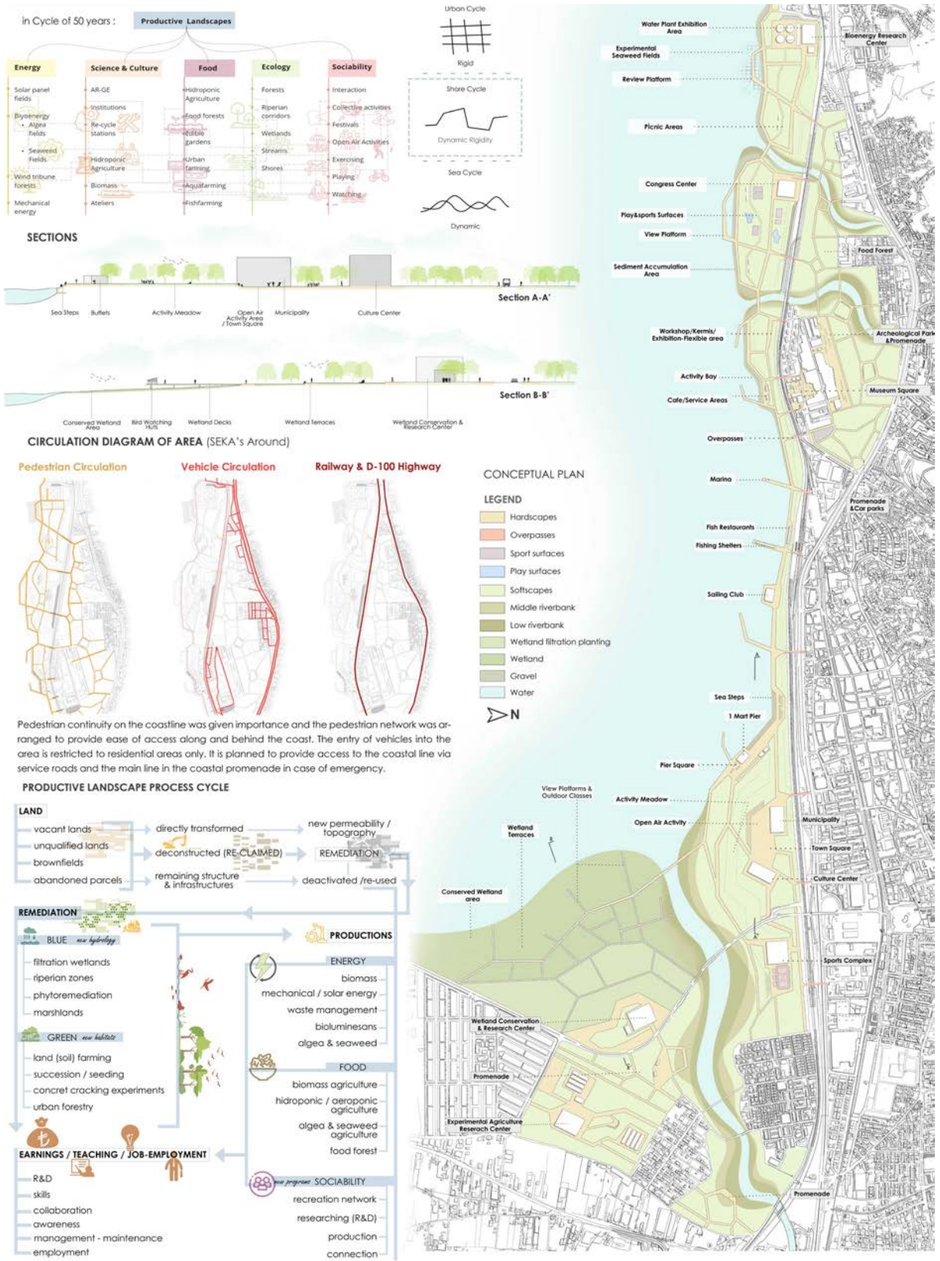
After conducting the analysis, as the concept plan was being developed, I aimed to create new functions in the area by considering the future of the site in 50 years, focusing on energy, science/culture, food, ecological values, and sociability. I emphasized what could be produced in the area in this new situation, starting from the idea of a productive landscape. The proposed functions include: bioenergy research centers, algae & seaweed production centers under the energy category; wetland conservation and research centers, hydroponic and aeroponic alternative agriculture research centers, SEKA, science and archaeology museums, and treatment pool digital art areas under the science/culture heading, along with the functions that develop around them.

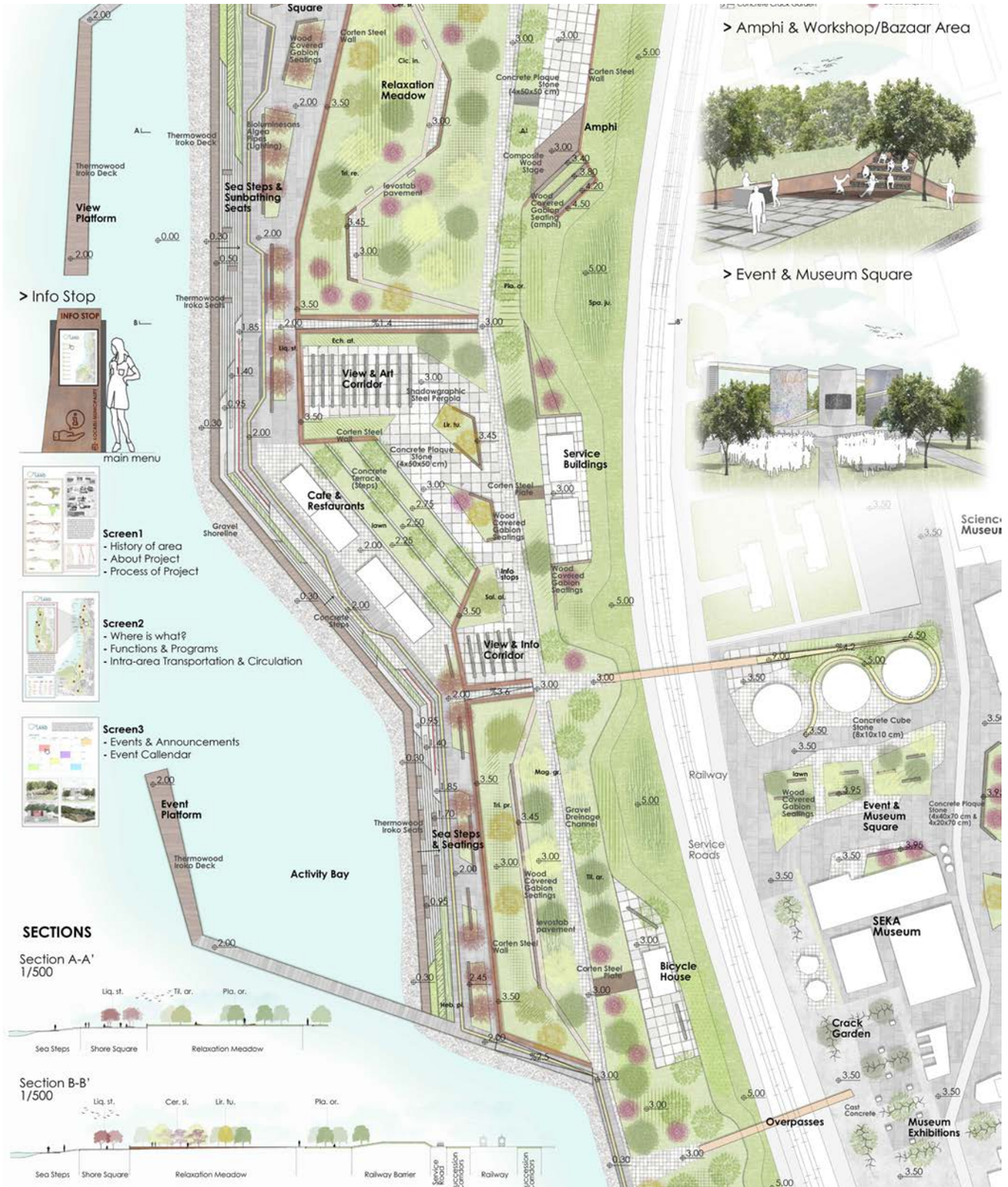
Additionally, there are edible landscape areas, city and coastal squares, urban forests and woodlands, wetland terraces, and rehabilitated and naturalized streamlines under the headings of ecology, food, and sociality. A large-scale productive landscape matrix is created by interconnecting the proposed functions. In this matrix, alongside spaces for sports, games, gathering, conversation, and relaxation, research and production centers are integrated in line with a future scenario that anticipates the continuation and development of the information and technology age.

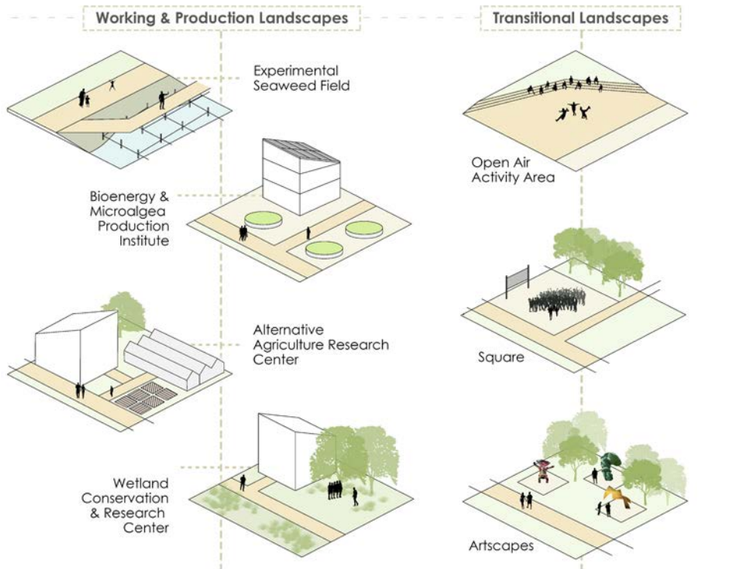
Along the coastline, where the rigid urban texture meets the dynamism of the sea, the design was shaped based on the form I termed "dynamic rigidity," which combines both textures.

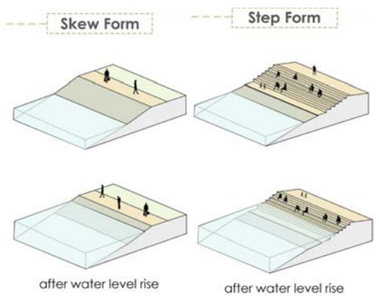


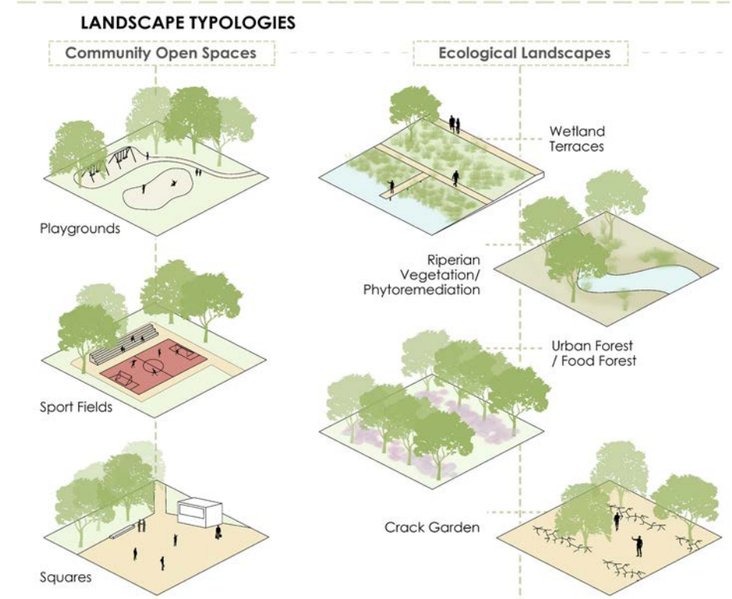


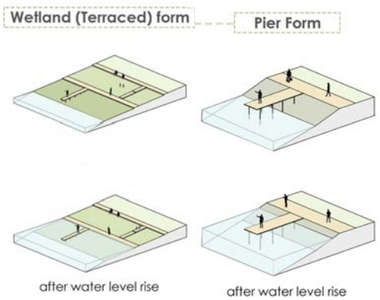

in Cycle of 50 years :
Productive Landscapes
Energy
Science & Culture
Food
Ecology
Sociability
Urban Cycle
Rigid
Shore Cycle
Dynamic Rigidity
Sea Cycle
Dynamic
SECTIONS
Section A-A'
Sea Steps
Buffets
Activity Meadow
Open Air Activity Area / Town Square
Municipality
Culture Center
Section B-B'
Conserved Wetland Area
Bird Watching Huts
Wetland Decks
Wetland Terraces
Wetland Conservation & Research Center
CIRCULATION DIAGRAM OF AREA (SEKA's Around)
Pedestrian Circulation
Vehicle Circulation
Railway & D-100 Highway
Pedestrian continuity on the coastline was given importance and the pedestrian network was arranged to provide ease of access along and behind the coast. The entry of vehicles into the area is restricted to residential areas only. It is planned to provide access to the coastal line via service roads and the main line in the coastal promenade in case of emergency.
PRODUCTIVE LANDSCAPE PROCESS CYCLE
LAND
vacant lands
unqualified lands
brownfields
abandoned parcels
directly transformed
deconstructed (RE-CLAIMED)
remaining structure & infrastructures
new permeability / topography
REMEDIATION
deactivated /re-used
REMEDIATION
BLUE new hydrology
filtration wetlands
riperian zones
phytoremediation
marshlands
GREEN new habitats
land (soil) farming
succession / seeding
concret cracking experiments
urban forestry
EARNINGS / TEACHING / JOB-EMPLOYMENT
R&D
skills
collaboration
awareness
management - maintenance
employment
PRODUCTIONS
ENERGY
biomass
mechanical / solar energy
waste management
bioluminesans
algea & seaweed
FOOD
biomass agriculture
hidroponic / aeroponic agriculture
algea & seaweed agriculture
food forest
new program SOCIABILITY
recreation network
researching (R&D)
production
connection
CONCEPTUAL PLAN
LEGEND
Hardscapes
Overpasses
Sport surfaces
Play surfaces
Softscapes
Middle riverbank
Low riverbank
Wetland filtration planting
Wetland
Gravel
Water
N
Water Plant Exhibition Area
Experimental Seaweed Fields
Review Platform
Picnic Areas
Congress Center
Play&sports Surfaces
View Platform
Sediment Accumulation Area
Workshop/Kermis/ Exhibition-Flexible area
Activity Bay
Cafe/Service Areas
Overpasses
Marina
Fish Restaurants
Fishing Shelters
Sailing Club
Sea Steps
1 Mart Pier
Pier Square
View Platforms & Outdoor Classes
Activity Meadow
Open Air Activity
Wetland Terraces
Conserved Wetland area
Bioenergy Research Center
Food Forest
Archeological Park &Promenade
Museum Square
Promenade &Car parks
Municipality
Town Square
Culture Center
Sports Complex
Wetland Conservation & Research Center
Promenade
Experimental Agriculture Research Center
Promenade


> Amphi & Workshop/Bazaar Area
> Event & Museum Square
> Info Stop
INFO STOP
main menu
Screen1
- History of area
- About Project
- Process of Project
Screen2
- Where is what?
- Functions & Programs
- Intra-area Transportation & Circulation
Screen3
- Events & Announcements
- Event Calendar
Square
Relaxation Meadow
Amphi
View Platform
Sea Steps & Sunbathing Seats
View & Art Corridor
Service Buildings
Cafe & Restaurants
View & Info Corridor
Event Platform
Sea Steps & Seatings
Activity Bay
Event & Museum Square
SEKA Museum
Bicycle House
Crack Garden
Overpasses
Museum Exhibitions
Railway
Service Roads
SECTIONS
Section A-A'
1/500
Sea Steps
Shore Square
Relaxation Meadow
Section B-B'
1/500
Sea Steps
Shore Square
Relaxation Meadow
Railway Barrier
Railway

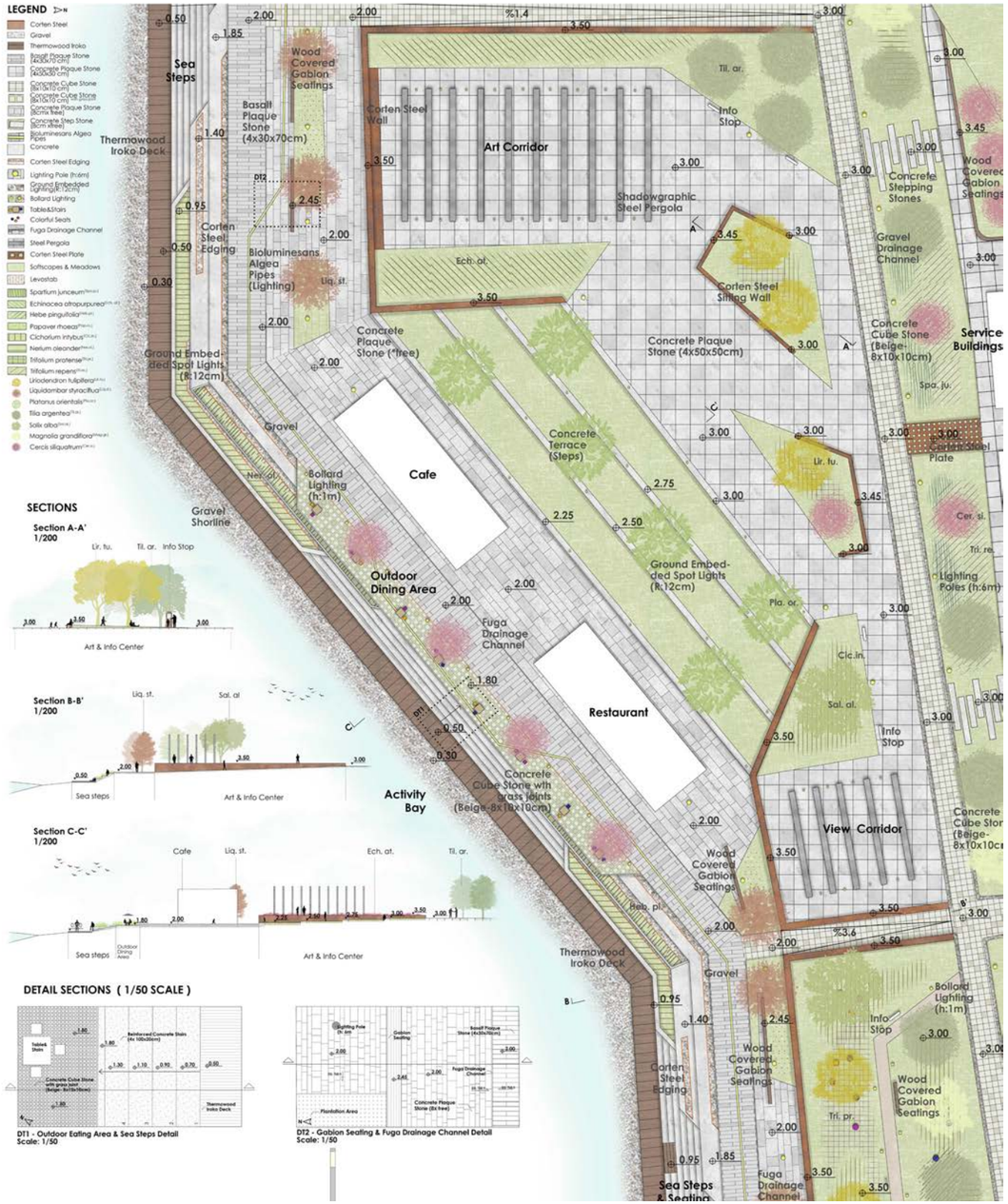

Working & Production Landscapes
Transitional Landscapes
Experimental Seaweed Field
Open Air Activity Area
Bioenergy & Microalgea Production Institute
Alternative Agriculture Research Center
Square
Wetland Conservation & Research Center
Artscapes

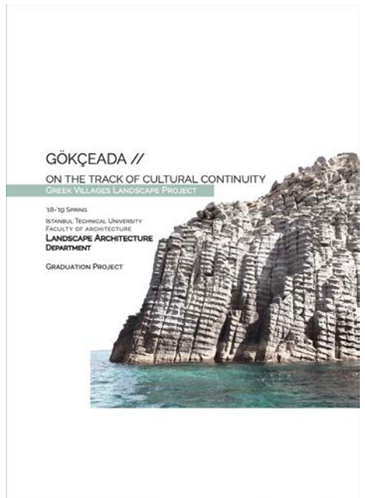

Skew Form
Step Form
after water level rise
after water level rise

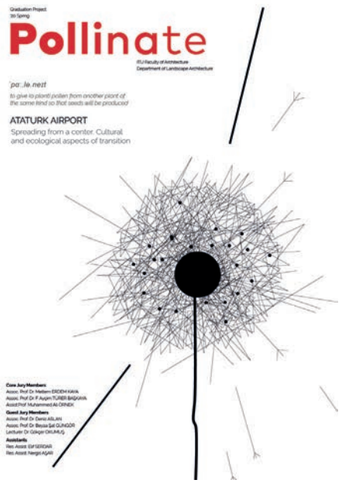

LANDSCAPE TYPOLOGIES
Community Open Spaces
Ecological Landscapes
Playgrounds
Wetland Terraces
Riperian Vegetation/ Phytoremediation
Sport Fields
Urban Forest / Food Forest
Squares
Crack Garden

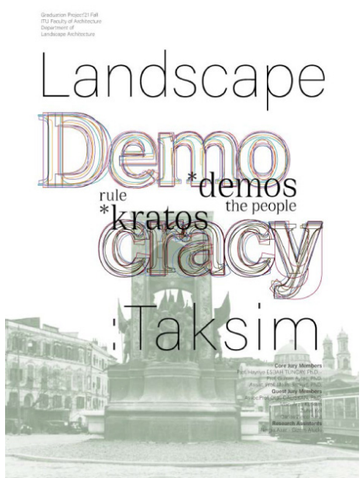

Wetland (Terraced) form
Pier Form
after water level rise
after water level rise

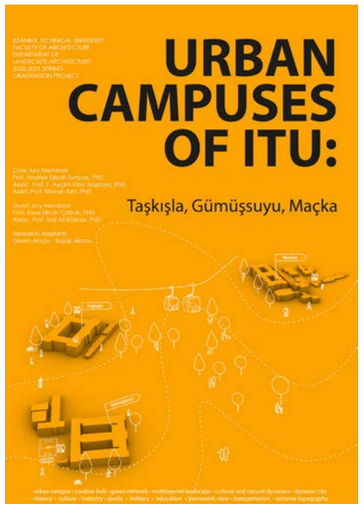


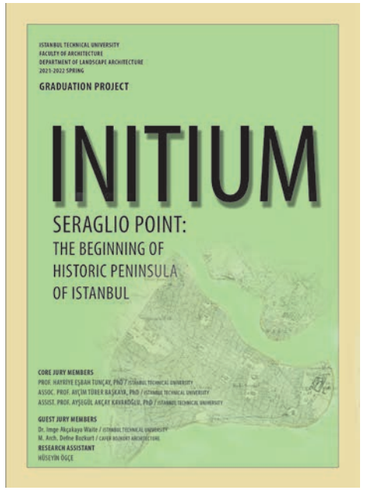

LEGEND
SECTIONS
Section A-A' 1/200
Section B-B' 1/200
Section C-C' 1/200
DETAIL SECTIONS ( 1/50 SCALE )
DT1 - Outdoor Eating Area & Sea Steps Detail Scale: 1/50
DT2 - Gabion Seating & Fuga Drainage Channel Detail Scale: 1/50
Art Corridor
Cafe
Restaurant
Outdoor Dining Area
Activity Bay
View Corridor
Service Buildings
Sea Steps
Thermowood Iroko Deck
Corten Steel Wall
Basalt Plaque Stone (4x30x70cm)
Wood Covered Gabion Seatings
Shadowgraphic Steel Pergola
Concrete Plaque Stone (4x50x50cm)
Concrete Cube Stone (Beige-8x10x10cm)
Gravel Drainage Channel
Concrete Stepping Stones
Concrete Terrace (Steps)
Ground Embedded Spot Lights (h:12cm)
Bollard Lighting (h:1m)
Lighting Poles (h:6m)
Fuga Drainage Channel
Gravel Shoreline
Corten Steel Edging
Bioluminesans Algea Pipes (Lighting)
Corten Steel Sitting Wall
Info Stop






*BİTİRME PROJESİ*

# GRADUATION PROJECT

## Bitirme Projesi Felsefesi

Bitirme çalışmasının amacı, Peyzaj Mimarlığı Bölümü'ndeki eğitim ve öğretimin bütününü oluşturan tüm disiplin alanlarında, öğrencinin gerekli bilgiye ve gelişime sahip olduğunu ve istenilen mesleki seviyeye ulaştığını kanıtlayan bir bitirme çalışmasını ortaya koymasının sağlanmasıdır. Öte yandan bitirme projesi sürecinde gerçekleştirilen ara jürilerde yöneltilen eleştiriler yardımıyla öğrencinin yetişme olgusunun bu son aşamada bir adım öteye götürülmesi hedeflenmektedir.
Bölüm tarafından her dönem belirlenen bitirme projesi jürisi, belli sınırlar içinde analiz çalışmalarını içeren ve esas niteliği bir peyzaj tasarımı olan proje çalışma konusunu dönem boyunca çalışmak üzere öğrencilere verir. Üretilen bitirme projeleri, jüri tarafından verilen program ve diğer koşullara uygun olarak öğrenci tarafından geliştirilecek ve özellikle kendi düşünce ve çabalarının ürünü olacaktır.
Bitirme projesi jürisi çalışma programı doğrultusunda, yarıyıl içerisinde aşamalar halinde yapılan en az üç oturumda bitirme projesinin denetimini ve genel eleştirisini yapar.
Bitirme çalışması, ara jüriler, eskiz sınavı, bitirme projesi teslimi ve final jürisi notlarının genel değerlendirmesi sonucunda öğrencinin başarı derecesi belirlenir.

Bu dersi tamamlayan öğrencilerin;
- Çalışma alanının çevresini ve koşullarını, gereksinimlerini ve olanaklarını analizi edebilme ve yorumlayabilme,
- Tüm öğretim boyunca edinilen bilgilere ve deneyimlere dayanarak senteze ulaşma,
- Analizlerle elde edilen tasarlama enformasyonunu tasarlama bilgilerine dönüştürebilme,
- Tasarım bilgisine ulaşma yolunda alandan ve analizlerinden edindiği bilgi ve sentezi küresel problemler ve olanaklar ve entelektüel bilgi birikimiyle harmanlayabilme,
- Verilen ölçek ve içerikte problem alanına yönelik tasarım ve alternatifler geliştirme becerisi kazanır.

## *Graduation Project Philosophy*

*The aim of the Graduation Project is to ensure that the student presents a comprehensive final landscape design project demonstrating proficiency and attainment of the desired professional level in all discipline areas comprising the entirety of education and instruction within the Department of Landscape Architecture. Concurrently, the objective is to elevate the student's developmental process through critiques offered during interim juries throughout the thesis project.*
*Each semester, the department-appointed Graduation Project jury/juries assign students a project topic encompassing analysis studies within specified limits and predominantly characterized by landscape design. The proposed diploma projects, in accordance with the program and other conditions set by the jury, are to be developed by the students, particularly reflecting their own thoughts and efforts.*
*The jury conducts at least three sessions, in stages throughout the semester, to oversee and provide general critique for the thesis project in accordance with the work program. The evaluation of the thesis work is determined based on interim juries, sketch exams, thesis project submissions, and final jury assessments.*

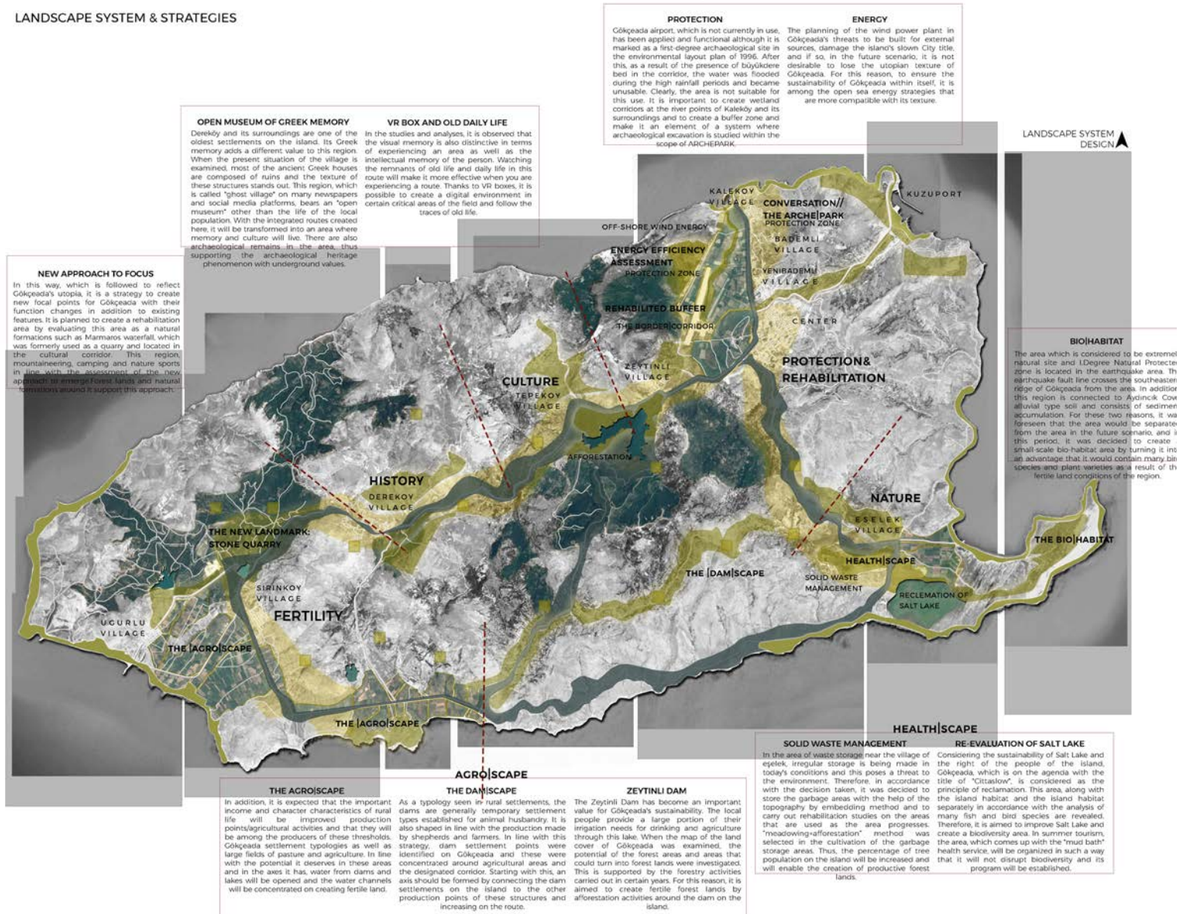
*Upon completion of this course, students will have the ability to:*
*- Analyze and interpret the surroundings, conditions, requirements, and opportunities of the project area,*
*- Synthesize information based on knowledge and experiences acquired throughout the instruction,*
*- Transform design information obtained from analyses into design knowledge,*
*- Blend knowledge and synthesis derived from the field and analyses with global problems, opportunities, and intellectual knowledge on the path to reaching design knowledge,*
*- Develop the ability to design and generate alternatives for the problem area at the given scale and context.*

# Diasporal Arcadia

Melisa Aksun

*"Diasporal Arcadia" was produced within the scope of Graduation Project carried out by Prof. Dr. Meltem Erdem Kaya, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Muhammed Ali Örnek, Assoc. Prof. Dr. Melih Bozkurt, M.Sc. Land Arch. Arzu Nuhoğlu, and Lecturer. Dr. Gökçer Okumuş and assisted by Res. Assist. Elif Serdar Yakut and Res. Assist. Merve Aydınlı under the title "Gökçeada - On the Track of Cultural Contunuity Greek Villages " in the spring semester of 2018-2019.*

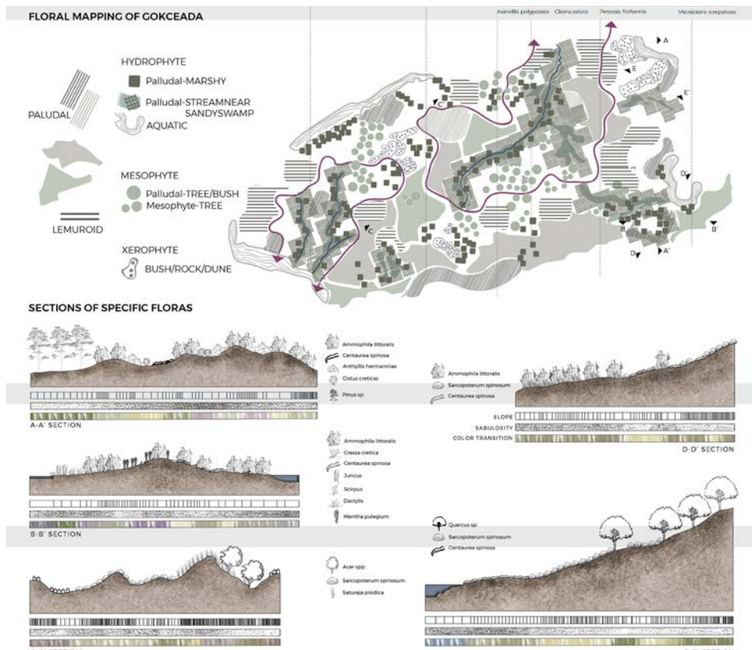
✳ TMMOB Chamber of Landscape Architects • 8th Landscape Architecture Students Graduation Project Awards
Equivalent Award, Selection Committee Special Award



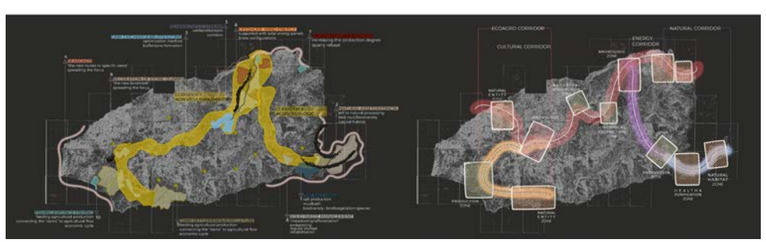



Diasporal Arcadia Takes Over Gökçeada, a Forgotten Utopia

Gökçeada was once a self-sufficient utopia, as its history reveals. However, today, it evokes a sense of abandonment, as it struggles with the loss of its identity due to the erosion of its cultural values. The island has undergone significant demographic changes, particularly since the 1960s, driven by forced migration, the establishment of new Turkish villages, the presence of a semi-open prison, and the closure of Greek religious structures. Additionally, Gökçeada—historically known for its village-based character—is steadily transforming into

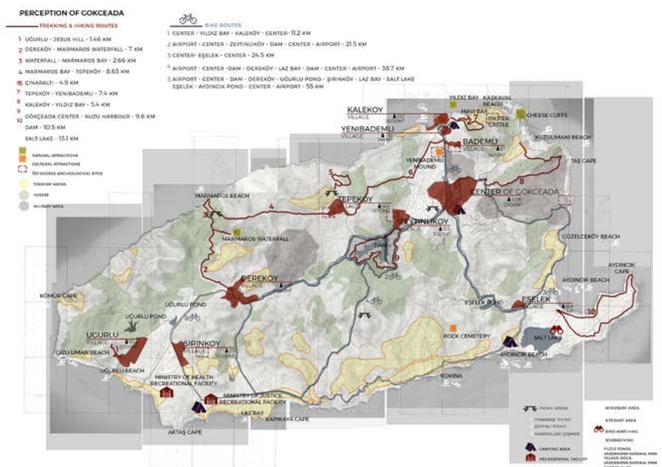


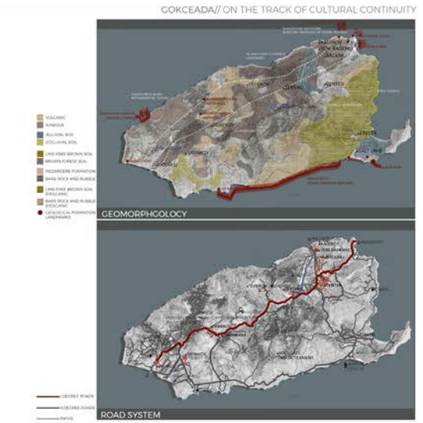
an urbanized landscape with expanding settlements and a growing city center. In large-scale planning efforts, there is a renewed focus on reviving and preserving Gökçeada's rural utopian potential. As Turkey's first and only island designated as a Cittaslow, ensuring the sustainability of this identity is a critical challenge. From an environmental and infrastructural perspective, specific strategies must be implemented to restore and sustain this rural utopia.

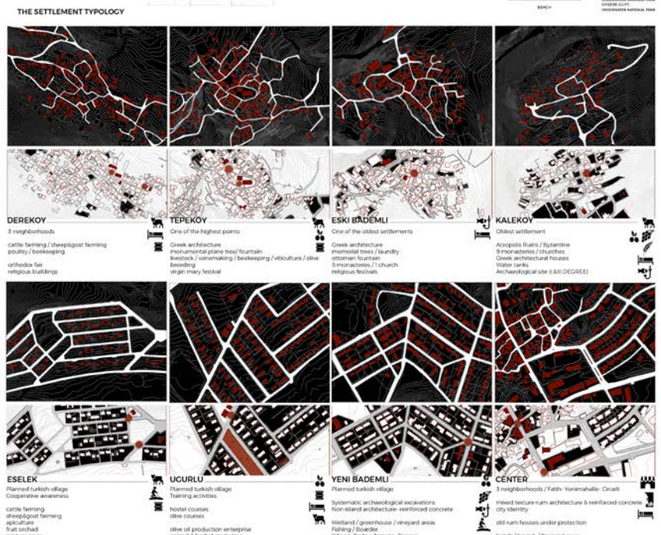


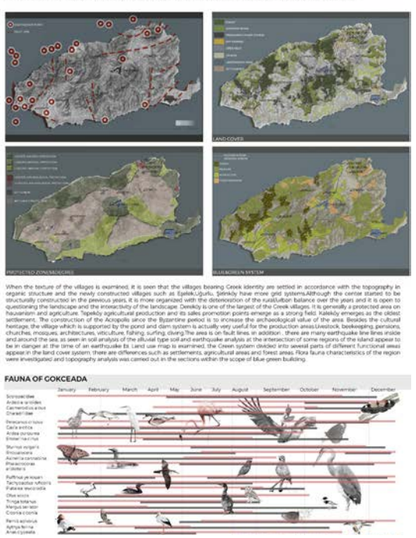
Gökçeada can be understood through two primary corridors: memory and nature. This framework brings together the interwoven concepts of agroecology and culture. Kaleköy, a coastal village, plays a vital role in both tourism and local life, especially during the summer months when the island is most active. Although Gökçeada's coastal areas hold significant design potential, fostering a balance between the coast and the island's interior is equally crucial. This has led to a design approach centered on the concept of "agro-food-forest," which aims to extend the tourism economy inland while maintaining local agency in shaping tourism development.

The Agro-Food strategy emphasizes ecological sustainability, active local participation, and a balanced relationship between residents and tourists throughout the year. Kaleköy emerges as a focal point of both production and ecological sustainability, where local communities contribute to agricultural production in all seasons, and tourists engage in immersive experiences that help revive Gökçeada's utopian vision.

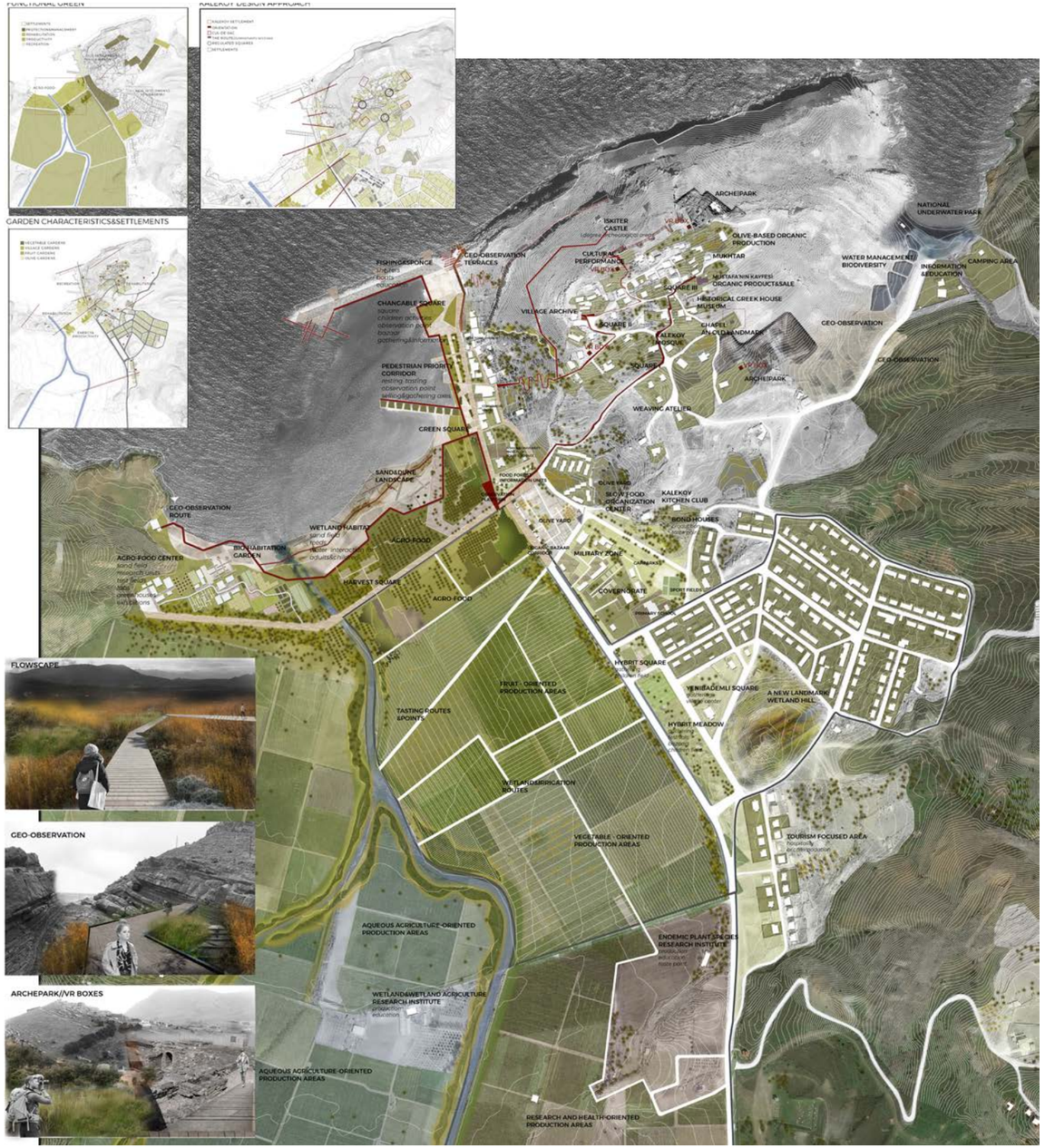


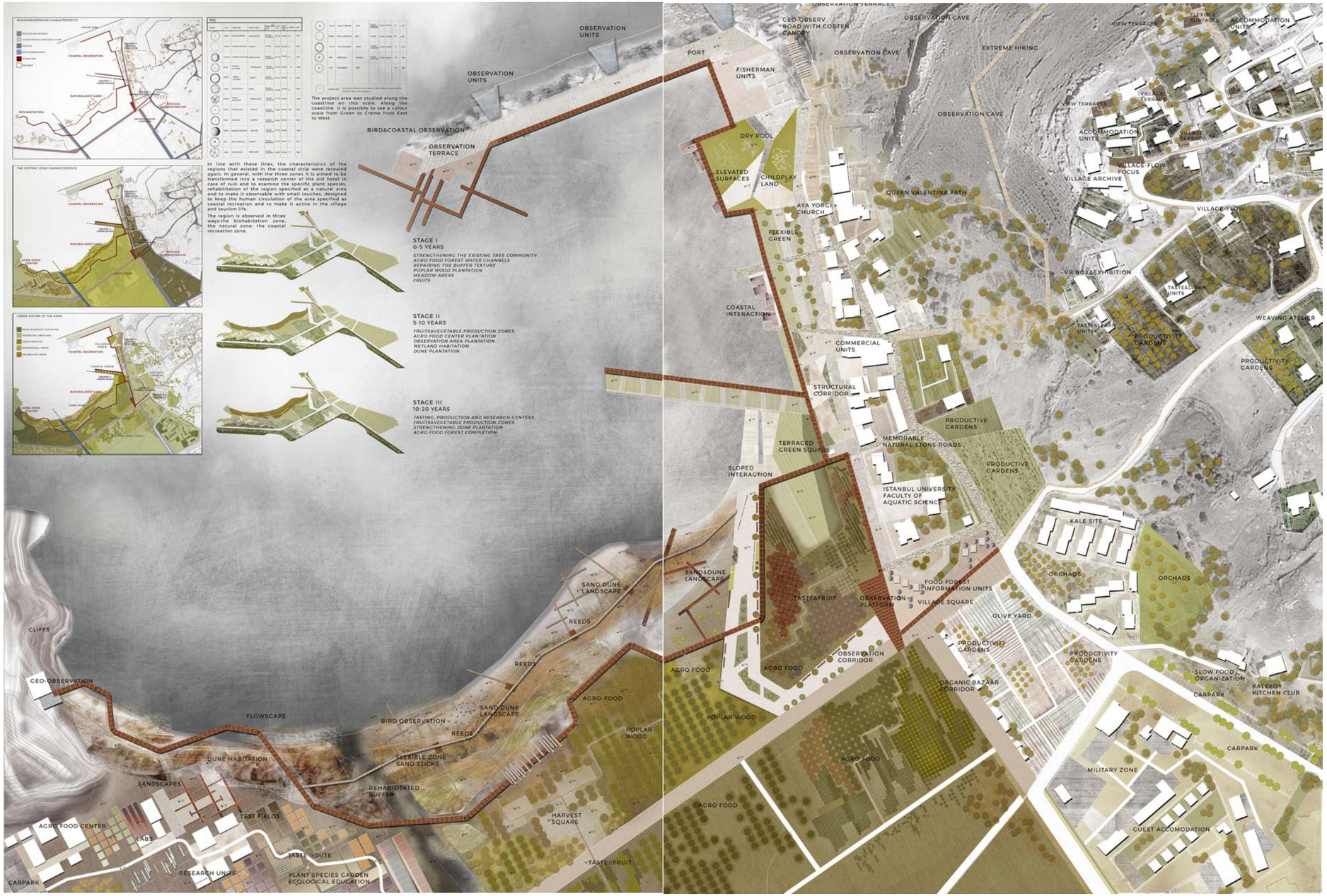





The strategy includes revitalizing existing landscapes, integrating agro-food principles, improving meadow areas, enhancing beach landscapes, and developing multifunctional agricultural zones. These may include poplar groves, fruit orchards, experimental fields, research units, laboratories, and olive groves—creating a space where both producers and the public can actively participate.

Furthermore, rehabilitating the island's dune landscapes and incorporating reed ecosystems into the design will enhance ecological resilience. Kaleköy, with its adaptable spaces supported by poplar woodlands, agro-food initiatives, and commercial hubs, is positioned to become an essential component of Gökçeada's reimagined utopia.



SQUARE III: CHILDREN PLAYLAND
WOODEN PIER FLOWSCAPE
CORTEN SURFACES ELEVATED ELEMENTS
PLAYING ELEMENTS FOR CHILDREN
AYA YORGI CHURCH
A-A' SECTION 1/500

COASTAL TYPOLOGY II
GREEN TERRACES
SLOPED SURFACES
EXTENSIONS

WETLAND&SAND LANDSCAPE
REHABILITATED STREAM// BUFFR
ELEVATED FLOWSCAPE
PERGOLA CORRIDOR REED PLANTATION
POPLAR WOOD
B-B' SECTION 1/500

COASTAL TYPOLOGY III
WETLAND&WATERSCAPE
HABITAT

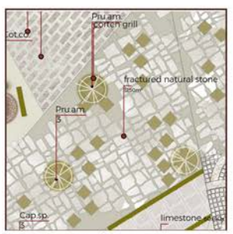
NATURAL//REHABILITATED AREA
ISTANBUL UNIVERSITY AQUATIC SCIENCE FACULTY
SANDSTICKS BIRD OBSERVATION
POPLAR WOOD
REEDS&WETLAND COMMUNITY
ELEVATED FLOWSCAPE
WATERMEADOW SLOPED CORTEN SCAPES
STRUCTURAL CORRIDOR
POPLAR WOOD FLOWSCAPE
CHARACTERISTIC PEDESTRIANIZED ROAD
C-C' SECTION 1/500

COASTAL RECREATION AREA
KALEKOY VILLAGE HOUSES
HISTORICAL SERVICE BUILDINGS
CUL-DE-SAC// PATHS
FLOWSCAPE PIER
PIER SQUARE WITH GREEN AXES
CHARACTERISTIC PEDESTRIANIZED ROAD
OLIVE PATHS
OBSERVATION HIKING ROUTES OBSERVATION CAVES
D-D' SECTION 1/500

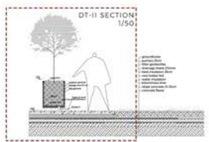
DUNE LANDSCAPE PLAN
1/200
PHRAGMITES CORRIDOR
WETLAND&STREAM CORRIDOR
AGRO-FOOD FIELDS

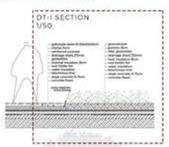
**COMMERCIAL ZONE** PEOPLE CAN FEEL THE TEXTURE OF THE VILLAGE AND KEEP THE HARBOR AREA ALIVE IN MORE FLEXIBLE SPACES, WHICH ARE REFLECTIONS OF THE COMMERCIAL UNITS PRESENT **TYPE-I** HERE.

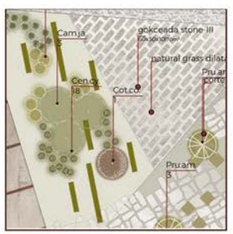
**COMMERCIAL ZONE** PEOPLE CAN BENEFIT FROM COMMERCIAL SPACES AND OPEN SPACE EDITING IN THE AREA DESIGNED WITH MORE FLEXIBLE UPPER KALKÖY TEXTURE AND PLANT TEXTURE. CERTAIN **TYPE-II** PERIODS OF THE YEAR STANDS AND KERMES WILL BE ORGANIZED IN THESE AREAS.

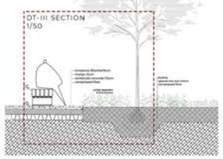



PLAN FOR DETAIL- 1/100

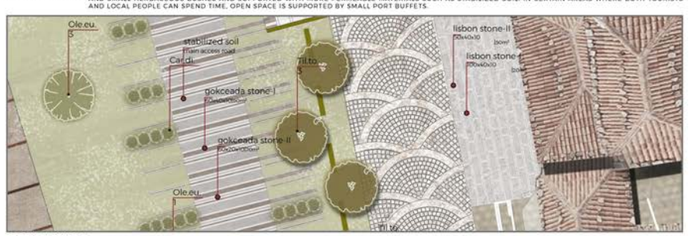


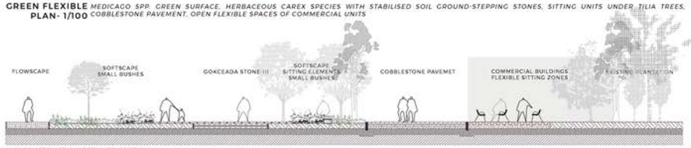



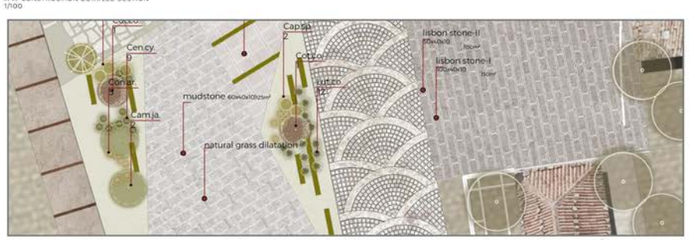
**GREEN FLEXIBLE** IN THE AREA DEFINED AS FLEXIBLE GREEN, STEP STONES IDENTIFIED AS GÖKÇEADA STONE ON THE OPEN GREEN AREA WERE COMPLETED WITH OLIVE TREES AND SMALL HERBACEOUS BUSHES AND SUPPORTED WITH MORE PERMEABLE MATERIALS SUCH AS STABILIZED SOIL. IN CERTAIN AREAS WHERE BOTH TOURISTS AND LOCAL PEOPLE CAN SPEND TIME, OPEN SPACE IS SUPPORTED BY SMALL PORT BUFFETS.



