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BOOK OF
STUDENT CHARRETTE &
GLOBAL STUDIO PROGRAM

Book of
IFLA WORLD 2024 İSTANBUL TÜRKİYE
STUDENT CHARRETTE
&
GLOBAL STUDIO PROGRAM

THEME: Creating Resilience for All

UNION OF TURKISH ARCHITECT AND ENGINEERS (UCTEA)
CHAMBER OF TURKISH LANDSCAPE ARCHITECTS (CTLA)

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Ankara, 2024

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Preface

This publication presents the comprehensive experiences and innovative approaches of the Student Charrette program, held as part of the 2024 International Federation of Landscape Architects (IFLA) World Congress in Istanbul. Organized over four days preceding the Congress, this intensive design workshop brought together landscape architecture students from diverse geographies, fostering intercultural collaboration and creative problem-solving. The outcomes of the Charrette were celebrated during the Congress with an award ceremony, highlighting the program's pivotal role within IFLA's global framework.

The Charrette was conducted in the historic studio and classroom spaces of Istanbul Technical University's Faculty of Architecture at the iconic Taşkılla Building. Our sincere gratitude is extended to Istanbul Technical University for hosting the event in this remarkable venue, which provided an inspiring setting for the students' creative processes.

This initiative was enriched by the invaluable support of the Nava Polman-Gerson Foundation, as well as partner universities including Istanbul Technical University, Medipol University, Yeditepe University, Özyeğin University, and Istanbul University-Cerrahpaşa. We are also deeply thankful to Fatih Municipality for its vital contribution to the success of this program.

Special thanks are due to the tutors and jury members who guided and evaluated the students' work with their expertise and dedication. The efforts and enthusiasm of the participating students, who embraced the challenges of this collaborative design process, deserve commendation. Together, they have brought forward innovative and context-sensitive ideas that reflect the theme of resilience. This book explores the outcomes of the Charrette, including student projects, workshop activities, site analysis, and jury evaluations, while aiming to provide a platform for learning and knowledge exchange in the field of landscape architecture. It is hoped that this work will inspire future initiatives and contribute to the advancement of the discipline. This publication stands as a testament to the power of collaboration and creativity in addressing pressing urban and environmental challenges.

Bruno Marques

IFLA (International Federation of Landscape Architects) World

Bariş Işık

CTLA (Chamber of Turkish Landscape Architects) President

Yasin Otuzoğlu

Chair of the 2024 IFLA World Congress Organising Committee

Alessandro Martinelli

*Chair of the IFLA 2024 Student Charrette and IFLA World Education,
Academic Affairs Chair*

Prof. Dr. Şükran Şahin

*Co-Chair of the IFLA 2024 Student Charrette, CTLA Executive Committee Member,
IFLA Delegate*

IFLA 2024 Charrette: Novelties and Organization

Şükran Şahin, Nihan Yegin Yarayan & Elif Sena Karakuş

IFLA 2024 Charrette: Novelties and Organization

Şükran Şahin, Nihan Yegin Yarayan & Elif Sena Karakuş

The International Federation of Landscape Architects (IFLA) World Congress is the organisation's most significant annual event, designed to foster global engagement in landscape architecture. The Congress serves as a central platform where professionals, researchers, educators, students, and stakeholders converge to discuss advancements in landscape architecture, share innovations, and address pressing global challenges. Through a range of sessions, including keynote presentations, panel discussions, workshops, and student competitions, the Congress promotes professional development and intercultural exchange, aiming to enhance both theoretical and practical knowledge in the field. The event reflects IFLA's mission of supporting landscape architecture's role in shaping sustainable and resilient communities globally (IFLA, 2015a, 2015b, 2015c).

The Student Charrette, held prior to the Congress, is an integral part of the event, with the charrette exhibition and awards presented during the Congress itself. The IFLA Student Charrettes are intensive, short-term design workshops held for landscape architecture students from around the world, typically in the three days preceding the IFLA World Congress. These charrettes provide students with a platform to collaboratively address significant urban and environmental challenges, such as mitigating urban heat islands and harmonizing urban landscapes with historical structures.

About IFLA Student Charrettes

Objectives and Scope

The Student Charrettes aim to equip participants with practical problem-solving skills and foster a global outlook on landscape architecture. By offering an environment for collaboration across cultures, these charrettes support students in expanding their understanding of different environmental and cultural perspectives, while enhancing their professional skills. Supported by the Nava Polman-Gerson Foundation, the charrettes allow students to bring forth innovative and contextually relevant ideas that align with the Congress theme (IFLA, 2015a; IFLA, 2015b).

Eligibility and Participation

Participation in a charrette is restricted to students of landscape architecture who hold a valid registration for the IFLA World Congress. Each charrette hosts a maximum of 60 students, encouraging a diverse representation of nationalities. During registration, students are required to submit a Declaration Form to confirm their current academic status. Additionally, a symbolic registration fee (typically €50) is paid upon confirmation of participation (IFLA, 2015a; IFLA, 2015c).

Preparation and Workshop Process

Before the charrette begins, participants are provided with digital resources outlining the study area's physical and environmental context, including historical structures and urban challenges. Working in teams, students develop solutions by integrating their own cultural insights with their academic training. Each team presents a digital design or planning concept at the conclusion of the charrette, accompanied by a written summary explaining their work and approach (IFLA, 2015a).

Jury Evaluation and Awards

Following the charrette, a jury selects the top three projects, awarding prizes of \$1,500, \$1,000, and \$500 to the first, second, and third-place teams, respectively. These awards are presented during the final session of the World Congress, providing recognition on an international stage. This acknowledgment not only celebrates the students' achievements but also serves as motivation for their continued professional development (IFLA, 2015c).

Organisational Support

Throughout the event, the host organisation provides logistical support, including accommodations, meals, and necessary materials. Dedicated workspaces are arranged for students, often near their accommodations, facilitating a cohesive environment for both work and discussion. Transportation between accommodations and the charrette site, as well as to the Congress venue if required, is organised by the hosts. Faculty members and coordinators from both the host country and abroad are appointed to guide and supervise students, with a ratio of one instructor for every ten students, ensuring an optimal support structure for the participants (IFLA, 2015b).

Cultural and Professional Engagement

Beyond a design workshop, the IFLA Student Charrette represents an opportunity for cultural and professional exchange. Participants gain exposure to diverse design philosophies by interacting with peers from different backgrounds, deepening their understanding of global environmental issues and culturally sensitive solutions. Additionally, the projects developed during the charrette are exhibited during the Congress, granting students a platform to showcase their ideas and engage with an international audience. These interactions foster a professional network for students, equipping them with a broader perspective that they can carry into their future careers (IFLA, 2015a).

In sum, the IFLA Student Charrettes play a crucial role in the development of landscape architecture students, empowering them to tackle global environmental challenges with creative and sustainable solutions. The charrettes cultivate professionals who are not only skilled in their craft but also sensitive to the cultural and environmental dimensions of the landscapes they will shape.

About IFLA 2024 Student Charrettes

The 2024 Student Charrette, held in conjunction with the IFLA World Congress in Istanbul from August 31 to September 3, hosted by the Chamber of Turkish Engineers and Architects (TMMOB) and the Chamber of Landscape Architects (PMO), introduced several notable improvements and changes:

- Pre-event Online Meeting: Students participated in an introductory online meeting before the event for orientation, briefings, and initial team formations.
- Extended Duration: The workshop was extended to four days, allowing for deeper collaboration and development.
- Integration of the Global Studio Program: For the first time, the IFLA Global Studio Program was integrated into the Charrette, enriching the educational experience and fostering international cooperation.

The Charrette began with a studio session on the first day at Medipol University, followed by three days at Istanbul Technical University's historic Taşkışla campus. The event was sponsored by Nava Polman-Gerson Foundation, with additional support from [Supporting Universities]. The Charrette exhibition and awards were presented during the Congress, showcasing the collaborative achievements of the participants.

The Charrette began with a studio session on the first day at Medipol University, followed by three days at Istanbul Technical University's historic Taşkışla campus. The event was sponsored by the Nava Polman-Gerson Foundation, with additional support from partner universities: Istanbul Technical University, Medipol Istanbul University, Yeditepe University, Özyeğin University, and Istanbul University. The Charrette exhibition and awards were presented during the Congress, showcasing the collaborative achievements of the participants. The group formation process for the IFLA 2024 Charrette followed a structured approach to enhance collaboration and provide comprehensive guidance:

Committee, Assistants, Tutors and Jury Members

The Charrette was organized by a committee led by key figures such as Alessandro Martinelli, Prof. Şükran Şahin, and Dr. Nihan Yeğin Yarayan. Tutors from various local universities participated to guide students, including representatives from Istanbul Technical University, Medipol University, Yeditepe University, Özyeğin University, İstanbul Cerrahpaşa University, and Ankara University. Additionally, tutors selected from both academia and the industry provided critiques to students, enriching the feedback process with diverse perspectives.

Charrette Committee Members

- IFLA World Chair: Alessandro Martinelli
- IFLA World Co-Chair & CTLA Leader of the Committee: Prof. Şükran Şahin - (CTLA ExCo Member & IFLA Delegate)
- Coordinator: Dr. Nihan Yeğin Yarayan - (CTLA ExCo Member)
- Prof. Dr. Hayriye Eşbah Tuncay - (İstanbul Technical University)
- Assoc. Prof. Dr. Bahar Başer Kalyoncuoğlu - (İstanbul Medipol University)
- Assist. Prof. Dr. Bengi Korgavuş - (Yeditepe University)
- Assoc. Prof. Dr. Beyza Şat - (Özyegin University)
- Assoc. Prof. Dr. Nilüfer Kart Aktaş - (İstanbul University-Cerrahpaşa)
- Arzu Nuhoğlu - (Arzu Nuhoğlu Landscape Design)
- Engin Musa Gürcan - (CTLA ExCo Member & Bardam Landscape)
- Research Assist. Cemre Korkmaz - (Kırklareli University)
- Elif Sena Karakuş - (Ankara University, MSc. Student)

Charette Asisstants

- Ress. Assist-Fatma Sultan Bozkurt - (İstanbul Technical University)
- Ress. Assist. Çisem Demirel Koyun - (İstanbul Technical University)
- Ress. Assist. Merve Boyacı - (İstanbul Medipol University)
- Ress. Assist. Orçun Mert Carlık - (Yeditepe University)
- Ress. Assist. Elnaz Tajer - (Özyegin University)
- Ress. Assist. Nihan Parlak - (İstanbul University- Cerrahpaşa)
- Betül Rüveyda Ay Ak - (İstanbul University – Cerrahpaşa, PhD Student)
- Meryem Sarıkaya - (Ankara Üniversitesi, BA)
- Arda Sakaoğlu - (Ankara Üniversitesi, BA)

CTLA (Chamber of Turkish Landscape Architects) Tutors

- Hayriye Eşbah Tuncay - (Istanbul Technical University)
- Bahar Başer Kalyoncuoğlu - (İstanbul Medipol University)
- Bengi Korgavuş - (Yeditepe University)
- Beyza Şat - (Özyegin University)
- Nilüfer Kart Aktaş - (Istanbul University- Cerrahpaşa)
- Oktan Nalbantoğlu – (Bilkent University)
- Deniz Aslan – (Istanbul Technical University)

IFLA GSP (IFLA Global Studio Program) Tutors

- Yiwen Cui – (Victoria University of Wellington)
- Amer Habibullah – (King Abdulaziz University)
- Cathe Nadal – (University of the Philippines Diliman)
- Nappy Navarra – (University of the Philippines Diliman)
- Robert Dalton – (South Dakota State)
- Tariq I. Alrawaf – (Imam Abdulrahman Bin Faisal University)
- Yin-Lun Chan - (Technological and Higher Education Institute of Hong Kong)

Jury Members

- Hayriye Eşbah Tuncay - (İstanbul Technical University)
- Bahar Başer Kalyoncuoğlu - (İstanbul Medipol University)
- Nilüfer Kart Aktaş - (İstanbul University- Cerrahpaşa)
- Beyza Şat - (Özyegin University)
- Oktan Nalbantoğlu – (Bilkent University)
- Ceylan Belek Ombregt
- Sertaç Ertem
- Taner Özdil - (Texas University)
- Amer Habibullah - (King Abdulaziz University)

Group Composition

Six groups were established, each consisting of five in-person students and three online students, creating a balanced mix of physical and virtual collaboration. This setup allowed diverse perspectives and the inclusion of remote participants.

Group 1

In Person

1. EU: Elvira Feldt-SWEDEN
Swedish University of Agricultural Sciences
2. ME: Mohammed Khalid Al Harthi-SAUDI ARABIA
King Abdulaziz University
3. APR: Shin-Yu Wang-TAIWAN
Fujen Catholic University
4. APR: Hanting Huang-CHINA
Tianjin University
5. APR: Izzy Shin-SOUTH KOREA
Pusan National University

Online

6. AR: Alixe Yarelli Ortiz Cruz-MEXICO
Universidad Nacional Autonoma de Mexico
7. AR: Iara Parissi-ARGENTINA
Universidad de Buenos Aires
8. AF: Aicha Bousnina-TUNISIA
University of Sousse

Group 2

In Person

1. EU: S. Meryem Sarıkaya-TÜRKİYE
Ankara University
2. EU: Phuong Uyen Thi (Victoria) Hoang-FRANCE
ESAJ-Ecole Supérieure d'Architecture des Jardins
3. ME: Ali B. Al Wazzan-SUIDI ARABIA
Imam Abdulrahman Bin Faisal University
4. APR: Eunjin Yang-SOUTH KOREA
Pusan National University
5. APR: Yu-Chen Hsueh-TAIWAN
Chinese Culture University

Online

6. AR: Marlon Julian Perez Mejia-MEXICO
Universidad Nacional Autonoma de Mexico
7. AF: Purity Wangombe-KENYA
JKUAT- Jomo Kenyatta University of Agriculture and Technology
8. APR: Tasha Angelika Sihombing-INDONESIA
IPB University- Institut Pertanian Bogor

Group 3

In Person

1. EU: İrem Aleyna Sarısoy-TÜRKİYE
Istanbul Technical University
2. AR: Jacob Pytleski-USA
South Dakota State University
3. APR: Meng Guo-CHINA
Soochow University
4. APR: Yoyo Wing-Yiu-HONG KONG
THEI- Technological and Higher Education Institute
5. APR: Caylie Lacap-PHILIPPINES
University of the Philippines-Diliman

Online

6. AR: Francesca Mollica-URUGUAY
Universidad de la Republica
7. AF: Emmanuel Mushi-TANZANIA
Ardhi University
8. ME: Islam Reem-PALESTINE
Birzeit University

Group 5

In Person

1. EU: Arda Sakaoğlu-TÜRKİYE
Ankara University
2. EU: Manon Migadel-FRANCE
Ecole Nationale Supérieure de Paysage Versailles
3. ME: Faisal H. Alessawi-SUIDI ARABIA
Imam Abdulrahman Bin Faisal University
4. APR: Chu-Hsuan Wang-TAIWAN
Chinese Culture University
5. APR: Lauren Kendon-NEW ZELAND
Victoria University of Wellington

Online

6. AR: Florencia Castillo-CHILE
Universidad Central de Chile
7. AF: Mark M'Mbololo-KENYA
JKUAT- Jomo Kenyatta University of Agriculture and Technology
8. APR: Sofia Febriyani Rudiarto-INDONESIA
IPB University- Institut Pertanian Bogor

Group 4

In Person

1. EU: Anna Alavaara- SWEDEN
Swedish University of Agricultural Sciences
2. AR: Miranda Peck-USA
South Dakota State University
3. APR: Chaeyoung Kim-SOUTH KOREA
Pusan National University
4. APR: Yixin Chen-CHINA
Tianjin University
5. APR: Carol Sze-Kei Ng-HONG KONG
THEI- Technological and Higher Education Institute

Online

6. AR: Lucía Villagrán-URUGUAY
Universidad de la Republica
7. AF: Hajer Dahwathi-TUNISIA
University of Sousse
8. ME: Sema Salah-PALESTINE
Birzeit University

Group 6

In Person

1. EU: Ahmet Selim Bilgili-TÜRKİYE
Istanbul Technical University
2. ME: Faris Aiman Feda-SAUDI ARABIA
King Abdulaziz University
3. APR: You-En Chien Chien-TAIWAN
Fujen Catholic University
4. APR: Jaylord Abucot-PHILIPPINES
University of the Philippines-Diliman
5. APR: Zoe Mason-NEW ZEALAND
Victoria University of Wellington

Online

6. AR: Isidora Gahona-CHILE
Universidad Central de Chile
7. AR: Sol Pizzia-ARGENTINA
Universidad de Buenos Aires
8. AF: Noel Mzava-TANZANIA
Ardhi University

Critique and Guidance

Each group was required to receive critiques from the assigned tutors, who facilitated face-to-face sessions and ensured online connectivity for remote students. Tutors from the Global Studio Program (GSP) also provided additional feedback through joint critique sessions.

Communication Channels

A common WhatsApp group was created for general updates and coordination. Additionally, each group set up its own internal WhatsApp group to streamline communication, planning, and collaboration within the team.

Leadership and Responsibility

Each group appointed a leader responsible for organizing meetings, coordinating with tutors, and ensuring all members were engaged in the critique sessions.

This structured approach to group formation and guidance aimed to create a collaborative environment, with a focus on leveraging diverse expertise and enhancing the learning experience for both in-person and online participant.

References

- IFLA. (2015a). 2015 IFLA World Councils and Congresses Guidelines.
- IFLA. (2015b). Standard items to cover whilst planning World Congress.
- IFLA. (2015c). 2015 IFLA World Councils and Congresses Bidding Guidelines.

About the Global Studio Program

Bruno Marques & Alessandro Martinelli



About the Global Studio Program

Bruno Marques & Alessandro Martinelli

The International Federation of Landscape Architects (IFLA) is a global federation representing 80 national landscape architecture associations across Africa, the Americas, Europe, the Asia Pacific Region, and the Middle East. As a non-profit, non-political, and non-governmental organization, IFLA advocates for the profession of landscape architecture on a worldwide scale, engaging with both governmental and non-governmental entities. Its mission is to elevate landscape architecture by fostering collaboration with related built-environment professions, emphasizing excellence in education, training, research, and practice, and providing leadership in all related disciplines.

The IFLA Executive Committee (ExCO) oversees the general management and strategic direction of IFLA. It develops policies for the World Council of national associations to consider and consists of a President, Treasurer, five Regional Presidents, and three chairs of key sectoral committees: the Professional Practice and Policy (PPP) Committee, the Education and Academic Affairs (EAA) Committee, and the Communications and External Relations (CER) Committee. The EAA Committee is particularly focused on advancing landscape architecture education globally, with a special emphasis on supporting developing countries. Its goals include promoting high academic standards in landscape architecture by fostering educational development, supporting accreditation processes, and ensuring parity across IFLA members. Additionally, the EAA encourages the growth of landscape architecture programs and facilitates knowledge exchange among IFLA members through study, research, and shared resources.

Definition

The IFLA GSP - Global Studio Program represents an experimental initiative aiming to facilitate coordination among key international landscape events through student charrettes in 2024, conducted in English.

Key Objectives

- The primary goal is to ensure the participation of 2-4 landscape architecture bachelor's programs from each IFLA geographic region or sub-region—North America, South America, Europe, Africa, the Middle East, and the Asia Pacific—in all major global landscape event charrettes. The intended structure includes at least two students and one tutor (a full-time faculty member) per program.
- A secondary objective is to foster thematic and structural consistency across charrettes, enriching the collaborative educational experience.

Rationale

- Supporting IFLA World's core mandate, the primary aim is to broaden student engagement in global charrettes, thereby enhancing the events' appeal to students and academic institutions. This engagement aligns with the mission assigned by IFLA World President Bruno Marques to the IFLA World EAA Chair, targeting a wider academic and institutional reach.
- The secondary rationale is to promote meaningful dialogue and knowledge exchange on regional nuances, encouraging greater diversity and engagement across events. This cross-regional exchange is intended to foster capacity-building, beginning with event organizers and extending to the broader academic network.

Basic Structure

To minimize disruptions to existing event and charrette frameworks (unless desired by organizers), the GSP includes:

- An alternate application pathway via bachelor's programs instead of individual applications, supplementing existing application systems.
- Remote participation options for students or programs lacking sufficient resources to support in-person attendance.
- Tutors from participating programs serve as coordinators for their students and as intermediaries between students and charrette educators.

Each global event may accept additional students beyond those in the GSP, although GSP-designated participants are expected to attend all charrettes. The program is intended as a unique platform to cultivate Future Leadership in landscape architecture, encouraging global exchange. Organizers are encouraged to aim for approximately 30 GSP-enrolled students, with an additional 20-30 local and 10-20 international participants applying independently. Organizers handle the selection and any rejections of independently applying students.

GSP Platform

Following initial discussions, the GSP Platform includes representatives from across IFLA regions and educational organizations:

- Alessandro Martinelli, IFLA World EAA Chair
- Rafael Dodera, IFLA America EAA Chair
- Attila Toth, IFLA Europe EAA Chair
- Goabamang Lethugile, IFLA Africa EAA Chair
- Amer Habibullah, IFLA Middle East EAA Chair
- Wenshan Huang, IFLA Asia Pacific Region EAA Chair
- Chingwen Cheng, President of CELA (US)
- Ellen Fetzer, President of ECLAS (EU)
- Şükran Şahin, IFLA World Congress Istanbul 2024 Organization Team Member

Identified events and contributions to GSP preparation include:

- 1. March 20-23, 2024** - Council of Educators in Landscape Architecture Congress: Program announcement.
- 2. April 3 - July 2, 2024** - Open Landscape Academy Seminar: Tutor capacity-building and theoretical resources for students (online).
- 3. May 7-8, 2024** - IFLA Americas Regional Conference: GSP launch (online).
- 4. June 24-28, 2024** - Landscape Forum of the LE Notre Institute: unveiling of schools participating to GSP 2024 (online).
- 5. August 31 - September 3, 2024** - IFLA World Congress in Istanbul: First student charette.
- 6. October 8-11, 2024** - Global Landscape Conference in Taipei: Second student charette.
- 7. November 4-8, 2024** - Landscape Middle East Awards in Jeddah: Third student charette.
- 8. January 13-15, 2025** - RAEAP Charette in Tepoztlan: Fourth and last student charette.
- 9. January 31, 2025** - Program finissage and launch IFLA GSP 2025.

Didactic System

The GSP is available exclusively to bachelor's students and their tutors from institutions with landscape architecture programs. Program chairs are responsible for selecting students and tutors, while financial support and subsidy applications remain the discretion of each institution. The IFLA World EAA Chair will support subsidy applications to promote participation.

- GSP requires each program to enroll two students and one tutor in each charrette of the major global landscape events within the program.
- With regional GSP events, students and tutors have opportunities for in-person attendance, though online options are also available. Tutors are expected to oversee student engagement throughout.
- Event organizers determine charrette topics and sites, while the IFLA World EAA Chair encourages inter-organizer communication to foster an educational continuum across charrettes and encourage region-specific design sites.
- Charrette organizers are responsible for providing briefs, preparatory materials, and coordinating charrette activities. Students and tutors collaborate as teams on design tasks and presentations.

Didactic Goals

- Each charrette must conclude with a final presentation, though interim reviews are encouraged.
- Organizers convene panels to review student work, with evaluations submitted to the IFLA World EAA Chair for ranking.
- GSP exposes students to diverse educational approaches and cultural contexts, enhancing their understanding of the relationship between design methodologies and socio-natural diversity. This experience aims to prepare students for careers within a global framework and establish a network of professional relationships.

Capacity-Building for Tutors and Programs

- GSP aims to foster global networking opportunities for tutors, providing access to diverse academic and professional landscapes. This network offers potential for collaboration, research, and pedagogical inspiration.
- Exposure to a variety of charrette formats allows tutors to explore different educational methods and assess their relevance in distinct socio-cultural contexts.
- The program includes preparatory resources focused on Democratic Landscapes and Landscape Culture Language, equipping tutors with theoretical insights for enhanced didactic engagement.
- The IFLA World will award a certificate to the program with the top-performing students, potentially contributing to IFLA Education Recognition.

General Goals

- GSP aligns with IFLA's objectives by encouraging the idea that landscape architecture embodies a globally varied discipline. The program seeks to lay groundwork for globally relevant standards in education and professional practice.
- GSP focuses on (1) fostering Future Leadership among students and tutors and (2) developing a Global Landscape Academia network for educator capacity-building.
- The success of Future Leadership is intertwined with the establishment of a supportive Global Landscape Academia, which together aim to shape a progressive future for landscape architecture.

Theme and Subthemes of the 2024 Student Charrette: Creating Resilience for All

IFLA 2024 Charrette Committee of CTLA



Theme and Subthemes of the 2024 Student Charrette: Creating Resilience for All

IFLA 2024 Charrette Committee of CTLA

As we search for solutions that can prevent many of the developments we are discussing today that are hurting the viability of human life in the world, can look at how ancient cities solved these problems be a way forward? How can we design more resilient “urban metabolisms” - by using the infra-world and its nested landscapes of our cities together - in the face of growing inequality and runaway climate change?

Mediterranean geography has many important references in terms of urban history, and we know that ancient cities, whether inhabited or abandoned, offer us many possibilities for how our cities can become more resilient. When we look at the compact lifestyles of cities of the past, we see an urban metabolism where infrastructures and life-support systems were thoughtfully designed to be self-sufficient for days in case of disaster or war. Underground waterways, fountains, arches, vaults, cisterns, bostans, urban farms, sanctuary gardens, city walls, gates, gateways, underground tunnels, socially inclusive public networks, and their public spaces, and many other components of the urban system are perfectly designed to sustain life under all conditions throughout the history.

The Historic Peninsula of Istanbul has also preserved its layers of different eras in one form or another as an ancient city that has managed to survive by closing in on itself in the face of the threats it has faced throughout history.

The area we will be studying in this year’s IFLA 2024 Student Charette, located at the north-eastern corner of the historic peninsula, is an urban sample where many layers belonging to different periods of an ancient city try to coexist with the landscape. It includes a variety of land uses that serve different purposes. The most significant are residential, commercial, and green areas. A landscape is created by the 1600-year-old walls and their surroundings, which reflect the city’s history and the numerous complex cultural activities that have occurred there. Cemeteries, open spaces like parks, historical orchards/vegetable gardens-bostans-, courtyards of traditional Turkish Houses, city walls, fortifications, gates, towers, monuments from various historical periods, and buildings like traditional homes are some of the multi-layered tangible features of the cultural landscape.

We expect that the IFLA 2024 Student Charette will produce design models that attempt to address the questions we have tried to open above from the potentials of Istanbul and the historical layers of the natural and cultural landscapes of the Historic Peninsula, which is a UNESCO World Heritage Site!

Study Area Landscape Characteristics

Hayriye Eşbah Tunçay & Nilüfer Kart Aktaş



Study Area Landscape Characteristics

Hayriye Eşbah Tuncay & Nilüfer Kart Aktaş

Historic Peninsula

The central inner region of Istanbul, separated from the outer parts of the city by a large city wall, is the old, historical, culturally valuable and main part of the city. This is called the Historic Peninsula. Historic Peninsula has a geographical location surrounded by the Golden Horn to the north, the Bosphorus to the east, the city walls to the west and the Marmara Sea to the south has always been very important for the civilizations that ruled in the city throughout its history due to its strategic location connecting Europe and Asia (Figure 1).

The total area of the Historic Peninsula is 16.118.755,35 m² which consists of 57 neighborhoods. The population of the area is 382.909 people.



Figure 1. Location of Historic Peninsula

Historic Peninsula is a densely populated area containing the most important historical opuses in Istanbul. Hagia Sophia Mosque, Blue Mosque, Topkapı Palace, Süleymaniye Mosque, the Hippodrome, Sultanahmet Square, the world famous Grand Bazaar, the Beyazıt Complex, the Museum of Basilica Cistern, the Mosaics Museum, the Kariye (Chora) Museum, the Archaeological Museum, Yedikule Fortress and many others are located in this peninsula.

Historic Peninsula is also the center of administration, with many institutions such as the Governorship of Istanbul and the Istanbul Metropolitan Municipality located here. Istanbul University, important libraries and hospitals are located in this area. This region also has the most important archaeological sites in Istanbul.

As a transit point between Asia and Europe, the region has been home to various civilizations since the Paleolithic, Neolithic and Bronze Ages. The first historical findings related to the Historic Peninsula belong to the Neolithic period and were unearthed during the Marmaray excavations in Yenikapı. The Neolithic period, which corresponds to approximately 6500 BC, is the period when human beings first engaged in agriculture, started to grow crops and domesticated animals. The alphabet, mathematics, the art of architecture and the approach to city building all took place during this period. Excavations under Sultanahmet Square in Sarayburnu also yielded findings dating back to 5000-3000 BC. In the light of these findings, it can be easily said that the region has been a settlement point for 8500 years. With 8500 years of historical background, the Historic Peninsula has been the capital of three empires, hides precious archeological values in its underground from the past and has been strategically located until today (Kart Aktaş, 2012).

Historic Peninsula is under protection by law and it has been declared as a protected area for its unique cultural heritage by the regulation, taken by the First Council for the Protection of the Cultural and the Natural properties in Istanbul, dated 12/07/1995, numbered 6848 (Anonymus, 2004). Besides, Istanbul was included in the UNESCO World Heritage List in 1985 with 4 regions in Historic Peninsula. These are;

1. Sultanahmet Urban Archaeological Area, which includes the Hippodrome, Hagia Sophia, Hagia Irene, Little Hagia Sophia Mosque and Topkapı Palace,
2. Süleymaniye Conservation Area, which includes the Süleymaniye Mosque and its surroundings,
3. Zeyrek Conservation Area, which includes the Zeyrek Mosque and its surroundings,
4. İstanbul Land Walls Conservation Area (Figure 2), (URL 1).



Figure 2. Unesco World Heritage sites of Istanbul (URL 1)

The Historic Peninsula is built on seven hills. Monumental buildings were built on almost every hill. These monumental and historical buildings on each hill give the peninsula an impressive and unique silhouette (Anonymus, 2004). With this topography, the landscape of the peninsula has played an important role in the architectural development of the city. The residential areas of the city, protected by walls, consist of traditional wooden Turkish houses with courtyards. Religious buildings such as churches and mosques and palaces located in the most prestigious areas in the seven-hill topography of the peninsula have greatly changed the landscape of the city. The streets and avenues shaped by important landmarks have left their mark on the city landscape. While the city provides its water needs with cisterns and aqueducts, it provides its food needs with orchards and the life cycle with commercial activities carried out its harbor in the city. Today it is a living area with many layers.

Study Area

The study area located at the north-eastern side of the Historic Peninsula, is approximately 78.000 m² and is spread over two neighborhoods; Dervişali and Ayvansaray. The population of Dervişali neighborhood is 364755 people and the population of Ayvansaray is 621450 people (Figure 3).



Figure 3. Location of Study Area

Historical Process/Land Use Changes

The study area has undergone many changes in the historical process, but some of its basic formations have survived to the present day. According to Kauffer's map, settlement increased along the waterways and seaside in 1776, and according to Moltke's map, by 1836, there were changes and developments in the roads connecting the outer and inner city walls, and with the expansion of the settlement, the waterways were carried to the settlement units with cisterns and fountains. According to an Ottoman map from 1918, the green texture outside the city Walls was mostly replaced by cemeteries, while within the city walls, settlement gradually increased and urbanisation began (Figure 4).

In recent history, especially since the early 1950s, with the industrialization period and the increase in development activities, major changes have begun to be seen in the Historic Peninsula. These changes have been particularly effective in the landscape of the region.

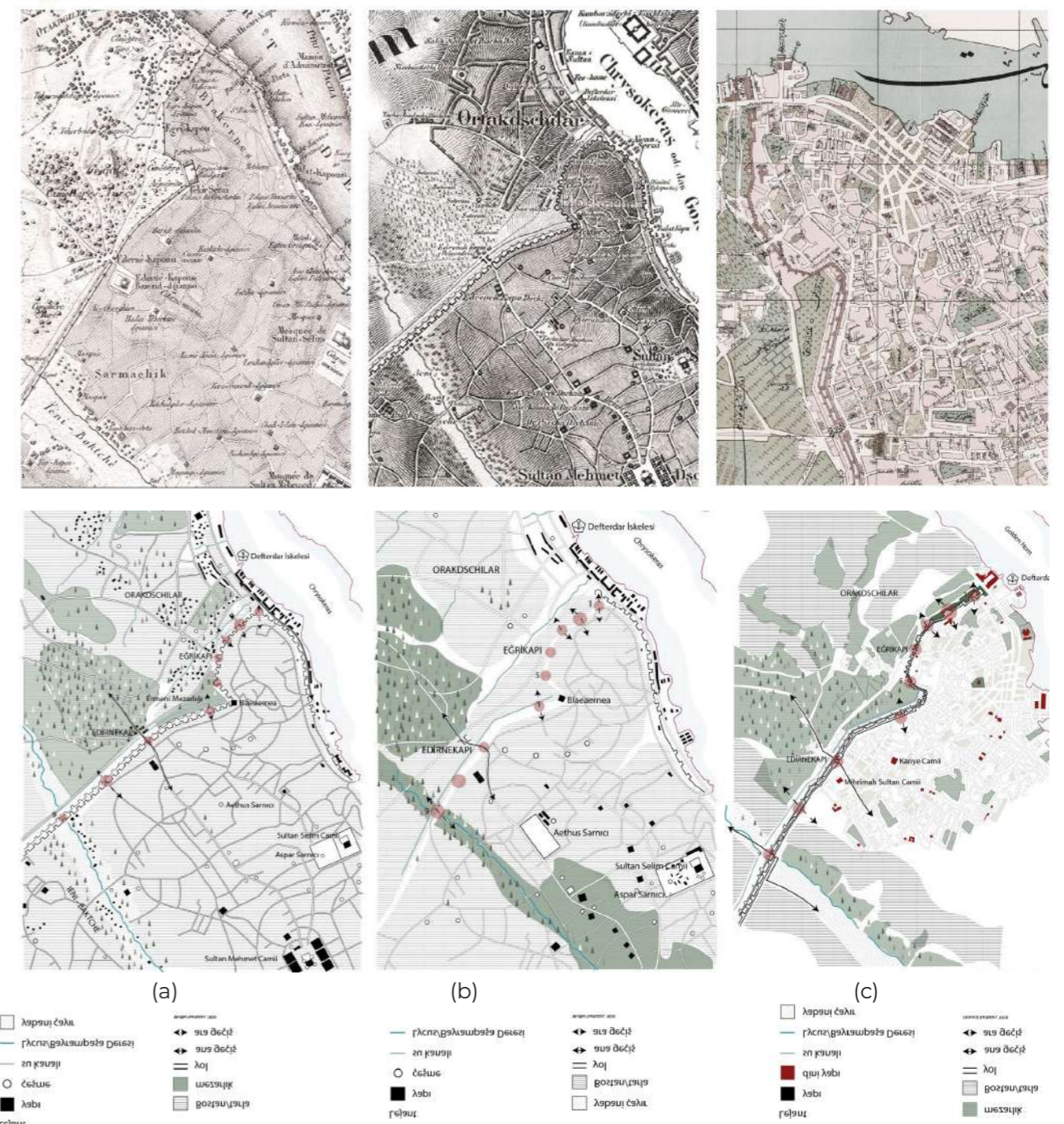


Figure 4. The development of the city according to a. Kaufer map (1776), b. Moltke map (1836) and c. Ottoman map (1918)

The most striking changes can be summarized as the change in the typology of residential areas (from detached houses with courtyards to apartment-type residential areas without garden-courtyard), the change in the typology of open and green areas, transformation of the agricultural areas to urbanized area, the increase in transportation networks, increasing sports facilities and decline in urban vegetation. Especially in recent years, the activities carried out to increase green areas, the restoration of the city walls, the projects developed for the protection of the bostans and the restoration activities of the deteriorated historical buildings make a significant contribution to the landscape of the site.

City Walls

Over a period of 5-6000 years, from the beginnings of urban civilizations to almost all pre-industrial revolution cities, fortifications have been the most ubiquitous and defining element of urban architecture throughout the world. Of all the magnificent fortifications, the one that is relatively well preserved is the one built by Theodosius II. The importance of these walls has been recognized by UNESCO and declared part of the World Cultural Heritage.

