



T.C.
İSTANBUL TEKNİK ÜNİVERSİTESİ
REKTÖRLÜĞÜ
Uluslararası Değişim Programları Ofisi

Sayın
Doç. Dr. Derya Güleç Özer,

Erasmus + Blended Intensive Program (BIP) desteğiyle (2023-1-TR01-KA131-HED-000162406-1) a [TRH] **Augmenting Thresholds: Sustaining Architectural Heritage of Istanbul LandWalls** projesini, Mart-Haziran 2025 tarihlerinde çevrimiçi seminerler, 19-27 Temmuz 2025 tarihleri arasında ise İstanbul'da yüz yüze çalıştaylar şeklinde; İTÜ Mimarlık Fakültesi ev sahipliğinde; University of Granada (İspanya), University of Porto (Portekiz), University of Applied Sciences Nysa (Polonya), University of Politecnico (İspanya) ve Politecnico di Milano (İtalya) gibi uluslararası üniversitelerin yer aldığı 50'ye yakın akademisyen ve lisans/lisansüstü öğrencinin katılımıyla; **yürütücü** olarak başarıyla tamamlamıştır.

ITU Proje ekibi:

Yürütücü: Doç. Dr. Derya Güleç Özer

Araştırmacılar: Prof. Dr. L. Figen Gül, Prof. Dr. Seden Acun Özgünler, Doç. Dr. Ayşegül Akçay Kavakoğlu, Arş. Gör. Ecem Karabay Özder, Arş. Gör. Burak Delikanlı, Mimar Elif Erkol.

Saygılarımla,

İmza
Erasmus Kurum Koordinatörü
Prof. Dr. Esra Çapanoğlu Güven

adına Dr. Derya Güleç Özer

Erasmus + Blended Intensive Program

Virtual Activities March-June 2025 (online)

Physical Activities 19-27 July 2025, Istanbul

Augmented Thresholds

Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH] Istanbul

This certificate is presented to,

Derya GÜLEÇ ÖZER

Istanbul Technical University, Turkey

in recognition of her invaluable contribution as a member of the **organization committee** for the Erasmus+ Blended Intensive Program "Augmented Thresholds: Sustaining Architectural Heritage of Istanbul Land Walls."

Your dedication, commitment, and collaborative spirit were instrumental in the successful planning and execution of both the virtual sessions held between March-June 2025, and the in-person workshop hosted at Istanbul Technical University between July 19-27, 2025.

We sincerely thank you for your outstanding efforts.

On behalf of BIP Org. Committee

Assoc. Prof. Dr. Derya Güleç Özer

ITU Faculty of Architecture
Dean

Prof. Dr. Mehmet Küçükmehtetoğlu

Erasmus + Blended Intensive Program

Virtual Activities March-June 2025 (online)
Physical Activities 19-27 July 2025, Istanbul

Augmented Thresholds

Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

This certificate is presented to,

Derya GÜLEÇ ÖZER

Istanbul Technical University, Turkey

in appreciation of the valuable contribution as giving an online seminar on "Introduction to a[TRH Istanbul]: Digitalization of Architectural Heritage" during the Erasmus+ Blended Intensive Program "Augmented Thresholds: Sustaining Architectural Heritage of Istanbul Land Walls" on 22.03.2025.

Your expertise and insightful presentation greatly enriched the academic depth of the program and inspired meaningful engagement among participants during the virtual sessions

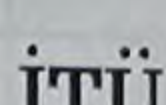
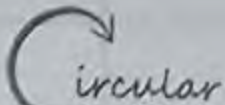
We are grateful for your generous support and intellectual contribution.

On behalf of BIP Org. Committee

Assoc. Prof. Dr. Derya Güleç Özer

ITU Faculty of Architecture
Dean

Prof. Dr. Mehmet Kuçukmehmetoğlu



Erasmus + Blended Intensive Program

Virtual Activities March-June 2025 (online)

Physical Activities 19-27 July 2025, Istanbul

Augmented Thresholds

Sustaining Architectural Heritage of Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH] Istanbul

This certificate is presented to,

Derya GÜLEÇ ÖZER

Istanbul Technical University, Turkey

in sincere appreciation of their outstanding contribution as **conducting a workshop** "Documenting/Storytelling/Experiencing: Virtual Realities of Landwalls" during the Erasmus+ Blended Intensive Program "Augmented Thresholds: Sustaining Architectural Heritage of Istanbul Land Walls."

Held between 19–27 July 2025 at Istanbul Technical University, the on-site workshop greatly benefited from your guidance, expertise, and commitment to interdisciplinary collaboration. Your efforts played a pivotal role in shaping the intellectual and creative outcomes of the program.

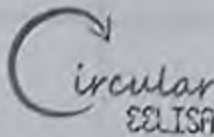
We thank you for your dedication and meaningful engagement with the participants.

On behalf of BIP Org. Committee

Assoc. Prof. Dr. Derya Güleç Özer

ITU Faculty of Architecture
Dean

Prof. Dr. Mehmet Küçükmehtemoglu



Virtual Activities
March-June 2025

Physical Activity
19-27 July 2025
İstanbul, Türkiye

Erasmus + Blended Intensive Programme

a[TRH]
istanbul

Augmented Thresholds

Sustaining Architectural Heritage of
Istanbul Land Walls

LIMINALITY

LOCAL

AUGMENTED

CIRCULAR ECONOMY

HERITAGE

EXTENDED REALITY

THRESHOLD

DIGITALIZATION

Editor:

Derya Güleç Özer, Phd (ITU)

Co-editors:

Ecem Karabay Özder, Msc (ITU)

Elif Erkol, BA (ITU, Maltepe Uni.)

Website Design:

Burak Delikanlı (ITU)

Contents

Presentation

*organization, partners, students,
collaborators, venue*

Program

virtual activities (seminars, workshops)

Results

*case studies on Istanbul Land Walls,
logo competition, workshop studios, master
level studies, undergraduate level studies*

References

useful weblinks, database and source

1

BIP General Activity Information

a. Organizaiton

Istanbul Technical University (ITU)

Assoc. Prof. Dr. Derya GÜLEÇ ÖZER
(Project Executive)

Prof. Dr. Figen GÜL
Prof. Dr. Seden ACUN ÖZGÜNLER
Assoc. Prof. Dr. Ayşegül AKÇAY KAVAKOĞLU
Res. Ass. Burak DELİKANLI (M.Sc.)
Res. Ass. Ecem KARABAY ÖZDER (M.Sc.)
Elif ERKOL (B. Arch.)

b. Partners

University of Granada (Spain)

Prof. Dr. Francisco J. ABARCA ALVAREZ
Assoc. Prof. Dr. Fernando OSUNA PÉREZ

University of Porto / FAUP (Portugal)

Prof. Dr. João Rodrigo PARREIRA COELHO

University of Applied Sciences in Nysa (Poland)

Prof. Dr. Agata PIET
Michał KACZMARZYK (M.Arch.)

Technical University of Madrid (Spain)

Prof. Dr. Justo Garcia NAVARRO

Politecnico di Milano (Italy)

Assoc. Prof. Dr. Nora LOMBARDINI
Miriam TERZONI (PhD)

c. Students

After the inter-institutional agreements and preparations were completed, the program was announced to interested students with an open announcement, and after a meticulous selection process, a total of 28 students from 5 schools were selected.

Istanbul Technical University (ITU)

Beyza Gül TOPÇU
İrem KEKİLLİ
Ayşe Tutku KILINÇ
Serra ACARTÜRK
Begüm ÖZCAN
Orsola D'ALESSANDRO

University of Applied Sciences in Nysa (Poland)

Marta KRYPEL
Wiktor WOLNY

University of Porto (Portugal)

Arthur MACHADO DINIS
Carolina DUARTE VAZ FÉLIX
Diego Aristófanes DIAS DE SOUSA



University of Granada (Spain)

Maria GARCIA MORA

Elena GONZALEZ RUIZ

Raúl Pavel HOLTEI SOLDEA

Lourdes PACHECO BRAVO

Freddy QUELIS OROZCO

Álvaro RUIZ SÁNCHEZ

Lucia TRINIDAD MARTINEZ

Politecnico di Milano (Italy)

İlayda ŞAHİN

Zeynep ZORLU

Hanqing FEI

Margherita ANGELI

Vimala Sakshi GANGU

Letizia DOMENICALE

Xingyu LAI

Sicheng JIANG

Murad MIR-ZADA



UNIVERSIDAD
DE GRANADA



POLITÉCNICA



IBB
MİRAS | IBB
kültür



d. Collaborators

Circular EELISA

IBB Miras

IBB Kültür

Prof. Dr. Marc Aurel SCHNABEL
(Xi'an Jiaotong-Liverpool University)

Prof. Dr. Figen Kivılcım ÇORAKBAŞ
(Bursa Uludag University)

Prof. Dr. Hayriye EŞBAH TUNÇAY
(Istanbul Technical University)

Assoc. Prof. Dr. Pınar AYKAÇ LEIDHOLM
(Middle East Technical University)

Assoc. Prof. Dr. İmge AKÇAKAYA WAITE JR.
(Istanbul Technical University)

Assoc. Prof. Dr. Serdar AYDIN
(Mardin Artuklu University)





<https://mim.itu.edu.tr/genel-bilgi/>

e. Venue

TAŞKIŞLA: ITU Faculty of Architecture

Taşkıışla was designed by British architect Williams James Smith to provide Mekteb-i Tıbbiye with a contemporary masonry structure for education. Its construction began in 1847, originally planned as a medical school and hospital. In 1944, it was allocated to Istanbul Technical University and repurposed as the Faculties of Architecture and Civil Engineering.

Taşkıışla, with its rectangular plan, features a large central courtyard with a pool at its center. The east and west façades are designated for academic staff, while the spaces facing the courtyard are used as workshops. Large amphitheatres are situated along the north and south façades. Designed in the Neo-Renaissance style, the building exhibits a balanced and refined architectural integrity, with horizontal cornices defining its structure and an entrance portico supported by eight fluted Ionic columns. (Tarihte TAŞKIŞLA- İTÜ Mimarlık Fakültesi, 2023)

Virtual and Physical Activities

f. Virtual and Physical Activities Schedule



The program of the virtual activities BIP organized (a minimum of 4 ECTS) is as follows:

Virtual Activity No 1_22.03.2025

Focus theme: General

Seminar [1]: “Introduction to a[TRH Istanbul]”

@13.00-13:45

Derya Güleç Özer, PhD, Istanbul Technical University

Seminar [2]: “[Land Walls & Green] Infrastructures” @13.45-14.30

Francisco J Abarca Alvarez, PhD, University of Granada

Break @14.30-15.00

Seminar [3]: “Interpreting and Presenting Archaeological Heritage in Urban Contexts” @15.00-15.45

Pınar Aykaç Leidholm, PhD, Middle East Technical University

Logo Design Competition/ Student Study Time
@ 15.45-18:00

Virtual Activity No 2_12.04.2025

Focus theme: Circular Economy and Management in Heritage Studies

Seminar [4]: “Circular Economy: General Overview” @ 13.00-13:30

Justo Garcia Navarro, PhD, Technical University of Madrid

Seminar [5]: “Circular and Collaborative Approaches to Urban Heritage Management @ 13.30-14.00 İmge Akçakaya Waite Jr., PhD, Istanbul Technical University

Break @14.00-14.30

Interactive Studio Time: Co-creation of Circular Infographics with a Heritage Focus @ 14:30-18:00

Virtual Activity No 3_26.04.2025

Focus theme: Preservation in Heritage Studies

Seminar [6]: *“Design of the Management Plan for the UNESCO World Heritage Site: Historic Centre of Córdoba” @ 13.00-13:45*

Fernando Osuna Perez, PhD, University of Granada

Seminar [7]: *“The knowledge of the monument in the frame of the management of UNESCO Heritage Sites” @ 13.45-14.30*

Nora Lombardini, Professor, Politecnico di Milano

Break @ 14.30-15.00

Student Study Time @ 15:00-18:00

Virtual Activity No 4_10.05.2025

Focus theme: Interaction Design in Heritage Studies

Seminar [8]: *“Crafting Interaction: From Data to Design” @13.00-13:45*

Ayşegül Akçay Kavakoğlu, PhD, Istanbul Technical University

Seminar [9]: *“Graphic mapping as a form of architectural illumination- non-invasive design of lighting systems for historic buildings” @ 13.45-14.30*

Michał Kaczmarzyk, PhD, University of Applied Sciences in NYSA

Break @14.30-15.00

Seminar [10]: *“Temporary uses as a way to re[activate] space” @ 15.00-15.45*

Agata Pięt, PhD, University of Applied Sciences in NYSA

Data Design Workshop by Ayşegül Akçay Kavakoğlu, PhD, Istanbul Technical University @ 15.45-16:30

Virtual Activity No 5_24.05.2025

Focus theme: Interaction Design in Heritage Studies

Seminar [11]: *“Immersive Wall Legacies: Intelligent Design Heritage” @ 13.00-13:45*

Marc Aurel Schnabel, PhD, Xi'an Jiaotong- Liverpool University

Seminar [12]: *“Heritage Interpretation through gamification in Yedikule/ Istanbul” @ 13.45-14.30*
Leman Figen Gül, PhD, Istanbul Technical University

Break @14.30-15.00

Seminar [13]: *“The Unheard Stream: Mardin’s Water Memory” @ 15.00-15.45*

Serdar Aydın, PhD, Mardin Artuklu University

Student Study Time @ 15.45-18:00

Virtual Activity No 6_21.06.2025

Focus theme: Istanbul Land Walls_Group Works

Seminar [14]: *“Istanbul Land Walls’ Heritage as a Driver of Economic, Social and Cultural Development” @13.00-13:45*

Figen Kivılcım Çorakbaş, PhD, Uludağ University

Seminar [15]: *“Istanbul Land Walls: From an Administrative Perspective” @13.45-14.30*

IBB Miras (Istanbul Metropolitan Municipality)

Break @ 14.30-15.00

Seminar [16]: *“Material Studies in Istanbul Land Walls” @ 15.00-15.45*

Seden Acun Özgünler, PhD, Istanbul Technical University

Group Works @ 15:45-18.00

Physical Activity

The program of the physical mobility
BIP organized (9 days, 72 hours) is as follows:

| 19.07.2025 Saturday | |
|---------------------|--|
| 09.30-10.30 | Registration (place: 126 Foyer- Taskisla Location) |
| 10.00-11.00 | Opening Speeches (place: 126) |
| | Prof. Dr. Mehmet Küpükmehtetoğlu, ITU (Dean of Faculty of Architecture) Prof. Dr. Seden Acın Özgünler, ITU (Head of Department of Architecture) Assoc. Prof. Dr. Derya Gülec Özer, ITU (BIP a[TRH] Coordinator) |
| 11.00-12.00 | Assoc. Prof. Dr. Aysegül Akçay Kavakoglu, ITU "Catch up: Data Visualization Session Part II" |
| 12.00-13.00 | Lunch |
| 13.30 | Departure from the gate of Faculty of Architecture (Taskisla Location) |
| 14.00-18.30 | Site Trip Yedikule Gazhane (Location) Yedikule Fortifications and Dungeons (Location) Landwalls (From Belgradkapı to Mevlanakapı Location) Tekfur Palace (Location) Anemas Dungeons (Location) |
| 19.00-21.00 | Welcoming Cocktail in Karasuriani Visitor Center (Location) |
| 21.00 | Buses leave the cocktail area to Taskisla |

| 20.07.2025 Sunday | |
|-------------------|---|
| 09.00-11.00 | Free time in Istanbul |
| 11.00-12.00 | Group Meetings at 217B-C (Second floor of Taskisla) |
| 12.00-13.00 | Lunch |
| 13.30-15.30 | Group Meetings |
| 15.30-16.00 | Coffee Break |
| 16.00-17.30 | Group Meetings |

| 21.07.2025 Monday | |
|-------------------|---|
| 09.30-10.30 | Group Meetings at 217B-C |
| 10.30-11.00 | Coffee Break |
| 11.00-12.00 | Group Meetings |
| 12.00-13.00 | Lunch at Taskisla Campus Student Lunchroom (Location) |
| 13.30-15.30 | Group Meetings |
| 15.30-16.00 | Coffee Break |
| 16.00-17.30 | Group Meetings |

| 22.07.2025 Tuesday | |
|--------------------|---|
| 09.00 | Meeting at Kabatas Ferry Terminal to Buyukada (Location) Check for the Ferry schedule here . |
| 10.45-13.00 | Island Group tour with architectural historian Dr. Nilay Özüü |
| 13.00-18.00 | Free Time on the island: You may enjoy a bike ride, hiking or sea side locations to swim. |
| 18.00-21.00 | Dinner at Buyukada Anadolu Klubu (Location) |
| 21.45 | Last ferry to Kabatas/ Istanbul (Location for Buyukada Ferry Terminal) |

| 23.07.2025 Wednesday | |
|----------------------|---|
| 09.30-10.30 | Group Meetings at 217B-C |
| 10.30-11.00 | Coffee Break |
| 11.00-12.00 | Group Meetings |
| 12.00-13.00 | Lunch at Taskisla Campus (Location) |
| 13.30-15.30 | Group Meetings |
| 15.30-16.00 | Coffee Break |
| 16.00-17.30 | Group Meetings |

| 24.07.2025 Thursday | |
|---------------------|-----------------------|
| 09.30-13.00 | Free Time in Istanbul |
| 13.30-15.30 | Group Meetings |
| 15.30-16.00 | Coffee Break |
| 16.00-17.30 | Group Meetings |

| 25.07.2025 Friday | |
|-------------------|---|
| 09.30-10.30 | Group Meetings at 217B-C |
| 10.30-11.00 | Coffee Break |
| 11.00-12.00 | Group Meetings |
| 12.00-13.00 | Lunch at Taskisla Campus (Location) |
| 13.30-15.30 | Group Meetings |
| 15.30-16.00 | Coffee Break |
| 16.00-17.30 | Group Meetings |

| 26.07.2025 Saturday | |
|---------------------|--------------------------|
| 09.30-10.30 | Group Meetings at 217B-C |
| 10.30-11.00 | Coffee Break |
| 11.00-12.00 | Group Meetings |
| 12.00-13.00 | Lunch |
| 13.30-15.30 | Group Meetings |
| 15.30-16.00 | Coffee Break |
| 16.00-17.30 | Group Meetings |

| 27.07.2025 Sunday | |
|-------------------|--|
| 10.30-12.00 | Final Presentations at 126: Group 1 Group 2 |
| 12.00-13.00 | Lunch |
| 13.30-16.30 | Final Presentations at 126: Group 3 Group 4 Group 5 |
| | Farewells |

g. Web site and data share information

You may follow our project through our website:
www.atrh.itu.edu.tr

The banner features a purple header with the ITÜ logo and navigation links. The main content area has a light pink background with a faint map of Istanbul. The title 'Augmented Thresholds' is prominently displayed in large, multi-colored letters. A circular badge indicates the application deadline. A text box at the bottom left provides details about the event, and a diagram on the right illustrates the project's focus on 'Liminality', 'Local', and 'Augmented' aspects.