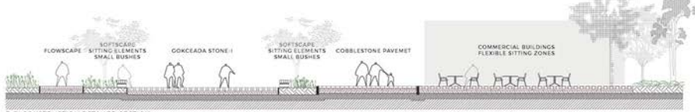

**GREEN FLEXIBLE PLAN- 1/100** *MEDICAGO SPP. GREEN SURFACE, HERBACEOUS CAREX SPECIES WITH STABILISED SOIL GROUND-STEPPING STONES, SITTING UNITS UNDER TILIA TREES. COBBLESTONE PAVEMENT, OPEN FLEXIBLE SPACES OF COMMERCIAL UNITS*




A-A' CONSTRUCTION DETAILED SECTION
1/100




**STRUCTURAL CORRIDOR PLAN- 1/100** *MEDICAGO GREEN SURFACE,SITTING UNITS AND GREEN SURFACES BETWEEN TREE AND DENSE BUSHES. REFLECTIVE, FLEXIBLE OPEN SPACES OF COMMERCIAL UNITS, CONSTRUCTED CORRIDOR WITH POST CONNECTION*



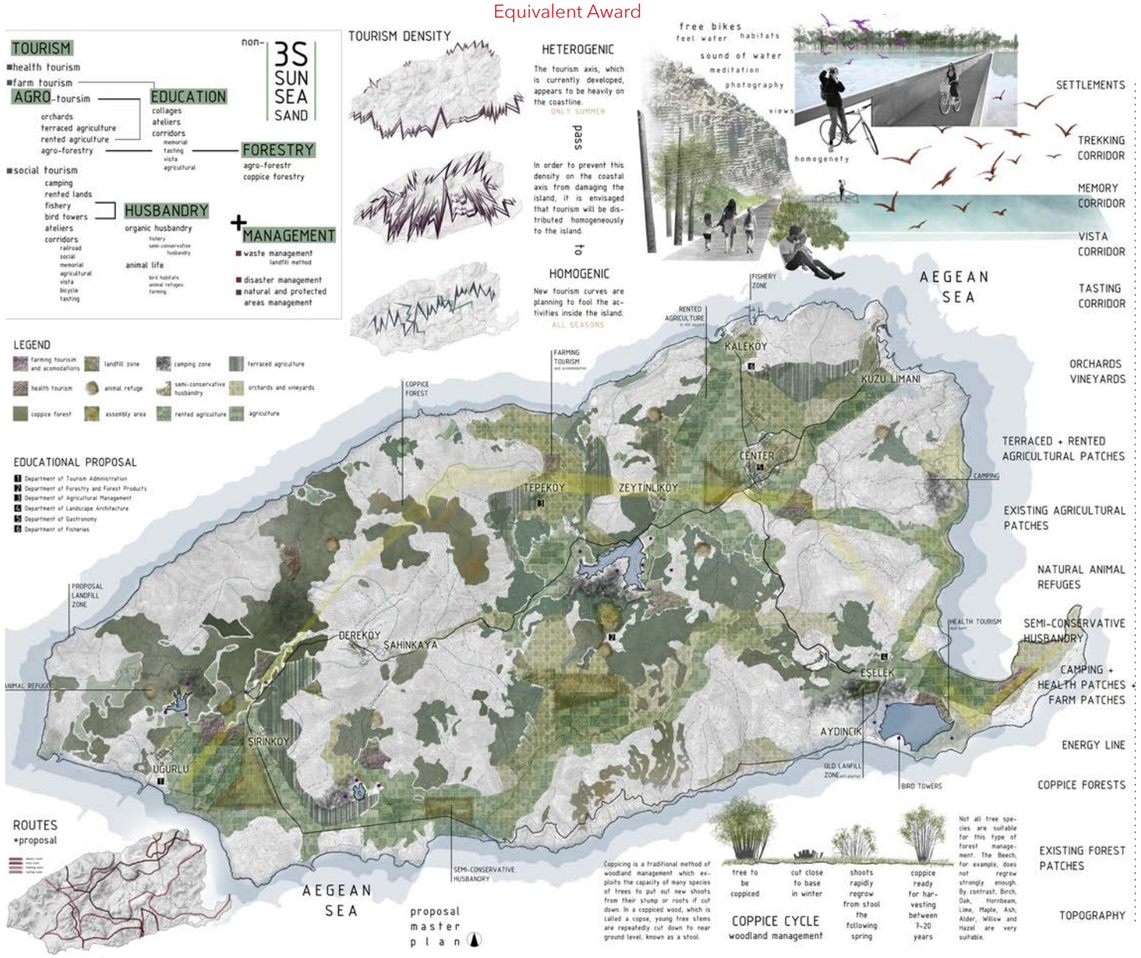

B-B' CONSTRUCTION DETAILED SECTION
1/100

# Roll-ing

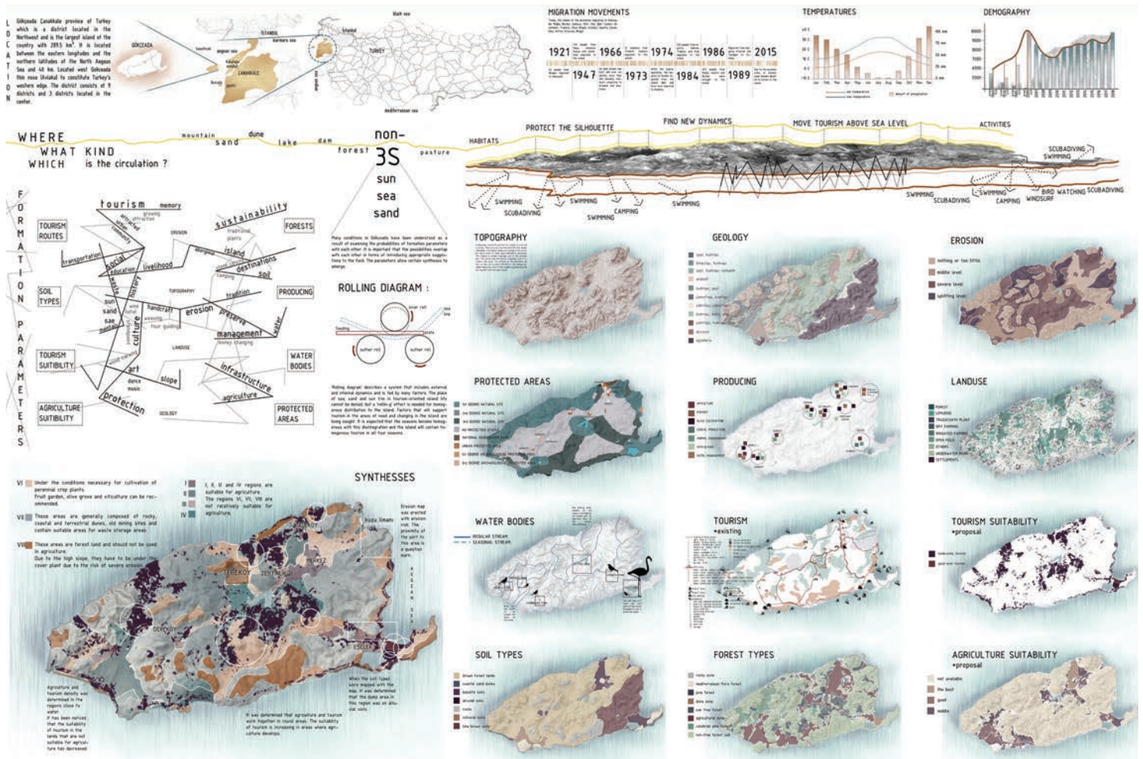
Melike Tuğçe Çelik

*"Roll-ing" was produced within the scope of Graduation Project carried out by Prof. Dr. Meltem Erdem Kaya, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Muhammed Ali Örnek, Assoc. Prof. Dr. Melih Bozkurt, M.Sc. Land Arch. Arzu Nuhoğlu, and Lecturer. Dr. Gökçer Okumuş and assisted by Res. Assist. Elif Serdar Yakut and Res. Assist. Merve Aydınlı under the title "Gökçeada - On the Track of Cultural Contunuity Greek Villages" in the spring semester of 2018-2019.*

✳ TMMOB Chamber of Landscape Architects • 8th Landscape Architecture Students Graduation Project Awards Equivalent Award



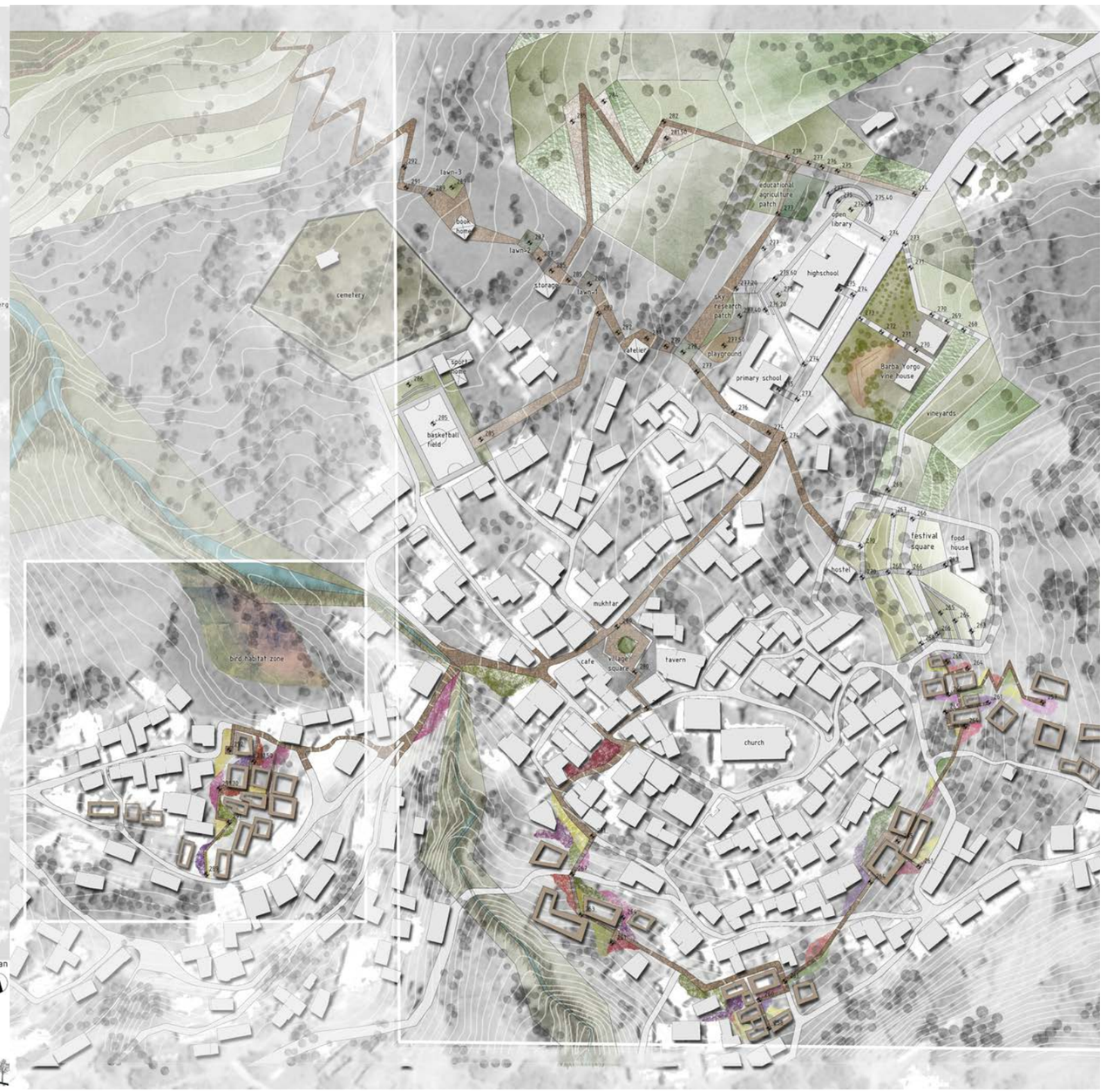



Gökçeada, a district of Turkey's Çanakkale province, holds a unique cultural, social, and economic dynamic. With its rich natural landscapes and vibrant local traditions, the island becomes a focal point, especially in summer, attracting visitors through its festivals and ecological diversity. Along the coastline, high-potential tourism activities thrive, drawing numerous visitors who come to observe its unique fauna and natural beauty.

One of the primary objectives of the Istanbul Technical University Landscape Architecture graduation project is to analyze and reimagine Gökçeada through the lens of sustainable tourism. Extensive island-wide analyses have revealed that tourism is largely concentrated along the coast, leading to seasonal vitality limited to the summer months. To create a more balanced and year-round tourism economy, potential inland areas must be developed to maintain their appeal during winter as well. In this transformation, the traditional "sea, sand, sun" tourism model is being redefined through the new framework of "flow, soil, energy."

ROLL - IN PROGRAMME
1 sun --> ENERGY
intangible energy
human movement energy
animal movement energy
tangible energy
agro-forestry
coppice forest
nature forest
2 sea --> FLOW
socal flow
ateliers
education
camping
recreational flow
camping
vistas
routes
3 sand --> LAND
agriculture 'Agridia'
rented lands
terraced lands
farm tourism
husbandry
semi-conservative
animal refuge
TEPEKÖY / Agridia
Location:
TEPEKÖY
Çınaraltı
intagible energy
flow diagram
The abstract energy axis examines the energy of human and animal movements in the energy flow along the north-west-southwest axis of the land. Animal movements from the movement of bees to the habitats of birds were examined. In addition, a landscape design was carried out to move people by taking into account the energy of the colors.
vineyards
bird habitats
apiculture
colour energy
2
bird habitat formation and bird movements
Quercus coccifera and Rubus fruticosus shrubs are nourishment, hiding and breeding habitats for certain bird species.
Rubus fruticosus
Quercus coccifera
Sylvia melanocephala
Sylvia atricapilla
Passere montanus
3
bee movements and dancing energy
The energy of the free movement of animals in nature in nature is reflected in the fiction in human movements. The instinct is to live together in all areas where animals and people living spaces overlap. The presence of bees and the gifts it offers to nature provides the balance of ecosystems. "Bee dance", the route of the movement of bees by the bees, can give us an abstract line of energy. At the same time, the habitats, where the birds love are transformed into the bird habitat and affect the migration route. The path of movement of birds is the infrastructure of a fictional landscape centered on people.
1/2000 master plan
TERRACED AGRICULTURE
SOCIAL CENTER in TEPEKÖY CENTER
SEMI-CONSERVATED ANIMAL REFUGE
COPPICE FOREST


cemetery
lawn-3
lawn-2
lawn-1
storage
atelier
sport hall
basketball field
educational agriculture patch
open library
highschool
research patch
playground
primary school
Barba Yorgo vine house
vineyards
festival square
food house
hostel
mukhtar
cafe
village square
tavern
church
bird habitat zone

## DESIGN PRINCIPLES

### TERRACED LANDS
proposed terracing agricultural areas in order to prevent erosion and evaluate sloping areas

### VINEFEAST LANDS
area and production where energy directs human movement

### "AGRIDIA" EDUCATION LANDS
the field of production and training of agricultural land inspired by the old name of Tepeköy, Agridia. All of the vineyards, orchards, and terraced farmland. The most suitable university departments of the entire island are Tepeköy's "department of agricultural management" area of the education axis connected to the energy field.

### STUDENT LIFE LANDS
the reorganization of the environment around the existing historical schools and the connection with the social flow axis. new active use areas for students.

### SOCIAL FLOW AXES
social axle with a long axle and side arms and six spatial settings. direct link to the field of education, sports and agriculture.

### FARMING TOURISM LANDS
the area created to enable the village's farm tourism and to provide accommodation for tourists. Includes livestock, agriculture and habitats. It can also be used as activity area. there is also a small availability situation.

### BIRD HABITAT
bird habitat and observation area with local plants preferred by birds.

### GREEN FEAST SQUARE
green festival square held in addition to the current square of the village

The walking axis, which is inspired by the ruins of the characteristic old and ruined houses of Tepekoy and taking the energy of the colors as reference.

the recreation areas that dominate the visual intelligence of the island.

The plants used for the orientation of the colors are specific to Gökçeada.

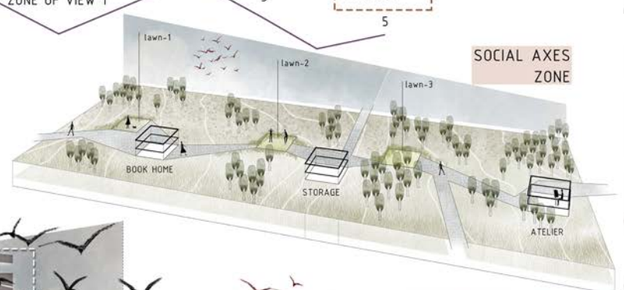
the energy field, which directs people and puts them into a landscape fiction, includes historical texture and creates a memory route.

COLOUR ENERGY

ZONE OF VIEW 1 — 2 — 3 — 4 — 5

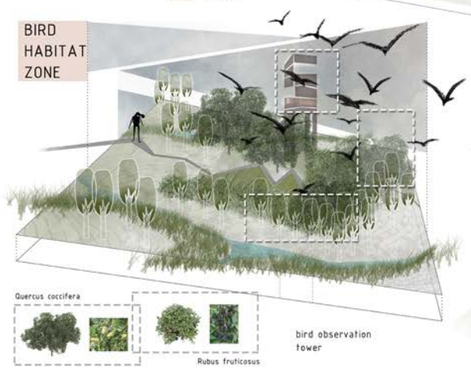
VISTA FRAME

the landscape fiction of the human with the balance of animal life in nature




SOCIAL AXES ZONE

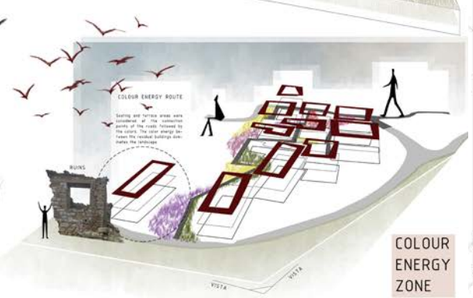
BIRD HABITAT ZONE



Quercus coccifera

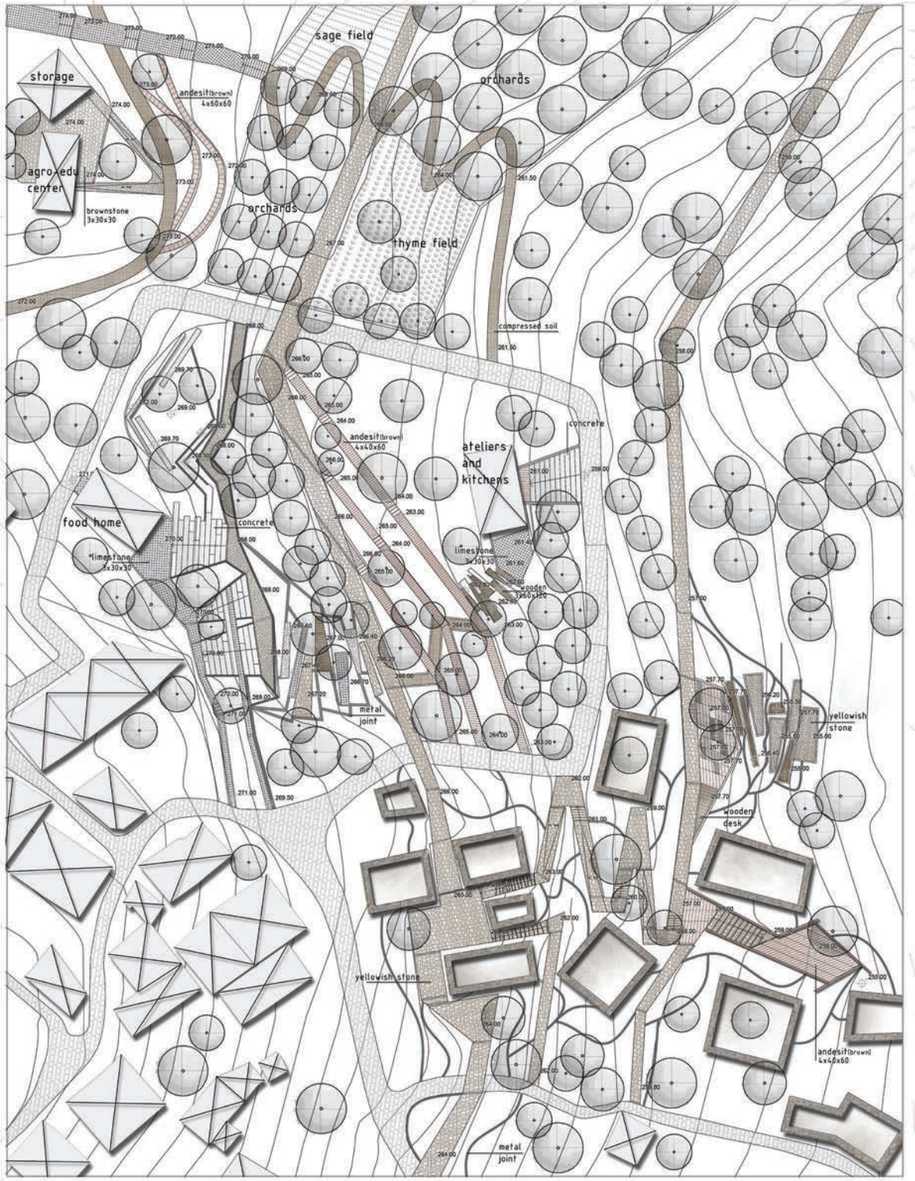
Rubus fruticosus

bird observation tower



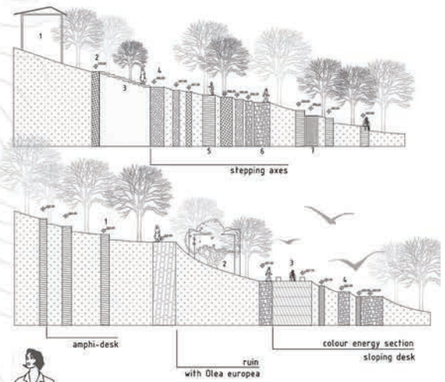

COLOUR ENERGY ZONE

CONSTRUCTED PLAN :

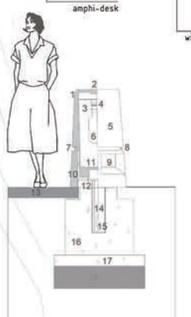



scale : 1/200

SECTIONS

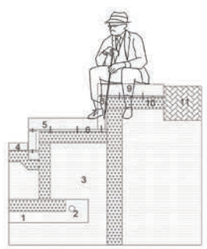



DETAILED SECTIONS



Bollard lighting detail
Scale: 1/20

1- aluminum lighting mold
2- lighting slots
3- stainless steel support
4- waterproof lampholder
5- cast aluminum mold
6- energy saving bulbs
7- surface horizontal fuga
8- sealants
9- cast aluminum mold
10- painted aluminum
11- stainless steel plated socket
12- spaces
13- precast concrete decking
14- cast aluminum base battery
15- from electric power supply
16- reinforced concrete foundation
17- briquettes
18- rubble stone sub-base

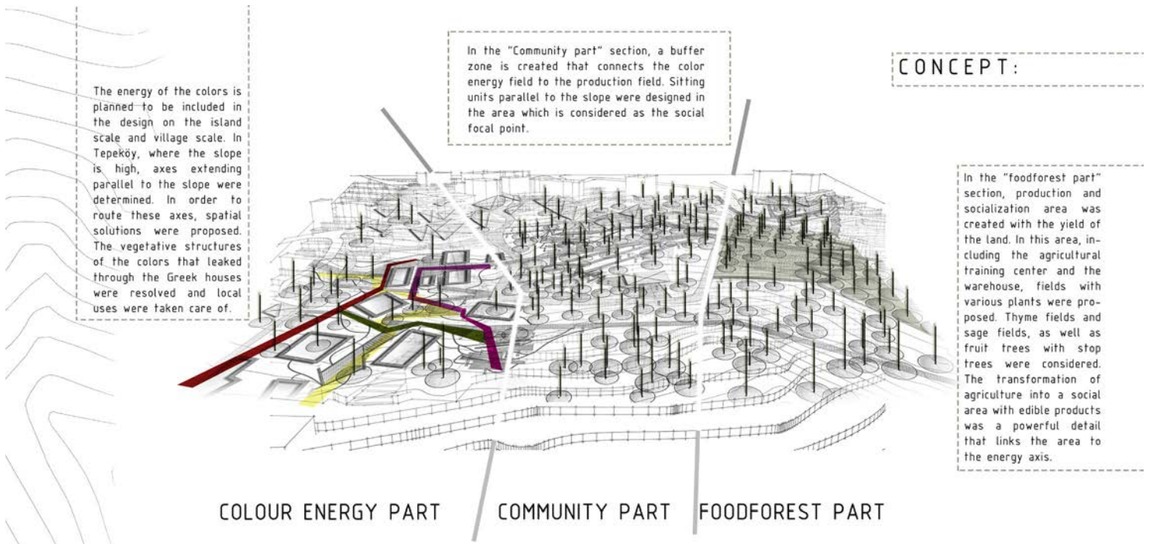


Detail of typical limestone seating
Scale: 1/20

1- crushed aggregate
2- poured channel with reinforced concrete foundation
3- compressed structural filler
4- precast concrete pavement
5- the sides of the limestone and rough end of the saw track
6- stone anchor
7- support metal and grouting
8- coarse limestone coating, pinned to carrier plate
9- rough side of the sides, saw track ends limestone
10- reinforced concrete plaque
11- vegetable soil

LEGEND

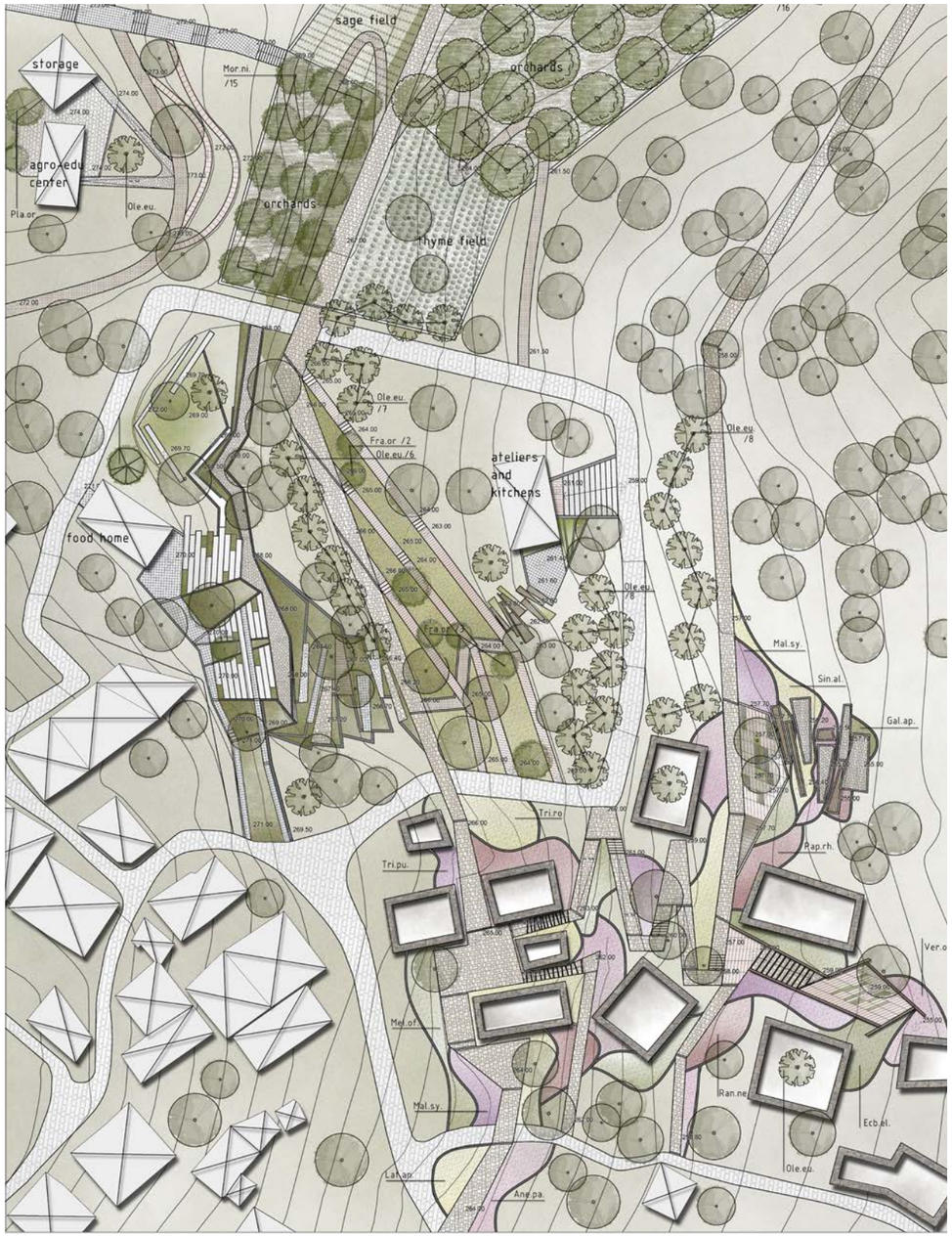
| SYMBOL | NAME | DIMENSION | AREA |
|---|---|---|---|
| CONSTRUCTION LEGEND | | | |
| | Brownstone | 3x30x30 cm | 160 m² |
| | Compressed soil | | 197 m² |
| | Andesit (brown) | 4x40x60 cm | 235 m² |
| | Concrete | | 108 m² |
| | Yellow stone | 4x30x40 cm | 803 m² |
| | Limestone | 3x30x30 cm | 56 m² |
| | Andesit (grey) | 4x40x60 cm | 860 m² |
| | Wooden | 3x60x120 cm | 34 m² |



## COLOUR ENERGY PART

It is thought that what dynamics of colors in our lives change and affect people's energy and life. In order to spread color energy to the island and create attractive textures on behalf of the people, local colored plant species were examined. Local colorful plants on the island were spread to Tepeköy with various routes and included in the design. The stabilization of the ruins of the old Greek houses was ensured and the interior, exterior, surroundings and roofs of these houses were integrated into the energy concept with soft touches. Colorful plants sprouting from some spills in the village form the orientation of the people.

At a more localized scale, Tepeköy—one of the island's villages—has been identified as a key site for integrating these new concepts. Here, the principles of flow, soil, and energy are translated into practical design interventions aimed at revitalizing the village. A central focus is on harnessing both tangible and intangible energy sources, leading to the development of innovative concepts related to sustainable resources, social interaction, and local economic growth. The project envisions Tepeköy as a year-round destination, offering employment opportunities and social spaces for residents across all seasons. To enhance tourism in the village, a "Color Energy" route has been designed, featuring local and vibrant plant species that celebrate the island's ecological richness. The spatial connections and design decisions made at the village level align seamlessly with broader strategies implemented across Gökçeada, ensuring a cohesive and sustainable tourism vision.
Ultimately, the Gökçeada Sustainable Tourism Project has been strategically planned to promote an inclusive and balanced lifestyle, fostering expansion and continuity in tourism while preserving the island's cultural and ecological integrity.



# Genius Loci: Shinudi

Rümeysa Konuk

*"Genius Loci: Shinudi" was produced within the scope of Graduation Project carried out by Prof. Dr. Meltem Erdem Kaya, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Muhammed Ali Örnek, Assoc. Prof. Dr. Melih Bozkurt, M.Sc. Land Arch. Arzu Nuhoğlu, and Lecturer. Dr. Gökçer Okumuş and assisted by Res. Assist. Elif Serdar Yakut and Res. Assist. Merve Aydınlı under the title "Gökçeada - On the Track of Cultural Contunuity Greek Villages" in the spring semester of 2018-2019.*

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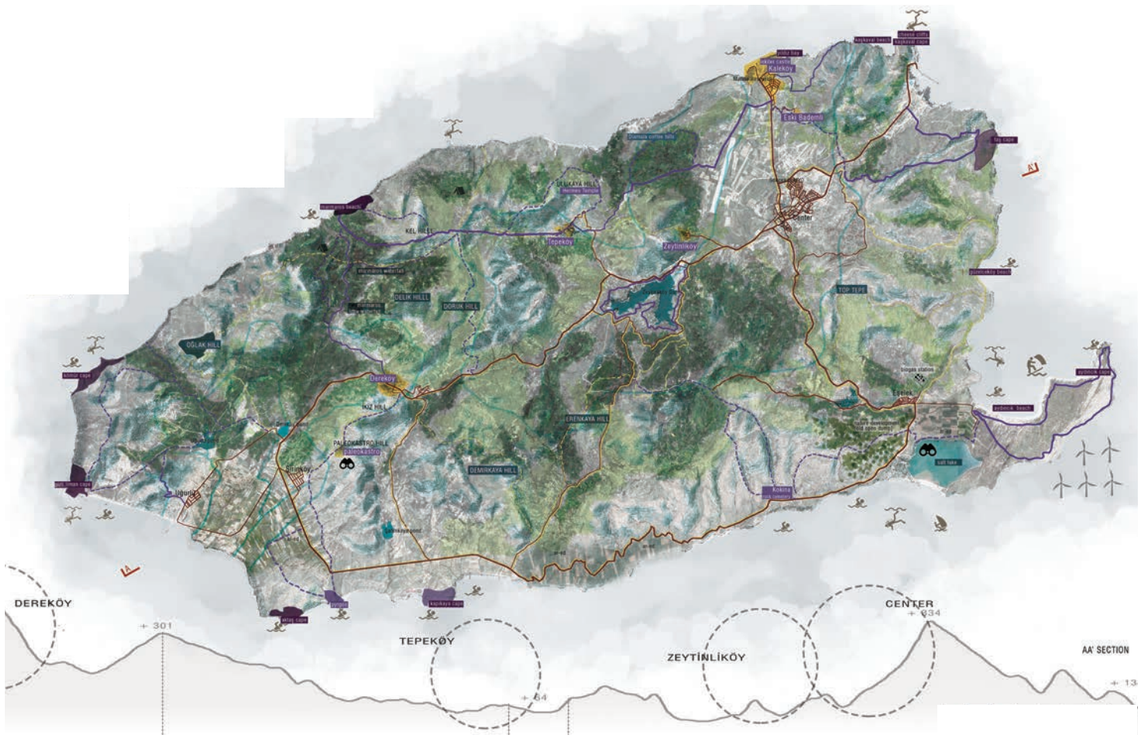
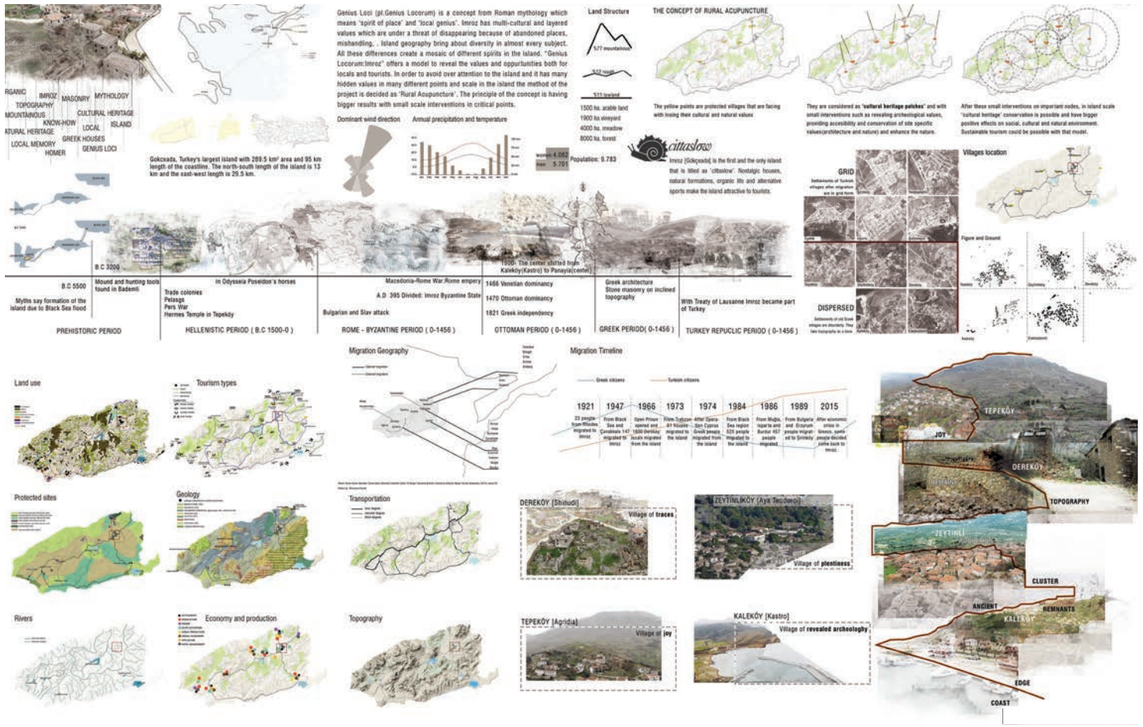
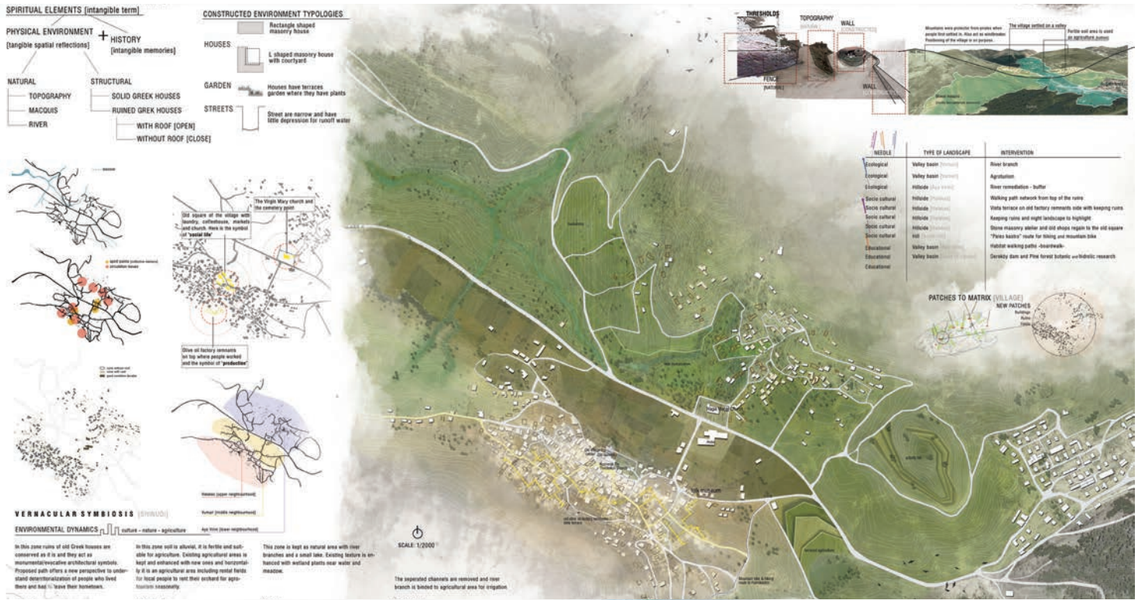
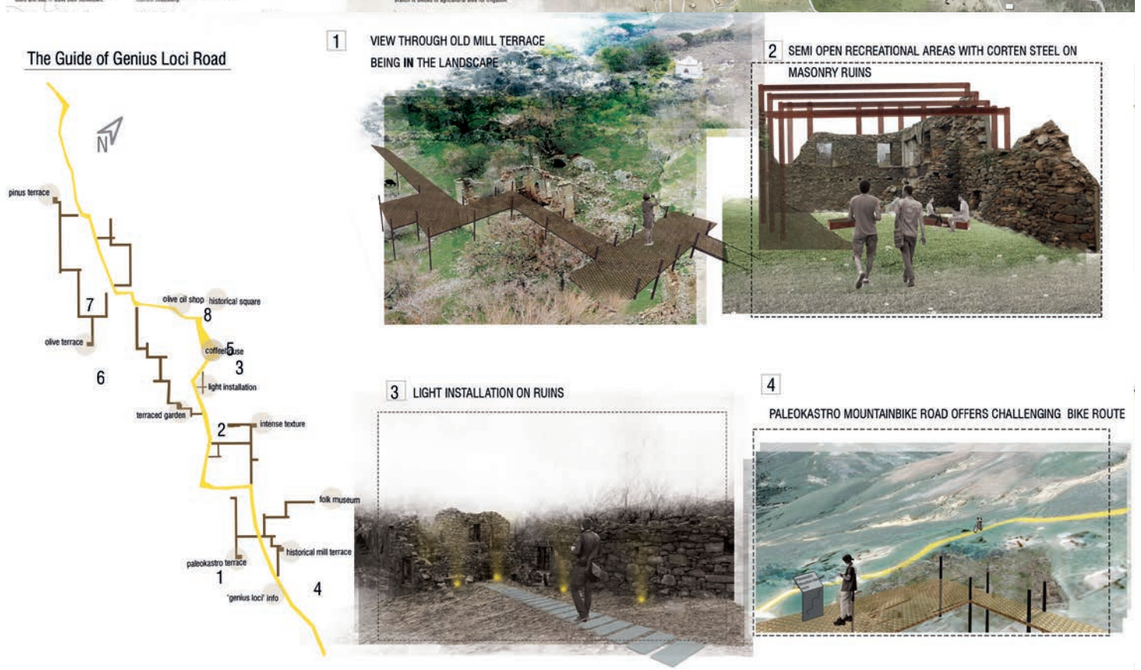


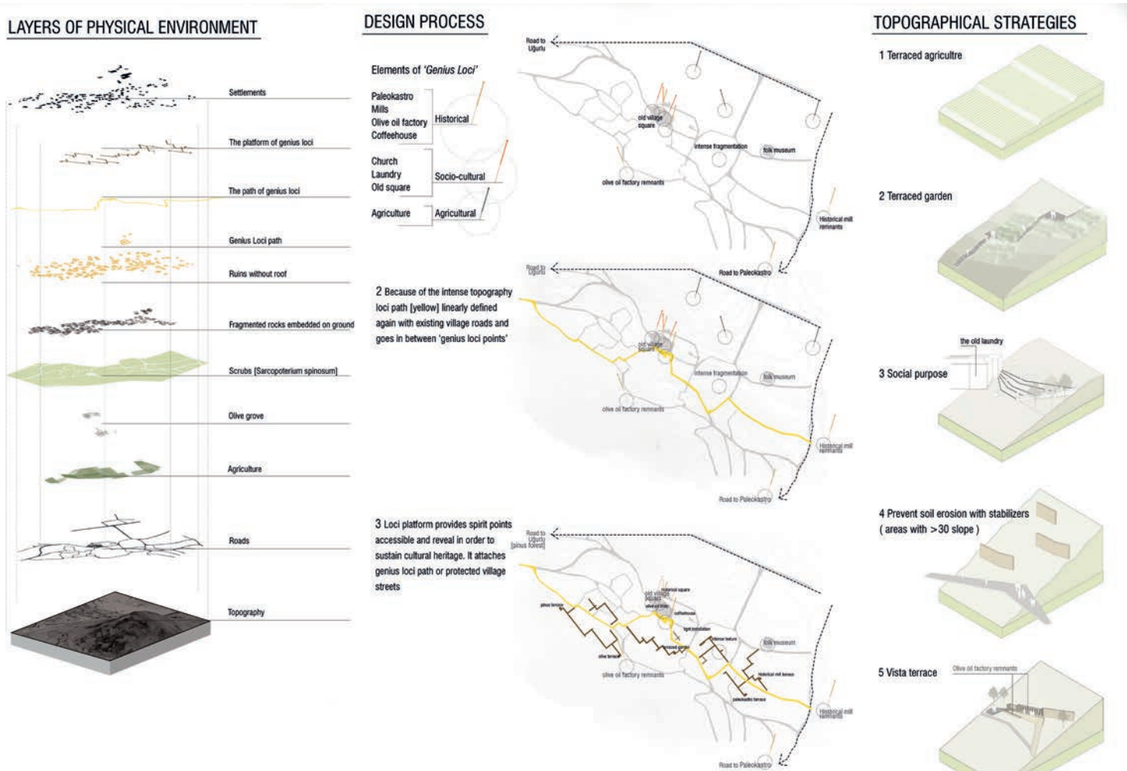




The concept of Genius Loci, originating from Roman mythology, refers to the "spirit of place" and the unique identity of a location. Imroz possesses a rich, multi-layered cultural heritage, yet its identity is increasingly at risk due to abandonment and mismanagement. To address this challenge without causing further disruption or overexposure, the project adopts the Rural Acupuncture method. This approach aims to achieve significant results through small-scale, strategic interventions at critical points, preserving the island's intrinsic values while fostering sustainable revitalization. The Rural Acupuncture method introduces various tourism models that balance the island's diverse cultural and environmental dynamics. At the island scale, three acupuncture interventions have been proposed, each targeting a distinct aspect of Gökçeada's heritage: socio-cultural interventions, ducational interventions, cological interventions These intervention "needles" work in harmony with existing tourism activities, such as coastal tourism, cultural tourism, nature-based tourism, and sports tourism, ensuring a holistic and sustainable approach to development.



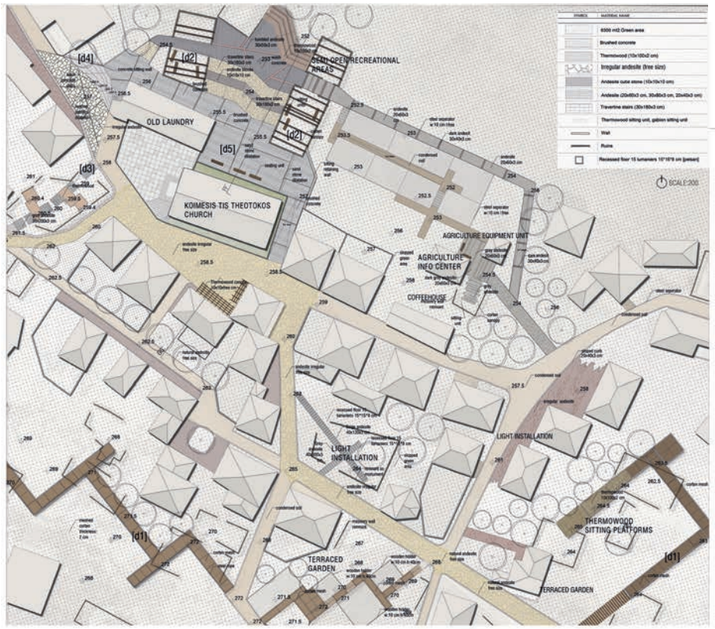


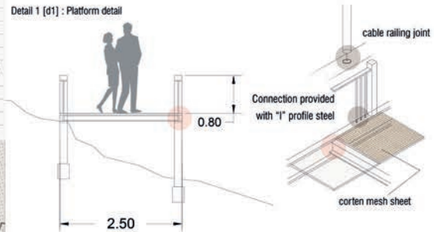



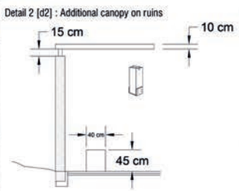


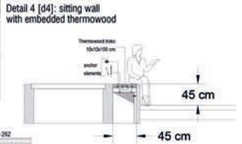

At a more localized scale, the village of Dereköy (Shinudi) is reimagined through three thematic lenses: Culture, Agriculture, and Nature. The village's history of abandonment has led to an organic transformation, where the ruins of old structures have merged with the surrounding topography, creating a distinct landscape. However, rather than evoking the memory of old Shinudi, this evolving texture primarily conveys feelings of abandonment and melancholy. Beyond physical presence in the landscape, the experience of viewing the site from a distance or from elevated perspectives enhances visitors' awareness and emotional engagement. The spatial relationships between the ruins are reflected in the proposed grid platform system, which extends into the vertical plane through sectional repetition. A key feature of the design is the Memory Path, which serves as the primary connector within the grid system. Extending from the village entrance in the east to its exit in the west, this path ensures a coherent and traceable narrative through the site. Several significant historical elements shape the spirit of the intervention, including: Paleokastro (Old Castle), ruins of historic mills, remnants of an olive oil factory, the old coffeehouse. Additionally, the church, laundry, and old shops located in the former village square have been repurposed into socio-cultural and agricultural spaces within the valley basin. These key landmarks act as acupuncture points within the village, working in tandem with the Memory Path and grid platforms to reinforce a sense of continuity and place.

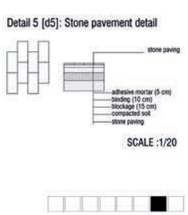
olive grove
Hotel
old laundry
semi-open recreational gardens
pinus terrace
old olive shop
Koimesis Tis Theotokos Church
agriculture info center
historical coffeehouse
Halakas cafe
light installation
texture terrace
folk museum
terraced garden
olive grove
olive terrace
olive factory remnants
vista terrace
mill terrace
paleokastro terrace
'genius loci' info
DESIGN PROCESS
VERTICAL RELATION
From section
to plan
SAME ATTITUDE ON PLAN
FINAL RELATION
LEGEND
Roads
Buildings
Ruins without roof
Agriculture
Embedded rocks
Genius Loci path
Genius Loci platform
Corten canopy
Sitting units
Stabilized wall
Private garden wall
Existing trees
Proposed evergreen trees
Proposed deciduous trees
SCALE:1/500
PLATFORM SERVICES
Spatial experience
Connective
Informative

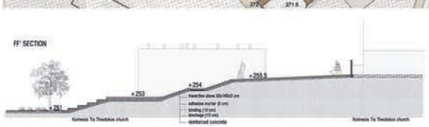


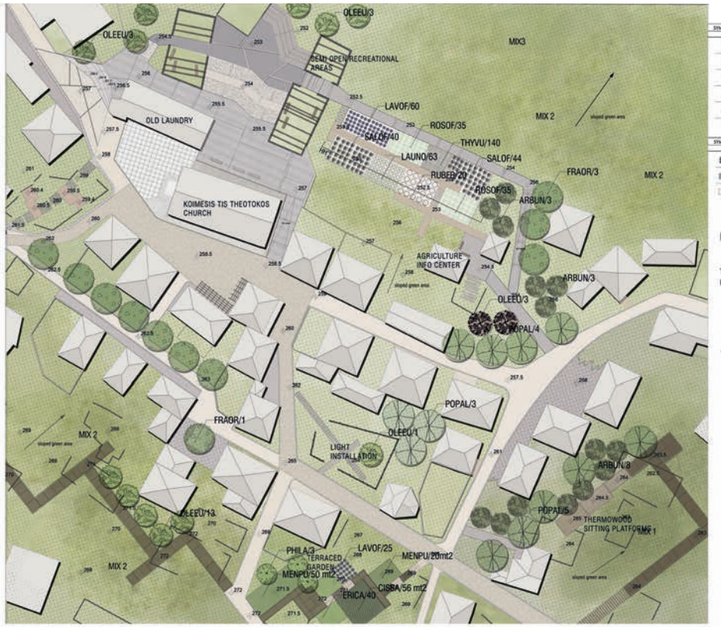


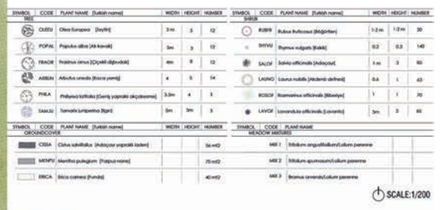



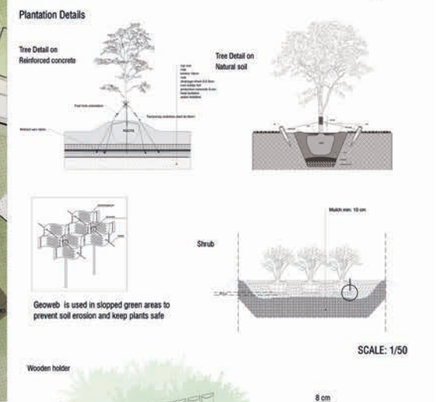



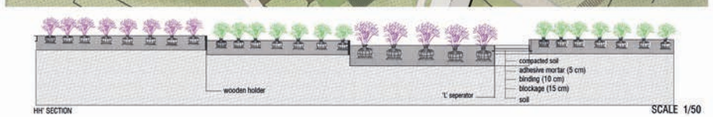
5 SECOND OLIVE PRODUCING AREA REVITALIZED BY SITTING PLATFORMS

6 OLIVE OIL FACTORY REMNANTS WITH THE 'GENIUS LOCI' PLATFORM



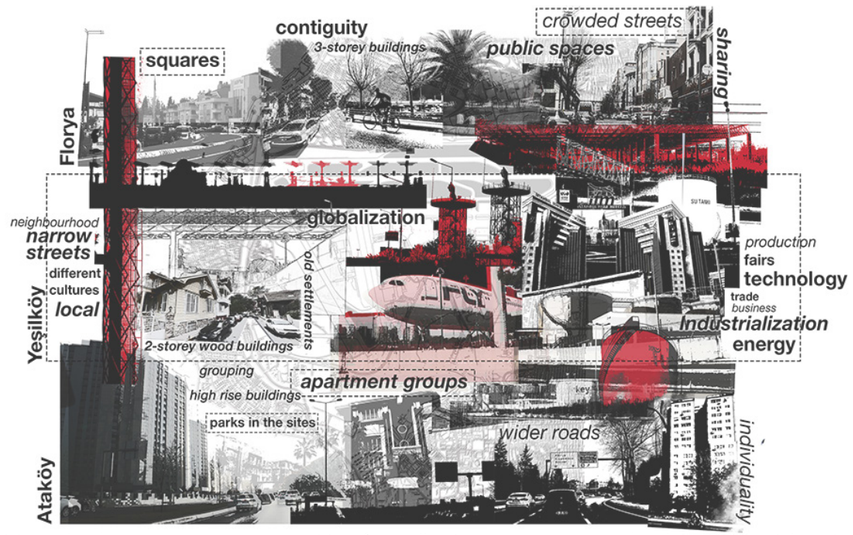

7 OLIVE GROVE CAN BE ALSO EXPERIENCED WITH THE PLATFORM

8 OLD VILLAGE SQUARE IS REVITALIZED BY NATURAL STONES, STAIRS AND SITTING WALL

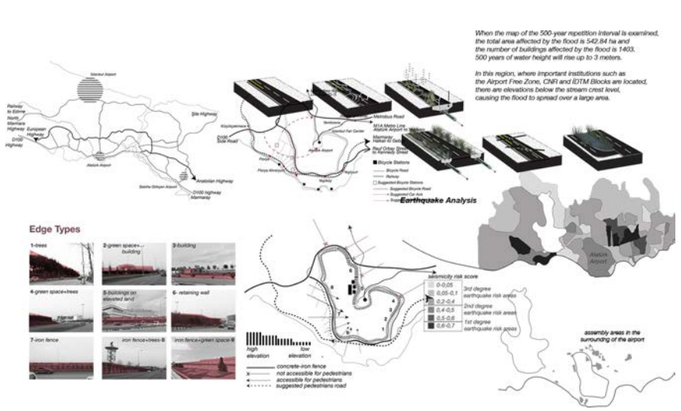
# TechnoScape

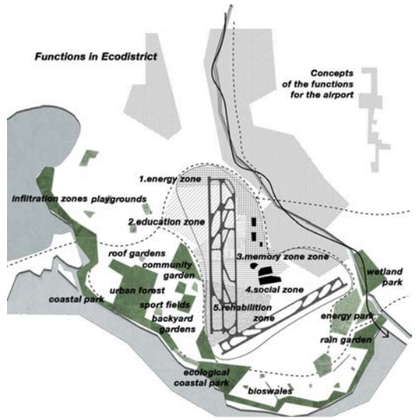
Sadiye Gülgün Atalay

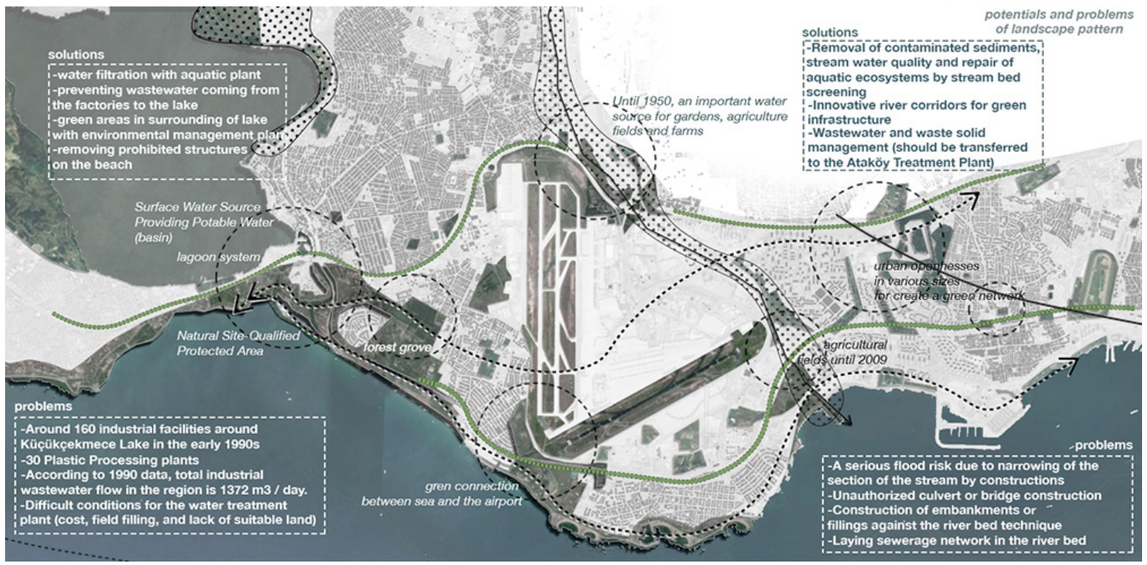
*"Diasporal Arcadia" was produced within the scope of Graduation Project carried out by Prof. Dr. Meltem Erdem Kaya, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Muhammed Ali Örnek, Assoc. Prof. Dr. Deniz Aslan, and Lecturer. Dr. Gökçer Okumuş and assisted by Res. Assist. Elif Serdar Yakut and Res. Assist. Nergis Aşar under the title "Pollinate " in the spring semester of 2019-2020.*



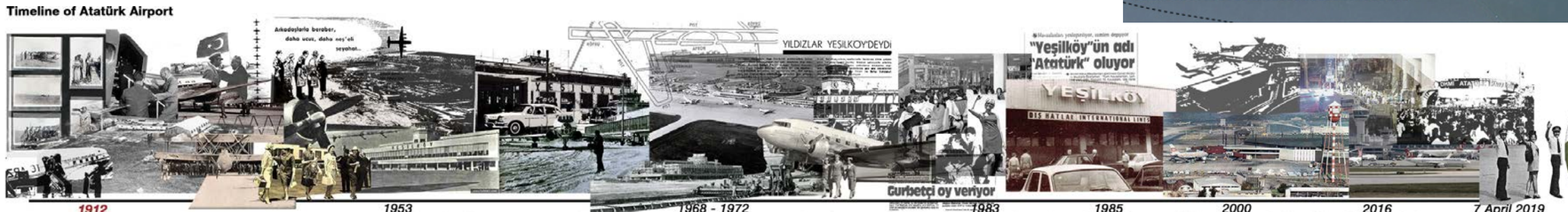

This project envisions landscape as a metaphor for an airport, aiming to redefine and sustain the sense of place, support cultural memory, establish a balance between local and regional dynamics, and integrate both globalization and localization through functional design. By transforming Atatürk Airport into a productive landscape, the project also creates opportunities for collective engagement among local communities. Atatürk Airport, built in 1912 in Istanbul, was a milestone in the city's technological development. Any new landscape proposal for this area must embrace innovation and act as a catalyst for future urban transformations. The concept of ecodistricts plays a central role in this vision, emphasizing sustainable development, social equity, and a reduced ecological footprint. This approach considers environmental challenges through a collaborative, systematic process, integrating both technological and social strategies to create a sustainable urban framework.