The walls of Istanbul are still standing in the west (Land Walls), south and east (Marmara Walls) of the city. The walls on the shores of the Golden Horn, which were poorly built in their time, were destroyed and partially survived. The strongest walls of the city are on the western front (Land Walls) (Ortaylı, 2010).

The fortification line that protected Constantinople and determined its western border was called the "Land Walls" by Byzantine authors. The 5650 m long main portion, extending from the shores of the Marmara Sea to the quarter of Tekfur Palace is the Theodosian Walls, built by Emperor Theodosius II (408-450). This section consists of three parallel lines of defense: a great/inner wall, an outer wall and a moat. The bulwark is considered as the most advanced defense system of the Late Antique and Byzantine medieval era and has been breached only twice, in 1204 and 1453 (Url 2).

The long history of city walls as an essential feature of permanent fortifications requires us to remember their importance as part of 'collective memories' of urban space, at least where they persist. In modern cities, the remains of historic fortifications are hidden behind buildings and other utilitarian structures or surrounded by quiet parks and gardens. However, they remain a testament to the urban development patterns of the past and contribute to the characteristic image of the modern city. In this context, the city walls surrounding the Historic Peninsula have taken their place in history as one of the most special walls known.

Bostans

The bostans of the Historic Peninsula, where the majority of the city's food needs were met during the Ottoman period, are today confined to very small areas (Kart Aktaş and Yıldız Dönmez, 2018). Information on urban bostans, which constitute the first step towards local production, dates back to the 1700s. The most detailed and comprehensive information on bostans and gardeners can be found in the guarantor's book dated 1735, which records 344 bostans within the city walls of Istanbul (Shopov and Han, 2013). An 1883 map of Istanbul shows that there were 102 bostans within the city walls in the city (Dünden Bugüne İstanbul Ansiklopedisi, 1994). These bostans have been an integral part of the land walls built in the 5th century and an important component of the cultural landscape ever since, and only the Yedikule bostans have survived to the present day. Yedikule Bostans are one of the unique examples of the unity of tangible and intangible cultural heritage of Byzantine and Ottoman Istanbul and one of the most fundamental authenticity values of the World Heritage Site (Gürsel, 2016).

As can be seen from the old dated map (Figure 4), there are bostans in the study area. The area where these bostans are located, which have not survived to the present day, is a passive green space and has idled today.

Current Condition of Study Area

The area has a wide range of facilities such as education, commercial, residential and public institutions. It houses a wide variety of historic artifacts. There are important historical buildings in the site including palaces, mosques, fountains, tombs, churches, such as Mihrimah Sultan Mosque, Kariye Mosque, Tekfur Palace in this area. Also there is a connection potential in the east-west direction with the city walls and 6 gates up to Edirnekapı (Figure 5). The site is in the boundary of the UNESCO world heritage site.

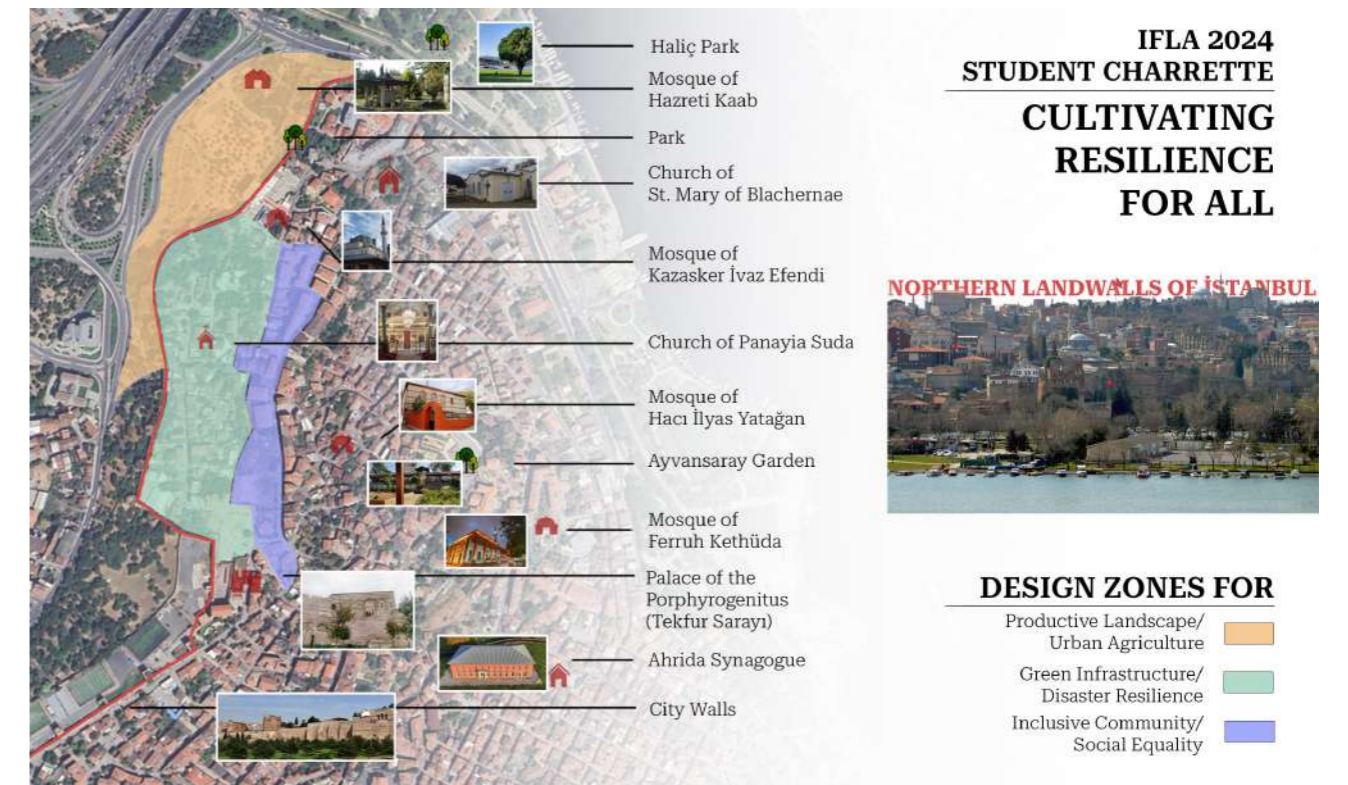


Figure 5. Introduction of the Study Area

The land walls defines the land use types: east of the wall is residential and commercial, the west side of the wall is mostly cemeteries and passive green spaces (Figure 6). The areas close to the city walls in the Ayvansaray region are in the best condition in terms of climatic comfort of the peninsula due to the density of vegetation, the modesty of the building stock, the fact that it is a sloping area that collects urban drainage and cools with water and also because the city walls block the afternoon sun (Figure 7).

The study area has a high relationship with both natural water resources and historical water ways such as Kırkçeşme waters. However, it is seen that fountains, water traces and cisterns related to historical waterways remain dysfunctional today. Making water traces recognisable in the area is important in terms of urban identity.



Figure 6-7. Green Spaces and Surface Flow Maps of the Study Area

There exists Major transportation lines on the West of the land walls. Traffic penetrates the peninsula through 4 main axes crossing the major highway. Noise and air pollution from these lines are environmental challenges. Also, lack of parking spaces, and traffic jam in the local level traffic in the peninsula diminishes the recreation experience and affects daily life negatively (Figure 8, Figure 9).

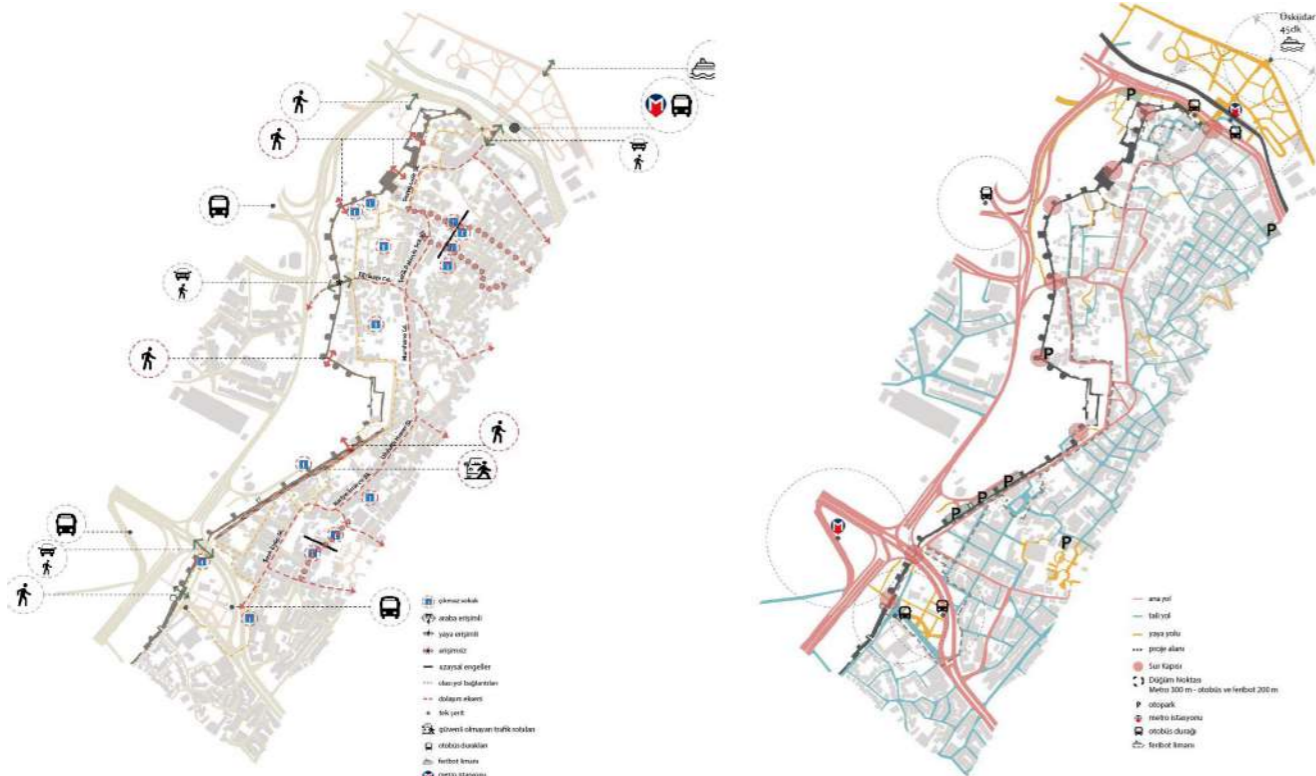


Figure 8-9. Accessibility and Transportation Maps of the Study Area

Problems of the Study Area

It is possible to categorise the problems of the project area into three groups. The first group is the problems related to zoning. These include unplanned settlements, construction encroaching on historical monuments, an inaccessible urban texture, problems related to pedestrian and vehicle traffic and undefined urban open spaces.

The second group of problems is related to environmental quality and the negative effects of climate change. These include noise problems on wide streets, high carbon emissions from the built environment in general, an urban environment vulnerable to floods and other disasters, garbage problems, and the arbitrariness of impervious surfaces.

The third group of problems is the social fabric that is adversely affected by the built environment. Public spaces and streets that are not accessible and safe, many abandoned areas and ruins of historical artifacts that feel unsafe, cemetery-like areas that become deserted at night, and green areas along the city walls that lack lighting and function are the headings that can be counted in this context (Figure 10).

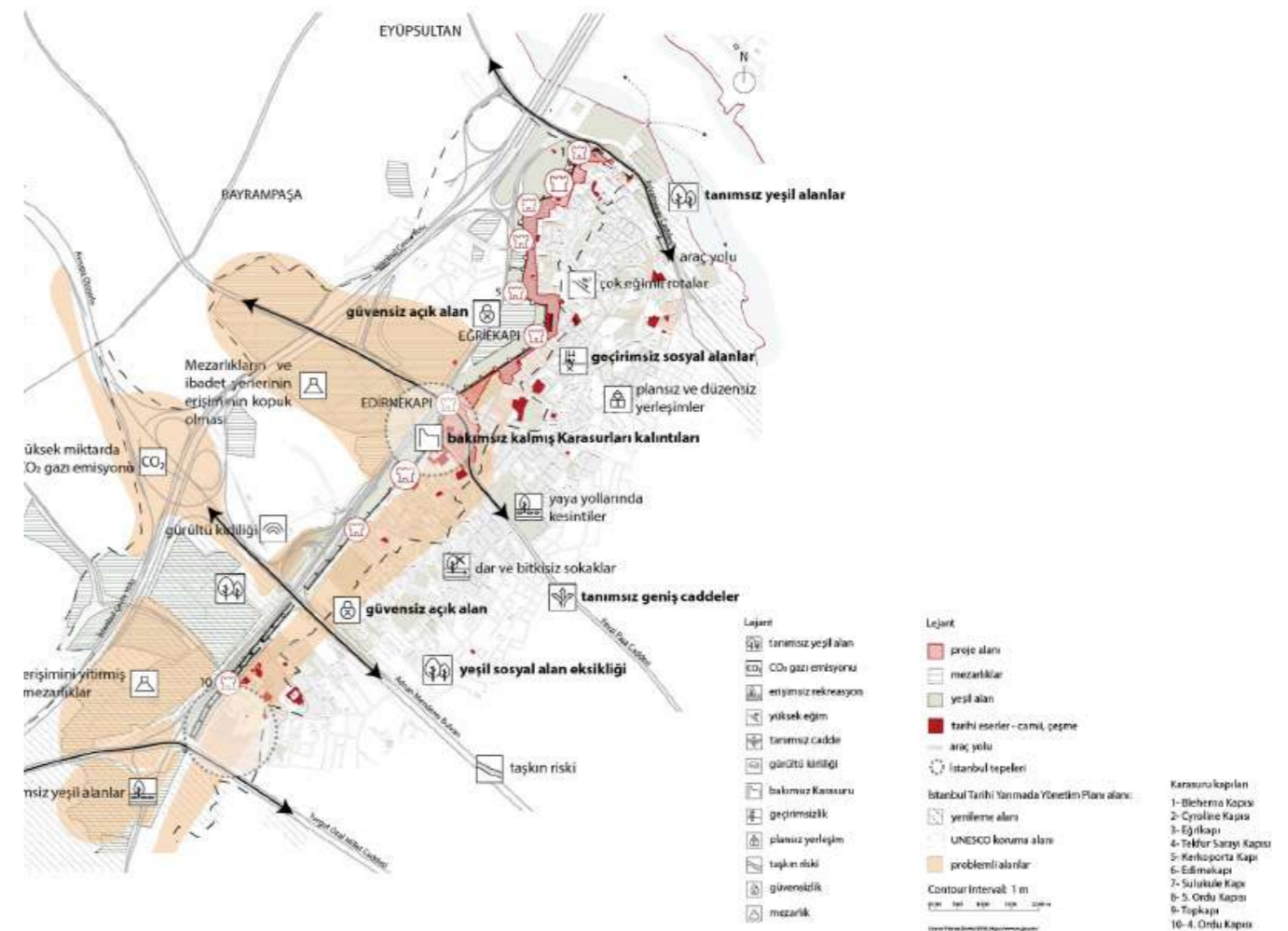


Figure 10. Problems of the Study Area

There are many idle open and green areas in the project area. Most of these are the lands exposed from the buildings removed as a result of expropriations. The presence of excavations in these areas is a problem. Irregular garbage bins every where in the area also pose a problem. The fact that the Wall has not yet been completely restored and the structures built by the citizens unconsciously using the Wall are a problem for the health of the wall and also for safety.

Another problem in the area is caused by the poor building stock. In this context, the main problems in the area can be summarized as; debris in idle areas, Impervious ground cover, limits to accessibility, unsafe traffic routes for pedestrians, unstable wall, garbage problem, sense of unsafe areas. This situation is unfavourable both in terms of urban aesthetics and disaster.

Potentials of the Study Area

In addition to its relationship with the Golden Horn, the Project area has the potential for views at many points that will enable the perception of historical monuments. As the existing vegetation is naturalised and multi-layered, there is ample opportunity to provide regulating and enabling ecosystem services for the surrounding urban fabric in terms of adaptation to climate change. This is further strengthened by the presence of large green areas and carbon sequestration is further enhanced by the uninterrupted green tissue along the cemeteries and city walls.

In terms of urban facilities, it offers health, education, recreation and worship services, and has a strong potential for trade and tourism. The fact that it harbours today's examples of food culture, bostan culture and promenade culture from the past is an important indicator of the socio-economic potential of the area. In this context, the potentials of the site can be listed as; urban services and green spaces, ample open spaces, fountains, urban Heritage, playgrounds and sport facilities, cemeteries (Figure 11).

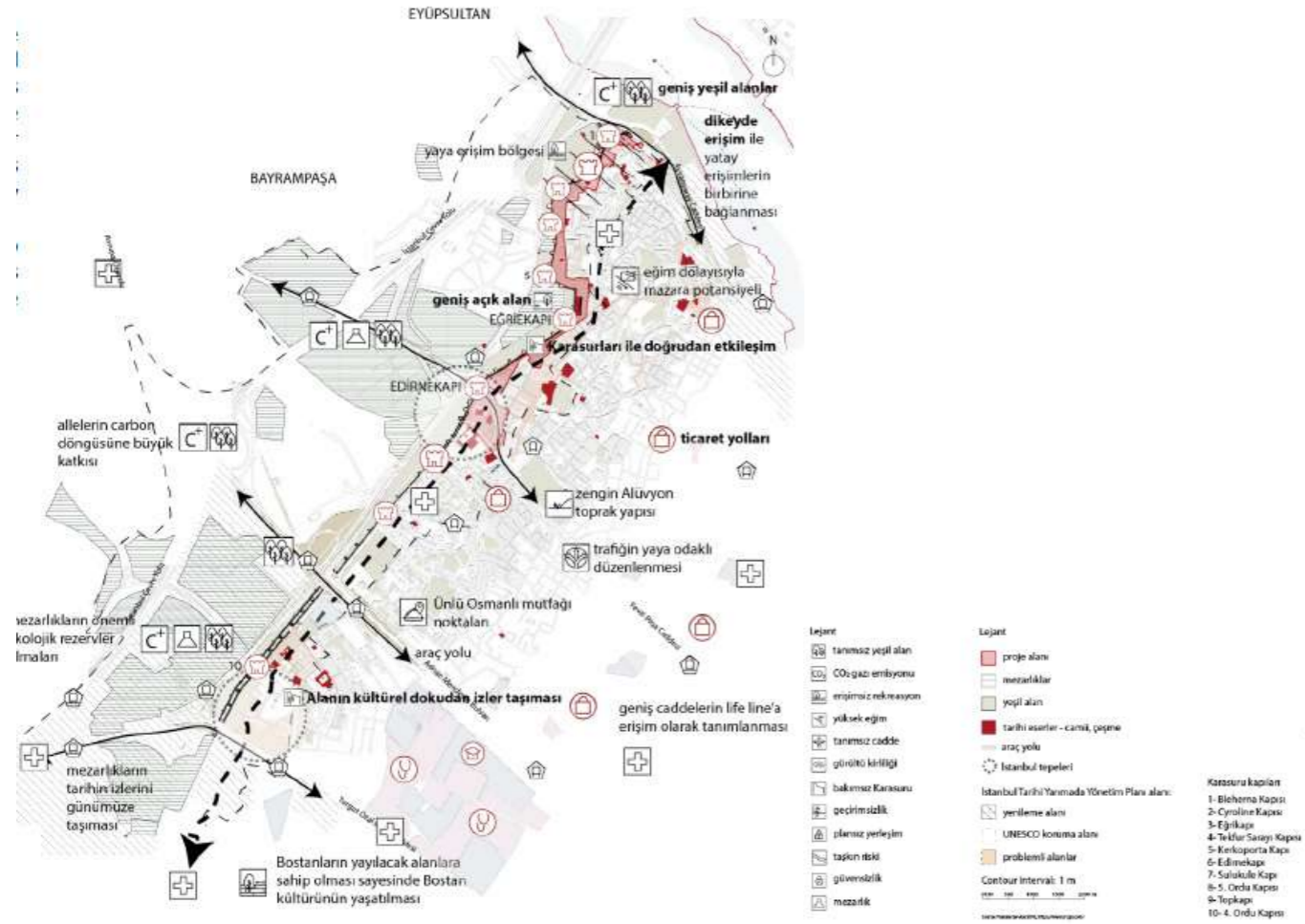


Figure 11. Potentials of the Study Area

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Historic Peninsula Site Management

Nilüfer Kart Aktaş & Melih Yılmaz



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Planning Process of Historic Peninsula

The Historic Peninsula is where Istanbul was first settled and developed. With its 8500 years of history, the topography of the Historic Peninsula, the center of Istanbul, which served as the capital of the Byzantine and Ottoman Empires, and its relationship with the sea, have played a role in the formation of the main structure of the city from the earliest periods and created its unique character.

The locations of historical and religious buildings, monumental assets and the spatial development of the area have been shaped according to the topography since the early periods. While the structural characteristics of the monuments have changed in line with the socioeconomic and cultural characteristics of the periods, their symbolic meanings have remained constant (Historic Peninsula Management Plan, 2011). As a multi-layered city, the urban development of the Historic Peninsula can be defined as the Roman, Byzantine, Ottoman and Republican periods, starting from the ancient period to the present day.

The fact that different forms of production continue to exist together and intertwined with historical and cultural layers in Historic Peninsula, and the problems arising from the changes in production, cultural and technological consequences, and the profound changes in the city's function and texture, have made the planning of Historic Peninsula an important issue that needs to be emphasized. In Historic Peninsula, different forms of production continue to exist together and intertwined with historical and cultural layers, on the other hand, the problems arising as a result of the deep changes in the city's function and structure as a result of the cultural and technological effects of the changes in production, have made the planning of Historic Peninsula an issue that needs to be emphasized (Kart, 2008).

The planning process of Istanbul began in 1836-1837, during the reign of Mahmut II, when Von Moltke prepared the first zoning plan of Istanbul on a 1/25,000 scale map. In this period, various foreign engineers and firms prepared proposals for tunnels, harbors and bridges. In addition, during the reign of Abdülhamit II, Arnodin and Bouvard also had projects for Istanbul, but these projects were not implemented.

From the proclamation of Tanzimat until the Second Constitutional Monarchy, the development of the city was tried to be shaped by the local plans made for large fire areas and areas to be reopened for settlement and the implementation of the Ebniye Regulations prepared in 1848-1849. After 1855, in the areas of major fires, fire site plans were made by applying these regulations. The structure of the city was transformed not by the implementation of a plan covering the entire city, but by the combination of separate local plans (Tekeli, 1993).

The first half of the 1930s was a period in which all urban management and zoning laws of the Republic from the Ottoman period were changed. Laws No. 1580 on Municipalities and No. 1593 on Public Hygiene enacted in 1930, the Law on Municipalities Bank enacted in 1933, the Law on Buildings and Roads enacted in 1933 to replace the Law on Ebniye, and finally the Law on Municipal Expropriation enacted in 1934 constituted a new urban management framework. According to Laws No. 1580 and 1593, municipalities above a certain size were obliged to make or have made plans (Tekeli, 1993).

Thus, studies on the planning of Istanbul continued in various periods. The first plan for the Historic Peninsula was prepared by Von Moltke in 1837. After this, Marie De Lavnay (1864), Carl Ch. Lörcher (1922-1928), Herman Elgötz (1933), Alfred Agache (1933), Jack H. Lambert (1933), Martin Wagner (1935), Henri Prost (1936), Högg (1956), Piccinato (1960) and after 1960 by Turkish planners.

Helmuth Von Moltke was assigned by Mahmut II to make a detailed map of Istanbul and to draw up a plan to organize the streetscape. The city, which had been built in sections, was considered as a whole for the first time. The main objective of the Von Moltke Plan (1836-1838) was to develop an uninterrupted and easy transportation network by opening wide roads between the old Byzantine gates where the commercial and administrative affairs of the Istanbul peninsula were conducted.

At the same time, residential architecture was to be gradually converted from wood to masonry to prevent fires. The problem of image played an important role in Moltke's plan. Istanbul was to be transformed into a European city in accordance with the Tanzimat philosophy (Çelik, 1998). Although Von Moltke's projects were not implemented, they formed the basis of new construction regulations. The beginning of the efforts related to the planning problem of Istanbul in the Republican period is accepted as 1933. As planning became an obligation with various laws enacted in this period, the Municipality of Istanbul opened a competition among well-known urbanists and three city planners who had made a name for themselves in their countries were invited to Istanbul for an idea competition. Alfred Agache, Herman Elgötz and Jack H Lambert came to Istanbul separately and made examinations for a period of one month and prepared their reports that would be the subject of the competition. The jury formed by the Municipality examined the reports of the competitors and Elgötz won the competition. Accordingly, Elgötz's (1934) ideas for the plan of Istanbul are summarized as follows:

"...Istanbul is the city that needs development the most in the world. It is such a city that it is located between continents and two civilizations, namely east and west...The natural beauty of Istanbul is unique in the world. On the peninsula of Istanbul, which gives it a special character, there is a seven kilometer long street along the ridge. But there are no promenades. The most important point in the future development activity is to give a direction from the city to the sea. The natural and topographical situation also requires this. The city should be organized in such a way that there should be no obstacle to the view of the sea from every point, and the construction on the existing hills should be in such a way as not to disturb the calm silhouette of Istanbul."

Elgötz (1934) also listed his views on the zoning of the city into districts as follows:

"While preparing the plan of Istanbul, it must be remembered that this city is in shape the accumulation of thousands of years of ancient cultures. Today, on every hill there is a masterpiece that will be the epitome of the city... There are mosques and churches that are unique in terms of beauty. Around this axis between Beyazit and Hippodrome, the commercial and religious life of the city gathers... While this renewal continues, it is necessary to carefully preserve the old monuments. Monuments should be separated from the main circulation routes and connected to each other by small promenades. The old historical road networks should be renewed. Starting from Sirkeci, a road should be built along the coast, showing the beauty of the city wall and the sea."

However, for unknown reasons, no agreement was reached with Elgötz on a plan, and none of his proposals on key issues such as growth, transportation, historic preservation and the creation of districts were realized.

In 1936, Prof. Henri Prost, a French urban planning expert, was invited to direct the planning studies for the city of Istanbul. As a result of the planning studies under the direction of Prof. Prost (1936-1950), a 1/5000 scale master plan of the Istanbul side was prepared, which came into force in 1939 (Figure 1). With this plan, important decisions were taken to create and preserve a beautiful city. The plan proposed some principles that are still valid today (preserving and developing the archaeological and touristic areas in the Sultanahmet district, not allowing any building higher than 9.50 m above + 40 altitude in order to protect the silhouette in the Historic Peninsula, etc.). The plan has also contributed to the preservation of the skyline of the Historic Peninsula until today.

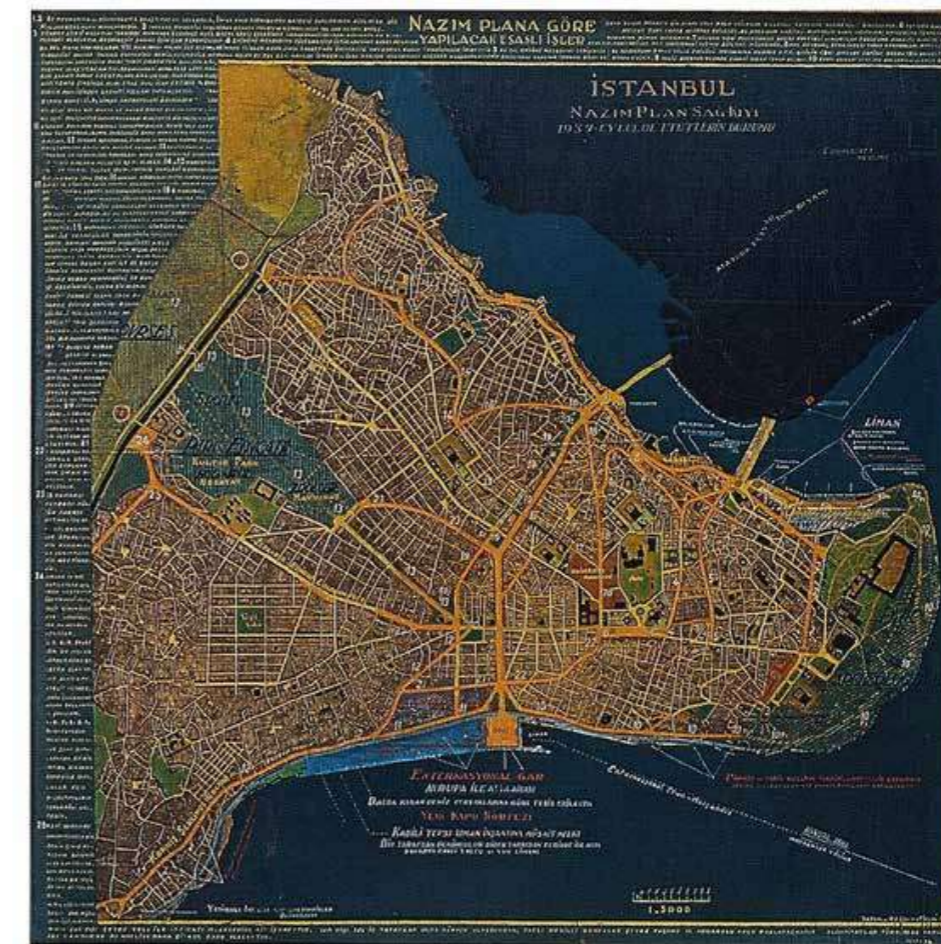


Figure 1. Prof. Henri PROST Plan (1936-1950)

1964 Historic Peninsula Zoning Plan, Greater Istanbul Master Plan (1971), 1990 Historic Peninsula Conservation Development Plan, 1993 Eminönü Conservation Development Plan, 1994 Fatih Conservation Development Plan, 1996 Historic Peninsula Conservation Development Plan, 2005 Historic Peninsula Conservation Development Plan, 2011 1/5000 Scale Conservation Development Plan and 2012 1/1000 Scale Conservation Implementation Zoning Plan can be listed as planning studies carried out for the Historic Peninsula after 1960.

In 2011 1/5000 Scale Conservation Development Plan, spatial decisions have been made in line with the objectives, targets and strategies of the plan. It is aimed to protect the existing housing texture, to save the traditional housing texture and historical housing areas from the pressure of trade, manufacturing and storage areas, to increase the housing areas and night population by improving the historical texture that has become a depressed area and areas to be decentralized, sanitized and preserved by giving function have been identified throughout Fatih.

2012 1/1000 Scale Conservation Implementation Zoning Plan is aimed to eliminate the negativities existing in Fatih, to take into account its structure that constitutes a different focus among the world cultures and to highlight these differences, to protect its historical, cultural and architectural core values that it carries at a universal level, to provide a unique identity structure in terms of history, culture, science, art and trade in order to gain the status of a world city today as it was in the past, and to reveal the qualities of continuity that can be established between the past and the future.

Today, the 1/5000 scale plan dated 30.12.2011 and the 1/1000 scale plan dated 04.10.2012 are still valid. During the historical process, the Historic Peninsula has been facing many intertwined urban problems such as population decline due to various reasons, changes in the social and demographic structure due to international migration, emergence of security problems, deterioration of physical space standards such as residential living environments, transportation and infrastructure, deterioration of the historical fabric and deterioration of the historical and cultural identity. These problems also affect urban welfare and life satisfaction.

Cities have become increasingly complex due to factors such as rapid urbanization, developments in information and communication technologies, cities becoming competitive on a global scale and changes in the economic system, and the traditional planning approach has been inadequate in solving urban problems due to their multidimensional and dynamic structure. This situation has led to the emergence of the strategic approach in spatial planning, which is defined as a more flexible approach, on the agenda of the planning field.

The Spatial Strategy Plan, which is seen as a tool for change instead of planning as an end to be achieved, is more participatory than in the past, will not be left on the shelf, is action-based, requires coordination, governance and consensus; should be prepared in a hierarchical system, starting from the vision, defining the goals, objectives, strategies and smallest scale projects that are connected to each other like the links of a chain.

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Historic Peninsula Spatial Strategy Plan (2020-2028)

Although it is defined as a plan prepared at the country and regional scale in the spatial planning hierarchy in our country, the most important issue that led to the preparation of a spatial strategy plan at the scale of Fatih district was the need for a holistic planning framework that would help to position the fragmented practices and projects of each administrative unit independently from each other within the existing structure and vision of Fatih. This plan has been prepared in order to ensure that the district is managed in a holistic manner within the framework of a vision created by considering all aspects of the district in a holistic manner, including physical, social, economic, cultural and historical aspects, and within the framework of goals, objectives and strategies that are compatible with this vision and that integrate with each other.

Fatih's current trends, problems, the extent to which these problems are experienced in which sub-region of the district and the factors that reveal the problems are revealed in a cause - effect relationship. Many qualitative and quantitative data sources such as written sources/literature study, primary and secondary data sources, survey-based data, etc. were used in the plan. The Urban Transformation Strategy Document, which was requested to be prepared by the Ministry of Environment, Urbanization and Climate Change, was prepared as a whole within a period of approximately 1 year. Within the scope of the study, a total of 3,086 surveys were conducted in April 2020, including 1,932 households, 379 workplaces, 385 foreign visitors and 390 domestic visitors. Along with the survey, data was collected from 90 external public institution directorates, and data was collected from the district municipality's building control, police, real estate, zoning and urbanization, etc. directorates. The surveys, the institutional data obtained and the Geographical Information data sets produced by the Planning and Project Directorate planning team were used.

Within the framework of all the findings obtained; in the plan prepared to include the investments, spatial interventions and projects of municipality; for what purpose, where and how they should be done; a positive change in urban welfare and satisfaction is aimed.

The Main Problems of Fatih (Historic Peninsula)

Within the scope of the study, the macro problems of Fatih were identified. The common feature of these problems is that the problem is seen spatially in the entire Fatih district and stands out as dominant in the scale of Istanbul.

1. Obsolete Building Stock and Disaster Risk

Fatih's building stock is quite old. In 1999, there was a major earthquake in the Marmara region and this earthquake was considered as a milestone and many regulations were put into practice afterwards. The rate of buildings built before this earthquake is 91%. If the old artifacts are included, it increases to 95%. In addition, about 10% of the old artifacts are abandoned.

On the other hand, a 7.5 earthquake is expected in Istanbul. According to the simulations of this earthquake, 15 thousand buildings will be affected. Again, in these studies, demolitions will occur in all of Fatih and it is seen that Fatih is one of the most risky districts. (Boğaziçi University Kandilli Observatory and Earthquake Research Institute Earthquake Engineering Department Istanbul Province Possible Earthquake Loss Estimates Update Project (2018))

2. Change in Living Population and Migration

One of the biggest problems in Fatih is population change. When looking at the neighborhood population changes between 2013 and 2023, it is seen that there is a 30% increase in some neighborhoods and a 30% decrease in others. This population change with different trends in locations close to each other is a major planning problem. It is known that the reason for the increase in population is migration. The reason for the loss of population is the unwillingness to live in Fatih due to reasons such as earthquakes and low quality of urban life. Looking at the age distribution of the outgoing population. It is seen that the group between the ages of 20-45 are young and newly-families. The fact that families and young people do not want to live in Fatih due to the inadequacy of urban services and leave the settlement is what we see as the main problem as a local administration. In the last 5 years, Fatih's population has decreased by around 20% mainly due to this reason. The migrants who left also have an impact on this decrease. Because there is a resettlement policy for immigrants in Fatih.

Another important issue related to demographic structure is migration. The Historic Peninsula is one of the districts in Istanbul with a high immigrant population. Another important issue regarding the demographic structure is that Fatih is the central district. In Eminönü, trade is very intense and the night population is almost non-existent. This difference is around 7 times. The fact that a significant part of the city has no night population causes other planning problems. Another issue that differentiates Fatih from other settlements in terms of demographic characteristics is that Fatih has different demographic characteristics within itself. While the elderly population is high in the south of the settlement, the child population is high in the north. As a local administration, this is taken into consideration when developing a project in a place. Likewise, socio-economic development is higher in the south of the settlement than in the north.

3. Urban Security

Another macro problem of Fatih is the problem of urban security. The biggest reason for this is migration, urban poverty, physical obsolescence of the city and the increase in depressed areas. As the center of the metropolitan city, Fatih is also the center of crime. In certain locations, the problem makes itself felt and urgent intervention is required.