ITÜ AUGMENTED THRESHOLDS SUSTAINING ARCHITECTURAL HERITAGE of ISTANBUL LAND WALLS

Home About Workshops Venue News Contact

Erasmus+ Blended Intensive Programme

a[TRH]
istanbul

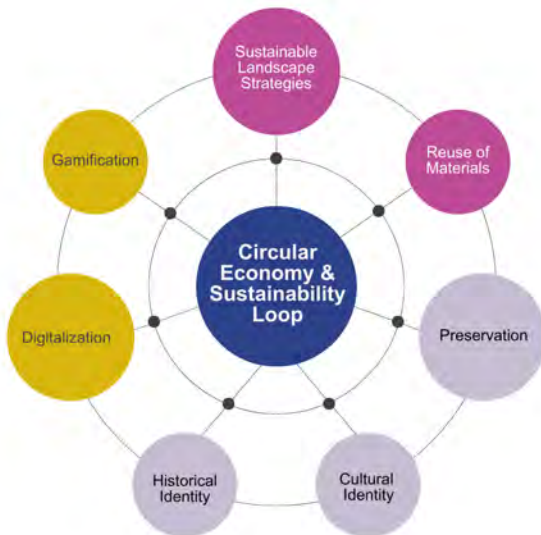
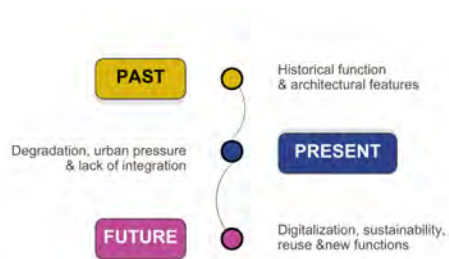
Application Deadline
7th
March

Augmented Thresholds

Sustaining Architectural Heritage of Istanbul Land Walls

The "Augmented Thresholds: Sustaining Architectural Heritage of Istanbul Land Walls (a[TRH] Vol 1)" event, organized by Istanbul Technical University (ITÜ) with support from the Erasmus+ Blended Intensive Program (BIP), will take place via online seminars (March-June '25) and in-person workshops in Istanbul (July 19-27, 2025). Approximately 40 participants, including academics and undergraduate/graduate students from six universities will come together for this event. The aim is to develop an interdisciplinary approach to preserving the Istanbul Land Walls and ensuring their sustainable future. The workshops will explore topics such as the dig-

TERMINALITY
LOCAL
AUGMENTED



h. General method and diagrams of our research

The transformation of the Istanbul Land Walls across different periods / The project's role in shaping their future

The past section focuses on the historical significance of the Land Walls, emphasizing their architectural features, defensive function, and cultural heritage.

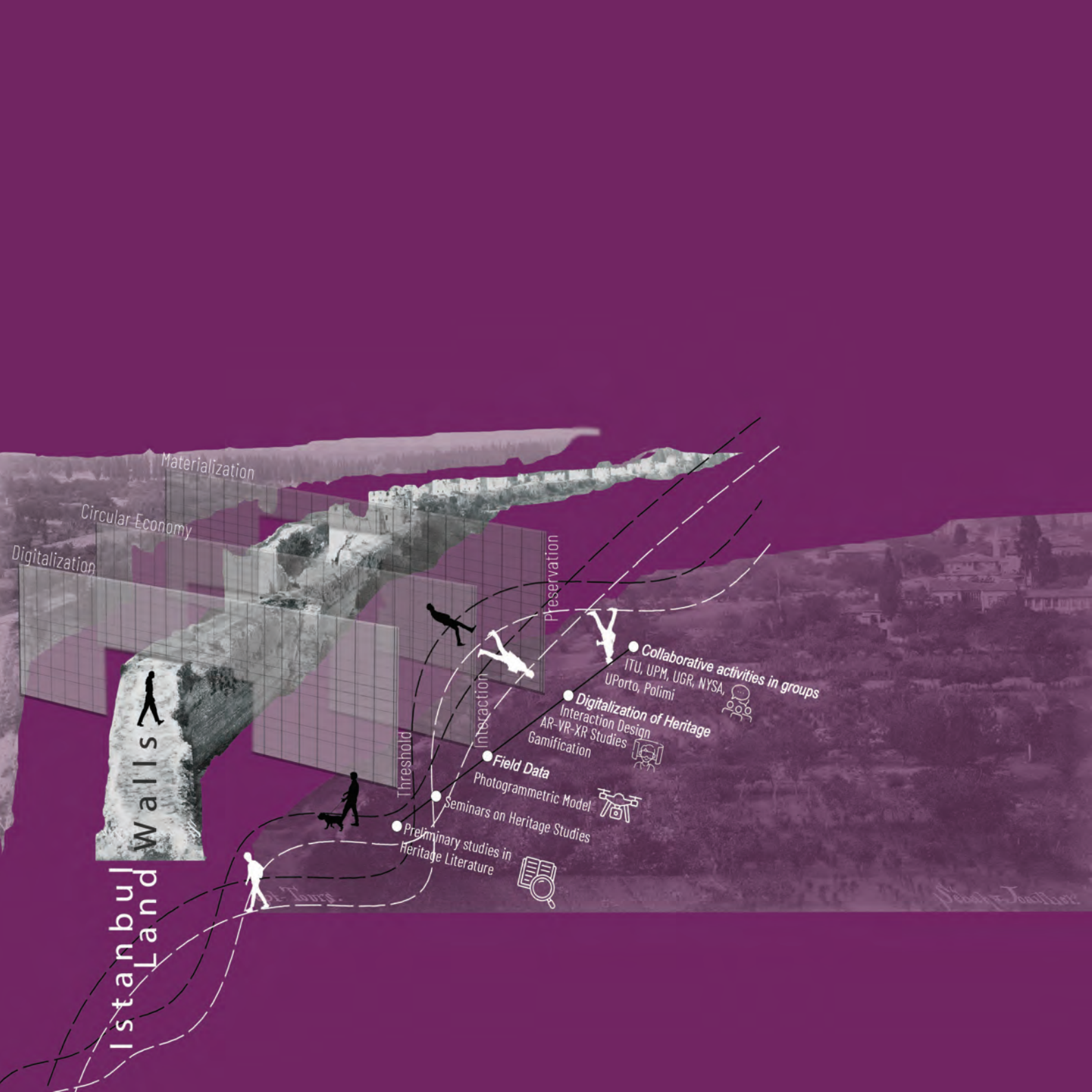
Moving into the present, the pressing challenges, such as physical degradation, urban encroachment, and the lack of integration with the contemporary city can be recognized. These issues underscore the urgent need for conservation and adaptive reuse.

The future should present a vision for sustainability, where digitalization, gamification, and circular economy principles play a key role in preserving and revitalizing the Land Walls.

This forward-looking approach ensures that the walls are not only protected as heritage but also reimagined as active elements within Istanbul's urban and environmental landscape, securing their relevance for generations to come.

The interconnected processes that ensure the long-term preservation and adaptive reuse of the Istanbul Land Walls

At its core, preservation is supported by digitalization and gamification, which enhance documentation, engagement, and awareness. The cycle also integrates reuse of materials, promoting a sustainable approach to architectural conservation. Sustainable landscape strategies further strengthen the environmental resilience of the site, while maintaining its cultural and historical identity ensures continuity between past, present, and future. This holistic framework fosters a dynamic and regenerative system, where heritage conservation and sustainability work together to create lasting value.



Istanbul Land Walls

Walls

Materialization

Circular Economy

Digitalization

Preservation

Interaction

Threshold

Collaborative activities in groups
ITU, UPM, UGR, NYSA,
UPorto, Polimi

Digitalization of Heritage
Interaction Design
AR-VR-XR Studies
Gamification

Field Data
Photogrammetric Model
Seminars on Heritage Studies

Preliminary studies in
Heritage Literature



Augmented Thresholds

Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme

a[TRH]
istanbul

22
03

[1]

Introduction to a[TRH] Digitalization of Architectural Heritage / Derya Güleç Özer / *Istanbul Technical University*

[2]

[Land Walls & Green] Infrastructures / Francisco J. Abarca / *University of Granada*

[3]

"Interpreting and Presenting Archaeological Heritage in Urban Contexts" / Pinar Aykaç Leidholm / *Middle East Technical University*

12
04

[4]

Circular Economy: General Overview / Justo Garcia Navarro / *Technical University of Madrid*

[5]

"Circular and Collaborative Approaches to Urban Heritage Management" / İmge Akçakaya Waite / *Istanbul Technical University*

26
04

[6]

Design of the Management Plan for the UNESCO World Heritage Site: Historic Centre of Córdoba / Fernando Osuna / *University of Granada*

[7]

The knowledge of the monument in the frame of the management of UNESCO Heritage Sites / Nora Lombardini / *Politecnico di Milano*

10
05

[8]

"Crafting Interaction: From Data to Design" / Ayşegül Akçay Kavakoğlu / *Istanbul Technical University*

[9]

Graphic mapping as a form of architectural illumination - non-invasive design of lighting systems for historic buildings / Michał Kaczmarzyk / *University of Applied Sciences in NYSA*

[10]

Temporary uses as a way to re[activate] space / Agata Pięt / *University of Applied Sciences in NYSA*

24
05

[11]

Immersive Wall Legacies: Intelligent Design Heritage / Marc Aurel Schnabel / *Xi'an Jiaotong - Liverpool University*

[12]

Heritage Interpretation through gamification in Yedikule/ Istanbul / Leman Figen Gül / *Istanbul Technical University*

[13]

The Unheard Stream: Mardin's Water Memory / Serdar Aydın / *Mardin Artuklu University*

21
06

[14]

Istanbul Land Walls' Heritage as a Driver of Economic, Social and Cultural Development / Figen Kıvılcım Çorakbaş / *Uludağ University*

[15]

Designing Along the Land Wall: Historic Neighborhoods on the Verge of Future Crises / Hayriye Eşbah Tunçay / *Istanbul Technical University*

[16]

Material Studies in Istanbul Land Walls / Seden Acun Özgünler / *Istanbul Technical University*

VIRTUAL EVENTS No.1

22.03

Virtual
Activity
No.1

**Augmented
Thresholds**
Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

[1]
Introduction to a[TRH]
Digitalization of Architectural
Heritage

Derya Güleç Özer
Istanbul Technical University

@13:00-13:45 (GMT+3)



[2]
[Land Walls & Green]
Infrastructures

Francisco J. Abarca
University of Granada

@13:45-14:30 (GMT+3)



[3]
"Interpreting and
Presenting Archaeological
Heritage in Urban Contexts"

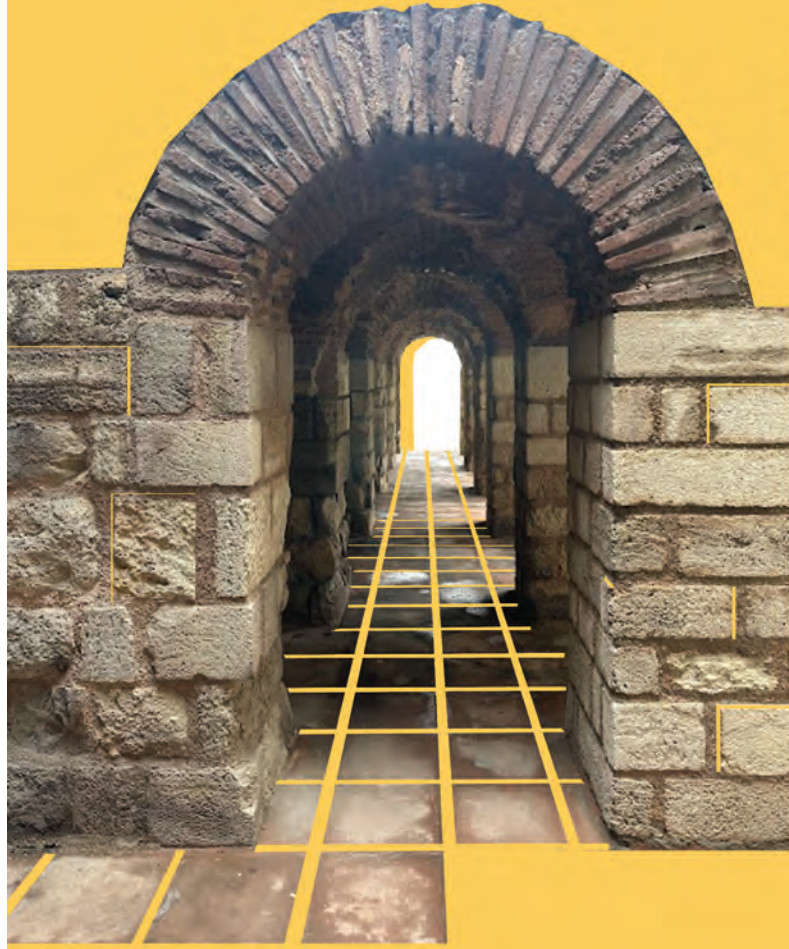
Pınar Aykaç Leidholm
Middle East Technical University

@15:00-15:45 (GMT+3)



*Student Study Time; Logo Design
*Competition @ 15:45-18:00





a[TRH] Augmented Thresholds

“Introduction to a[TRH Istanbul]”

Derya Güleç Özer, PhD, Istanbul Technical University

Augmented Thresholds “Sustaining Architectural Heritage of Istanbul Land Walls”

This Blended Intensive Programme spans half an academic year, and it is designed to be expanded in future editions at different locations, bringing together students from two different university cycles - undergraduate and postgraduate.

The project aims to develop an interdisciplinary approach to the protection of the Istanbul Landwalls and their transfer to a sustainable future. The workshop will address issues such as the digitalization of historical architectural and archaeological heritage, supporting it with gamification methods, addressing the LandWalls at environmental, urban, and landscape scales, evaluating architectural elements within the perspective of a circular economy, and strengthening the Land Walls as a threshold in historical, functional and periodic contexts. This comprehensive event aims to strengthen international cooperation while offering new approaches for the preservation and transfer of an important cultural heritage site such as the Istanbul Land Walls to the future.



“[Land Walls & Green] Infrastructures”

Francisco J Abarca, PhD, University of Granada

[Land Walls & Green] Infrastructures
Land Walls in historic cities are grey infrastructures nowadays, having lost their primary original protective purpose. However, their frequently empty surroundings can be reimagined as vibrant green spaces. By transforming these obsolete fortifications into interconnected systems of walls and open, green areas beyond the historic urban core, where cities can establish extensive, multifunctional green infrastructures. These spaces have the potential to be linked seamlessly with other urban parks and green zones, forming a significant ecological network that supports biodiversity, enhances urban climate resilience, and provides diverse ecosystem services through nature-based solutions (NbS). We will highlight successful international examples, demonstrating how cities worldwide have been revitalised with linear parks, green corridors, and integrated public spaces. These cases underscore the potential for heritage conservation combined with innovative landscape architecture and sustainable urban design, which can provide considerable environmental, social, and cultural benefits to contemporary urban environments.