**Timeline of Atatürk Airport**




**1912** — Turkey's first airport was opened in Yeşilköy for military purposes.

**1953** — It was put into service on August 01,1953 under the name of Yeşilköy Airport.

**1968 - 1972** — A master plan was prepared in 1971 for the development of the airport. The construction of the 18/36 runway which is 45 m. wide and has 3 thousand m. length was completed.

**1983** — The International Terminal was put into operation on October 29, 1983.

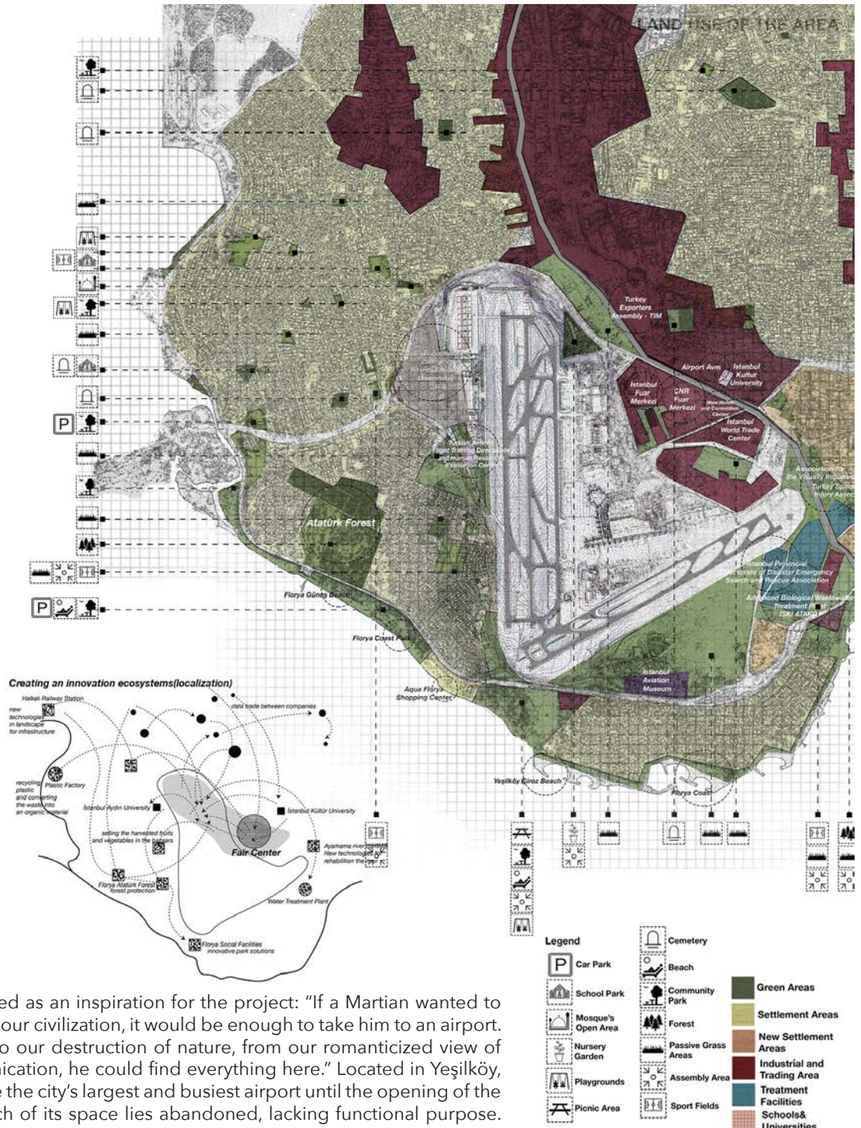
**1985** — the name of the airport has been changed and its name Istanbul Atatürk Airport became.

**2000** — TAV Airports who expanded the international terminal twice, increased its total terminal area to 286,770 square meters.

**2016** — With 1453 (An airplane landing or take-off every 59.46 seconds) broke the all-time record According to data from 2015, it is the world's 11th busiest airport.

**7 April 2019** — It has been closed to civil flights.

current — the project — future



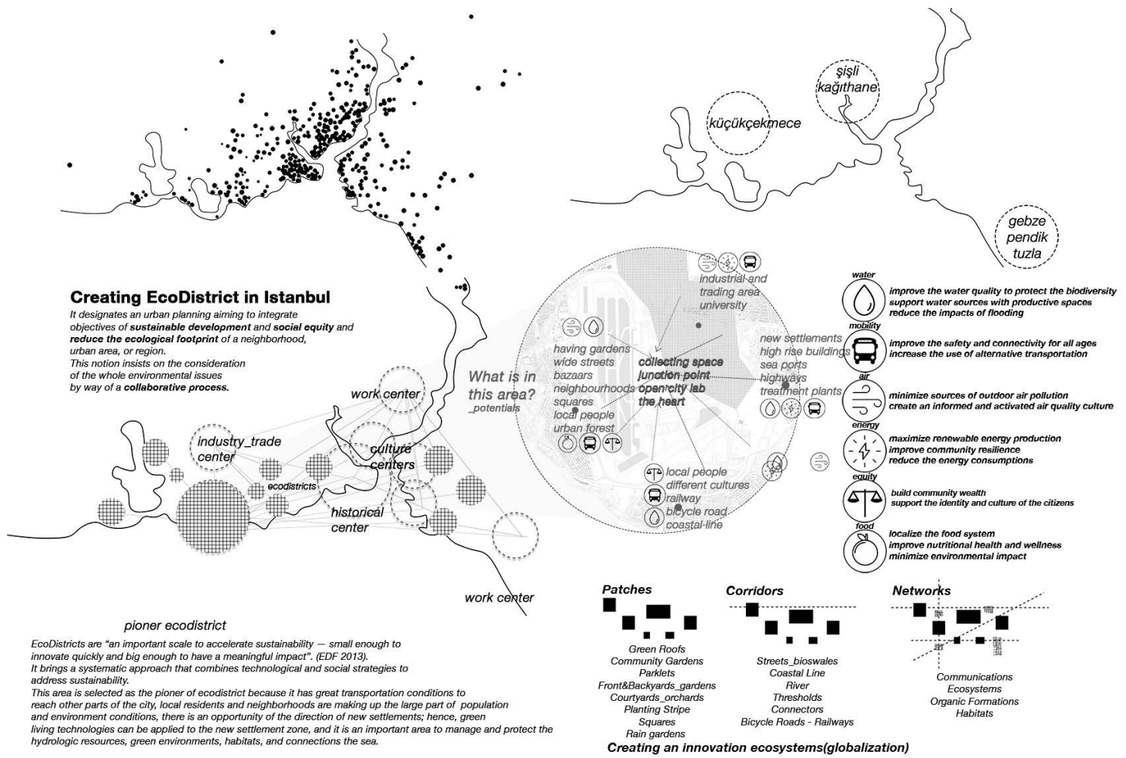

A quote by Alain de Botton served as an inspiration for the project: "If a Martian wanted to visit a single place to get to know our civilization, it would be enough to take him to an airport. From our loyalty to technology to our destruction of nature, from our romanticized view of travel to our patterns of communication, he could find everything here." Located in Yeşilköy, Istanbul, Atatürk Airport was once the city's largest and busiest airport until the opening of the new Istanbul Airport. Today, much of its space lies abandoned, lacking functional purpose. This project aims to reclaim the site as an urban landscape, recognizing that landscapes are inherently dynamic, flexible, and living systems. However, within the urban fabric, the airport acted as a catalyst for development, influencing the expansion of surrounding settlements. Before the airport was constructed, the area was primarily agricultural land. Over time, the airport's presence accelerated urbanization, leading to the replacement of farmland with housing and infrastructure.



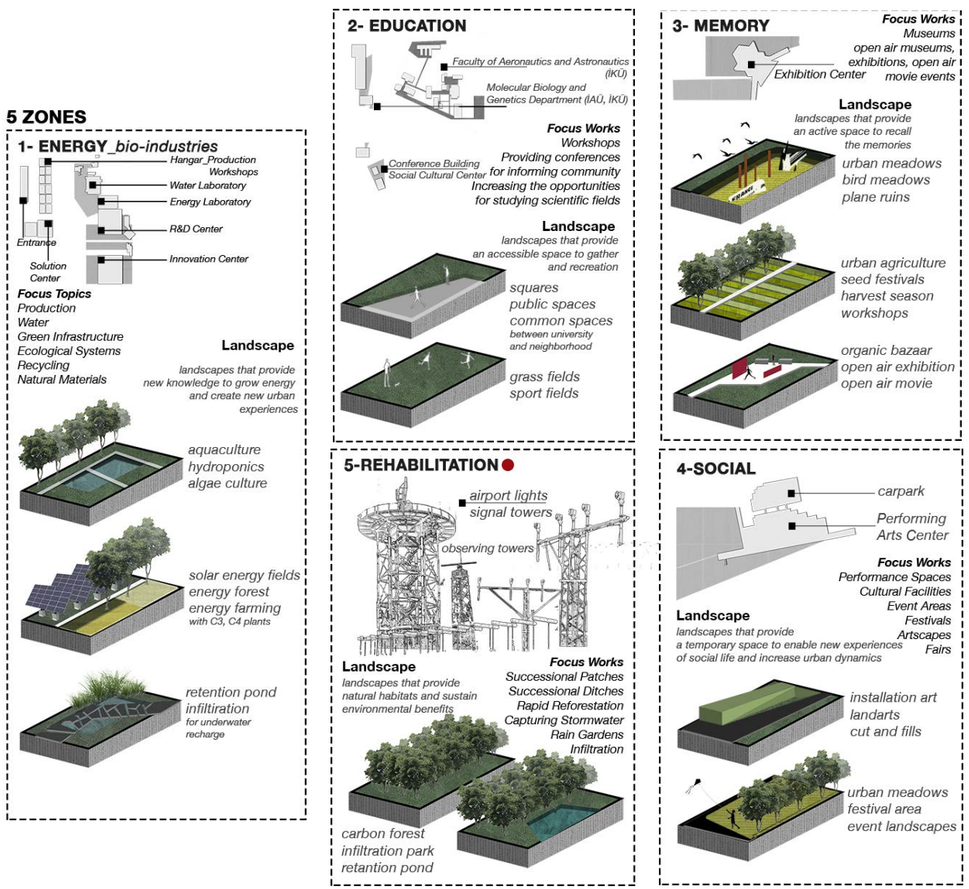
The airport, as a product of globalization and modernization, functioned as both a connector between local and global dynamics and a disruptor of natural systems. This transformation highlights the need for an ecodistrict strategy, which seeks to integrate sustainability into urban planning while restoring ecological balance. The site's strategic location and accessibility make it an ideal pioneer for Istanbul's ecodistrict movement. Key factors include: excellent transportation connections to the rest of the city, a diverse local population, providing a strong social fabric for engagement, opportunities for sustainable urban development, including green technologies, existing infrastructure that can be repurposed for education, research, and social activities.

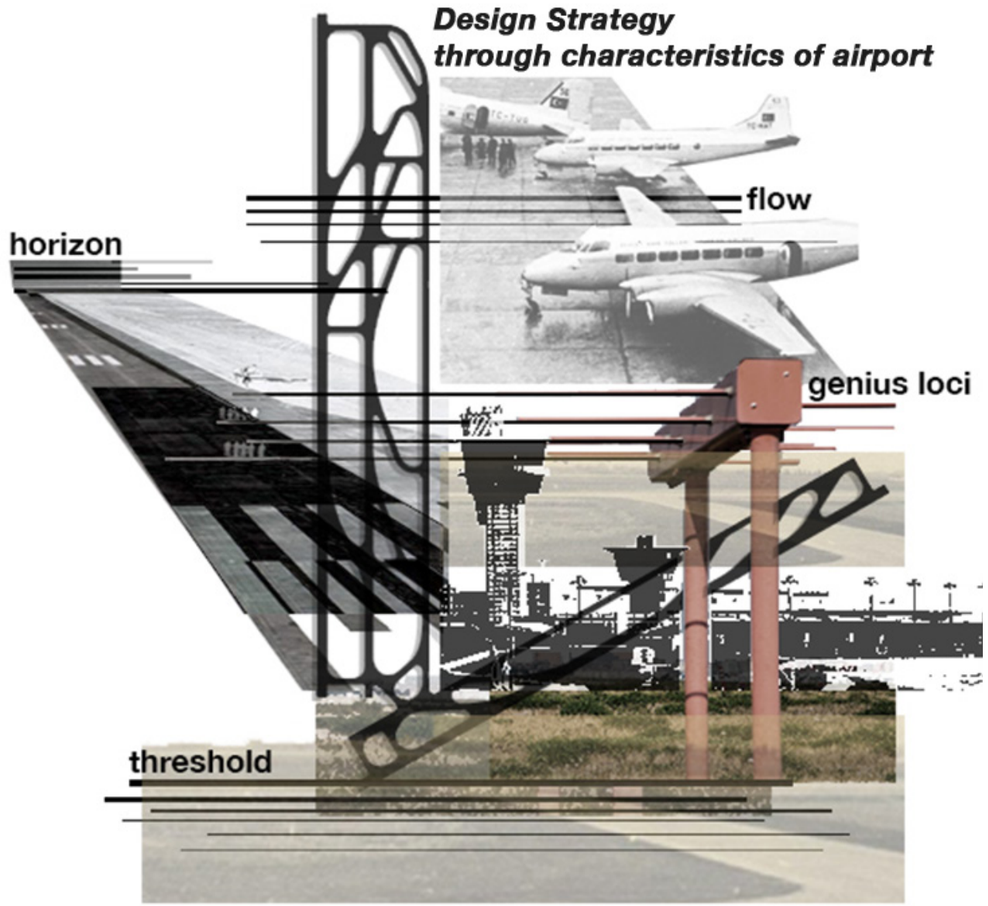
By leveraging these strengths, the project aims to transform the airport site into a model for sustainable urban regeneration. The reforestation strategy draws inspiration from the historical movement of settlements following the airport's construction. As the airport expanded, agricultural fields were absorbed, leading to a shift in land use. This movement is metaphorically translated into tree formations, where man-made tree clusters with sharp edges will be introduced across the site. These clusters will vary in size and species, fostering relationships through pollination. Additionally, ground ditches will be implemented as traces for seed planting, allowing for an observable process of ecological succession from the beginning.

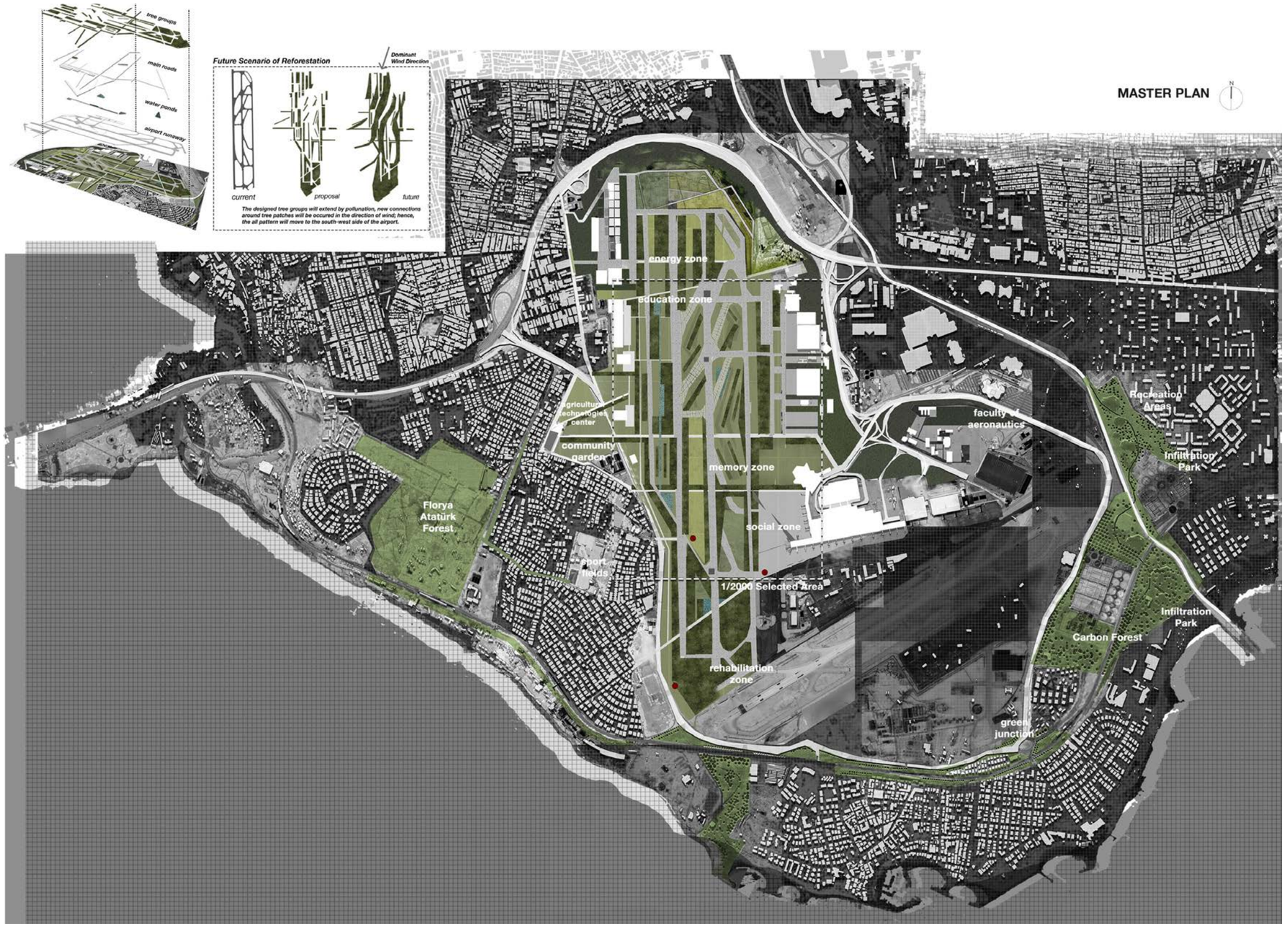


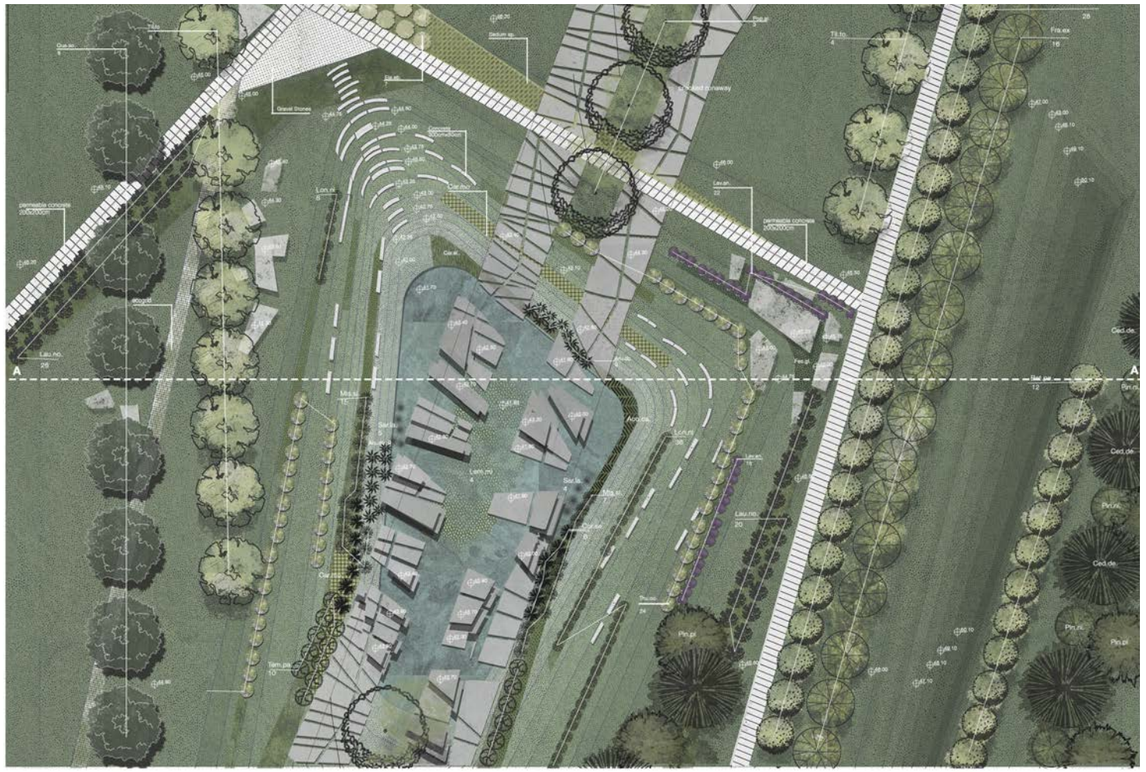


The project focuses on cultural, social, ecological, and economic connections, ensuring a holistic transformation of the site. As Istanbul's first ecodistrict, it seeks to raise awareness about the importance of preserving and sustaining natural and cultural resources in the 21st century. To achieve this, underutilized and passive spaces within the surrounding urban fabric will be converted into productive or recreational landscapes, utilizing innovative technologies and community-driven initiatives. The project particularly emphasizes collaboration between: students, elderly local residents, people from diverse cultural backgrounds, scientists and researchers, investors and engineers.




tree groups
main roads
water ponds
airport runaway
Future Scenario of Reforestation
Dominant Wind Direction
current
proposal
future
The designed tree groups will extend by pollunation, new connections around tree patches will be occured in the direction of wind; hence, the all pattern will move to the south-west side of the airport.
MASTER PLAN
N
energy zone
education zone
agriculture technologies center
community garden
memory zone
social zone
sport fields
1/2000 Selected Area
rehabilitation zone
Florya Atatürk Forest
faculty of aeronautics
Recreation Areas
Infiltration Park
Carbon Forest
Infiltration Park
green junction

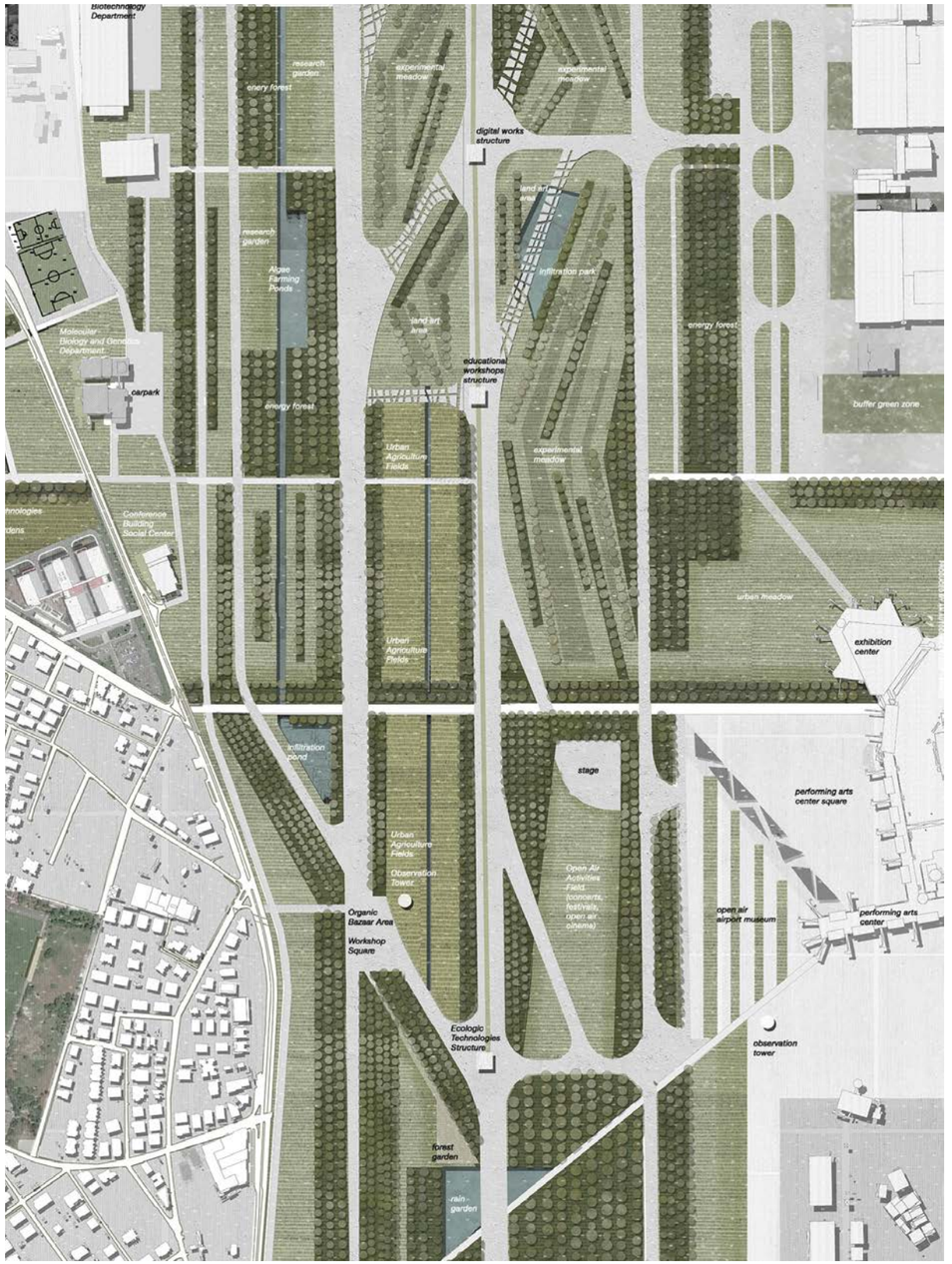


The design is structured around five key zones, each addressing different aspects of sustainability and urban function:

Energy Zone – Home to research centers and laboratories focused on renewable energy and sustainability.
Education Zone – Universities and open spaces dedicated to environmental education and knowledge-sharing.

Memory Zone – Includes urban agricultural fields, an open-air museum, and event spaces that highlight the history and cultural significance of the airport.
Social Zone – A vibrant hub for community gatherings, concerts, and exhibitions, fostering social interaction.
Rehabilitation Zone – The core reforestation area, where ecological restoration begins and evolves over time.

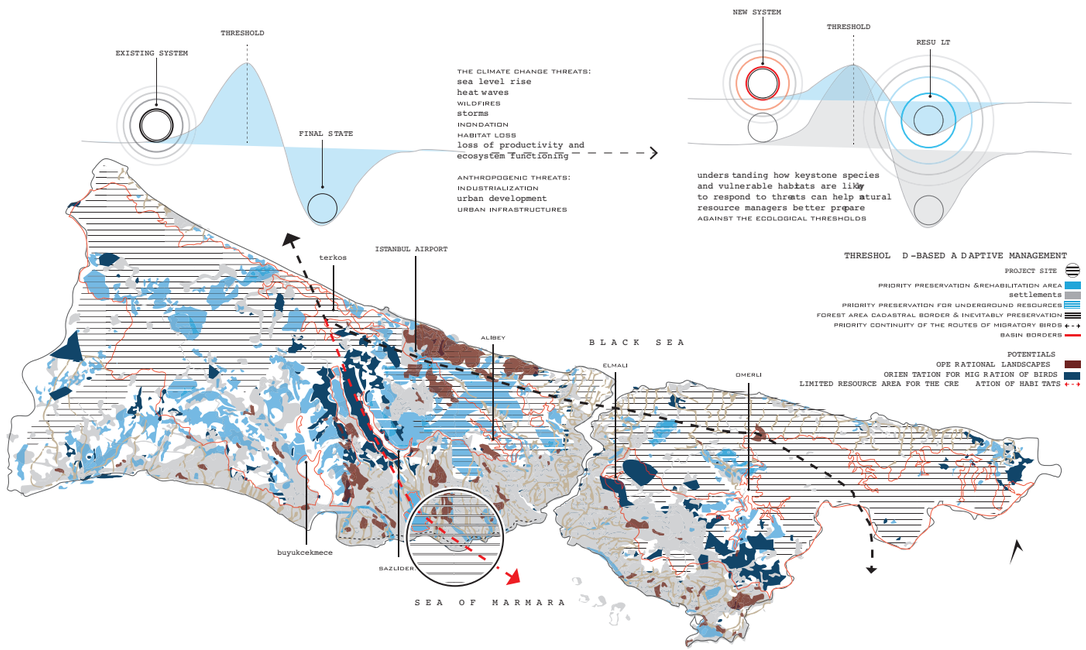
By transforming Atatürk Airport into an ecodistrict, the project not only reclaims abandoned urban land but also sets a precedent for sustainable urban development in Istanbul. Through a balance of cultural memory, ecological restoration, and social innovation, this vision redefines the airport as a dynamic, future-oriented landscape that fosters both local engagement and global connectivity.

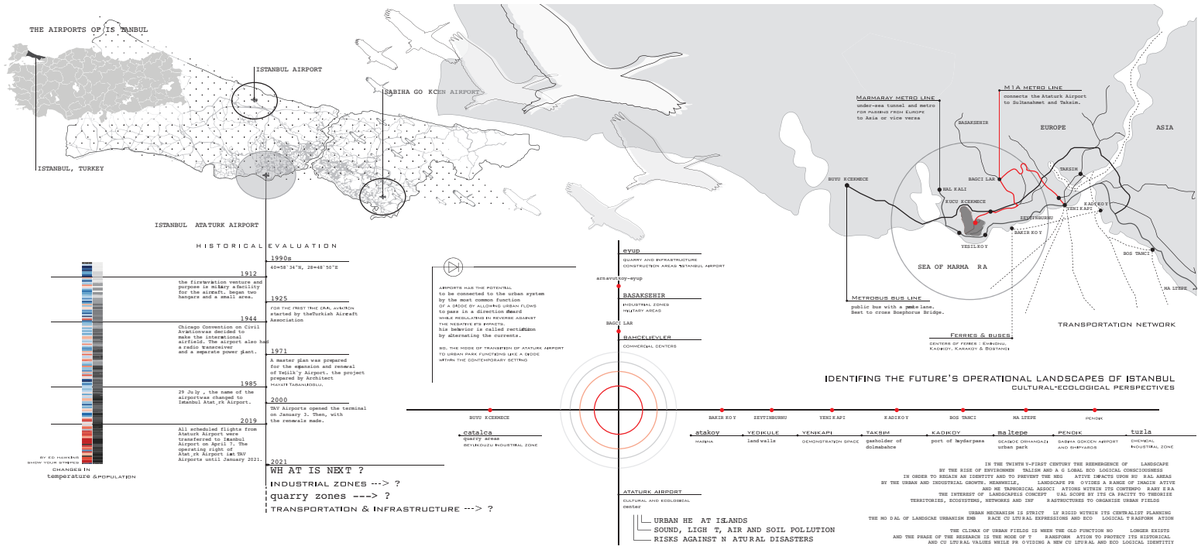


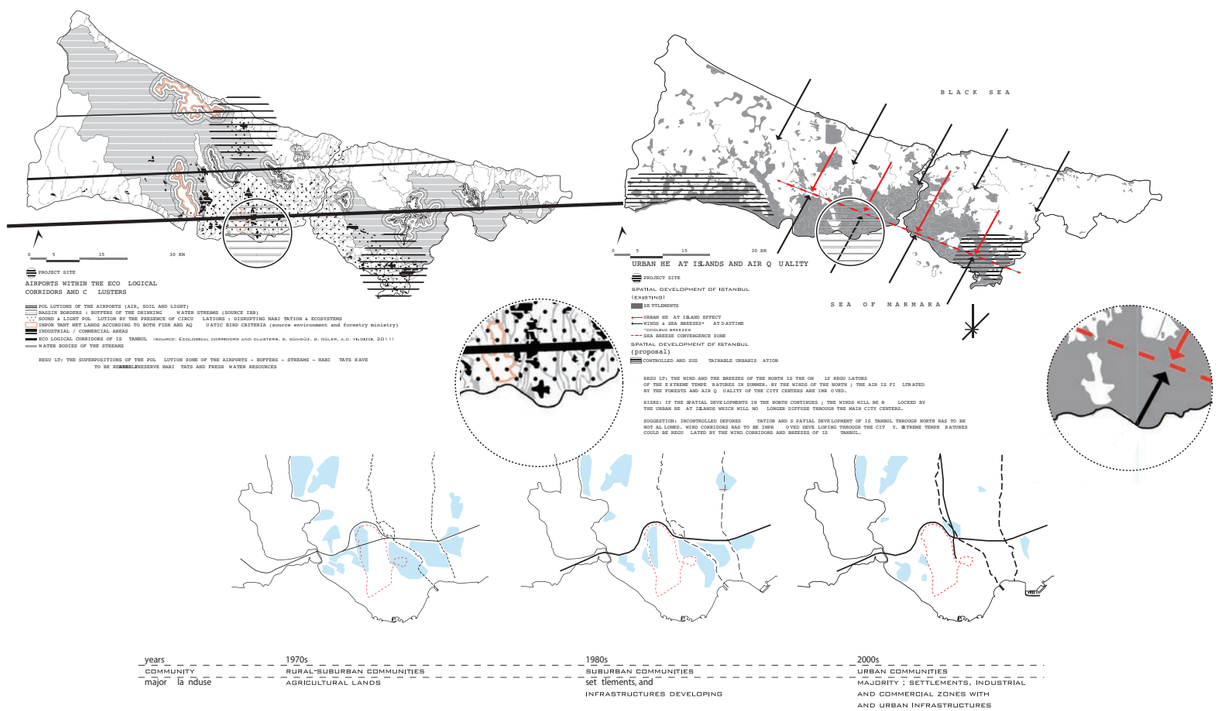
# Data Istanbul

Duygu Durmaz

*"Data Istanbul" was produced within the scope of Graduation Project carried out by Prof. Dr. Meltem Erdem Kaya, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Muhammed Ali Örnek, Assoc. Prof. Dr. Deniz Aslan, and Lecturer. Dr. Gökçer Okumuş and assisted by Res. Assist. Elif Serdar Yakut and Res. Assist. Nergis Aşar under the title "Pollinate " in the spring semester of 2019-2020.*



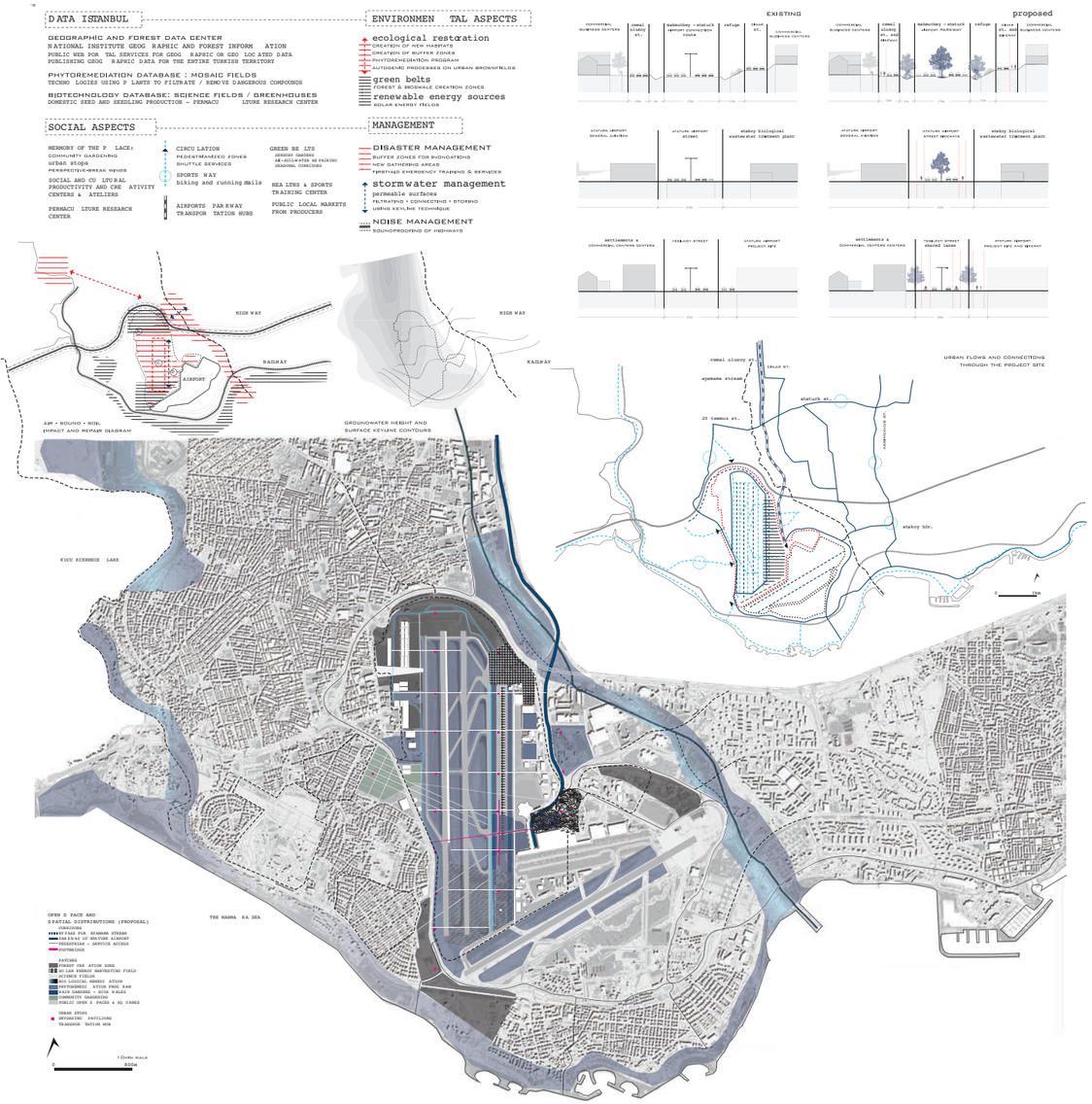

Operational landscapes serve as the keystone in shaping the transformation process of Data Istanbul, playing a crucial role in both landscape urbanization and the initiation of new ecological and cultural dynamics. By leveraging its potential as a catalyst for change, Data Istanbul fosters a new mode of transformation. At the core of this transformation is a virtual platform integrating geographical and forestry data, which enables the pollination of information on both national and international scales. This platform influences ecological and cultural shifts by facilitating data exchange, fostering innovation, and guiding sustainable urban development. The proposed urban landscape system is structured around three fundamental pillars:

Biotechnology – Integrating scientific advancements to enhance environmental resilience.

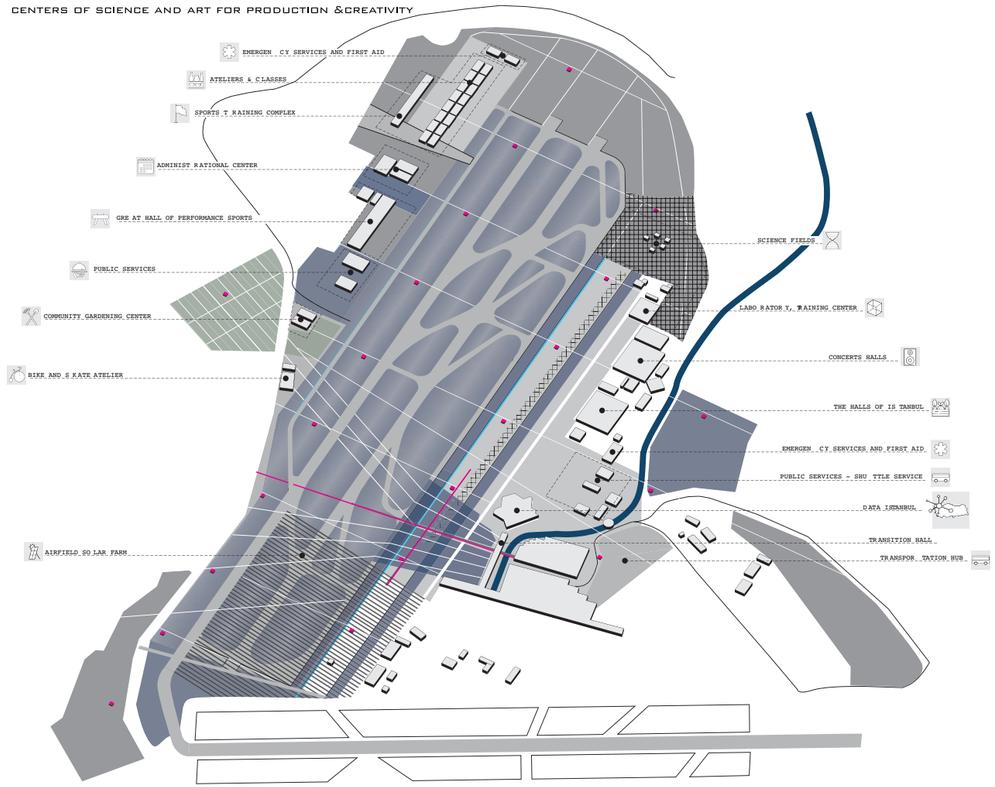
Permaculture Principles – Establishing self-sustaining, regenerative landscapes.

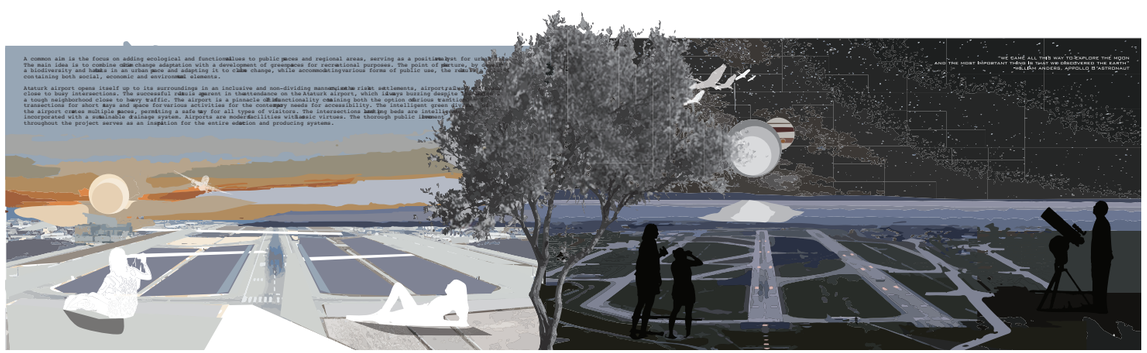
Phytoremediation Processes – Utilizing plants to detoxify and restore ecosystems.

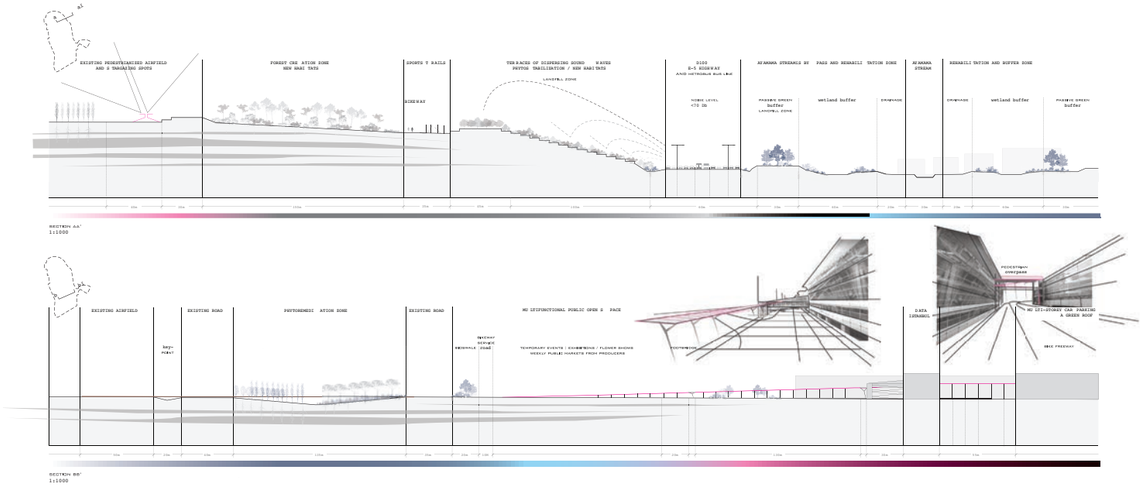
Data Istanbul promotes ecological restoration by prioritizing the accessibility of environmental data, allowing continuous adaptation and improvement within its ecological thresholds. By blending analytical thinking with an operational landscape approach, it seeks to establish a holistic and intellectual framework for transformation. This project envisions a metamorphosis process that emerges from the intersection of ecological and cultural landscapes, ensuring a sustainable, data-driven future for Istanbul.