4. Urban Transportation

Another important problem of the city is transportation. The biggest reason for this is that the city is historical and not suitable for rubber wheeled vehicle mobility. There is a lack of infrastructure for this. For this reason, parking is a major problem. Due to its historical character, road forms are irregular and narrow. Certain areas cannot receive public transportation service for this reason. Another issue is the heavy vehicle traffic due to its metropolitan center. Due to the existence of traffic axes such as the Eurasia tunnel, Vatan and Millet Street, Atatürk Boulevard, which have been produced in the last 50 years, transit traffic is very high and users coming from outside create traffic. This makes Fatih unlivable for the residents.

5. Cultural Heritage and Tourism

Fatih, which has been home to empires, has countless cultural and historical values. In terms of area, 1/4 of Fatih is in the World Heritage Site. 1/3 of all old artifacts in Istanbul are located in Fatih. Considering the resources available to the local government, there are problems in protecting so many cultural heritage assets. Approximately 10% of the old monuments in Fatih are in the process of deterioration. However, such a high cultural and historical value does not generate enough tourism value. Although the number of tourists is high, the duration of their stay is quite short. Policies to extend this are being developed by the local administration. Visitors visit certain areas (Hagia Sophia, Sultanahmet, Suleymaniye, Grand Bazaar, etc.) and leave the city. On the other hand, the whole of Fatih is worth visiting. The Land Walls World Heritage Site, as the boundary of the settlement, is rarely visited.

Agendas for a Solution

For the solution of the above problems, 10 agenda items were identified. These are:

Main Agendas

1. Urban Mobility
2. Disaster Risk and Safe, Accessible Housing
3. Urban Security
4. Cultural Heritage and Conservation
5. Sustainable Tourism
6. Urban Communities and Local Development
7. Planning and Management of Urban Services
 - a. Decentralization/Facility Oriented Transformation
 - b. Planning/Management of Commercial Areas
 - c. Water City

Instrumental Agendas

1. Energy Efficiency and Climate
2. Digitalization and Smart Cities
3. Participation and Governance, Institutional Capacity

A spatial strategy plan was prepared in the light of the identified problems and solution proposals (Figure 2, Figure 3).



Figure 2. Historic Peninsula Spatial Strategy Plan



Figure 3. Historic Peninsula Municipal Projects Focused Spatial Strategy Plan

Historic Peninsula Municipal Projects Focused Spatial Strategy Plan (2020-2028)

The “Municipality Projects Oriented Spatial Strategy Plan”, which is the first in Turkey to be prepared and finalized for the purpose of directing municipal investments especially at the district scale, covers an 8-year period for municipality.

Objectives, Targets, Strategies and Project Proposals

Within the scope of the municipal project-oriented spatial strategy plan study, project packages were identified as sub-headings of the above-mentioned agendas. More than 30 types of projects have been identified, ranging from urban transformation to the design and implementation of parks, from children’s playgrounds to kindergartens and libraries. The main motivation is to prevent people from leaving by producing projects that will improve the quality of urban life.

Prioritization and Site Selection

Project types were prioritized and the number of projects was optimized according to local needs, based on the survey and the opinions of professionals. A synthesis study was conducted for each project type and site selection decisions were produced according to these baselines.

This site selection study for all project types has resulted in a strategic plan. This plan has a target of 100 projects over 8 years. In the plan, strategic axes have been identified that combine project proposals and will ensure regional improvement. 13 of these axes were prioritized according to the level of need in terms of intervention. The first of these is the Land Walls axis (Figure 4).

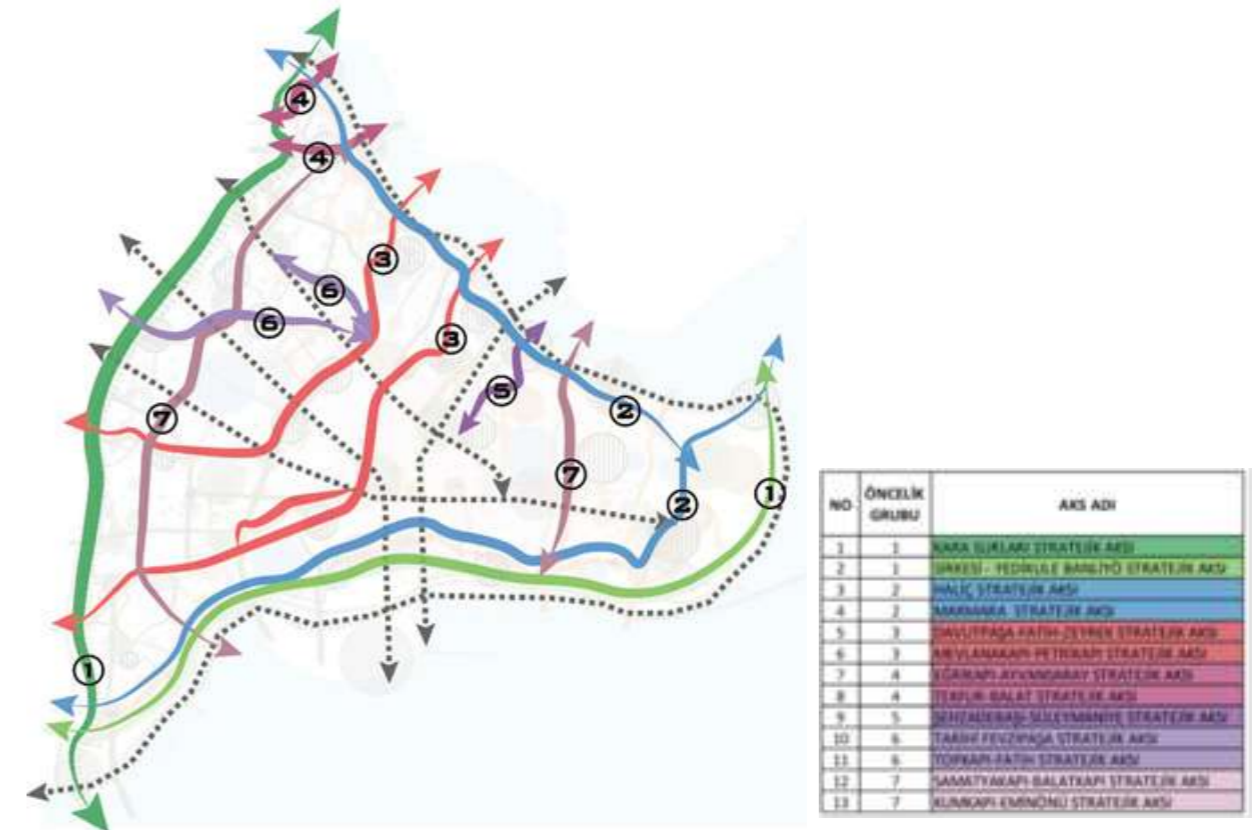


Figure 4. Fatih Municipality Spatial Strategy Plan Strategic Axes and Prioritization

Strategic axes and foci were determined by evaluating open space strategy, central and commercial areas strategy, urban regeneration strategy, public areas strategy, zoning study, regional development strategy, proposal Project packages, site selection regions and spatial strategic approach. These specified axes are;

- Axle length and location
- Interaction with other axes
- Factors such as the number and variety of projects on the axis were evaluated and prioritized in order to guide action and implementation.

Within the scope of the Fatih Municipality Spatial Strategy Plan, the “Rehabilitation of the World Heritage Site Around the Black Walls of Istanbul” project was designed and realized as the primary action and project area.

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Design Concept 1 : Productive Landscapes, Urban Agriculture and Bostans of İstanbul

Bahar Başer Kalyoncuoğlu



Design Concept 1: Productive Landscapes, Urban Agriculture and Bostans of Istanbul

Bahar Başer Kalyoncuoğlu

Urban Agriculture and Cities in Climate Crisis Age

The climate crisis, which is an undeniable reality of today, leads us to take action to protect natural resources and make the infrastructure of cities more resilient. On the other hand, it is well known that rapid and uncontrolled urbanisation and increasing urban population lead to food, water and energy shortages, as well as the degradation of natural resources. Over the past decade, it has become abundantly clear that urban agriculture as part of resilient and self-sufficient urban systems is a viable solution to these life-threatening problems. The cities of many developing countries have renewed their agricultural and urbanisation policies in this direction and have actually used 'urban agriculture' in their social development programmes. Today, with the growing interest in urban agriculture in many countries around the world, the theoretical and practical knowledge of urban agriculture has been better harmonised with planning standards.

Due to the widespread theoretical and practical impacts of urban agriculture, planning approaches that integrate land use for agricultural activities into urban areas have started to be accepted and implemented in major metropolises of the world. As urban agriculture gains recognition for its role in the sustainability of cities, its full potential will become more accessible (UNDP, 1996). Considering the unifying effect of agricultural activity, urban agriculture has the potential to strengthen the social capital of cities by supporting the collective memory of communities.

Why productivity? What is the meaning of UA for Student Charette?

Today, urban agriculture, which is supported in the leading cities of many countries, is considered as an activity that paves the way for socially and ecologically sustainable urban planning, one step beyond agricultural production or economic impact. Based on this idea, we thought that trying to understand the potentials of urban agriculture in Istanbul as a contribution to the social and ecological dimensions of the urban design process to be carried out in Istanbul, which is the study area of Student Charette, would open the vision of the projects to be designed.

Current Facts About Urban Food in Istanbul

Istanbul covers an area of 5.461 km² with a fragmented structure of high density settlements, a sloping topography formed by several hills, forests, valleys and river basins. The green structure of the city is mainly defined by the North Forests which cover an area of 2.387 km² representing 44.38% of the whole city (ICDR, 2013). Today, 15% of Turkey's population lives in Istanbul with almost 14 million people. The city was divided into two Plateaus by the Bosphorus named as European and Asian Parts.

According to the Agricultural Master Plan Report of Istanbul, 17% of the province is covered by agricultural land uses, 2% pasture and grasslands, 47% forest landscapes and 34% of the city area serves industrial and settlement uses (see Figure1). Even though the city has a strong capacity for feeding itself, Istanbul's agricultural areas have been reduced by 32% between 1997 and 2017, which means croplands, vegetable gardens and orchards have been transformed into built-up areas.

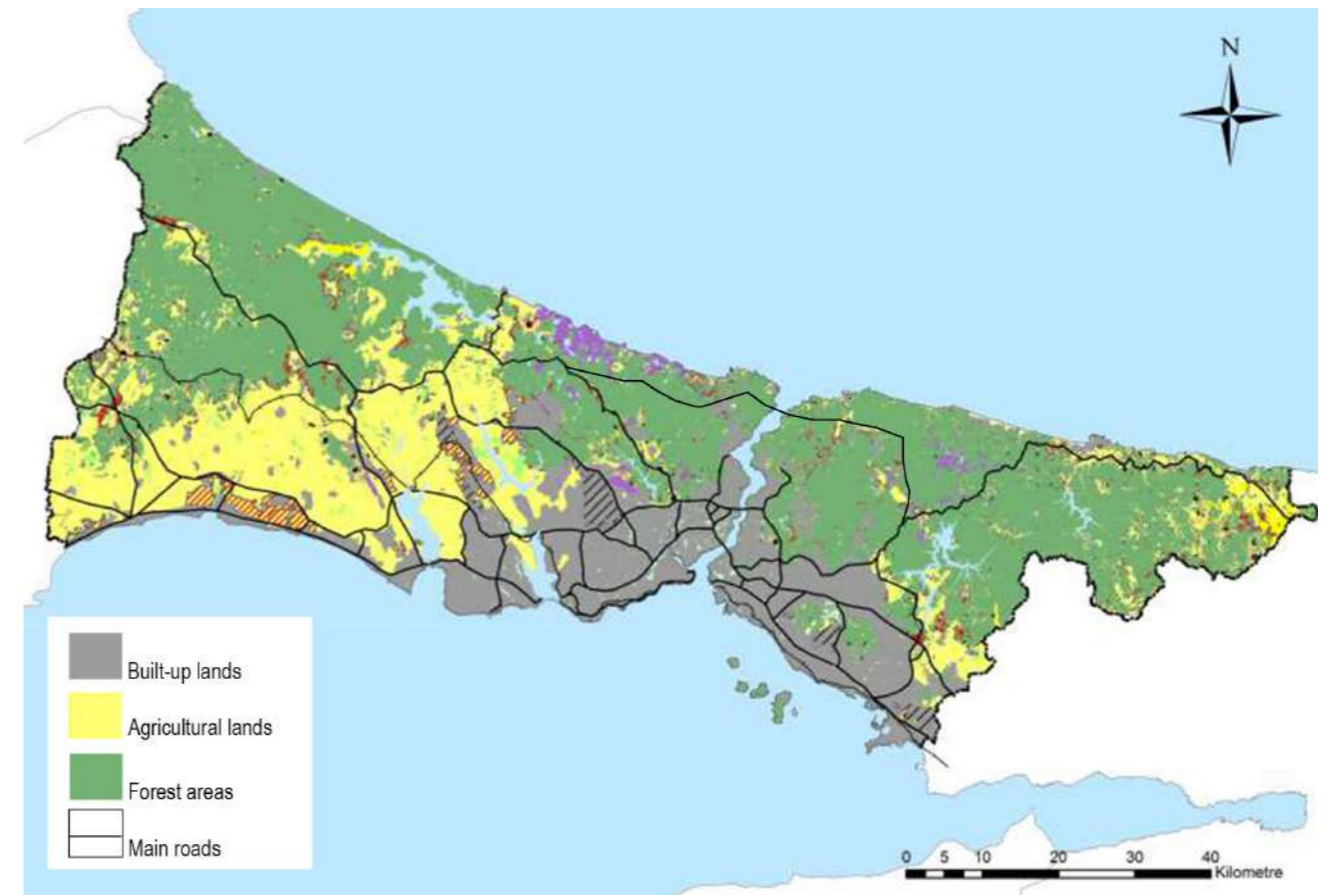


Figure 1. Location and land use of Istanbul (Adapted from Tezer et.al, 2014).

Even though urban agriculture has been recognised as an integral part of the urban socio-economic and ecological system (Mougeot, 2005), it is not considered in urban land use and development plans of Istanbul (Akin, 2011). Socio-culturally, urban agriculture would be ideally suited to the needs and capabilities of many Istanbul residents (Kaldjian, 2003:325). As Kaldjian (2003) pointed out, deep-rooted infrastructure supported with culture and needs are not sufficient for having a strong urban agro-ecosystem, for sustainability of this system there are needs to be supported by the political forces.

On the other hand, there have been few efforts to promote urban agriculture in the country except the practical efforts of non-governmental organisations and some insufficient marks in the political documents.

Unfortunately, existing UA activities have been severely restricted to plots of fragmented lands between buildings with little information about gardeners' values and perceptions on urban gardening. Beyond being a part of the social capital of the city, the importance of urban market gardens ("bostan" : i.e., traditional vegetable garden) in Istanbul, which has been a part of the city's food infrastructure for many years, is not fully understood by politicians. In the following section, we will briefly describe the urban agricultural history of Istanbul and its remnants in the historical peninsula.

History of Urban Agriculture in Istanbul

The agricultural character of modern-day Turkey dates back to some thousands of years ago, as the fertile crescent of central civilizations from which the farming culture was born and developed (Quataert, 2008).

Consequently, as becoming the capital of agrarian empires, Istanbul has a deep-rooted urban agriculture tradition which has always been a part of the city since Byzantine and Ottoman periods (Keyder, 1999:3; Baser and Esbah, 2010:111). In addition to having agrarian tradition, because the city is a bridge between the western and eastern world, is also seen as a global food market where the various products of both meet.

On the other hand, especially in Ottoman Istanbul, the vegetable-fruit gardens called “bostan”[1] by natives were an important functional part of the urban structure and also traditional Turkish Garden (see Figure 2). Although bostans were distributed throughout the city, they were always clustered around reliable sources of water, along creeks, artesian springs, and where wells tapped high water tables (Kaldjian, 2004). The social and cultural characteristics of the Ottoman Istanbul show that agricultural activities were highly integrated with daily urban life. Eremya Çelebi Kömürciyan (1637-1695), who is a well-known author with his descriptions of Istanbul’s daily life and environment in the 15th century A.D., mentioned many productive gardens located in the different districts of the city giving details about which product was famous where (Andreasyan, 1988).

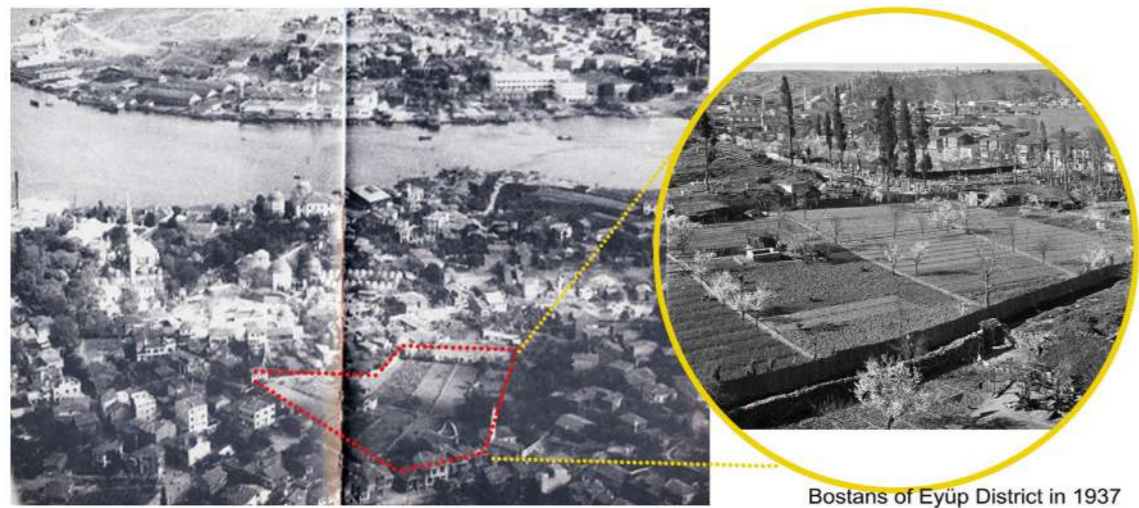


Figure 2. The Bostans of Istanbul were a part of urban metabolism in the history of the city. The aerial photo and photograph of Eyup district dated 1937 show how these productive landscapes blossom in the urban matrix.

In 1985, UNESCO recognised the Historical Peninsula of Istanbul as a world heritage and this site includes the Yedikule Bostan Gardens around Theodosian Walls. The vegetable gardens along Theodosian Walls of Constantinople, with a history of many hundred years, are the last remains of urban gardening living since the 16th century. Moreover, the “bostans” were functioning as crucial facilities of urban structure until the beginning of the ‘80s when the modernization and migration process from rural to urban started. While the city spreads, these traditional urban gardens, in which food cultivation and marketing were carried out in one space, have also been established and operated in new settlements. Because of this reason, especially until the late 1980s, the “bostans” have been existing as a functional part of the smallest subdivision of the urban settlement of Istanbul called “mahalle”[2] in Turkish. Historically, the deep-rooted urban gardening system has contributed to the urban resilience of modern days Istanbul through its tangible and intangible benefits for the local community.

After the rebuilding process of the city in the 1980s and urban renewal movements which took place in the 2000s (Kuban,1996; Keyder,1999),Istanbul’s built-up areas have continued to expand by taking the place of cultivated soil surfaces. The most remarkable example of this process can be observed in the land use changing process of Langa Bostans which was very famous and the largest urban garden of the city (Figure 3).

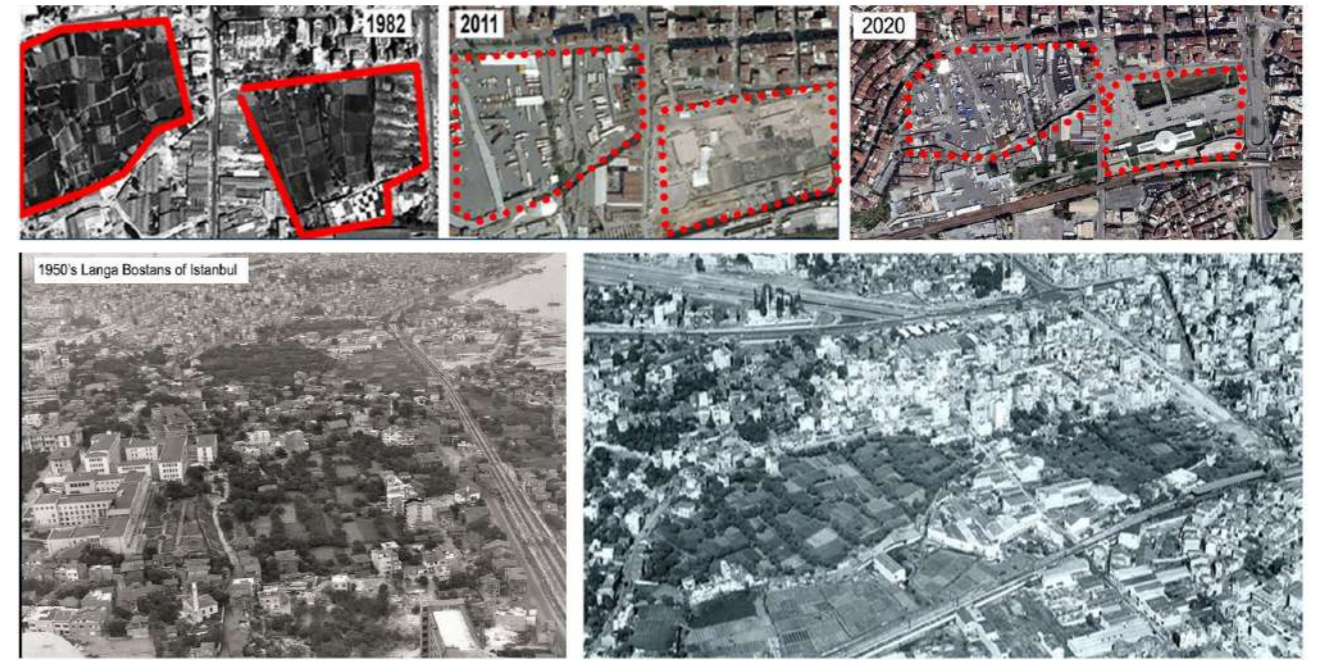


Figure 3. Drastically changed the Famous Langa Bostans of Istanbul by years.

Today, the agricultural areas in and around the city are being threatened not only by the occupation of the constructions to create new residential areas, but also they are under the pressure of large-scale infrastructure projects or land profits.

Chronologically, the still active bostans of Istanbul can be divided into two groups; “traditional bostans” (Figure 4.) of the historical core and “urban market gardens” of new settlement areas of the post-migration period. Even though they were established in different periods, the urban gardens are basically operated with similar know-how with traditional bostans by resisting the pressures of over-scaled constructions in Istanbul.



Figure 4. Irrigation of Yedikule Urban Market Gardens (Bostans) in different centuries; 2015's left, in 1930's right.

What is the Contribution of Urban Agriculture to the Transformation of Urban Landscape in Istanbul Land Walls?

As one of the fastest growing metropolises of Europe, Istanbul comprises many cultural and physical assets in its urban landscape. The traditional bostan gardens of Land Walls of the city, which is a part of the charrette project area, are the remnants of cultural landscapes of Istanbul. These productive landscapes are not only food markets but als they represent the resiliency infrastructure of the ancient city of Istanbul.

Even though the city still contains the inherent traces of the traditional agrarian culture especially along the historic walls, urban gardens of the city have been absorbed by the large scale urban structures and build up land uses.

Within the scope of this studio, landscape architecture students from different countries had the opportunity to observe the transformative effect of productive landscapes in the construction of urban resilience and transfer it to their projects with the projects they designed for the historical zone of the ancient city of Istanbul.

[1] The Turkish term 'bostan', indicates small areas of agricultural production and sale of vegetables, legumes and herbs involving the work of a few individuals or families, also named as urban market gardens.

[2] 'Mahalle' means the smallest neighbourhood unit of traditional Turkish Town.

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Design Concept 2 : Green Infrastructure

Beyza Şat



Design Concept 2: Green Infrastructure

Beyza Şat

Green Infrastructure: Definition, Components and Key Aspects

In the context of global environmental change and rapid urbanisation, enhancing urban resilience has attracted increasing attention from urban planning practitioners and researchers. The United Nations has set sustainable development goals to make cities and settlements inclusive, safe, resilient, and sustainable (Fu et al., 2021). In recent years, the Urban Green Infrastructure (UGI) model has emerged as an adaptation strategy to improve urban resilience to growing environmental risks (Rayan et al., 2021).

Green infrastructure (GI) refers to a sustainable approach that protects and improves the natural environment by designing green spaces and preserving natural processes (Muktiali et al., 2023). The components of urban green infrastructure (UGI) include various elements, such as green public open spaces, urban trees, stormwater management systems, green roofs, green walls, and other green features (Parker & Simpson, 2020). These components contribute to multiple urban resilience goals. For example, urban green infrastructure (UGI) systems play an essential role in stormwater management (Huang, 2024), mitigating urban heat island effects (Abdulateef & Al-Alwan, 2022), supporting biodiversity by providing habitats for a diverse range of species (Filazzola et al., 2019), and improving air quality by using plants to filter pollutants, which benefits public health (Vitaliano et al., 2024). Beyond environmental services, green spaces promote social cohesion by facilitating community interaction and providing resources contributing to social resilience (Wan et al., 2021). As mentioned above, we can summarize the key aspects of GI in 5 groups, namely, a- stormwater management, b-urban heat island mitigation, c-biodiversity support, d-air quality improvement, and e-social cohesion. We can clarify those groups briefly, as written below.

The stormwater management aspect comprises the help of GI to manage stormwater through natural absorption and filtration, reducing flooding and water pollution (Mosleh et al., 2023). Techniques include rain gardens, permeable pavements, and green roofs (Karabay et al., 2024; Zhang et al., 2022). In urban heat island mitigation, the help of vegetation in cooling urban areas reduces the risk of heat-related illnesses during extreme heat events. This is especially vital in densely populated cities (Zander et al., 2024). Regarding biodiversity support, GI provides habitats for various species, promoting biodiversity, which can enhance ecosystem resilience in disasters Grabowski et al., 2023). The impact of plants filters pollutants and improves air quality, contributing to public health, especially during events like wildfires or urban smog, enhancing GI's air quality (Nieuwenhuijsen, 2021). Finally, the social cohesion aspect of GI comprises green spaces' promotion of community interaction and the provision of vital resources (like food) during emergencies (Ruan et al., 2023; Wan et al., 2021).

The main components of GI, especially in urban areas, are green spaces, broadly defined as any vegetated areas found in the urban environment, including parks, forests, open spaces, lawns, residential gardens, or street trees. These spaces' connectivity and systems compose the urban GI (UGI). Green spaces, which is the main subject of UGI, are diverse, ranging from city parks to green walls and rooftop gardens, from urban forests to allotment gardens. They encompass all vegetation in the urban environment. However, they also include blue spaces such as lakes or rivers and their adjacent green. Diversity of the Urban Green Spaces (UGS) is a prerequisite for understanding how green spaces can be functionally connected with the built environment to construct the green infrastructure of the urban.

UGS classified vary by the researchers (Bell et al., 2007; Swanwick et al., 2003; Hoffmann & Gerstenberg, 2014; Byrne & Sipe, 2010; Rupperch & Byrne, 2014; and Bell et al., 2006). UGS are essential for well-functioning and livable cities because they play a recreational role in everyday life; contribute to the conservation of biodiversity; contribute to the cultural identity of the city; help maintaining and improving the environmental quality of the city; and bring natural solutions to technical problems (e.g., sewage treatment) in cities (Sandström 2002). Some water elements, water bodies as lakes, rivers, riparian zones also are the elements of UGS. Well-designed, well-managed, and well-connected green spaces are the subject of UGI.

GI Enhancing Disaster Resilience

Green infrastructure (GI) for disaster resilience focuses on leveraging natural systems and processes to mitigate the impacts of disasters and enhance community preparedness. A deeper look into how GI contributes specifically to disaster resilience will help clarify this part via successful application worldwide.

Several successful green infrastructure projects highlight the real-world benefits of this approach. Chulalongkorn University Centenary Park in Bangkok is the city's first major green infrastructure project designed to tackle ecological issues while reducing disaster risk. The park incorporates innovative water retention and stormwater management systems to mitigate flooding and reduce urban heat (World Landscape Architect, n.d.). Similarly, Shanghai Houtan Park in China is recognized for its focus on flood resilience, water management, ecological restoration, and climate adaptation. By managing flood risks, enhancing biodiversity, and strengthening community resilience, the park demonstrates the multifaceted benefits of GI in urban resilience (ABD Headquarters, 2015). These projects underscore the potential of green infrastructure to address environmental challenges and create sustainable, resilient, and socially cohesive urban spaces. Other successful applications from New York City and Tokyo can be given as examples of GI for disaster resiliency. The NYC Department of Environmental Protection has implemented green roofs and bioswales to manage stormwater and reduce flooding risks (NYC Department of Environmental Protection, n.d). Tokyo has integrated green spaces into its urban fabric, including parks that serve as flood retention areas during heavy rains (Tokyo Metropolitan Government. n.d.).

The functions of GI in enhancing disaster resilience can be summarized in 6 subtitles: a-flood risk reduction, b-heat mitigation, c-landslide prevention, d-ecosystem services, e-community preparedness, and f-sustainable water management (Ruangpan et al., 2020; Di Sabatino et al., 2020). Flood risk reduction can be achieved via wetlands and riparian buffers, which are the areas that absorb excess rainfall and runoff, reducing flood peaks and improving water quality (Wu et al., 2023; Bezak et al., 2021; Mander et al., 2017). Secondly, green roofs and permeable pavements are essential to achieve flood risk reduction since these surfaces allow water to infiltrate rather than run off, decreasing the volume and speed of stormwater (Bezak et al., 2021; Palermo et al., 2019). For heat mitigation, urban canopies and shade provision are essential. Trees and green spaces lower surface and air temperatures, reducing the urban heat island effect and protecting vulnerable populations during heat waves (Wong et al., 2021). Parks and tree-lined streets provide shade, helping to keep areas cooler and improving public health during extreme heat events (Klok et al., 2019). From the aspect of landslide prevention vegetative stabilization has high importance. Plant roots help to bind the soil, reducing the likelihood of landslides in hilly or unstable areas after heavy rainfall (Chok et al., 2004). Ecosystem services include two main subjects: pollination and biodiversity and air quality improvement (Díaz et al., 2018). Maintaining healthy ecosystems supporting pollinators and wildlife is crucial for food security and resilience to disasters like droughts or pest outbreaks (Maggi et al., 2023).

Besides, vegetation filters pollutants and improves air quality, benefiting health during wildfires or urban smog events (Vashist et al., 2024). In the community preparedness function of GIs, Green spaces can serve as assembly points during emergencies, providing safe areas for evacuation or shelter. So, they are creating public spaces. GI projects often involve local communities, fostering a sense of ownership and collaboration that strengthens social networks essential during disasters and community engagement (Everett et al., 2021).

The sustainable water management function of GIs, which are the most important for disaster resilience, especially caused by climate change, includes two main subjects: rainwater harvesting and aquifer recharge. In rainwater harvesting, GI can incorporate systems to collect and reuse rainwater, enhancing water supply during droughts (Rentachintala et al., 2022). In aquifer recharge permeable surfaces and vegetation can facilitate groundwater recharge, ensuring water availability during emergencies (Saleh & Allaert, 2009).

The implementation strategies of those GIs to enhance disaster resilience need three things to consider, that are;

1. Integrated urban planning: This needs to incorporate GI into land-use planning, zoning laws, and infrastructure development to ensure resilience from the outset (Senes et al., 2021).
2. Community involvement: This needs to engage local communities in the design and maintenance of green infrastructure projects, ensuring they meet local needs and preferences (Everett et al., 2021).
3. Policy support: This needs advocacy for policies that support the funding and implementation of green infrastructure initiatives as part of disaster risk reduction strategies (De Silva et al., 2022).

Overall, GI enhances urban ecosystems by managing stormwater, reducing urban heat, promoting biodiversity, and improving air quality, all of which safeguard public health and well-being locally and globally (Rayan et al., 2021; Song et al., 2023). These benefits are clearly demonstrated in successful projects around the world, demonstrating how GI can effectively address urban challenges while promoting social cohesion and environmental sustainability. These projects highlight the significant potential of GI to create resilient, livable, and inclusive urban spaces. Green infrastructure is a powerful tool for enhancing disaster resilience. By incorporating natural systems into urban design and disaster preparedness strategies, communities can better withstand and recover from various hazards, ultimately leading to safer, healthier, and more sustainable environments.

In the context of Green Infrastructure (GI) and urban resilience specific to our field, the Northern Historical Walls of Istanbul play a crucial role. Built to protect the city during the Byzantine Empire, these walls, particularly those starting from the Golden Horn coast, are less well-known and generally less preserved compared to the land walls along the Marmara coast. Despite this, the walls and their surroundings serve as a natural green corridor, contributing significantly to ecological connectivity.

The buffer green areas surrounding these walls function similarly to other elements within the Green Infrastructure system. They enhance urban sustainability and biodiversity by supporting natural ecosystems amid high-density settlements. These green spaces also add aesthetic value to the environment and act as physical barriers against natural disasters such as floods and storms. For example, seaside walls can mitigate wave impacts, while vegetated walls contribute to water management and reduce the urban heat island effect.

In summary, the Northern Historical Walls not only reflect Istanbul's rich history but also fulfill vital

ecological and urban resilience roles within the Green Infrastructure system.

The preservation and reuse of these structures become more effective when integrated with surrounding green infrastructure. These challenges were explored in student studies, which proposed practical and innovative solutions. In this context, the student Charette produced highly successful work. The relationship between the northern historical walls, urban green infrastructure, and urban resilience can be examined, particularly in the framework of sustainable urbanization, cultural heritage preservation, and climate change adaptation.

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Design Concept 3 : Inclusive Community

Bengi Korgavuş



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Inclusive Cities: Designing for Diversity in Urban Spaces

Urbanisation has been one of the most significant driving forces of recent global development. Currently, over 50% of the global population lives in urban environments, with projections suggesting that this proportion will increase to approximately 70% by the year 2050. (UN, 2018). In the context of rapid urbanisation, cities are encountering significant challenges, such as increasing poverty levels, inequality, and social exclusion. Therefore, future cities need to focus on building more inclusive and sustainable environments.

The concept of the inclusive city was initially conceptualised as an abstract urban concept associated with several dimensions of urban development (Meena & Singh, 2010). Numerous theoretical frameworks delineate the concept of an inclusive city. The concept was initially introduced by the United Nations (UN) in 2001, describing an inclusive city as a place where all individuals -irrespective of their gender, age, religion, ethnicity, race, or financial status-are able to fully participate in the economic, social, political and social life of the community (UN-Habitat, 2001). According to the Asian Development Bank (2022), an inclusive city is defined as one that “creates a safe and liveable environment with equitable and affordable access to urban and social services, as well as job opportunities for all residents and users of the city. This approach promotes the optimal development of human capital while upholding human dignity and equality.”

In academic research, scholars have provided a more detailed framework encompassing various aspects of inclusive cities. Robin (2014) emphasises that the economic, social, political, and environmental aspects are all major components of an inclusive city. Roe (2023) states that an inclusive city is one where buildings and public spaces are intentionally designed for access and use by everyone. Inclusive city design incorporates differences and diversity—such as gender, age, physical and cognitive abilities, ethnic identities, racial and socio-economic status—at all stages of the design process. This approach ensures that everyone has access to a full range of educational, social, economic, cultural, and health opportunities within the city.

At the policy level, The World Bank (2015) explains that the idea of an inclusive city encompasses a complex network of spatial, social, and economic factors. The New Urban Agenda envisions inclusive cities as those that “emphasise inclusive, safe, accessible, sustainable and high-quality public spaces that are welcome families, encourage social and intergenerational integration [...] and foster social cohesion, inclusion, and safety within peaceful and diverse societies.” (Zhao et al., 2023; UN-Habitat, 2016).

Understanding Diversity

Inclusive cities prioritize accessibility in essential services such as transportation, public buildings, and healthcare to create an environment that meets the needs of diverse residents. This approach ensures that all groups—particularly older adults, persons with disabilities, women, children, and other communities with unique backgrounds—to independently navigate and actively participate in urban life (Figure 1).



Figure 1. A visual representation of user diversity (Jenkins & Baker, 2020).