Figure credit: “Park Systems in Ávila, Spain”, Ávila City Master Plan 2005, by University Institute of Urban Planning of the University of Valladolid directed by Juan Luis de las Rivas and Gregorio Vázquez Justel.



“Interpreting and Presenting Archaeological Heritage in Urban Contexts”

Pınar Aykaç Leidholm, PhD, Middle East Technical University

Interpreting and Presenting Archaeological Heritage in Urban Contexts

Heritage interpretation plays a significant role in connecting people with heritage places, highlighting their significance to a wider audience as a primary step towards conservation. In recent years, people-centred interpretation approaches have gained prominence, emphasising the active involvement of communities in meaning-making processes. These approaches recognise that heritage places have diverse meanings shaped by the varying associations individuals have with the place. This presentation explores how the significance of heritage sites can be effectively communicated to the public, with a particular emphasis on urban archaeological heritage. By following the fundamental steps in developing interpretative plans for heritage sites, the presentation provides an overview of key principles, methods, and practical issues of interpreting and presenting archaeological heritage within urban contexts.

Photocredit: “The Future Belongs to What Was as Much as What is” by Morag Myerscough, courtesy of English Heritage

VIRTUAL EVENTS No.2

12.04

Virtual
Activity
No.2

**Augmented
Thresholds**
Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

[4]
Circular Economy:
General Overview

Justo Garcia Navarro
Technical University of Madrid

@13:00-13:30 (GMT+3)



[5]
Circular and Collaborative
Approaches to
Urban Heritage Management

Imge Akçakaya Waite
Istanbul Technical University

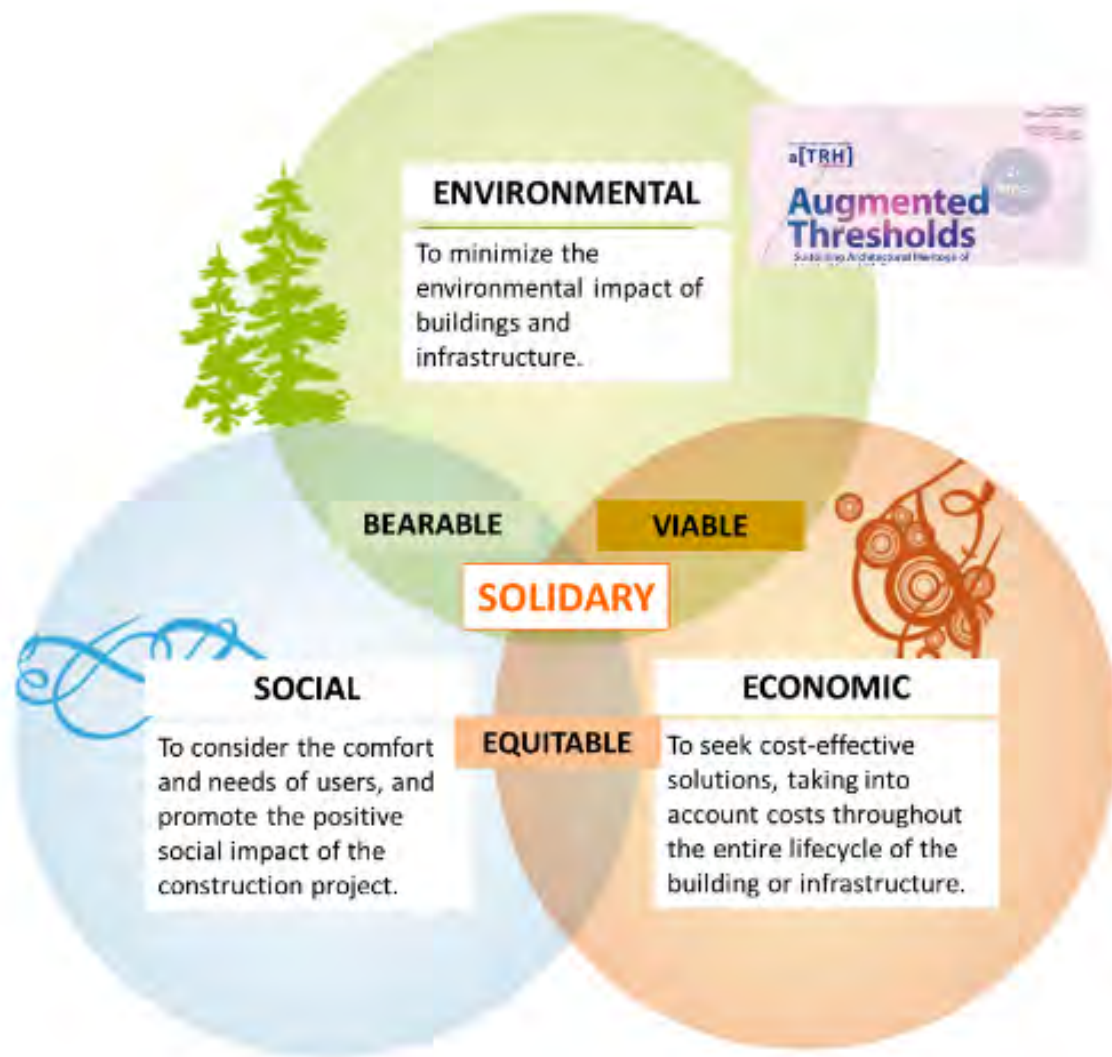
@13:30-14.00 (GMT+3)



*Break @14.00-14.30 (GMT+3)

*Interactive Studio Time: Co-Creation
of Circular Infographics with a
Heritage Focus @14.30-18.00 (GMT+3)



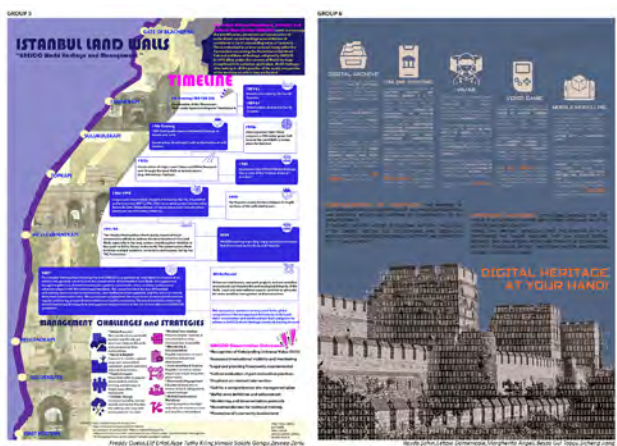
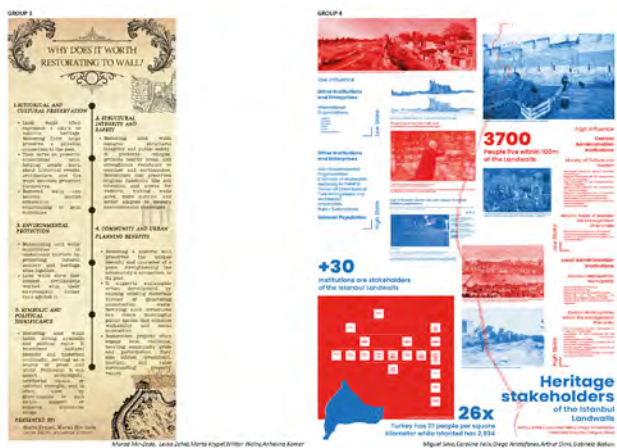


“Circular Economy: General Overview”

Justo Garcia Navarro, PhD, Technical University of Madrid

The aim of this session was to combine the paradigm of Sustainability, meeting the needs of the present without compromising the ability of future generations to meet their own needs; the demands of a new way of producing and consuming, avoiding any type of waste, proposed by the Circular Economy; and the goals of Built Heritage Protection and Conservation. Then, the idea is to maintain active some principles, when intervening in a Built Heritage:

- To holistically approach the project, balancing the different aspects (environmental, social and economic), looking for a space of compromise, a solidary space.
- To end waste, to take care of the management of the flow of materials, and to feed the cycle with renewable energy.
- To meticulously design the restoration and preservation of historic buildings or infrastructures, integrating at the same time contemporary needs and innovations, ensuring that these structures remain vibrant and functional for future generations.



“Circular and Collaborative Approaches to Urban Heritage Management

İmge Akçakaya Waite, PhD, Istanbul Technical University

The circular economy plays a vital role in educating future industry experts, especially those engaged in urban heritage management across Europe. As cities seek sustainable ways to preserve and adapt historical sites, integrating circular principles becomes essential for long-term environmental and cultural resilience. Equally important is raising public awareness about circular economy practices and their relevance to urban heritage, ensuring broader support and participation. Infographics serve a dual purpose in this context: as a design thinking tool that enhances youth learning by simplifying complex systems, and as a compelling visual medium to communicate key messages to the general public. Produced and conducted as part of the a[TRH]: Augmented Thresholds, the seminar entitled “Circular and Collaborative Approaches to Urban Heritage Management” and the accompanying workshop “Co-creation of Circular Infographics with a Heritage Focus” offered a hands-on platform to explore these intersections. A total of 30 students participated in the seminar and workshop, collaboratively producing six infographics focused on heritage and circularity themes of their choice. These outputs reflect strong teamwork, critical thinking, and creative engagement. The resulting heritage-themed circular infographics have since been disseminated through public social media and institutional channels, contributing to broader public understanding and interest in circular approaches to heritage management.

VIRTUAL EVENTS No.3

26.04

Virtual
Activity
No.3

**Augmented
Thresholds**
Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

[6]

Design of the Management Plan
for the UNESCO World Heritage
Site: Historic Centre of Córdoba

Fernando Osuna
University of Granada

@13:00-13:45 (GMT+3)



[7]

The knowledge of the monument
in the frame of the management
of UNESCO Heritage Sites

Nora Lombardini
Politécnico di Milano

@13.45-14.30 (GMT+3)



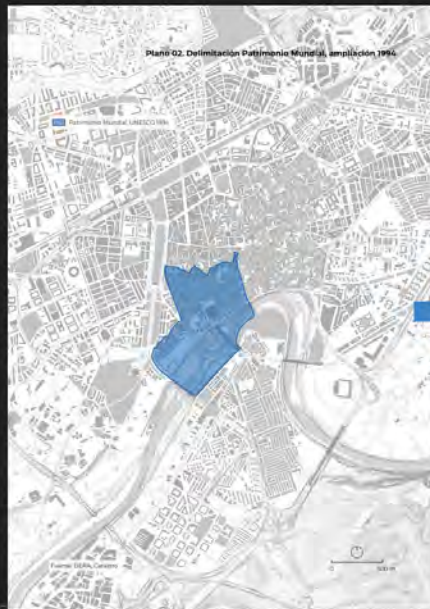
* Break @14:30-15:00 (GMT+3)

* Student Study Time @ 15:00-18:00 (GMT+3)

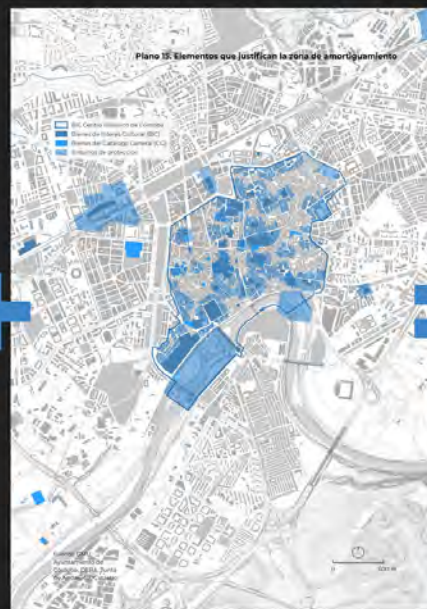


M.P. HISTORIC CENTRE OF CÓRDOBA. World heritage site buffer zone proposal

World Heritage Delimitation



Protected heritage elements



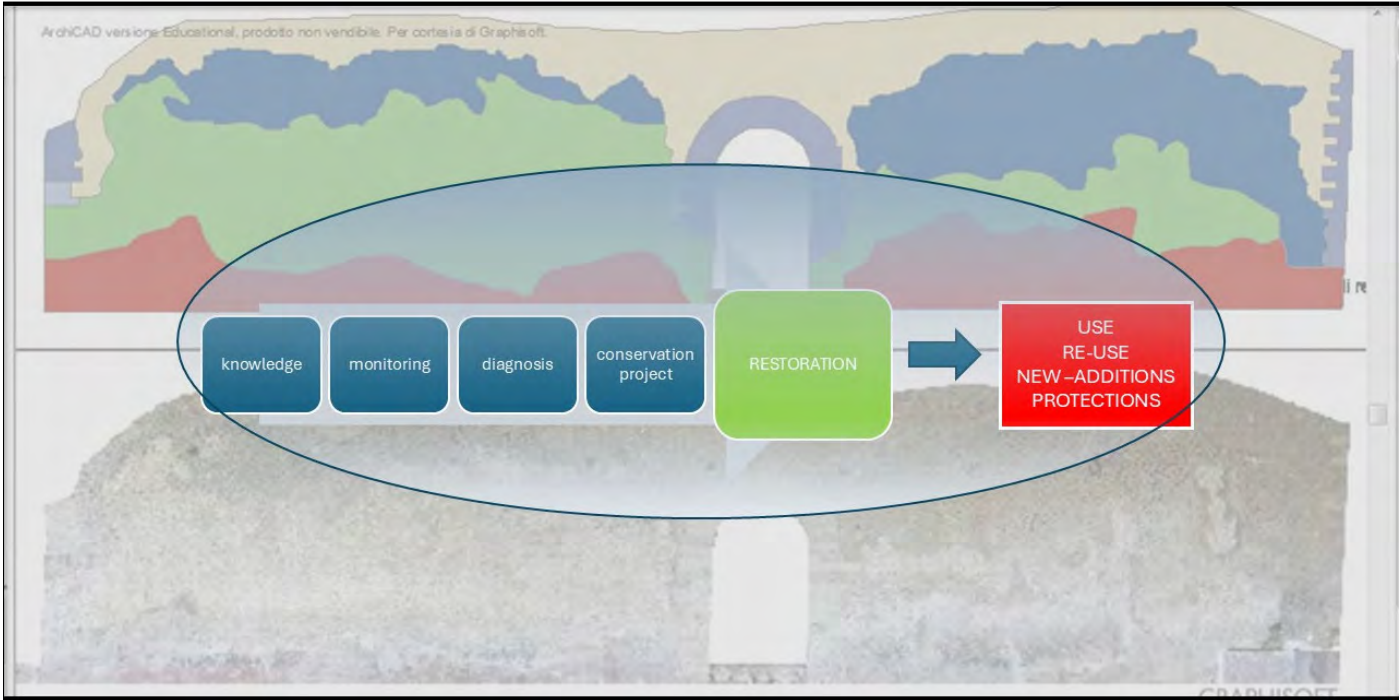
Proposed buffer zone



“Design of the Management Plan for the UNESCO World Heritage Site: Historic Centre of Córdoba”

Fernando Osuna, PhD, University of Granada

The Seminar presents the methodological framework developed for the Management Plan of the World Heritage site, the Historic Centre of Córdoba. Central to this framework is the integration of UNESCO's Historic Urban Landscape (HUL) approach, which provides a holistic understanding of the site beyond its physical boundaries. The methodology pioneers the systematic application of Heritage Impact Assessments to evaluate potential effects on the site's Outstanding Universal Value (OUV), originally centred on the Mosque-Cathedral. Key to the management strategy is defining the property's intricate attributes, acknowledging the interplay between tangible and intangible heritage elements within a broader geographical and historical context. The author's approach offers a structured process for applying HUL principles in practice. It establishes guidelines for integrating conservation strategies with sustainable development goals, crucial for historic urban areas. This involves defining a wider setting, including its relationship with the Guadalquivir River and the Caliphate City of Medina Azahara, and proposing a protective buffer zone. The research demonstrates how a methodology rooted in HUL and impact assessments provides an effective tool for the comprehensive management of complex World Heritage sites, balancing the preservation of historical integrity with the demands of contemporary urban life.