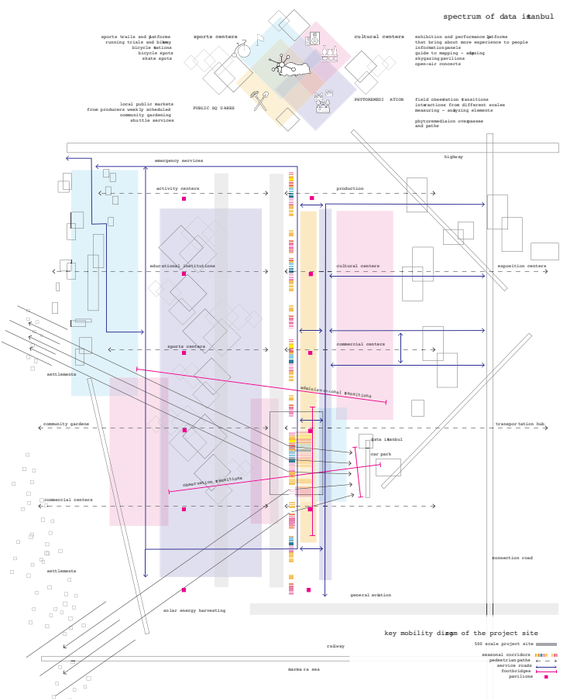

DATA ISTANBUL
GEOGRAPHIC AND FOREST DATA CENTER
NATIONAL INSTITUTE GEOG RAPHIC AND FOREST INFORM ATION
PUBLIC WEB POR TAL SERVICES FOR GEOG RAPHIC OR GEO LOC ATED DATA
PUBLISHING GEOG RAPHIC DATA FOR THE ENTIRE TURKISH TERRITORY
PHYTOREMEDIATION DATABASE : MOSAIC FIELDS
TECHNO LOGIES USING P LANTS TO FILTRATE / REMOVE DANGEROUS COMPOUNDS
BIOTECHNOLOGY DATABASE: SCIENCE FIELDS / GREENHOUSES
DOMESTIC SEED AND SEEDLING PRODUCTION – PERMACU LTURE RESEARCH CENTER
ENVIRONMEN TAL ASPECTS
ecological restoration
CREATION OF NEW HABITATS
CREATION OF BUFFER ZONES
PHYTOREMEDIATION PROGRAM
AUTOGENIC PROCESSES ON URBAN BROWNFIELDS
green belts
FOREST & BIOSWALE CREATION ZONES
renewable energy sources
SOLAR ENERGY FIELDS
SOCIAL ASPECTS
MEMORY OF THE P LACE:
COMMUNITY GARDENING
urban stops
PERSPECTIVE-BREAK WINDS
SOCIAL AND CU LTU RAL PRODUCTIVITY AND CRE ATIVITY CENTERS & ATELIERS
PERMACU LTURE RESEARCH CENTER
CIRCU LATION
PEDESTRIANIZED ZONES
SHUTTLE SERVICES
SPORTS WAY
biking and running trails
AIRPORTS PARKWAY
TRANSPOR TATION HUBS
GREEN BE LTS
SENSORY GARDENS
AB-SORB-WATER RE PAIRING SENSORIAL CORRIDORS
HEA LTHS & SPORTS TRAINING CENTER
PUBLIC LOCAL MARKETS FROM PRODUCERS
MANAGEMENT
DISASTER MANAGEMENT
BUFFER ZONES FOR INDIVIDUALS
NEW GATHERING AREAS
FIRST-AID EMERGENCY TRAINING & SERVICES
stormwater management
permeable surfaces
FILTRATING + CONNECTING + STORING
USING KEYLINE TECHNIQUE
NOISE MANAGEMENT
SOUNDPROOFING OF HIGHWAYS
EXISTING
proposed
HIGH WAY
RAILWAY
AIRPORT
AIR - SOUND - SOIL IMPACT AND REPAIR DIAGRAM
GROUNDWATER HEIGHT AND SURFACE KEYLINE CONTOURS
URBAN FLOWS AND CONNECTIONS THROUGH THE PROJECT SITE
KUCU KCEKMECE LAKE
THE MARMA RA SEA
OPEN S PACE AND SPATIAL DISTRIBUTIONS (PROPOSAL)
CONNECTIONS
THE EYAY OF ATATURK AIRPORT
PEDESTRIAN - SERVICE ACCESS
PATCHES
SCIENCE FIELDS
PUBLIC SERVICES
COMMUNITY GARDENING
URBAN STORE
RECREATING PAVILLONS
TRANSPOR TATION HUB

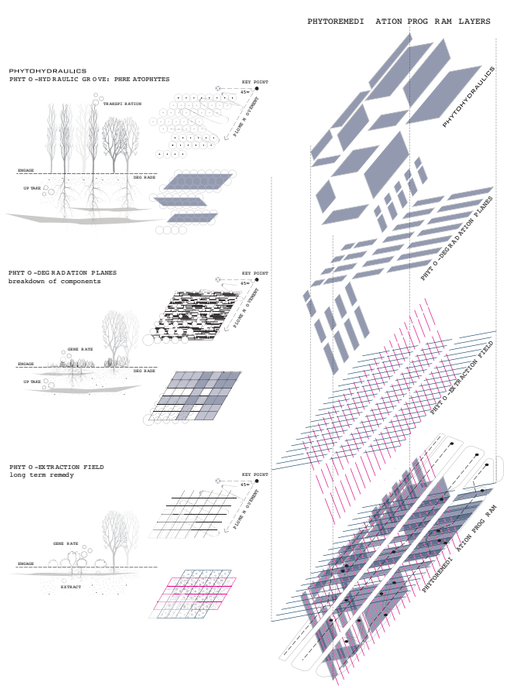


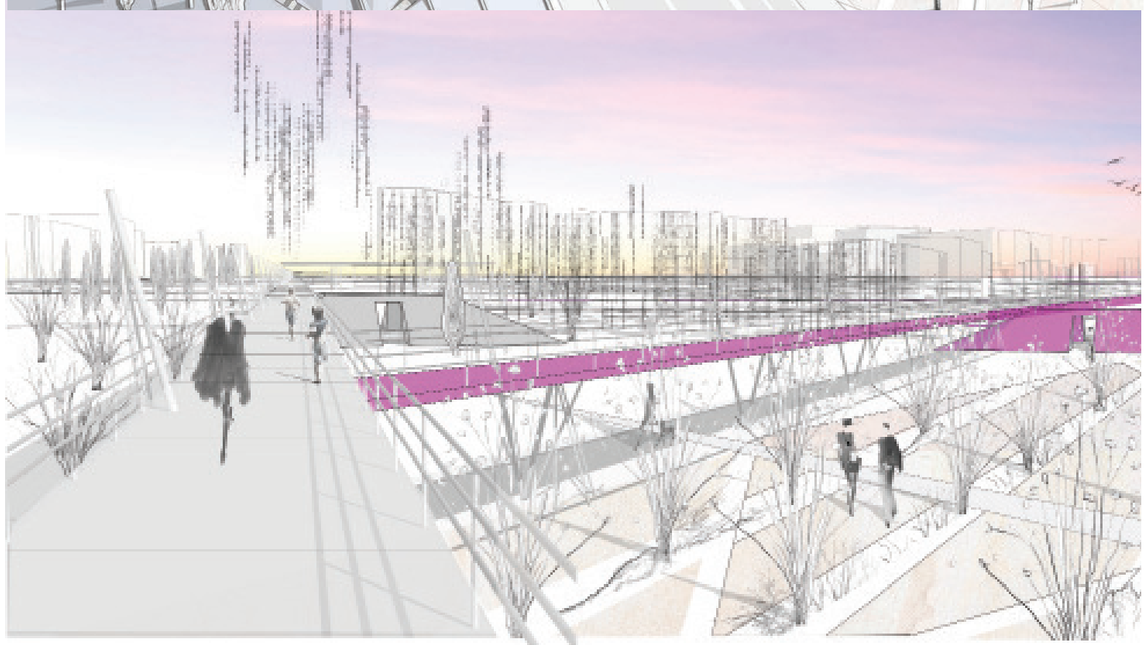

KEY PROG RAM OF THE PROJECT SITE
CENTERS OF SCIENCE AND ART FOR PRODUCTION &CREATIVITY
EMERGEN CY SERVICES AND FIRST AID
ATELIERS & CLASSES
SPORTS T RAINING COMPLEX
ADMINIST RATIONAL CENTER
GRE AT HALL OF PERFORMANCE SPORTS
PUBLIC SERVICES
COMMUNITY GARDENING CENTER
BIKE AND S KATE ATELIER
AIRFIELD SO LAR FARM
SCIENCE FIELDS
LABO RATOR Y, TRAINING CENTER
CONCERTS HALLS
THE HALLS OF IS TANBUL
EMERGEN CY SERVICES AND FIRST AID
PUBLIC SERVICES - SHU TTLE SERVICE
DATA ISTANBUL
TRANSITION HALL
TRANSPOR TATION HUB


A common aim is the focus on adding ecological and functionalities to public spaces and regional areas, serving as a positive impact for urban
The main idea is to combine climate change adaptation with a development of greenspaces for recreational purposes. The point of departure, by creating
a biodiversity and habitats in an urban space and adapting it to climate change, while accommodating various forms of public use, the result is a
containing both social, economic and environmental elements.
Ataturk airport opens itself up to its surroundings in an inclusive and non-dividing manner, as the right settlements, airportrelated
close to busy intersections. The successful climate quarter is characterized by the Ataturk airport, which always burning despite
a tough neighborhood close to heavy traffic. The airport is a pinnacle of functionality containing both the option of various washing
transections for short stays and space for various activities for the contemporary needs for accessibility. The intelligent green
the airport comes multiple paces, permitting a safe way for all types of visitors. The intersections and pedestrians beds are intelligent
connected with each other, creating a safe and attractive network for visitors. The thorough public
throughout the project serves as an inspiration for the entire economic and producing systems.
THE GAME ALL THIS WAY TO EXPLORE THE MOON
AND THE VERY EXPERIMENT THROW IN. WAIT MY OBSERVATIONS THE EARTH'
HARLEY WOODS, APOLLO 15 ASTRONAUT


SECTION AA'
1:10000
EXISTING AIRFIELD
EXISTING ROAD
PHYTOREMEDI ATION ZONE
EXISTING ROAD
MU LTIFUNCTIONAL PUBLIC OPEN S PACE
key-point
SECTION BB'
1:10000


spectrum of data i anbul
sports centers
cultural centers
PUBLIC SQ UARE
PHYTOREMEDI ATION
highway
emergency services
activity centers
production
cultural centers
exposition centers
commercial centers
sports centers
community gardens
transportation hub
data i anbul
car park
commercial centers
settlements
connection road
general aviation
solar energy harvesting
railway
Marmara sea
key mobility diagram of the project site
500 scale project site
seasonal corridors
pedestrian paths
electric roads
footbridges
ferrylines

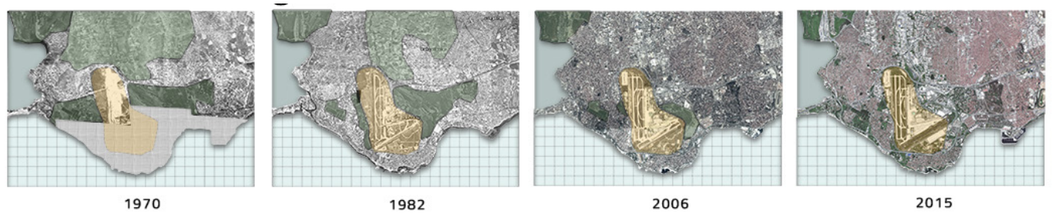

PHYTOHYDRAULICS
PHYTO-HYDRAULIC GROVE: PHREATOPHYTES
KEY POINT
TRANSPI RATION
ENGAGE
GENE RATE
UP TAKE
PHYTO-DEGRADATION PLANES
breakdown of components
PHYTO-EXTRACTION FIELD
long term remedy
EXTRACT
PHYTOREMEDI ATION PROG RAM LAYERS

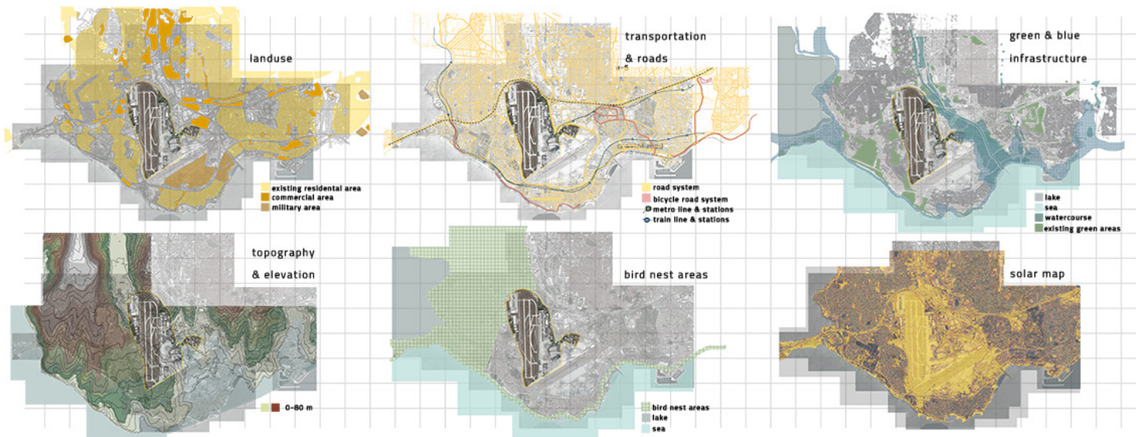


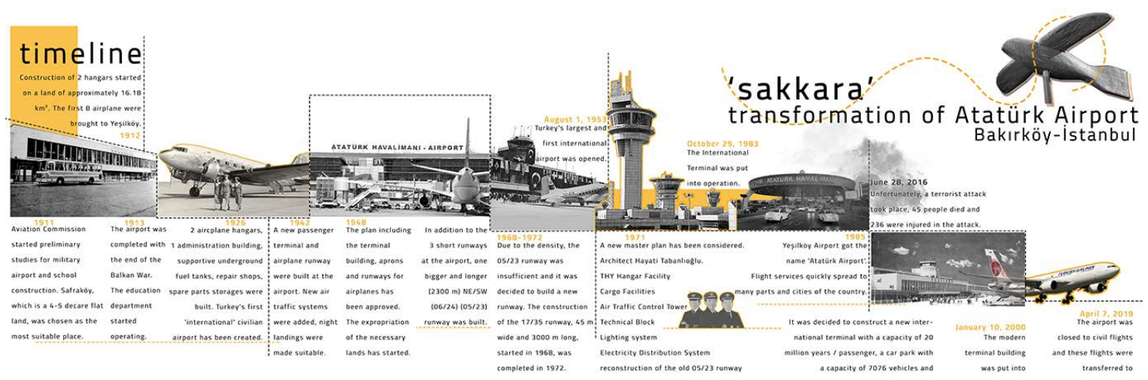
# ‘sakkara’

Edanur Utkan

*“sakkara” was produced within the scope of Graduation Project carried out by Prof. Dr. Meltem Erdem Kaya, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Muhammed Ali Örnek, Assoc. Prof. Dr. Deniz Aslan, and Lecturer. Dr. Gökçer Okumuş and assisted by Res. Assist. Elif Serdar Yakut and Res. Assist. Nergis Aşar under the title “Pollinate ” in the spring semester of 2019-2020.*




The main design decisions in the project were driven by the ‘wind’ factor, which is intricately linked to both the pollination concept and the airport design. To enhance pollination and movement within the area, various birds and pollinating animals were incorporated into the design. Additionally, the growing bird population in the region will continue to mimic flight patterns, referencing the planes, thereby preserving the memory of the area’s historical connection to aviation. Every year, hundreds of birds migrate through Turkey, making it a key habitat for short rest periods during migration. In response, an ecological, sociocultural, and economic design idea was developed on an urban scale, proposing a holistic cycling route that passes through bird watching points across Istanbul, integrating the area into this larger system. In addition, the project aims to serve ecotourism by creating an open, accessible space for people of all ages and backgrounds. Furthermore, the goal is to foster ecological diversity by enhancing pollination, supported by the activity of animals such as birds, bees, wasps, and butterflies.

Atatürk Airport, located in the Bakırköy district, plays a critical role in bringing a new urban park to Istanbul due to its significant land area, location, and scale. Therefore, the design decisions for the project were shaped by comprehensive analyses conducted on the scale of Istanbul. Embracing the principles of landscape urbanism, the design aims to create a holistic space that contributes ecologically, socioculturally, and economically to the city, while preserving dynamic, functional, and national memory.

The site is divided into three distinct zones: core, buffer, and transition. The Core zone focuses on pollination and bird habitats, featuring a wide variety of plants that remain active throughout the year, wetlands formed using the existing canal infrastructure, shelters for birds, open spaces for people, and fruit trees. The Buffer zone encircles the Core and includes a grove system. Four entrances provide access to the park, with circulation routes designed for vehicles, bicycles, and pedestrians, organized into primary, secondary, and tertiary road systems. Additionally, the design incorporates several functional and recreational features, including edible gardens, orchards, a farmer's market, greenhouses, activity hills for interactive installations, open-air exhibition spaces, performance areas, viewing terraces, recreational zones, seating areas, entrances, meeting spaces, sport facilities, event meadows, theme gardens, and energy production zones.

## birds & plane crashes

"An airport alone has a regional impact on bird populations. It is frightening that storks that have to descend on the roofs of the houses cannot find any mixed land to be put in Istanbul, and have to migrate hundreds of kilometers of hungry without food. Otherwise, plane collisions will harm a few individuals, so be sure that many birds are killed by the collisions on the highways. Birds cannot escape from vehicles traveling faster than 80 kilometers; however, hunger and constant fatigue collapse the whole population."
ornithologist Assoc. Dr. Zeynel Arslangundogdu

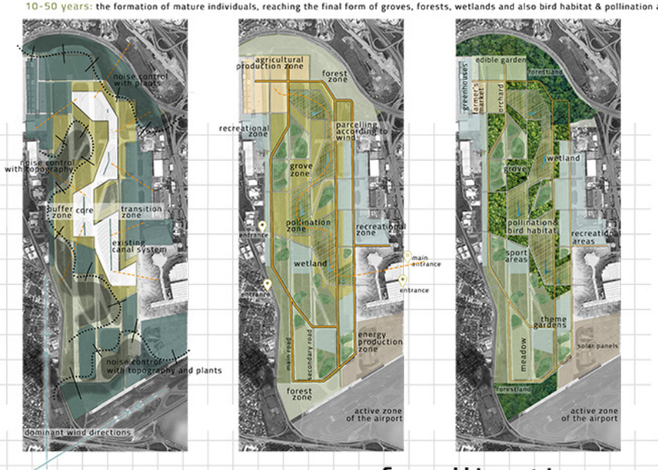
Bird migration routes cannot be changed!
Experienced birds know these routes that have been formed in tens of thousands of years and protect the flock.

Compared to Yeşilköy, at least 4 times more birds pass through the region where the 3rd Airport will be built and the risk of accidents is much higher. According to the risk modeling of Arslangündoğdu based on data such as the size of the airport, the number of flights and the amount of birds to pass through the airspace, there is a probability that there will be at least 2-3 accidents caused by birds every year.

## process

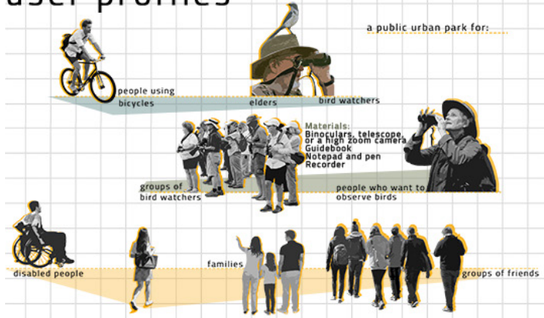
The transformation of existing contaminated hard floors into a green texture in the project area has been designed with the succession method at certain time intervals according to this:

1-5 years: formation of new zones by transporting herbaceous plants and seeds through pollinators
5-10 years: involving shrubs and young trees
10-50 years: the formation of mature individuals, reaching the final form of groves, forests, wetlands and also bird habitat & pollination area

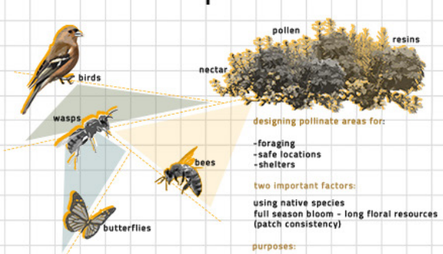



## user profiles

a public urban park for:




## users of pollination




designing pollinate areas for:

-foraging
-safe locations
-shelters

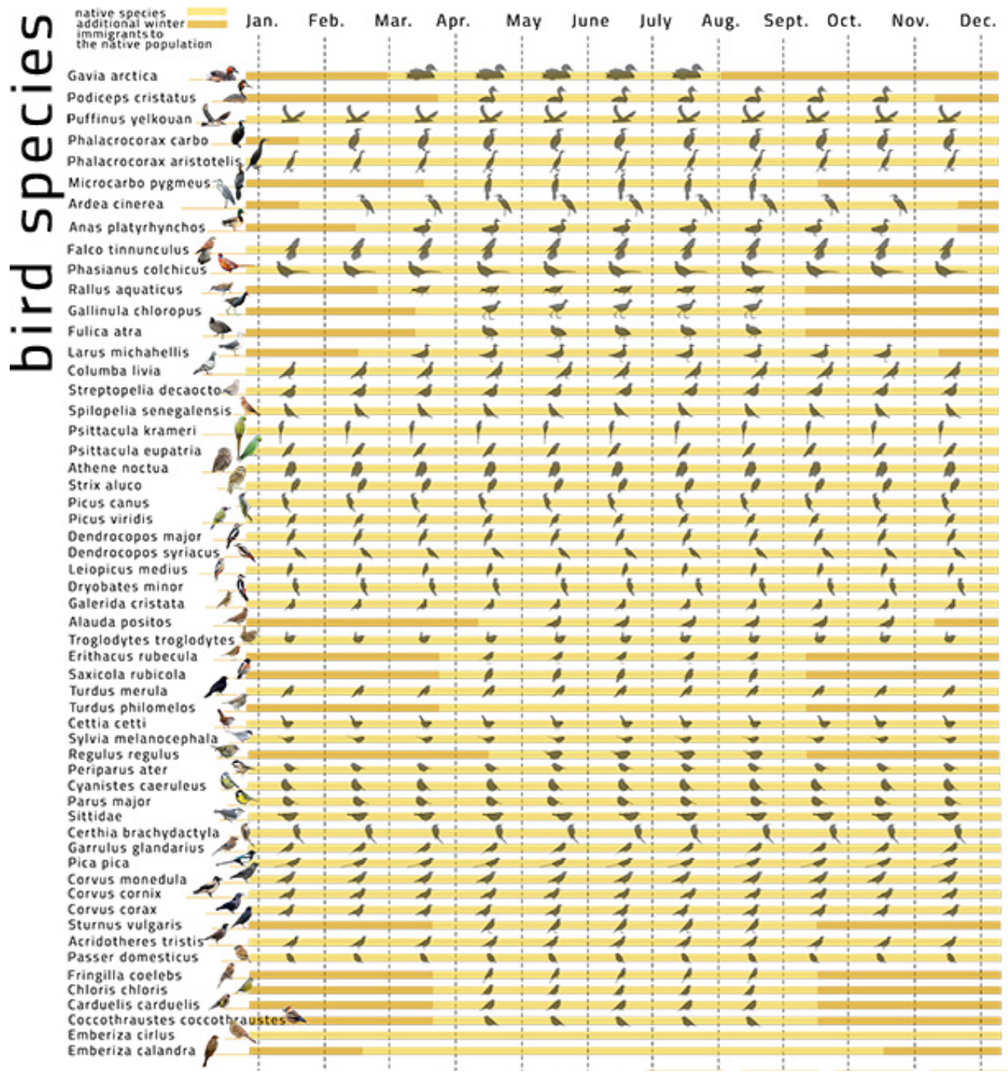
two important factors:

using native species
full season bloom – long floral resources (patch consistency)

purposes:

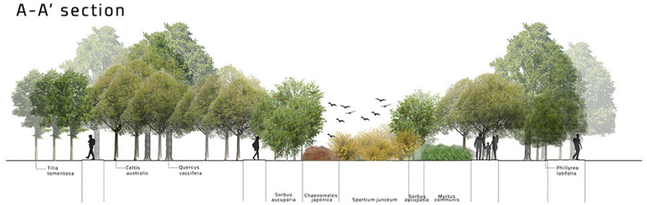
biological diverse species of pollinators

## bird species



Küçükçekmece
Lake
Ayamama watercourse
& riperian proppsal
Atatürk Airport
project area
bird habitat
&pollination
zone
Florya
Atatürk Forest
Marmara Sea
active zone of the
airport area
military area
legend
1 bird habitat and polination zone
2 edible garden
3 greenhouses
4 groves
5 farmer's market
6 sport field + playground
7 orchard
8 forestland
9 recreational zones
10 meadow
11 theme garden
12 education building (workshops-academy)
13 cultural center - library
14 science center
15 bird observation & research center
16 parking garage
17 aviation museum
18 rain garden
19 main entrance
20 main road (shuttle+bicycle+walking)
21 solar panels - energy produc

## A-A' section




## B-B' section

## C-C' section

## planting legend

**Evergreen Trees**

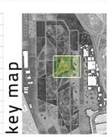
| Symbol | Abbreviation | Name | Height | Width | Trunk diameter | Trunk height | Unit | Quantity | Note |
|---|---|---|---|---|---|---|---|---|---|
| | QUECO | Quercus coccifera | 10 m | 8 m | 35-40 cm | 1 m | piece | 88 | Planting will be done according to the plans in the project. |
| | PHYLA | Phillyrea latifolia | 10 m | 5-6 m | 25-30 cm | 1-2 m | piece | 141 | Planting will be done according to the plans in the project. |
| | LAUOF | Laurocerasus officinalis | 7-8 m | 4-5 m | 30-35 cm | 1-2 m | piece | 20 | Planting will be done according to the plans in the project. |

**Dedicous Trees**

| Symbol | Abbreviation | Name | Height | Width | Trunk diameter | Trunk height | Unit | Quantity | Note |
|---|---|---|---|---|---|---|---|---|---|
| | CELAU | Celtis australis | 10 m | 9-10 m | 25-30 cm | 3,5 m | piece | 129 | Planting will be done according to the plans in the project. |
| | AESHI | Aesculus hippocastanum | 20 m | 12 m | 50-100 cm | 4 m | piece | 18 | Planting will be done according to the plans in the project. |
| | TILTO | Tilia tomentosa | 25 m | 8-10 m | 50-100 cm | 1 m | piece | 64 | Planting will be done according to the plans in the project. |
| | CORMA | Cornus mas | 5-6 m | 3 m | 18-20 cm | 1 m | piece | 67 | Planting will be done according to the plans in the project. |
| | SORAU | Sorbus aucuparia | 6-8 m | 1-2 m | 14-16 cm | 1 m | piece | 63 | Planting will be done according to the plans in the project. |
| | MALFL | Malus floribunda | 4-5 m | 2-3 m | 15-20 cm | 1 m | piece | 24 | Planting will be done according to the plans in the project. |
| | PERVU | Persica vulgaris | 5-6 m | 3 m | 16-20 cm | 0.5 m | piece | 30 | Planting will be done according to the plans in the project. |
| | PRUDO | Prunus domestica | 10-15 m | 4-5 m | 15-20 cm | 1-2 m | piece | 16 | Planting will be done according to the plans in the project. |

**Shrubs**

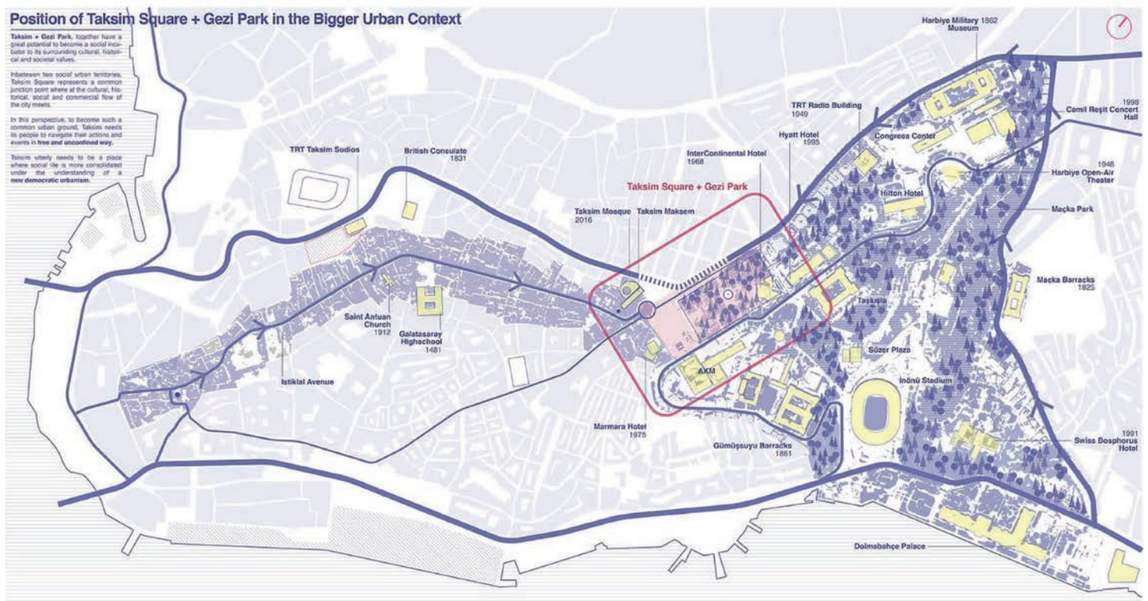
| Symbol | Abbreviation | Name | Height | Width | Unit | Quantity | Note |
|---|---|---|---|---|---|---|---|
| | POL | Polygonum sp. | 0.3 m | 2-4 m | piece | 9 | Planting will be done according to the plans in the project. |
| | VAL | Vallisneria | 0.5 m | 3 m | piece | 13 | Planting will be done according to the plans in the project. |
| | FORIN | Forsythia x intermedia | 2 m | 2-3 m | piece | 32 | Planting will be done according to the plans in the project. |
| | SYRVU | Syringa vulgaris L. | 3 m | 2-3 m | piece | 52 | Planting will be done according to the plans in the project. |
| | CHAJA | Chaenomeles japonica | 1 m | 2 m | piece | 32 | Planting will be done according to the plans in the project. |
| | SPAJU | Spartium junceum | 1.5 m | 2 m | piece | 49 | Planting will be done according to the plans in the project. |
| | BERTH | Berberis thunbergii | 1.5-2 m | 1 m | piece | 39 | Planting will be done according to the plans in the project. |
| | MRYCO | Myrtus communis | 2-3 m | 1-2 m | piece | 61 | Planting will be done according to the plans in the project. |
| | VINMA | Vinca major&Vinca minor | 0.3 m | 2-4 m | piece | 47 | Planting will be done according to the plans in the project. |
| | AJURE | Ajuga reptans | 0.2 m | 1.5 m | piece | 36 | Planting will be done according to the plans in the project. |



# Taksim Encounters

Mehmet Bulut

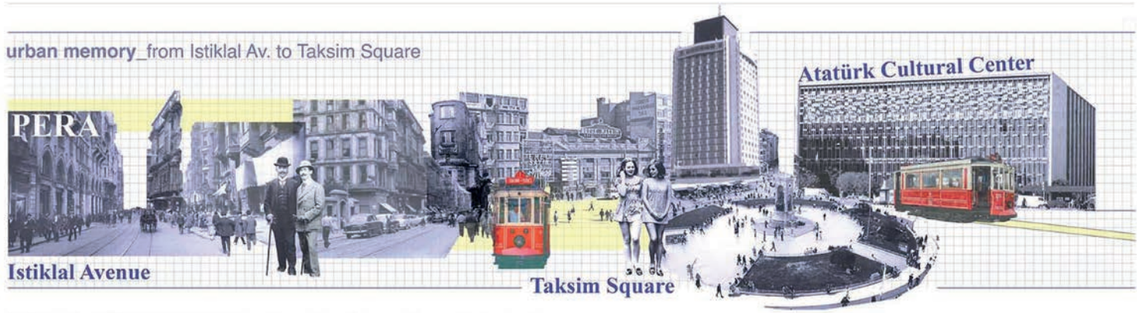
*"Taksim Encounters" was produced within the scope of Graduation Project carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. Gülşen Aytaç, Assist.Prof. Dr. Melih Bozkurt, Assoc. Prof. Dr. Olgu Çalışkan, M.Sc. Arzu Kutkam, M.Sc. Zuhal Kol, and Carlos Zarco Sanz, and assisted by Res. Assist. Nergis Aşar and Res. Assist. Gizem Aluçlu under the title "Landscape Democracy: Taksim" in the fall semester of 2020-2021.*

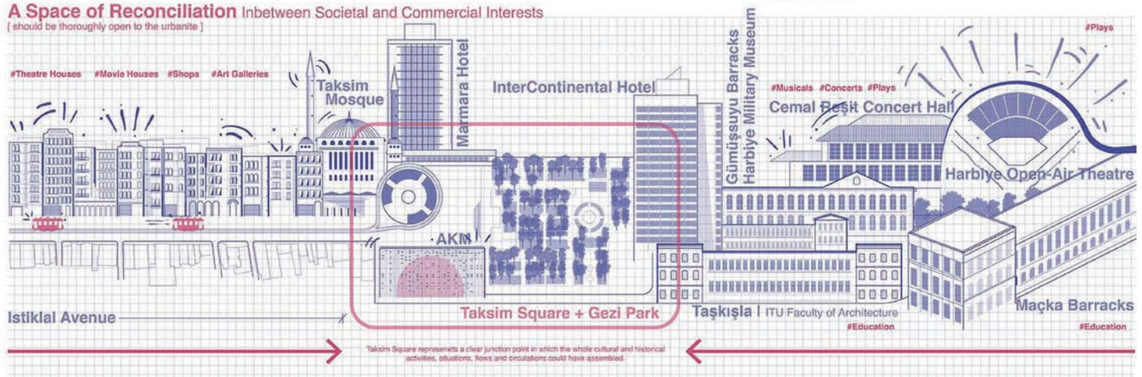


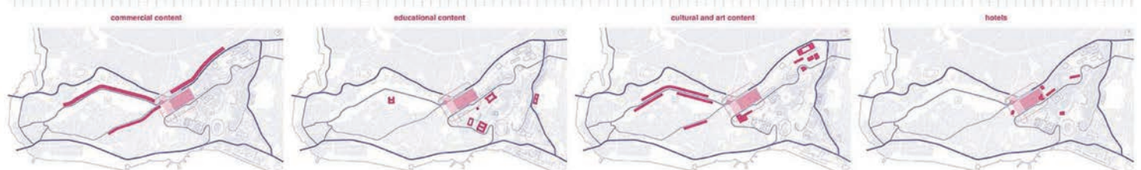

Taksim Encounters, guided by a process-based design philosophy, challenges the conventional boundaries of landscape design by exploring a new approach to open publicity in an urban environment like Taksim. The project aims to integrate both intangible and tangible design interventions, seeking to blend digital and physical elements within urban space to foster a more cohesive and public use of the area. This integration creates an engaging, democratic framework that strengthens the historical and socio-cultural context of Taksim Square, Gezi Park, and the surrounding area as a whole.

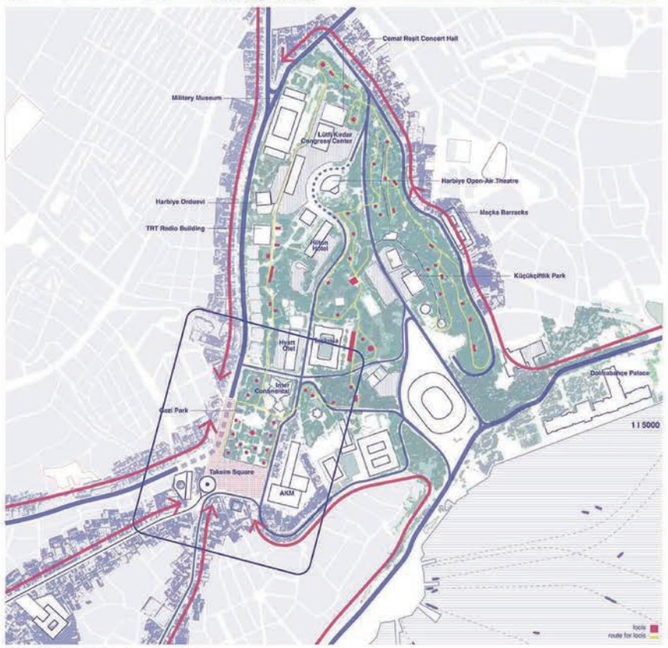
Moreover, the overlapping layers of this landscape design approach connect the ecological, physical, and contextual components of the space. By incorporating interrelated urban elements such as Cumhuriyet Street, Gezi Park, Taksim Municipal Garden, Republic Square, Maksem, the Underground Level, and the Atatürk Cultural Center, the project treats these areas as integral parts of the entire urban environment. These elements are unified under the concept of urban democracy, coupled with an open-use design approach—Loci—to broaden the conceptual scope of the urban design and landscape system.







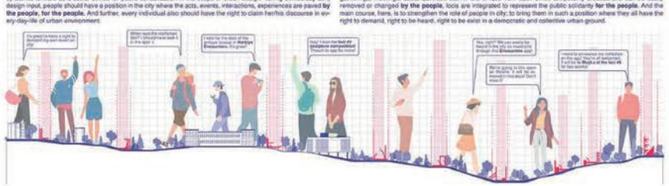

**democracy**_as a **social device** for an engaging urban life

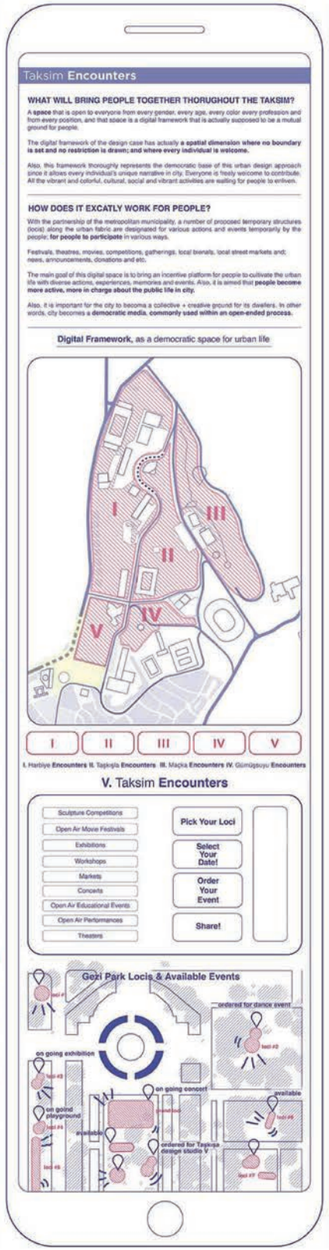
*"Democracy is based on the freely-expressed will of the people to determine their own political, economic, social and cultural systems and their full participation in all aspects of their lives."* the Vienna Declaration on Human Rights states. As the concept of democracy addresses, the **right of equal self determination** of peoples, and respect for individual **collective human rights** and fundamental freedoms are the essential basis when it comes to the urban rights and public consensus. And, in this sense, **democracy is the best safeguard of freedom of expression, tolerance of all groups of society, and equality of opportunity for each person.**

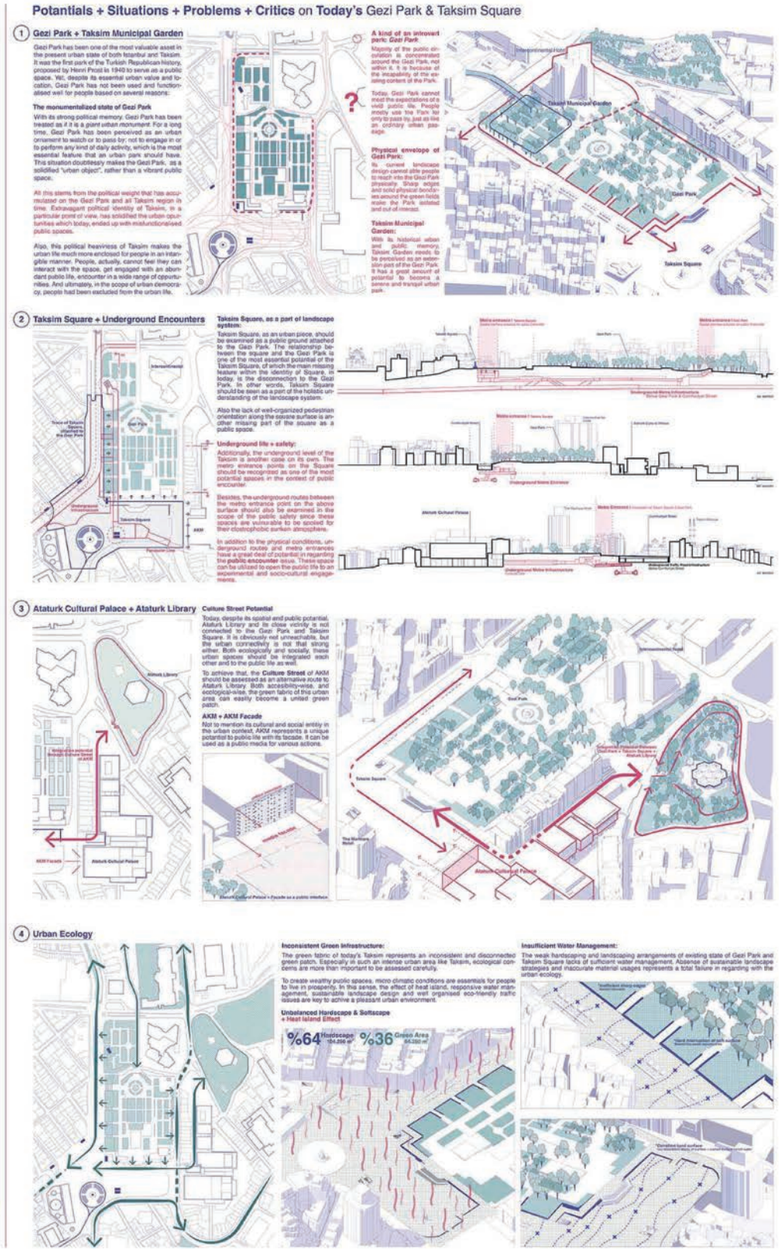
With respect to this, democratical urban approaches should be integrated to the public life where every individual has its own narrative, and, as the concept of democracy implies, where **every individual voice matters**. Here, democracy stands forward as a social device for public consolidation in the scope of urban design. Taking democracy as a design input, people should have a position in the city where the acts, events, interactions, experiences are paved **by the people, for the people.** And further, every individual also should have the right to claim her/his discourse in every-day-life of urban environment.

Regarding with these urban approaches, in this particular design case, Taksim has been taken into consideration as one the five important parts of a bigger whole which is weaved with an intense social, cultural and historical values. And the people of this region represent a great intense diversity composing of students, academicians, artists, musicians, directors, performers, art lovers, craftsmens, trademens; and every and each one of the has a unique discourse and demand in public life. And accordingly, the urban fabric is also weaved through this diversity: art galleries, movie houses, theater houses, studios, ateliers, museums, concert halls, historical places etc.

For this diversity to come to life, an incentive urban design system is proposed where the people arrange their unique acts along the region. With a number of locis* and a following rawls, people are eonvolenti to organise their events, gatherings, meetings, social activities etc. All are unique from each other, temporarily aroused and can be easily removed or changed **by the people**. locis are integrated to represent the public solidarity **for the people.** And the main course, here, is to strengthen the role of people in city; to bring them in such a position where they all have the right to demand, right to be heard, right to be exist in a democratic and collective urban ground.





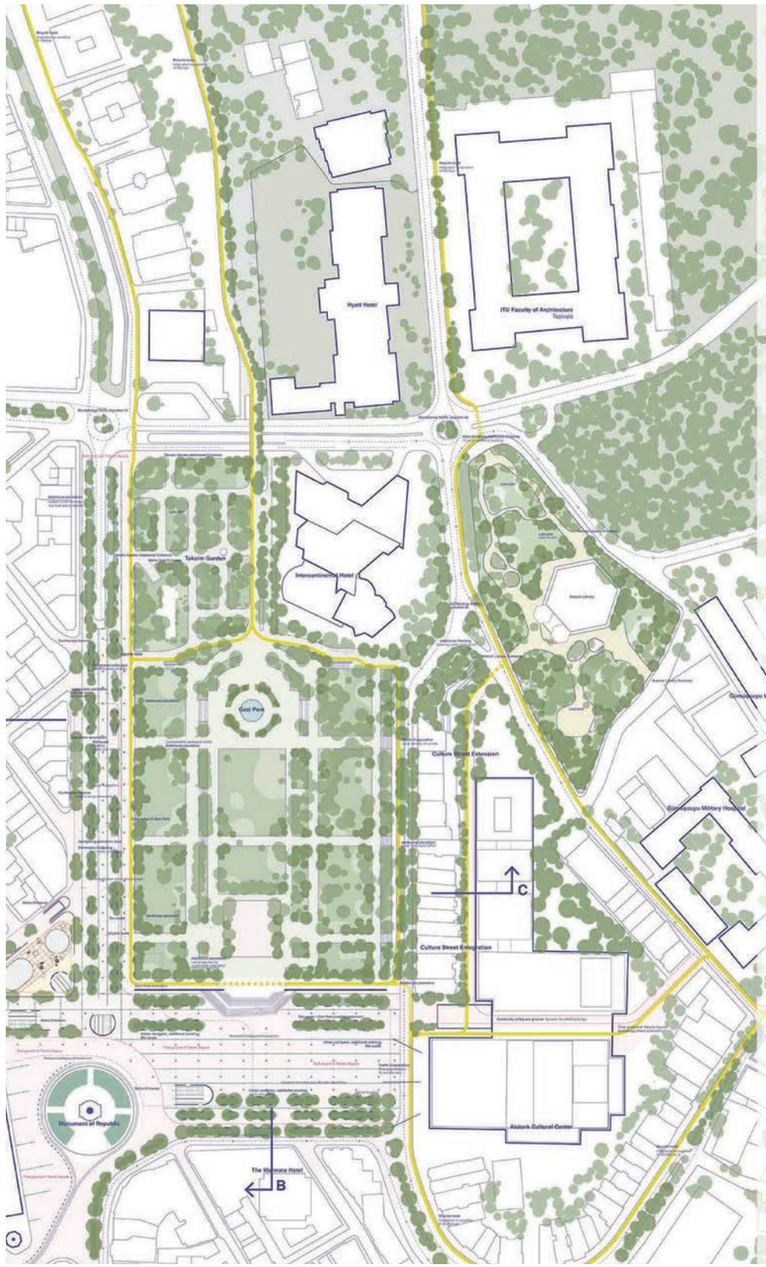



Cumhuriyet Street
An Open Public Corridor Aroused from The Historical Traces

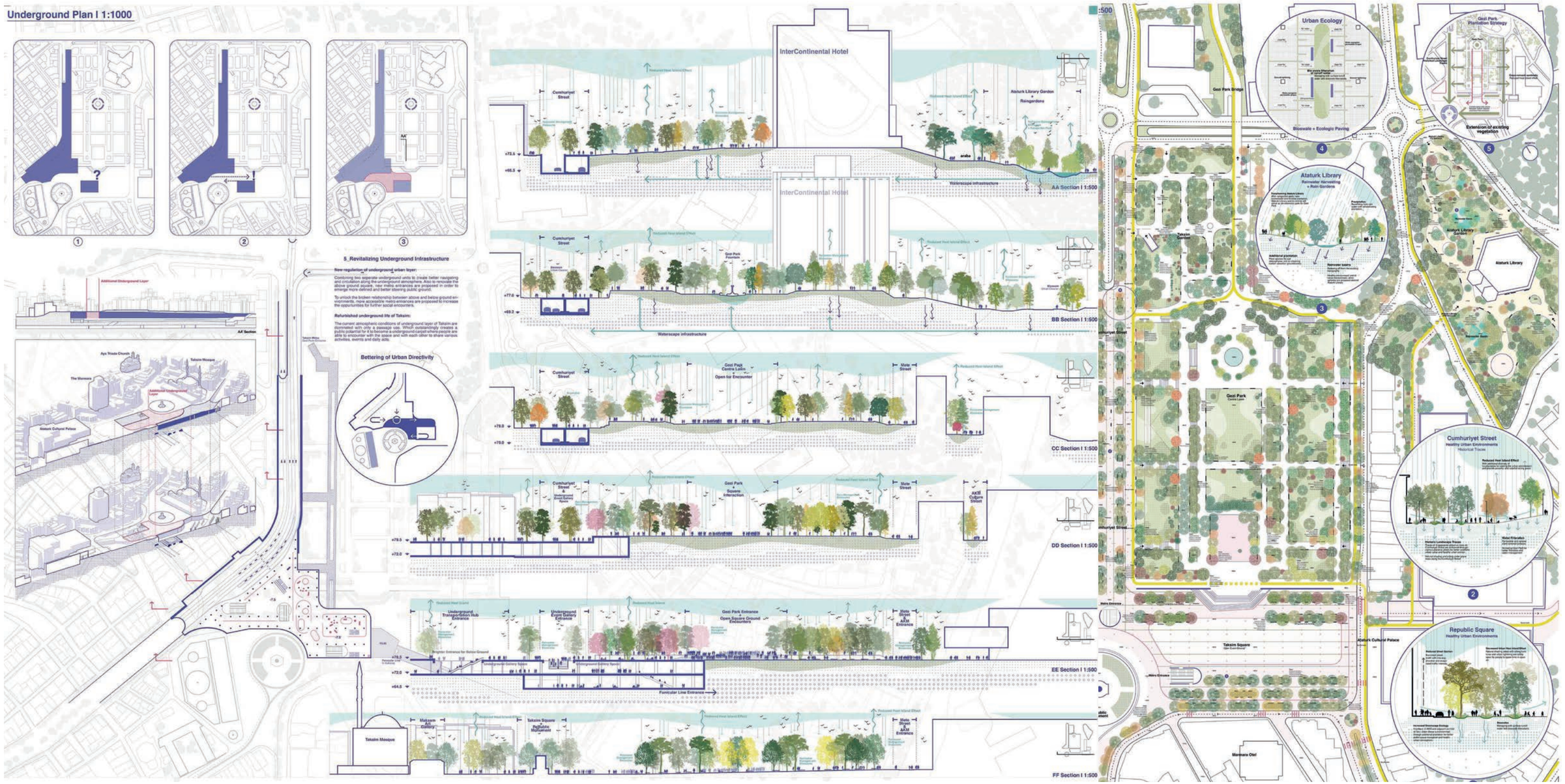
Gezi Park Centre Lawn
A Centric Public Carpet for Exchange of Public Programs
2

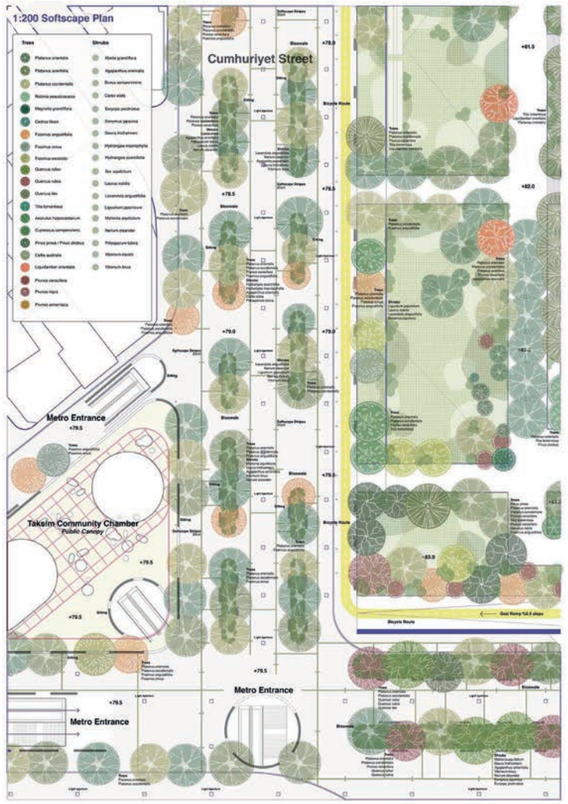
Taksim Community Chamber
Semi Public Spatial Hub for Organisational Assemblies

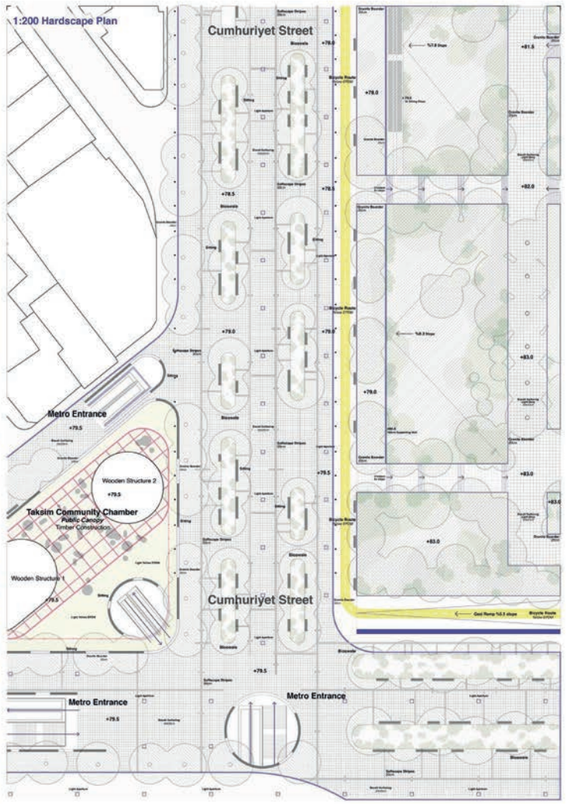



Hyatt Hotel
ITU Faculty of Architecture
Taşkışla
Taksim Garden
Intercontinental Hotel
Gezi Park
Culture Street Extension
Gümüşsuyu Military Hospital
Culture Street Extension
Atatürk Cultural Center
Monument of Republic
The Marmara Hotel
B
C

1_Renovation of Urban Road Network
Existing Road Network
Proposed Road Network
Reorganizing Transportation and Road Network
In a such urban environment like Taksim, vehicle intensity and congested traffic conditions are one of the most important urban issues in today's city life.
Especially, around the Gezi Park and Taksim, in the context of urban ecology and urban health, new road network regulation has been proposed to make urban life more liveable and healthy.
With the traffic evaporation strategy, Meta Street and Tünel Zafer Street has been reduced to one way direction. With this, section of these streets are now can be transformed into a more green, more public, more walkable urban corridors.
Urban pollution issue, also, now can be taken into consideration since the new spatial public opportunities are emerged.
Moreover, noise pollution size can be reduced since the number of vehicle using these roads are reduced and streets are belong to more pedestrians more than before.
2_Gezi Park Reviving & Preservation
Existing Gezi Park Spatial State
Weak spatial organisation, too much unusable fragmented green fields.
Preserving Existing Direction
Keeping the current major axis maintained. In respect to the public memory and memorial urban circulation
Recuperation of Spaces
Bettering the fragmented green spaces into more holistic and usable ground. Making it open to more people, more possibilities, more event opportunities.
Enhancement of Current Vegetation
With additional plantation strategy, urban heat island impact, health of urban environment, spatial orientation is rehabilitated.
3_Improving Existing Urban Ecology
Existing Green Infrastructure
Improving Green Infrastructure
Continuity of Green Patch & Corridors
The existing fragmentation of green traces in the urban scale is making this already intensified urban area even more vulnerable to urban side-effects. The concerns of urban ecology becomes more and more important in a such intensified urban environment like Taksim.
Thus, it is crucial to lowering the severe climatic effects of the urban area, to recuce the urban heat island effect, to emerge healthy environments, to create aesthetically pleased streets and squares, additional landscape system is proposed all along the urban scale. From Gezi Park to the Harbiye, Beşiktaş, and Galata region, a series of plantation strategies are arranged throughout the existing urban context.
Lowering Existing Urban Intensity Effects
Decreasing urban heat island effect with more permeable and green surfacings
Proposed native and local plant species for better adaptation and to ensure low maintanance efforts
Plantation in accordance to slopes and existing physical urban context to improve water management and to get better off from the sustainable environment
Not to use same species constantly, to provide more visual rehabilitation to create therapeutic urban environments
4_Revised & Holistic Taksim Square Ground
Bettering the Recognisability of Taksim Environment
To annihilate the undefined atmospher of Taksim Square and its relationship with its close vicinity, an inclusive and holistic embracing total ground is proposed.
To enhance its relationship with Atatürk Cultural Palace, Atatürk Library, Gezi Park, Istiklal Street, Cumhuriyet Street and Tarlabaşı Boulevard, the easily traceable urban surface is proposed to make the Taksim area more traceable and defined by its own way.
This totalitarian is also an intangible thouch to the context of holistic and democratic urban design philosophy.
To make it defined, any kind of defined design interventions have not been made in Taksim environment. It is a kind of design conscious that opens the Taksim regiosto the events that will be created by the people itself.
To achive that socially inclusive design philosophy, an inclusive and embracing urban ground is proposed, which welcomes every urbanite from any region of the city.