Recognizing diversity in urban populations includes acknowledging attributes like age, disability, ethnicity, gender, religious beliefs, socio-economic background, and cultural heritage. Understanding and accommodating this diversity at every stage of city planning is essential to creating spaces where everyone can access services equitably and engage in social, educational, and economic opportunities.

With this foundation of diversity and accessibility, the following sections will explore inclusive specific design principles that enhance inclusivity in urban environments. We will discuss how cities can effectively address distinct older adults, women, children, persons with disabilities, and cyclists—each group requiring specific considerations to create a truly inclusive city.

Designing Cities for Ageing Communities

Demographic factors have become increasingly significant in shaping national and urban development initiatives. The global population is ageing rapidly, leading to substantial demographic shifts in the 21st century. In contrast to the 20th century, the world was predominantly younger, with high child mortality rates resulting in a lower life expectancy at birth (WHO, 2007). The world's population is experiencing a significant increase in the number of older individuals, especially those aged 65 and above, who are growing at a faster rate than younger populations. According to the World Population Prospects 2022, the proportion of the global population aged 65 and older is projected to rise from 10% in 2022 to 16% by 2050. By 2050, it is projected that the global population aged 65 and older will be double the number of children under 5 years of age and nearly equal to the number of children under 12 (UN, 2022). Although cities accommodate a growing population of older adults, they are not always designed with this demographic in mind.

In cities, ageing populations encounter various interconnected challenges. These include access to transportation, healthcare, essential services, and more complex issues such as loneliness and a lack of social connections.

The World Health Organization (WHO) has significantly contributed to understanding age-friendly cities. In 2007, it published the report “Global Age-Friendly Cities: A Guide,” which established a framework for age-friendly planning. This framework is organised into eight domains (WHO, 2023a; WHO, 2007).

1. Outdoor spaces and buildings: Create more green spaces; design walkable environments; enhance accessibility; maintain a secure environment; ensure safe pedestrian crossings; design networks for active recreation; provide ample seating areas; and include adequate public toilets.

2. Transportation: Ensure affordable and reliable public transport; ensure easy access to transport; enhance safety and comfort; enhance accessibility at stops and stations; provide specialised transport services for older people; and use age-friendly vehicles.
3. Housing: Ensure affordable housing; provide essential services nearby; encourage and enable older people to live with (or near) family; build adaptable senior housing; provide a range of housing options; and create a comfortable living environment.
4. Social participation: Create accessible, inclusive, and affordable activities; integrate generations, cultures, and communities; promote inclusion and civic participation; fight loneliness and isolation; and increase awareness of activities and events.
5. Respect and social inclusion: Encourage intergenerational interactions and public education; promote respectful behaviour; foster community helpfulness; address economic exclusion; strengthen the place of older adults in the community; and define roles for older people in planning the built environment.
6. Civic participation and employment: Offer flexible volunteer and work opportunities; create better employment options and more opportunities; support civic participation; and value older people's contributions.
7. Community support and health services: Ensure accessible and affordable health services; provide a wide range of health services; co-locate healthcare with daily needs; encourage volunteer participation; establish residential care facilities; and build a network of community services.
8. Communication and information: Distribute information widely; use age-friendly formats and design; balance information technology use; and emphasise personal and collective responsibility.

These topics highlight the features of the city's structures, environment, services, and policies that foster the well-being and inclusion of older adults in urban settings. Investments in local policies and infrastructure aimed at creating age-friendly cities and communities not only enhance the quality of life for older individuals but also address the needs of persons with disabilities, promoting their mobility and independence. For instance, enhanced access to transportation, public buildings, and spaces, along with the implementation of assistive information and communication technologies, can significantly foster the inclusion and active participation of all individuals, including those with disabilities and parents of young children.

Designing Accessible Cities

Disability is a fundamental aspect of the human experience. Approximately 1.3 billion people, or about 16% of the global population, currently live with significant disabilities. The number of persons with disabilities is rising, largely due to factors such as population ageing, increased life expectancy, and an increase in injuries resulting from natural disasters (WHO, 2023b). Although “persons with disabilities” sometimes refer to a single population, actually this is a diverse group of persons with a wide range of needs. Persons with disabilities encompass various identities and experiences, where factors such as sex, age, gender identity, sexual orientation, religion, race, ethnicity, and economic situation significantly affect their life experiences and health needs.

The United Nations (2007) Convention on the Rights of Persons with Disabilities defines disability as encompassing long-term physical, cognitive, developmental, intellectual, mental, and sensory impairments or a combination of various factors. Disabilities may be present at birth or acquired later in life. A disability can be easily seen or concealed and challenging to identify.

Inclusive cities strive to ensure that everyone, including persons with disabilities, can participate fully and equally in urban life. This approach promotes the acceptance of individuals as they are, enabling them to engage in society without barriers. It also signifies that specialised solutions and

adaptations for disabled individuals become unnecessary, paving the way for future generations—irrespective of age, gender, ability, or cultural background—to independently access and enjoy social, economic, and recreational activities throughout the city.

Accessibility is essential for inclusive urban development. It plays a significant role in enabling individuals with disabilities to live independently and fully engage in all aspects of life within an inclusive community. An accessible environment ensures safe and unrestricted movement, functionality, and access for everyone, regardless of age, gender, or condition. It embodies a space or set of services that are open to all—free of obstacles, offering dignity, and promoting autonomy to the greatest extent possible. Additionally, accessibility encompasses the technical standards mandated at national or international levels for designing and constructing physical or virtual environments, spaces, facilities, or services (Cities4All, n.d.). For too long, cities have been built without considering how physical and social barriers impact individuals with disabilities. If cities are designed with accessibility, persons with disabilities will feel socially included.

Accessible cities are designed to ensure that individuals of all abilities can navigate and use urban spaces effectively. Key features include:

1. Barrier-Free Infrastructure
2. Inclusive Public Transportation:
3. Accessible Buildings and Public Spaces
4. Effective Communication and Information
5. Community Engagement

Designing Cities for Women

Despite making up half the urban population (Ritchie & Roser, 2024), cities often overlook specific needs related to women's safety, mobility, and access to essential services. The design, construction, management, and maintenance of cities significantly affect women's quality of life.

Women of all ages and identities encounter various barriers and vulnerabilities in cities worldwide. Whether by design or circumstance, the structure of many urban environments often exacerbates gender inequities. The design and structure of many cities make women unsafe, fail to meet their essential needs and limit their economic and social opportunities. These challenges significantly disadvantage women from diverse backgrounds. Consequently, billions of women find themselves underserved by the urban environments in which they live and work (Arup et al., 2022).

A gender-inclusive and responsive approach to urban planning is essential for the future of our cities, fostering environments where everyone can live, work, and flourish. Adopting a gender-responsive approach benefits women and ensures that all community members can take advantage of the opportunities provided by cities. This approach generates broader economic, environmental, and social advantages. Incorporating women's perspectives promotes a more equitable, inclusive, and sustainable approach to development (Arup et al., 2022).

The "Cities Alive: Designing Cities that Work for Women" report (2022) highlights four key themes essential for creating more welcoming and inclusive cities for women. These four themes and their corresponding strategies are:

1. **Safety and security:** Enhance public safety by design; improve lighting in urban areas; provide safe and accessible transportation options; incorporate violence prevention strategies into legislation; and raise awareness.

2. **Health and well-being:** Foster active, restorative, and inclusive public spaces and green areas; ensure safe and adequate accommodation options; enhance access to mental and physical healthcare facilities; and improve the accessibility of inclusive water, hygiene, and sanitation facilities.
3. **Enrichment and fulfilment:** Provide accessible and inclusive workplaces and schools; design public spaces that accommodate diverse and flexible uses; design safe and inclusive recreational and cultural areas; and utilise the built environment to celebrate and recognize women's history.
4. **Justice and equity:** Integrate gender-responsive planning into national legislation and policies; encourage women's involvement in urban decision-making across all levels; promote the gathering of gender-disaggregated data; and safeguard women's right to land and property.

Designing Cities for Children

Over half of the children in the world are growing up in urban environments (UN, 2022). These children's health, lives, and futures will increasingly depend on how urban development progresses over the coming decades. However, children and families are frequently neglected in urban planning and resource distribution. Many cities have limited the areas available for children and families, as the dominance of cars has pushed them away from streets or created narrower sidewalks. Additionally, restrictions placed on public spaces have considerably reduced opportunities to engage in exploratory activities with their caregivers and to participate in meaningful interactions with others (Allen, 2023).

To enable children to achieve their full potential, it is crucial that they not only meet fundamental needs—such as healthcare, nutrition, safety, and access to clean air and water—but also have substantial opportunities for play and learning from their surrounding social and physical environments (Toms, 2017). Play is essential for optimal child development and is recognized as a fundamental right for every child by the United Nations Commission on Human Rights (UN, 1989). Engaging in play is vital for children's happiness and well-being, as well as for the development of their cognitive, emotional, physical, social, and creative skills (Zosh et al., 2018). Although play is commonly associated with playgrounds or designated children's areas, cities can offer significant possibilities for children to learn through playful experiences (Arup, 2017).

Child-friendly urban planning promotes children's development, health, and access to social, educational, and recreational opportunities, far beyond the confines of playgrounds. According to the Global Designing Cities Initiative (2019), child-friendly cities should be safe, healthy, comfortable, convenient, inspirational, and educational. The design strategies outlined serve as foundational elements for urban redesign and share common goals of comfort, safety, and happiness to enhance the efficiency and enjoyment of streets for all users and various modes of transportation. According to the Global Designing Cities Initiative (2019), these design strategies are:

1. **Meet Basic Needs:** Upgrade pedestrian crossings; build or improve pedestrian pathways; enhance cycle facilities; clean and maintain existing street infrastructure; and add supplementary elements such as stormwater management systems, public restrooms, drinking fountains, and waste disposal units.
2. **Design for Appropriate Speeds:** Establish a citywide policy for speed limits; reduce speed through design; protect cyclists; and improve street operations and signals.
3. **Allocate Space for People:** Redistribute roadway space to promote sustainable and efficient transportation modalities; optimise vehicular volumes and parking demand; establish pedestrian-only zones and shared streets; and repurpose urban spaces for children's play and recreation.

4. **Incorporate Play and Learning:** Incorporate spaces for pause, play, and relax; integrate playful and learning aspects; incorporate nature, such as trees and landscaping; and program streets for child-friendly activities.
5. **Integrate Adjacent Spaces:** Extend street design into adjacent unbuilt spaces; activate empty lots; activate adjacent facades; and engage residents and businesses to activate ground floor uses.

Child-friendly urban planning is essential for creating inclusive cities that benefit everyone. The advantages of a child-friendly city extend beyond just children, enhancing the quality of life for all residents. Incorporating a child-friendly approach into city planning leads to more welcoming, greener, and inclusive spaces. Additionally, spaces designed for children and play can enhance the built environment's economic value and long-term sustainability.

Designing Cities for Cycling

Cycling offers a healthy, affordable, equitable, and sustainable transportation option that helps reduce traffic congestion and enhances road safety. It has the potential to improve public health and air quality and reduce congestion, making cities more attractive and liveable (Global Designing Cities Initiative, 2016). However, cars have dominated our urban planning and development for the past century. It is essential to place people back at the heart of the cities and adopt a human-centred approach in designing the built environment. To achieve this, Arup and Sustrans (2020) have outlined several recommendations for making cycling in cities more accessible and attractive for everyone. These recommendations are as follows (Burns et al., 2020):

1. Enhance road safety by prioritising protected cycling areas and low-traffic zones.
2. Address issues of personal safety and harassment
3. Improve the design of infrastructure and public spaces
4. Ensure cycling infrastructure is fully inclusive for all users
5. Achieve better-integrated cycling with residential areas and public transport

In summary, creating inclusive cities requires urban design that addresses the diverse needs of all residents, ensuring equitable access, safety, and opportunities for everyone. By adopting principles of accessibility and social inclusivity, cities can transform into environments where older adults, children, persons with disabilities, women, and other diverse groups feel welcome and empowered. Looking forward, prioritizing inclusivity in urban planning will be essential to address the social and environmental challenges of the future. As cities continue to grow and evolve, embracing this diversity is not only beneficial but necessary for building sustainable, vibrant, and resilient urban communities.

The Historic Peninsula offers a unique setting to explore inclusive urban design, where the interplay between cultural heritage and modern urban challenges creates both opportunities and constraints. As a densely populated area rich in historical significance, it emphasizes the importance of designing spaces that cater to diverse needs while safeguarding the area's cultural and architectural integrity. Accessible pathways, inclusive public transportation systems, and safe public spaces are critical interventions to enhance mobility, equity, and social participation, especially for women, children, persons with disabilities, and the elderly.

The challenges within the charette study area, such as fragmented green spaces and limited accessibility, underline the necessity of adopting a participatory approach to urban planning. Involving local communities in the design and decision-making process ensures that interventions

are contextually relevant and meet the needs of residents. This participatory framework not only addresses immediate urban issues but also strengthens social cohesion, a cornerstone of long-term resilience.

Furthermore, the study area's role as a boundary between historical layers and contemporary urban pressures positions it as a living laboratory for testing inclusive design strategies. By reimagining idle green spaces, reactivating historical corridors and water systems, landscape architecture students can foster ecological balance and social connectivity. Moreover, recognizing and preserving the cultural landscapes of the city walls and Bostans offers an opportunity to strengthen the area's collective memory while addressing the contemporary need for sustainable urban living.

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Charrette Operation

Elif Sena Karakuş, Betül Rûveyda Ay Ak, Fatma Sultan Bozkurt, Nihan Parlak, Orçun Mert Carlık



Charrette Operation

Elif Sena Karakuş, Betül Rûveyda Ay Ak, Fatma Sultan Bozkurt, Nihan Parlak, Orçun Mert Carlık

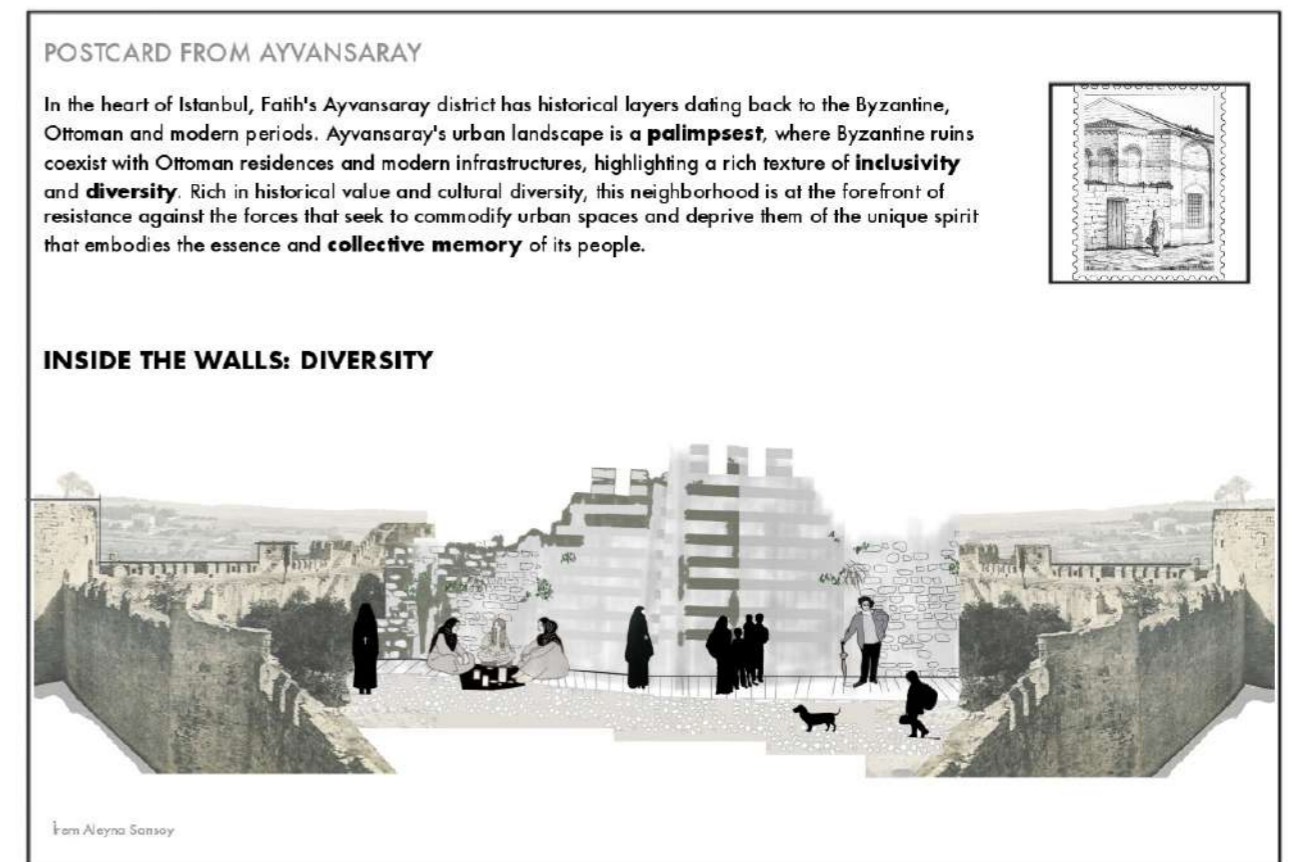
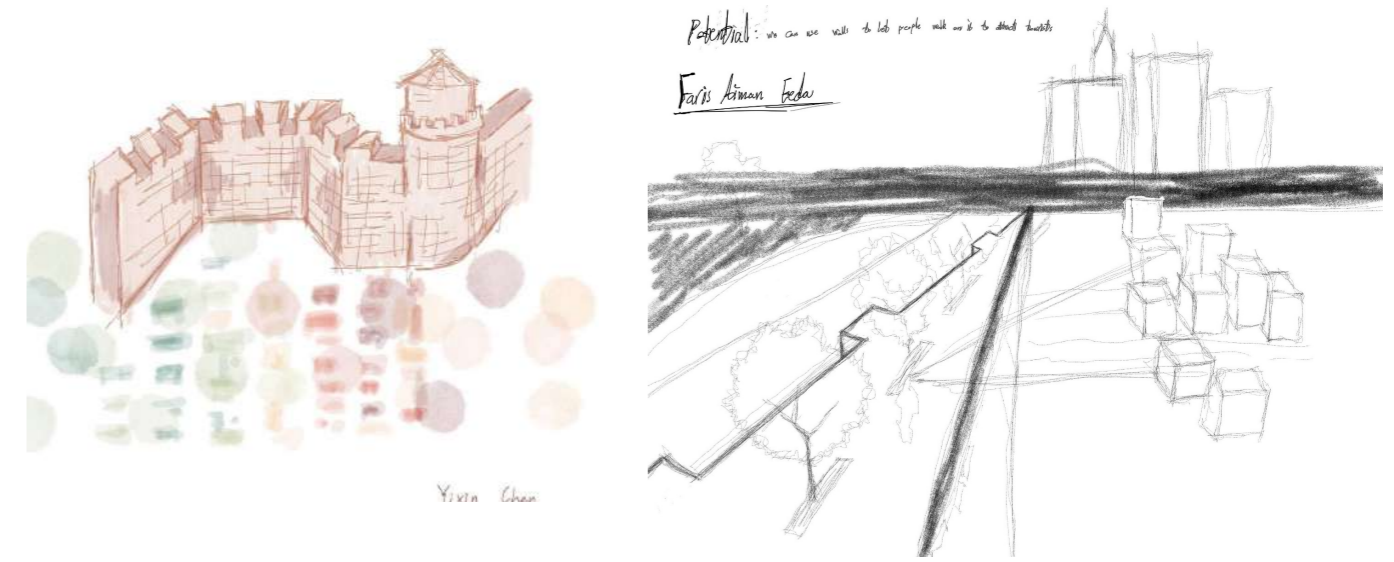
Schedule

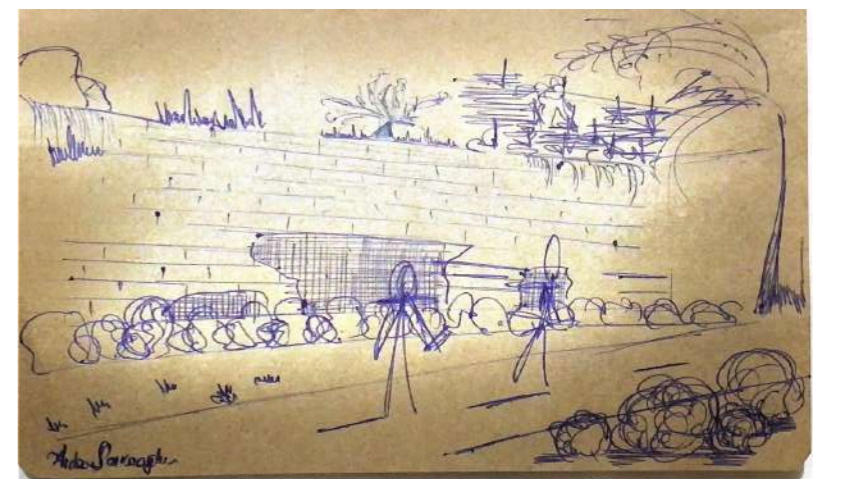
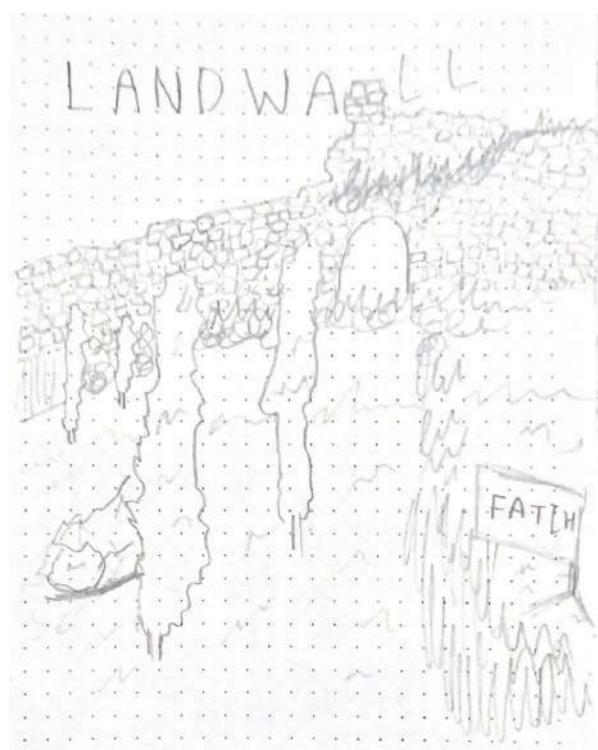
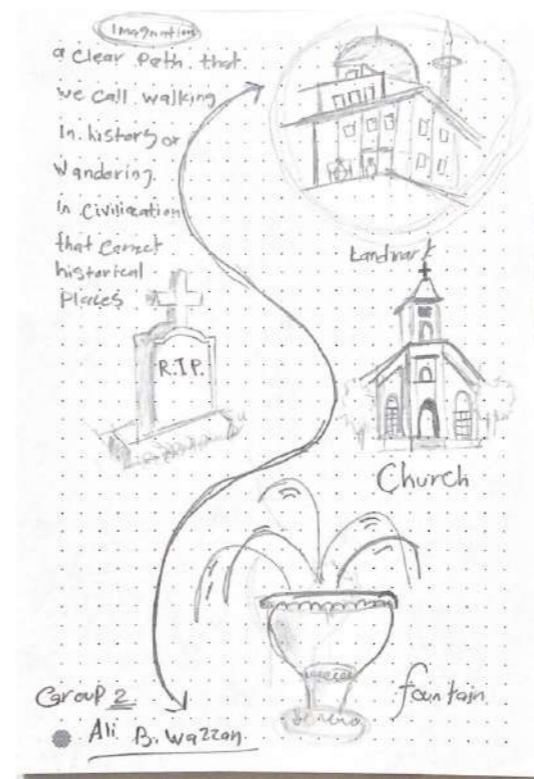
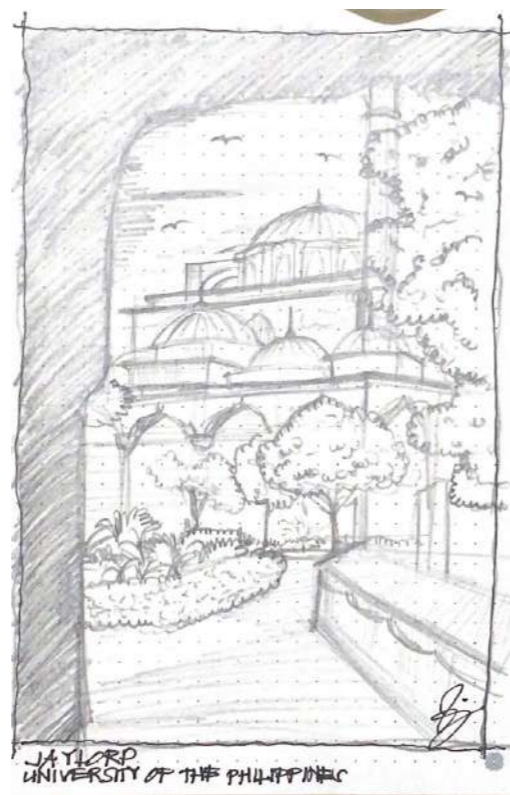
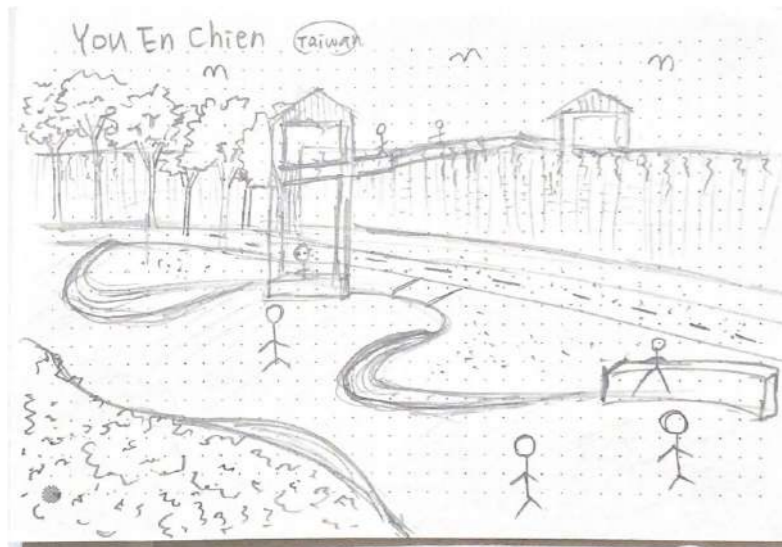
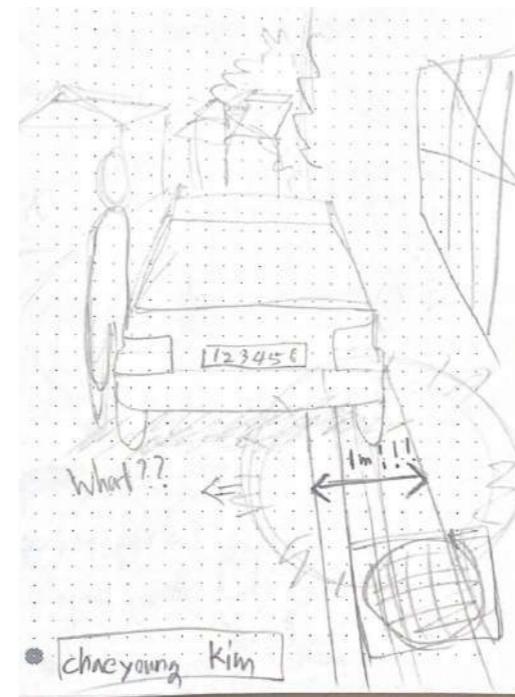
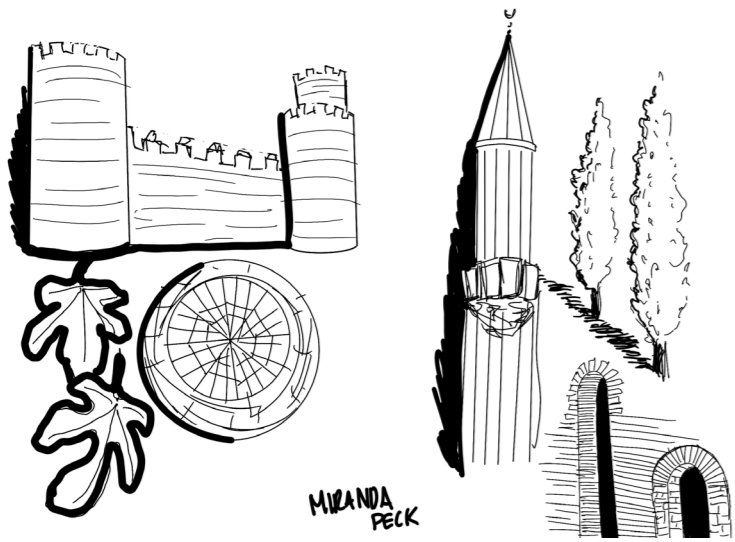
It was carried out according to the following schedule developed by the Charrette Working Committee of IFLA World 2024 İstanbul meetings.

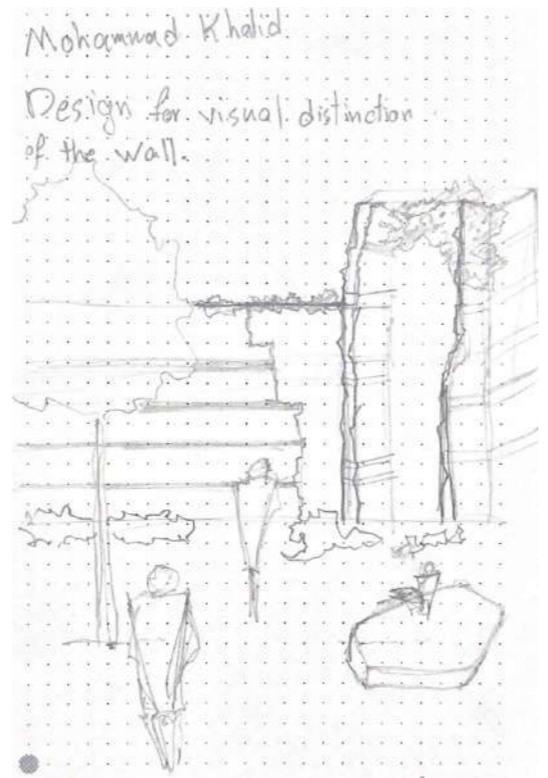
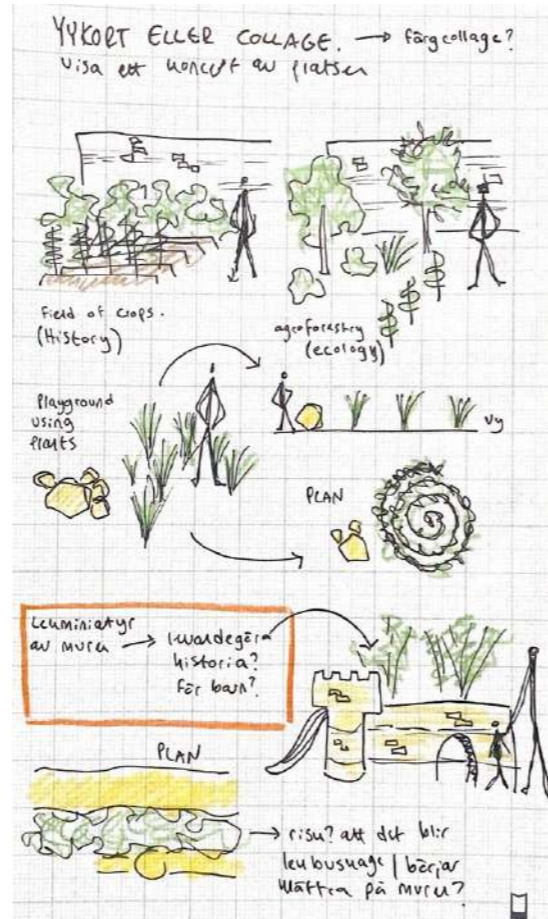
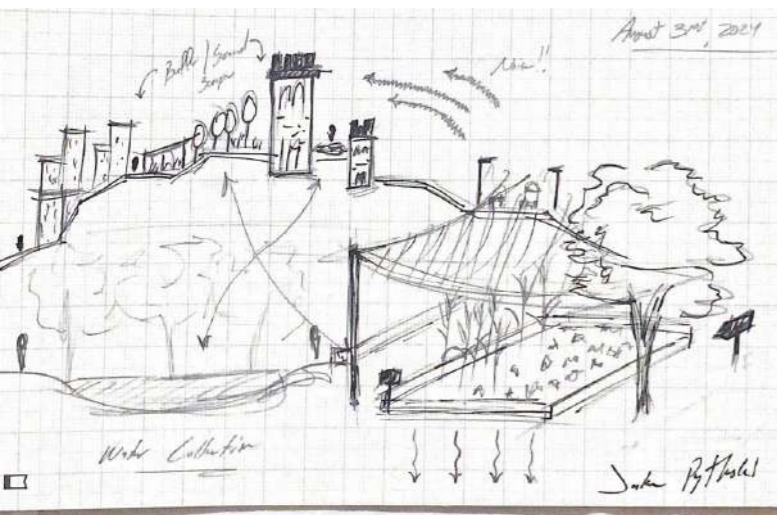
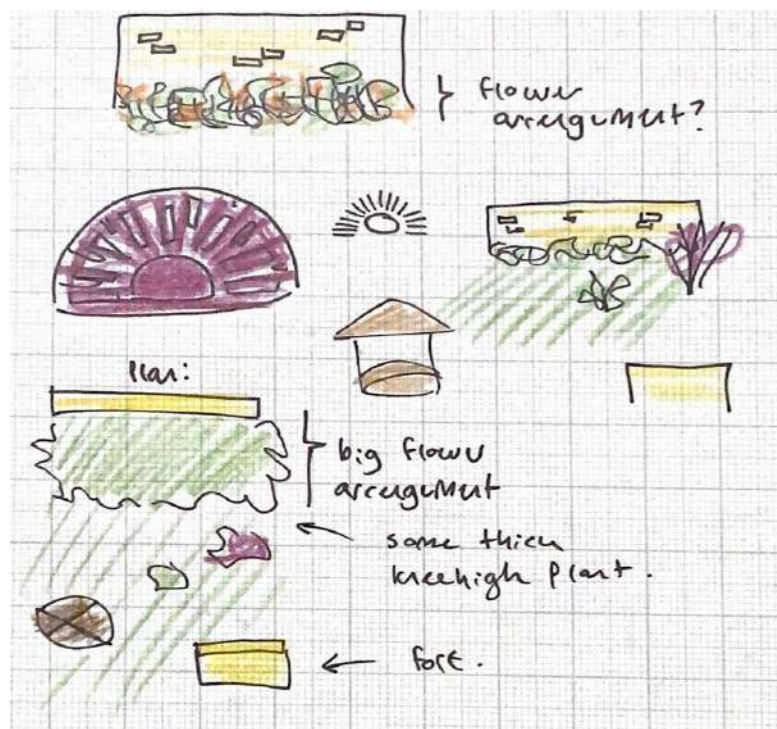
Saturday 31st of August		
09:00 - 10:00	Opening Speeches, Orientation, and Group Allocations	Fatih Municipality/ Neslişah Sultan Cultural Center-Idea Atelier
10:00 - 12:00	Project Site Briefing and Presentations	Fatih Municipality/ Neslişah Sultan Cultural Center -Idea Atelier
12:00 - 14:00	Lunch and Excursion	Fatih Municipality/ Yedikule Garden
14:30 - 17:00	Visit to Project Site	Northern Landwalls
17:30 - 18:00	Campus Garden Tour	Medipol University
18:00 - 19:00	Opening Reception	Medipol University
19:00 - 20:00	Warm-up session (postcards from the site)	Medipol University
20:00 - --	Independent Working Hours	Hotel
Sunday 1st of September		
09:00 - 10:00	ITU Taşkişla Tour	ITU Taşkişla
10:00 - 12:00	Lecture & Discussion 1. Figen Kıvılcım_ The Walls of Istanbul, 2.Kerim Altuğ_ Cisterns	ITU Taşkişla
12:00 - 13:30	Lunch	ITU Taşkişla
13:30 - 18:00	Studio	ITU Taşkişla
18:00 - 19:00	Pin-up session	ITU Taşkişla
19:00 - 20:00	Dinner / Free Time	
20:00 - --	Independent Working Hours	Hotel
Monday 2nd of September		
09:00 - 12:00	Studio	ITU Taşkişla
12:00 - 13:30	Lunch	ITU Taşkişla
13:30 - 14:30	Lecture & Discussion Bahar Başer Kalyoncuoğlu_ Bostans	ITU Taşkişla
14:30 - 18:00	Studio	ITU Taşkişla
18:00 - 19:00	Pre-Jury	ITU Taşkişla
19:00 - 20:00	Dinner / Free Time	
20:00 - --	Independent Working Hours	Hotel
Tuesday 3rd of September		
09:00 - 12:00	Studio (Preparations for Final Presentations)	ITU Taşkişla
12:00 - 13:00	Lunch	ITU Taşkişla
13:00 - 17:00	Final Presentations / Jury	ITU Taşkişla
17:00 - --	Exhibition / Closing Cocktail	ITU Taşkişla

Site Visit and Warm-Up Session (Sketch Drawings)

The site visit was conducted with the support of Fatih Municipality. The visit began with an informative session about the site held at the Municipality's Conference Hall, followed by additional briefings during the field tour. At the conclusion of the site visit, students were engaged in sketching exercises to capture fundamental impressions of the site. These activities were conducted in the studio halls of Medipol University. Selected examples of these sketches are presented below.