The knowledge of the monument in the frame of the management of UNESCO Heritage Sites”

Nora Lombardini, PhD, Politecnico di Milano

Monument is: “architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science” [<https://unesco.cultura.gov.it/en/management-plan/>]. It is not only a document capable of remembering the past and contributing to the definition of the identity of a specific cultural context, but also of stimulating a dialogue between “different cultures”. The conservation of the “monument” is therefore an action that must not concern a single cultural expression, generally made to coincide with a specific geo-political context, but must be an intercultural action through a bottom-up process, even if managed through top-down interlocutory actions. The monument represents our cultural and natural heritage, which, as the UNESCO reports, “are both irreplaceable sources of life and inspiration” [<https://www.unesco.org/en/world-heritage>]. It is the sign that carries cultural values that must be preserved in its material physicality. To avoid its loss, as underlined by the UNESCO Convention for the Protection of Cultural Heritage of 1972, it is necessary to spread its knowledge and raise awareness regarding its conservation, even preventive. Conservation processes include: Geometrical survey; Study of construction history; Study of methods and materials; Decay and damage analysis; Sustainable re-use project.

VIRTUAL EVENTS No.4

10.05

Virtual
Activity
No.4

Augmented
Thresholds
Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

[8]

Crafting Interaction:
From Data to Design

Ayşegül Akçay Kavakoğlu
Istanbul Technical University

@13:00-13:45 (GMT+3)



[9]

Graphic mapping as a form of
architectural illumination - non-invasive
design of lighting systems for historic
buildings

Michał Kaczmarzyk
University of Applied Sciences in NYSA

@13.45-14.30 (GMT+3)



[10]

Temporary uses as a way to
re[activate] space

Agata Pięt
University of Applied Sciences in NYSA

@15:00-15:45 (GMT+3)



*Student Study Time @ 15:45-18:00





“Crafting Interaction: From Data to Design”

Ayşegül Akçay Kavakoğlu, PhD, Istanbul Technical University

Technological developments, particularly in the last decade, have profoundly altered the ways of interaction in design and architecture. How designers and users interact with design and within the design process has evolved accordingly. The generic definition of interaction as reciprocal action between entities — including humans, animals, machines, systems, and nature — that influence one another within different contexts has also evolved, especially with the integration of artificial intelligence (AI) and data-driven design methods. This seminar focuses on these transformations by highlighting the central role of the user in relation to technology, experience, and data when designing interactions. How information flows around and through this relationship to shape the interaction, and how the user becomes a mediator of this process, is elaborated through various design cases in which the user interacts with humans, robots, computers, buildings, and AI. These interactions involve diverse agents, scales, and systems. The selected cases in the seminar demonstrate design research in various design and experience environments, including mixed, virtual, and real-world settings, while the data types used can be real-time, batch, or latent. Users' perception, cognition, emotion, and collaboration are affected and reshaped through these diverse design contexts and computational processes, while interaction is crafted from data to design.



“Graphic mapping as a form of architectural illumination - non-invasive design of lighting systems for historic buildings”

Michał Kaczmarzyk, PhD, University of Applied Sciences in NYSA

One of the basic problems related to the design of architectural illuminations is the technical possibility of locating lighting equipment directly on the object and providing power for each light point. The development of LED technology and the minimisation of the overall dimensions of the technical equipment are not enough to enable the illumination of buildings of the highest historical value. The search for new ways of projecting light onto the facades of architectural objects aims not only to eliminate lighting fixtures on the object, but also sets an ecological trend in terms of protecting the night sky from light pollution. These problems focus on the process of mapping the geometry of the architectural object and the associated light flow. The introduction of new media such as multimedia and laser projection, adapted to the spatial structure of the object, allows a high quality control of the aesthetic effect presented. Using the multimedia value of graphic mapping provides a basis for creating new aesthetic values in terms of the night-time image of urban spaces.



“Temporary uses as a way to re[activate] space”

Agata Pięt, PhD, University of Applied Sciences in NYSA

The seminar discusses the temporary use of urban spaces, which is one method of reactivating abandoned buildings and the spaces between them. A commercial temporary use occurs when a terrain vague, an unused building or an unused area is given a new purpose, primarily for financial gain. These spaces are also known as ‘waiting spaces’ and are used in various ways while awaiting redevelopment. Temporary uses are additionally related to tactical urbanism, a concept introduced by Mike Lyndon, who created a handbook of tactical solutions that can be implemented by citizens using simple materials. All that is needed is the will to change the space around you. These are often small-scale urban interventions involving urban prototyping and activities characterised by a grassroots nature, low budget and temporality. These interventions are usually temporary, but if they are repeated cyclically, they can influence the way inhabitants and city authorities think about certain spaces, which can lead to permanent change. Temporary activities present the potential of forgotten, underused areas. Examples of this phenomenon in cities include the repurposing of the area below the motorway in Miami, USA, the new use of the street in Oslo, Norway and the city game in Wrocław, Poland.

VIRTUAL EVENTS No.5

24.05

Virtual
Activity
No.5

Augmented
Thresholds
Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

[11]

Immersive Wall Legacies:
Intelligent Design Heritage

Marc Aurel Schnabel
Xi'an Jiaotong - Liverpool University

@13:00-13:45 (GMT+3)



[12]

Heritage Interpretation through
gamification in Yedikule/ Istanbul

Leman Figen Gül
Istanbul Technical University

@13.45-14.30 (GMT+3)



[13]

The Unheard Stream:
Mardin's Water Memory

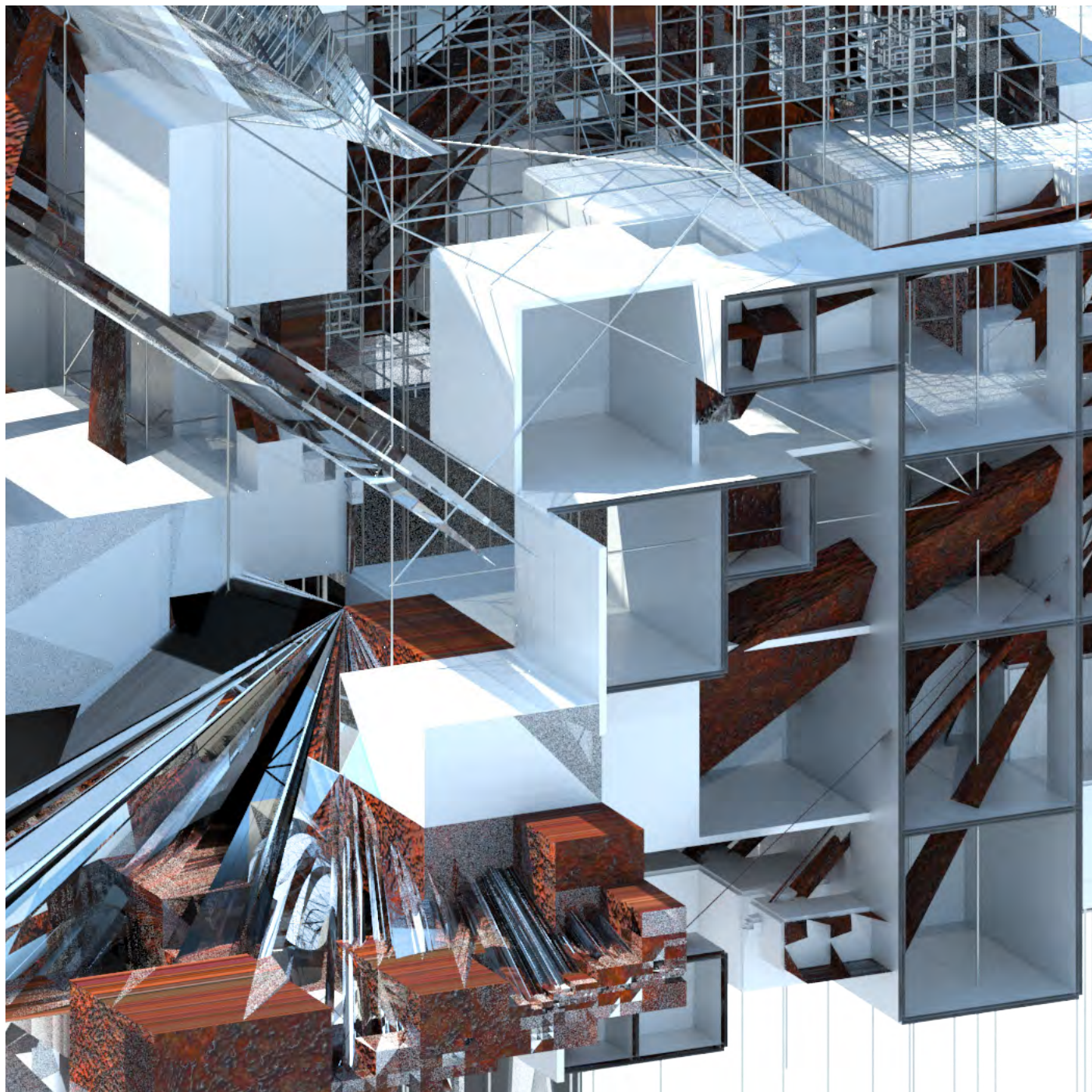
Serdar Aydın
Mardin Artuklu University

@15:00-15:45 (GMT+3)



*Student Study Time @15:45-18:00 (GMT+3)

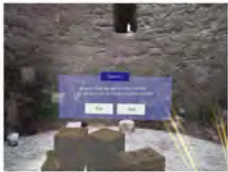




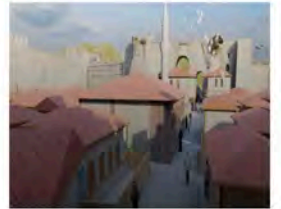
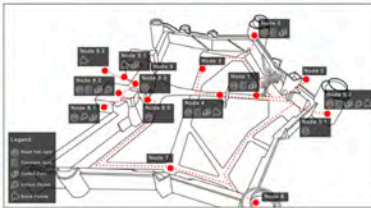
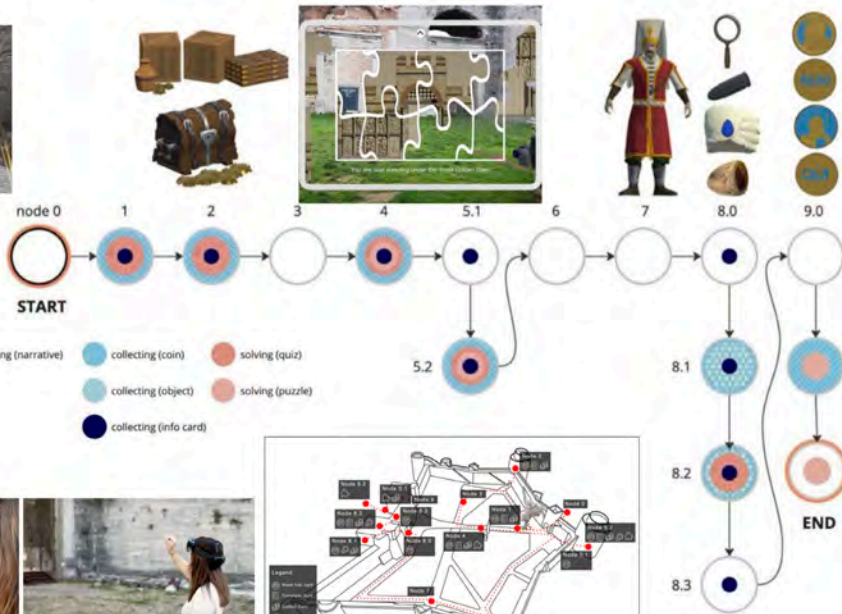
“Immersive Wall Legacies: Intelligent Design Heritage”

Marc Aurel Schnabel, PhD, Xi'an Jiaotong - Liverpool University

The role of digital technologies in preserving, interpreting, and reimagining cultural heritage is reconsidered through the concept of intelligent and immersive design. They focus on the evolving intersection of heritage conservation, urban memory, and smart technologies, and explore how artificial intelligence, extended reality (XR), Web3, parametric modelling, H-BIM, and gamification are reshaping the way we understand and interact with the built environment. These technologies go beyond tools, they introduce new design thinking paradigms that influence authenticity, accessibility, and cultural sustainability. Using the Walls as a metaphor and conceptual anchor, heritage is framed not as a static artefact but as a dynamic interface that negotiates between physical legacy and digital futures. By incorporating decentralised systems such as blockchain for authentication and co-creation, and employing data-driven analysis and virtual prototyping, current research demonstrates how digital augmentation can foster resilience and relevance in historical environments. Drawing on global collaborations and interdisciplinary expertise, one can propose future-proof design strategies that transcend disciplinary boundaries. And argue for a reframing of heritage as a living, intelligent system, one that invites participatory engagement, supports inclusive narratives, and promotes new models of conservation through immersive storytelling, responsive environments, and speculative design.



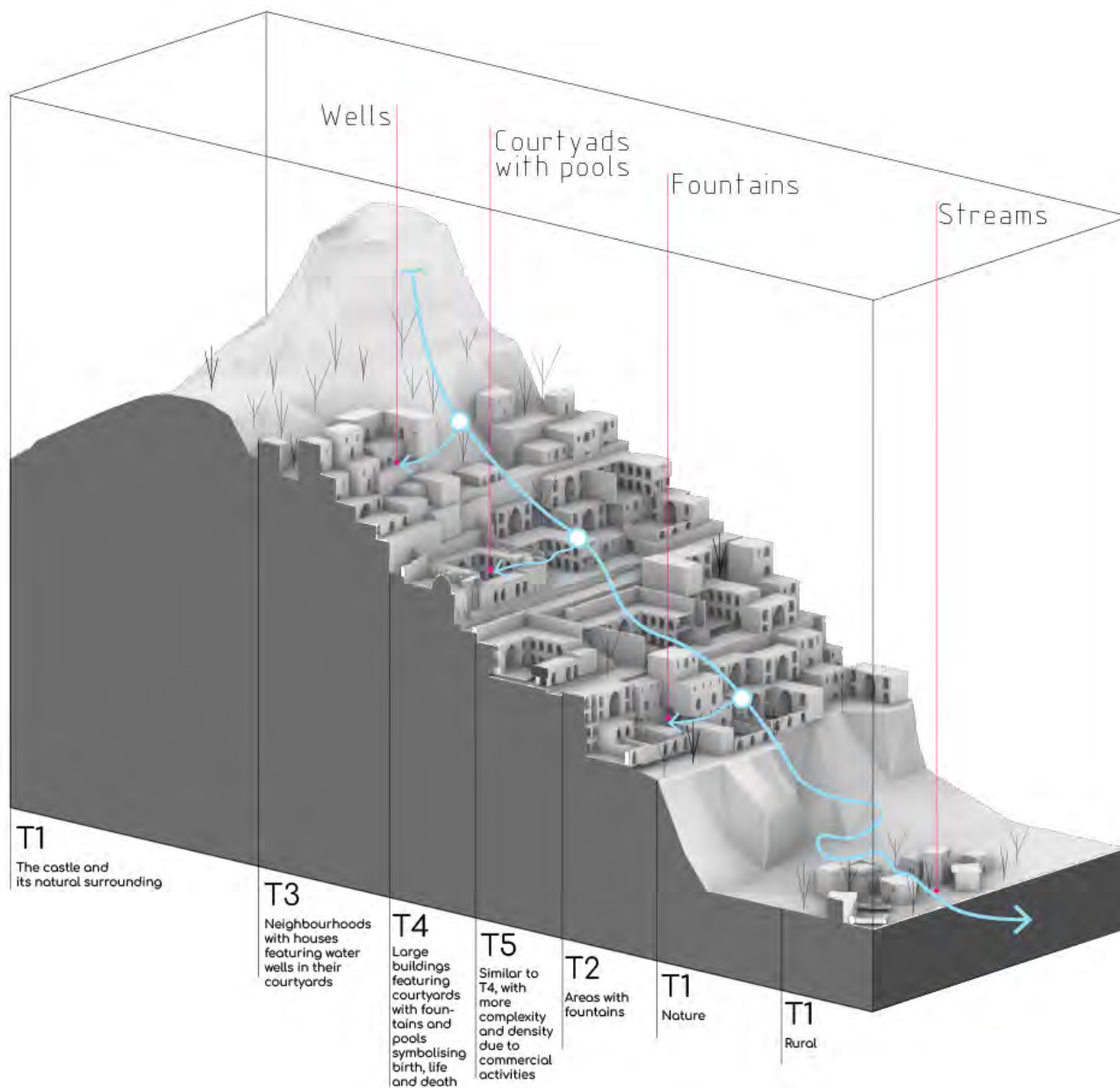
Game Flow



“Heritage Interpretation through gamification in Yedikule/ Istanbul”

Leman Figen Gül, PhD, Istanbul Technical University

The presentation is entitled “Game-based interaction: Gamification design with immersive technologies in heritage context.” It explores the concepts of game, gamification and serious games within the context of heritage. A game is defined as a system in which players engage in artificial conflict, defined by rules, leading to a quantifiable outcome. Gamification involves the application of game design elements to non-game contexts. Serious games are designed with educational or other non-entertainment purposes in mind. The presentation elaborates on the concept of heritage, stressing its importance as a value to be passed down through generations. It highlights the distinction between digital heritage and the digitisation of physical heritage. The Burra Charter, an Australian ICOMOS document, is introduced as a key framework for heritage conservation. Adopted in 1979 and revised periodically, it establishes principles for conserving culturally significant places. Emphasis is placed on understanding a locale’s cultural significance—its aesthetic, historical, scientific, social, and spiritual values—prior to conservation strategies. The charter recommends minimal necessary changes to retain significance and usability. Cultural significance includes physical fabric, setting, use, associations, and meanings. The presentation concludes with KUMIO, a TÜBİTAK-funded study at Yedikule, aiming to develop gamified cultural routes to enhance visitor engagement and understanding of the site’s historical context.