Underground Plan I 1:1000
5_Revitalizing Underground Infrastructure
New regulation of underground urban layer:
Combining two seperate underground units to create better navigating and circulation along the underground atmosphere. Also to renovate the above ground square, new metro entrances are proposed in order to emerge more defined and better steering public ground.
To unlock the broken relationship between above and below ground environments, more accessible metro entrances are proposed to increase the oppurtunities for further social encounters.
Refurbished underground life of Taksim:
The current atmospheric conditions of underground layer of Taksim are dominated with only a passage use. Which outstandingly creates a public potential for it to become a underground carpet where people are able to encounter with the space and with each other to share various activities, events and daily acts.
Bettering of Urban Directivity
Additional Underground Layer
AA' Section
Ayia Triada Church
Taksim Mosque
The Memorial
Ataturk Cultural Palace
InterContinental Hotel
Cumhuriyet Street
Ataturk Library Garden + Raingardens
Waterscape infrastructure
AA Section I 1:500
Gezi Park Fountain
BB Section I 1:500
Gezi Park Centre Lawn - Open for Encounter
Mete Street
CC Section I 1:500
Gezi Park Square Interaction
AKM Culture Street
DD Section I 1:500
Underground Transportation Hub Entrance
Underground Event Gallery Entrance
Gezi Park Entrance Open Square Ground Encounters
Mete Street AA' Entrance
Funicular Line Entrance
EE Section I 1:500
Taksim Square Republic Monument
FF Section I 1:500
Gezi Park Bridge
Urban Ecology
Bioswale + Ecologic Paving
Gezi Park Plantation Strategy
Extension of existing vegetation
Ataturk Library
Rainwater Harvesting + Rain Gardens
Ataturk Library Garden
Rainwater Basin
Gezi Park Centre Lawn
Cumhuriyet Street
Healthy Urban Environments
Historical Traces
Republic Square
Taksim Square
Marmara Otel



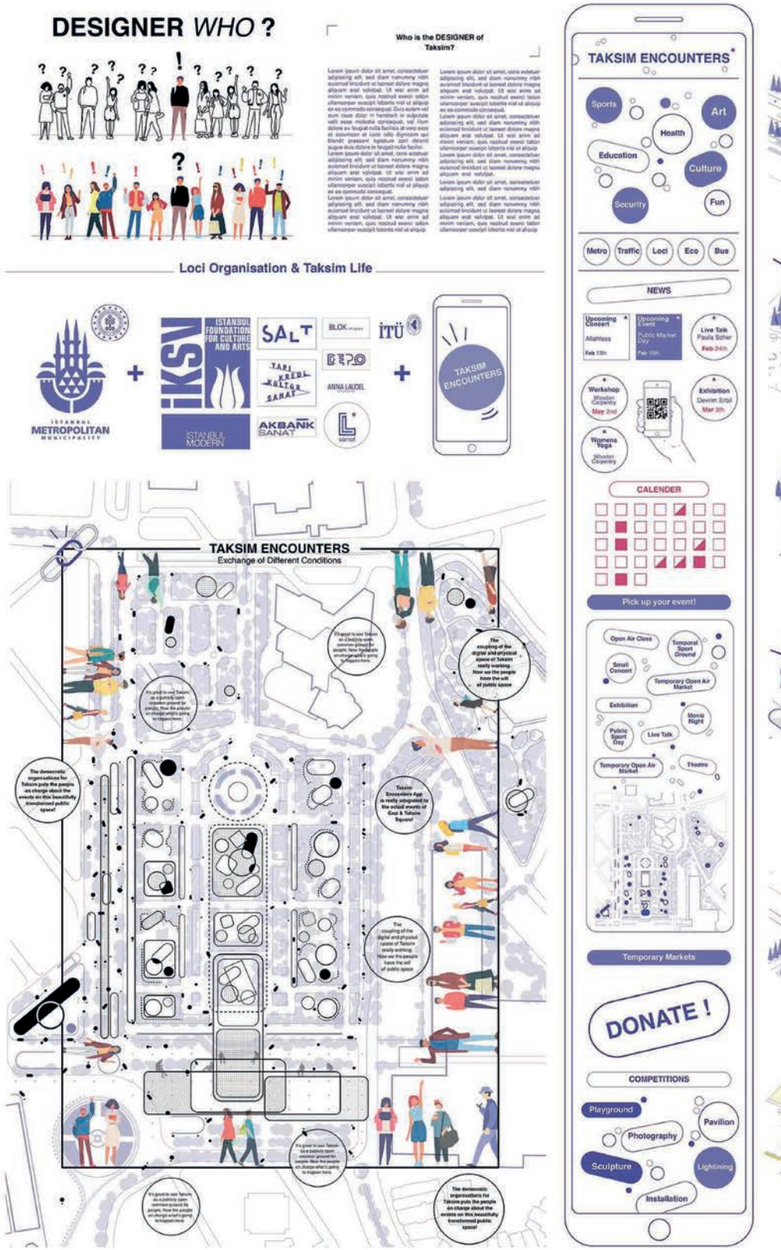

To bring these abstract ideas to life on the site, the axis of Cumhuriyet Street has been strengthened by regenerating the historical plane trees, transforming the area into a navigable and healthy urban corridor using water management and bio-swale strategies. Gezi Park has been revitalized, shifting from its monumental and stagnant state into a dynamic and inviting public park. This transformation involved reorganizing its spatial layout, establishing open-use Loci, creating the Taksim Community Chamber, integrating with Republic Square, and restoring the existing vegetation with native species.

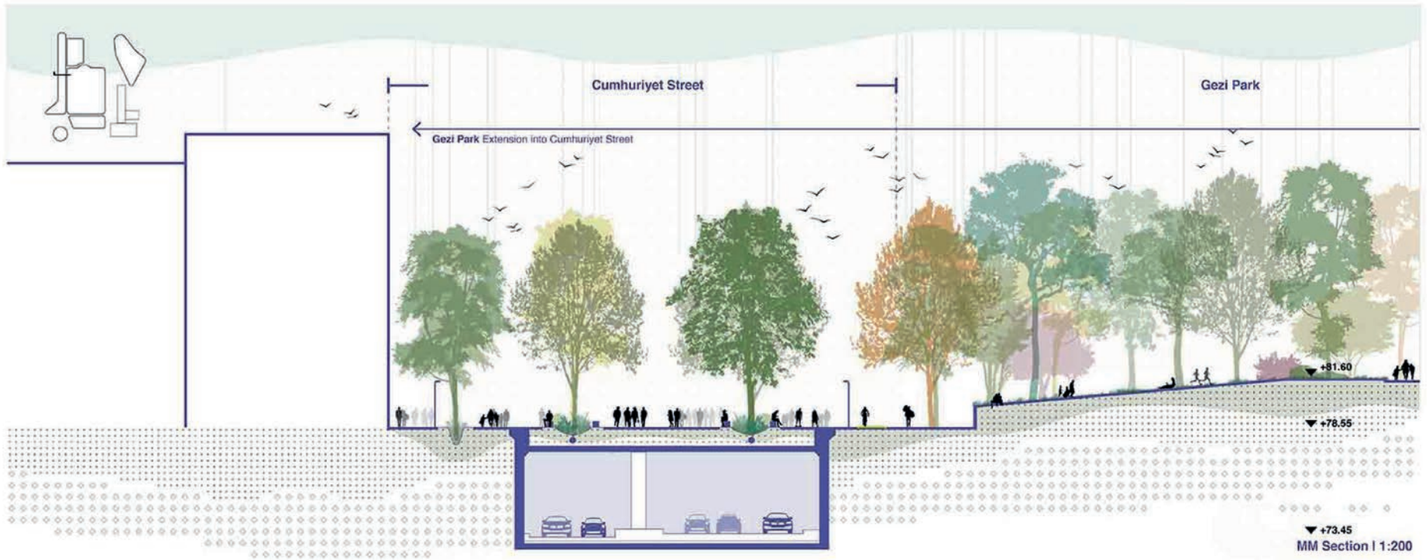
Republic Square has also been reshaped, reanimating its historical significance, and has been re-envisioned as an "open-use public carpet" extending toward the façade of the Atatürk Cultural Center. The square has been better integrated with the underground level of Taksim through the introduction of lighter, wider, and relocated metro entrances. Furthermore, the underground level has been reconnected with previously isolated spaces, creating a safe and cohesive area for vibrant activities.

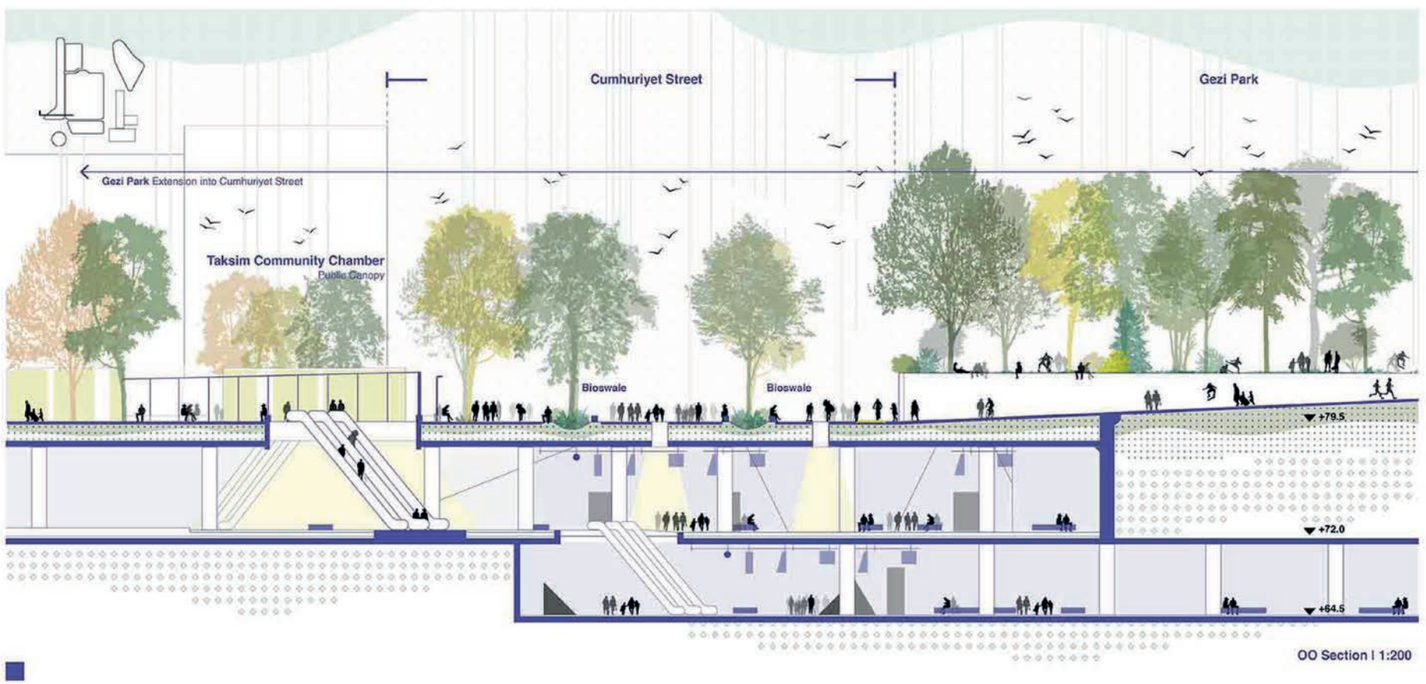
To enhance the urban environment, traffic around the square has been reduced by narrowing Tak-ı Zafer Street and Mete Street, designating them for mass transportation only, thus promoting a cleaner and healthier urban space.

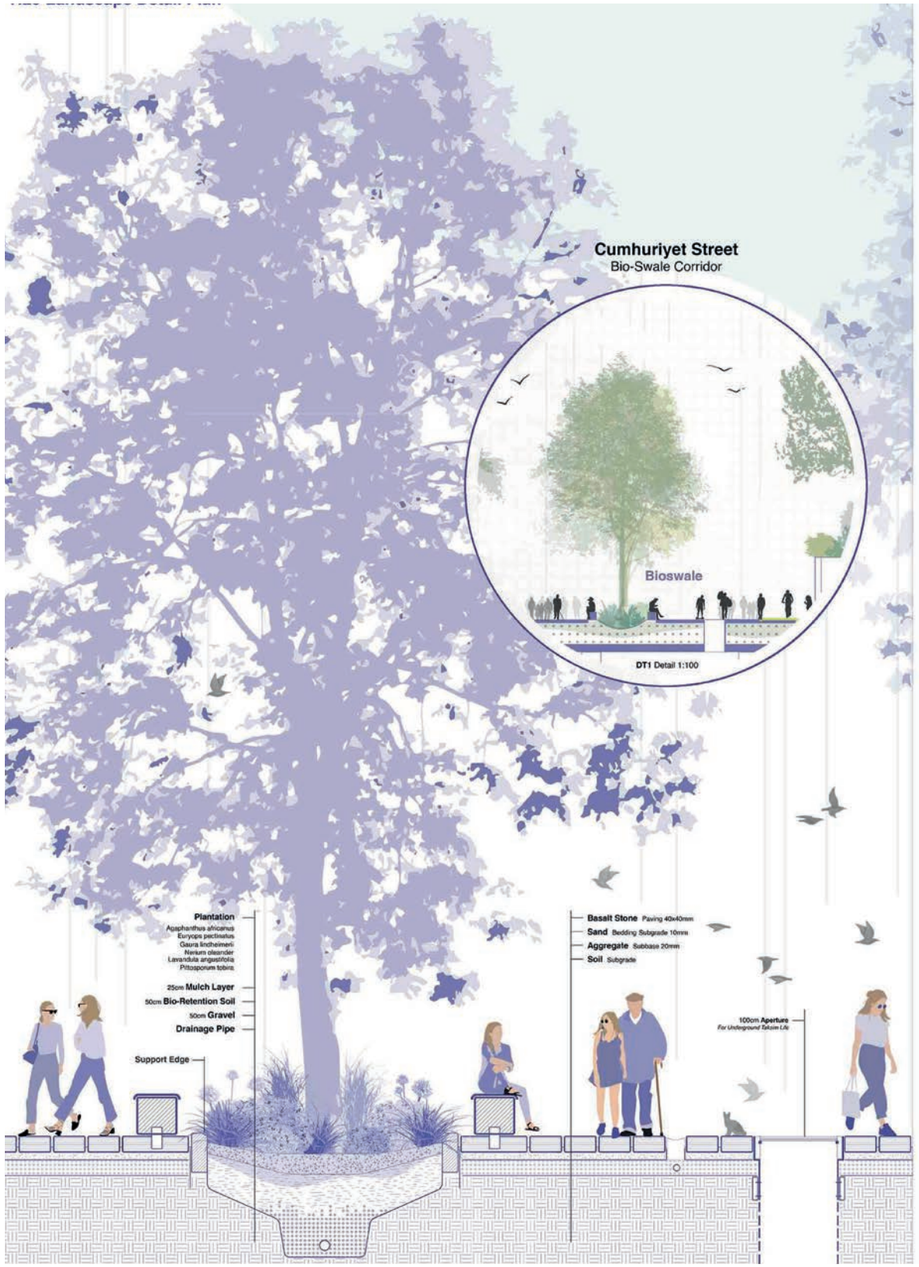







Cumhuriyet Street
Gezi Park
Gezi Park Extension into Cumhuriyet Street
+81.60
+78.55
+73.45
MM Section I 1:200


Cumhuriyet Street
Gezi Park
Gezi Park Extension into Cumhuriyet Street
Taksim Community Chamber
Public Canopy
Bioswale
Bioswale
+79.5
+72.0
+64.5
OO Section I 1:200

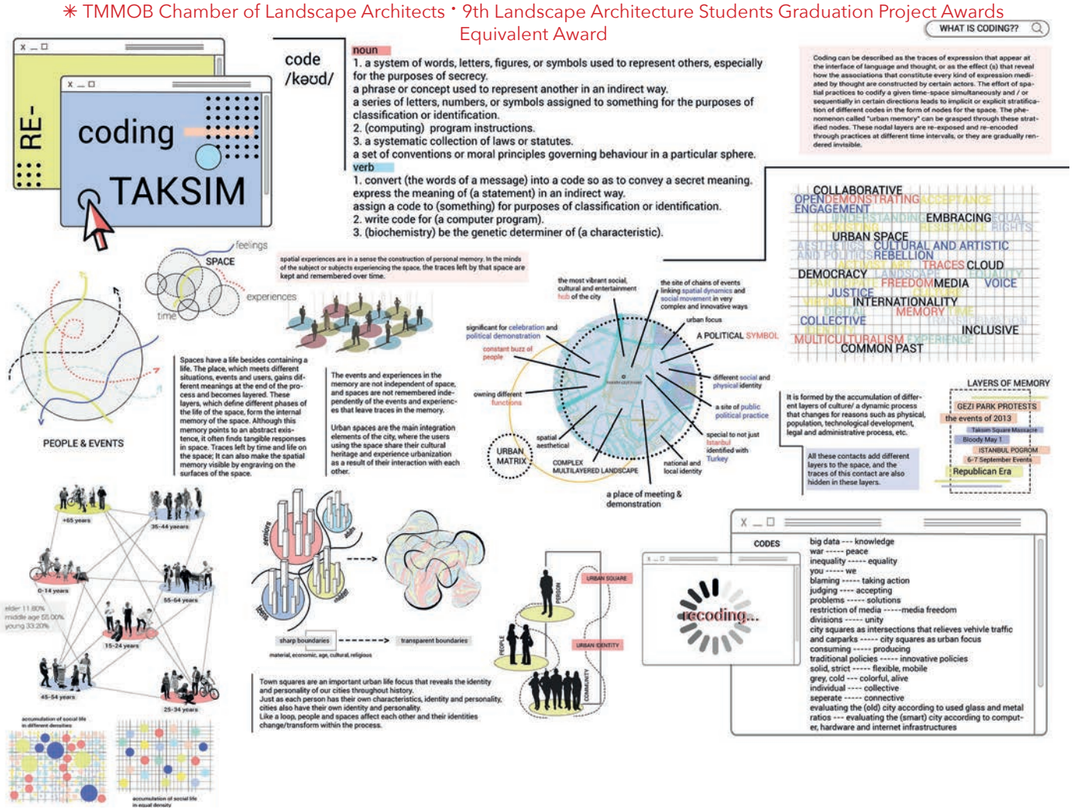

Cumhuriyet Street
Bio-Swale Corridor
Bioswale
DT1 Detail 1:100
Plantation
Apaphanthus africanus
Eurypas pectinatus
Gaura lindheimeri
Nerium oleander
Lavandula angustifolia
Pittosporum tobira
25cm Mulch Layer
50cm Bio-Retention Soil
50cm Gravel
Drainage Pipe
Support Edge
Basalt Stone Paving 40x40mm
Sand Bedding Subgrade 10mm
Aggregate Subbase 20mm
Soil Subgrade
100cm Aperture
For Underground Taksim Life

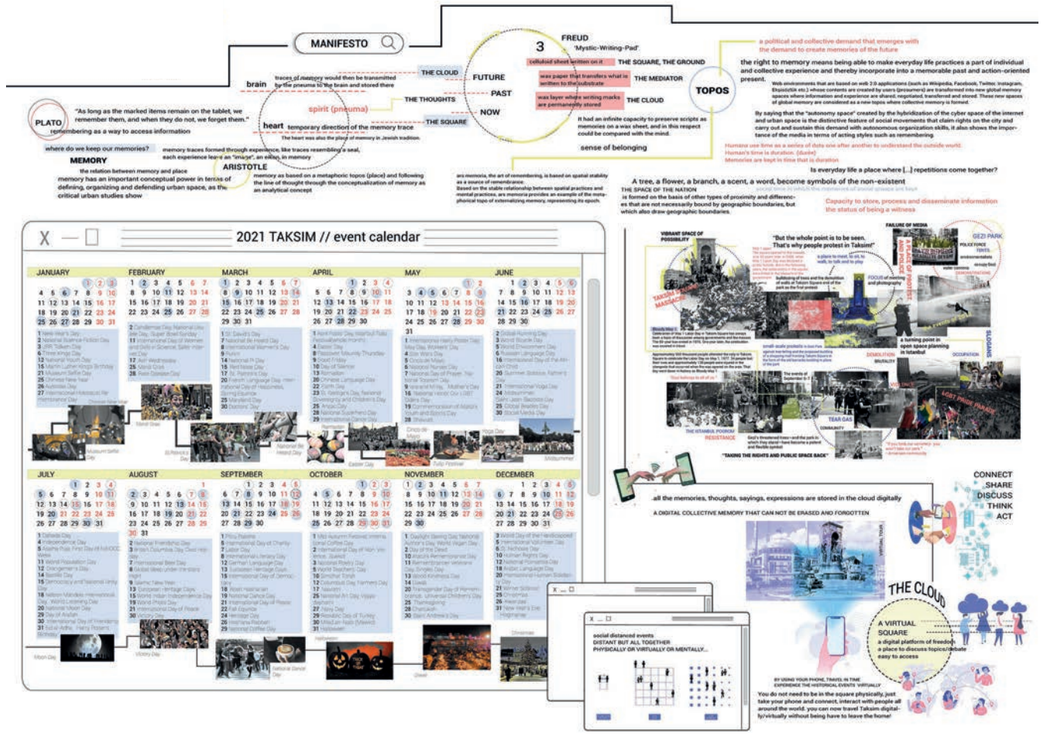
# Coding Taksim

Ece Şengül

*"Coding Taksim" was produced within the scope of Graduation Project carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. Gülşen Aytaç, Assist.Prof. Dr. Melih Bozkurt, Assoc. Prof. Dr. Olgu Çalışkan, M.Sc. Arzu Kutkam, M.Sc. Zuhal Kol, and Carlos Zarco Sanz, and assisted by Res. Assist. Nergis Aşar and Res. Assist. Gizem Aluçlu under the title "Landscape Democracy: Taksim" in the fall semester of 2020-2021.*

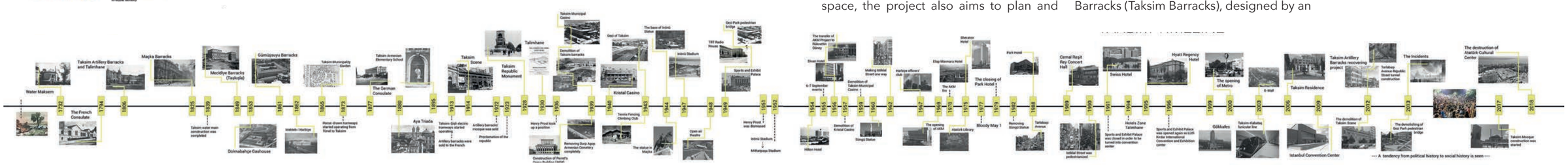
✳ TMMOB Chamber of Landscape Architects • 9th Landscape Architecture Students Graduation Project Awards Equivalent Award

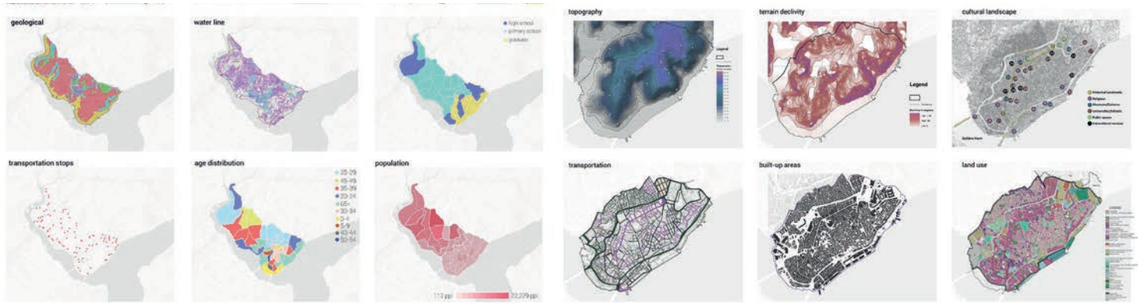


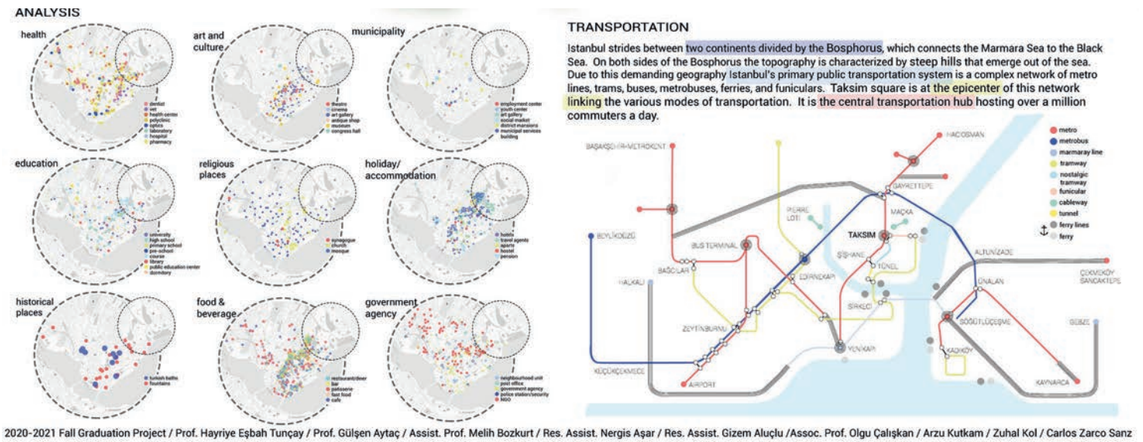




In this project, starting with the identity of the square and its surrounding areas, the historical process of change, and collective memory, new coding strategies have been developed for concepts such as disconnection, spacelessness, restriction, and inequality in order to update the region. The goal is to make the area fairer, more equal, freer, dynamic, and attractive by incorporating these new codes. Alongside planning the physical space, the project also aims to plan and develop the square digitally. In today's digital age, where situations such as social distancing and pandemics have made everything increasingly virtual, this digital transformation is essential.

Gezi Park and Taksim Square in Beyoğlu, just outside Galata to the north of the Golden Horn, have long been venues for meetings and demonstrations. Gezi Park was once the site of the Great Artillery Barracks (Taksim Barracks), designed by an Armenian palace architect. The large park, initially intended as a space for daily life, has come to be seen as a part of the city understood as a place for representations and demonstrations under various administrations. Over time, this location has evolved into an area marked by constant discussion and dispute. The content of these debates encompasses a wide range of issues, from social events to legal battles.

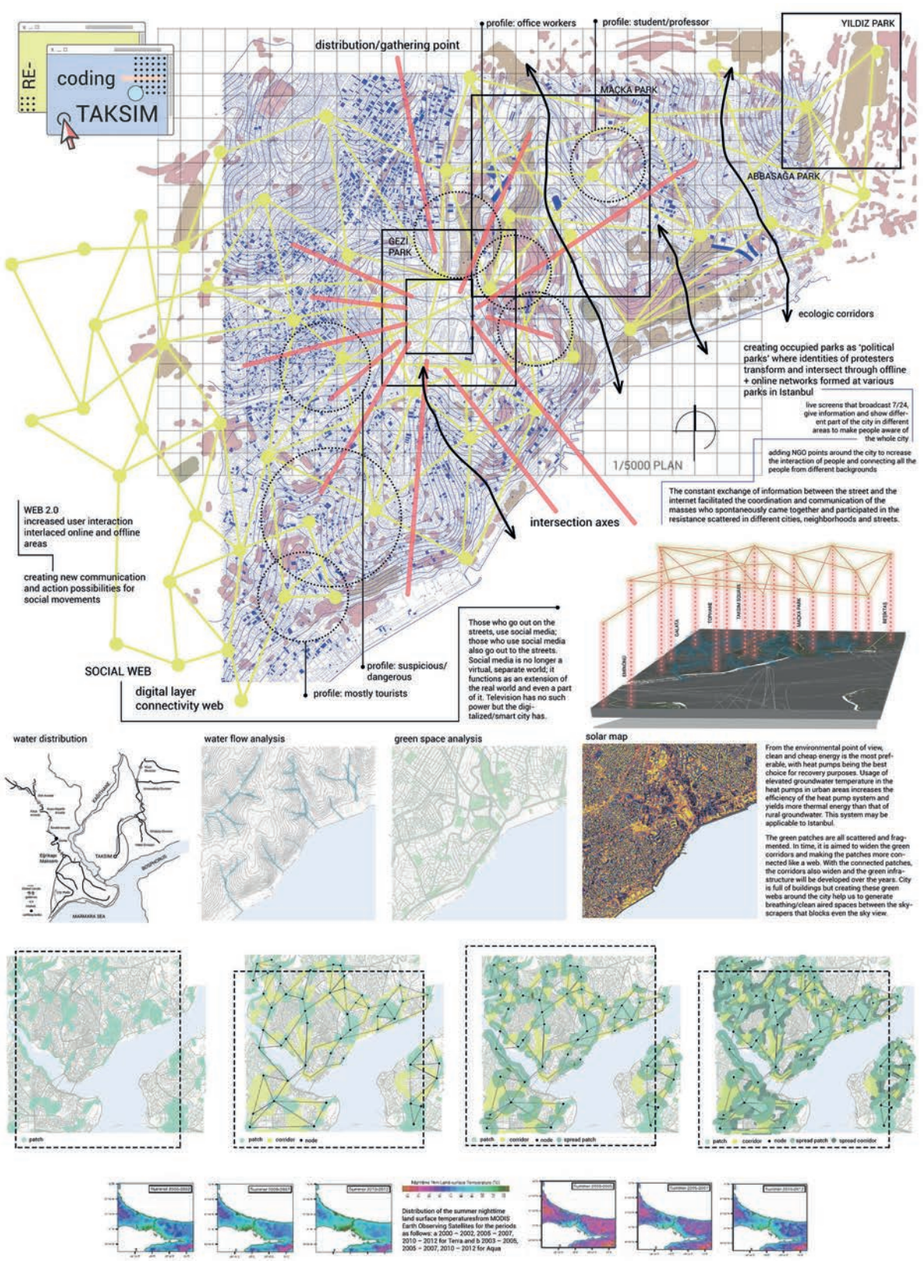


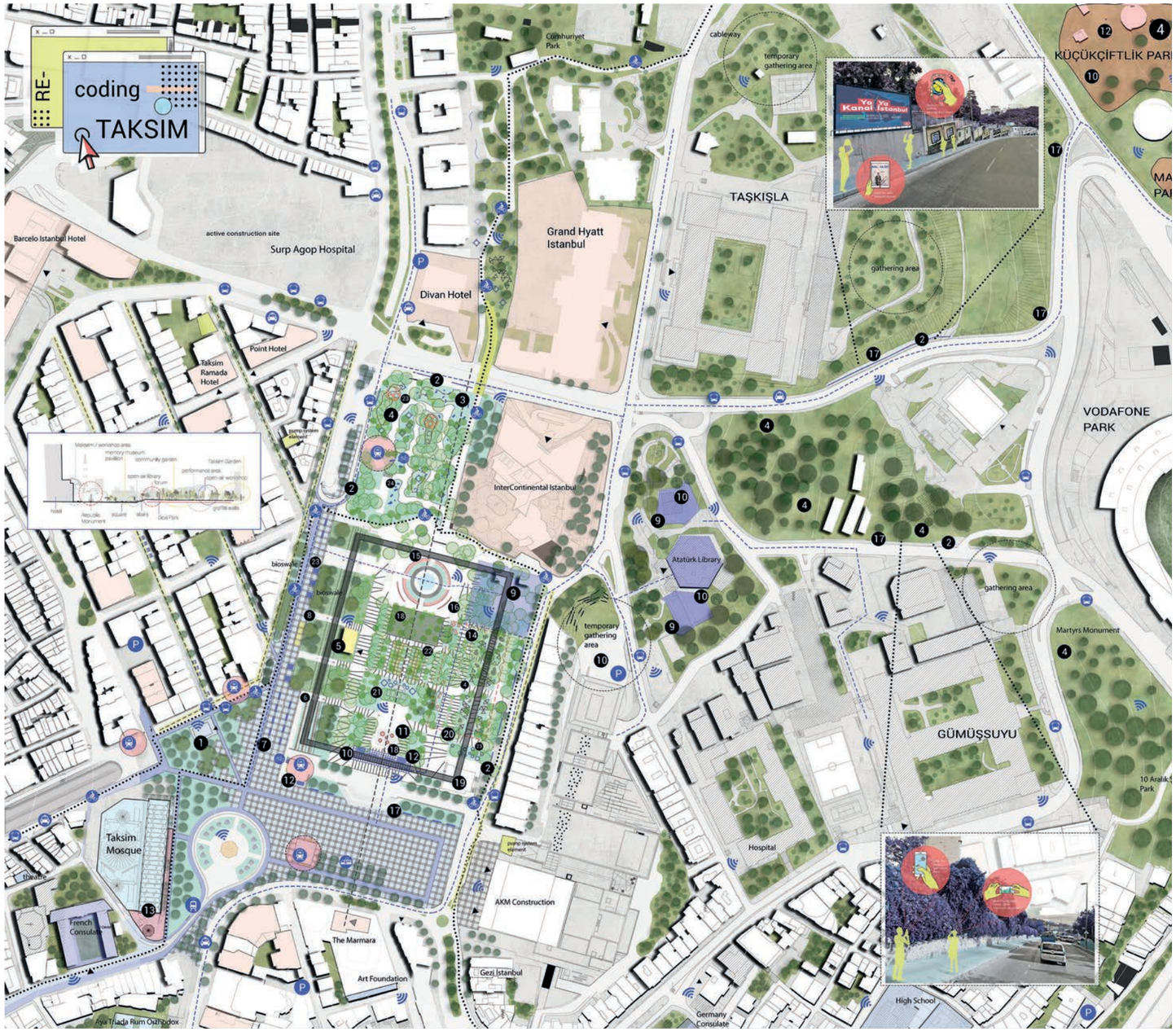


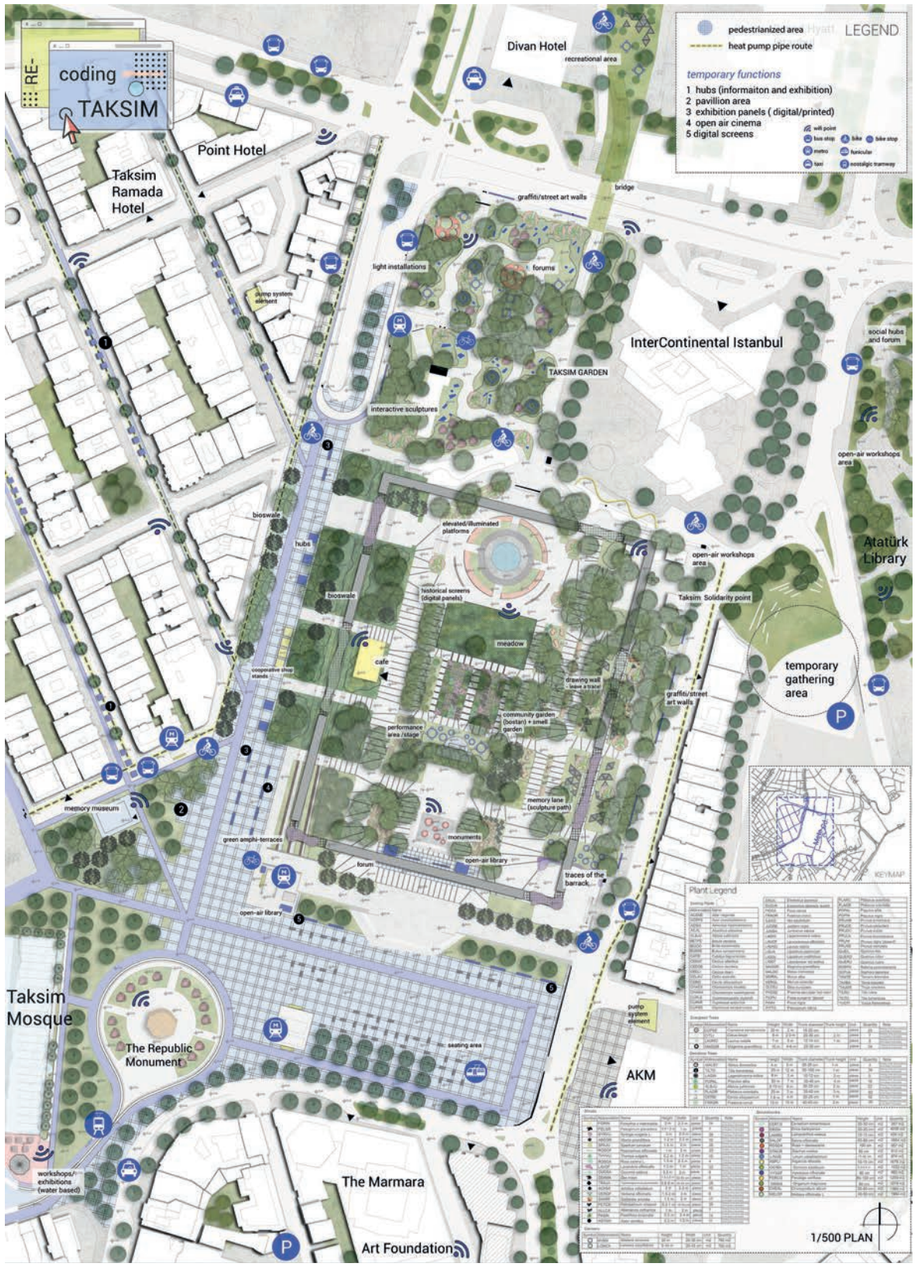



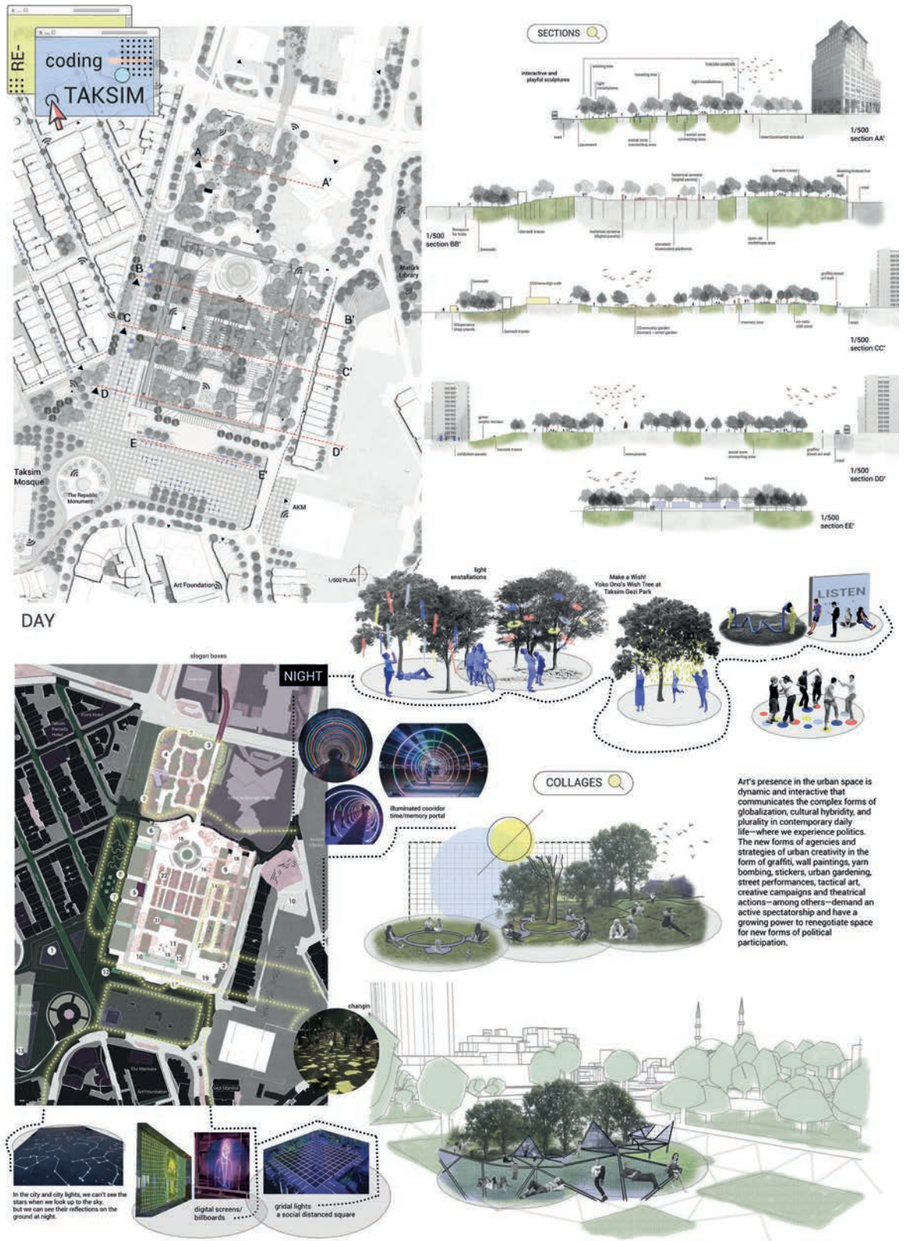

One of the major issues is that Gezi Park, a space where social life accumulates in varying densities, fails to establish sufficient connection with its surrounding areas. This issue is also seen in Taksim Square. Taksim Square, built on the memories of the Republic, is an energy hub and a key urban focal point, deeply embedded in the city's memory, where people gather. However, as the city rapidly developed with advancing technology, the lack of attention to the square's relationship with its environment, combined with the rising vehicle traffic due to population growth and various regulations, has transformed the square into a mere intersection, stripping it of its identity. It has become a transit point where people avoid lingering, seeking to escape the crowd, leading to a sense of disconnection.

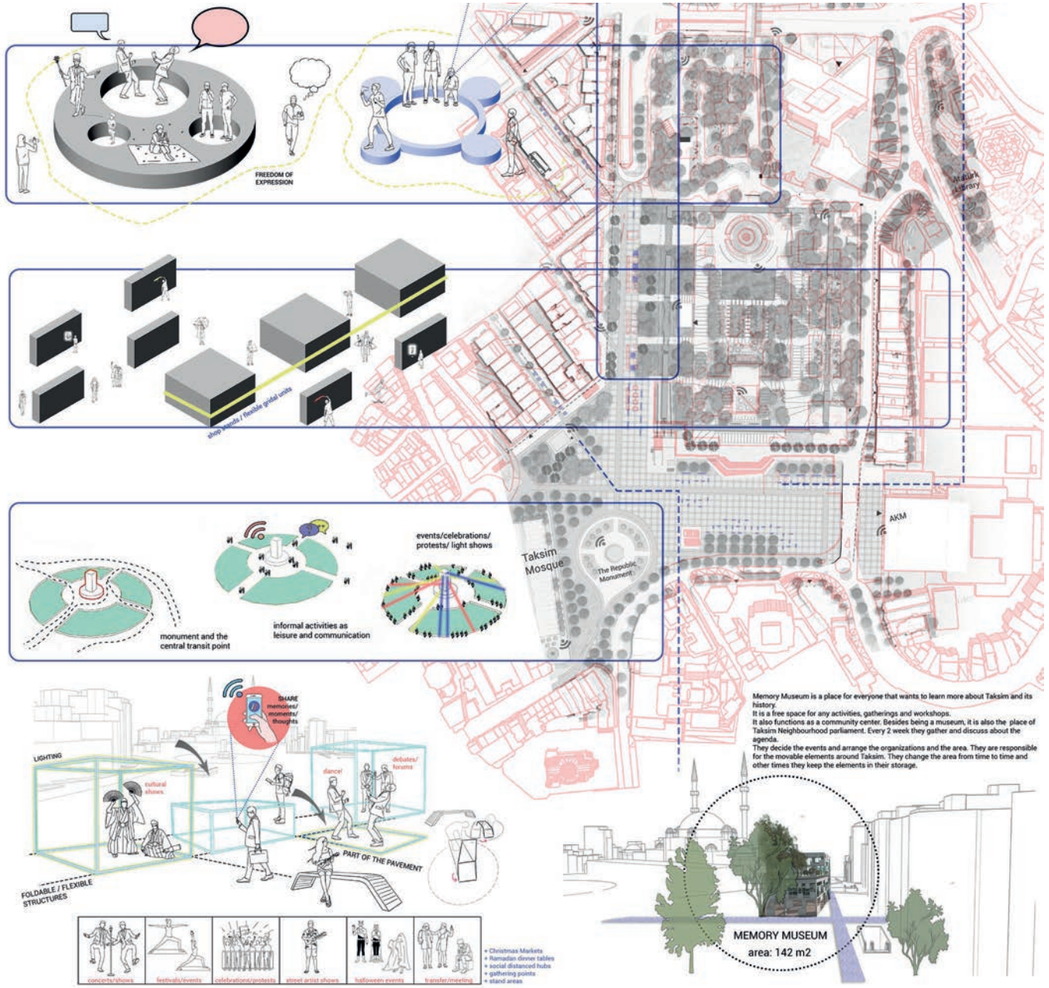
Thanks to the planned digital layer, we can now experience Taksim virtually, even if we cannot physically be there comfortably. While we may not be able to visit in person, at least our thoughts can reach the square. In essence, the goal is to create a physical space that fosters equality and freedom, an environment where people can voice their opinions or display their expressions, while also remembering history and shared experiences. Digitally, the objective is for people from Istanbul, Turkey, and even the world, to connect with the square—not physically, but through a digital platform—where they can share their thoughts and interact in this virtual space of freedom. The project was developed with the intention of binding and uniting all aspects of the space.


RE-
coding
TAKSIM
distribution/gathering point
profile: office workers
profile: student/professor
YILDIZ PARK
MACKA PARK
ABBASAGA PARK
GEZI PARK
ecologic corridors
creating occupied parks as 'political parks' where identities of protesters transform and intersect through offline + online networks formed at various parks in Istanbul
live screens that broadcast 7/24, give information and show different part of the city in different areas to make people aware of the whole city
adding NGO points around the city to ncrease the interaction of people and connecting all the people from different backgrounds
1/5000 PLAN
The constant exchange of information between the street and the internet facilitated the coordination and communication of the masses who spontaneously came together and participated in the resistance scattered in different cities, neighborhoods and streets.
intersection axes
WEB 2.0
increased user interaction interlaced online and offline areas
creating new communication and action possibilities for social movements
SOCIAL WEB
digital layer
connectivity web
profile: suspicious/ dangerous
profile: mostly tourists
Those who go out on the streets, use social media; those who use social media also go out to the streets. Social media is no longer a virtual, separate world; it functions as an extension of the real world and even a part of it. Television has no such power but the digitalized/smart city has.
water distribution
water flow analysis
green space analysis
solar map
From the environmental point of view, clean and cheap energy is the most preferable, with heat pumps being the best choice for recovery purposes. Usage of elevated groundwater temperature in the heat pumps in urban areas increases the efficiency of the heat pump system and yields more thermal energy than that of rural groundwater. This system may be applicable to Istanbul.
The green patches are all scattered and fragmented. In time, it is aimed to widen the green corridors and making the patches more connected like a web. With the connected patches, the corridors also widen and the green infrastructure will be developed over the years. City is full of buildings but creating these green webs around the city help us to generate breathing/clean aired spaces between the skyscrapers that blocks even the sky view.
patch
patch corridor node
patch corridor node spread patch
patch corridor node spread patch spread corridor
Distribution of the summer nighttime land surface temperaturesfrom MODIS Earth Observing Satellites for the periods as follows: a 2000 – 2002, 2006 – 2007, 2010 – 2012 for Terra and b 2003 – 2005, 2005 – 2007, 2010 – 2012 for Aqua


RE-
coding
TAKSIM
Cumhuriyet Park
cableway
temporary gathering area
KÜÇÜKÇİFTLİK PARK
TAŞKIŞLA
gathering area
Barcelo Istanbul Hotel
active construction site
Surp Agop Hospital
Grand Hyatt Istanbul
Divan Hotel
Point Hotel
Taksim Ramada Hotel
InterContinental Istanbul
VODAFONE PARK
Atatürk Library
temporary gathering area
Martyrs Monument
GÜMÜŞSUYU
Taksim Mosque
Hospital
AKM Construction
French Consulate
The Marmara
Art Foundation
Gezi Istanbul
Germany Consulate
High School
Aya Triada Rum Ortodox


RE-
coding
TAKSIM
LEGEND
pedestrianized area
heat pump pipe route
temporary functions
1 hubs (informaiton and exhibition)
2 pavillion area
3 exhibition panels ( digital/printed)
4 open air cinema
5 digital screens
Divan Hotel
recreational area
Point Hotel
Taksim Ramada Hotel
bridge
graffiti/street art walls
light installations
forums
pump system element
InterContinental Istanbul
social hubs and forum
TAKSIM GARDEN
interactive sculptures
open-air workshops area
biowaste
hubs
elevated/illuminated platforms
historical screens (digital panels)
Taksim Solidarity point
Atatürk Library
meadow
cafe
cooperative shop stands
drawing wall (take a look)
temporary gathering area
community garden (bostan) + smell garden
performance area /stage
graffiti/street art walls
memory museums
memory lane (sculpture path)
monuments
green amphi-terraces
forum
open-air library
traces of the barrack...
KEYMAP
Plant Legend
Taksim Mosque
The Republic Monument
seating area
AKM
pump system element
workshops/ exhibitions (water based)
The Marmara
Art Foundation
1/500 PLAN

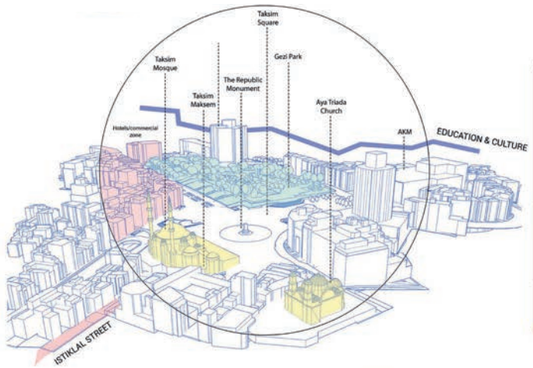

RE-
coding
TAKSIM
SECTIONS
1/500 section AA'
1/500 section BB'
1/500 section CC'
1/500 section DD'
1/500 section EE'
Taksim Mosque
The Republic Monument
AKM
Art Foundation
1/500 PLAN
DAY
light installations
Make a Wish! Yoko Ono's Wish Tree at Taksim Gezi Park
LISTEN
NIGHT
slogan boxes
illuminated coorider time/memory portal
COLLAGES
Art's presence in the urban space is dynamic and interactive that communicates the complex forms of globalization, cultural hybridity, and plurality in contemporary daily life—where we experience politics. The new forms of agencies and strategies of urban creativity in the form of graffiti, wall paintings, yarn bombing, stickers, urban gardening, street performances, tactical art, creative campaigns and theatrical actions—among others—demand an active spectatorship and have a growing power to renegotiate space for new forms of political participation.
changin
In the city and city lights, we can't see the stars when we look up to the sky, but we can see their reflections on the ground at night.
digital screens/ billboards
gridal lights a social distanced square

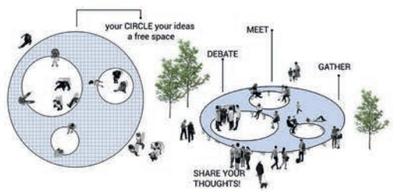


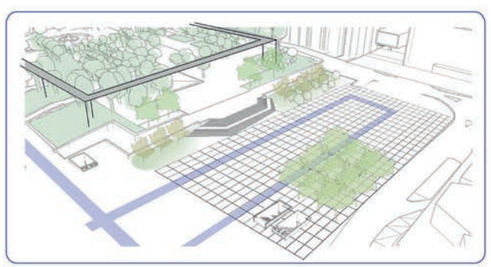

The goal was to create a space where people from diverse backgrounds—regardless of geography, religion, language, race, gender, or age—could come together, establish connections, and build bonds. In addition to the digital connectivity, the aim was to enhance fragmented ecological and spatial areas by merging them. Through the strengthening of green spaces and the introduction of new functions, the project also sought to foster and deepen human connections over time. The link between the area and its surrounding neighborhoods was reinforced, with functions added at key connection points to make the space more attractive and functional. Green areas, such as Gezi Park and Maçka Park, which are in close proximity, were integrated and connected on a larger scale. A route for education and culture was planned to unite institutions like Taşkışla, Atatürk Library, and the ITU Gümüşsuyu campus, attracting more students and young people. Additionally, specific colors were chosen to represent the potential and purpose of each area in the design: purple for cultural activities, roads, and spaces; pink for social interaction, communication, and free thought; yellow for production; and green as the unifying element between them.