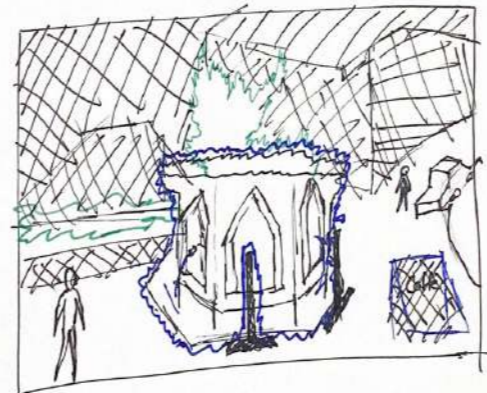






Stuckness

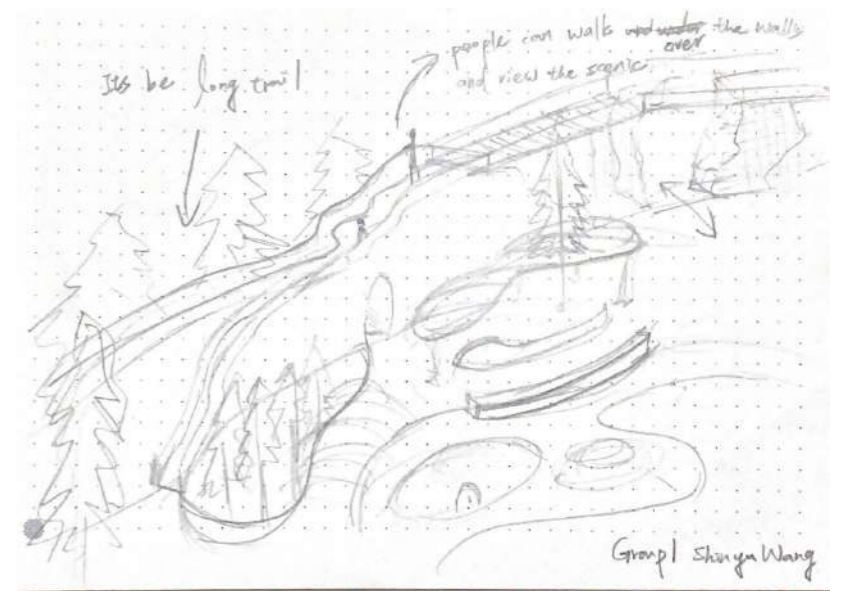
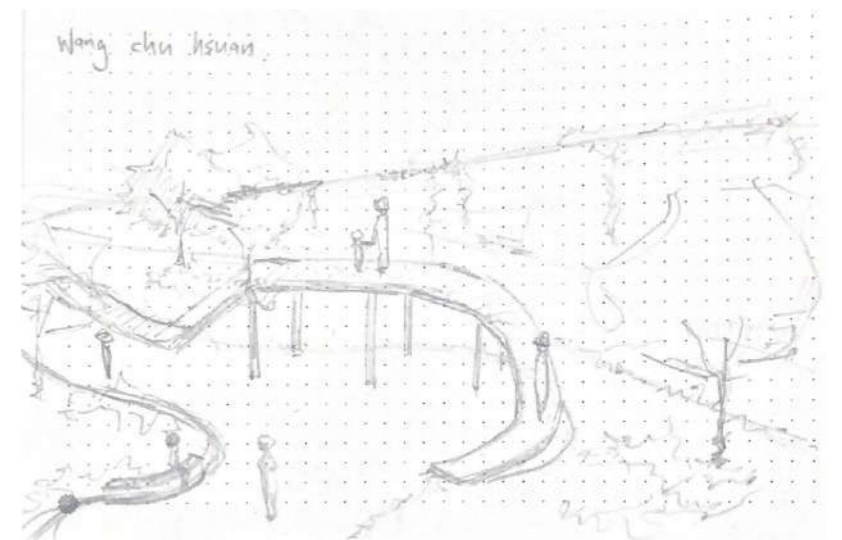
- What would you do if you were **stuck** in time?
- Have you ever been **surrounded** from all sides?



Ahmet Selim Bilgili



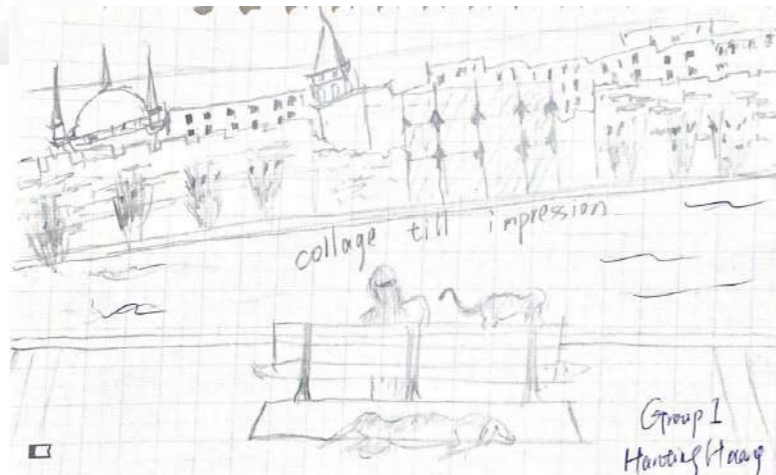
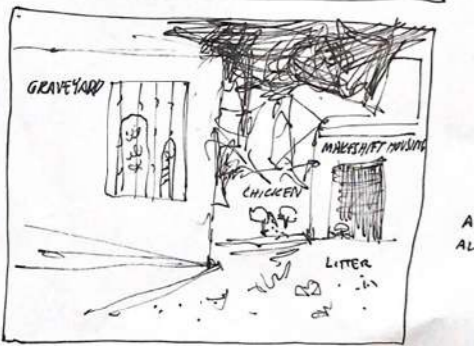
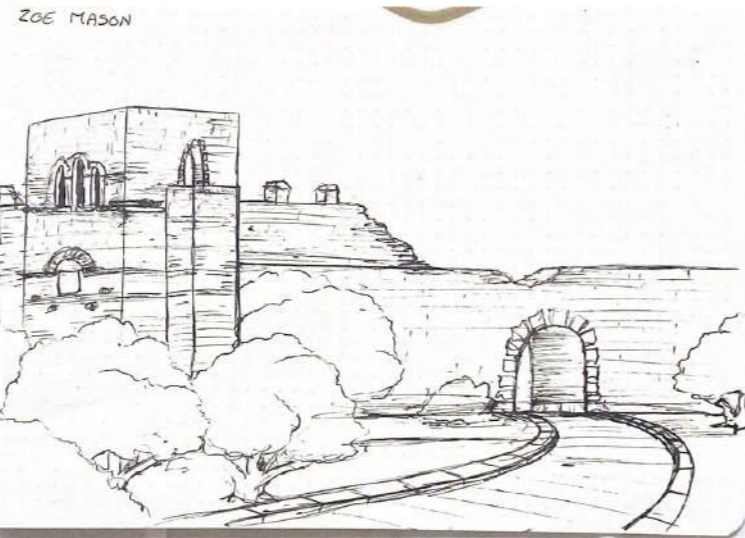
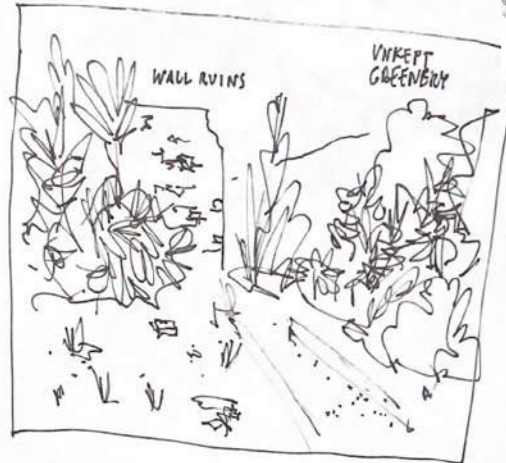
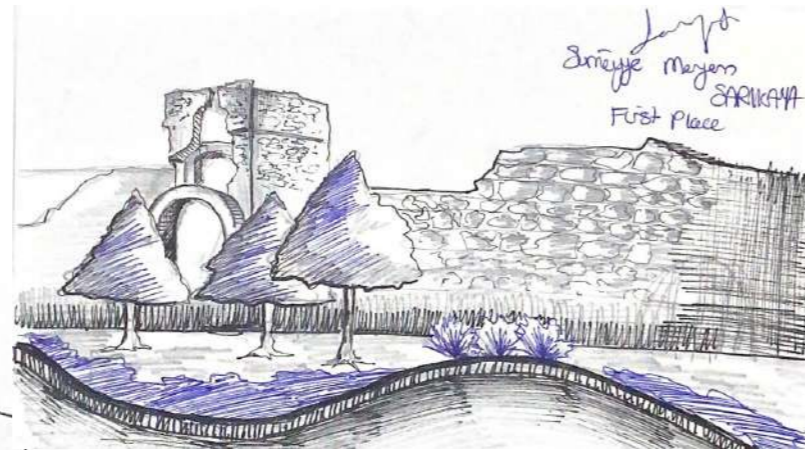
Lauren Kowala



Group Shinya Wang



What do i remember ?



Studio Guidelines

Below are the detailed steps and requirements for students project:

1. Inventory: Existing Natural and Cultural Assets

- Conduct a thorough inventory of the site, identifying existing natural and cultural features.
- Document the flora, fauna, topography, water bodies, and built environments.
- Include historical, social, and cultural elements that contribute to the character of the site.

2. Site Analysis: Digital Presentation

- Perform a detailed site analysis using digital tools to represent your findings.
- Analyze the spatial opportunities, potentials, constraints, and problems of the area.
- Present your analysis in a digital format, highlighting key elements that will inform your design process.

3. Spatial Opportunities and Threat Analysis

- Identify and analyze the spatial opportunities and potentials that the site offers.
- Consider the constraints and challenges present in the area, such as topographical limitations, environmental regulations, or social dynamics.
- Make a problem analysis to address the key issues that need to be resolved in your design.

4. Vision/Concept Development: Future Scenarios/Perspectives for the Area

- Define a clear vision for the future development of the area, considering the theme of the charrette (cultivating resilience) through sustainable and innovative solutions.
- Develop future scenarios that reflect your vision, focusing on ecological, social, and cultural aspects.
- Your vision should guide the overall direction of your design solutions.

5. Design Solutions Based on the Vision

- Develop design solutions that align with your established vision and address the identified problems.
- Consider both large-scale and detailed design elements that contribute to the overall cohesion of the project.

6. Concept Plan/Preliminary Landscape Plan

- Create a concept/ Preliminary Landscape Plan that outlines the major components of your design.
- The plan should clearly illustrate how the design addresses the site's opportunities and constraints while fulfilling the project vision.

7. Detailed Concept Development for Specific Zone

- Site specific spatial drawings via 2D, 3D, sketch definitions, cross sections, photo collages, etc.

8. Technically Accurate Scales

- All drawings and plans must be in scale,
- Use scales between 1/2000 to 1/10000 for upper scale site plans, and lower scales for detailed concept definitions.
- Develop sketches and collages that visualize your design ideas and concepts.

9. Presentation

- Presentations will be digital
- Each group member is responsible to present at least one topic of the concept.

Pin-up Session

This is the initial student presentation conducted prior to the jury session. It primarily includes groups' inventory, analysis, and vision development studies related to the project site. Photographs from this preliminary jury session are provided at the end of the book.

Submission Requirements and Final Jury

- A1 size digital submission of the site analysis (containing more than one analysis).
- A1 size a concept development plan including A2 size concept/preliminary landscape plan and also detailed drawings.
- A digital presentation will be prepared.
- All submissions should be formatted and presented in a professional manner digitally, suitable for review by a panel of experts.
- All group names should be indicated in all presentations.

The Final Jury marked the culmination of the Charrette, where student groups presented their comprehensive design proposals. The jury session highlighted critical evaluations and discussions, providing valuable feedback on the innovative solutions developed throughout the workshop. Photographs from this final jury session are provided at the end of the book.

Outputs: Student Projects

Elif Sena Karakuş, Fatma Sultan Bozkurt, Betül R veyda Ay Ak, Nihan Parlak, Or un Mert Carlık





LIVING HERITAGE: Revive, Sustain, and Connect

about team



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Ecole Nationale Supérieure
de Paysage Versailles
France



Lauren Kendon
Victoria University of
Wellington
New Zealand



Faisal H. Alessawi
Imam Abdulrahman
Bin Faisal University
Saudi Arabia

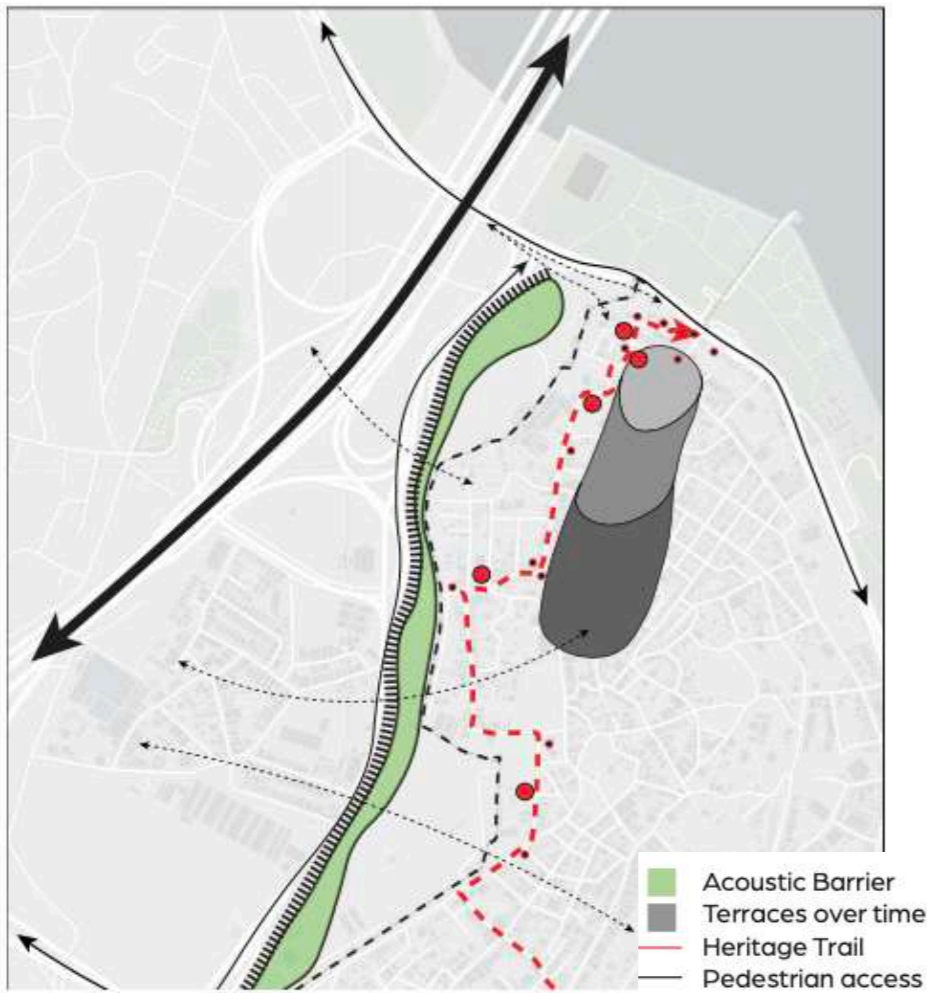


Arda Sakaoglu
Ankara University
Türkiye



Chu-Hsuan Wang
Chinese Culture University
Taiwan





This project focuses on revitalising the Fatih neighborhood around the historic walls of Istanbul. In Istanbul, an area rich in historical significance but facing challenges from natural disasters, dense urbanization, and limited public open spaces. Located at the heart of Istanbul, north of the ancient city walls, Fatih represents a unique intersection of historical heritage and modern urban life. Our concept, "Living the Heritage," aims to enhance the resilience of the local community and environment by reconnecting people with their land, culture, and history.

Tourism Connection



Green Network



Children Area



Water Catchment



Issues and Opportunities Analysis

Issues

Hidden Heritage
Earthquake Risk

Air Quality
Water Management
Poverty
Narrow Roads

Noisy Road Area
Unused Spaces

Increase drought

Potentials

Open Spaces

Topography
Views
World Heritage

Children
Gates
Close to tourism

Initial Ideas

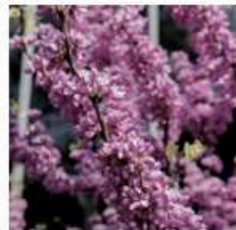
Toolbox of strategies

Child Play
Local Vegetation
Acoustic Barrier

Public Space
Water Retention
Bridges

Place Identity

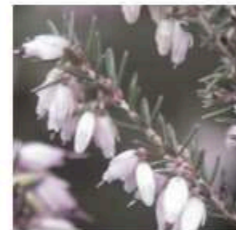
Cercis siliquastrum
Judas Tree



Cupressus
Cypress



Erica spp.
Heath



Fagus orientalis
Beech



Fraxinus
Ash



Pinus pinea
Stone pine



Pistacia lentiscus
Mastic Tree



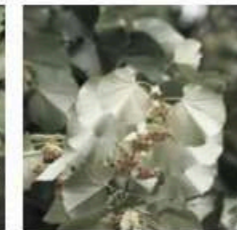
Platanus orientalis
Plane Tree



Quercus spp.
Oak



Tilia spp.
Linden Tree



Acacia dealbata
Mimosa Tree



Aesculus
Horse Chestnut



Our design strategy is built around three core principles: reviving heritage, sustaining the local community, and fostering connections. To address climate resilience, we reinterpret historical water management systems to manage drought conditions and create sustainable, biodiverse landscapes with low maintenance. We propose urban agriculture terraces to empower community self-sufficiency and integrate educational spaces inspired by Ottoman and Byzantine heritage.

Revive

Heritage-based Water Management

Reinterpret historic systems of water management (aqueduct and moat) into modern technology to manage water and adapt to extreme weather from climate change.

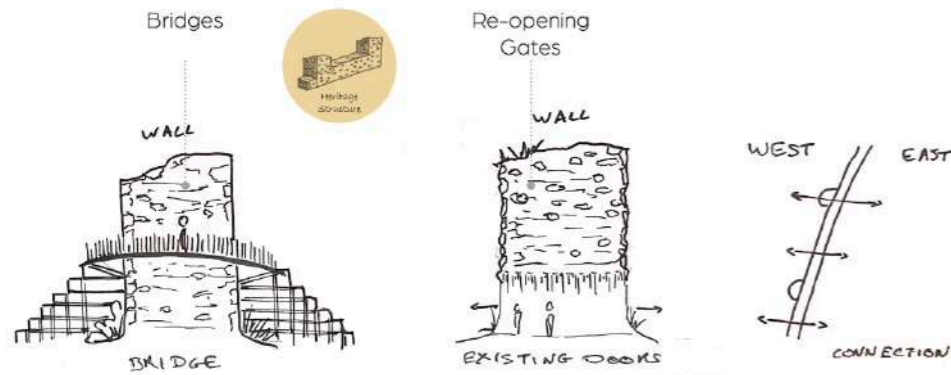
Historical Narratives in Play

Educational play spaces inspired by Ottoman and Byzantium traditional play and history.

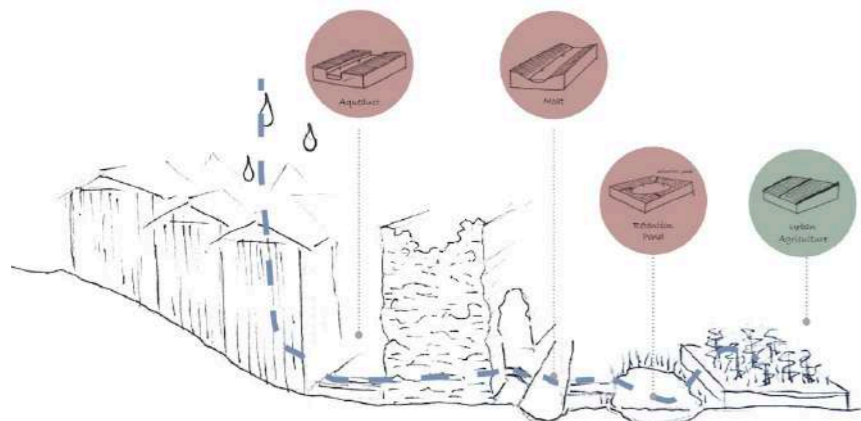
Historical Narratives in Play



Cultural Corridors



Heritage-based Water Management



Sustain

Community Sufficiency

Urban agriculture and water management to empower self sufficiency within the community and ensure food and water security in the event of natural disaster such as earthquakes.

Climate Concious Planting

Dry tolerant planting that requires minimal maintenance and enhances biodiversity.

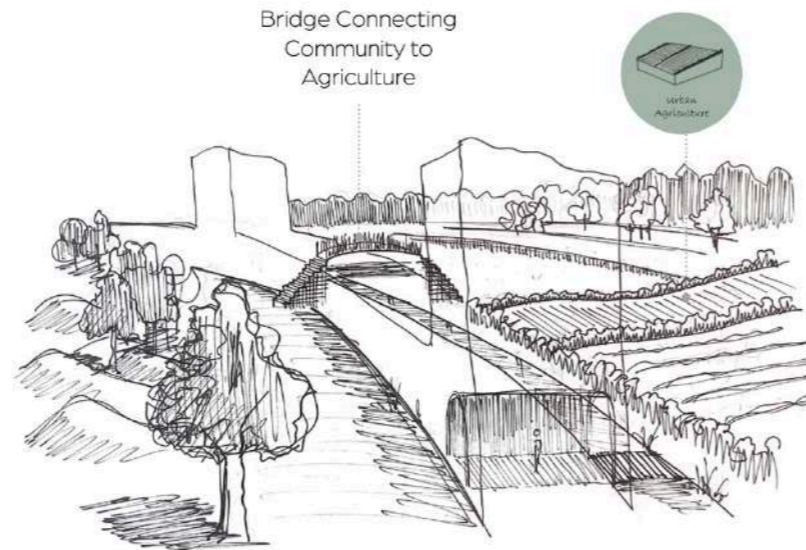
Recycled Materials

Material re-use from building demolition in gabions to construct walls.

Disaster Resilient Safe Zones

Open spaces to provide earthquake and tsunami safe zones in the event of an earthquake.

Community Sufficiency



Public to Private



public

private

Connect

Heritage Corridor

Linking heritage structures with artistic expression from the Byzantine and Ottoman period.

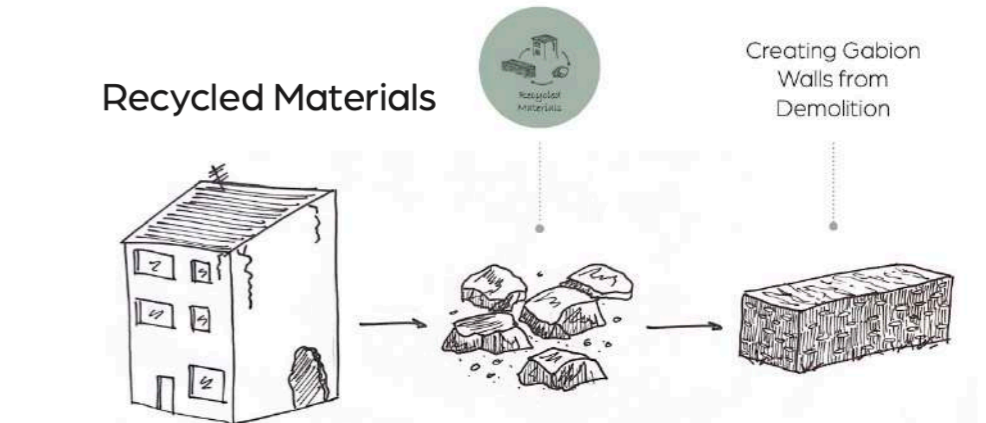
Public to Private Gradient

Create a gradient from public to private utilising topographic forms to connect people with the landscape and community.

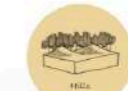
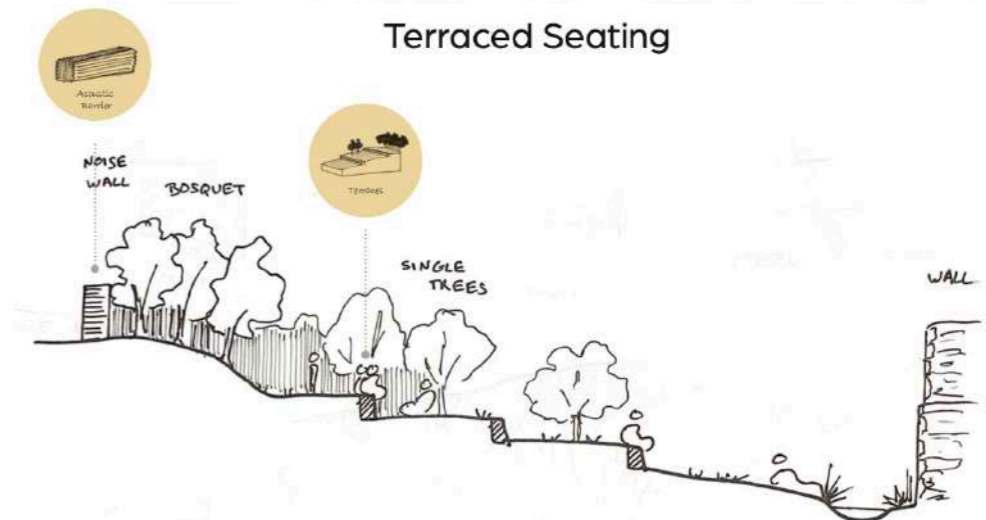
Permeable Circulation

Prioritising pedestrians, extending the bike path and considering circulation from the motorway for easy access for tourism.

Recycled Materials



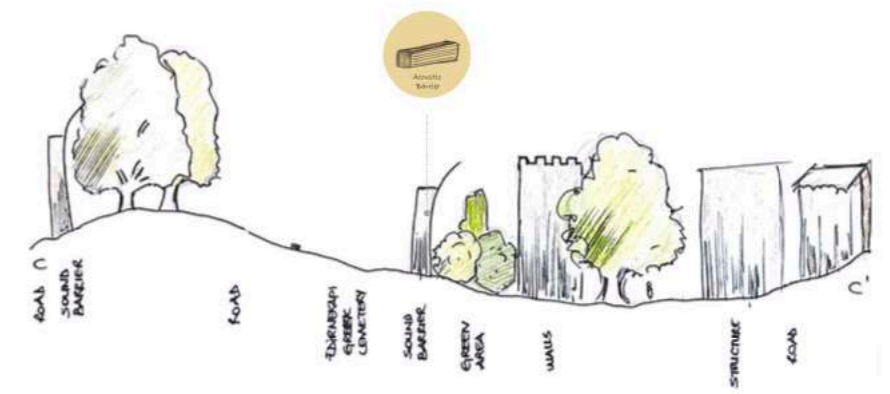
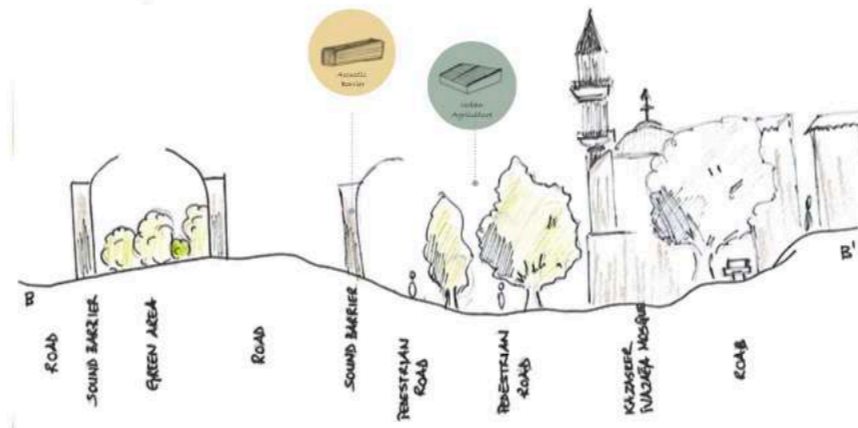
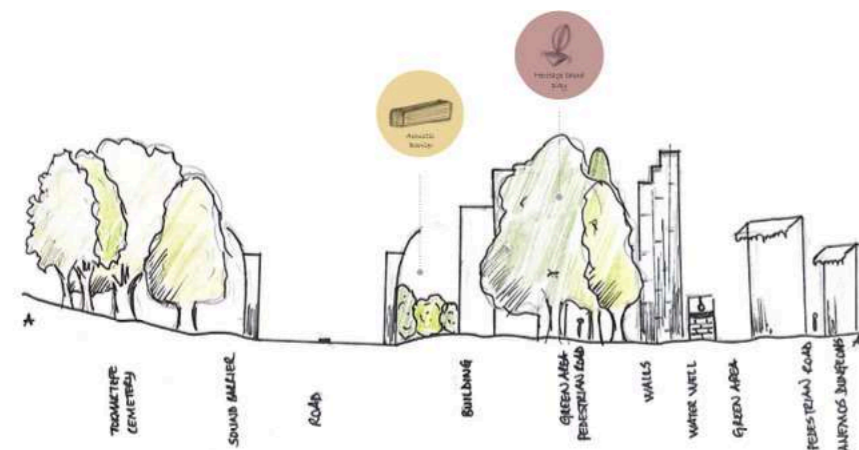
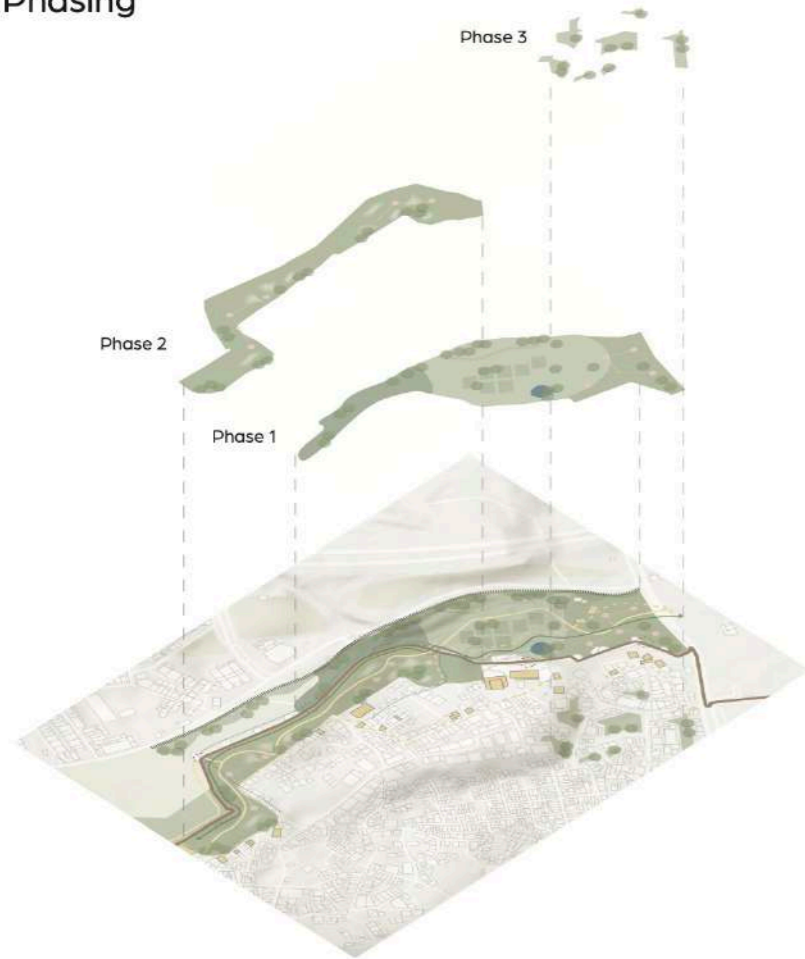
Terraced Seating



public

private

Phasing



Terraced Seating



Heritage signage



To connect people with their surroundings, we introduce heritage corridors, enhance pedestrian mobility, and create inclusive public spaces that blend the boundaries between private and communal areas.