“The Unheard Stream: Mardin’s Water Memory”

Serdar Aydın, PhD, Mardin Artuklu University

The unheard stream of memories is about a collection of digital heritage and design works. It begins with code, not memory though. Immersive prototypes, digital heritage experiments, computational design workflows—each project, from Shlomo to Decoding Kashgar focusing on user-generated virtual reconstructions, tests architecture’s capacity to simulate, provoke and reassemble. In this context, gamification and interaction emerge as critical tools—not only to preserve the past, but to destabilize how it is accessed, edited and played. Users co-author; architects relinquish control. Craftsmanship returns as digital labor. Technology becomes archaeology. Coming to Mardin, beneath the speculative interfaces of its heritage landscape lies the forgotten infrastructure: water—a silent, subterranean logic. It was once carved into the city’s topography through channels, cisterns and communal rituals; now silenced by urban erasure, climate fragility and institutional blindness. Here, the research returns to the ground—through typo-morphological analysis and a mapping of place vulnerability, it reactivates the logics of a lost hydroscape. The unheard stream presentation stages a deliberate dissonance between computational invention and urban sedimentation. If architecture can be coded, can memory be played? If absence is the dominant condition, can design still act?

VIRTUAL EVENTS No.6

21.06

Virtual
Activity
No.6

Augmented
Thresholds
Sustaining Architectural Heritage of
Istanbul Land Walls

Erasmus + Blended Intensive Programme
a[TRH]
Istanbul

[14]

Istanbul Land Walls' Heritage as
a Driver of Economic, Social
and Cultural Development

Figen Kivılcım Çorakbaş
Uludağ University

@13:00-13:45 (GMT+3)



[15]

Designing Along the Land Wall:
Historic Neighborhoods on the
Verge of Future Crises

Hayriye Eşbah Tunçay
Istanbul Technical University

@13:45-14:30 (GMT+3)



[16]

Material Studies
in Istanbul Land Walls

Seden Acun Özgünler
Istanbul Technical University

@15:00-15:45 (GMT+3)



*Group Study Time @15:45- 18:00 (GMT+3)





“Istanbul Land Walls’ Heritage as a Driver of Economic, Social and Cultural Development”

Figen Kivılcım Çorakbaş, PhD, Uludağ University

Being one of the four components of the “Historic Areas of Istanbul” UNESCO World Heritage Site, the Istanbul Land Walls and their immediate surroundings represent a significant part of the city’s historical and architectural legacy. The walls have witnessed numerous historical events and transformations, making them a symbol of resilience and continuity. Their preservation is crucial for maintaining the city’s identity and memory. The Istanbul Land Walls have the potential to serve as a driver of economic development for their surroundings as well as the Istanbul Historic Peninsula. By attracting tourists, fostering cultural tourism and providing space for local trade and social gatherings, the walls can stimulate local businesses, create job opportunities, and enhance the overall economic vitality of the area. The Istanbul Land Walls heritage site encompasses both tangible and intangible cultural qualities. The physical structure of the walls, with their intricate design and historical significance, represents the tangible aspect. Meanwhile, the stories, traditions, and cultural practices associated with the walls embody the intangible qualities that enrich the site’s heritage. In conclusion, the integrated conservation of both tangible and intangible values is essential for the proper preservation and development of the Istanbul Land Walls. This holistic approach ensures that the site remains a vibrant and meaningful part of the city’s cultural landscape, contributing to its sustainable development.



Designing Along the Wall: Historic Neighborhoods on the verge of future crises”

Hayriye Eşbah Tunçay, PhD, Istanbul Technical University

In the quest for solutions to contemporary urban challenges, there's a growing interest in drawing inspiration from ancient cities. These historical urban centers, despite their antiquity, often showcase innovative approaches to sustainability and resilience that resonate with today's concerns. By examining how ancient cities managed their infrastructures and designed their living spaces, we can glean valuable insights into creating more resilient urban environments. Istanbul's Historic Peninsula serves as a prime example of this resilience. Despite facing numerous threats throughout its history, the city has managed to adapt and endure by leveraging its layered urban fabric. The peninsula's diverse landscape, shaped by centuries of human activity, offers a rich tableau for exploring the interplay between natural and built environments. By delving into the city's past and engaging with its cultural and natural landscapes, the presentation aims to craft innovative design models that address pressing urban challenges. From residential and commercial spaces to green areas and historical landmarks, the peninsula's multi-layered identity provides fertile ground for creative experimentation.



“Material Studies in Istanbul Land Walls”

Seden Acun Özgünler, PhD, Istanbul Technical University

This presentation gives an information about a scientific study on the construction materials and deterioration mechanisms of Istanbul Land Walls, with a particular emphasis on the section between Mevlanakapı and Belgradkapı. In the context of the study, field surveys and laboratory analyses were conducted to identify the primary materials used in the walls—limestone (especially locally sourced küfeki stone), brick, Khorasan mortar, and reused spolia. Petrographic analysis, SEM-EDS, and XRD techniques were used to examine the microstructure and composition of these materials. The study identified various types of material deterioration, including surface erosion, salt crystallization, biological growth, joint loss, and graffiti damage. Contributing factors include environmental stressors (air pollution, freeze–thaw cycles), biological activity, seismic impacts, and especially the use of incompatible modern materials like cement-based mortars in previous repair efforts.

Based on the findings, the presentation proposes a conservation approach rooted in the principle of minimal intervention. Suggested strategies include the removal of incompatible additions, cleaning of biological and surface deposits, structural monitoring, and repointing using historically compatible mortars. These efforts aim to preserve the physical integrity and historical significance of the Land Walls for future generations.

CASE STUDY: LAND WALLS



Mevlevihane Kapi (Gate)

Mevlevihane Gate is located north of the Kalagros Gate, between the rectangular gate towers numbered 50 and 51.

The 16.22-metre-wide gate wall, built with large cut stone blocks, ends with a twisting path with a dendan above.

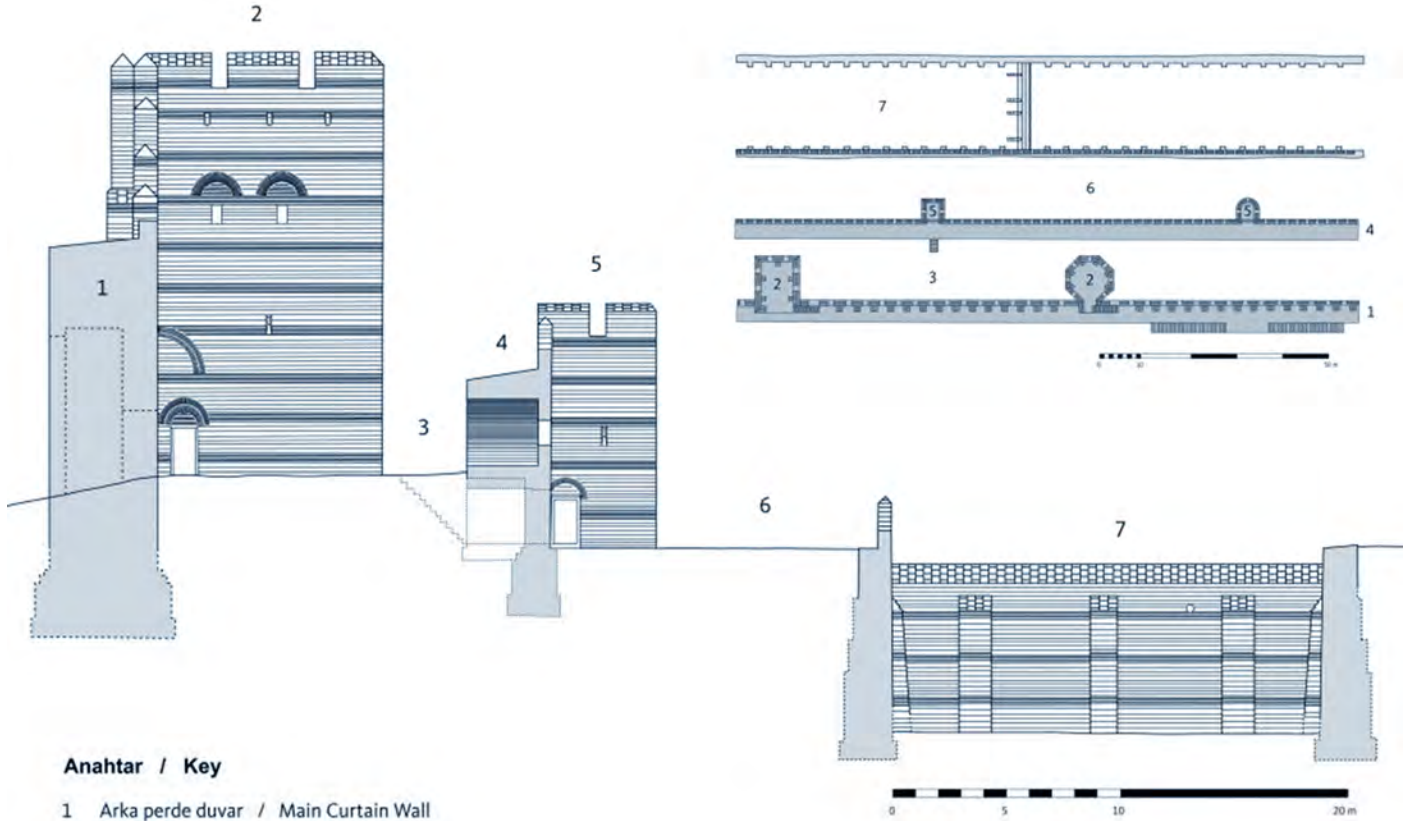


Silivri Kapi (Gate)

Silivri Kapi is located north of Belgrad Gate, between the polygonal gate towers numbered 35 and 36.

The 16.50 metre wide gate wall with arched entrance, built with large cut stone blocks, ends with a twisting path with a dendan at the top.

Kalagros Gate



Anahtar / Key

- 1 Arka perde duvar / Main Curtain Wall
- 2 Arka kule / Main Tower
- 3 Arka teras / Main Ward
- 4 Ön perde duvar / Outer Curtain Wall
- 5 Ön kule / Outer Tower
- 6 Ön teras / Outer Ward
- 7 Hendek / Moat

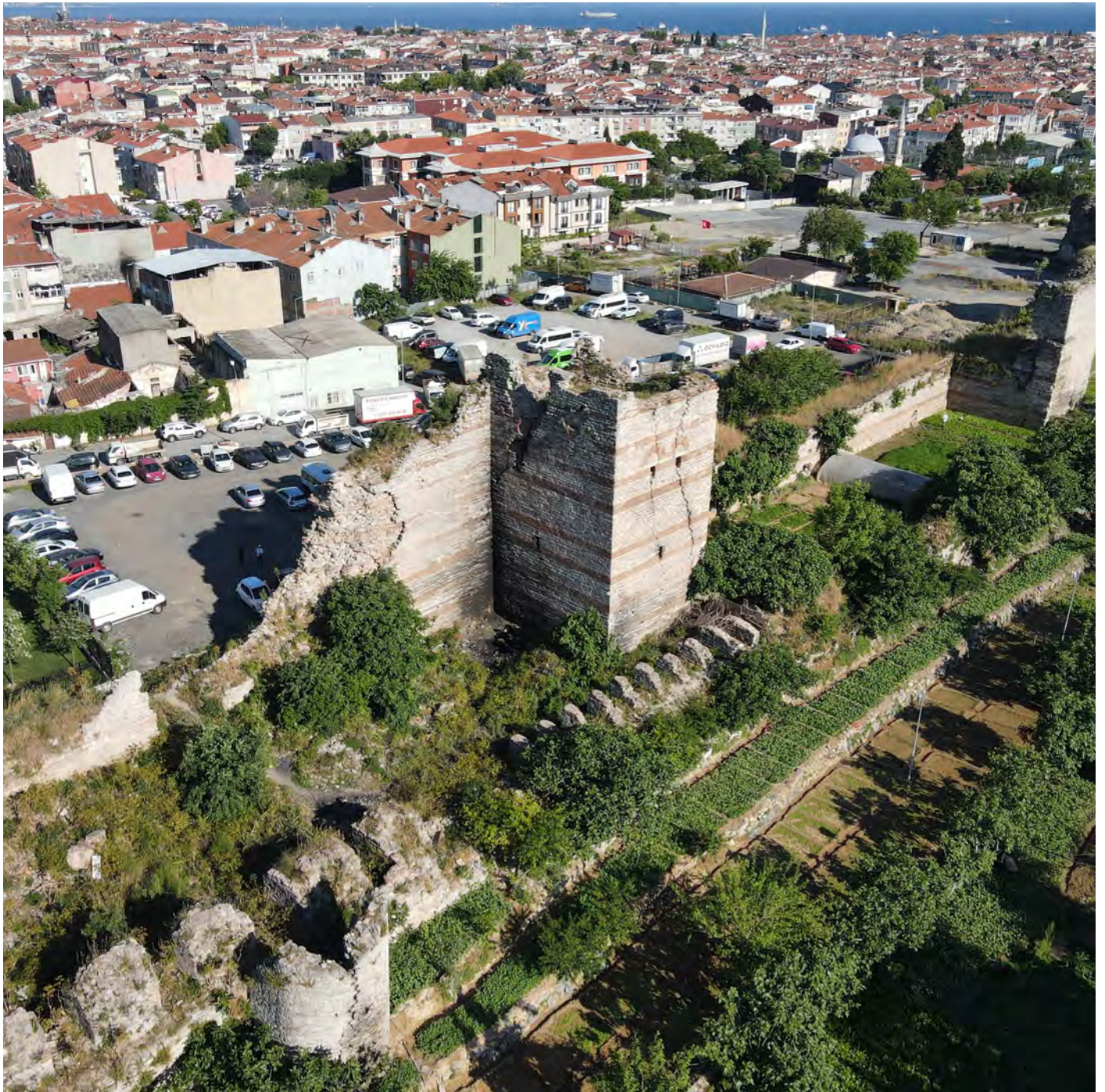


Photo Credit By: Batuhan Esirger



Photo Credit By: Batuhan Esirger



Photo Credit By: Batuhan Esirger



Photo Credit By: Batuhan Esirger



Photo Credit By: Batuhan Esirger







A Brief Evaluation Spolia on the Walls

The Istanbul City Walls are very rich in the use of spolia. The use of these materials was due to the material needs that arose as a result of the repairs that the building underwent. However, spolia were not only used to meet this need, but also for decorative purposes. The reason for this idea is that the decorations are placed in such a way that they can be seen on the walls.

The majority of spolia materials are taken from old buildings. The most common material used in repairs and additions is ashlar. Also notable is the use of elements such as cornices, column bodies and column capitals along the city walls. The materials in the areas adjacent to the city walls were often used in repairs due to their easy accessibility. The mouldings on the facades of the towers, which emphasise the floor levels, are among the most important surviving examples of the ornamentation used.