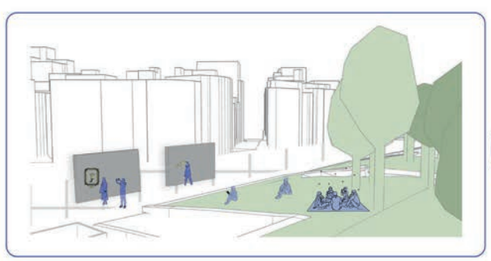


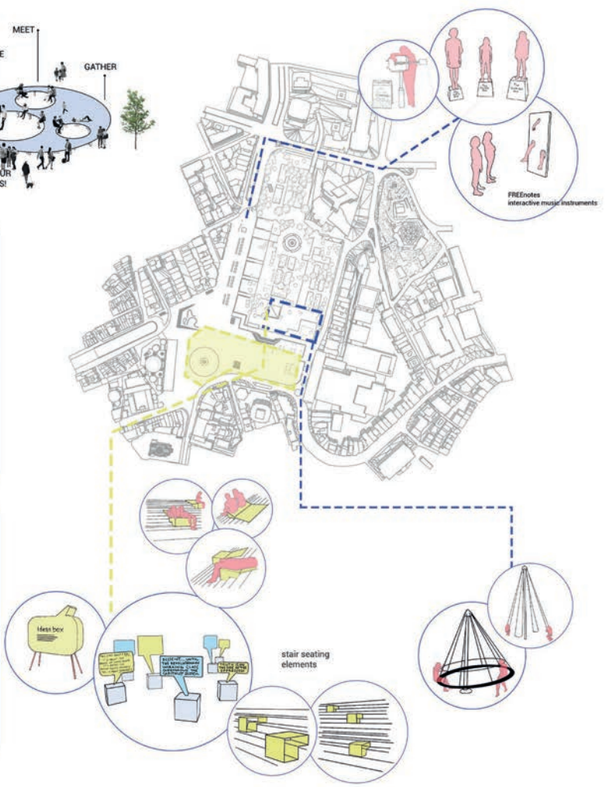


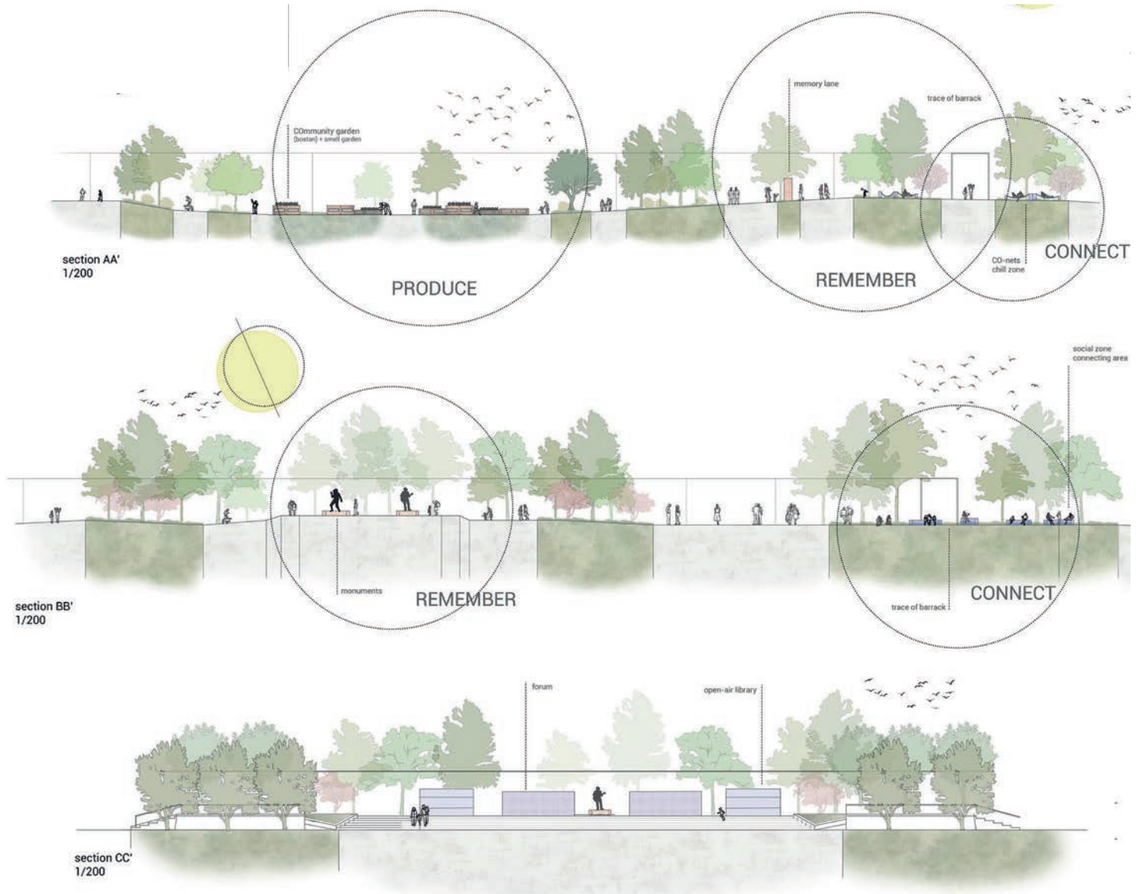


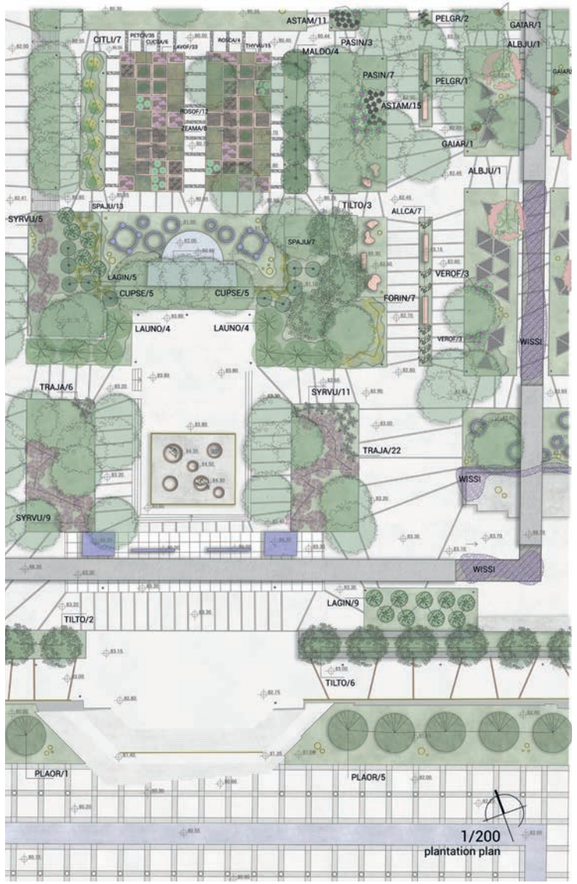


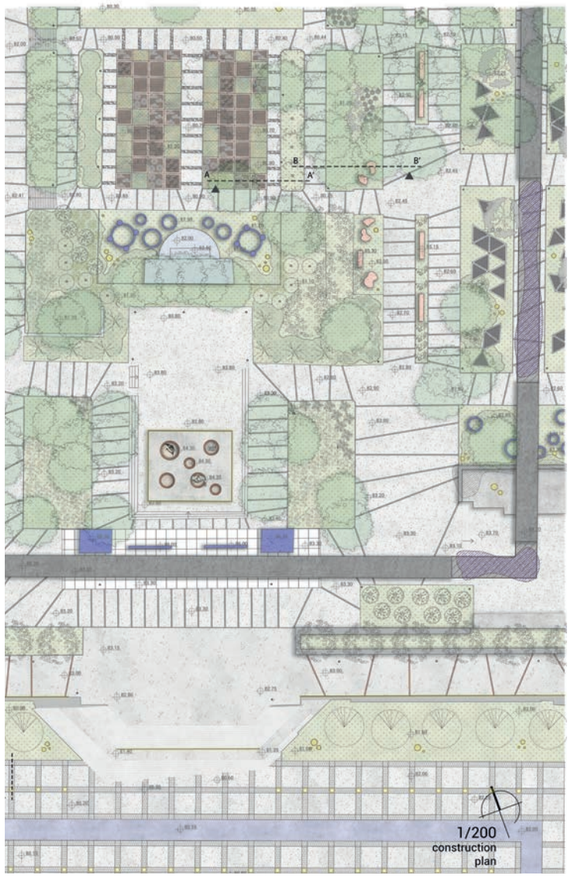












In this project, the bostans (urban gardens) and gardens, which were also included in the Istanbul Master Plan prepared by Prost, were incorporated into the park as a community garden and a smell/butterfly garden. The gardens were designed with a focus on edible and aromatic plants, aiming to make the space more memorable, attractive, and dynamic for visitors by creating smell gardens along the memory route. Seasonal color changes of the plants were carefully considered to add vibrancy throughout the year. Additionally, colors were used to differentiate spaces based on their functions. The produce from the bostans is intended to be sold at the café and sales areas within the park.

To foster art and creativity, provisions were made for graffiti and artistic activities within the park and the surrounding city. New activities and functions were introduced to replace the negative memories associated with the site. The goal is to transform these unpleasant recollections into new, positive experiences. Many interactive design elements were added to the park to engage visitors. Furthermore, a digital application was developed for Taksim, offering an opportunity for users—whether physically present or digitally engaged—to participate in the space. The app creates a platform for free expression, where users can listen to podcasts about Taksim, stay updated on news, share photos and memories, and engage in discussions with others, contributing to a more inclusive and dynamic experience.

The spaces in the park have been designed as forums, free thinking and discussion areas, complemented by urban furniture. Movable seating elements and special grid-like areas have been incorporated for various events such as concerts, shows, and celebrations. Foldable structures have been introduced to make the square more flexible and adaptable for events. These structures can be removed after the event, turned back into part of the pavement, and stored. The goal is for these flexible structures to be easily relocated and used across the entire area when needed. The memory museum in the area was designed as a multifunctional space, serving as storage, public assembly, meeting, planning, and consultation areas. To mitigate the heat island effect, vegetation was added, green spaces were expanded, and bioswale areas were integrated.

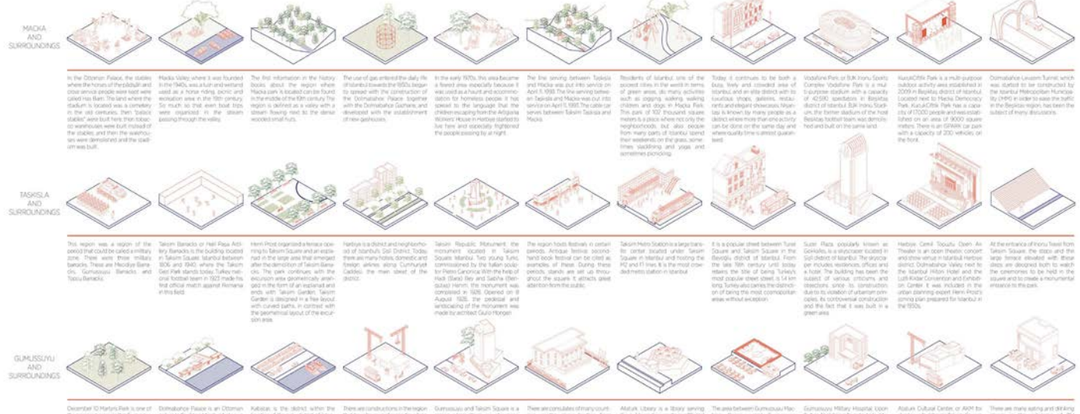
The old plans, past experiences, and the overall history of the area were carefully examined and used as inspiration for shaping the new places, routes, and functions. Thanks to thoughtful lighting design, the area now comes alive both during the day and at night. The goal is to seamlessly integrate the past, present, and future with the digital layer. Taksim, which requires an update, had to be digitized to reconnect its past and future, strengthening these connections. Based on these insights, a new design update has been developed and implemented.

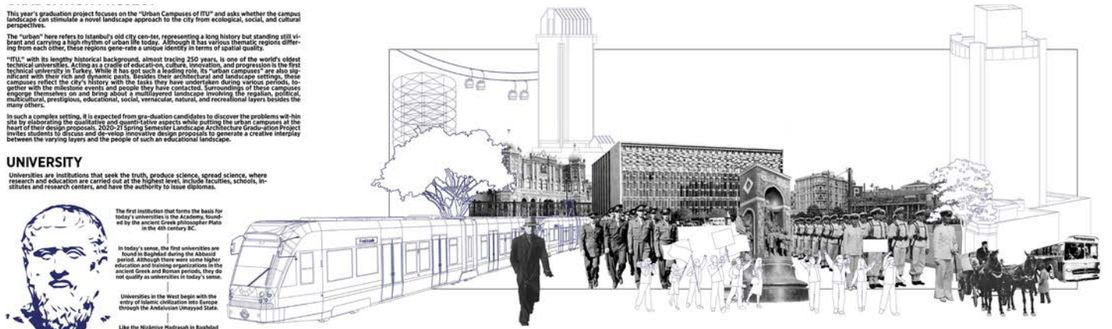
# Urban Laboratory

Gizem Yağmur Gölbaşı

*"Urban Laboratory" was produced within the scope of Graduation Project carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Ikhwan Kim, Assoc. Prof. Dr. Saye Nihan Çabuk, and Assoc. Prof. Dr. Saitali Köknar and assisted by Res. Assist. Gizem Aluçlu and Res. Assist. Başak Akarsu under the title "Urban Campuses of ITU" in the spring semester of 2020-2021.*

✳ TMMOB Chamber of Landscape Architects • 9th Landscape Architecture Students Graduation Project Awards, Equivalent Award





This year's graduation project focuses on the "Urban Campuses of ITU" and asks whether the campus landscape can stimulate a novel landscape approach to the city from ecological, social, and cultural perspectives.

The "urban" here refers to Istanbul's old city cen-ter, representing a long history but standing still vibrant and carrying a high rhythm of urban life today. Although it has various thematic regions differing from each other, these regions pone-rate a unique identity in terms of spatial quality.

"ITU," with its lengthy historical background, almost tracing 250 years, is one of the world's oldest technical universities. Actina as a cradle of educati-on, culture, innovation, and progression is the first technical university in Turkey. While it has got such a leading role, its "urban campuses" are also significant with their rich and dynamic pasts. Besides their architectural and landscape settings, these campuses reflect the city's history with the tasks they have undertaken during various periods, together with the students who have come from all over the country. Besides, they have encouraged people to empow themselves on and bring about a multilayered landscape involving the regular, political, multicultural, prestigious, educational, social, vernacular, natural, and recreational layers besides the many others.

In such a complex setting, it is expected from gra-duation candidates to discover the problems wit-hin site by elaborating the qualitative and quanti-tative aspects while putting the urban campuses at the heart of their design proposals. 2020-2T Spring Semester Landscape Architecture Gradu-ation Project invites students to discuss and de-velop innovative design proposals to generate a creative interplay between the varying layers and the people of such an educational landscape.

## UNIVERSITY

Universities are institutions that seek the truth, produce science, spread science, where research and education are carried out at the highest level, include faculties, schools, institutes and research centers, and have the authority to issue diplomas.

The first institution that forms the basis for today's universities is the Academy, founded by the ancient Greek philosopher Plato in the 4th century BC.

In today's sense, the first universities are found in Baghdad during the Abbasid period. Although there were some higher education and training organizations in the ancient Greek and Roman periods, they do not qualify as universities in today's sense.

Universities in the West begin with the study of Islamic civilization into Europe through the Andalusian Umayyad State.

Like the Nizamiye Madrasah in Baghdad (1065) and the Izmik Museum (1331), which was the first university in the Ottoman, the madrasa establishment, which developed rapidly during the Seljuks and Ottomans period, had a say in science lessons until Tanzimat.

The first universities in the west, which started to develop under the norms of Bologna, Pavia, Ravenna and Paris, remained under the control of the bishops for a long time.

Later, the rector of the university became autonomous, ensuring his authority over the diocese. Following this, after the non-papal British universities of Oxford and Cambridge, universities were established in various European cities until the 16th century.

## UNIVERSITY CAMPUSES

A campus is traditionally the land on which a college or university and related institutional buildings are situated. Usually a college campus includes libraries, lecture halls, residence halls, student centers or dining halls, and park-like settings.

Rapid urbanization, industrialization, migration, economic and technological advances have affected the growth and development of universities. Lack of land in the cities, universities leave the city; It caused them to take with them many functions that they needed and benefited from the city for those needs. Thus, university cities have emerged, located outside the city, meeting all the needs of the university youth (accommodation, education, health, sports, entertainment, etc.), with the concept of campus, which combines all education functions, and spread over large lands. The first examples of campus planning in America are J. Jacques Romee's Union College in New York (1813) and Thomas Jefferson's Virginia universities in Charlottesville. American campuses are generally designed as a "university town" outside the city; A library, auditorium, cafeteria, student center etc. arranged around a central square. Education buildings were located outside of the common units. Universities according to their location in the city; can be divided into two groups as urban universities and non-urban universities (campuses).

## URBAN CAMPUSES

They are university settlements that are formed in the city by new building design or transformation of existing buildings, on the scale of the block or in the form of cottonseed. Universities are located in the city, close to the center; 1. Socialization of students with cities and citizens; 2. Students benefit from all social and cultural facilities of the city; 3. The citizens of the city have advantages such as benefiting from the educational, cultural and social units (gymnasiums, library, auditorium, etc.) of the university.

## ITU

By 1920 the institution had gained formal recognition as a university of engineering which provided education in both engineering and architecture. In 1944 the name of the institution was changed to Istanbul Technical University and in 1946 the institution became an autonomous university with architecture, civil, mechanical, and electrical engineering faculties.

With its long history of 243 years, its modern teaching environment, and well-qualified teaching staff, Istanbul Technical University today is the personification of engineering and architectural education in Turkey. Istanbul Technical University's not only played a leading role in the modernization movement of the Ottoman Empire, but has also maintained its leadership position in the changes and innovations taking place in the construction, industrialization, and technological realms during the modern days of the Turkish Republic. Engineers and architects trained at Istanbul Technical University have played significant roles in the construction of Turkey. Alumni also played a significant role in Turkish politics.

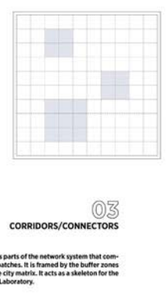
## METHODOLOGY

"Landscapes are composed of elements–the spatial components that make up the landscape. A convenient and popular model for conceptualizing and representing the elements in a categorical map pattern is known as the patch-corridor-matrix model (Forman 1995). Under this model, three major landscape elements are typically recognized, and the pattern and configuration of these elements defines the pattern of the landscape."

(1) Patch.– Landscapes are composed of a mosaic of patches (Urban et al. 1987). Landscape ecologists have used a variety of terms to refer to the basic elements or units that make up a landscape, including ecotope, biotope, landscape component, landscape element, landscape unit, landscape cell, geotope, facies, habitat, and site (Forman and Godron 1986).

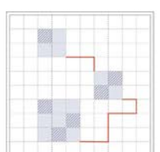
(2) Koridor. – Koridorlar, yapı veya işlev temelinde tanımlanabilen doğrusal peyzaj unsurlarıdır. Forman ve Godron (1986) koridorları "her iki taraftaki matristen farklılık gösteren dar arazi şeritleri olarak tanımlar. Koridorlar izole şeritler olabilir, ancak genellikle biraz benzer bitki örtüsüne bağlanır. "

(3) Matris. – Bir peyzaj tipik olarak birkaç tür peyzaj öğesinden oluşur (genellikle yamalar). Bunlardan matris, en kapsamlı ve en bağlantılı peyzaj öğesi türüdür ve bu nedenle peyzajın işleyişinde baskın rolü oynar (Forman ve Godron 1986).



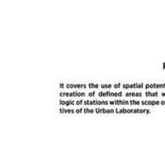
**01**
**PATCHES**

It covers the use of spatial potential and the creation of defined areas that work in the logic of stations within the scope of the objectives of the Urban Laboratory.



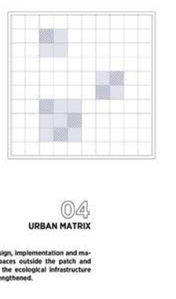
**02**
**ROOMS/CELLS**

They are specialized units included in patches. They become more defined in terms of content and function. As a concept, they are loyal to the patches they are on. Due to spatial differences, they are described as units.



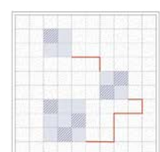
**03**
**CORRIDORS/CONNECTORS**

It forms parts of the network system that combines patches. It is framed by the buffer zones and the city matrix. It acts as a skeleton for the Urban Laboratory.

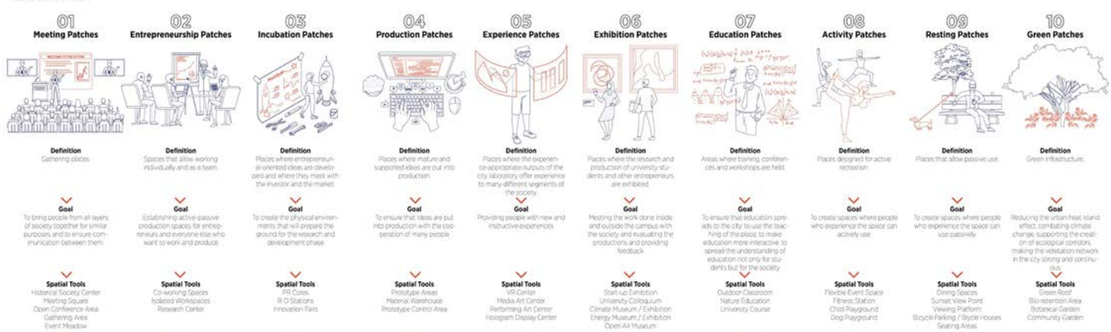


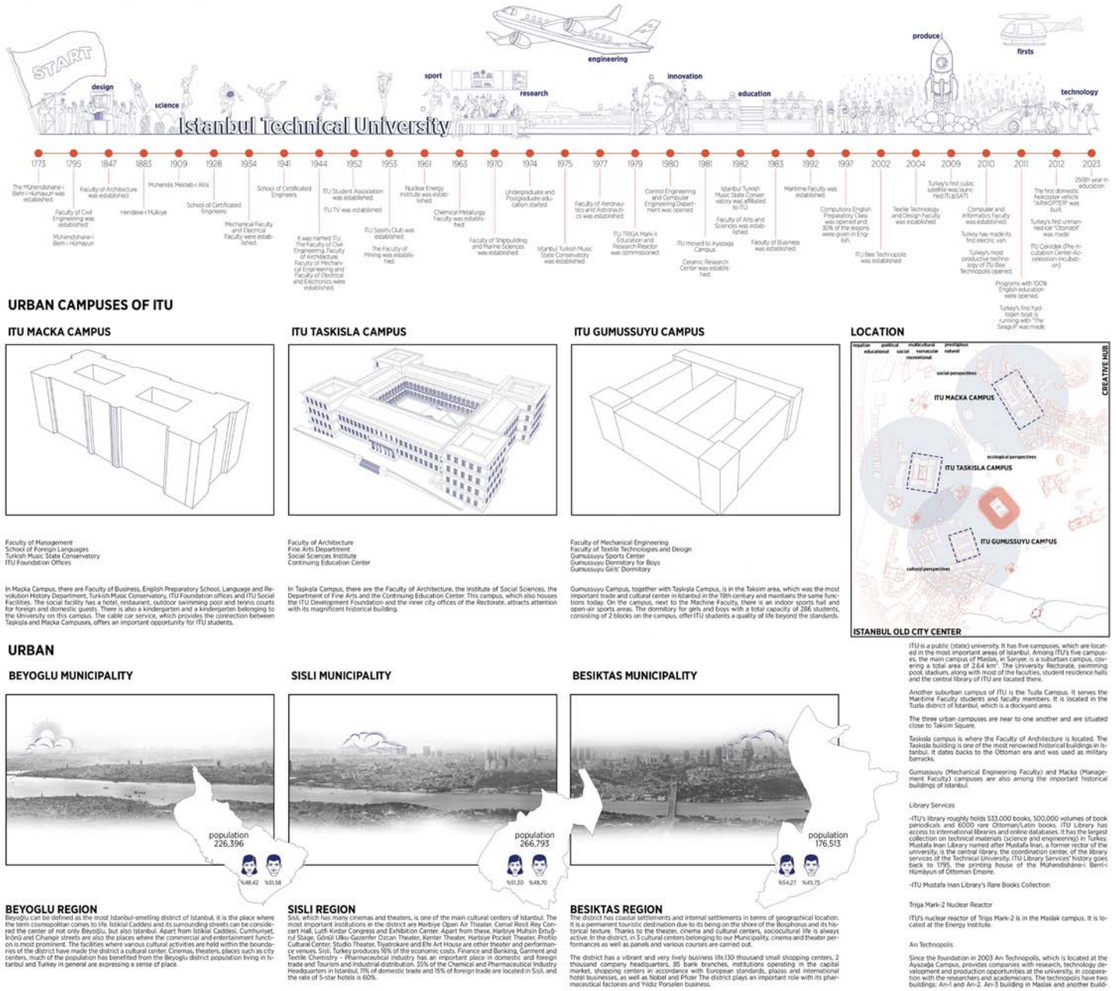
**04**
**URBAN MATRIX**

It covers the design, implementation and management of spaces outside the patch and corridor, where the ecological infrastructure of the city is strengthened.



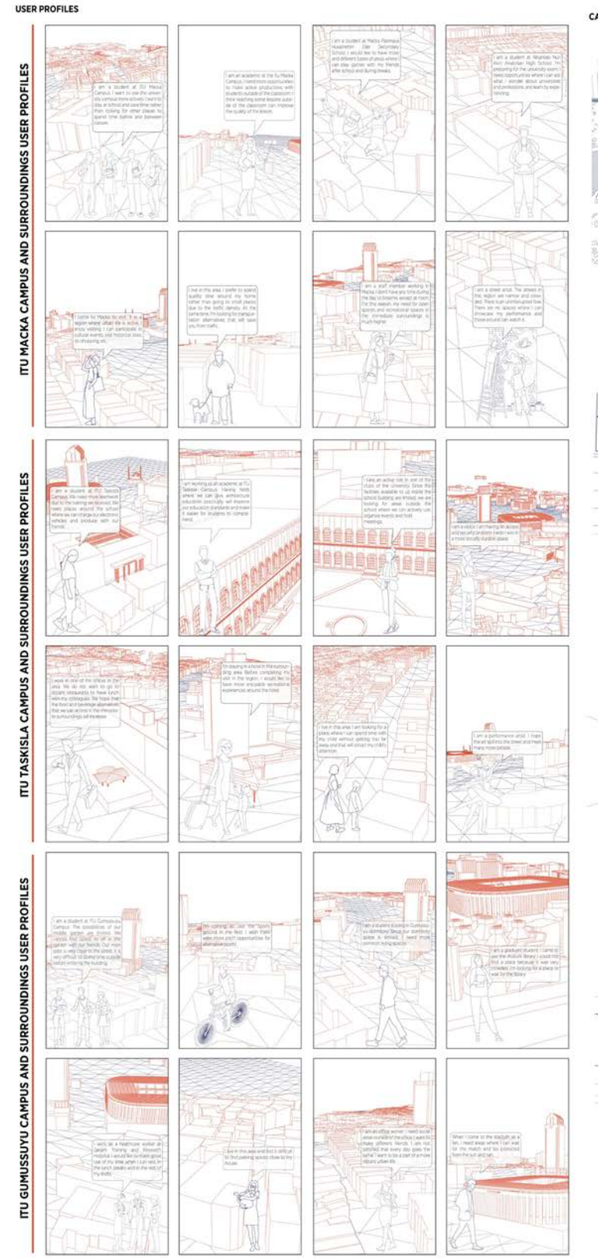
## PATCH TYPES



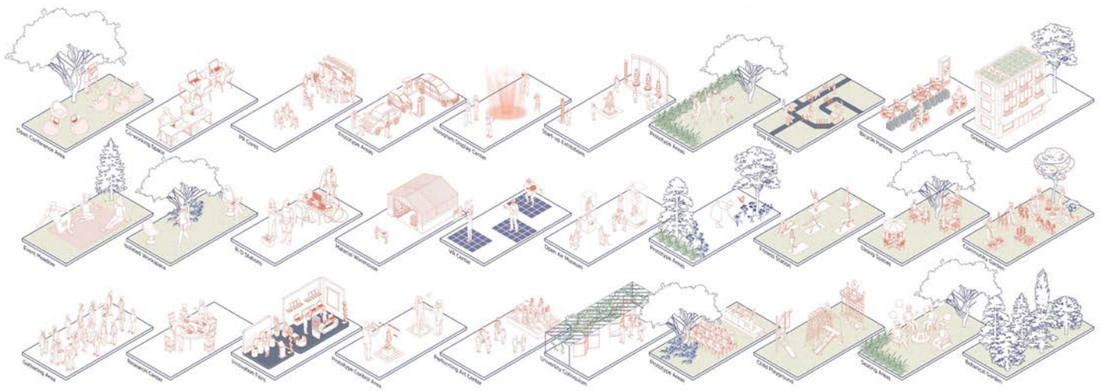


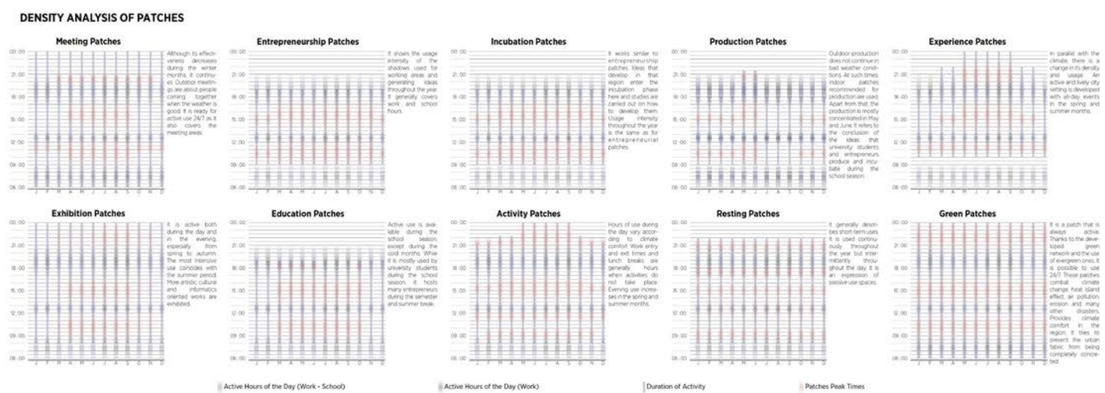

The Urban Laboratory Project, designed as part of the interaction between the university and the city, is overseen and managed by both the university and local administrations. Located at the intersection of three Istanbul Technical University campuses, the project adopts innovative, inclusive, participatory, resilient, ecological, and flexible design approaches. These strategies are tailored to address the environmental, social, and economic needs of the region's complex structure. The proposed project consists of 10 core concept areas: meeting, enterprise, incubation, production, experience, exhibition, education, activity, rest, and green spaces. These areas leverage the university's resources to generate scientific solutions for urban challenges. The project involves all segments of society, incorporating participatory processes to address urban issues. Experts, entrepreneurs, students, city residents, and administrative groups collaborate to create studies that shape the future of the city and contribute to international scientific standards. The dissemination of these studies is facilitated through various channels, including the city council, mobile applications, social media, ITU Radio, and a dedicated website.



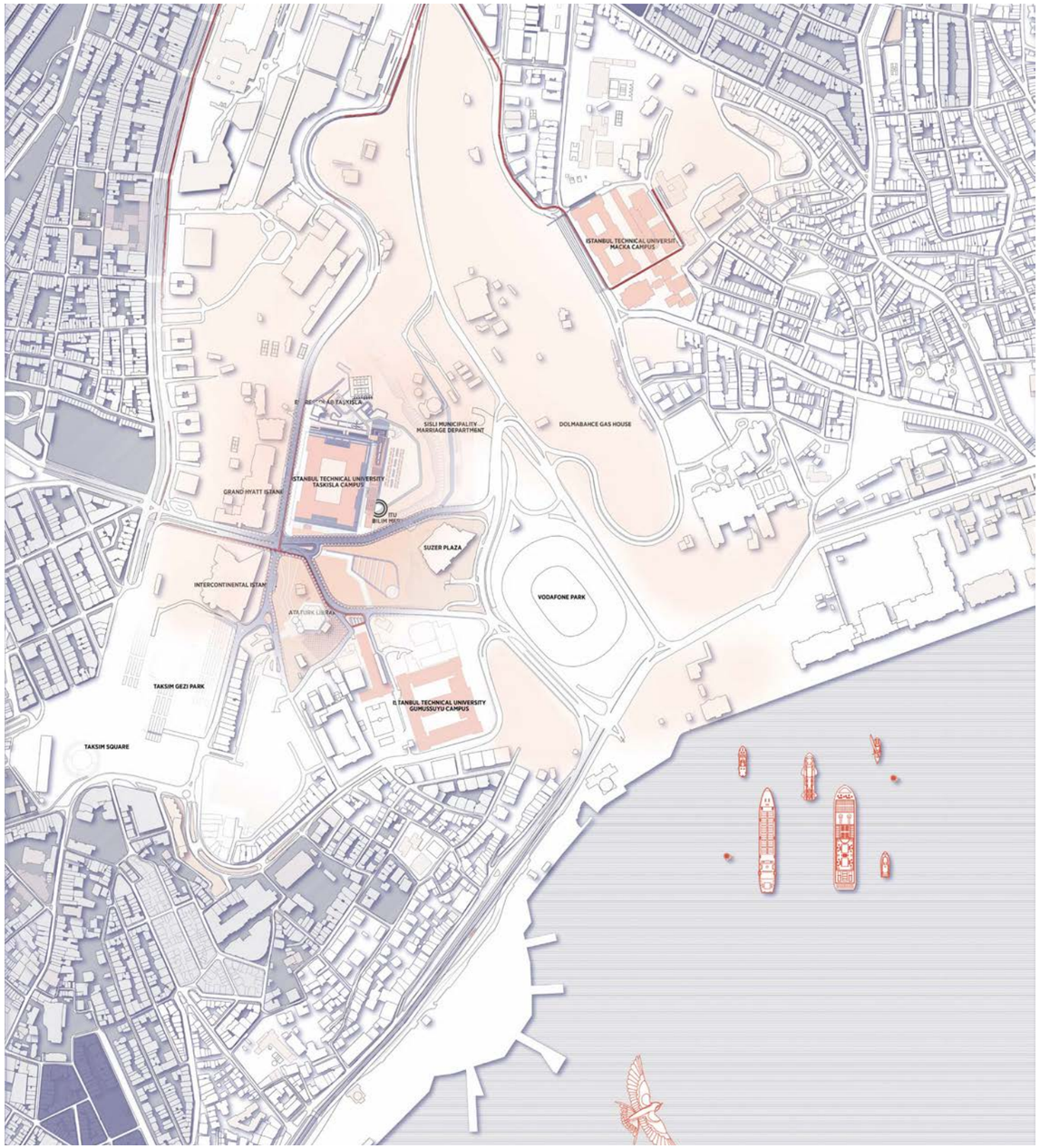



The area studied in this project holds historical and urban significance. Maçka Democracy Park, situated at the intersection of three campuses, stands out as the largest green space in the region, offering substantial ecological potential. The goal of the project is to develop spatial strategies and solutions that are mindful of the park's sensitive nature. The Patch-Corridor-Matrix model was applied, considering the issues identified at the 1/2000 scale and the proposed solutions derived from this conceptual approach. This method was maintained at both the 1/500 and 1/200 scales. In the 1/500 plan, the focus was placed on the Taşkışla Campus, the urban gap between the campuses, the Gümüşsuyu Campus, and the Atatürk Library. At the 1/200 scale, Taşkışla Campus was chosen as the core area, with eco-friendly co-working spaces developed both within and around Taşkışla. The project also integrates areas where people from diverse backgrounds can socialize and contribute to the Urban Laboratory, alongside shared working spaces.

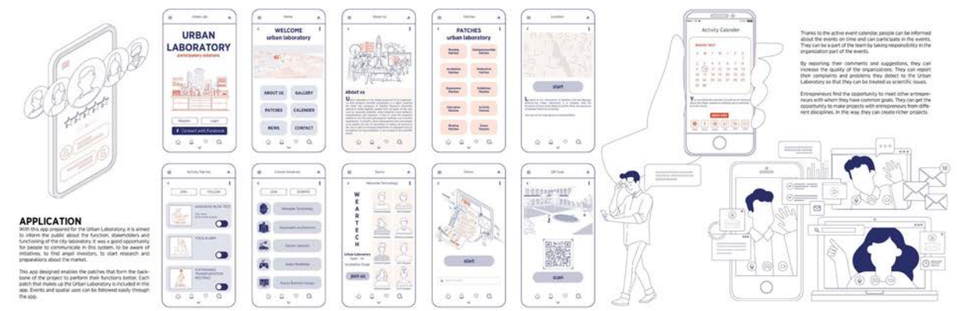


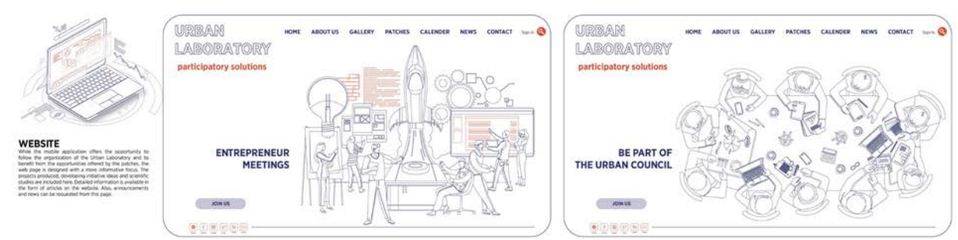


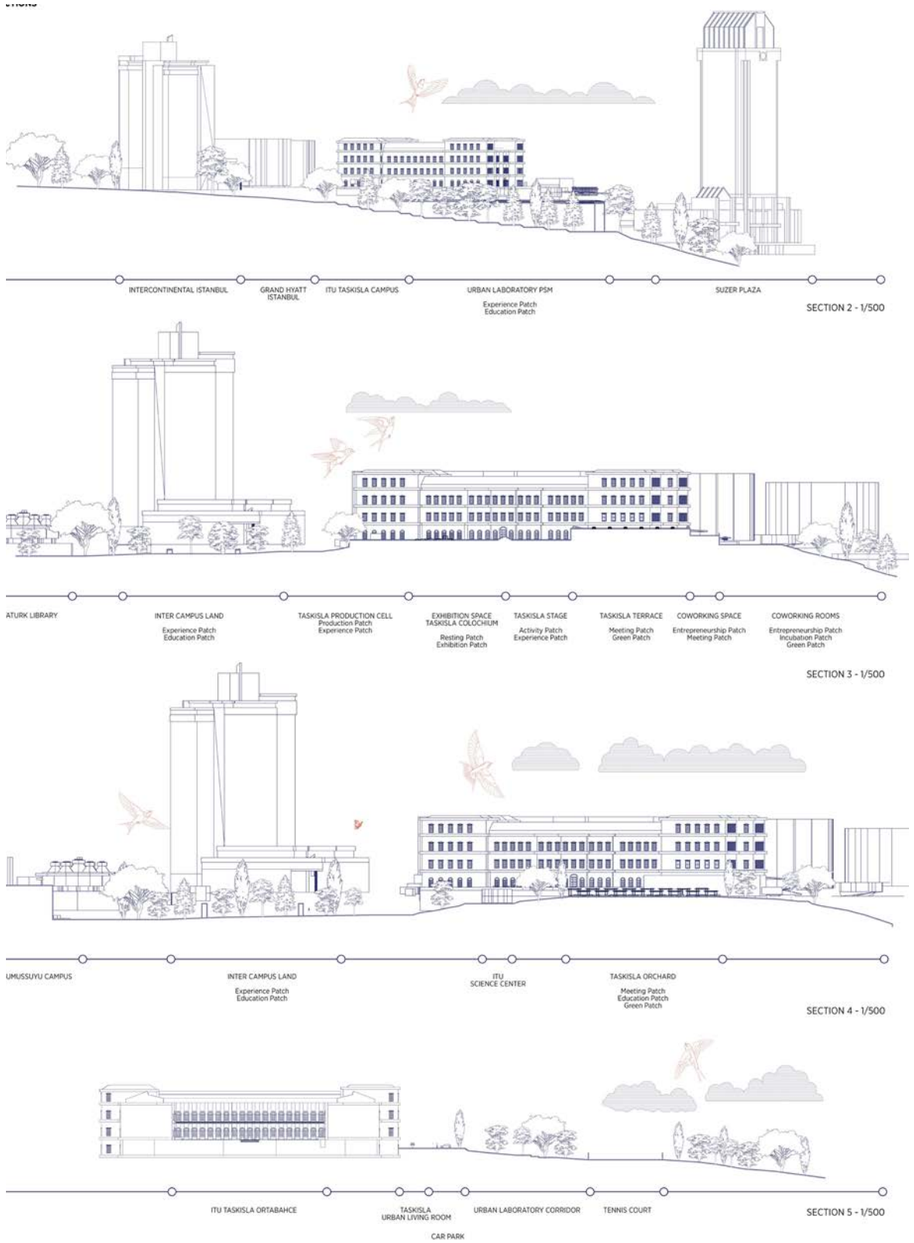

The Urban Laboratory is an initiative that fosters interaction between the university and the city, working to create collaborative solutions to urban challenges by leveraging the resources of both. It serves as a city infrastructure that unites all relevant stakeholders—city officials, university members, and the local community—through participatory project development. This collective effort addresses the paradigms of urban living, encouraging productivity, connecting entrepreneurs with shared objectives, and rewarding successful ideas by linking them with angel investors. By extending education and innovation beyond institutional walls and into the broader city, the initiative facilitates the testing and advancement of scientific ideas in direct connection with social life.

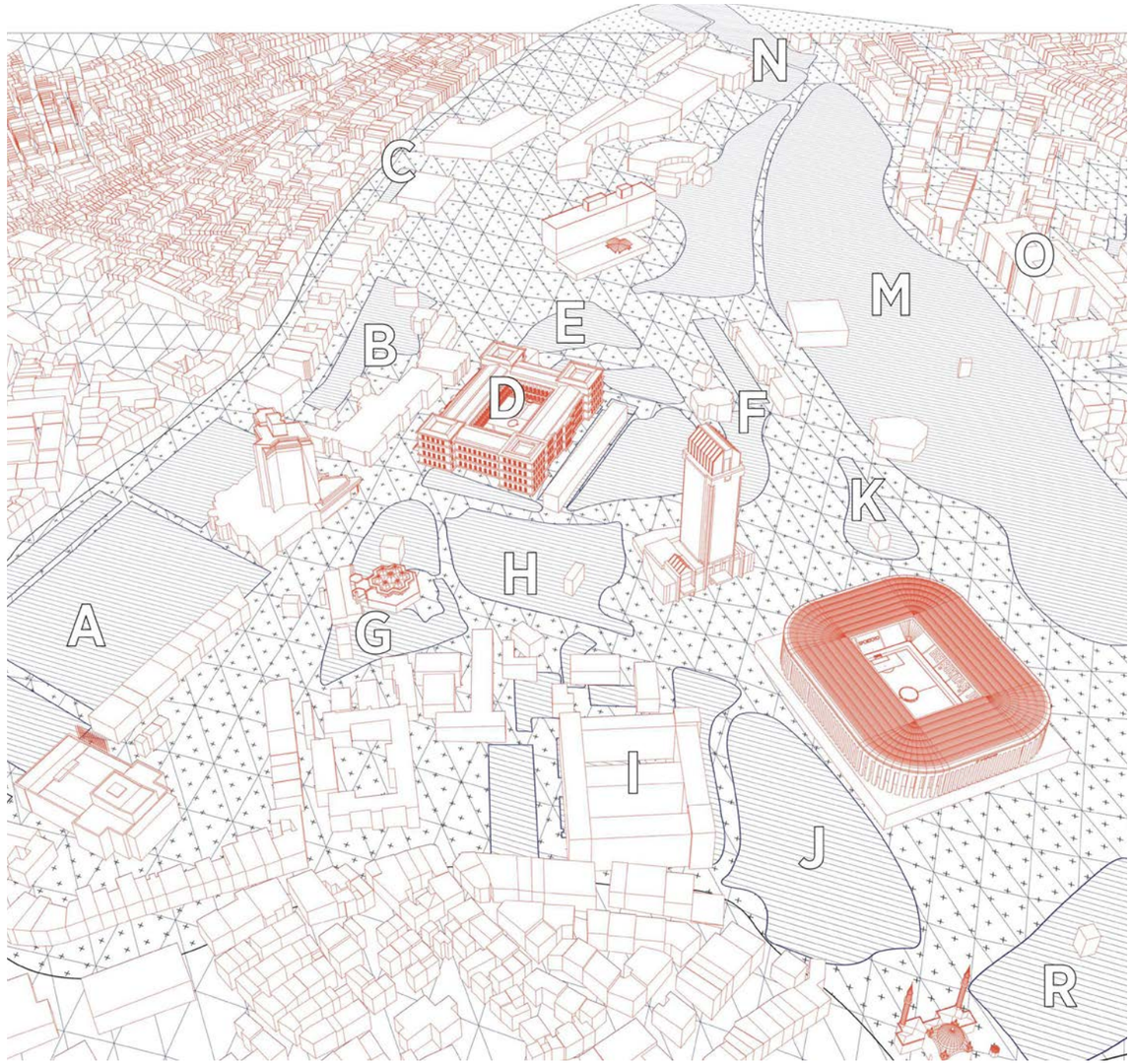


The ITU URBAN LABORATORY Project, to be implemented through the collaboration between Istanbul Technical University and the Istanbul Metropolitan Municipality, aims to address urban challenges while hosting the scientific knowledge generated by the university. The involvement of other universities in these studies, along with the publication of the outcomes from the urban laboratory at both national and international levels, will offer solutions to urban issues globally. This approach will strengthen social relations, provide opportunities for development-focused individuals in the city to connect, and enhance the overall welfare and education levels. The project will bring together all segments of society to create rich, diverse content.

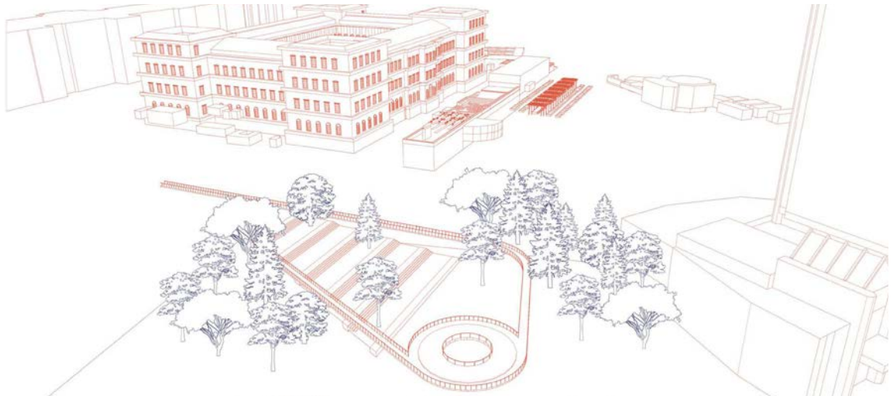


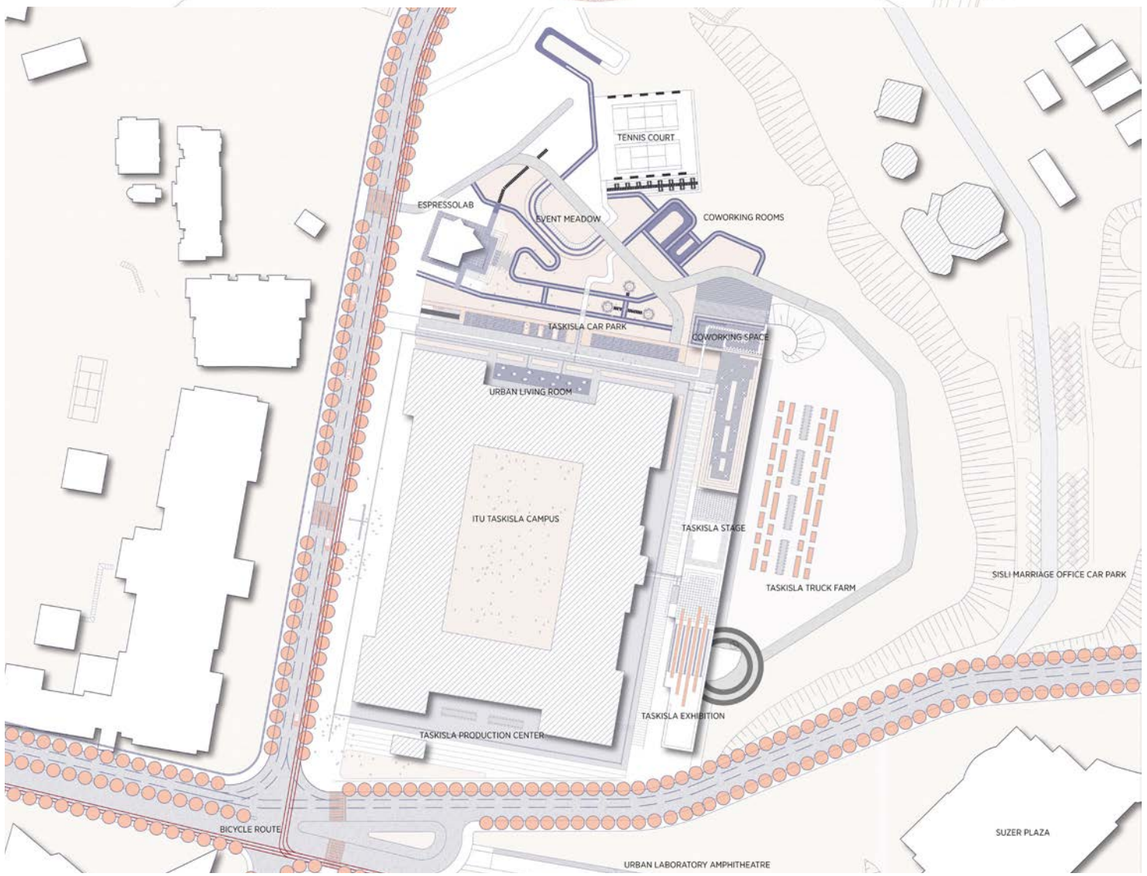





The Urban Laboratory, developed to enhance the interaction between the university and the city, aims to leverage existing potentials and generate scientific solutions to urban challenges. It will serve as the hub for innovative ideas and processes, addressing complex urban issues through collaborative efforts. In this process, the city's history and culture, its infrastructure, and the young, dynamic university population with their science-driven capabilities will be harnessed.

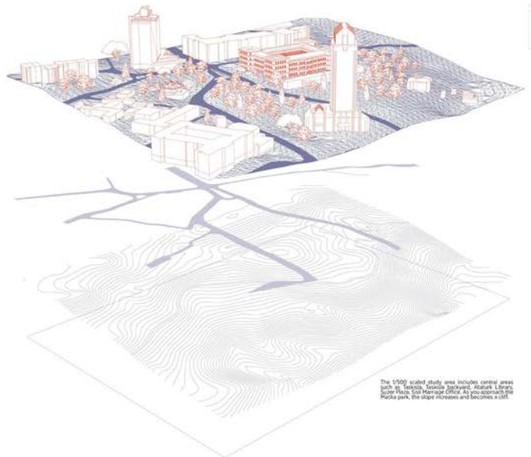




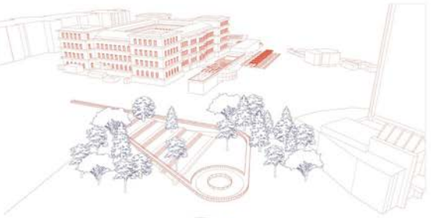





1/500 EXISTING

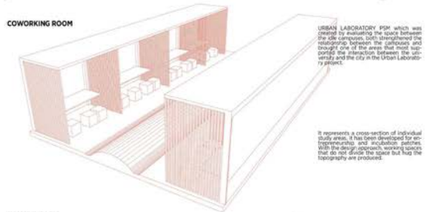


The 1/500 scaled study area includes central areas such as Taksim, Inönü Boulevard, Ataturk Library, Suzer Plaza, Sisli Marriage Office. As you approach the Ritchie park, the slope increases and becomes a cliff.



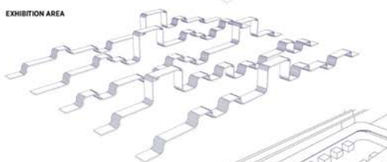
COWORKING ROOM

URBAN LABORATORY PDP, which was created by evaluating the green spaces in the ide campuses, both strengthened the relationship between the campuses and the city and the Urban Laboratory project, portrays the interaction between the university and the city in the Urban Laboratory project.



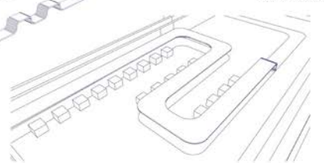
It represents a cross-section of individual study areas. It has been developed for entrepreneurship and incubation patches. With the design approach, workers' spaces that do not divide the space but hug the topography are produced.

EXHIBITION AREA

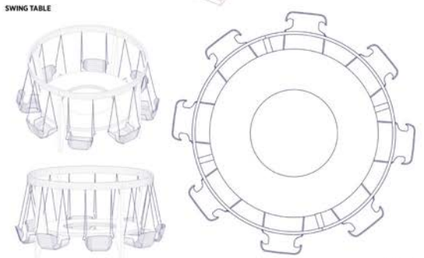


Design proposals have been developed to support the 'Green Zone' and 'Urban Campuses' development method of Urban Laboratory. It is aimed to integrate these areas with the area by designing them in accordance with the patch theme.

COWORKING SPACE



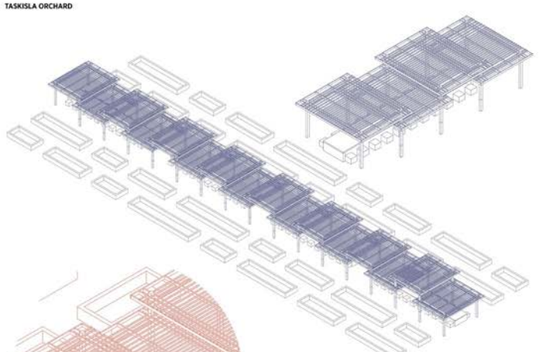
SWING TABLE



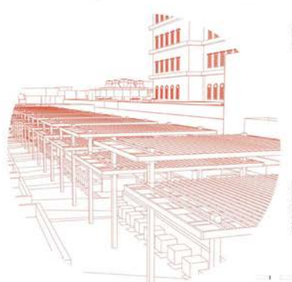
1/20 PLAN

The basic principle of the swing table is to create a flexible space by adding a swing to the circle in the form of a ring. The space of Tasksia into the design. For this reason, there are large gaps in the middle of the table where the tree trunk can easily fit.

TASKISLA ORCHARD

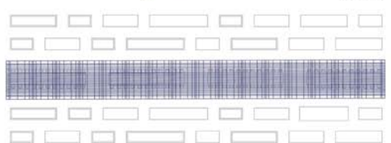


In order to be suitable for the current use of the area, a division was tried to be developed without intervening too much on the ground. The initial goal of this design is to experience this 'green zone and combine its potentials with the Urban Laboratory program.



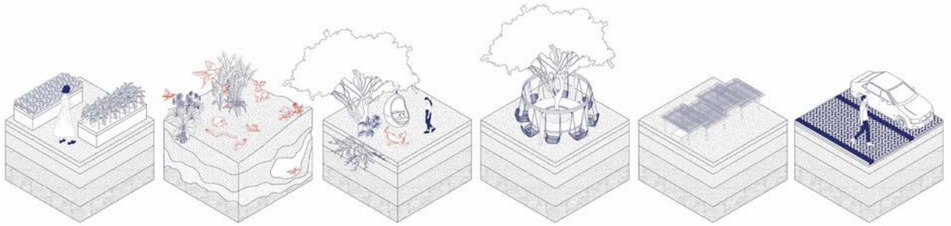
In this design consisting of wooden pergolas, it will serve the purposes such as actively gathering, spending time, socializing in the open area and creating an urban unit similar the Tasksia. There are plant boxes around the pergolas suggested to keep the concept of orchard alive and develop it. In terms of ergonomics, garden beds with a height of 60 cm are the most suitable plant beds depending on the season.