ROOTS to FUTURE

about team



Meryem Sarıkaya
Ankara University
Türkiye



**Phuong Uyen Thi
(Victoria) Hoang**
ESAJ-Ecole Supérieure
d'Architecture des Jardins
France



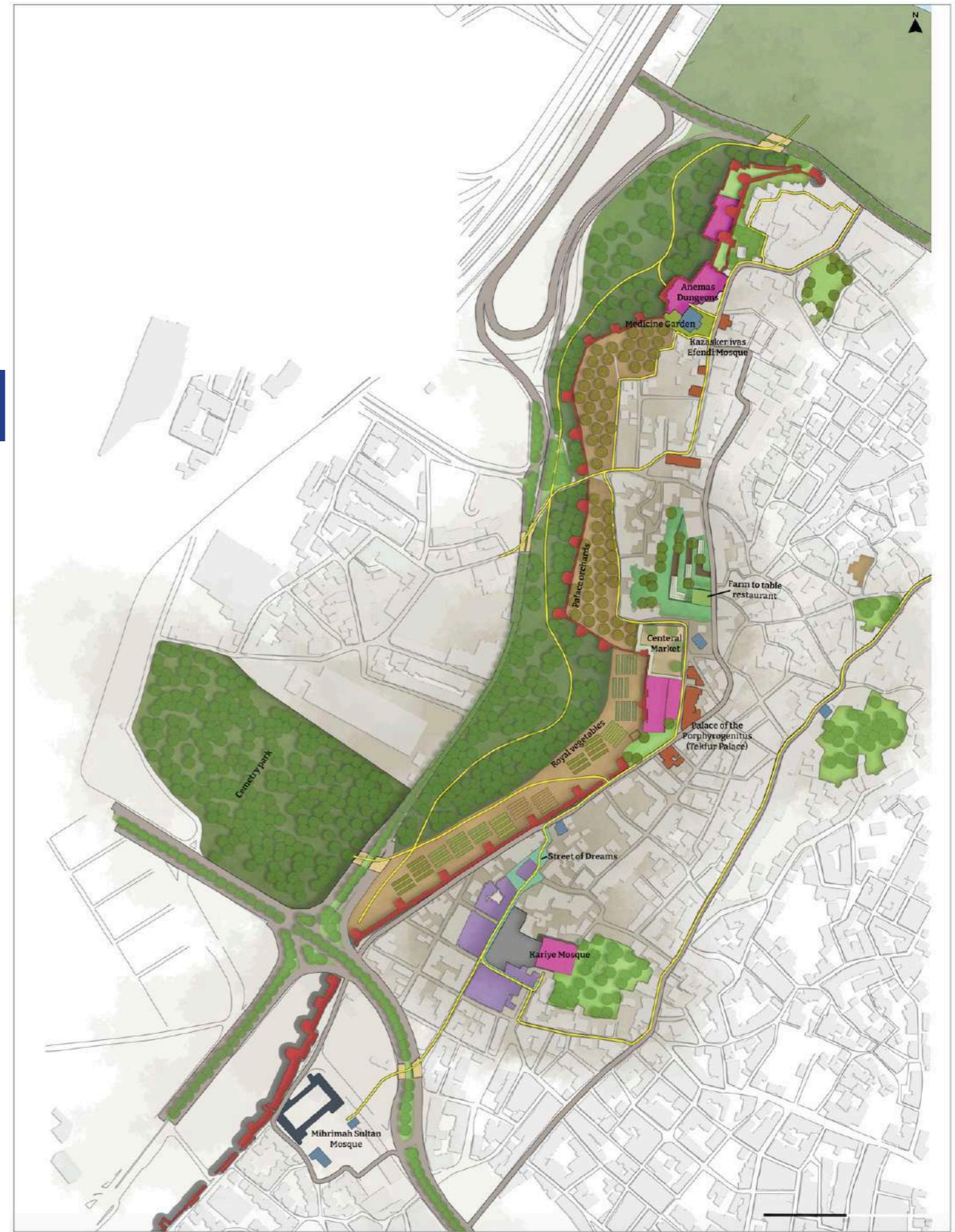
Ali B. Al Wazzan
Imam Abdulrahman
Bin Faisal University
Saudi Arabia



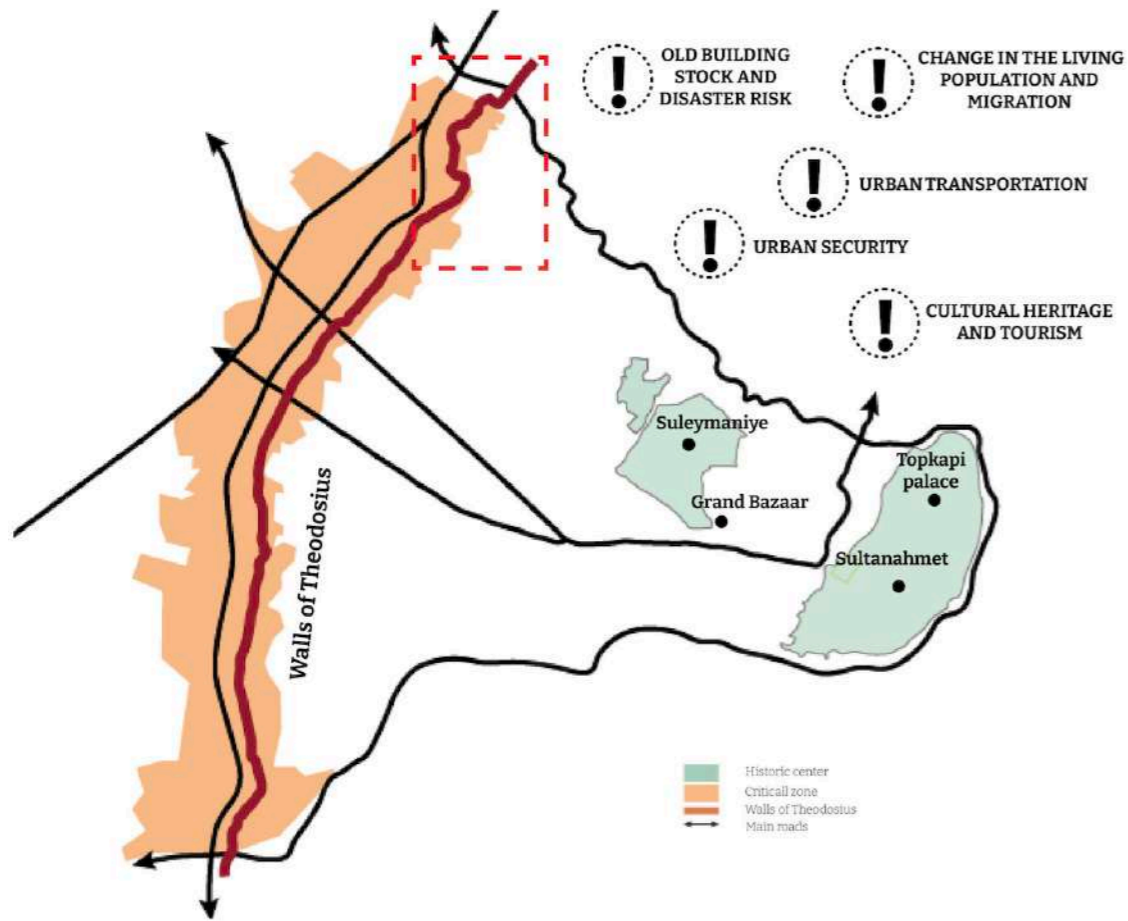
Eunjin Yang
Pusan National University
South Korea



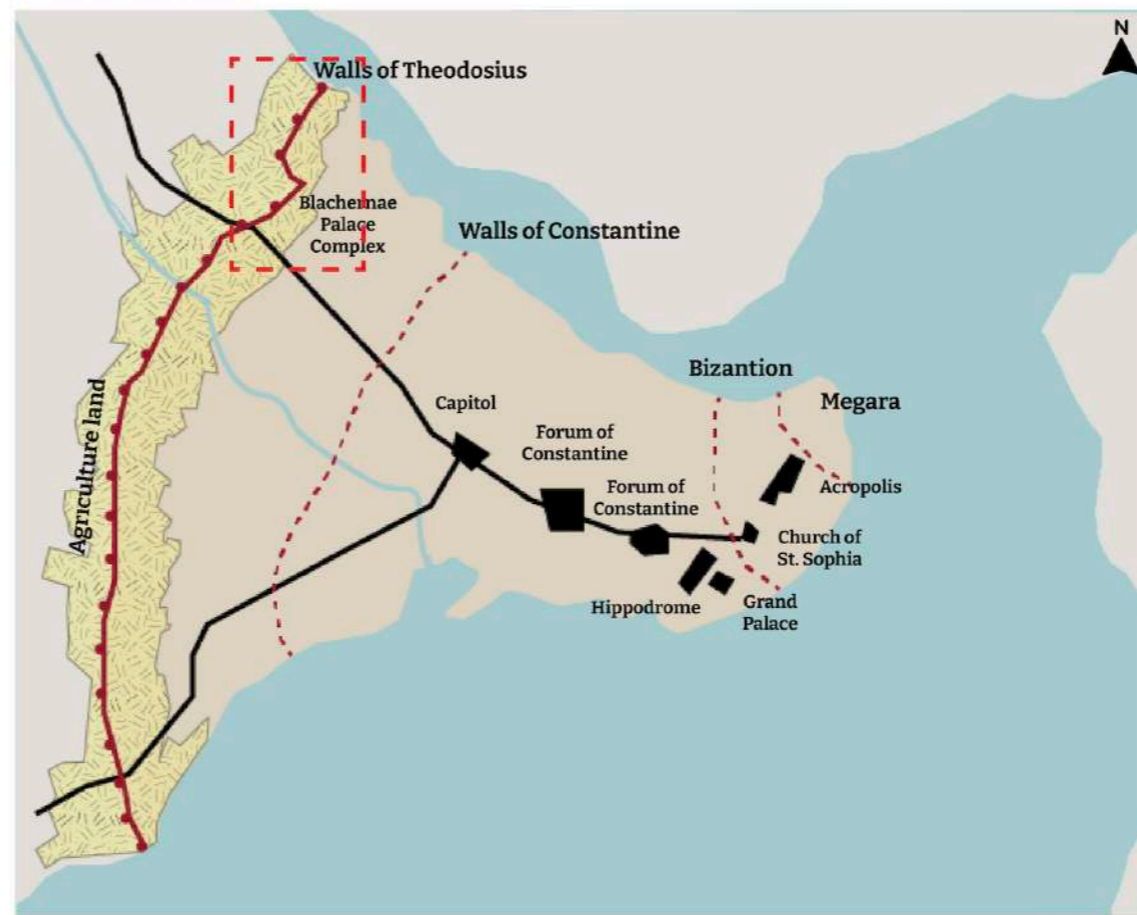
Yu-Chen Hsueh
Chinese Culture University
Taiwan



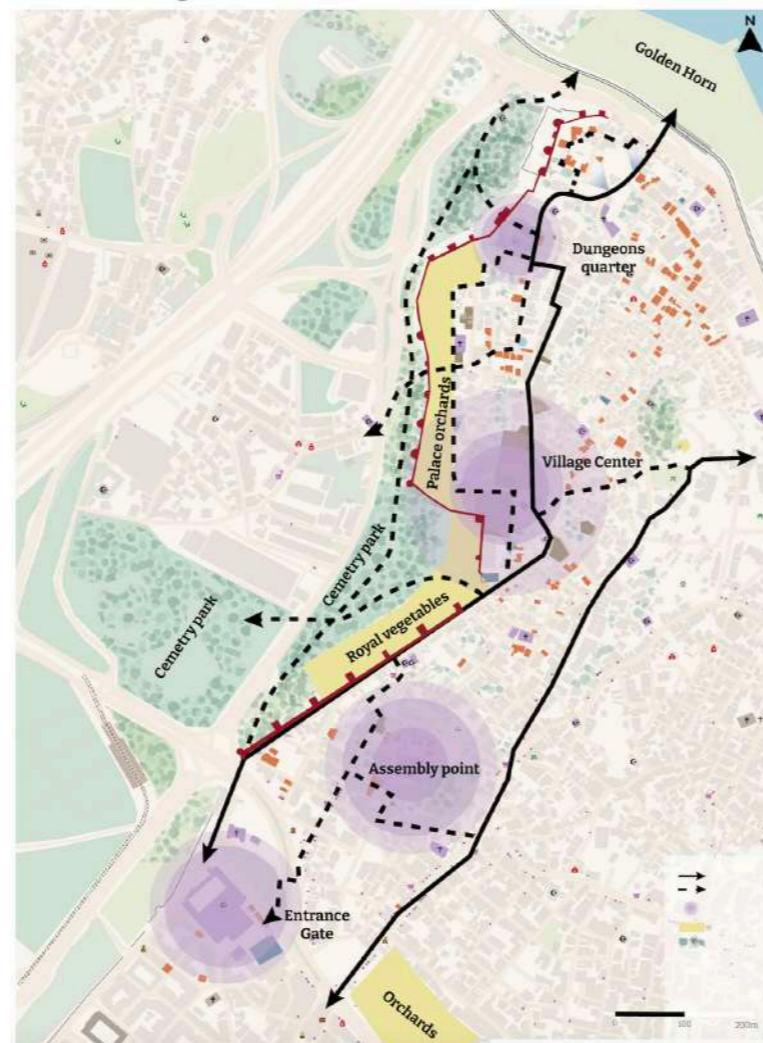
The critical zone



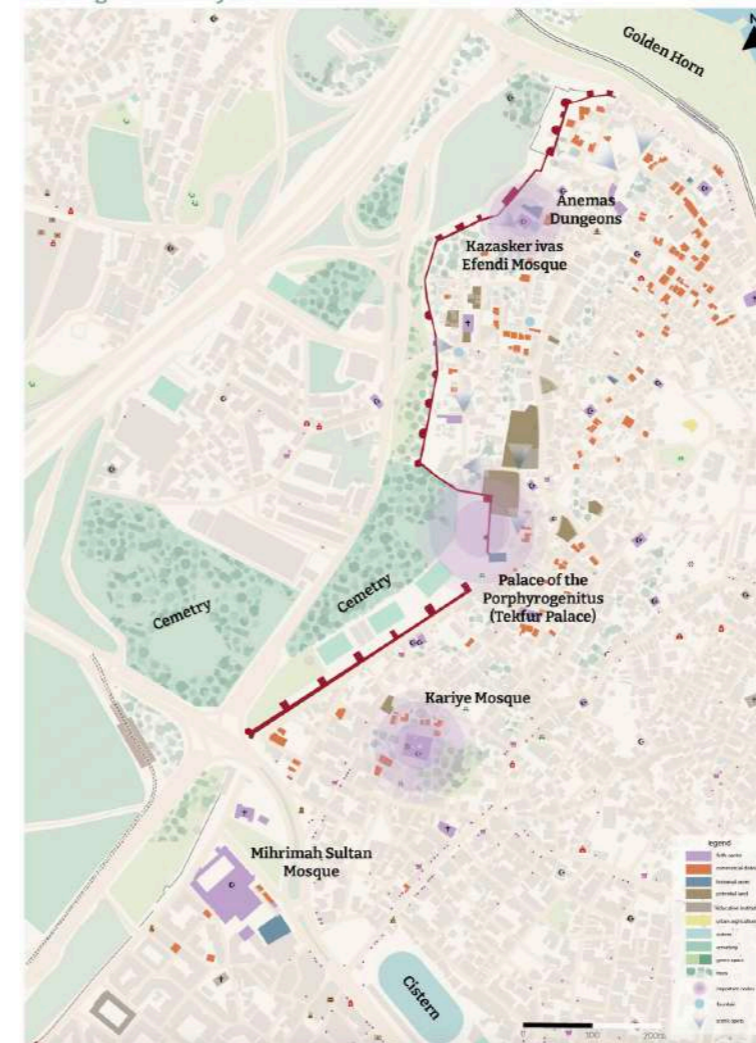
Back to the roots



The modern village

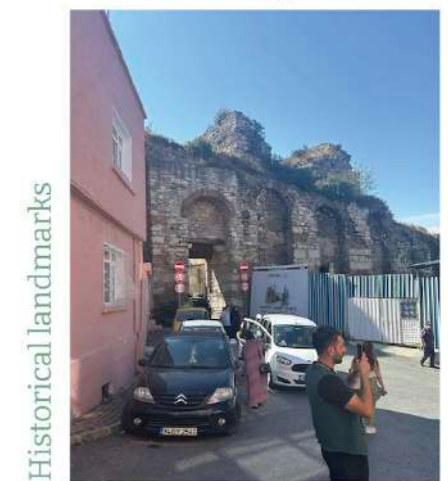


Working with fine layers



In a rapidly urbanizing world, where modern cities often foster isolation and environmental degradation, "Roots to the Future" shows that the solutions to today's social problems may lie in the wisdom of the past. By reviving the essence of village life, the project emphasizes a lifestyle that values close-knit communities, sustainable food production, and a balanced relationship with nature. In times past, people cultivated local food, shared resources, and relied on natural cycles—creating a resilient social fabric that held people together despite differences in race, religion, or status.

The site full of potential



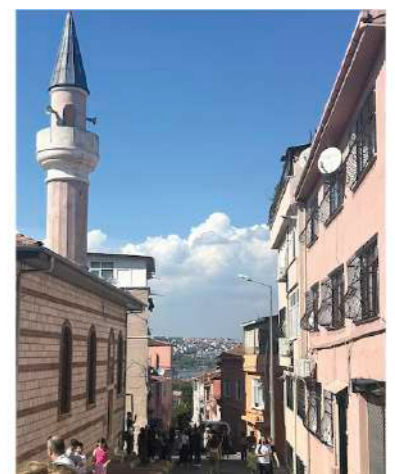
Historical landmarks



Green patrimony

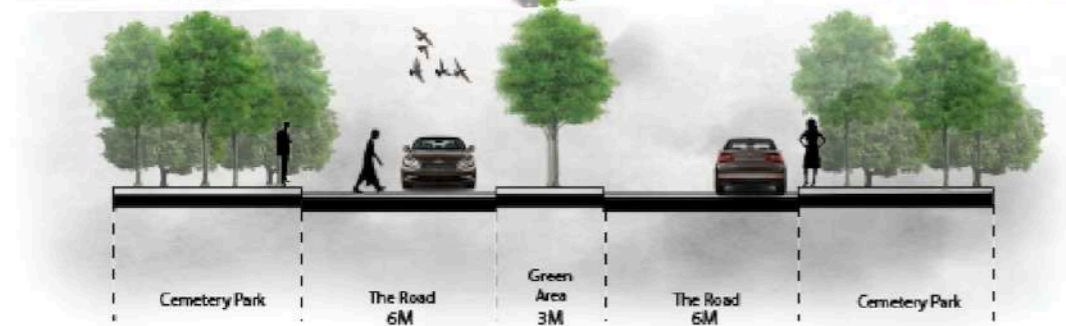


People

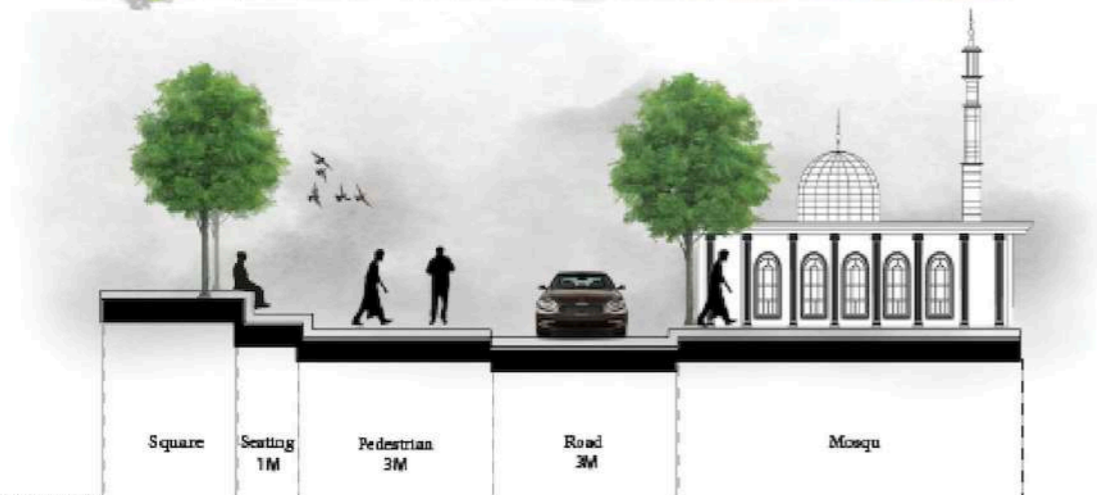
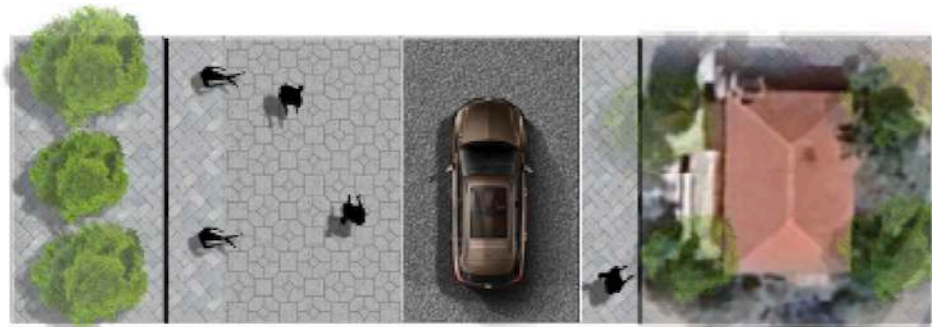


Views

The gates and circulation



A-A SECTION



B-B SECTION

By reintroducing these practices, this project not only addresses urban insecurity, pollution, and social isolation but also fosters a lifestyle rooted in mutual support, environmental awareness, and a sense of place. Through small community markets, shared green spaces, and a walkable neighborhood design, "Roots to the Future" reinvigorates the sense of belonging and environmental responsibility often lost in modern cityscapes. In essence, it shows that by looking to the past, we can unlock sustainable and socially cohesive models for the future.

Ceuillette terrace



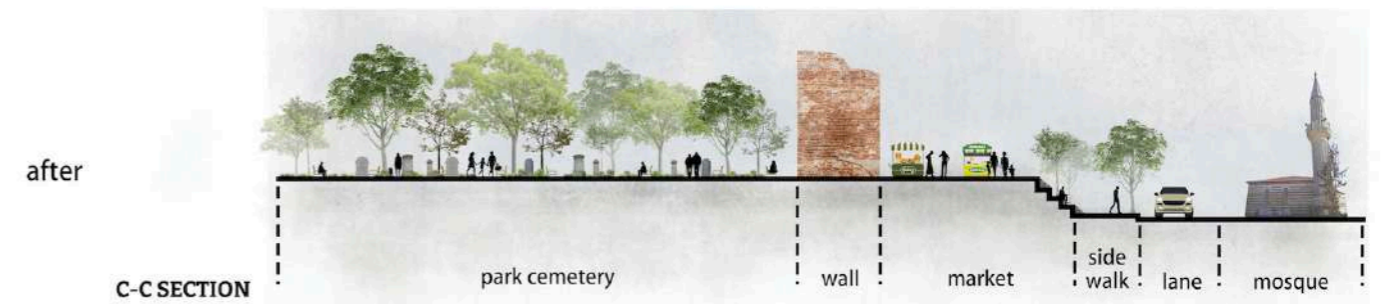
Market square



Reviving the village life

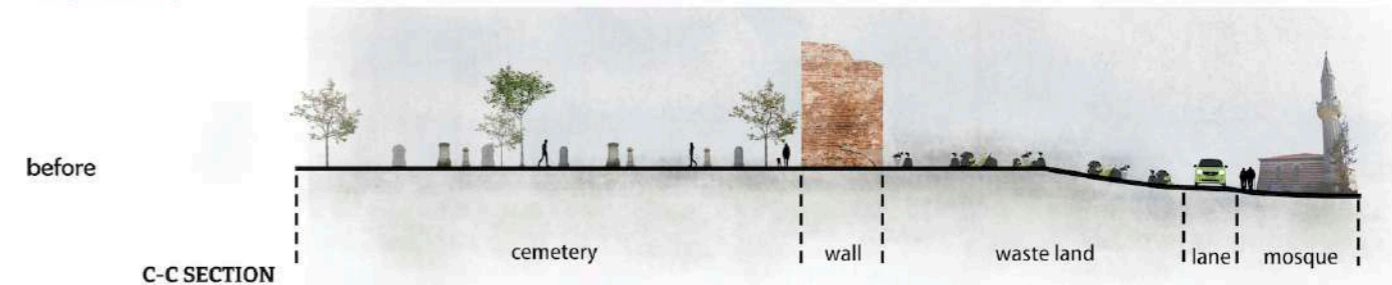


Village of tomorrow



C-C SECTION

City of today



C-C SECTION



HETEROTROPHIC WALLS: Resilia for Vulnera

about team



İrem Aleyna Sarısoy
Istanbul Technical
University
Türkiye



Jacob Pytleski
South Dakota State
University
USA



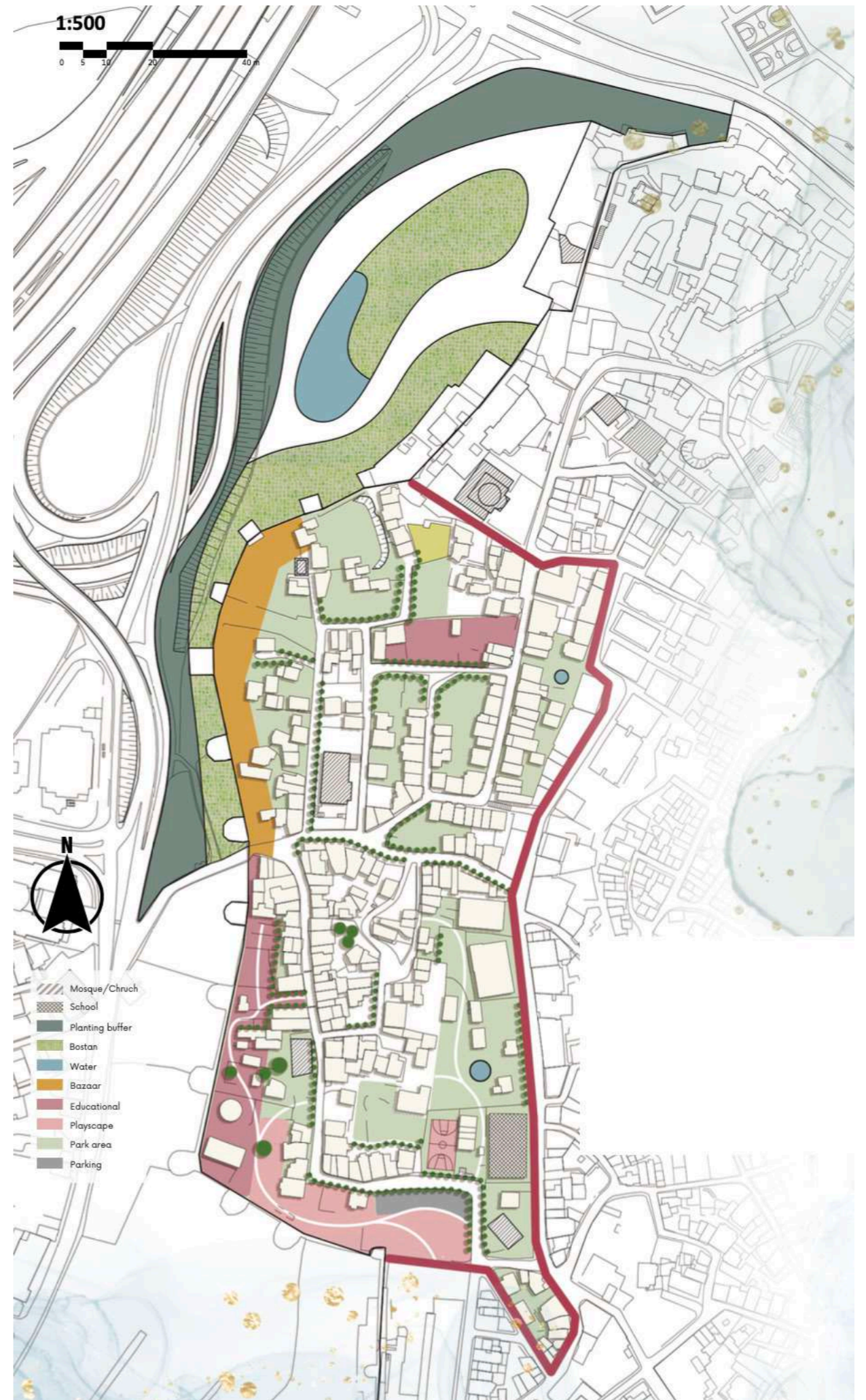
Meng Guo
Soochow University
China

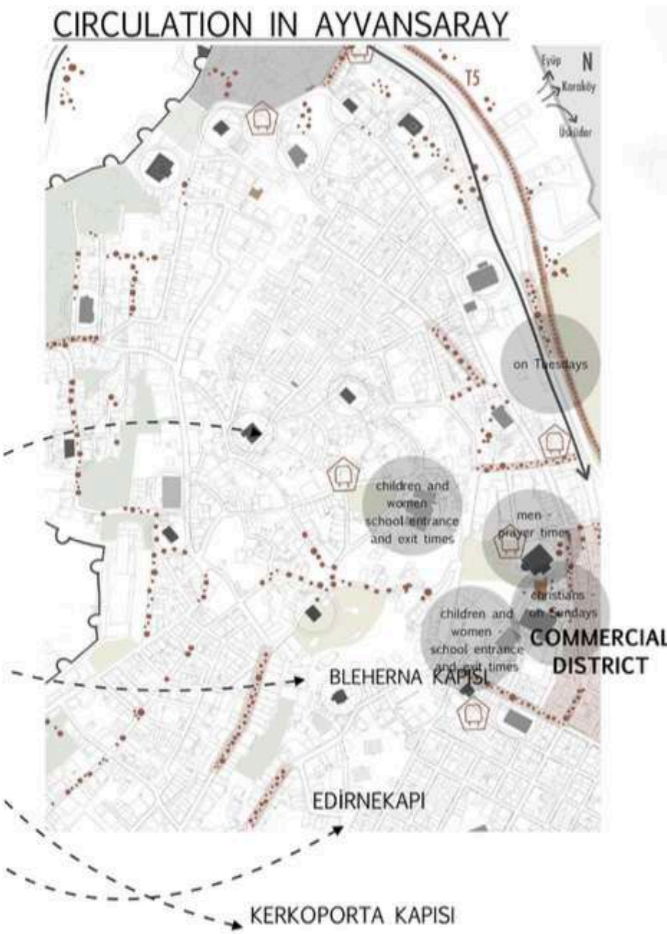


Yoyo Wing-Yiu
THEI- Technological and
Higher Education Institute
Hong Kong



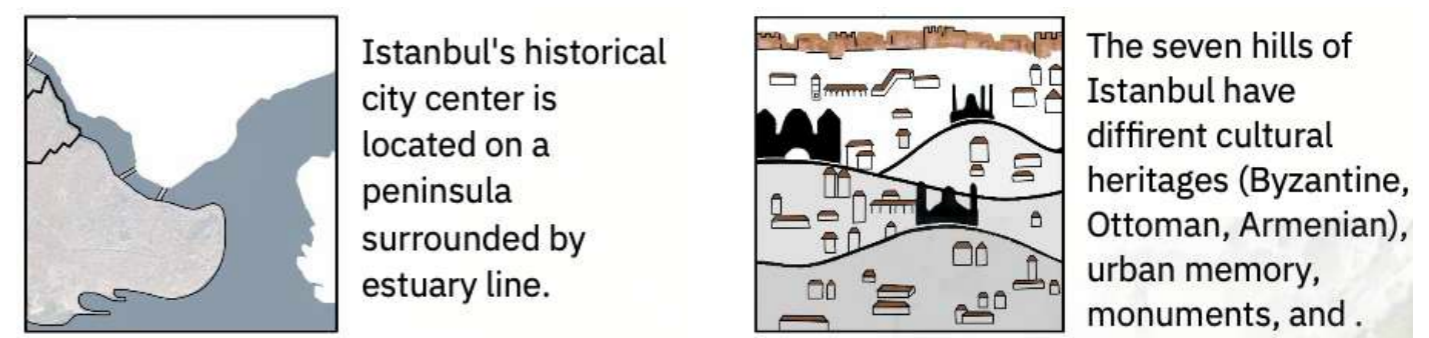
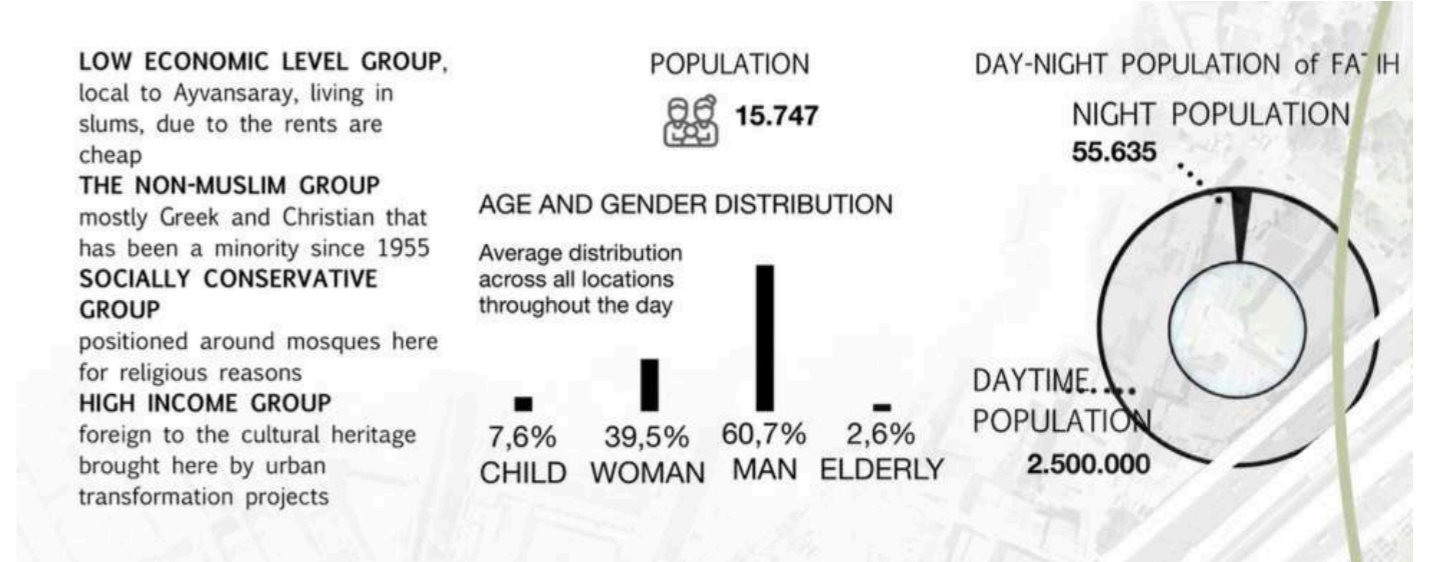
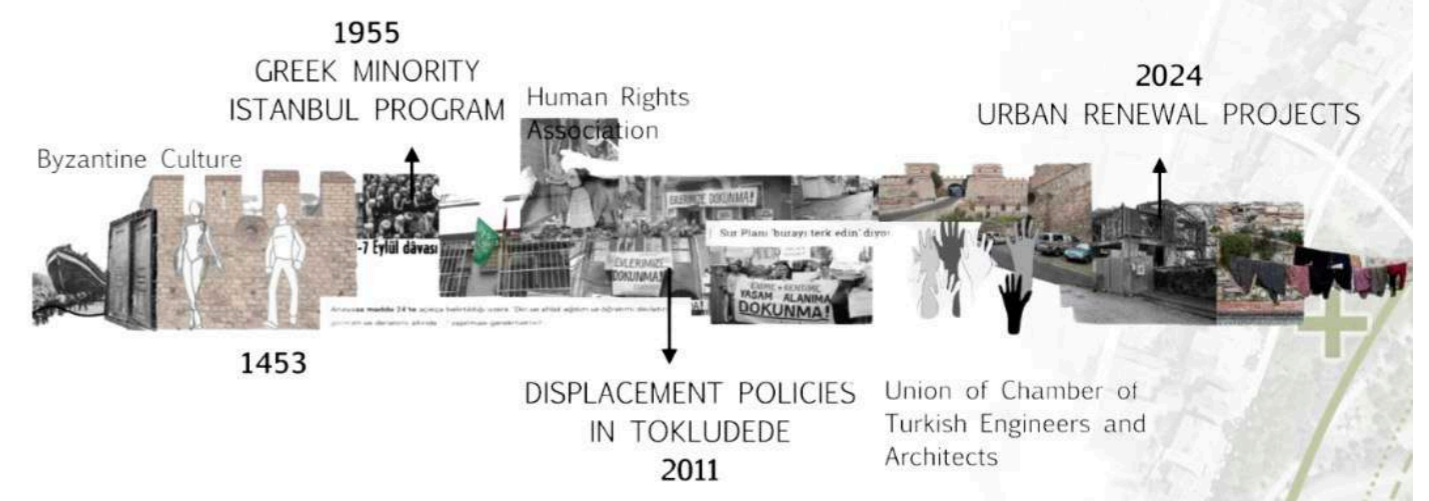
Caylie Lacap
University of the Philippines-
Diliman
Philippines

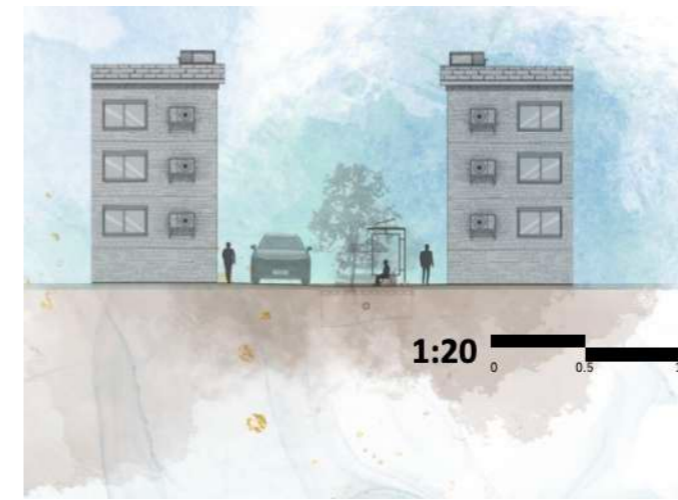
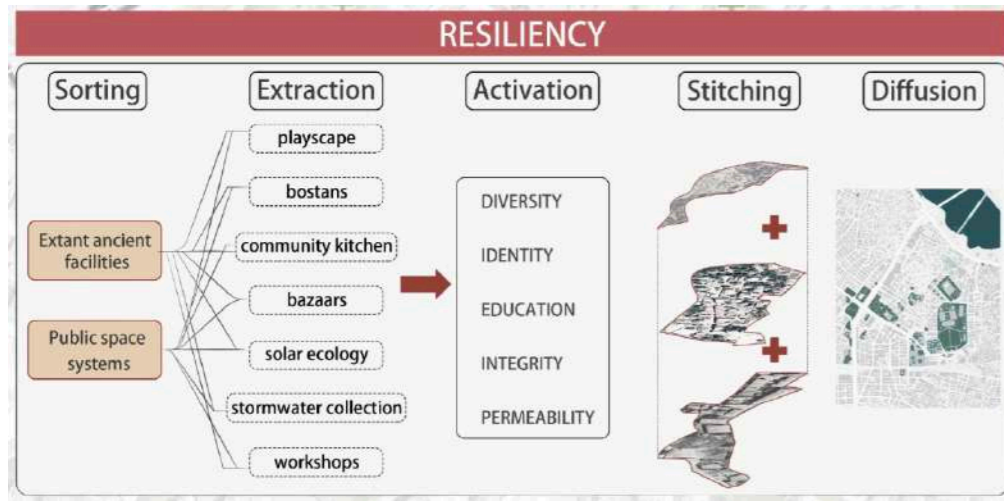




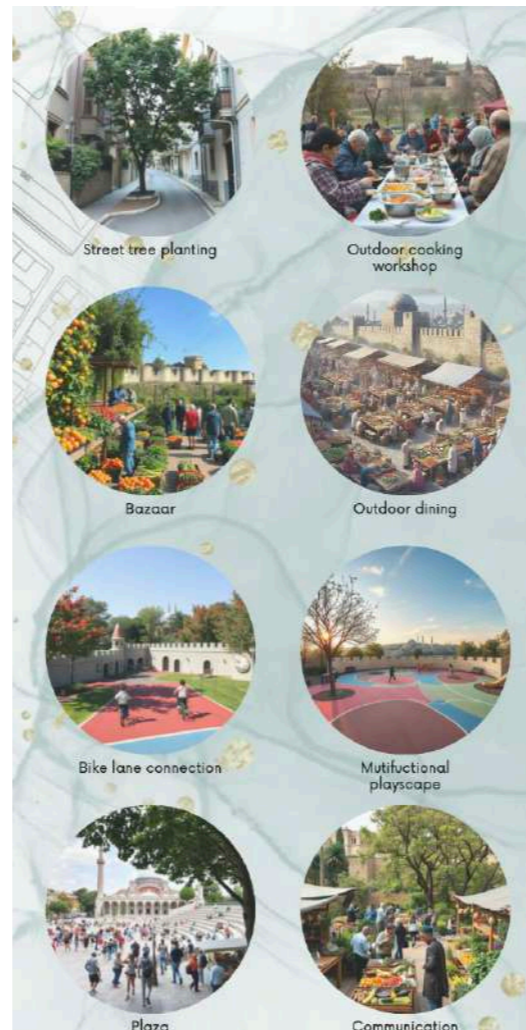
Heterotrophic Walls: Resilia for Vulnera Project is an inclusive landscape architecture project in the Ayvansaray district of Istanbul, aiming to increase urban resilience through social and structural ways. This district, which draws attention with its historical texture, has a palimpsest urban texture with Byzantine, Ottoman and Armenian cultural heritages, while at the same time hosting socially separated profiles such as low-income group, high-income group, radical groups and vulnerable groups. The project proposed to create various public spaces in order to transform this diversity into a potential that

will increase resilience both physically and socially with the concept of inclusivity rather than a threat of isolation and separation. The designed areas; create economic justice by bringing people from all economic segments together such as community gardens, community kitchens, bostans, bazaars and workshop areas. These gardens are maintained by local community members, which encourages a sense of ownership and responsibility. Socially, the gardens provide common areas for residents to come together, work together and establish social ties.