Reference: Özkılıç, M. "Surlardaki Devşirme Malzeme ve Bezeme Üzerine Kısa Bir Değerlendirme ", [Link](#), 2017



Photo Credit By: Elif Erkol



Photo Credit By: Elif Erkol

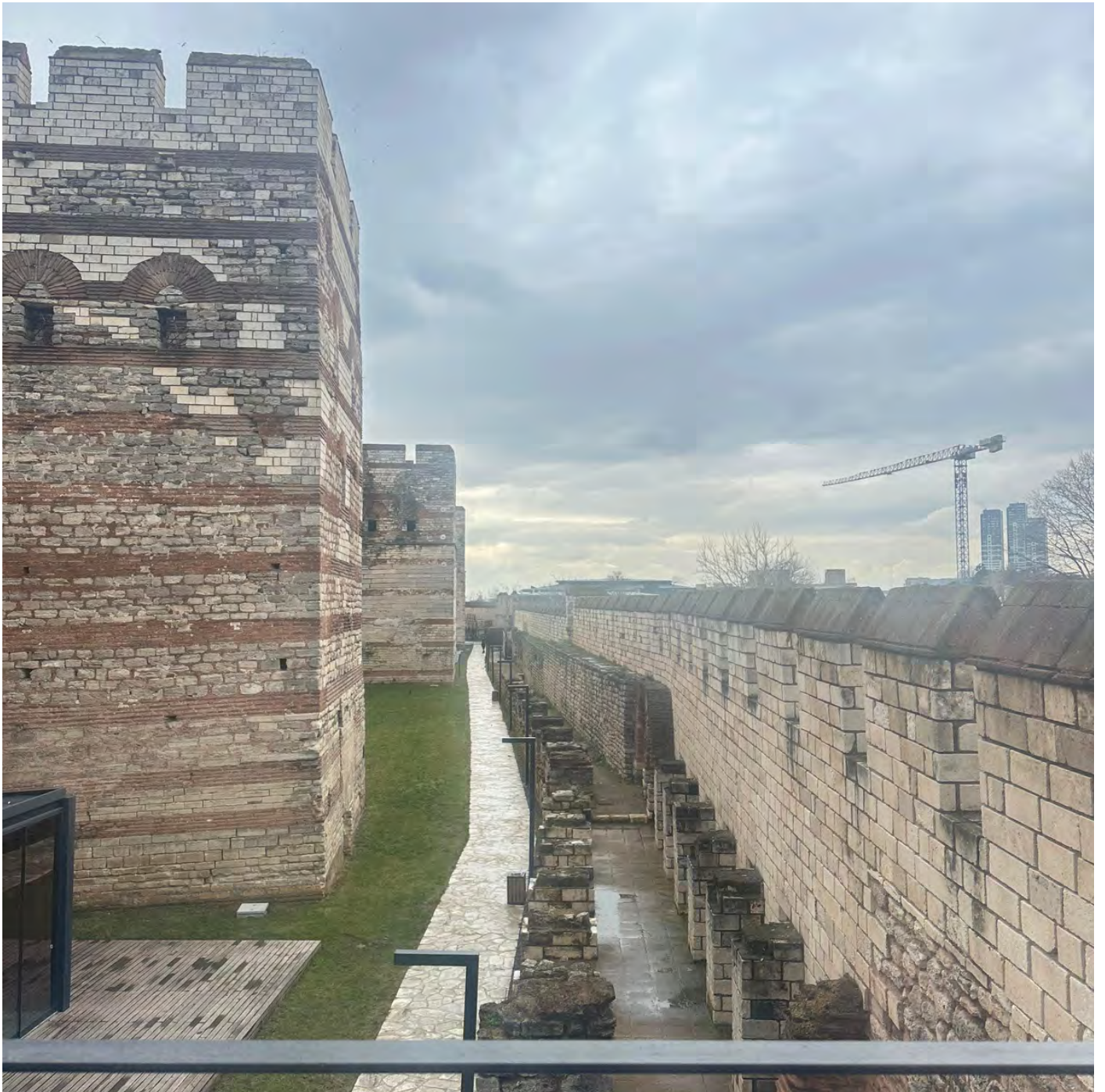


Photo Credit By: Elif Erkol



Photo Credit By: Elif Erkol



Photo Credit By: Elif Erkol

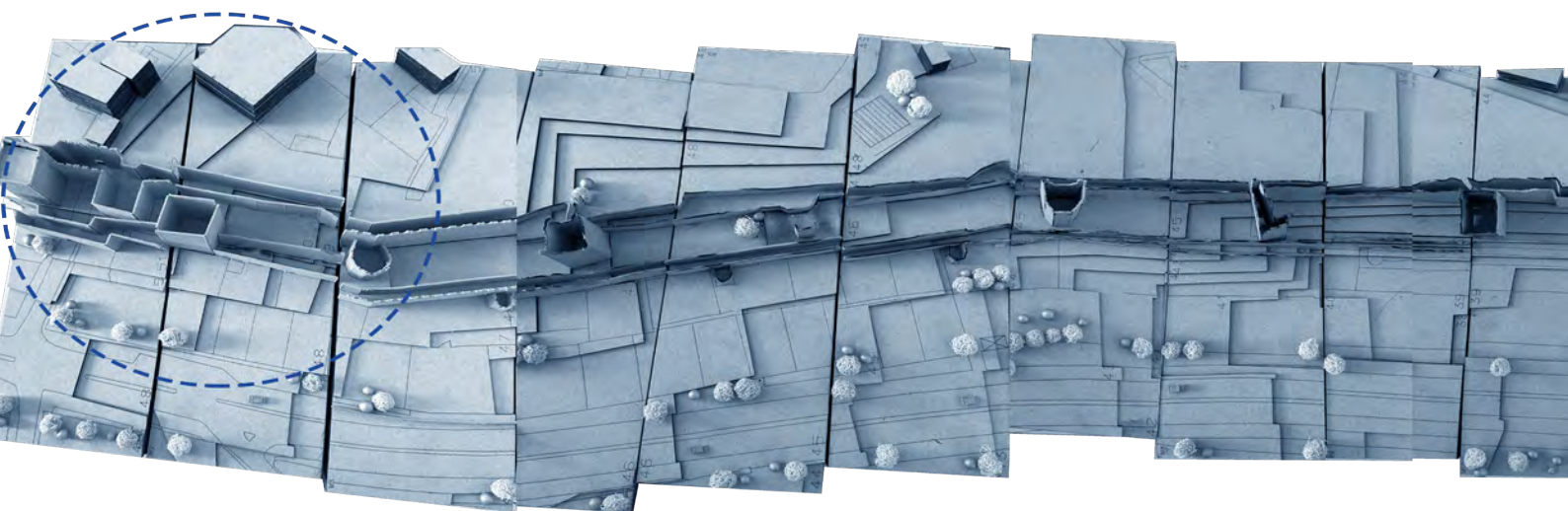


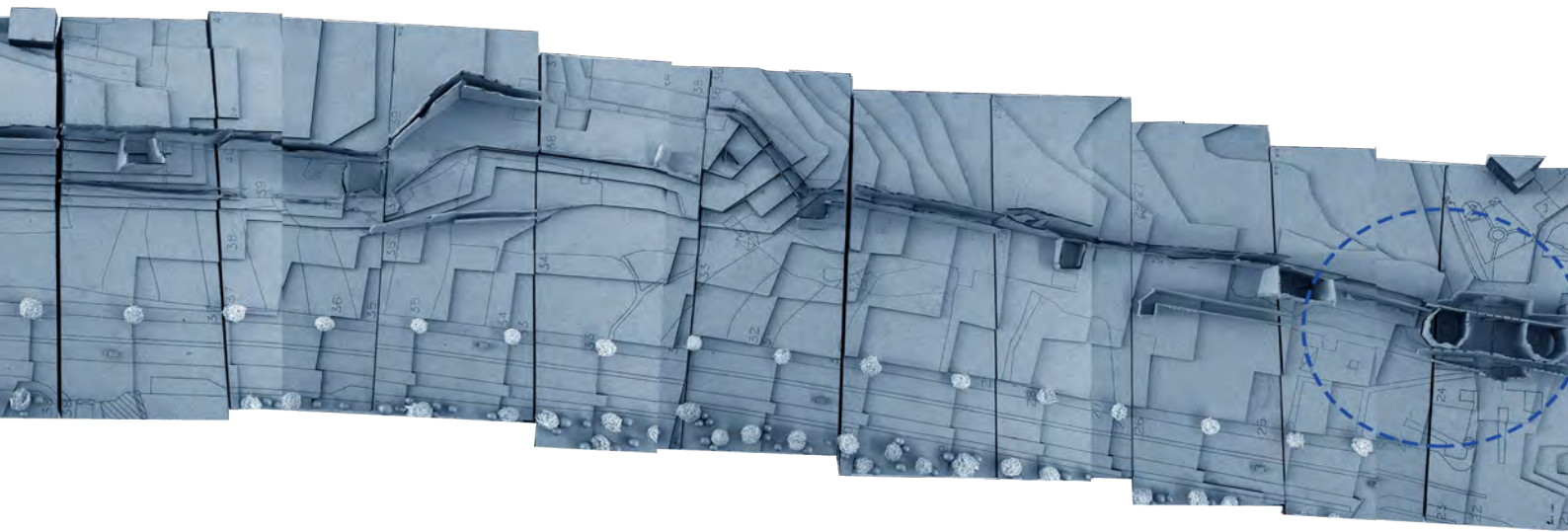
- 
- 325** - Constantine builds new walls.
- 405** - Anthemius and Theodosius begin constructing the Theodosian Walls.
- 423** - Completion of the Theodosian Walls.
- 447** - Most of the walls are damaged in a major earthquake and repaired by Praetor Valens Constantine.
- 474** - Zeno enters Constantinople.
- 530** - Justinian holds a victory parade.
- 554** - August 15 earthquake.
- 557** - December 14 earthquake and major repairs.
- 559** - A parade is held in honor of Justinian's return from Selymbria.
- 626** - Siege of Constantinople by Persians and Avars.
- 627** - Heracius' victory march.
- 628** - Heracius celebrates his victory.
- 667-669 (?)** - Arab attacks.
- 698** - Emperor Tiberius III enters Constantinople.
- 705** - Justinian II enters Constantinople.
- 711** - Justinian II greets Pope Constantine at the Golden Gate.
- 713** - Soldiers from Thrace enter the city and overthrow Philippikos.
- 715** - Theodosius III enters Constantinople.
- 717-718** - Arab Siege.
- 740** - October earthquake; Emperor Leo III repairs the walls.
- 763** - Emperor Constantine V celebrates his victory.
- 773** - Emperor Constantine V brings military spoils into the city in a victory parade.
- 813**-Emperor Leo V adds an outer wall to the Blachernae region; Siege by Bulgarian Khan Krum.
- 821-823** - Thomas the Slav's Rebellion.
- 831 or 837** - Theophilos celebrates his victory.
- 863** - Emperor Basil I celebrates his victory
- 907** - Rus' attack under Oleg

907 - Rus' attack under Igor.

- 913** - Bulgarian siege under Simeon.
- 924** - Bulgarian Khan Symeon lays siege to Constantinople for a second time.
- 941** - Rus' attack under Igor.
- 956** - Nikephoros Phokas celebrates his victory.
- 971/972** - Ioannes Tzimiskes celebrates his victory.
- 1019** - Emperor Basil II celebrates a victory.
- 1041** - Emperor Michael IV celebrates a victory.
- 1043** - Rus' attack under Vladimir.
- 1047** - Revolt of Leon Tornikios.
- 1057** - Isaac I Komnenos.
- 1078** - Nikephoros Botaneiates' Rebellion.
- 1081** - Alexios I Komnenos' Rebellion.
- 1096** - The First Crusade threatens Constantinople.
- 1126** - Emperor John II Komnenos celebrates a victory.
- 1143-1180** - Emperor Manuel I Komnenos builds a new wall.
- 1167** - The Second Crusade arrives in Constantinople.
- 1180** - Emperor Manuel I Komnenos celebrates a victory.
- 1167** - The Second Crusade arrives in Constantinople.
- 1261** - Constantinople is recaptured. Emperor Michael VIII enters the city through the Golden Gate in a parade.
- 1323** - Earthquake (late in the year).
- 1328** - Emperor Andronikos III enters Constantinople.
- 1343** - Great Earthquake.
- 1347** - John Kantakouzenos is accepted into the city.
- 1354** - Emperor John V lays siege to Constantinople twice and enters the city.
- 1376** - Andronikos IV's Rebellion.
- 1379** - Emperor John V and Emperor Manuel II enter Constantinople.
- 1390** - Emperor John VII and Emperor John V are forced to demolish the Golden Gate fortress.
- 1394** - Bayezid I begins an eight-year-long blockade.
- 1402** - The blockade of Constantinople is lifted.
- 1445/1442?** - Emperor John VIII repairs the walls.
- 1453** - Constantinople is conquered by the Ottomans.

MEVLEVIHANE GATE





SILIVRI GATE

LOGO COMPETITION PROPOSALS



1. Serra Acartürk, Istanbul Technical University (Turkey)

Through the Walls (1st Prize)

The logo is inspired by the series of layers that Istanbul's land walls offer. It shows the intimate relationships among the layers and how they reflect the one before. As time passes, the story evolves, and the pieces of the whole come apart, in a way, becoming augmented.



2. Letizia Domenicale, Politecnico di Milano (Italy)

From Skyline to Streetline (2nd Prize)

The logo merges the tower's verticality from Istanbul's historic walls with the horizontal layout of building footprints and topography. Tower details were simplified but signs of decay and openings remain. GIS tools defined building outlines in the old town, while DEM data was used to extract contour lines of the terrain.



3. Diego A. Dias de Sousa, University of Porto (Portugal)

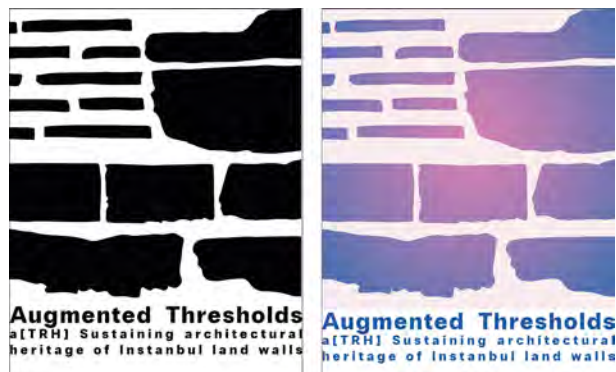
Thresholds for Meaning (3rd Prize)

The logo is based on a 4x3 grid, symbolizing Istanbul's Land Walls. The Arch represents arched bricks, and the T symbolizes the void of battlements. Blue and Magenta colors reflect the grid and the potential of digital technologies like augmented reality. The Arch and T represent "Augmented" and "Thresholds," connecting past and future.

The Memory of the Walls

Álvaro Ruiz Sanchez, University of Granada (Spain)

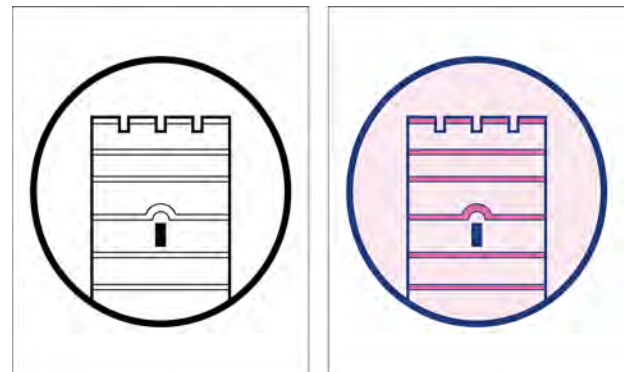
Istanbul land walls have seen many centuries of this city. Each society participated in their conservation, leaving their footprints through layer after layer of many different materials: ashlar blocks, unhewn stones, clay bricks... This logo proposal aims to recognise this architectural heritage as a living part of the society in constant transformation.



Facing Memory

Margherita Angeli, Politecnico di Milano (Italy)

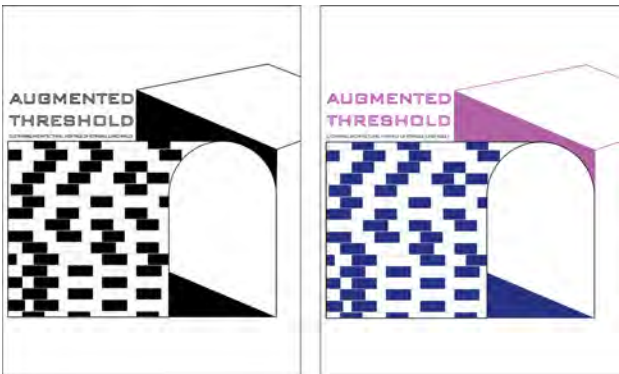
The following proposals play on the iconic image of the walls themselves, using the recognisable stripe patterns that characterize them all through their length. The proposal uses the tower as its symbol producing a stamp-like feeling to the design.



The Interflow

Ayşe Tutku Kılınç,Istanbul Technical University (Turkey)

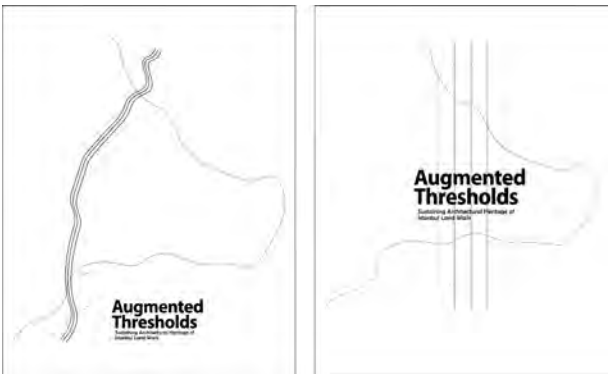
“The Interflow” conceptualizes the threshold as a transitional space between physical and digital layers. It enables the differentiation and subsequent integration of spatial and temporal dimensions within a coherent framework. This logo constructs a symbolic visual language that bridges traditional architectural heritage with the evolving dynamics of digital transformation.