1/200 SECTION



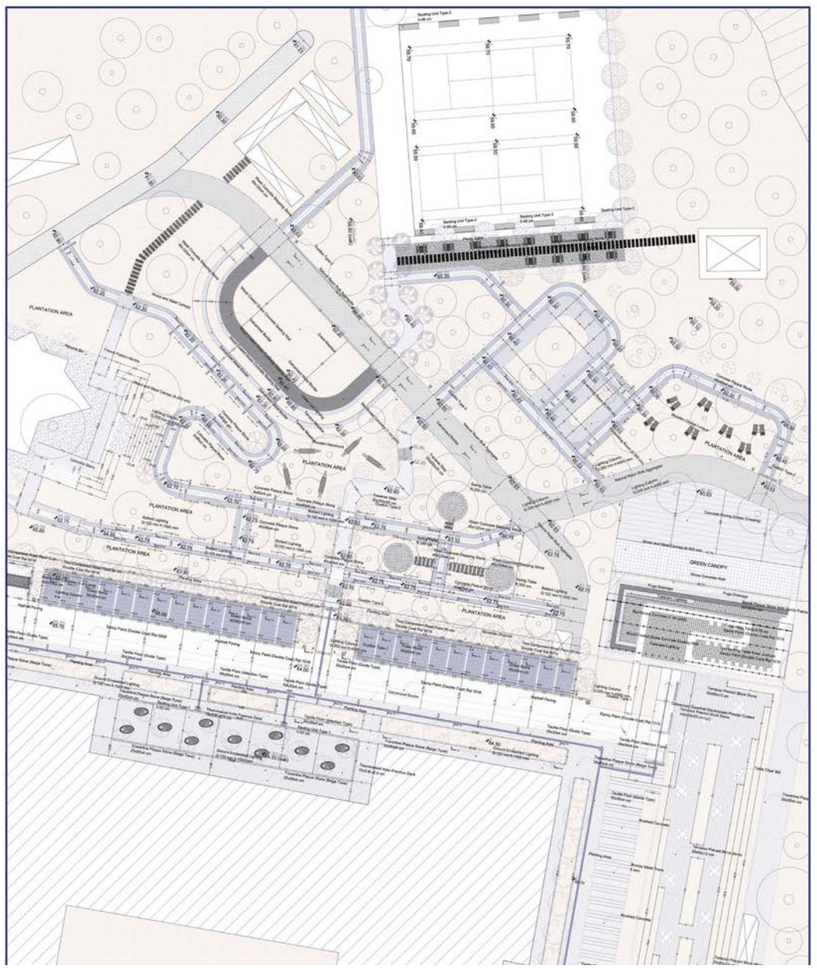
1/200 PLAN

1/200 SECTION



## URBAN LABORATORY LANDSCAPE PROJECT - 1/200 HARDSCAPE PLAN

A1




- Thermowood Iroko Fraxinus Deck (13x5.8.x2,5 cm)
- Travertine Plaque Stone (Beige Tone) (25x50x4 cm)
- French Pattern Marble (Hurok Silver Set)
- Grass Stone (40X60X9 cm)
- Terrazzo Precast Block Stone (40X60X9 cm)
- Basalt Plaque Stone With Sandy Patina (30X30X4 cm)
- Asphalt Paving
- Reinforced Concrete (1 cm joint)
- Natural Resin Bulk Aggregate
- Compressed Soil with Solution
- Traverse Step (30x200x20 cm)
- Concrete Plaque Stones
- Concrete Stairs
- Granite Plaque Stone (30x30x4 cm)
- Mulch
- Wash Concrete Stepping Stone (40x120x4 cm)
- Epoxy Paint (Double Coat) Ral 1018
- Terrazzo Precast Stairs
- Two Component Road Paint 20 cm
- Concrete Grey Ceramic (70x100x1 cm)
- Wood and Steel Canopy
- Brushed Concrete
- Concrete Paving (Grass Crossing)
- Tactile Floor (Guide Type) (30X30X4 cm)
- Tactile Floor (Attention Type) (30X30X4 cm)

### PLANTING LEGEND

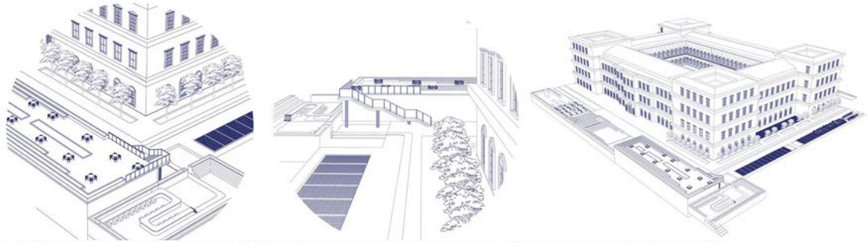
- Planting Area
- Existing Trees

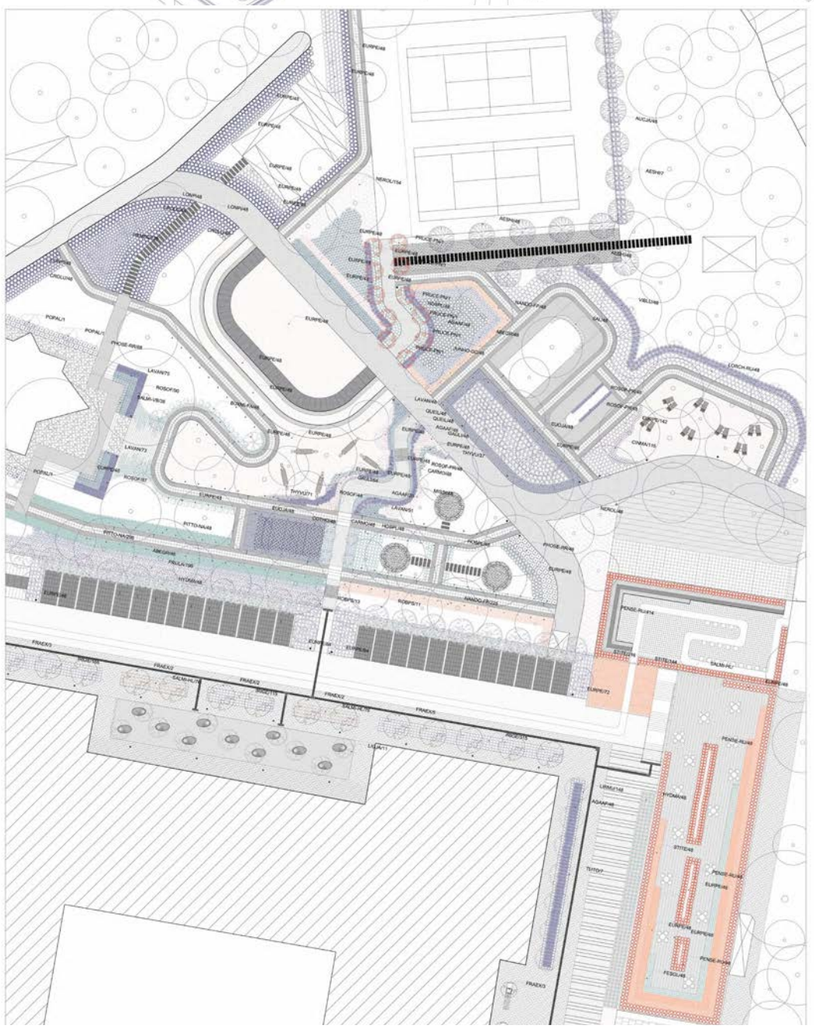
### URBAN FURNITURE LEGEND

Swing Table | Seating Unit Type 1 | Seating Unit Type 2 | Seating Unit Type 3

Picnic Table | Table Chair Set | Wooden Hammock | Wooden Chaise Longue







### LEGEND

#### TREES

| Symbol | Abbreviation | Plant Name | Pace | Width (cm) | Height (cm) | Trunk Diameter | Trunk Height | Unit | Quantity |
|---|---|---|---|---|---|---|---|---|---|
| | AESHI | Aesculus hippocastanum | Pol | 300-400 | 400-450 | Q:16-18 | - | Piece | 18 |
| | CERSI | Cercis siliquastrum | Pol | 280-350 | 150-200 | Q:12-14 | - | Piece | 3 |
| | FRAER | Fraxinus excelsior | Pol | 400-450 | 400-450 | Q:18-20 | - | Piece | 2 |
| | LAGIN | Lagerstroemia indica 'Tiga' | Pol | 350-250 | 250-300 | Q:12-14 | 120 | Piece | 6 |
| | LIQUA | Liquidumb.styraciflua | Pol | 300-350 | 350-400 | Q:18-20 | - | Piece | 11 |
| | POPAL | Populus alba | Pol | 400-500 | 400-450 | Q:25-30 | - | Piece | 3 |
| | PRUCE-PN | Prunus cerasifera 'Pissardii Nigra' | Pol | 350-400 | 300-350 | Q:18-20 | - | Piece | 11 |
| | QUEIL | Quercus ilex | Pol | 400-450 | 350-400 | Q:18-20 | - | Piece | 15 |
| | ROBPS | Robinia pseudoacacia | Pol | 350-400 | 300-350 | Q:18-20 | - | Piece | 4 |
| | SYRVU | Syringa vulgaris | Pol | 400-450 | 350-400 | Q:18-20 | - | Piece | 10 |
| | TILTO | Tilia tomentosa | Pol | 400-450 | 350-400 | Q:18-20 | - | Piece | 7 |

#### SHRUBS

| Symbol | Abbreviation | Plant Name | Pace | Width | Height | Unit | Quantity | Planting Range |
|---|---|---|---|---|---|---|---|---|
| | ABEGR | Abelia grandiflora | Pol | 40-50 | 40-50 | Piece | 89 | 40 |
| | AUCJA | Aucuba japonica | Pol | 40 | 40-50 | Piece | 91 | 40 |
| | BUXMA-N | Buxus sempervirens 'Faulkner' Ball | Pol | 50 | 50-60 | Piece | 20 | 50 |
| | COTHO | Cotoneaster horizontalis | Pol | 60 | 50-60 | Piece | 32 | 50 |
| | EUOJA | Euonymus japonicus | Pol | 50 | 40-50 | Piece | 42 | 50 |
| | EUPPE | Eucalyptus pauciflorus | Pol | 80 | 40-50 | Piece | 165 | 60 |
| | HYDMA | Hydrangea macrophylla | Pol | 60 | 40-50 | Piece | 160 | 60 |
| | JUNCO-GC | Juniperus communis 'Green Carpet' | Pol | 40 | 20-30 | Piece | 1435 | 40 |
| | LAVAN | Lavandula angustifolia | Pol | 40 | 30-40 | Piece | 310 | 40 |
| | LONPI | Lonicera pileata | Pol | 60 | 30-40 | Piece | 178 | 60 |
| | LONSY-RU | Lonicera syringantha 'Rubrum' | Pol | 40-50 | 50-60 | Piece | 75 | 40 |
| | NANDO-FP | Nandina domestica 'Fire Power' | Pol | 40 | 30-40 | Piece | 88 | 40 |
| | NEROL-MI | Nerium oleander 'Mirtoustre' | Pol | 80-90 | 80-90 | Piece | 164 | 80 |
| | PHOSE-RR | Photinia serrulata 'Red Robin' | Pol | 40-70 | 70-90 | Piece | 48 | 60 |
| | PHOTE-VA | Phormium tenax 'Variegata' | Pol | 60-70 | 70-90 | Piece | 68 | 60 |
| | PITTO-MA | Pittosporum tobira 'Nana' | Pol | 60 | 40-40 | Piece | 36 | 60 |
| | PRULA | Prunus laurocerasus | Pol | 60 | 30-40 | Piece | 36 | 60 |
| | PYRCO-NA | Pyracantha coccinea 'Nana' | Pol | 60-70 | 70-90 | Piece | 48 | 60 |
| | ROSOF-PR | Rosmarinus officinalis 'Prostratus' | Pol | 40 | 40-50 | Piece | 103 | 40 |
| | VIBLU | Viburnum lucidum | Pol | 80 | 70-90 | Piece | 116 | 60 |

#### GRASS / PERENNIALS

| Symbol | Abbreviation | Plant Name | Pace | Width | Height | Unit | Quantity | Planting Range |
|---|---|---|---|---|---|---|---|---|
| | AGAAF-SU | Agapanthus africanus 'Star Gutty' | Pol | 40 | 30-60 | Piece | 88 | 40 |
| | CAREX-MO | Carex oshimensis 'Milk Chocolate' | Pol | 30 | 20-30 | Piece | 81 | 30 |
| | CAREX-VA | Carex morrowii 'Variegata' | Pol | 30 | 20-30 | Piece | 58 | 30 |
| | CIRRA | Cineraria maritima | Pol | 30 | 30-35 | Piece | 59 | 30 |
| | CROLU | Crocosmia lucifer | Pol | 40-50 | 40-50 | Piece | 598 | 40 |
| | FESGL | Festuca glauca | Pol | 30 | 20-30 | Piece | 58 | 30 |
| | GAUJ | Gaura lindheimeri | Pol | 40-50 | 50-60 | Piece | 97 | 40 |
| | HEMFU | Hemerocallis fulva | Pol | 40 | 40-50 | Piece | 370 | 40 |
| | HOSPL | Hosta plantaginea | Pol | 40 | 40-50 | Piece | 310 | 40 |
| | IRISE | Iris germanica | Pol | 40 | 40-50 | Piece | 258 | 40 |
| | LIRMU | Liriope muscari | Pol | 80 | 30-60 | Piece | 408 | 60 |
| | MISSI | Miscanthus sinensis | Pol | 80 | 50-80 | Piece | 406 | 60 |
| | PENSE-RU | Pennisetum setaceum 'Rubrum' | Pol | 50 | 50-70 | Piece | 205 | 50 |
| | SALNI-HL | Salvia nemorosa 'Hot Lips' | Pol | 60 | 30-40 | Piece | 117 | 60 |
| | SALNI-VB | Salvia nemorosa 'Viola Blue' | Pol | 60 | 30-40 | Piece | 158 | 60 |
| | SYTE | Stipa tenuissima | Pol | 40 | 40-50 | Piece | 414 | 50 |
| | THYVU | Thymus vulgaris | Pol | 40 | 40-50 | Piece | 414 | 50 |

#### GROUND COVERS

| Symbol | Abbreviation | Plant Name | Unit | Quantity | Planting Range |
|---|---|---|---|---|---|
| | DICRE | Dichondra repens | $m^2$ | 170 | - |

#### MIX PLANT AREAS

| Symbol | Abbreviation | Plant Name | Unit | Quantity | Planting Range |
|---|---|---|---|---|---|
| | MIXSOW-MIX 1 | %50 Lolium perenne, %12 Festuca rubra 'Commutata' %20 Festuca rubra 'Rubra', %15 Poa pratensis, %3 Agrostis stolonifa, %12,5 Festuca ovina | $m^2$ | 1782 | - |

# Re-Connect

Ezgi Akpınar

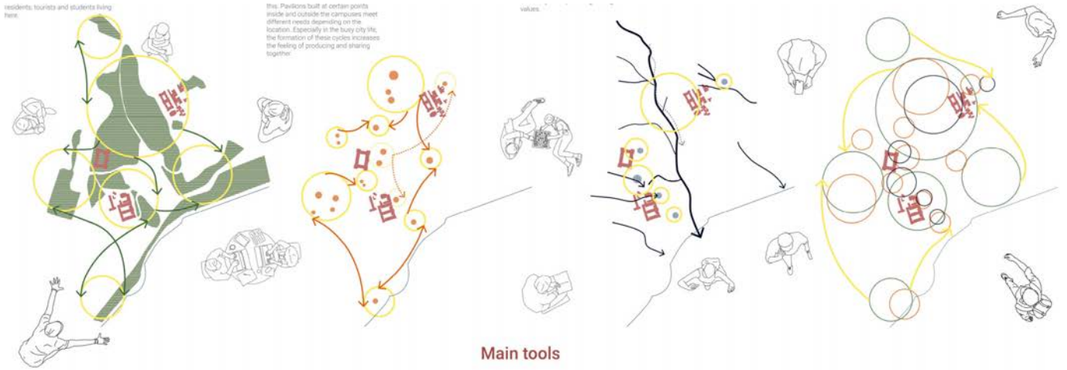
*"Re-Connect" was produced within the scope of Graduation Project carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Ikhwan Kim, Assoc. Prof. Dr. Saye Nihan Çabuk, and Assoc. Prof. Dr. Saitali Köknar and assisted by Res. Assist. Gizem Aluçlu and Res. Assist. Başak Akarsu under the title "Urban Campuses of ITU" in the spring semester of 2020-2021.*

✳ TMMOB Chamber of Landscape Architects • 9th Landscape Architecture Students Graduation Project Awards Equivalent Award

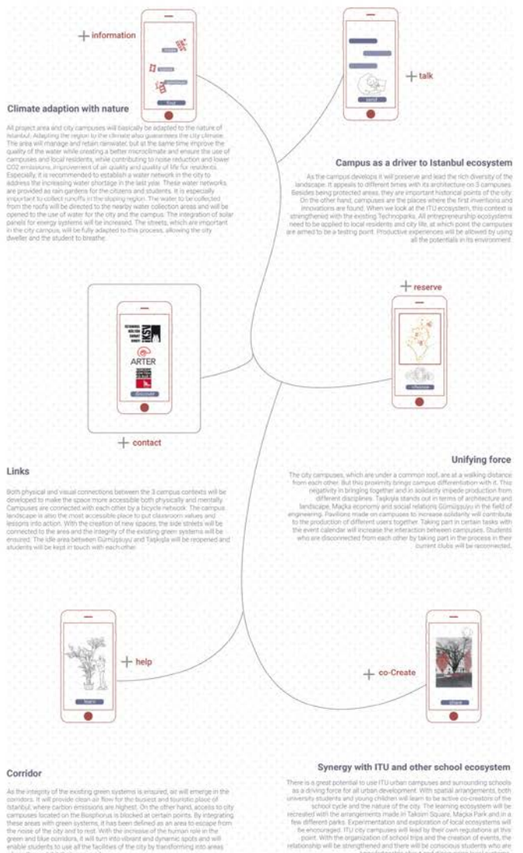
The Re_Connect project focuses on creating local urban area solutions that strengthen the campuses' locations while simultaneously addressing global climate challenges. As the student population has grown over time, the sense of unity and belonging among students has diminished. The term "re-connect" originates from the cooperation and interdisciplinary processes that were a fundamental part of early education systems, where students worked together under a single roof. Today, with the growing student population and the introduction of campus concepts, these interdisciplinary processes have weakened. The project aims to rekindle the sense of togetherness and cooperation through cycles of engagement.



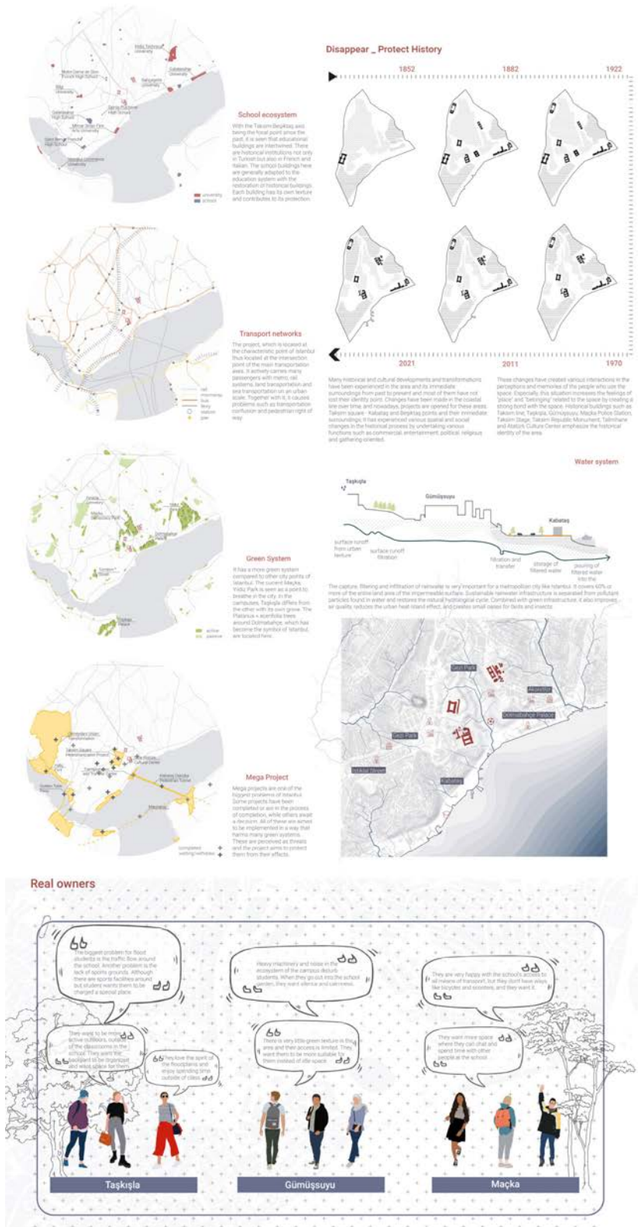


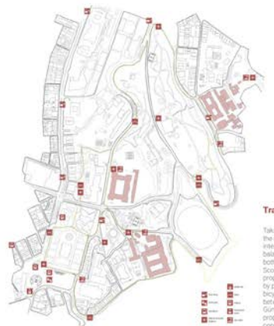


Main tools



The project aims to contribute to city life by creating a framework that adapts to the changing environment and people. It leverages co-creation, ownership, and the social diversity of the community and region as its strengths. By enhancing the natural characteristics of the city and strengthening biodiversity, the project also contributes to the unique spirit of the region. Taşkışla, Maçka, and Gümüşsuyu, the city campuses of Istanbul Technical University (ITU), encourage reconnection between each other and with other systems. The goal of the project is not only to provide solutions for ITU campuses but also to make a positive impact on their surroundings. This process has been supported by creating arrangements that support cycles, such as transport, flow, green system, blue system, activities, and innovation systems. By combining circulation and activities, connections were made between the three campuses. Activities were chosen based on six key tools that had been defined beforehand, ensuring that the environment fully engages the user.





**Transportation**

Taksim-Beşiktaş line, located in the middle of Istanbul, is home to intense transportation vehicles. A balance must be created between both pedestrian and vehicle traffic. Scooter rental points have been proposed for the field. In addition, by proposing a suitable route for bicycle traffic, a loop route between Taşkışla - Maçka - Gümüşsuyu campuses was proposed and campuses were connected.

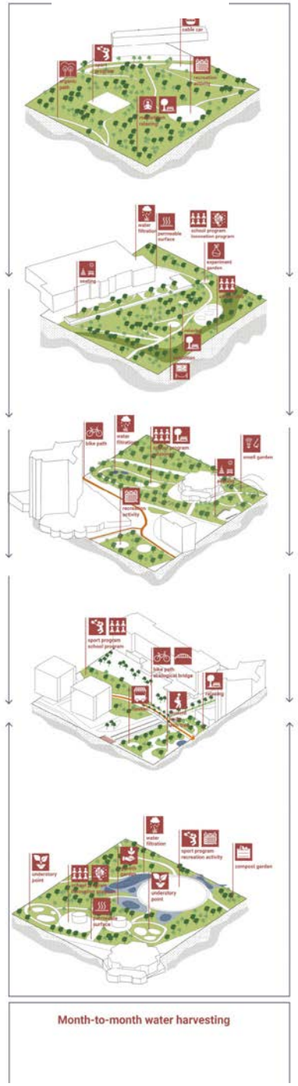
**Circulation**

It has been proposed with the necessary width of pavement for pedestrians in the necessary arrangements for circulation. At some points, pedestrian and vehicle traffic mix with each other. It is aimed to relieve vehicle traffic by bringing intersection suggestions especially for Taşkışla and its surroundings. Since Taksim and the campuses are places with heavy pedestrian traffic, a speed limit has been imposed for vehicles. Uninterrupted pedestrian traffic is supported.

**Green system**

The field is home to many green systems. The necessary regulations not only propose new systems, but also maintain their current form. While maintaining the green system, it is aimed that the field be used by the users.

Istanbul is dependent on surface water resources. Changes in temperature and precipitation regime caused by climate change make it difficult to meet the increasing demand of the increasing population of the city. Pressures on water resources can threaten water security due to decreasing precipitation, evaporation with increasing temperatures, decrease in the amount of surface water, and prolongation of drought periods.



**Month-to-month water harvesting**

**Activities**

Many systems in the field are aimed to connect with the user. Suggested activities are aimed at students, locals and tourists. The area that connects with many users brings many innovations to the user. Outdoor activities support the spirit of the region and the continuity of green systems is also ensured by activities.

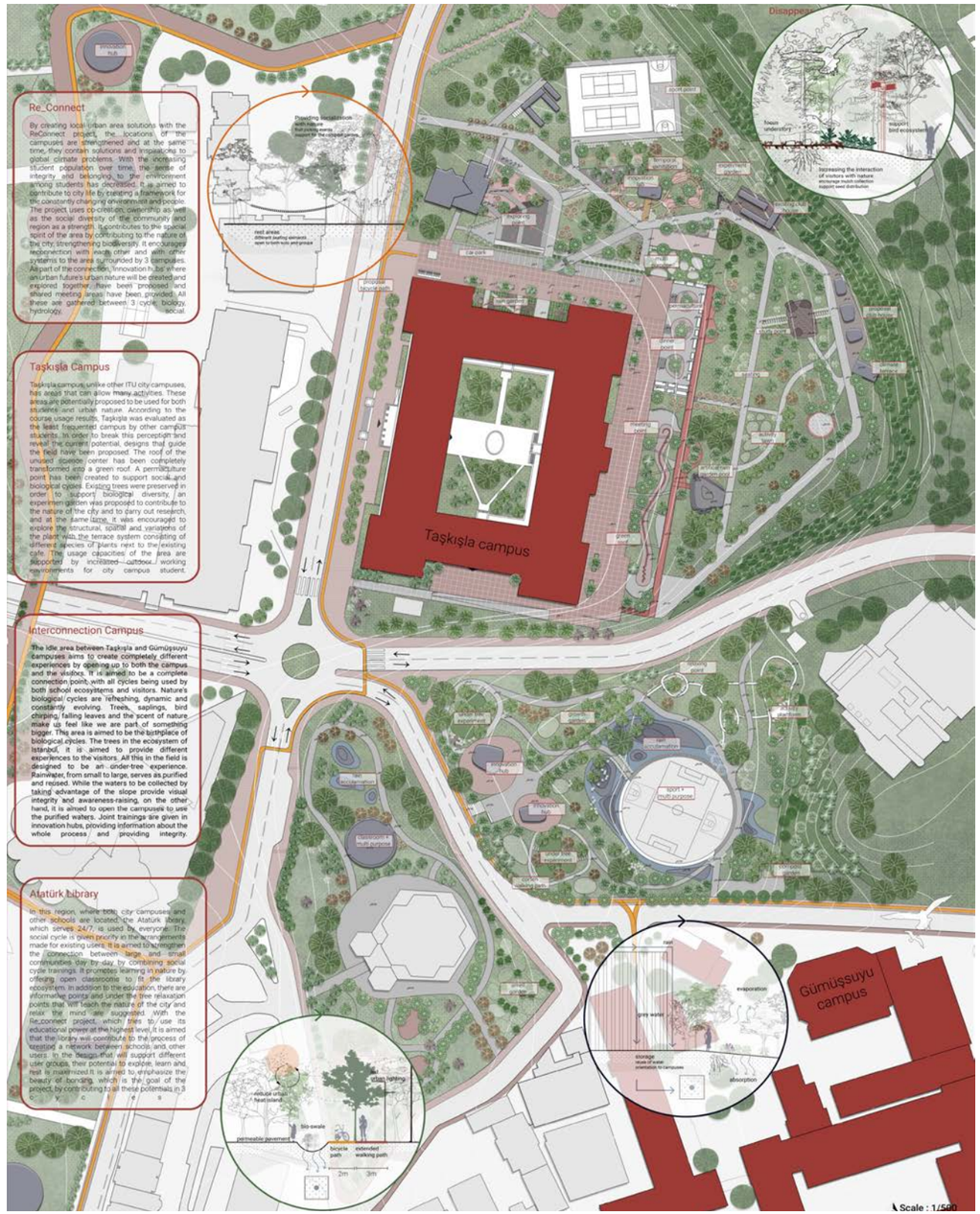
**Water system**

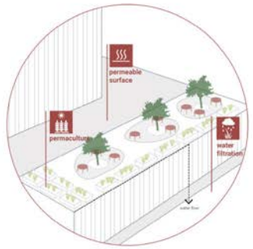
Many systems in the field are aimed to connect with the user. Suggested activities are aimed at students, locals and tourists. The area that connects with many users brings many innovations to the user. Outdoor activities support the spirit of the region and the continuity of green systems is also ensured by activities.

**Innovation system**

The area has many school ecosystems. At the suggested points, it has been turned into places where school activities can be held and interact with the green system more. In this way, awareness will be raised on issues such as the climate crisis. Innovations points scattered over many points will be open to the public. One of these points has been adopted as Taşkışla.

With the proposed water collection area, it raises awareness about how water can be collected in the center of Istanbul. With the calculated area and precipitation capacity, water can be collected in every season in the area, and it is arranged to be transferred to the underground water tanks at the points where the area is insufficient. In this way, the accumulated water will be home to the creatures there, and at the same time it is aimed to be used between campuses. By using one of the main topics, climate adaption with nature, ITU campuses are aimed to be a pioneer for other schools.





**Connect food**

The school's hard-floored roof has been replaced with a green roof. Activities in the roof garden are out of the ordinary. First of all, it is aimed to experience permaculture activity thanks to wooden pots. On the other side of the terrace, it is aimed to transform the roof garden into a meeting place with the sitting element at different levels, where the plants can be experienced. Arrangements have been made to come to the common meeting point of 3 campuses in the future.When it rains, it is aimed to collect it in the drainage gap and the activity platform located at the lower level.

**Connect climate**

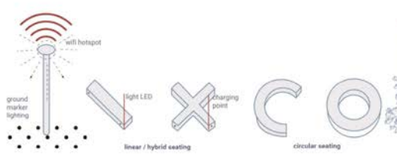
ITU students must learn to be active co-creators of the Istanbul cycle and the nature of the city. Taşkışla invites other campus students to reveal the current potentials of the floodplain. For this, it was aimed that school clubs take an active role. A wooden terrace was proposed along with the proposed club rooms. It is aimed to be used as a climate garden where students can observe their nature experiences. Units that measure and share natural data. sundial, barometer, anemometer, wind vane, precipitation meter, humidity meter, thermometer were placed.

**Connect people**

Taşkışla, Maçka and Gümüşsuyu have the potential to invite students to the area. With the opening of the backyard students, it is aimed to strengthen their relationship with nature. Students will be able to study in the open air with the wooden system that will not disturb the nature texture placed in the The exhibition point , which is open to different uses, it is aimed that more people interact with the backyard by providing outdoor activities.

**Lighting / seating**

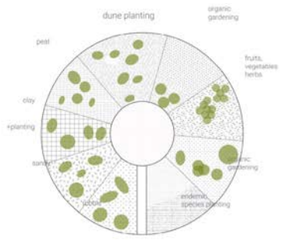
Urban furniture was changed according to the needs of the students on campus. By adding wifi to the furniture, it was aimed for the students to spend time and work actively in nature. It is aimed to take on a different atmosphere in the evenings with the additional LED lights.



The project begins with cycles that are interconnected through the principles of adhesion and cohesion. Cohesion binds similar substances, while adhesion binds different substances together. Three cycles have been created for a sustainable campus: hydrological, social, and biological. These cycles are linked through the concept of adhesion and cohesion. When examining the main tools, the design has been aligned with sustainable campus principles. Six key tools were identified: harmony with nature through climatic solutions, links and corridors, campuses acting as drivers for Istanbul's ecosystems, unifying power, and synergy with ITU and other educational ecosystems. As the design progresses into the lower layers of the biological, hydrological, and social cycles, various points in landscape planning are explored.

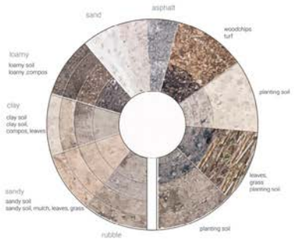







**Planting**

Plants are aimed to be made from the most used plants in the city. It varies according to the soil type for different sections. Controlled experiments have been created for different garden types. With the selection of the easy-growing species of the plants, the observation was made to be seen by everyone.




**Soil**

Various soil compositions based on four different surfaces have been used. Different soil types found in Turkey were used. By dividing the soil types, materials such as leaf and compos, which can be mixed with the existing ones, were added. Different controls of different soils are provided. It is aimed to increase the applications by keeping the depths of the soil short

**Water**

Rain water collected from the roof of Taşkışla to support the recycling of the water will meet the plants here. On the other hand, water measuring monitors were used to find out how permeable it is according to different parameters. Thanks to these monitors, it will be predicted what results can be obtained in city applications.

**Biological cycle**

**Social cycle**

**Hydrological Cycle**

**Four season**

Tanks will be built in the entire area that collects rainwater used as a source. There are many hydrological cycles in the project, which focuses on climate assurance. It is important that these cycles meet with local residents and students and make the process visible. Thanks to the rainwater pool established in the back garden of the Taşkışla, the water collected from the roofs will be collected by the surface flow. On rainy days, it is aimed to be transferred to the warehouse at the bottom thanks to the permeable surfaces. The transferred water will be stored for later use for other cycles. On the other hand, it is aimed to ensure all the recycling of water by using seeds for irrigation of seedlings. This will also turn into an awareness campaign for students and visitors at the school. On days when it is not raining , the pool will remain empty and events will be allowed .

spring

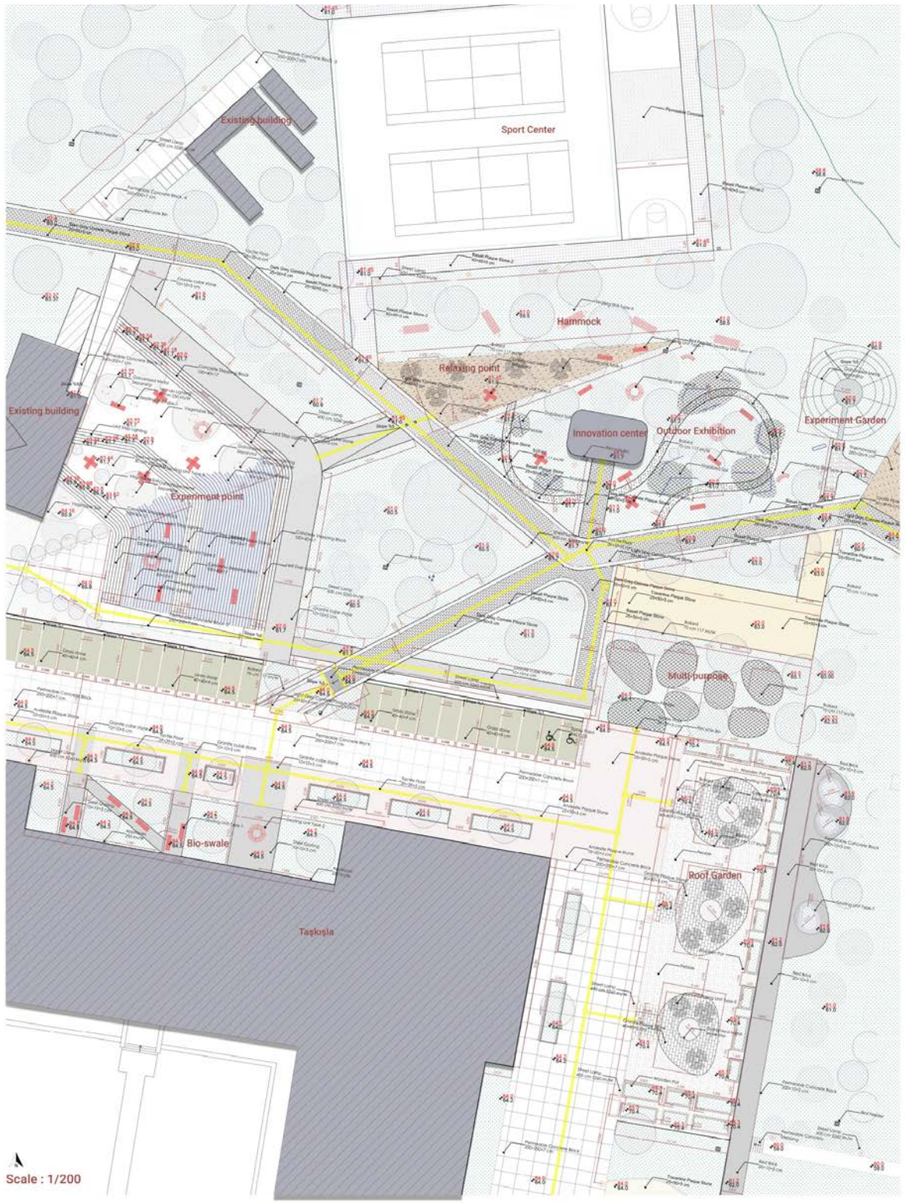
summer

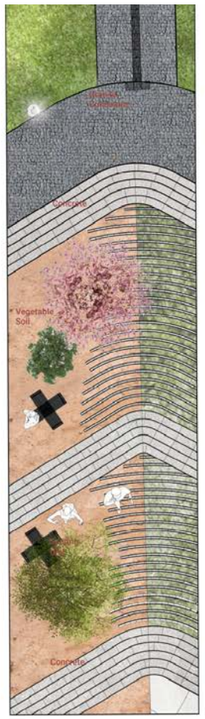
section rainy day

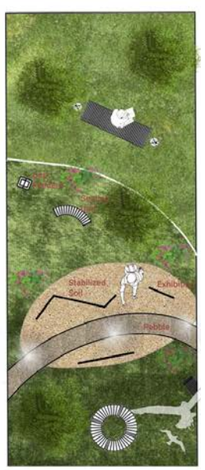
fall

winter

section normal day







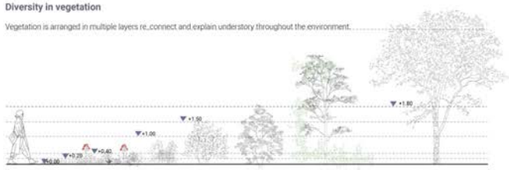

## Biological cycle

Cycle with biological _ understory

## Social cycle

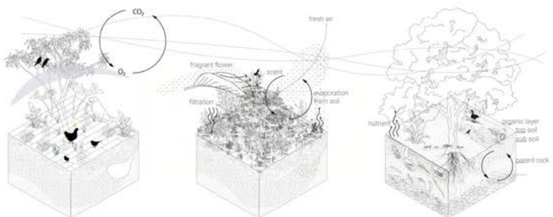
Diversity in vegetation

Vegetation is arranged in multiple layers re_connect and explain understory throughout the environment.




The understory is the underlying layer of vegetation in a forest or wooded area, especially the trees and shrubs growing between the forest canopy and the forest floor.With the decreasing green tissue day by day, many plant and animal species are also decreasing. It is designed to consider not only the top of the earth but also the gold. Different vegetation types have been introduced as a suggestion and it is aimed to keep biodiversity at a high level.

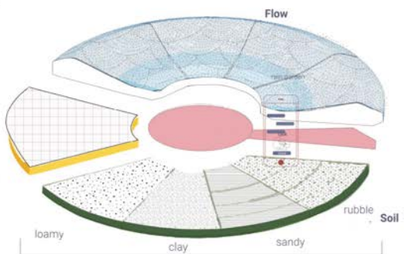
## Hydrological Cycle




Top cover and bottom cover work together. Students, local residents and tourists have been informed more about the subject with the planting design that will lead the campus and its surroundings. A special sense of belonging to the place has been created with the selection of the vegetation species belonging to Istanbul. Different vegetation has been used to create the necessary nutrients for underground plants. All these bring together the integrated landscape system.

Cycle with social and hydrological _ experiment garden

The climate is changing, rains are falling heavier, on the other hand, drought lasts longer. While these two points form the innovation part of the project, they unite the hydrological, social and biological cycles. The experimental garden located in Taşkışla campus is designed to learn what parameters it brings to the city in planting design. Different lands and different practices in the city have been tested. The selected soil types from these areas and these seeds are planted in order to adapt to the natural environment. For this, experiments are carried out with soil compositions, planting types and runoffs. These experiments are aimed to be used in different application areas of the city in the future. On the other hand, they will be able to support the experimental process by owning the tasks in the proposed application so that their students can interact.



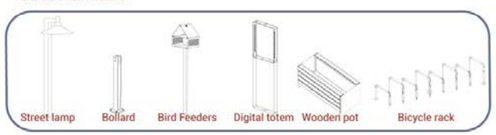
## Material Legend

| Symbol | Name | Width | Unit | Number |
|---|---|---|---|---|
| | Andesite Plaque Stone | 25×50×5 | m² | 336 |
| | Basalt Plaque Stone -1 | 25×50×5 | m² | 135 |
| | Basalt Plaque Stone - 2 | 40×40×5 | m² | 189.6 |
| | Basalt Plaque Stone - 3 | 30×10×7 | m² | 60.2 |
| | Concrete Plaque Stone Dark Grey | 25×50×5 | m² | 467 |
| | Concrete Plaque Stone Light Grey | 25×50×5 | m² | 93.75 |
| | Concrete Stepping Stone | 100×40×17 | m² | 117 |
| | Galvanized Metal Seperator | | m² | 35 |
| | Granite Plaque Stone | 40×80×5 | m² | 186 |
| | Granite Cube Stone | 10×10×5 | m² | 362 |
| | Grass Stone | 40×40×9 | m² | 316 |
| | Pebble | | m² | 397 |
| | Permeable Concrete Block | 200×200×7 | m² | 834 |
| | Permeable Conrete Block - 2 | 250×200×7 | m² | 121.1 |
| | Permeable Conrete Block - 3 | 340×200×7 | m² | 22.1 |
| | Permeable Concrete Block - 4 | 350×200×7 | m² | 113 |
| | Red Brick Stone | 20×10×5 | m² | 262.4 |
| | Stabilized Soil | | m² | 74 |
| | Steel Grating | 10×10×5 | m² | 92.65 |
| | Thermowood | 200×200×9 | m² | 170 |
| | Travertine Plaque Stone | 25×50×5 | m² | 196 |
| | Vegetable Soil | | m² | 382.6 |

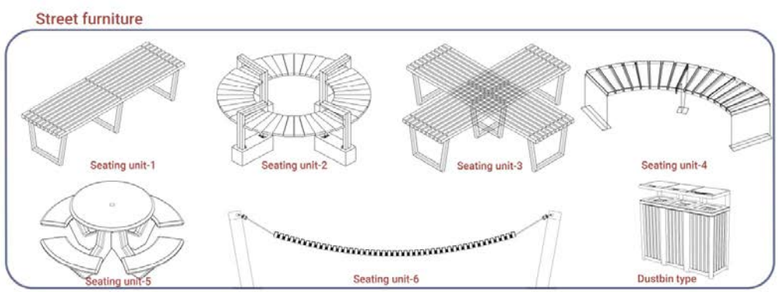
## Lighting legend

| Symbol | Name | Unit | Number |
|---|---|---|---|
| | Appliques | number | 6 |
| | Bollard | number | 60 |
| | Led Steeping Light | m | 256 |
| | Street Lamp | number | 40 |
| | Tree-up Lighting | number | 27 |

## Street furniture




## Street furniture



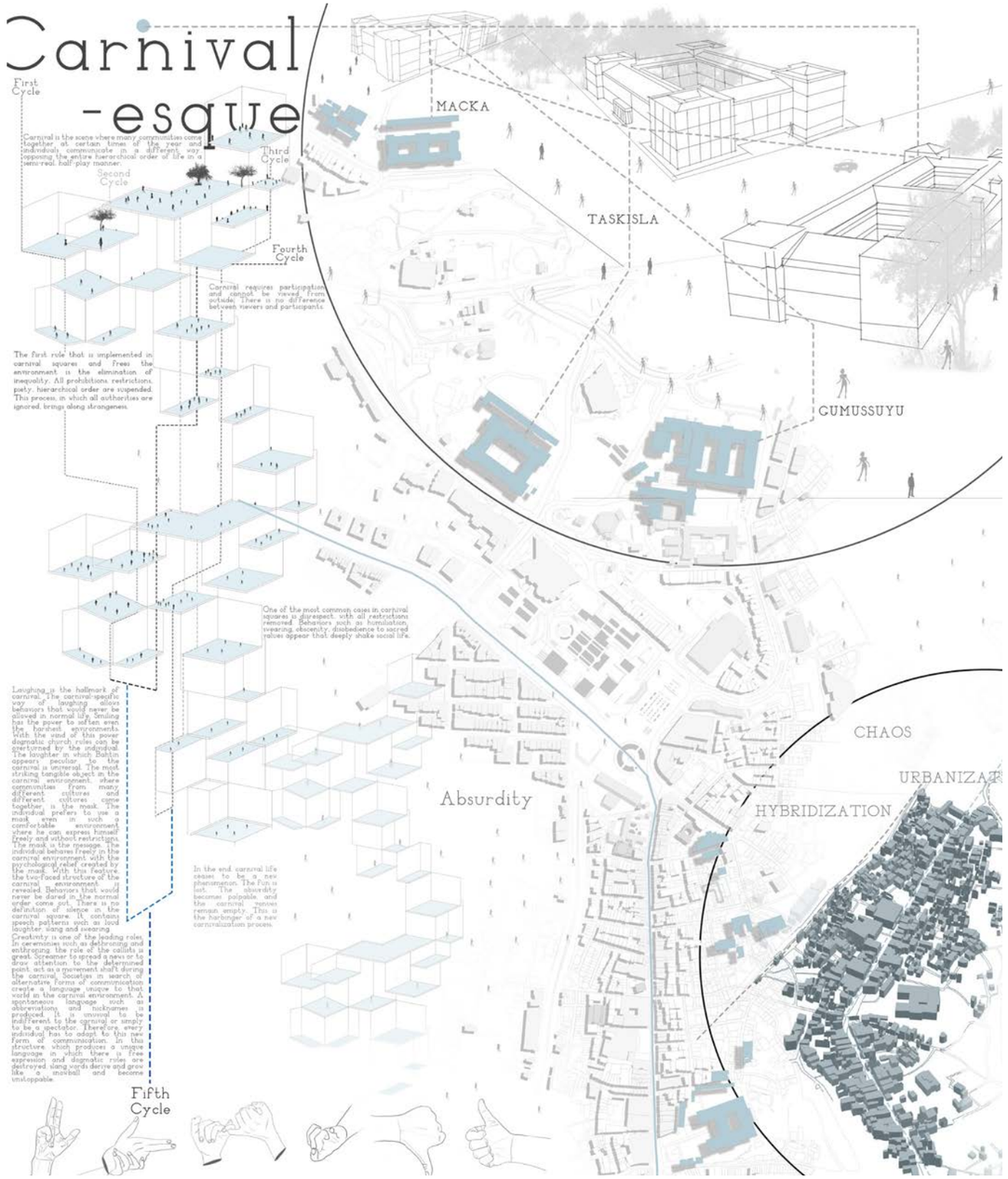
# Carnivalesque

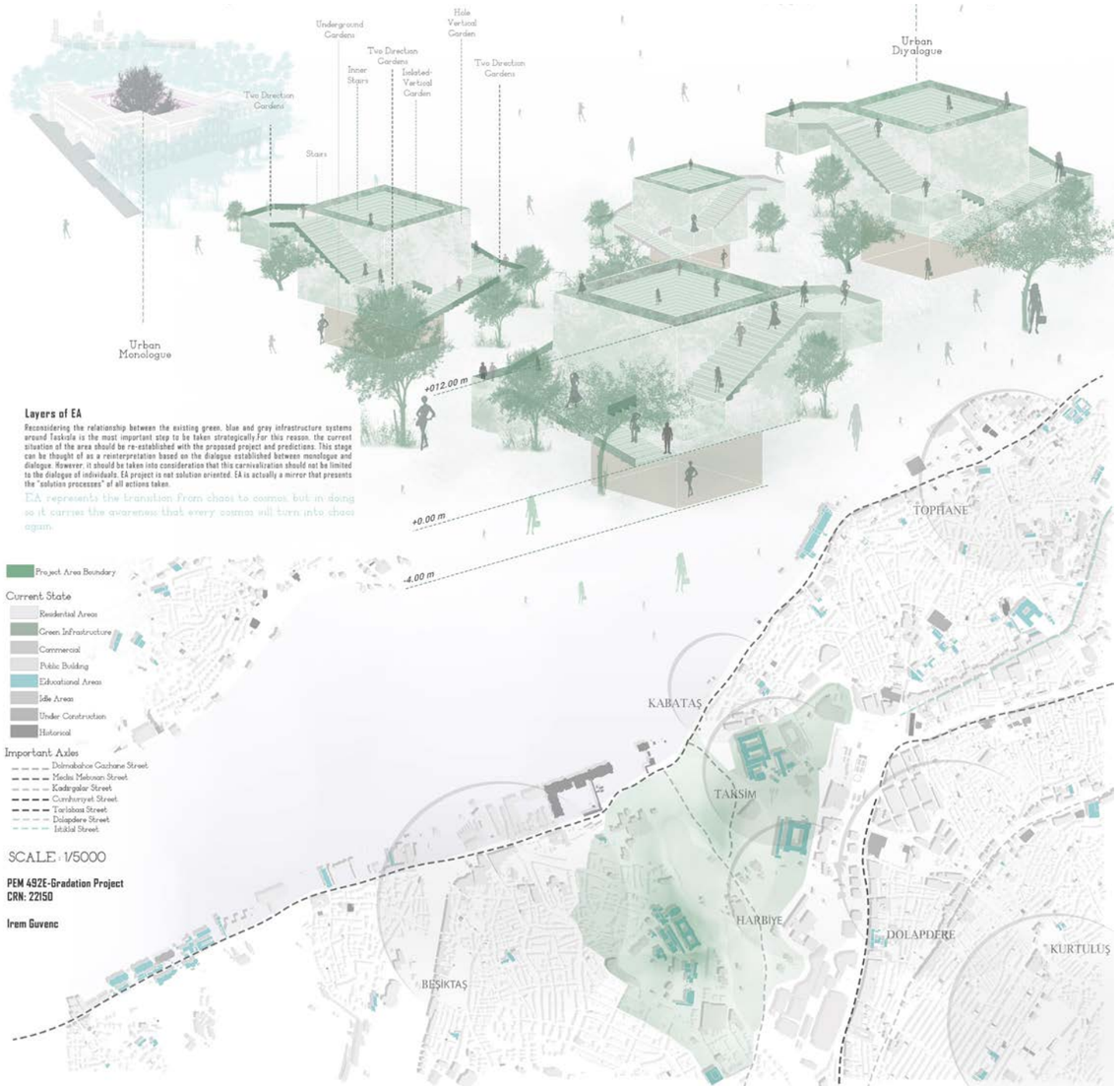
İrem Güvenç

*"Carnivalesque" was produced within the scope of Graduation Project carried out by Prof. Dr. Hayriye Eşbah Tunçay, Prof. Dr. F. Ayçim Türer Başkaya, Assist.Prof. Dr. Ikhwan Kim, Assoc. Prof. Dr. Saye Nihan Çabuk, and Assoc. Prof. Dr. Saitali Köknar and assisted by Res. Assist. Gizem Aluçlu and Res. Assist. Başak Akarsu under the title "Urban Campuses of ITU" in the spring semester of 2020-2021.*

Within the scope of the project, Bakhtin's concept of the Carnivalesque was considered. Using Michael Bakhtin's ideas of carnivalesque and carnivalization, the aim was to provide a new perspective on the city and its relationship with universities.

As is well-known, a carnival is formed when a large number of people from different backgrounds gather at certain times, temporarily stepping away from the ordinary course of daily life. Looking at this through the lens of the definition of carnival, events involved the looting of homes and businesses owned by Greek-origin residents of Taksim. While this issue is connected to the Cyprus conflict, it is widely known that many of the people who participated in these destructive actions were young university students. The critical question here is: where does this influence on young people stem from? The answer, of course, is the media. This is where carnivalization plays a key role. Looking back today, painful events are often told with a sense of heroism to the student groups of that time. Being an observer in this situation is also crucial, as observers can more easily notice the absurdities at play. In this context, design strategies were developed, shifting from monologue spaces to dialogue spaces.






However, it should be noted that the relationship between monologue and dialogue is not linear, but rather circular. EA is a cellular design model where different spaces create a dialogue with various boundary elements. EA plants were developed with spaces embedded within them. These spaces are areas where participants can engage in vertical planting. This concept is a futuristic interpretation of an ancient Far Eastern belief. According to this belief, a person creates a hole in a tree and whispers their secrets into it. Afterward, the gap is filled with soil. Over time, a new cosmic balance forms here, fostering life. Eventually, it begins to sprout. However, it is important to understand that all cosmos formed in this way inevitably move toward chaos.

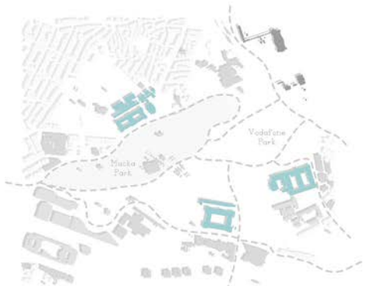




## Existing Life

### Monologue

In the current state of the field, the lack (or disturbance) of communication between the three campuses in various aspects draws attention. Publicity gains importance as educational areas become more public will contribute to the lifelong learning perceptions of individuals. Here, it is also necessary to consider the public abstention that exists in people. Transforming this order inherent to monologue life towards dialogue is one of the main scopes of project.