From an urban planning perspective, vegetable gardens contribute to the green space in the urban environment, increase biodiversity and improve air quality. A special market area is designed to sell the products grown in vegetable gardens.



TREES

Key	Latin Name	Common	Trunk Circum. (m)	Height (m)	Width (cm)	Sun Req.
ACECA	<i>Acer campestre</i>	Field Maple	20-22	10	5	☀
BETPE	<i>Betula pendula</i>	Silver Birch	20-22	10	4	☀ ☀
CARBE	<i>Carpinus betulus</i>	European Hornbeam	22-25	10	5	☀
CORCA	<i>Cornus capitata</i>	Himalayan Dogwood	18-20	6	3	☀
PLAOR	<i>Platanus orientalis</i>	Oriental Plane	25-30	12	10	☀
SALBA	<i>Salix babylonica</i>	Weeping Willow	22-25	8	5	☀
TILPL	<i>Tilia platyphyllos</i>	Large-leaved Linden	22-25	12	6	☀
ULMGL	<i>Ulmus glabra</i>	Wych Elm	22-25	15	6	☀ ☀

SHRUBS

Key	Latin Name	Common	Height (cm)	Width (cm)	Sun Req.
ARBUN	<i>Arbutus unedo</i>	Strawberry Tree	500	400	☀ ☀
BUXMI	<i>Buxus microphylla</i> 'Faulkner'	Littleleaf Boxwood	60	50	☀ ☀
GARJA	<i>Gardenia jasminoides</i> 'Radicans'	Creeping Gardenia	60	60	☀ ☀
GARJA*	<i>Gardenia jasminoides</i> 'Veitchii'	Veitchii Gardenia	150	100	☀ ☀
HYDAR	<i>Hydrangea arborescens</i> 'Annabelle'	Annabelle Hydrangea	100	100	☀
LAUNO	<i>Laurus nobilis</i>	Bay Laurel	150	200	☀ ☀
PITTO	<i>Pittosporum tobira</i> 'Variegata'	Variegated Japanese Pittosporum	150	150	☀ ☀
ROSSP	<i>Rosa spp.</i>	Rose	60	50	☀
SALOF	<i>Salvia officinalis</i>	Common Sage	40	45	☀
TAMTET	<i>Tamarix tetrandra</i>	Tamarisk	400	200	☀
VIBOP	<i>Viburnum opulus</i>	Guelder Rose	300	200	☀ ☀

This market includes vendor stalls, shaded seating areas and areas for community activities, creating a vibrant public space. The market becomes a hub for community interactions and promotes a sense of belonging and shared purpose. Economically, it provides a source of income for residents who sell their products, supports local economies and encourages entrepreneurship. The market is designed to be easily accessible, encouraging local trade and reducing the carbon footprint associated with food transportation. In addition, open public green areas, sustainable stormwater collection and solar ecology designs in infrastructure and superstructure designs integrated into the design increase permeability between the inside and outside of the wall, while also strengthening its ecological resilience. In the design, dramatic plants suitable for the Istanbul Marmara ecosystem and the religious atmosphere of Fatih were selected, ensuring that the planting design accompanies the structural design. Through these mechanisms, the project not only improves the urban environment but also strengthens the social structure and aims for a two-way resilience in Ayvansaray, both physically and socially.



VISUAL HISTORY

about team



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Agricultural Sciences
Sweden



Mohammed Khalid Al Harthi
King Abdulaziz University
Saudi Arabia



Shin-Yu Wang
Fujen Catholic
University
Taiwan



Hanting Huang
Tianjin University
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Izzy Shin
Pusan National University
South Korea



The most prominent feature of the area is the northern landwall of Istanbul. The wall, erected in the early fifth century AD, has been standing through the Byzantine, Ottoman and modern era. At the moment, the wall and the area surrounding it faces a variety of complications. Buildings have been creeping close to the wall, almost making it invisible to the surroundings, and thus making an important historical landmark fall into the realms of the forgotten. Further, the buildings are old, and the risk of them falling apart is prominent, making the area hazardous. Due to these problems, among others, the population is moving from the area.

With various design solutions we are going to make these historical remnants more prominent while at the same time providing recreational places for the local community. Clearing the area of the hazardous buildings and illuminating the historical landmarks will make the wall, as well as the old cemeteries residing in the area visible for the bypasser. Keeping and extending the local agricultural area, as well as making it communal will strengthen the neighborhood. Green areas for rest, recreation, play and other family activities will contribute to create a neighborhood where its inhabitants will flourish.



HISTORY OF THE WALL

● **5th century** (was built)
It were used for military and public purpose.

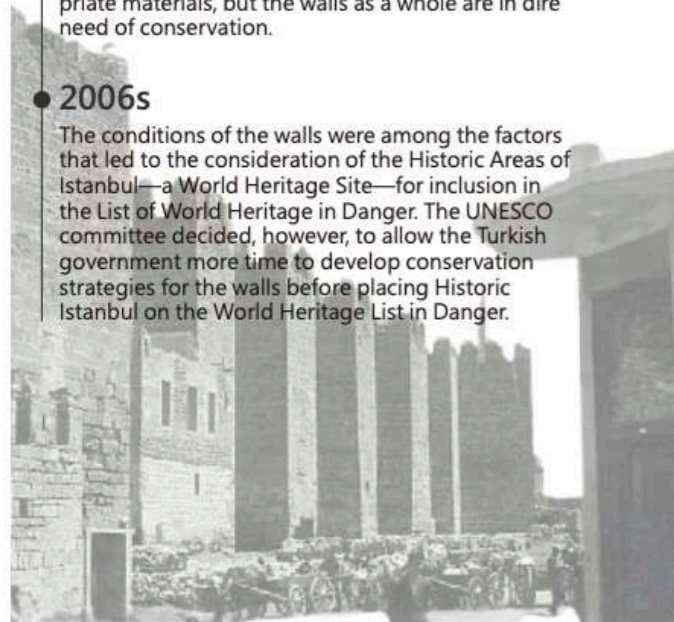


● **1204s**
The land wall was breached for the first time.

● **1453s**
The land wall was breached for the second time.

● **1894s**
An earthquake in 1894 damaged the walls, and with the troubled times of the late Ottoman Empire followed by two World Wars, there was little funding to support repairs. Sections have been restored in a piecemeal fashion and, in places, with inappropriate materials, but the walls as a whole are in dire need of conservation.

● **2006s**
The conditions of the walls were among the factors that led to the consideration of the Historic Areas of Istanbul—a World Heritage Site—for inclusion in the List of World Heritage in Danger. The UNESCO committee decided, however, to allow the Turkish government more time to develop conservation strategies for the walls before placing Historic Istanbul on the World Heritage List in Danger.



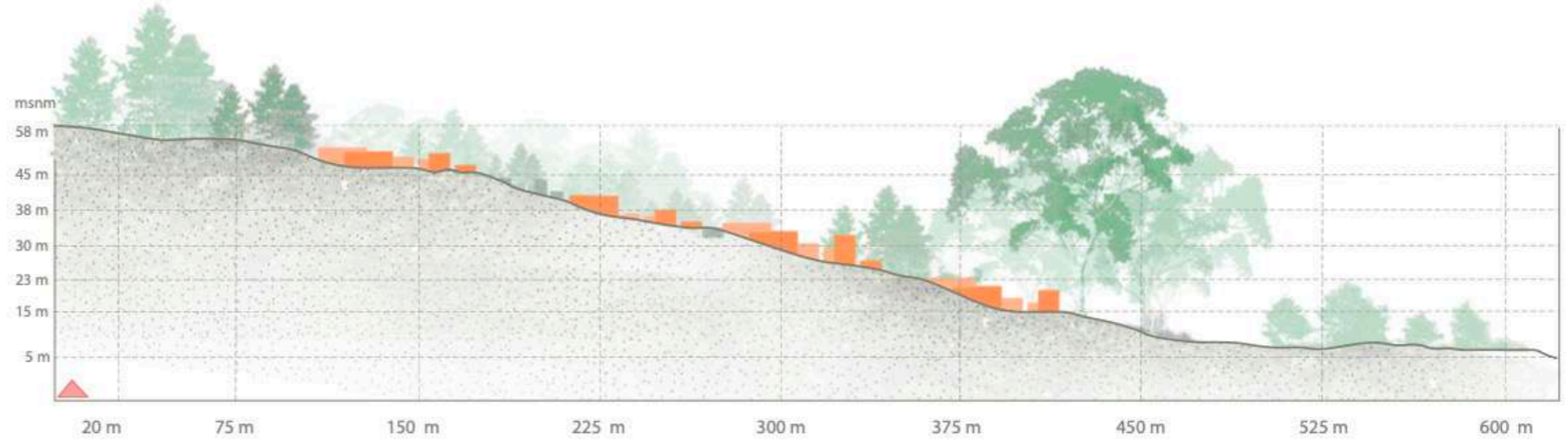
NEIGHBOURHOODS

HOUSING



The exterior walls of the residential buildings are finished in bright, high-saturation colors, which create a lively atmosphere on the streets and have a positive impact on the area's security.

TOPOGRAPHY

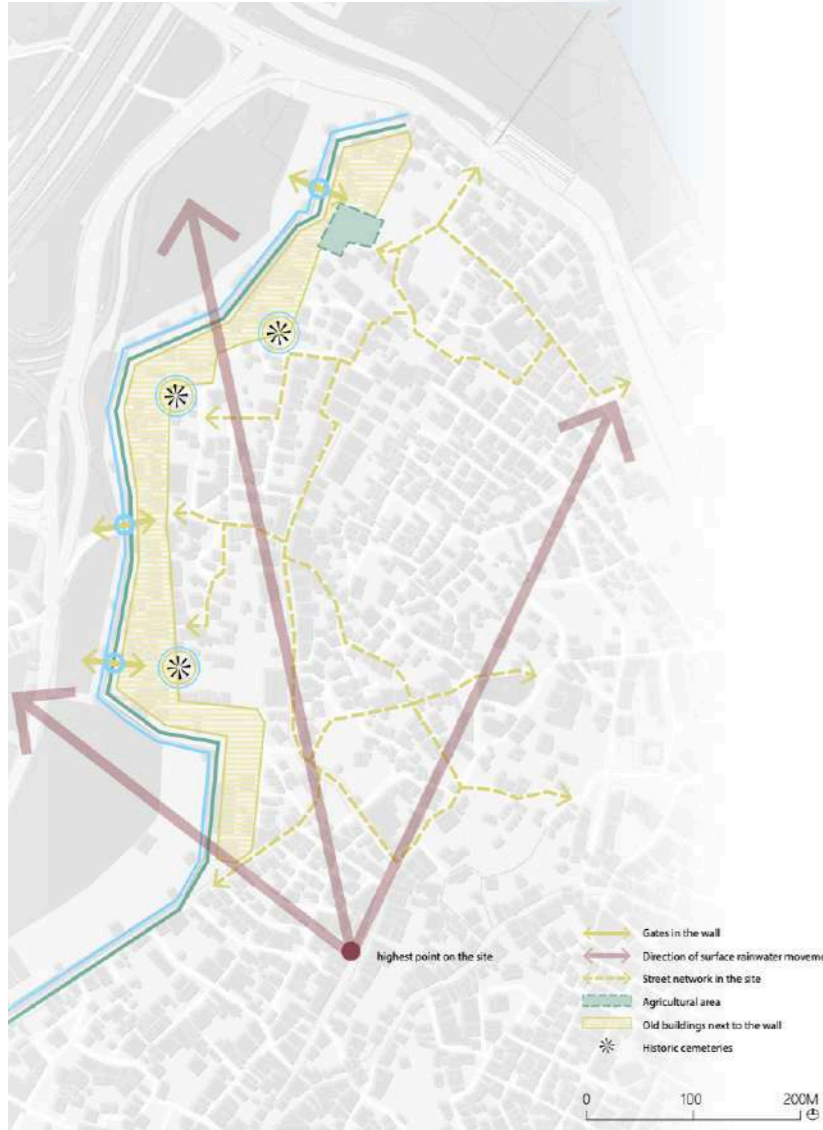


VEGETATION



SWOT Analysis

SWOT analysis, evaluating the strengths, weaknesses, opportunities, and threats of the area.



STRENGTH

- The wall and its history.
- The terraces, flattening out the steep topography.
- The agricultural areas, which provide food and are building community.

WEAKNESS

- The buildings in front of the wall are obstructing the view of both the wall and the landscape.
- Broken buildings create a hazardous area.
- The roads are narrow and the cars are driving fast. Combined with the lack of sidewalk, the road is becoming a threat to pedestrians.
- The area is lacking lights and might become dark and unsafe during nighttime.
- In some areas, the gates are closed, disrupting connectivity.

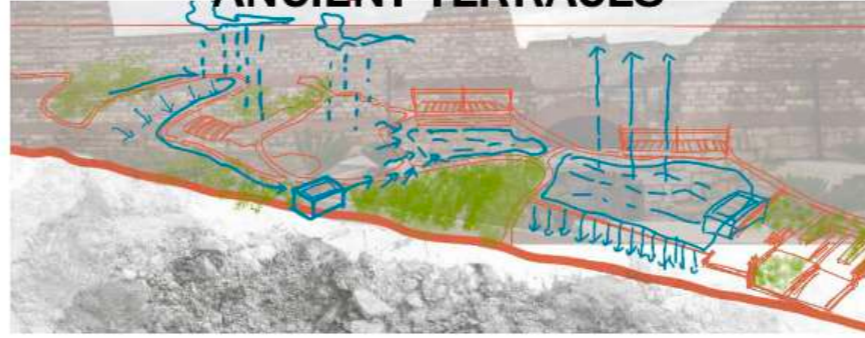
OPPORTUNITY

- The wall provides a great opportunity to learn about Turkish history.
- The gates, if we open them, the wall becomes less of an obstacle, and instead provide a connection with other parts of the city.

THREAT

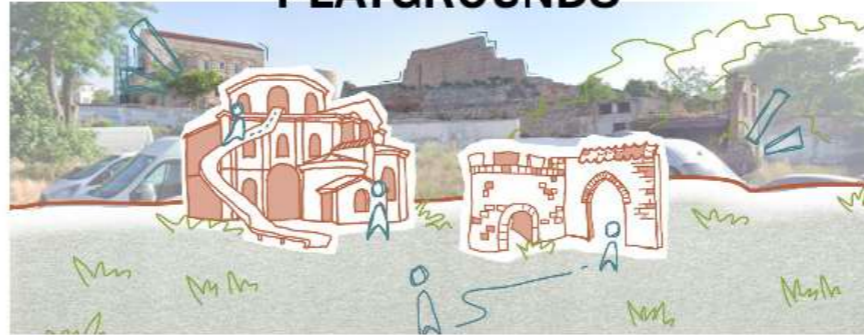
- The shallow drainage system gets flooded easily. Combined with the steep hills the flowing waters could flood houses and become dangerous to pedestrians.

ANCIENT TERRACES



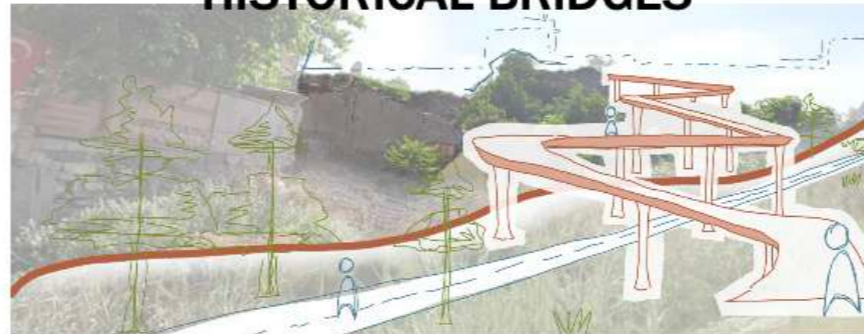
We want to keep the existing agricultural area, and extend it for the purpose of community gardening. Thus keeping the history of urban agriculture alive in the community.

PLAYGROUNDS



The playground imitates the historical site: a small version of the wall create an environment where children can safely explore the times of the past. The playground takes advantage of the terrain, with slides and climbing walls on the steeper parts.

HISTORICAL BRIDGES



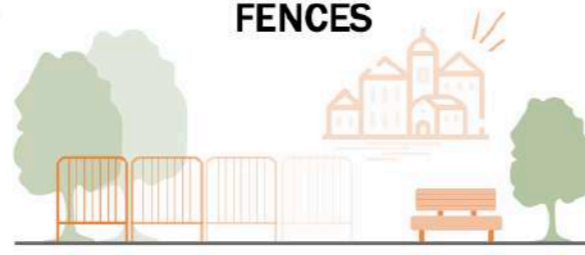
By clearing the area of illegal and broken buildings, vi will make the wall visible to the bypasser. Paths will be provided both beside, through and at one place above the wall, to allow the visitor to see the wall from different angles.

RESTORATION



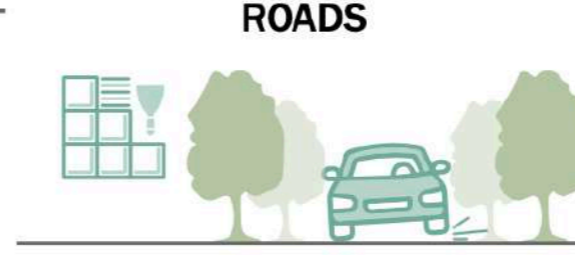
Restorations of the wall will be made with modern, native materials. This is to continue a long tradition of continuous building and restoration of the wall, making the wall not only a historical monument, but something living in the present.

FENCES



Fences obstructing the view over Istanbul will be removed, and the area will be transformed into a green park area, with benches, tables and plantations.

ROADS



We will reuse and extend the existing pattern of the bricks on the road, to keep the identity of the place while at the same time forcing the cars to drive slowly, as the bricks make a rather bumpy road.

Historical light

Adding lights on both sides of the path can make users safer.

Add lights to the land wall to make it easier for everyone to see and make it more lively.

Use lights to decorate house walls and echo light land walls.

Moving line

Routes in the park, connecting two attraction.

Add new entrance and increase outside and inside connection.

Set up a stepped path along the land wall and solve the problem of steep and difficult walking.

Create open space and open view

Remove illegal buildings to free up space and revitalize.

Improved wall visibility for residents.

Reduce car speed

Narrowing or twisting roads to reduce car speeds and improve residents' safety.

Waterways

The waterway along the land wall road and the water flows down according to terrain.

Make both sides of the road downward to form slopes and set up underground ditches.

TIMELESS CONNECTION

about team



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Türkiye



Faris Aiman Feda
King Abdulaziz University
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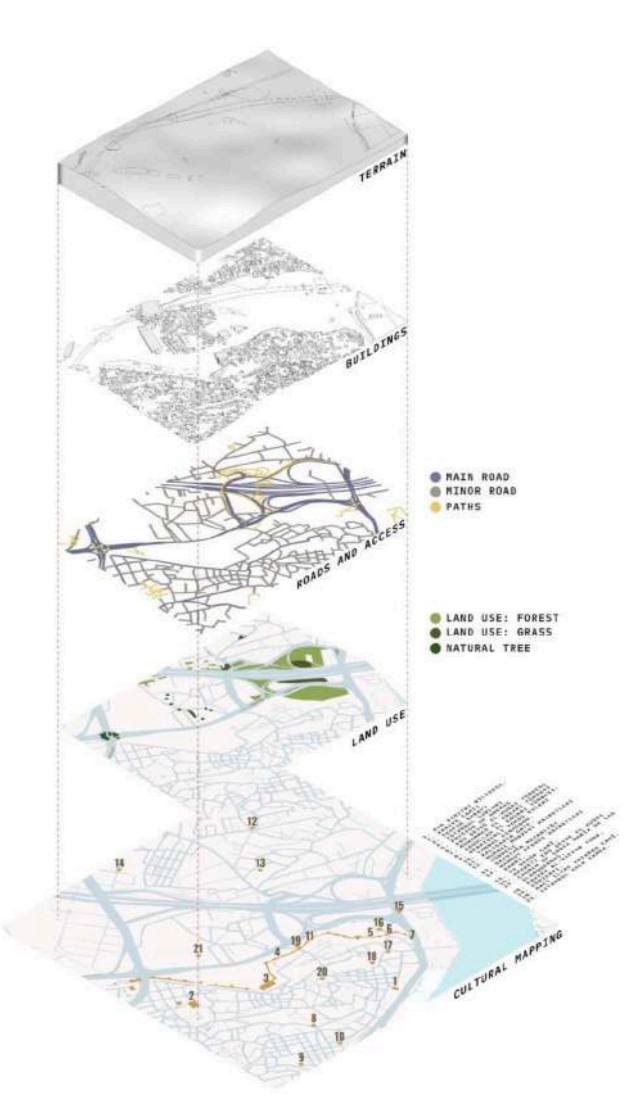
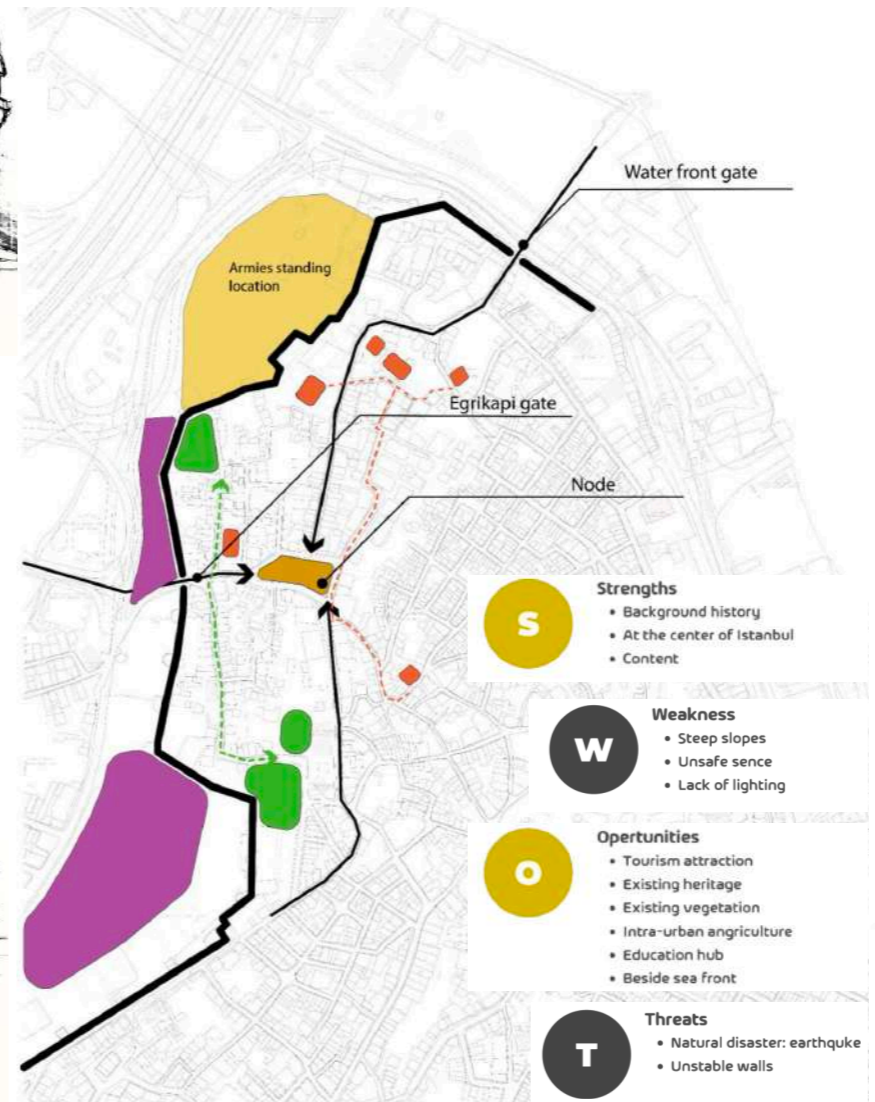
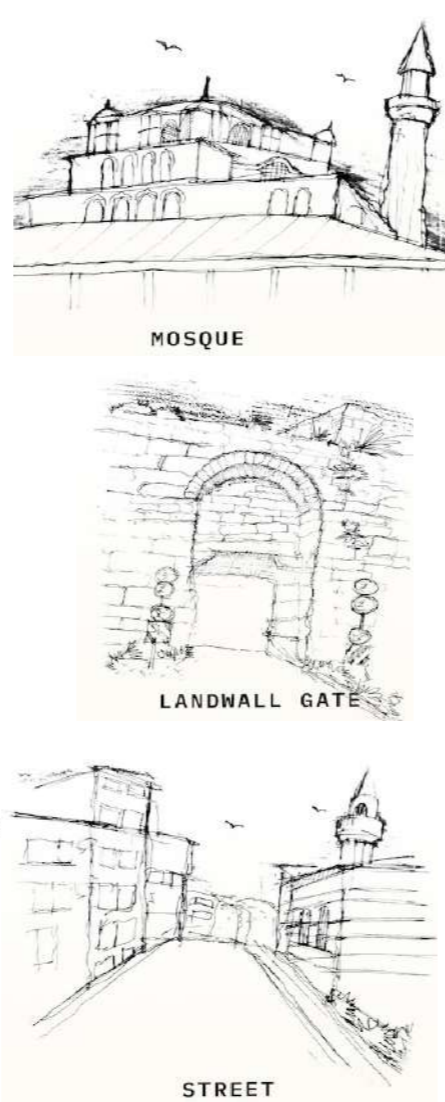


History
 About landwall and waterwall
 A land wall that surrounds and protects Constantinople, a wall that has existed since the Roman Empire was founded by Emperor Constantine.

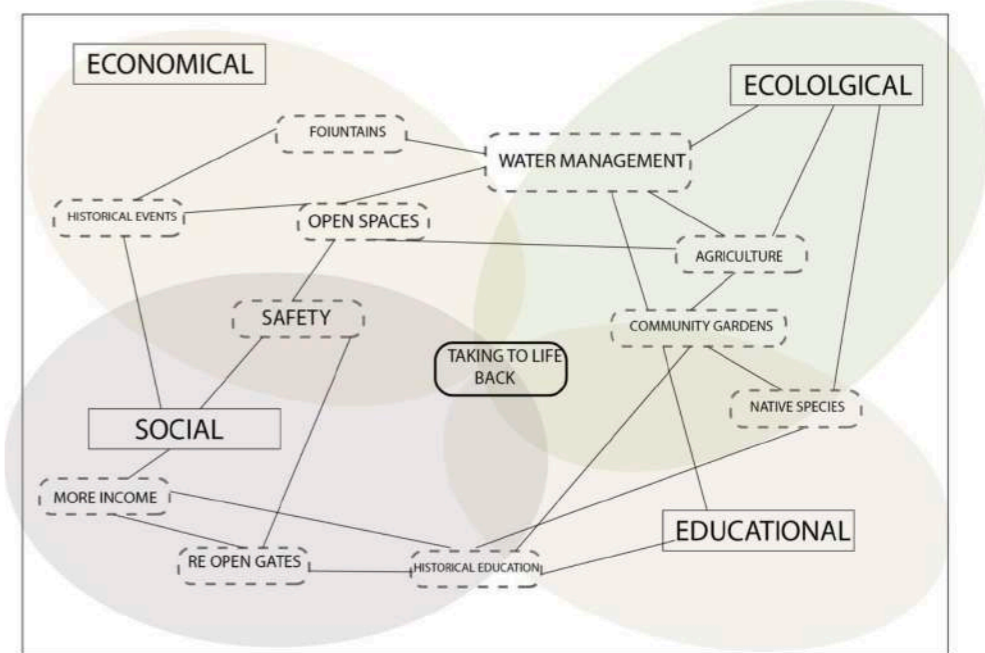
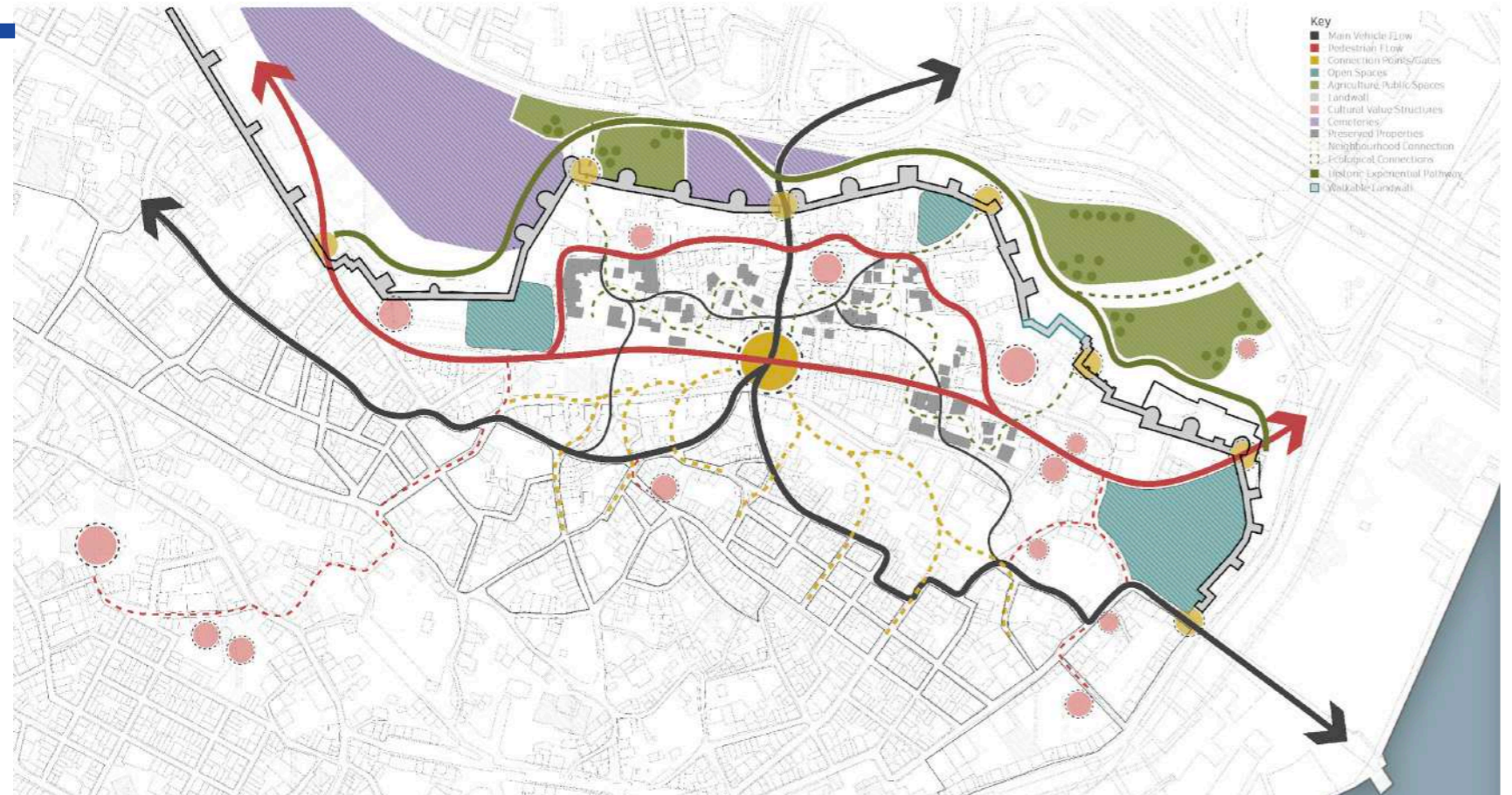
About historical church
 Considered one of the most beautiful Byzantine churches. It is located in the Fatih district of Istanbul. It was originally an Orthodox church, and its full name is "The Church of the Holy Savior in the Countryside"

Social combination
 The base is mostly occupied by residents and families, and even though it is located in Istanbul, you can find very few tourists. The population is mostly locals.

Ecology
 The city wall with historical value blocks ecological communication on both sides, so the base should be a space for ecological communication.