Linea

Zeynep Zorlu,Politecnico di Milano (Italy)

The logos capture three core themes that reflects the idea of thresholds: the historical peninsula, the land walls, and their gates. Each design uses symbolic lines to reflect these elements: the border line represents the peninsula, three lines depict the land walls' segmented structure, and dashed lines symbolize the gates. The designs alternately employ concrete and abstract forms, ensuring a harmonious blend of clarity and artistic interpretation. The focus is on delivering these themes in a visually compelling while making the essence of the city's identity easily understandable and memorable, ensuring its heritage remains.



Sustaining Architectural Heritage of Istanbul Land Walls

Marta Kyrpel, University of Applied Sciences Nysa (Poland)

The logo depicts a stylized section of a wall with defensive towers, inspired by the historic land walls of Istanbul. It references the city's architectural heritage and its preservation. The Erasmus project represented by the logo focuses on educating students in documenting, analyzing, and designing solutions for the conservation of historical structures. The program encourages international collaboration, interdisciplinary approaches, and sustainable development, allowing participants to develop practical skills in heritage conservation. The logo, resembling a wall structure with a modern graphic style, symbolizes the connection between past and present and highlights the importance of caring for shared cultural heritage.



Found in Transition

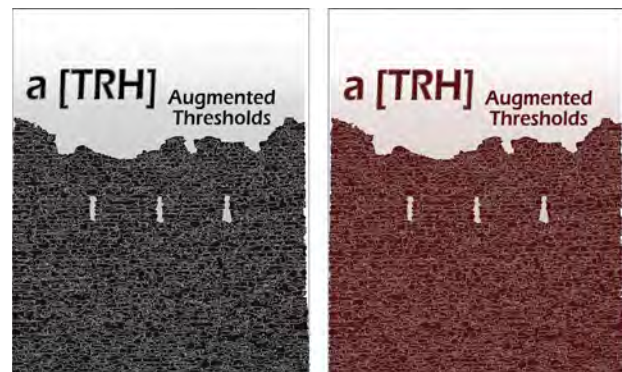
Carolina Duarte Vaz Félix, University of Porto (Portugal)

It's intuitive and spontaneous design suggests both continuity and disruption, in symbiosis with the historical evolution of the Istanbul Land Walls. The purpose of using irregular shapes in opposite to strict straight lines evokes the heritage and the memory of these spaces. The proposal is composed of this 1 concept that is demonstrated by 2 different "types" of logos:

-Land where the location of the Land Walls on the map lead to a simplified design; it is focused on the scale of the city as historical heritage.

-Wall which showcases a tower in ruins, as an example of the heritage we will be working with during the workshop; it is focused on the scale of the building as architectural heritage.

All logos instinctively visualize architectural fragmentation with an archaeological feel, suggesting cultural translation.



Istanbul as a Landscape Full of History

Elena Gonzalez Ruiz, University of Granada (Spain)

I wanted to show how Istanbul has a unique and recognizable landscape thanks to its architectural forms, urban organisation and history. This landscape is defined by the historic land walls that established its boundaries and has now become a central element of the city.



Echoes of Istanbul Land Walls

İrem Kekilli, Istanbul Technical University (Turkey)

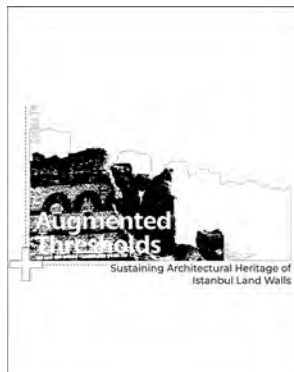
This logo is designed based on the stone texture of the land walls of Istanbul. As a threshold, the title is placed between stone pieces to strengthen the wall. The stones are doublelayered, which symbolizes the duality of the digital and the physical. The green shadow of the title references sustainability.



Sustaining Architectural Heritage of Istanbul Land Walls

Begüm Özcan, Istanbul Technical University (Turkey)

The broken-up textures of the wall suggest that history isn't frozen, but something we can walk through and add to. to enlarge and augment. to create new possibilities. It's all about creating new thresholds and new ways of seeing and experiencing heritage in today's world.



Sustainable Architectural Heritage of Istanbul Land Walls

Anhelina Komar, University of Applied Sciences Nysa (Poland)

The logo visually represents the theme "The Sustainable Architectural Heritage of Istanbul's Land Walls". It depicts Istanbul's Land Wall, emphasizing its historical significance, as well as the Blue Mosque and the Galata Tower, two of the city's most famous landmarks. The design emphasizes the cultural heritage, sustainable development and preservation of Istanbul's architecture. In this way, I wanted to emphasize the essence of our classes, during which we will learn about the treasures of Turkish culture, history and architecture leaving a part of ourselves there.



Sustainable Architectural Heritage of Istanbul Land Walls

Laiba Zahid, Technical University of Madrid (Spain)

This logo adopts the color theme of the main project poster to maintain a cohesive visual identity. The wall structure in the design highlights that the project focuses on historic walls. The map element indicates that the project is centered on the Istanbul Walls, while the outline of buildings further emphasizes the connection to Istanbul's iconic architecture. The arrows circling the design represent the project's circular and sustainable approach to the renovation and restoration process.

The wall, featuring a door in the center, symbolizes the historical entrance to the city through its fortified walls. The two pillars on either side represent the structural strength and support of the wall. The circular form around the design emphasizes a sustainable and circular approach to the restoration and preservation of the wall.



Bridge

Miguel Silva, University of Porto (Portugal)

As walls symbolize protection and closure, they will unite students from various countries in a collective spirit. The arch, an element that allows boundaries to be crossed, can be interpreted both as a bridge and its breaking as a sign of something insurmountable.

Saviors the Heritage

Raul Pavel Holtei Soldea, University of Granada (Spain)

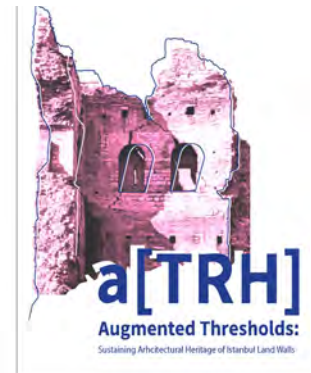
Fraternity, solidarity and union, to redeem existing assets and return to life the history and past a culture with great richness in all human domains. Always with the intention to respect the past and continue with the history contributing our techniques and knowledge. Taking into account the place and people, to continue with respect for the place and that the cultures last much longer in time.



Distorted Reality

İlayda Şahin, Istanbul Technical University (Turkey)

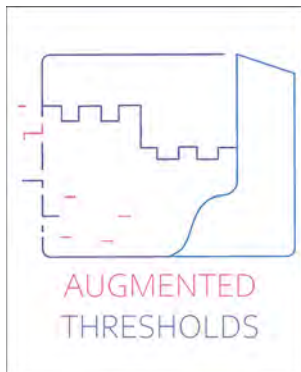
Titled Distorted Reality, the logo visualizes the fragmented state of Istanbul's Land Walls through a digitally altered, pink-toned image. The distortion symbolizes the tension between past and present and it emphasizes augmented reality's role in sustaining heritage-bridging historical decay with contemporary digital preservation and reinterpretation of architectural memory.



Augmented Thresholds

Lourdes Pachecobravo, University of Granada (Spain)

The logo represents the fusion of historical heritage and digital methods through the ancient walls of Constantinople. The pixelated effect symbolizes the transition from past to present and future, integrating digitalization as a tool for preservation. Using the workshop's colors, the design emphasizes sustainability, innovation, and the respectful conservation of architectural history through technology and modern methods.



Heritage in Transition

Beyza Gül Topçu, Istanbul Technical University (Turkey)

In the designed logo, the transition from physical heritage to digital preservation was symbolized by visualizing the Istanbul Land Walls scattered in pixels. This logo refers to the changes in the city borders, which are historical symbols, over time and their developments with the technology planned in the workshop. The aim was to keep the focus on digital lines and dots with a minimal design.



Timeless Walls

Orsola D'Alesandro, Istanbul Technical University (Turkey)

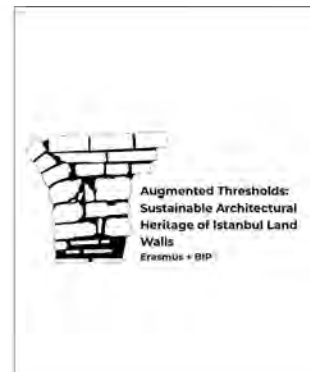
The logo offers a visual synthesis of the concept of augmented threshold, with the Land Walls of Istanbul depicted in a solid form gradually dissolving into digital elements. This transformation reflects the theme of Timeless Walls, symbolizing the enduring presence of cultural heritage across time. The pixelation suggests the transition from historical to technological dimensions, evoking continuity, interdisciplinary protection and the sustainable transfer of architectural heritage into the future.



Remains in the Wall

Lucía Trinidad Martínez, University of Granada (Spain)

“Remains in the wall” explores the layered history of Istanbul’s ancient walls. The logo reflects the diverse stones and textures embedded in the structure, symbolizing the passage of time. Its abstract form captures both physical remnants and cultural memory, to capture the feeling of transformations of the city.



Augmented Thresholds

Sicheng Jiang, Politecnico di Milano (Italy)

The design was inspired by the pattern of capitals coming from the land walls as well as the Turkish script, hence the joining of the three letters “aTH”. While, the “H” stands for “Heritage”, but it is not known what direction the land walls will head for in the future, so the negative form was used simply retaining the abstract gateway as a symbol of the “missing” heritage – the land walls. Finally, the color red means a bright future.



Tower

Wiktor Wolny, University of Applied Sciences Nysa (Poland)

The logo presented here intends to show the actual defragmentation of the ancient walls and the engagement of the participants of this particular workshop in preserving, maintaining and sustaining of this incredible and unique architectural structure. The existing elements (right side of the letters of the inscription (workshop title) are attached to the still existing byzantine structures and symbolize the remnants of the heritage. The empty spaces (left side of the inscription) demonstrates the fields to be completed by the activities of wise architects and archeologists to discover and restore the structures of the ancient empire. The ring around symbolizes the community of the volunteers - academics, students, engineers and other people involved in the restoring and preservation programme.



The Story of Silence

Hanqing Fei, Politecnico di Milano (Italy)

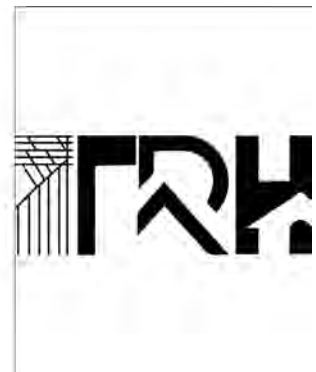
Inspired by the texture of the city walls of Istanbul, bricks of different periods and materials are put together to form a unique aesthetic, which makes people think about the history of different periods in the past.



The Augmented Thresholds Project's Identity is Embodied by the 'TRH' Logo

Murad Mir-Zada, Politecnico di Milano (Italy)

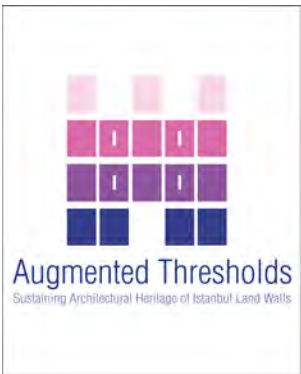
The green tone used in the logo was intentionally chosen to represent the concepts of ecological responsibility and sustainability, symbolizing growth and preservation of cultural heritage through interdisciplinary collaboration and natural integration of historic architecture with modern urban life. The project's forward-thinking and digitally innovative approach is emphasized by the clean, geometric font style, while the green color visually and symbolically connects with themes of environmental consciousness, resilience, and heritage protection.



Augmented Thresholds

Xingyu Lai, Politecnico di Milano (Italy)

The main image of this logo is abstracted from the gate image of the Istanbul Land Walls, clearly presenting the battlements, gates, window openings of the walls, and the characteristic horizontal lines of the walls built with different materials of bricks and stones through geometric lines. At the same time, this project aims to discuss the protection of archaeological heritage through digital means, and this logo also expresses support for and development of interdisciplinary research methods through pixel grids and computer languages composed of 0s and 1s.



Augmented Thresholds

Istanbul Land Walls

Vimala Sakshi Gangu, Politecnico di Milano (Italy)

The logo reimagines Istanbul's Land Walls, symbolizing the threshold between past and future. Stone textures evoke heritage and endurance, while fluid color accents represent sustainability and adaptation. This design honors historical depth while embracing innovative approaches to preserving cultural identity through contemporary design methods.



Contact

Arthur Machado Dinis, University of Porto (Portugal)

The threshold is the space of encounter and possibility in all its ambiguities. The logo's proposal stems to explore the simultaneous beauty and strangeness of the letters and semicircles bleeding into one another. The use of color takes the concept further. Each group formed in the workshop is assigned a color. This should reflect the diverse and interdisciplinary character of our efforts as a collective, both within each group and also as a whole.



Sustaining Architectural Heritage of Istanbul Land Walls

Maria García Mora, University of Granada (Spain)

The walls of Istanbul have a great weight in the history of the city as they represent the passage of different cultures that enriched it and molded it to what it is today this city.



WORKSHOP STUDIOS

GROUP 1

AI-driven Speculative Interactions:
Towards the Wall

Studio Conductors

Ayşegül Akçay Kavakoğlu (ITU)
Bengü Özmutlu (ITU)

Students

İrem Kekilli (ITU)
Ayşe Tutku Kılınç (ITU)
Elena Gonzales Ruiz (UGR)
Hanqing Fei (POLIMI)
Lourdes Pacheco Bravo (UGR)
Xingyu Lai (POLIMI)



Abstract

AI-driven speculative interactions: towards the wall workshop concentrates on the cultural heritage experiences via the use of machine learning-based models and their integration to interactive design generation methods. How artificial intelligence informs interaction and which kind of data can be used during this process will be explored through lectures and tutorials. We will design interactive spatial augmented reality installations regarding the context below:

While the historical, social, and scientific value is the initial driver for the cultural heritage of Land Walls, its future encounters through the interplay of human, nature, and artefact trio remain ambiguous. This workshop will envision the speculative interactions of Land Walls regarding this interplay. How the near future interactions will generate novel ways of experiencing cultural heritage and how we can create new forms of interaction via AI will be the central questions of the workshop. We will concentrate on sensory forms of interactions by speculating on the digital and computational representations of Land Walls and by questioning the intelligence of interaction while creating cultural, aesthetic, social, ecological or architectural encounters.

We will have lectures on interactive design, AI and speculative design. We will have tutorials on training a neural network, data set preparation and visual programming language for real-time interaction.



>WallScript

// AI-DRIVEN SPECULATIVE INTERACTIONS: TOWARDS THE WALL

Augmented
Thresholds

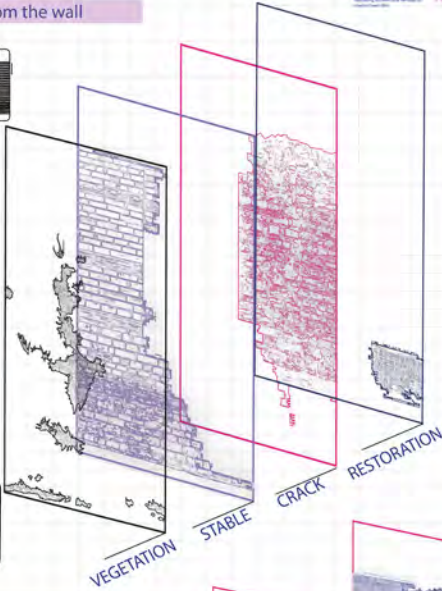
Classified photos from the wall



Pick the picture



Show the picture to the webcam



Detect the layers of wall

AYŞE TUTKU KILINÇ

WallScript
 // AI-DRIVEN SPECULATIVE INTERACTIONS TOWARDS THE WALL

Classified photos from the wall

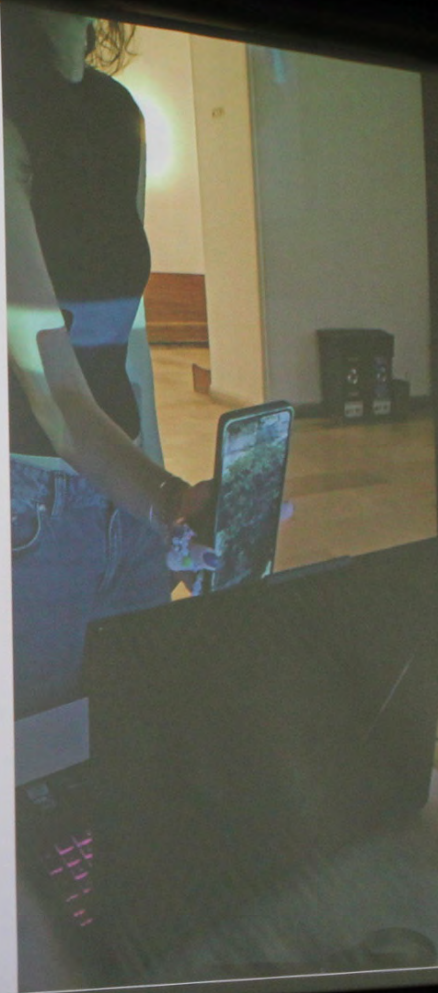
Pick the picture

Show the picture to the webcam

Select the layers of wall

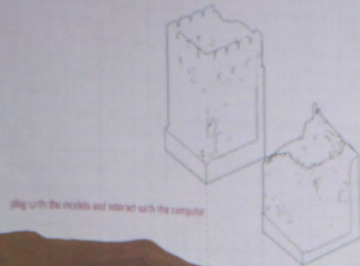
AYŞE TUTKU KILINÇ

İTÜ Erasmus+ Circular EFMD EQUIS



+ >digital building blocks

IT & ARCHITECTURE: SPECULATING, BETTERING, BUILDING, REIMAGINING THE URBAN



playing with the models and interact with the computer

It's about how we can use digital tools to create a new way of thinking and building, and how it can be applied to the city.