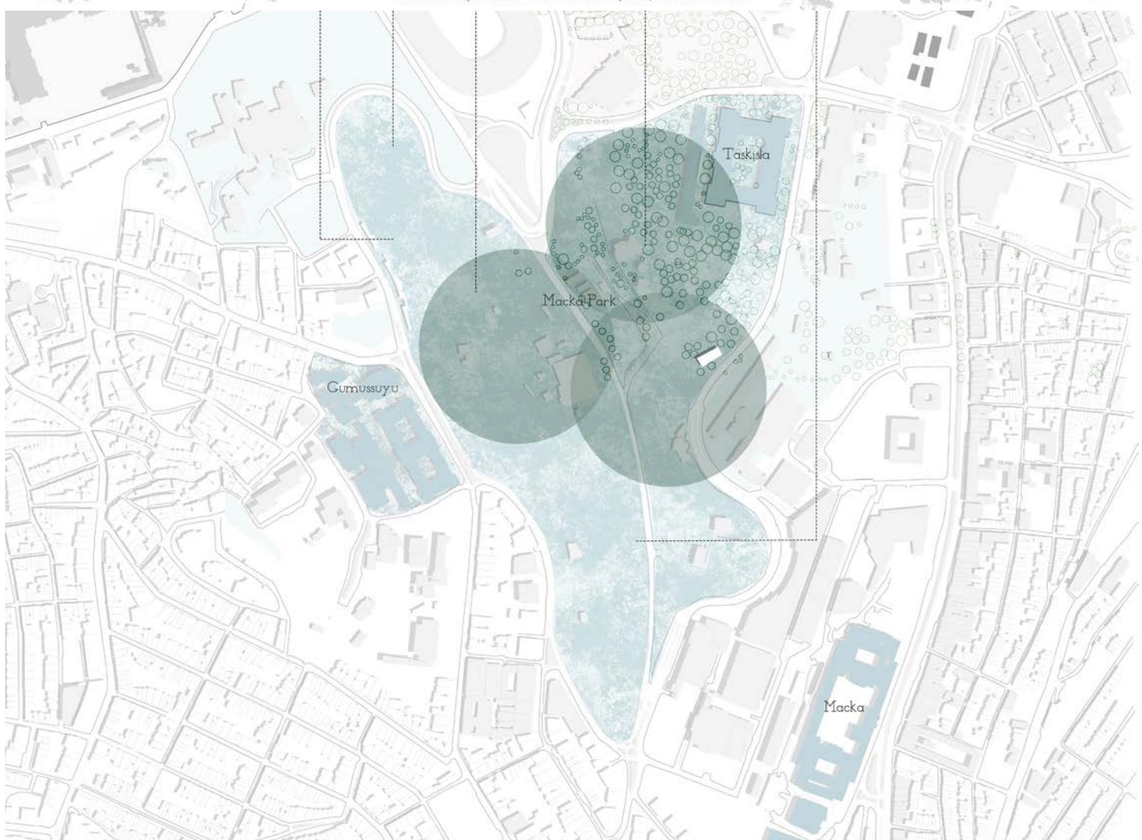

## Recommended Life

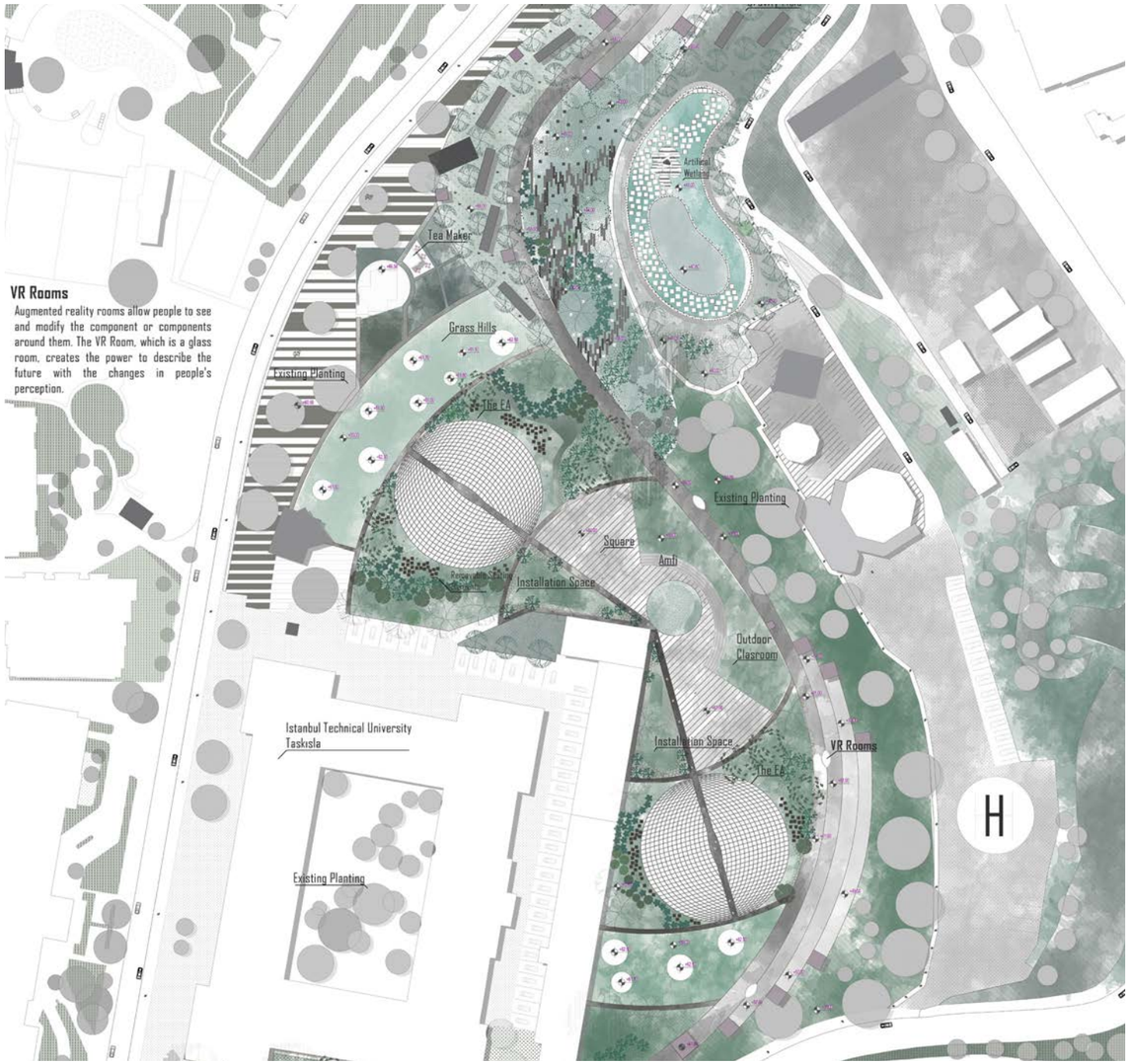
The first strategy of the project is to create focus areas in the region between Macka, Taskisla and Gumussuyu campuses. The harmony of organic and inorganic components will be utilized in the fictionalization of the spatial communication of this region, which is not in sufficient relationship with each other in social, ecological and economic contexts. Various technological components will be used for this.

## Process Design and Insight

### Dialogue

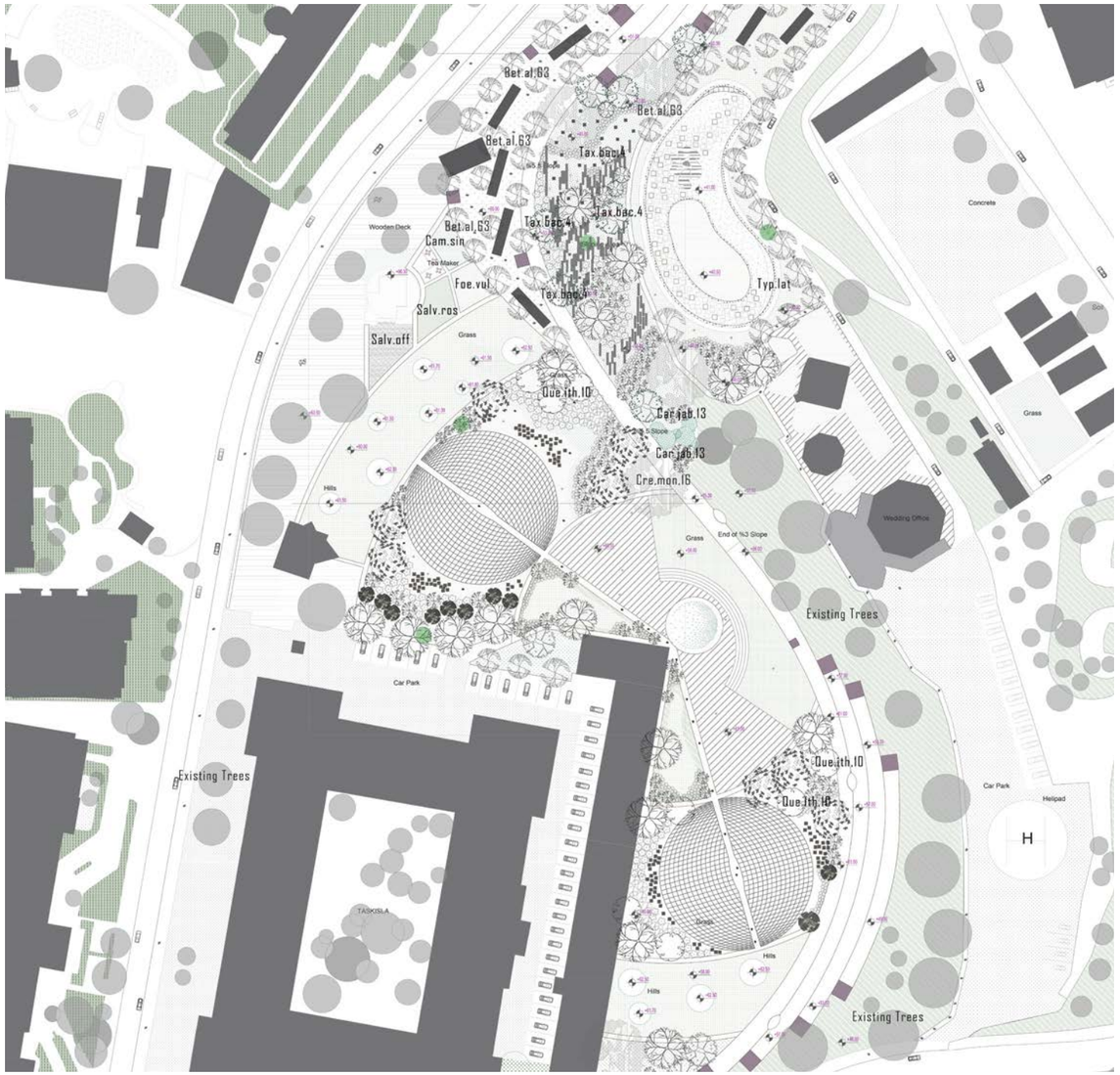
The traces of this futuristic spatial transformation to be made within the scope of the project area can be marked predictively. The main thing to reach is that this cosmos, which is established in a specific area, can strike the city over various axes over time. This will strengthen the dialogue process. When we think in the long run, even if the project is successful, this situation will become a monologue again with the developing order. At this point, the focus should be on change. A circular development is expected rather than a linear structure. This is related to the cumulative nature of spatial transformations.








According to the Turkish Language Association, universities are institutions with scientific autonomy and public legal personality that conduct high-level education, training, scientific research, and publication. These include faculties, institutes, colleges, and other similar establishments. Universities, defined as educational institutions or darülfünun, are deeply connected with the city, from its largest units to its smallest components. While the form, characteristics, or qualities of this interaction may change, its existence remains constant. This relationship can be understood and explained through Bahtin's concept of carnivalesque. Universities are places where issues, topics, and interpretations come together in a carnival-like manner. However, it is important to recognize that this carnivalization should not be characterized solely as positive or negative.






In the article titled "Carnivalesque theory and its reflections on the Instagram environment," carnivalization is succinctly defined as follows: Carnival is the stage where people from diverse walks of life come together at specific times of the year, engaging in communication in a different manner, existing in a half-real, half-play world that challenges the hierarchical order of everyday life. The carnival environment represents an unusual, inverted world order that emerges by deviating from the ordinary course of life. Carnival demands participation–it cannot be observed from the outside. There is no distinction between the audience and the participants. During carnival, everyone lives a carnivalesque life, governed by the unique laws of the carnival.

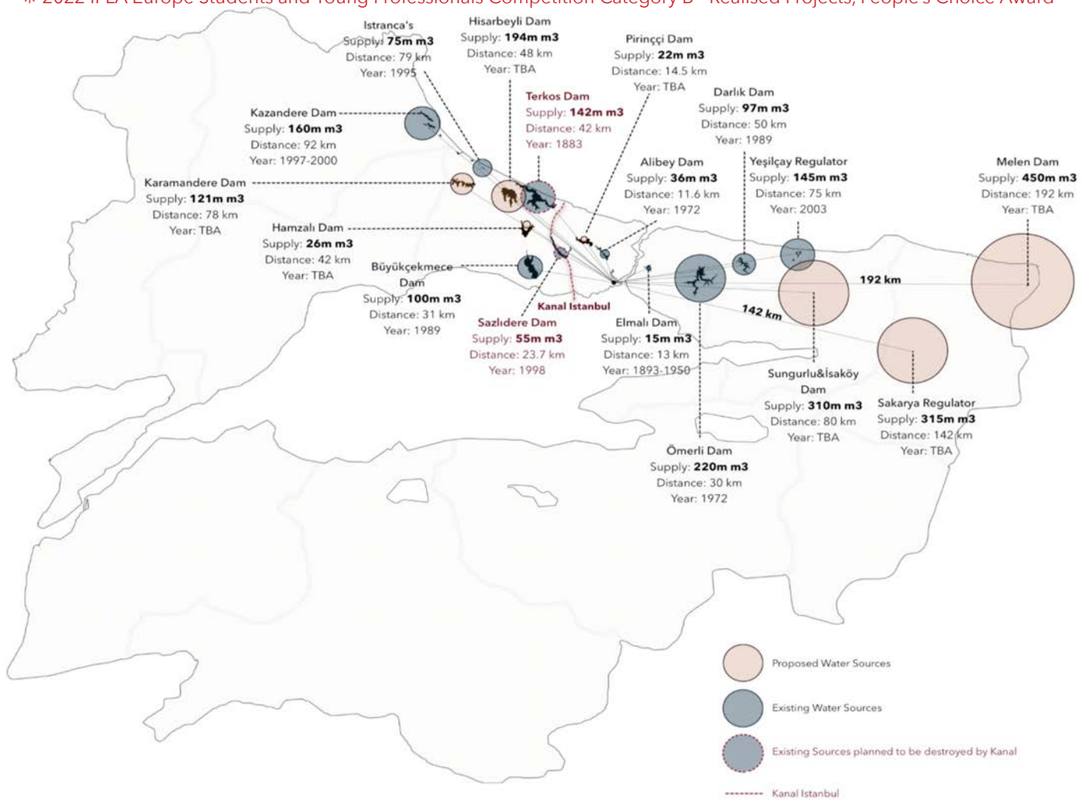
# Kırkçeşme Historic Park

Batuhan Ünlü

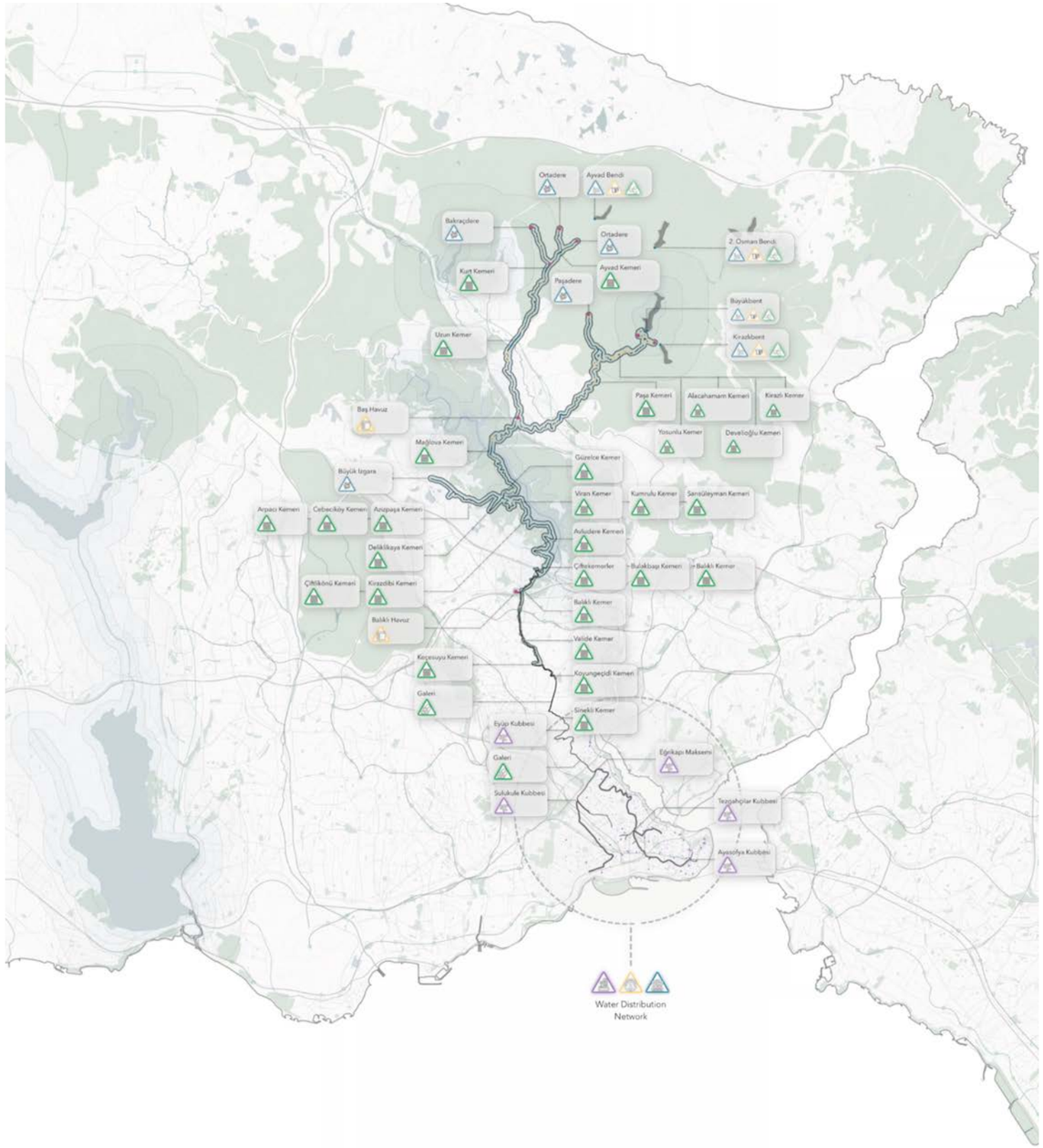
*"Kırkçeşme Historic Park" was produced within the scope of Graduation Project carried out by Assoc. Prof. Dr. Ebru Erbaş Gürler, Assist. Prof. Dr. Melih Bozkurt, Dr. Meliz Akyol Alay, Assoc. Prof. Dr. Zeynep Eres Özdoğan, , Lecturer Dr. Gökçer Okumuş, and Architect Ahmet Aygün and assisted by Res. Assist. Başak Akarsu and Res. Assist. Hüseyin Ögçe under the title "Aqu(A)duct: Re-thinking the Historic Waterway Landscapes of Istanbul" in the fall semester of 2021-2022.*

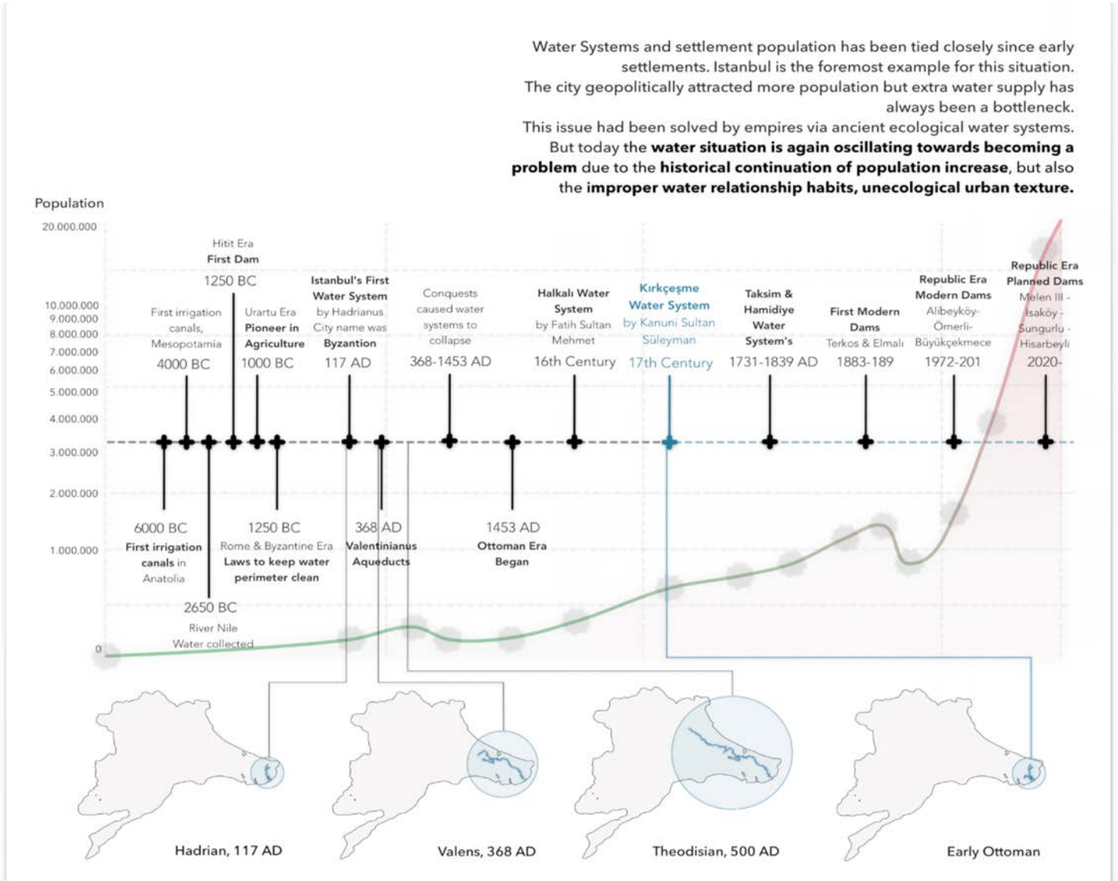
✳ TMMOB Chamber of Landscape Architects • 10th Landscape Architecture Students Graduation Project Awards, Equivalent Award

✳ 2022 IFLA Europe Students and Young Professionals Competition Category B - Realised Projects, People's Choice Award




The "Kırkçeşme Historic Park" project aims to analyze, predict, and act on Istanbul's relationship with water, with the goal of creating value for the city and its citizens. To achieve this, the project is structured around three main pillars: Ecological, Urban Memory, and Socio-Cultural. These three goals are represented by three distinct shapes throughout the project. A historical and spatial analysis of Istanbul's ecological, memorial, and socio-cultural relationship with water has been conducted, followed by future projections. Based on these analyses, respective strategies to achieve the defined goals were outlined. International case studies were examined for additional insights. Kırkçeşme was mapped and analyzed holistically, and the findings were visualized to raise spatial awareness. Posters were designed with three layers of visual comprehension: Point cloud (viewed from afar), text information, and spatial arrangement.

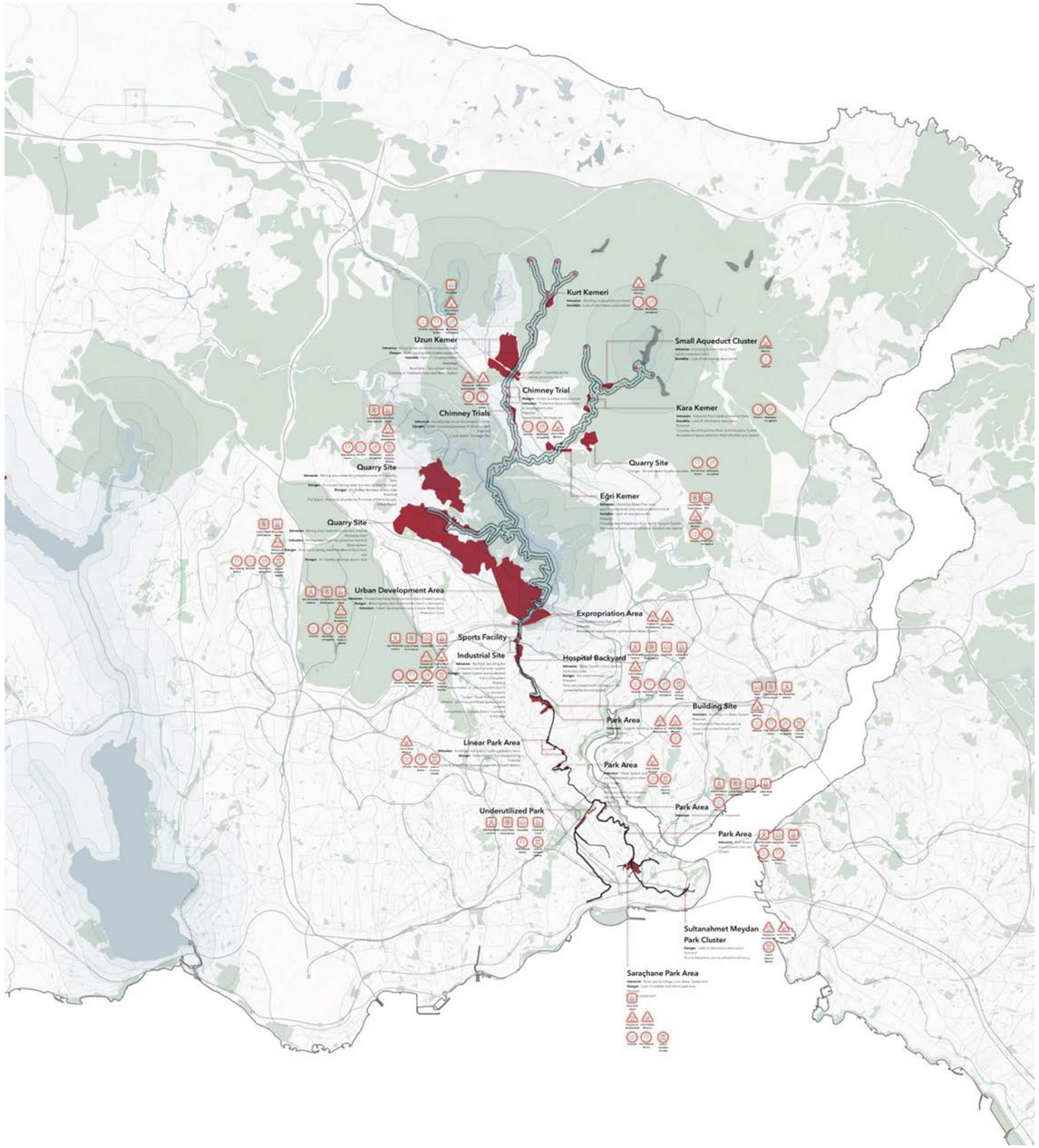


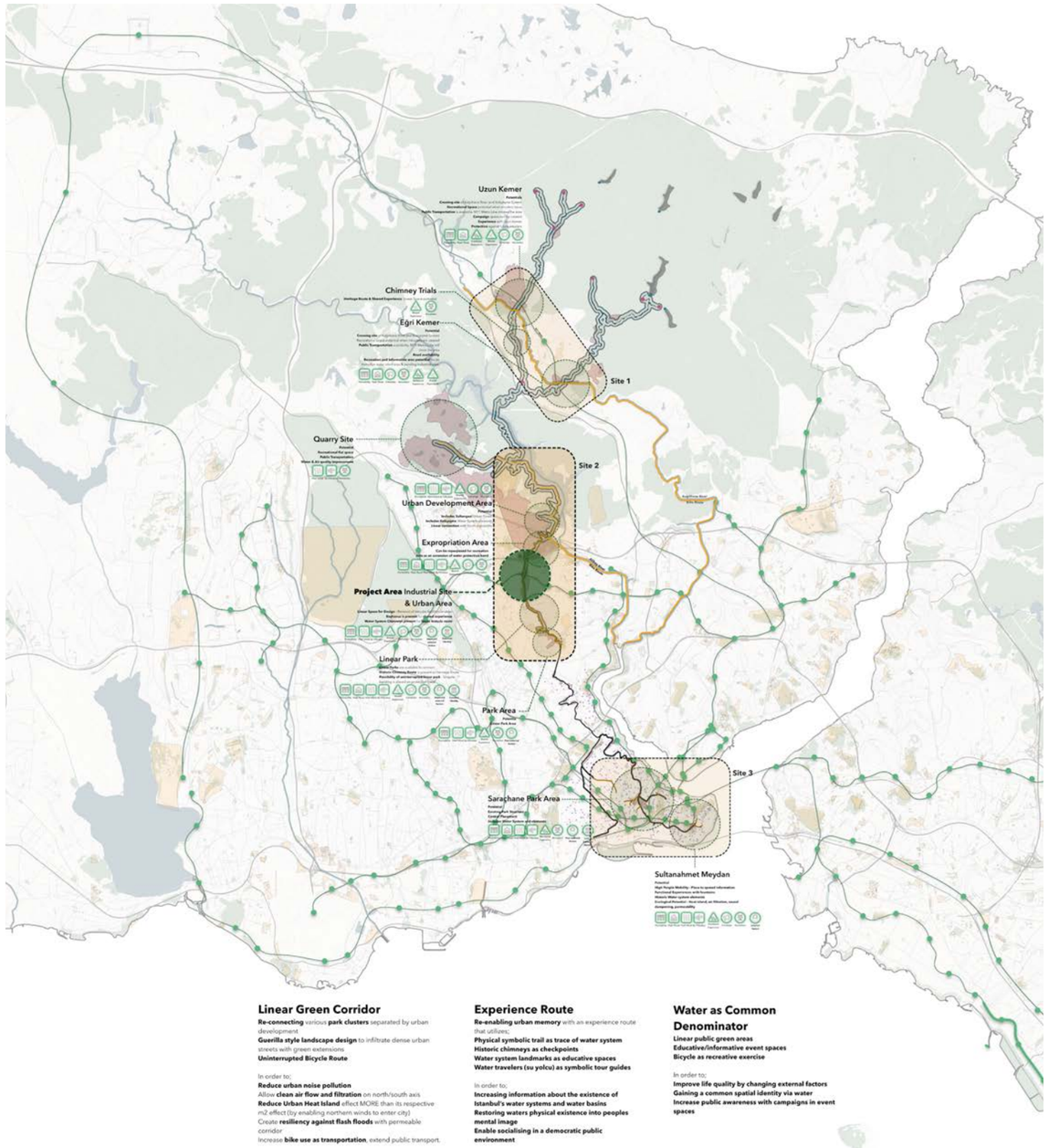



The problems identified in Kırkçeşme have led to spatial potentials that contribute to the three main goals of the project. These potentials are mapped with corresponding shapes and logos, forming a point cloud to highlight the ideal locations for implementing the design strategies that will help us achieve these goals.

"Site 1" primarily presents ecological improvement potentials due to its forested rural texture. "Site 3" offers both ecological and urban memory potentials, making it a valuable area for preservation and development. However, it is "Site 2" that presents the most diverse range of potentials. With its mixed urban, rural, and forest environment, Site 2 holds significant urban memory potential through its linear water system elements, event spaces, and accessibility via public transport, alongside the presence of democratic public parks along its route.

Because of these diverse attributes, "Site 2" will serve as the outer boundary for our spatial design implementation. The Ecological design strategy for this site includes proposing a green corridor that connects park clusters, infiltrating the urban fabric of Site 2 with guerilla landscape design, and introducing a continuous bicycle lane to enhance mobility and ecological connectivity.






**Linear Green Corridor**

**Re-connecting** various **park clusters** separated by urban development
**Guerilla style landscape design** to infiltrate dense urban streets with green extensions
**Uninterrupted Bicycle Route**

In order to;
**Reduce urban noise pollution**
Allow **clean air flow and filtration** on north/south axis
**Reduce Urban Heat Island** effect MORE than its respective m2 effect (by enabling northern winds to enter city)
Create **resiliency against flash floods** with permeable corridor
Increase **bike use as transportation**, extend public transport.

**Experience Route**

**Re-enabling urban memory** with an experience route that utilizes;
**Physical symbolic trail as trace of water system**
**Historic chimneys as checkpoints**
**Water system landmarks as educative spaces**
**Water travelers (su yolcu) as symbolic tour guides**

In order to;
**Increasing information about the existence of Istanbul's water systems and water basins**
**Restoring waters physical existence into peoples mental image**
**Enable socialising in a democratic public environment**

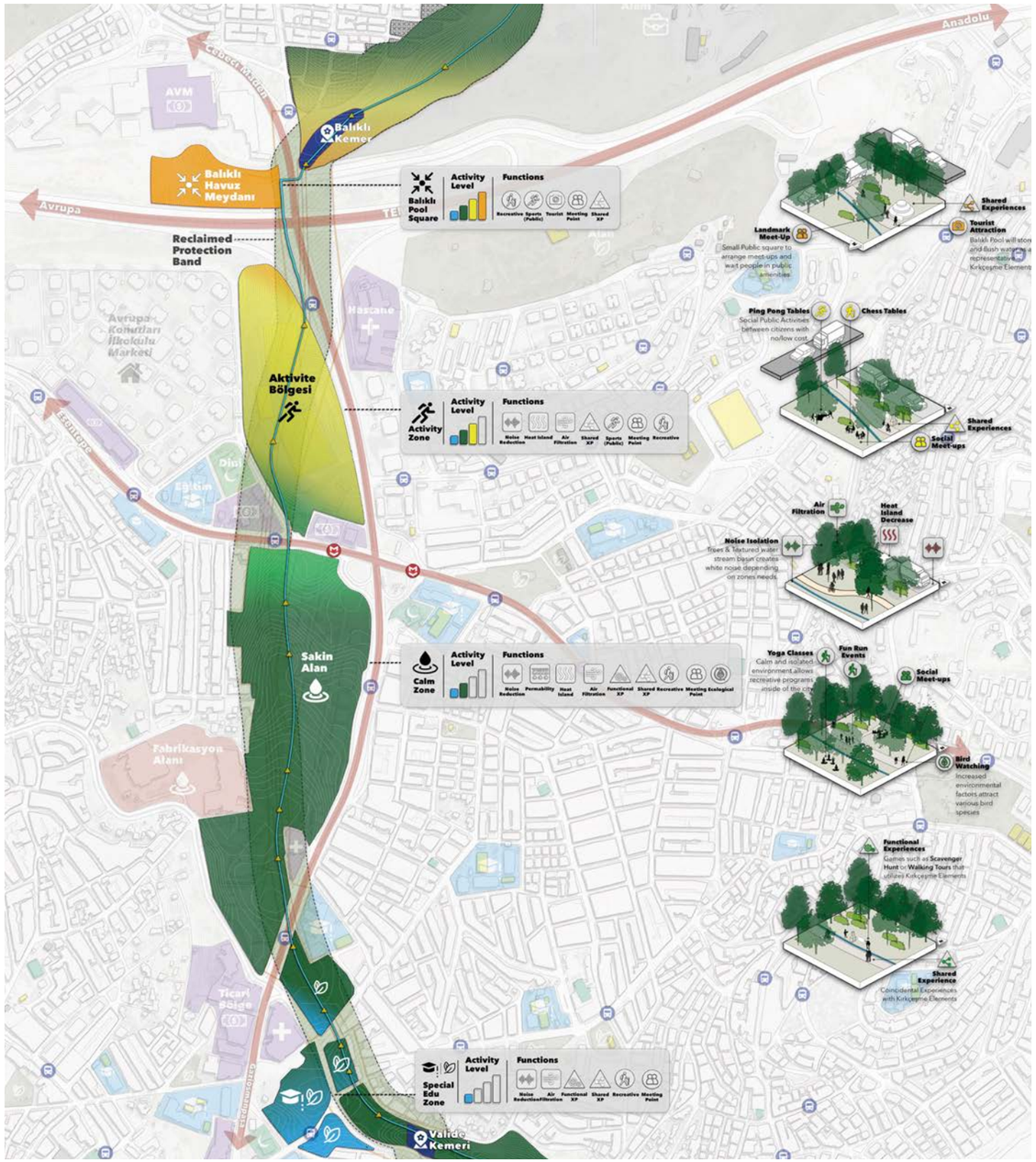
**Water as Common Denominator**

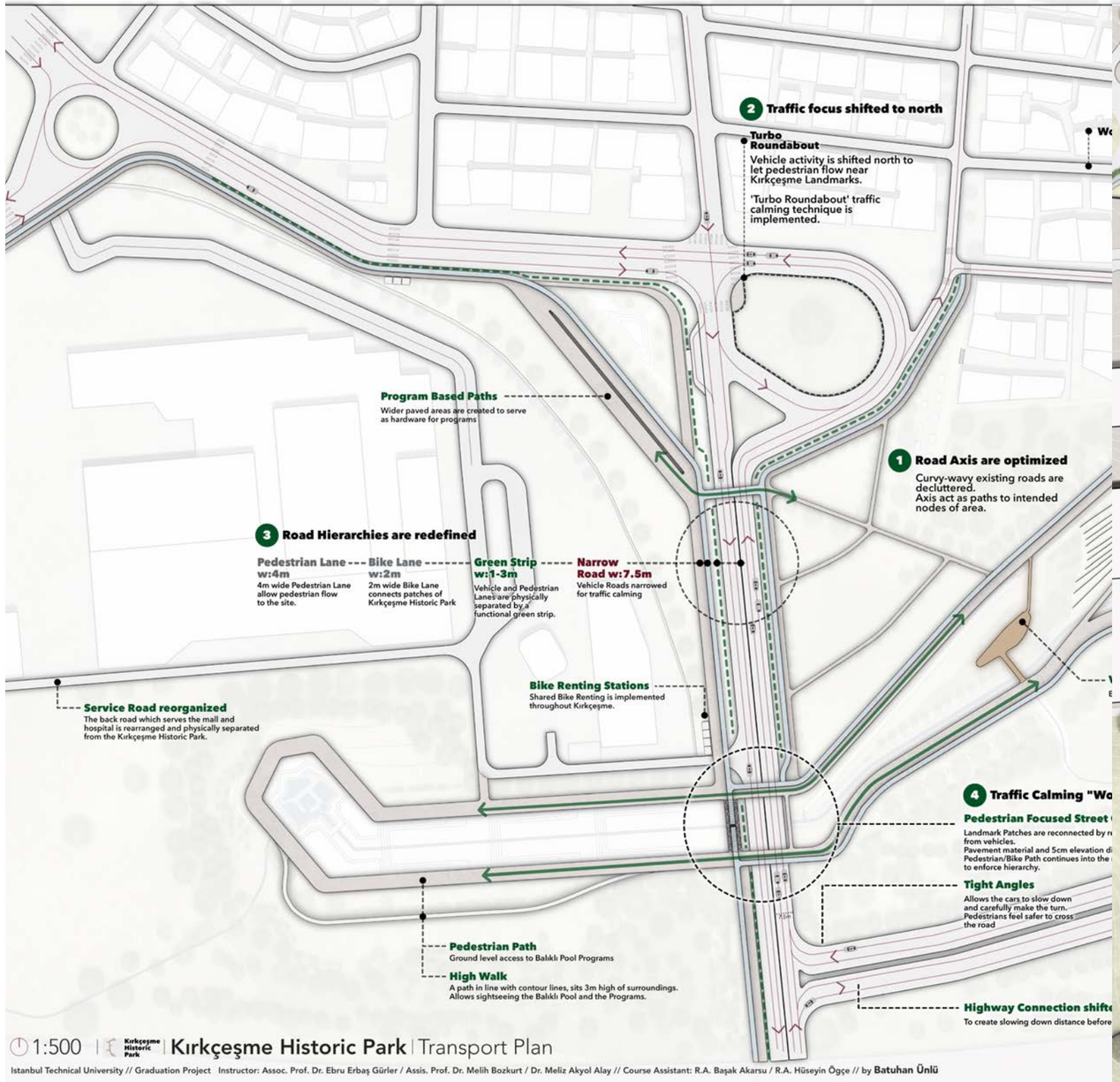
**Linear public green areas**
**Educative/informative event spaces**
**Bicycle as recreative exercise**

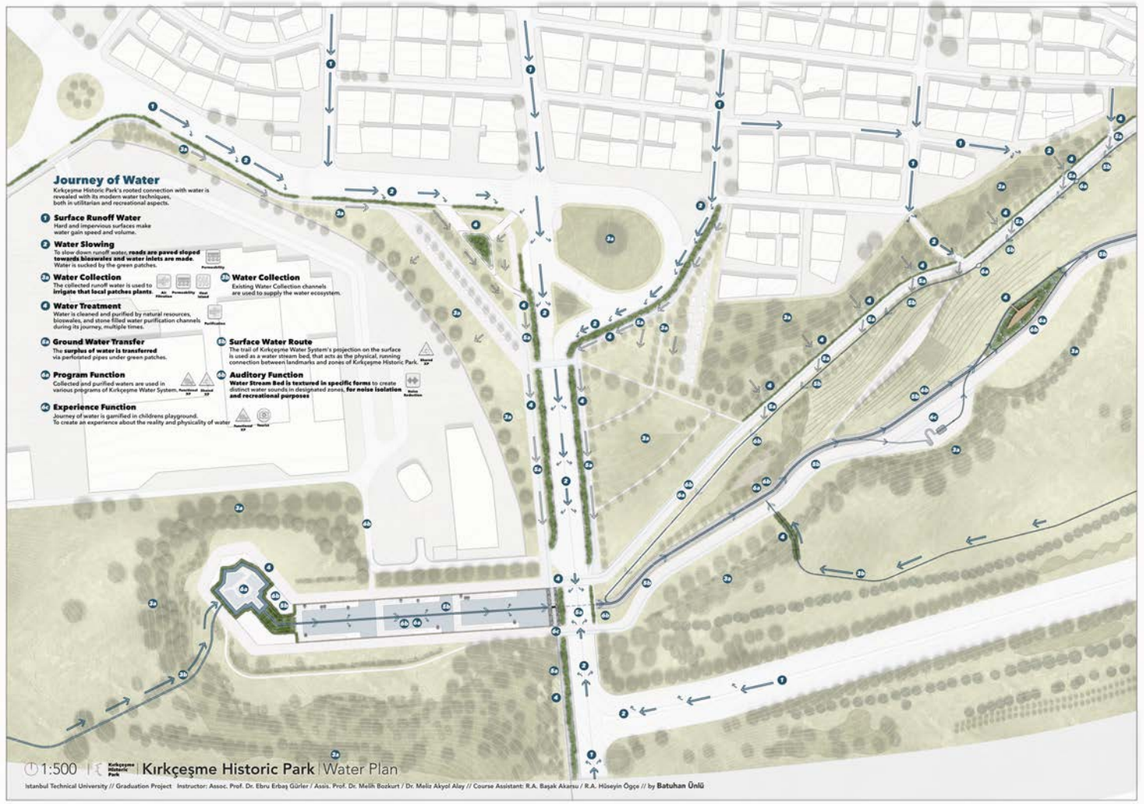
In order to;
**Improve life quality by changing external factors**
**Gaining a common spatial identity via water**
**Increase public awareness with campaigns in event spaces**








2 Traffic focus shifted to north
Turbo Roundabout
Vehicle activity is shifted north to let pedestrian flow near Kırkçeşme Landmarks.
'Turbo Roundabout' traffic calming technique is implemented.
Program Based Paths
Wider paved areas are created to serve as hardware for programs
1 Road Axis are optimized
Curvy-wavy existing roads are decluttered.
Axis act as paths to intended nodes of area.
3 Road Hierarchies are redefined
Pedestrian Lane w:4m
4m wide Pedestrian Lane allow pedestrian flow to the site.
Bike Lane w:2m
2m wide Bike Lane connects patches of Kırkçeşme Historic Park
Green Strip w:1-3m
Vehicle and Pedestrian Lanes are physically separated by a functional green strip.
Narrow Road w:7.5m
Vehicle Roads narrowed for traffic calming
Bike Renting Stations
Shared Bike Renting is implemented throughout Kırkçeşme.
Service Road reorganized
The back road which serves the mall and hospital is rearranged and physically separated from the Kırkçeşme Historic Park.
4 Traffic Calming "Wo
Pedestrian Focused Street
Landmark Patches are reconnected by re
from vehicles.
Pavement material and 5cm elevation di
Pedestrian/Bike Path continues into the
to enforce hierarchy.
Tight Angles
Allows the cars to slow down and carefully make the turn.
Pedestrians feel safer to cross the road
Pedestrian Path
Ground level access to Balıklı Pool Programs
High Walk
A path in line with contour lines, sits 3m high of surroundings.
Allows sightseeing the Balıklı Pool and the Programs.
Highway Connection shifte
To create slowing down distance before
1:500 | Kırkçeşme Historic Park | Transport Plan
Istanbul Technical University // Graduation Project Instructor: Assoc. Prof. Dr. Ebru Erbaş Gürler / Assis. Prof. Dr. Melih Bozkurt / Dr. Meliz Akyol Alay // Course Assistant: R.A. Başak Akarsu / R.A. Hüseyin Öğçe // by Batuhan Ünlü

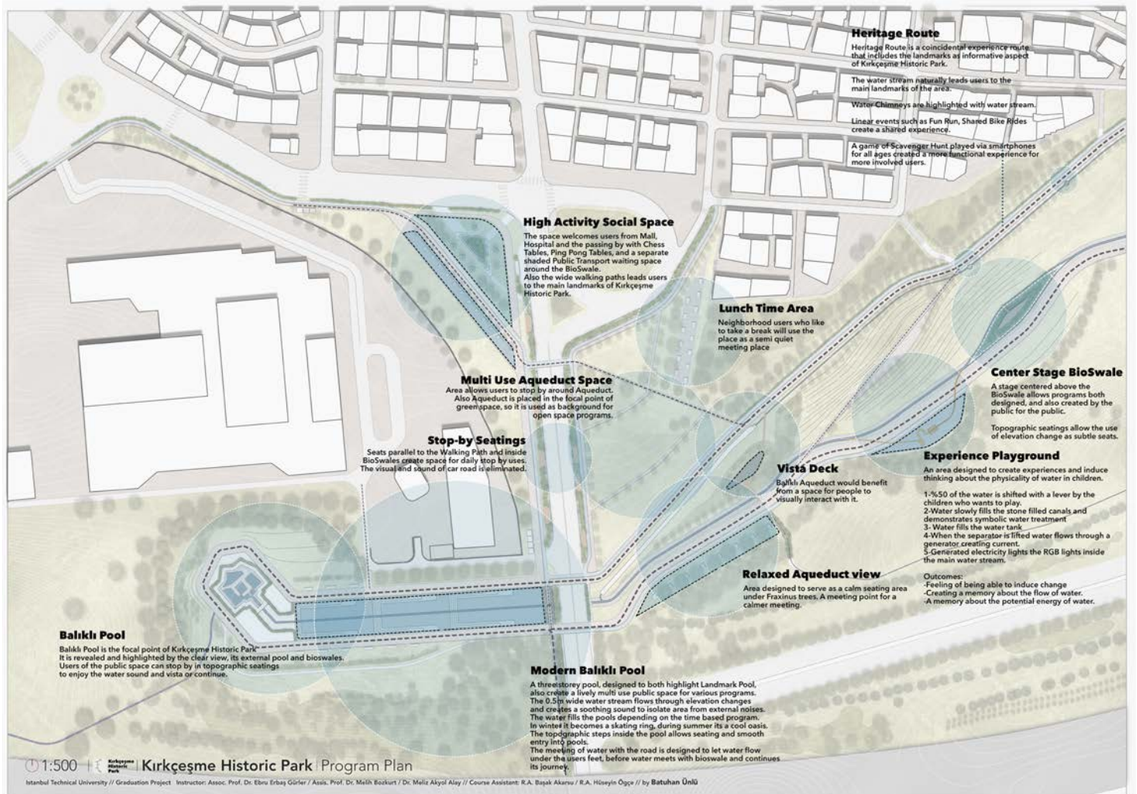



The ecological strategies for Kırkçeşme Historic Park are implemented by revealing the Balıklı Zone and transforming the old tertiary road leading to Kırkçeşme Valley into a “Calm Zone.” This area will be isolated from the urban fabric using visual and auditory barriers, with vegetation and water sounds enhancing the tranquil environment. The Balıklı Pool, which serves as the focal point of human flow, will be revitalized to harness its full potential. The Urban Memory design strategy focuses on creating a “shared & functional experience” for visitors. This experience includes a physical, symbolic trail of the water system, checkpoints marking historic chimneys, educational event spaces at landmark locations, and guides who are the historical “su yolcusu” (water travelers) of Kırkçeşme. These strategies aim to contribute to a park identity that will be embedded in the public urban memory. The Urban Memory goal will be implemented throughout the park with inclusive and engaging experiences. Functional experiences involve programs related to Kırkçeşme, while shared experiences are more incidental and invite interaction among locals and visitors alike.

The park will use the image of water as a unifying force, a metaphorical glue for the fragmented mosaic of Istanbul. Ultimately, Kırkçeşme Historic Park will serve as a democratic urban green space where every citizen can enjoy the park and find a connection to the city’s history and natural environment.



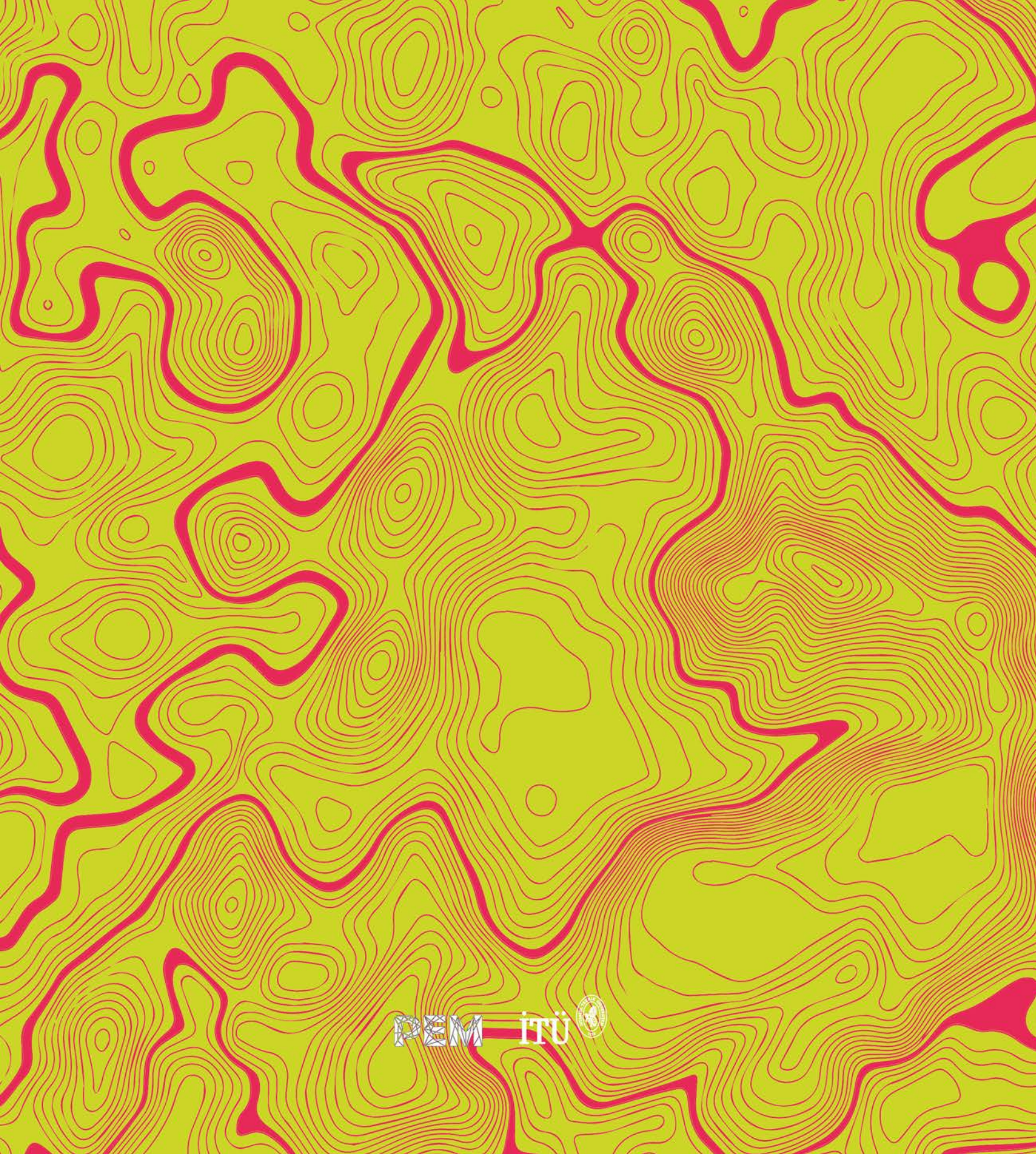





The Balıklı Pool, as the main focal point of the park, will feature a three-story public space that serves a variety of programs throughout the day, week, and year, offering activities for the public. The landmark Balıklı Pool will be highlighted by cleaning up intruders and creating a protected, separate path to preserve its historical significance. Similarly, the Balıklı Aqueduct will be revealed through urban transformation techniques and safeguarded from external threats by ensuring it is owned and cared for by the public.

Kırkçeşme Valley will be divided into two sections: the upper Heritage Route and the lower Calm Route. These routes will feature flowing water, with one route representing the real Kırkçeşme Galleries and the other serving as a symbolic water route. The flowing water will lead people naturally through the park, guiding them to different program zones. This continuous flow of water will help define the park’s identity, creating a seamless, connected space.

The programs offered in the park are designed to serve all types of users, from children to the elderly. The playgrounds will offer thought-provoking experiences that will leave lasting memories for children, while elderly visitors can find tranquility and peace near the Balıklı Pool. Office workers will have the opportunity to take a break and enjoy the park during their lunch hour. The human flow from nearby locations such as the Mall and Hospital will also contribute to the vibrancy of the square area, bringing more visitors to the park. This ensures that the park remains a lively and accessible public space for everyone.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