SPATIAL DESIGN PLAN



STRATEGIES

COMMUNITY AGRICULTURE

- Harvest rainwater by implementing green corridor collection systems throughout the urban area to support the public community gardens and urban farms.
- Promote local food production by providing opportunities for people learn and grow their own native produce.
- Reducing Noise pollution outside the walls through a buffer between the main street and the structures creating a public urban agriculture zone

HERITAGE PROTECTION

- Protect the land wall through a buffer to protect houses and way of life from these unstable walls
- Remove houses within a 40m buffer from the land walls to ensure safety from potential destruction in an earthquake event
- Provide visual connection to the land walls using low-impact design to protect the culturally significant structures and discourage physical contact

ACCESSIBILITY CONNECTION

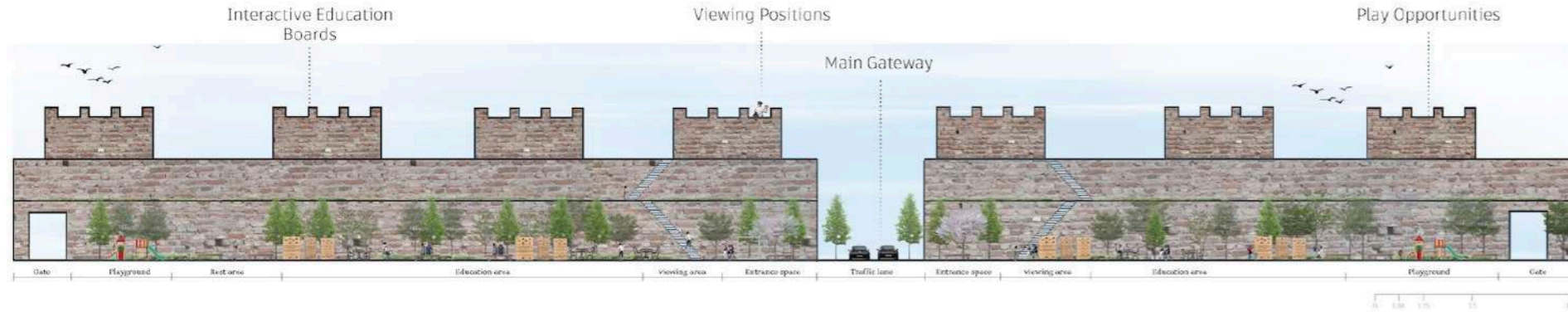
- Restore and reopen the historical gates to provide connection opportunities from surrounding areas to the cultural site
- Encourage tourist and local connection to the community gardens and central hub through strategic pathways to promote economic resilience to the area
- Improve walkability and safety of the site by implementing pedestrian only paths leading people through the heritage walkways

EDUCATION

- Interactive instalments providing historical context and information about the cultural significance of the site
- Educate local residents to promote sharing local knowledge of the history of the site, creating a cultural exchange
- Create outdoor learning spaces for local schools and children to interact with the cultural history of the site

AROUND THE WALL

It is hoped that the wall will have an educational and social function, so many recreational facilities and educational spaces will be added to attract tourists into the base.



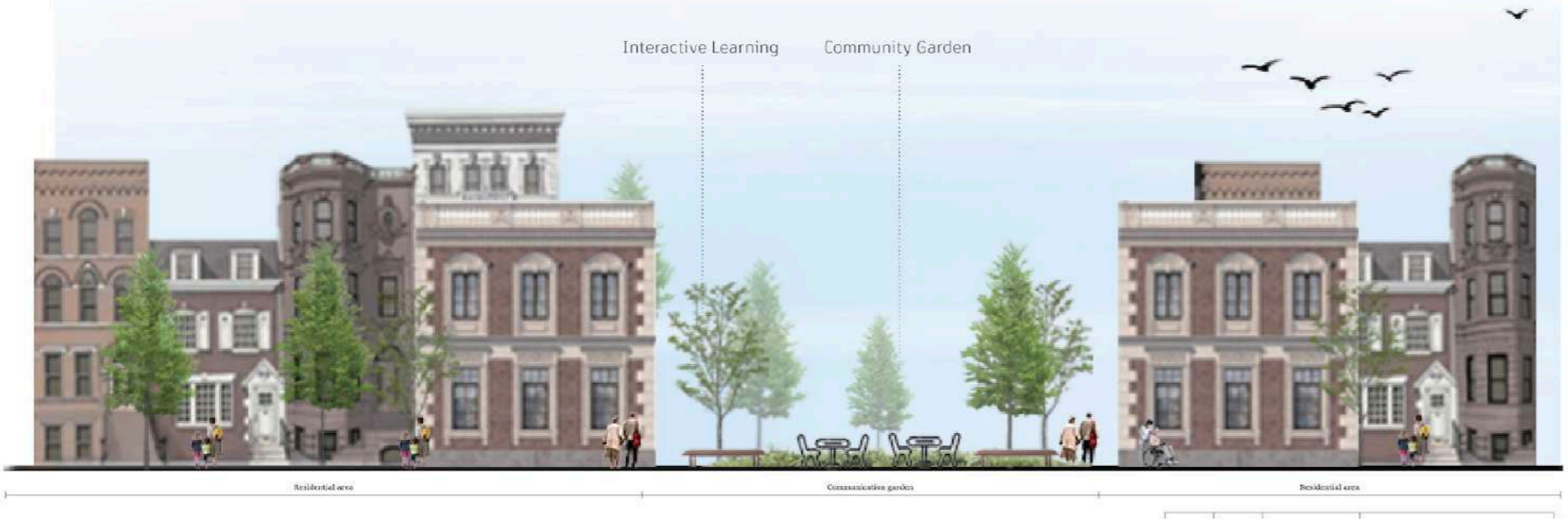
HISTORICAL CHURCH

Open spaces and green corridors are added around the church to connect the site.

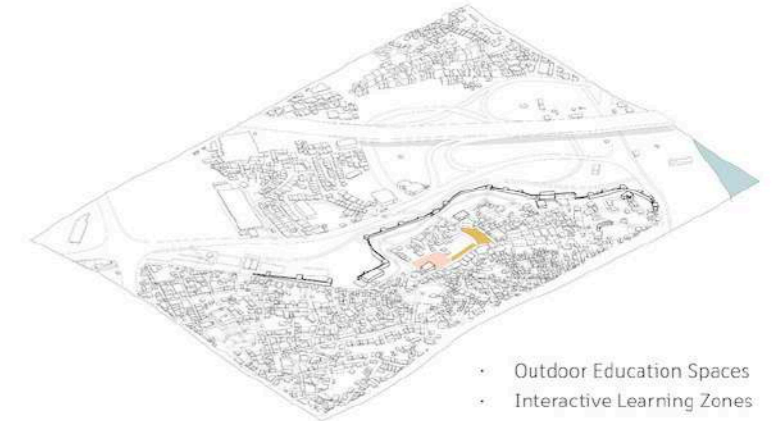


SOCIAL CONNECTION

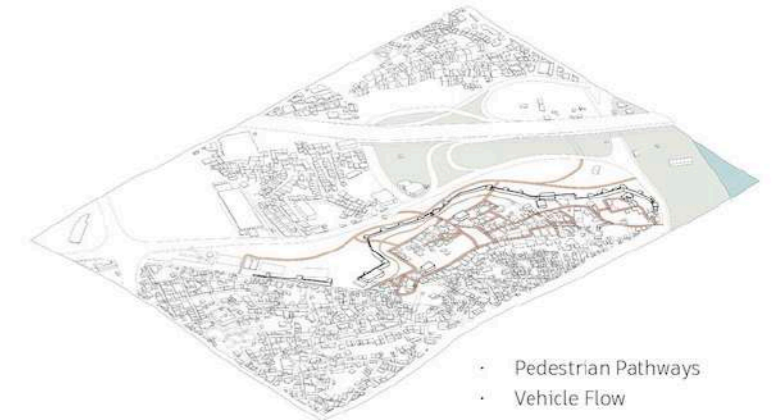
Most of the sites are residential areas, providing residents with social spaces and improving social connections.



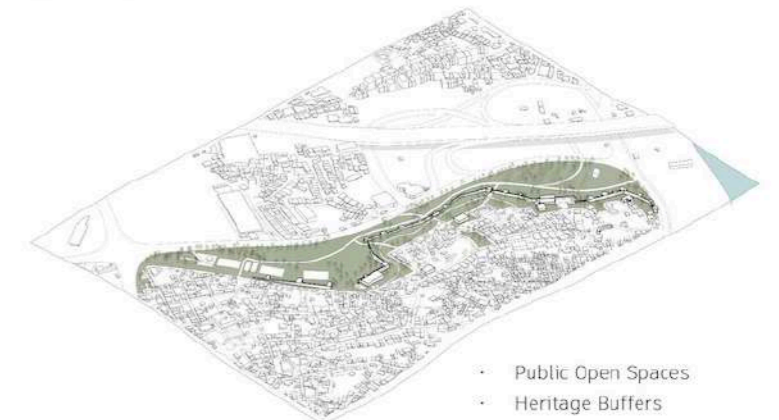
EDUCATION



PATH NETWORK



GREEN SPACE



WHOLE DESIGN



LIGHT OF OUR LIFE

about team



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Swedish University of
Agricultural Sciences
Sweden



Miranda Peck
South Dakota State
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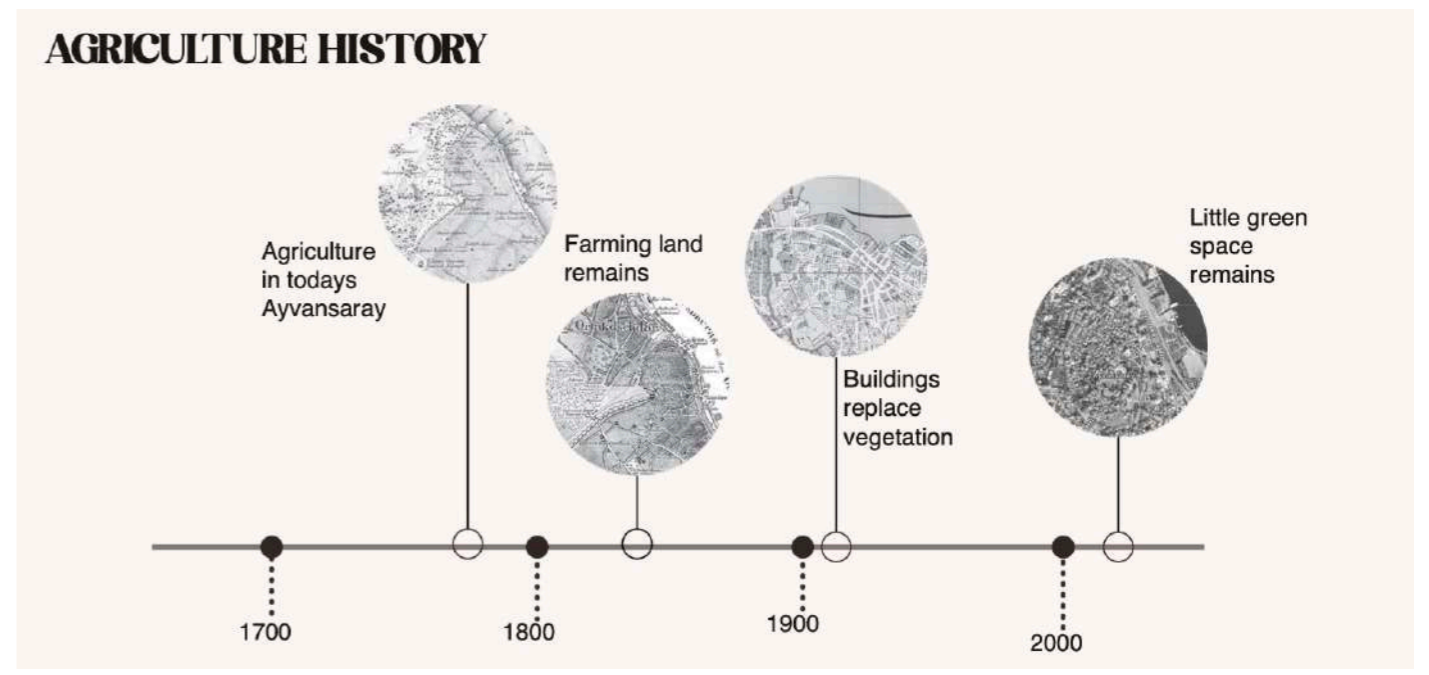
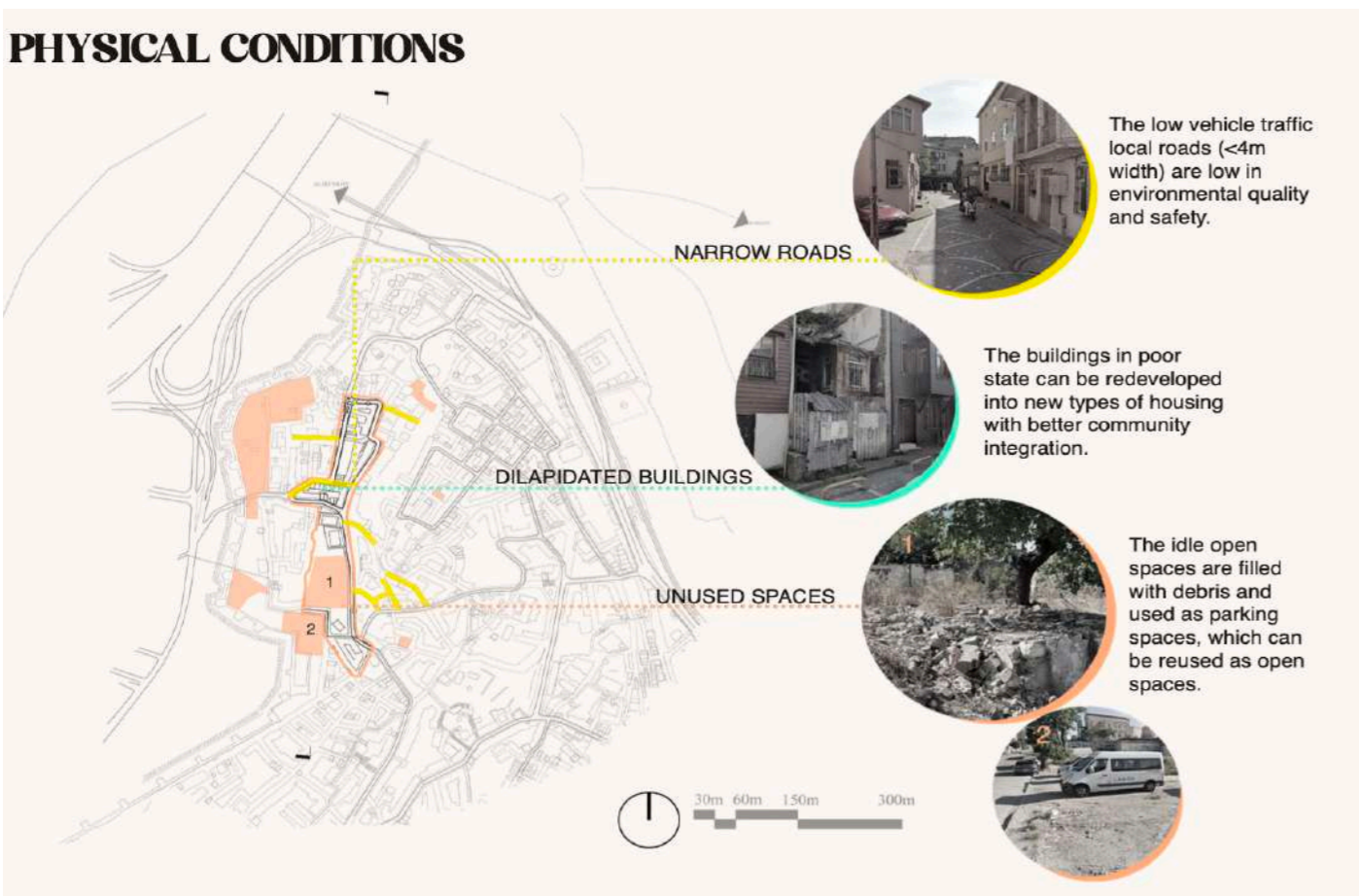
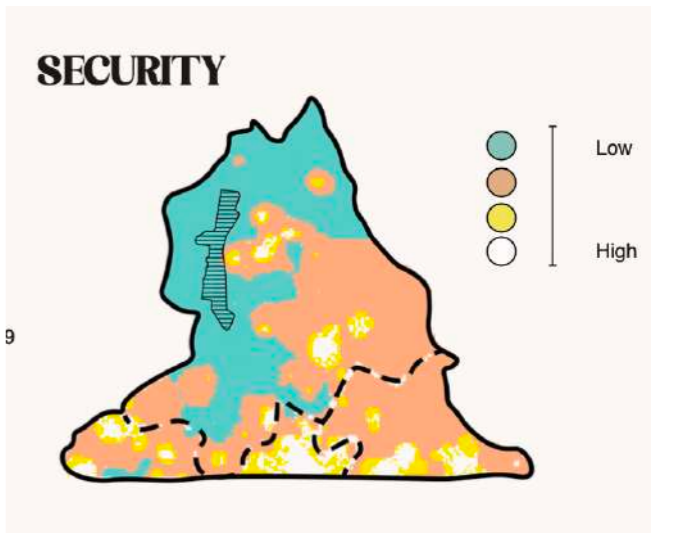
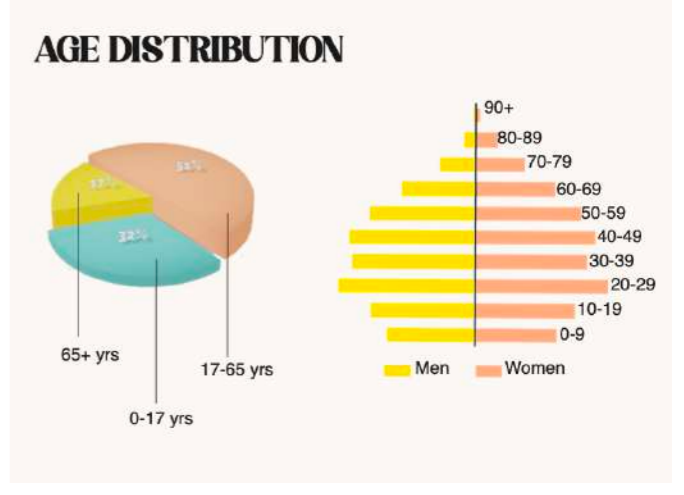
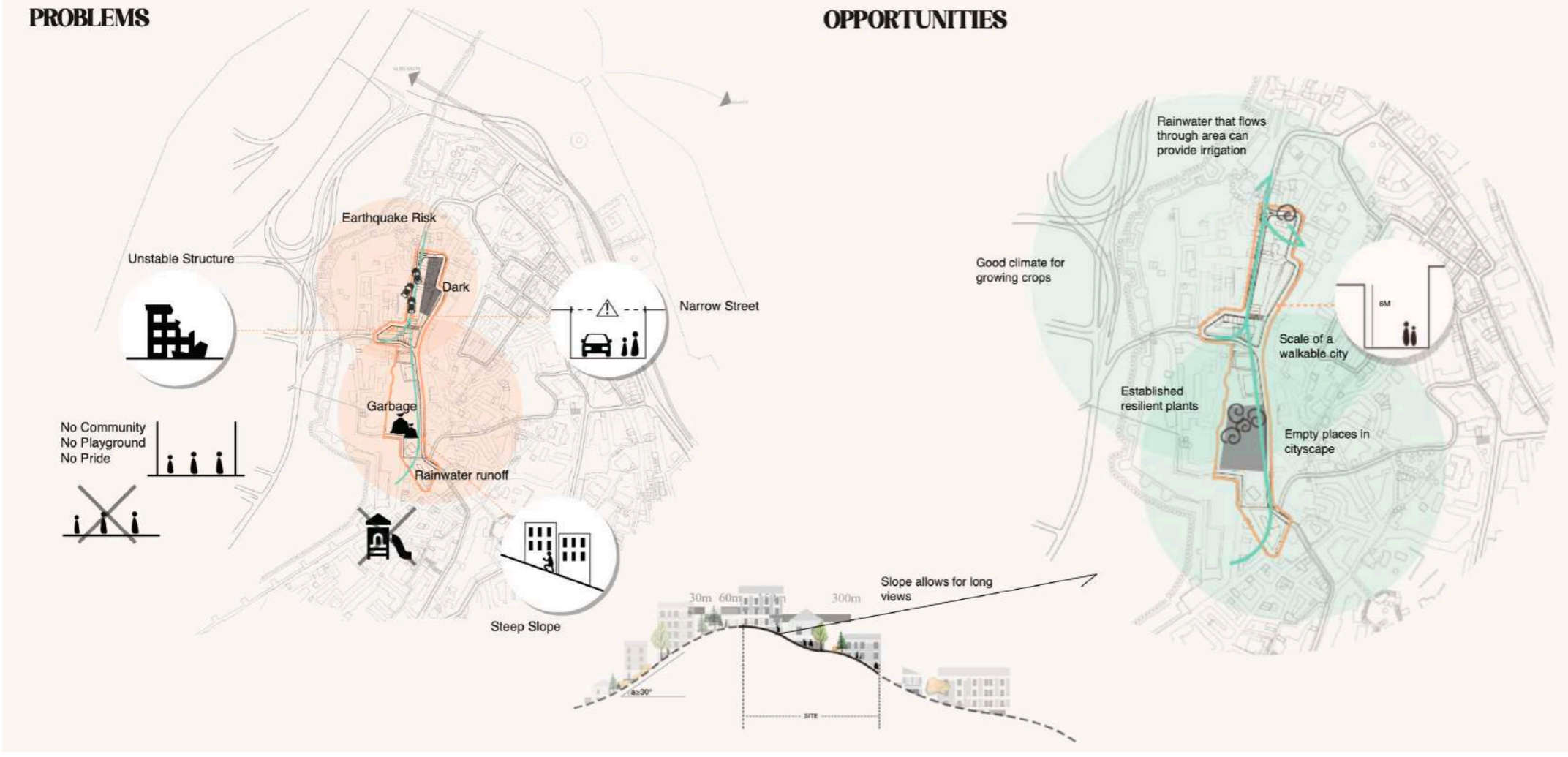


Yixin Chen
Tianjin University
China

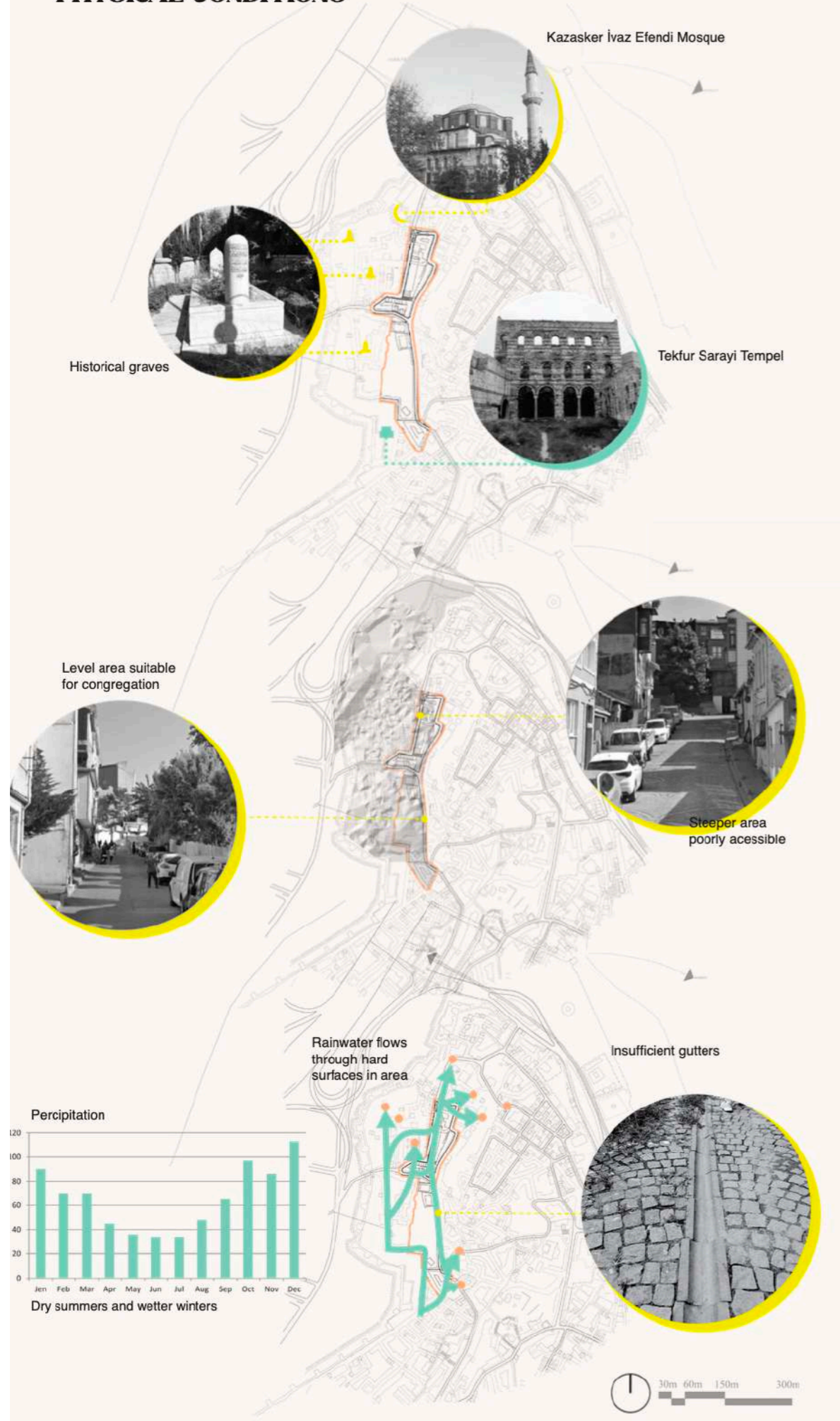


Carol Sze-Kei Ng
THEI- Technological and
Higher Education Institute
Hong Kong

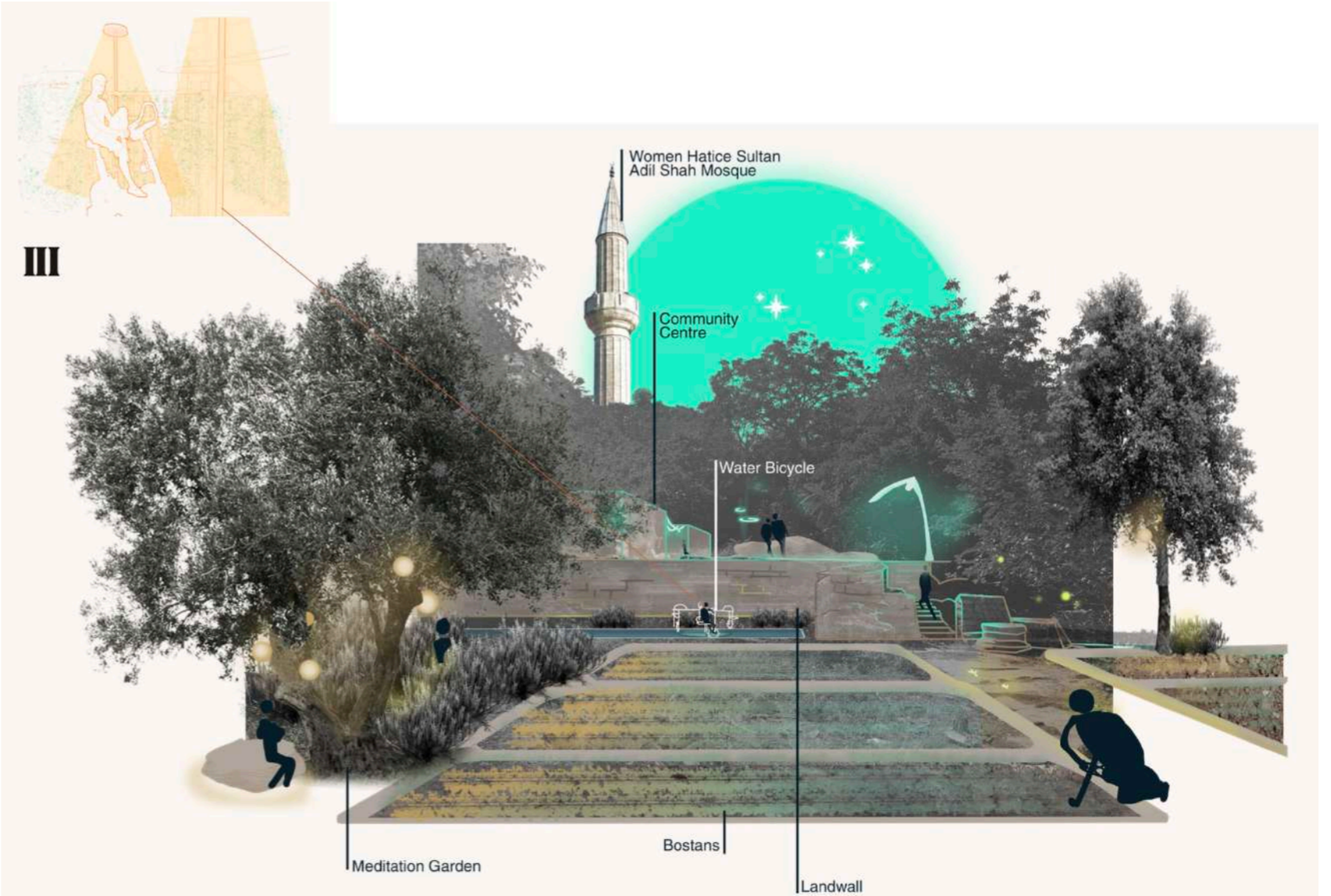
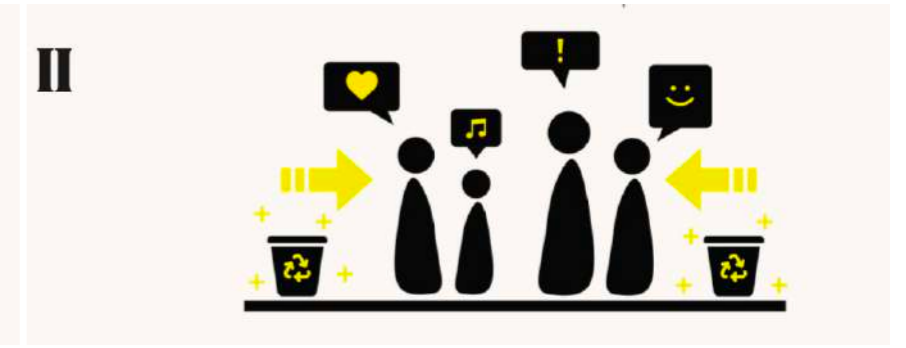
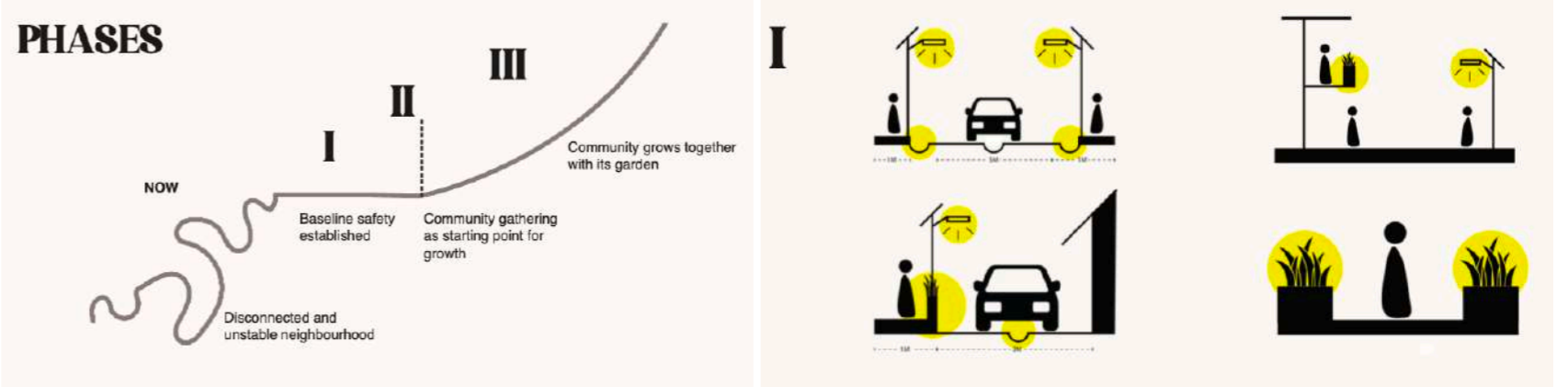




PHYSICAL CONDITIONS



PHASES



Student Reflection

Elif Sena Karakuş



Student Reflections

Elif Sena Karakuş

IFLA 2024 Student Charrette - Feedbacks from Students

"I would like to thank IFLA for organizing this opportunity, which gave me the first opportunity to work with talented students from different countries. Although the time is short, but also let us get into the state as soon as possible. I also felt the emphasis of different regions on design or planning from the exchanges of students from different countries. I hope to hear the views of local governments on site development planning and practical difficulties in the next workshop."

It was inconvenient because the dorm was too far away. Also, there was confusion because the schedule I knew in advance was different from the actual schedule. For example, because the dorm was far from the school, the start time was 10 AM instead of 9 AM, or there were delays in lunch or finishing times.

However, it was a very good experience and a memorable one. It was fun to share opinions with students from other countries and create a single logic.

The whole process was great. 1- Project scale should be 1/2000 and 1/1000, 1/500 makes it difficult to design within this time. Or instead, the project working day can be extended to 4-5 days. 2- It is very difficult to find original design ideas and project concepts in a limited time as a group, a main title can be given to project-oriented students and students can go into detail on that main title and produce original ideas. For example, the concept of water management can be selected and deepened in its sub-branches. 3- Online participants should be in groups with other online participants and a more detailed meeting plan should be prepared for online students.

Since I can't find you after we met, Here's my feedback for the charrett!!
I would appreciate it if you could prepare a pen for design work, a marker, or a material for modeling. Also, I would like the students' accommodation to be near the studio. I would appreciate it if you could provide a space to work throughout the night. Thank you to everyone who worked hard for the smooth event.

My recent experience was incredibly enriching, providing both personal growth and valuable insights. I learned not only new skills but also the importance of collaboration and adaptability in overcoming challenges. Each day brought unique opportunities to engage with others, fostering a sense of community that made the journey even more enjoyable. Reflecting on what I've gained, I feel inspired to set new goals and continue building on this foundation. Overall, it was a transformative experience that will undoubtedly shape my future endeavors.

I am very happy to be here, it is a great opportunity that does not come often. The location of the project is great and Istanbul is also great.

In a small time, we all gathered to work together. We learnt about each other's culture, ideas and so on. Really happy to be here. Hope to see everyone again soon.

Thank you for a full charrette! I learnt a lot. However, there are some organizational things that can improve.

1. Please try to keep Schedule properly, it helps organize work and expectations.
2. Accomodation closer to studio should be good to avoid long commute

I enjoyed getting to know other tutors and students. Thanks!

Thank you for a very educational and fun charrette!

My criticism concerns the online students; due to time differences it was hard to connect and further we had different experience of the site. Them being online which made it hard to include them in the charrette

It was a pleasure to meet so many new friends and will never forget the night spent together in Taksim Square. We had a great time brainstorming with our team members and it would have been better if we had more time to refine our design and presentation. Looking forward to seeing you all the next time.

A once in a life time experience with a lot of lessons learned.

The student charrette could be improved if the notification is earlier. I wish that the accomodation is near the student workshop. The accomodation could also be longer.

The student charrette was a great experience. For some suggestions I'd like to request for a faster and earlier processing of the ifla boards for our documents necessary for visa applications. Maybe free dinner too and better Access to the internet.

But overall it was a great charrette! Goodluck and have fun next year.

- Please consider travel time and distance between accomodation and venue
- Improve communication with online students
- Easy Access to printer and model materials
- Clear signs for students arriving at the accomodation
- On the page of requirements, clearly write and explain presentation slides instead of "digital format" as not many people were prepared for that

Positive

- Very good accomodation conditions
- Interesting Project
- Helpful critique of tutors
- Involvement of many universities
- Opportunity to communicate with ifla members
- Very helpful coordinators (Elif, Meryem and Arda were taking care well)

Negative

- Hard Access to printers and scanners
- No internet in dorms
- Far location of accomodation to studios (lot of time loss in transportation)
- Unclear method of communication with online participants
- Site inspection could be more guided or oriented (since for most of students its first time in Istanbul) We have not visited key places of the site.
- The fact that participation was obligatory and we had to pay 180 euros, that we did not participate was not stated in intiall brief on the website

I would appreciate it if you could prepare a pen for design work, a marker or a material for modelling. Also, I would like the students accomodation to be near the studio. I would appreciate it if you could provide a space to work throughout the night. Thank you everyone who worked hard for a smooth event

My recent experience was incredibly enriching, providing both personal growth and valuable insights. I learned not only new skills but also the importance of collaboration and adaptability in overcoming challenges. Each day brought unique opportunities to engage with others, fostering a sense of community that made the journey even more enjoyable. Reflecting on what I have gained, I feel inspired to set new goals and continue building on this foundation. Oveall, it was a transformative experience that will undoubtedly shape my future endeavours.

Photo Gallery