It's about how we can use digital tools to create a new way of thinking and building, and how it can be applied to the city.

It's about how we can use digital tools to create a new way of thinking and building, and how it can be applied to the city.



>digital building blocks

// AI-DRIVEN SPECULATIVE INTERACTIONS: TOWARDS THE WALL



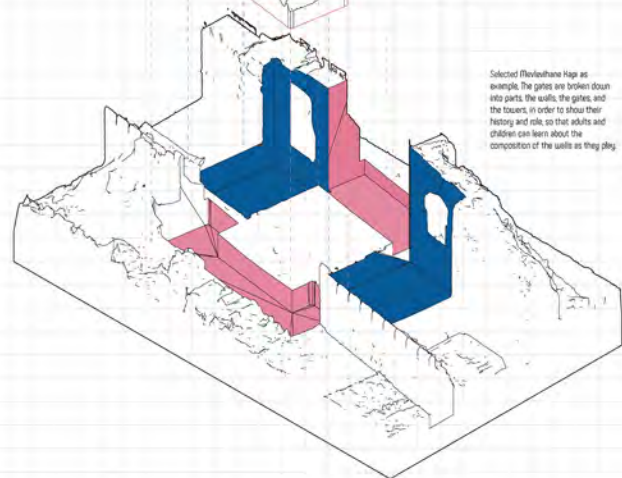
A physical model -reactive digital threshold based on machine learning and data. A science approach for everyone.

play with the models and interact with the computer



Use Thresholds (Machine, Touch Designer, Rhino, Mesh Lab) for the project and 3D print.

Selected Merveilhane Haps as example. The gates are broken down into parts: the walls, the gates, and the towers, in order to show their history and role, so that adults and children can learn about the composition of the walls as they play.





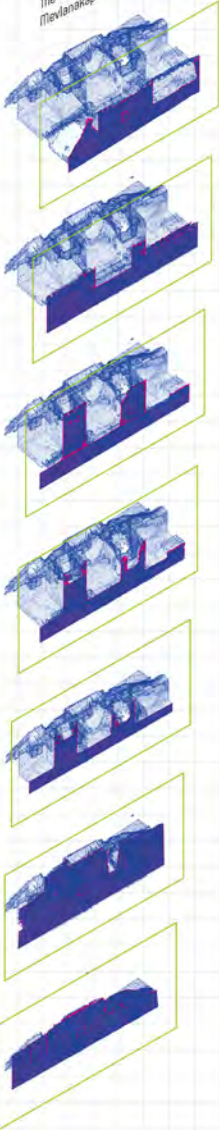
SEQUENCE

// AI-DRIVEN SPECULATIVE INTERACTIONS: TOWARDS THE WALL

A cinematic section series of the wall using body interaction.

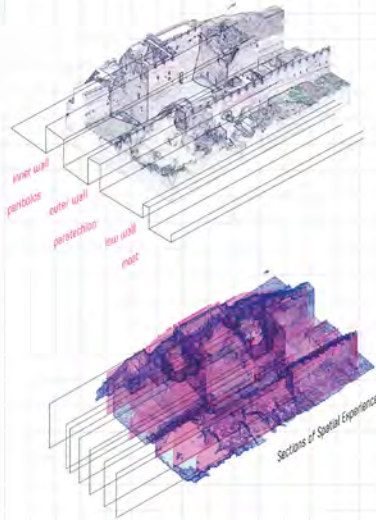


The section sequences of
Mevlanakapi



Layers of Landswalls

The idea of wall's structural layers are interpreted as section layers of current version of the Mevlanakapi



Crossing Between the Manipulative Sections of the Mevlanakapi

Point clouds are created from the 3D scanned
Mevlanakapi model in **Rhino** software



The determined body gestures are taught to a
machine learning model through **Teachable Machine**



In **TouchDesigner** software, sections are manipulated
speculatively and crossing sequences are created



Through camera, the poses are recognized and
manipulated sections are triggered for crossing



SEQUENCE

22-24-2019 SPECULATIVE INTERACTIONS: TOWARDS THE WALL

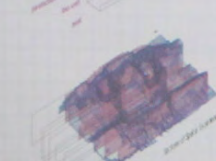
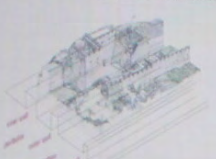
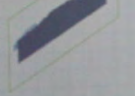
A cinematic section series of the wall using body interaction.



The vertical sequence of
the wall

Layers of Landscapes

The view of walls structural layers are interpreted as vertical layers of content around the landscape



Crossing Between the Translucence Sections of the Landscape

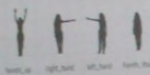
First, the wall is created from the 3D scanned
landscape model in Rhinoceros software



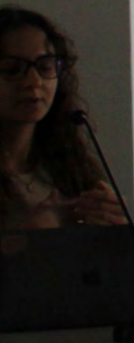
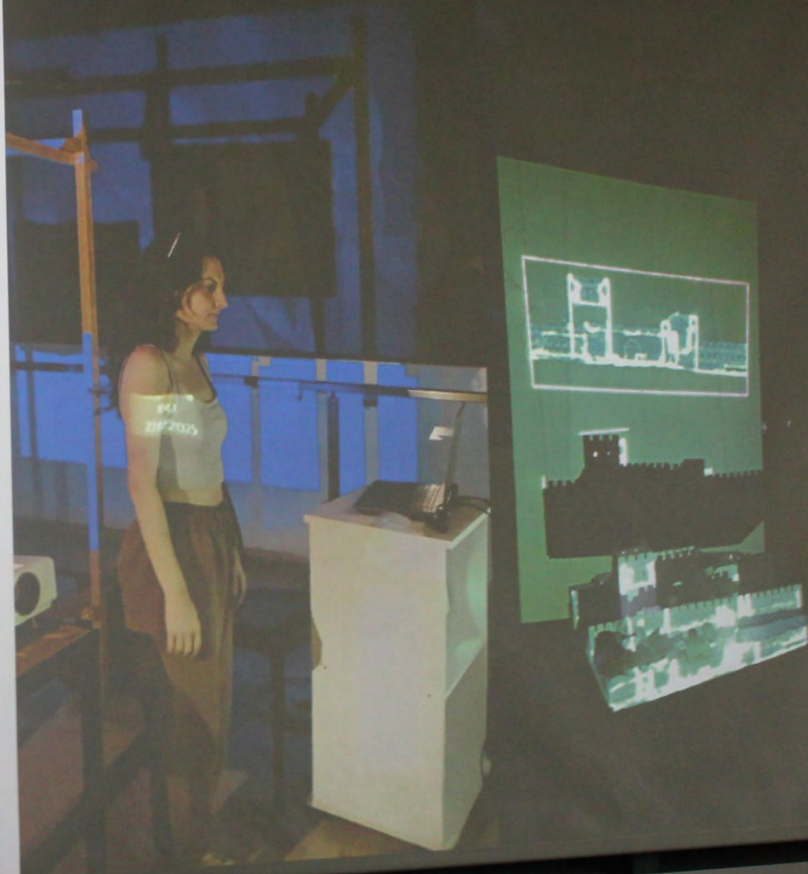
The transparent body gestures are brought in to
define working model through 'Teachable Machine'



In 'Teachable Machine' software, sections are manipulated
spatially and crossing sequence are created



Through camera the poses are recognized and
transparent sections are triggered for crossing



THE WALL OF CONSCIOUSNESS



The aim of this project is to explore and shape the different ways of life that have developed around the walls of London through history by highlighting how changes over time reflect different to everyday living practice and how they reflect the project's vision to offer a new, alternative design to the walls of London.

100-150 Before

During this period, the walls of London were built as a simple defensive structure that protected the city from enemies. The walls were built on a raised platform, allowing a clear view of the city and its surroundings.



150-1800 Middle

By the 15th century, the walls of London were built as a more complex structure that protected the city from enemies. The walls were built on a raised platform, allowing a clear view of the city and its surroundings.



1800-1900 Modern

In the 19th century, the walls of London were built as a more complex structure that protected the city from enemies. The walls were built on a raised platform, allowing a clear view of the city and its surroundings.



1900-2020 Future and education

In 2020, the walls of London were built as a more complex structure that protected the city from enemies. The walls were built on a raised platform, allowing a clear view of the city and its surroundings.

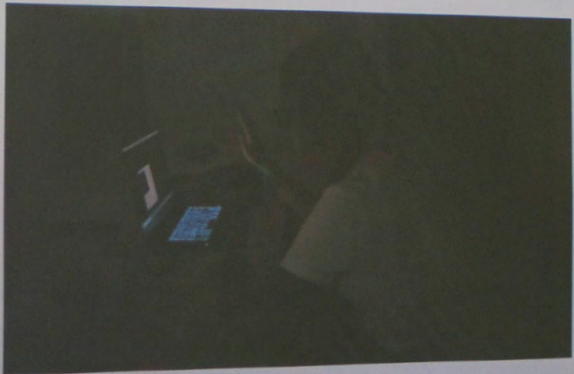


This project was created using SketchUp and Blender. It is a simple project that can be used to teach children about the history of London and the walls of London.

Each project is a simple and educational project.

- 1. Project 100-150
- 2. Project 150-1800
- 3. Project 1800-1900
- 4. Project 1900-2020

This project is a simple and educational project.



The aim of this project is to explore and reveal the different ways of life that have developed around the walls of Istanbul throughout history. By highlighting their changing roles—from military defense to everyday living, practical reuse, and finally cultural heritage—the project invites viewers to reflect on how architecture adapts to the needs of society over time.

330-1453 Defense

During this period, the walls of Constantinople served as a powerful military fortification. Built to protect the city from invasions, they withstood countless sieges for over a thousand years, becoming a symbol of the Byzantine Empire's strength and resilience.



1453-1908 Inhabited

After the Ottoman conquest of Constantinople, the walls lost their defensive purpose. Local people began to inhabit or use the spaces around and within them for daily life—farming, housing, and small-scale activities.



1908-2000 Rehabilitation

In the following centuries, the walls were increasingly reused for practical purposes. Stones and materials were taken for other buildings, some towers were turned into warehouses or homes, and parts of the structure were left to deteriorate.



2000-2025 Culture, tourism and education

In recent decades, the walls have been restored and protected as a cultural and historical monument. They are now a UNESCO World Heritage site and a symbol of Istanbul's rich and layered past, attracting visitors, researchers, and conservation efforts.



This project was created using TouchDesigner and Teachable Machine. It operates through hand gesture recognition: by showing different numbers with your fingers (from one to four) in front of the camera, the system detects the gesture and displays the corresponding historical stage of the wall.

Each gesture activates a visual and informational section:

1 finger: 330-1453



2 fingers: 1453-1908



3 fingers: 1908-2000



4 fingers: 2000-2025



This interactive approach allows users to explore the evolution of Istanbul's walls in a dynamic and engaging way.

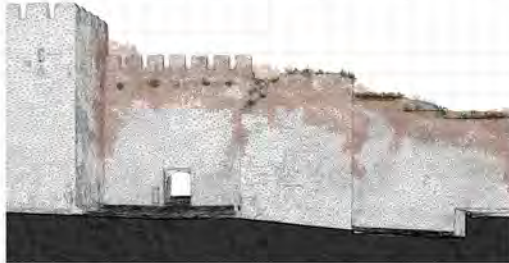
TIME. Its effects on the Landwalls

// AI-DRIVEN SPECULATIVE INTERACTIONS: TOWARDS THE WALL

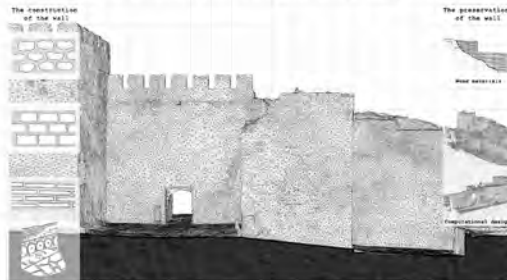


A posture-responsive digital threshold that alters video through body positions and movement.

This project explores how time and nature slowly transform the Walls of Istanbul. Vegetation grows in the cracks, with moss, ivy, and small plants gradually covering the ancient stones. This natural process changes both the appearance and structure of the walls, showing how nature reclaims and reshapes human-made history.



This project also highlights the materiality and construction techniques of the Walls of Istanbul. By studying their stonework and historical layers, we aim to represent their architectural essence. Thanks to modern technologies such as 3D scanning and digital modeling, these structures can be documented and preserved, ensuring their legacy endures over time.



To activate the video the posture that is placed in front of the camera is used and they are activated based on the posture



When the person is standing, the project title is displayed.



When the person extends an arm to the side, it shows how vegetation grows on the wall.



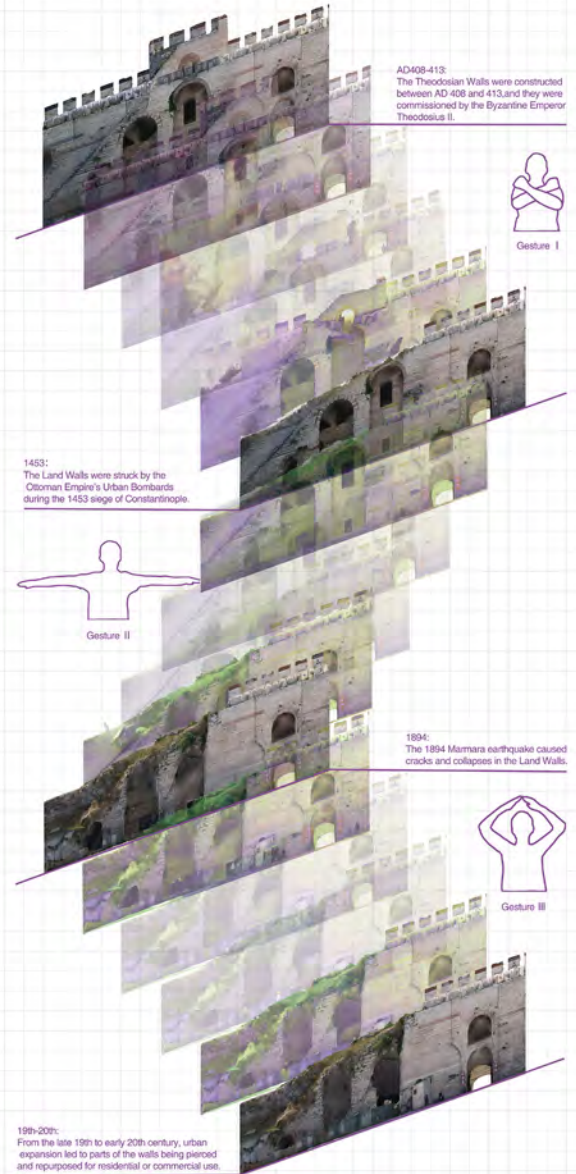
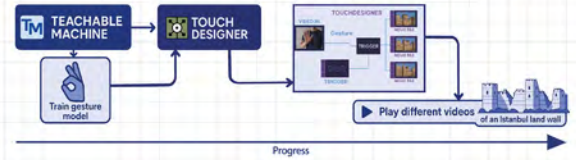
When the person opens their hand in front of the camera the construction systems and how heritage can be preserved are shown.

The project integrates various technologies to bring the concept to life. Teachable Machine was used to train a custom machine learning model that recognizes different body postures and positions. This model interacts with TouchDesigner, where the video content is dynamically altered in real time based on the detected movements. Additionally, SketchUp was used to design and visualize the spatiality, allowing for precise planning and integration of the digital elements.



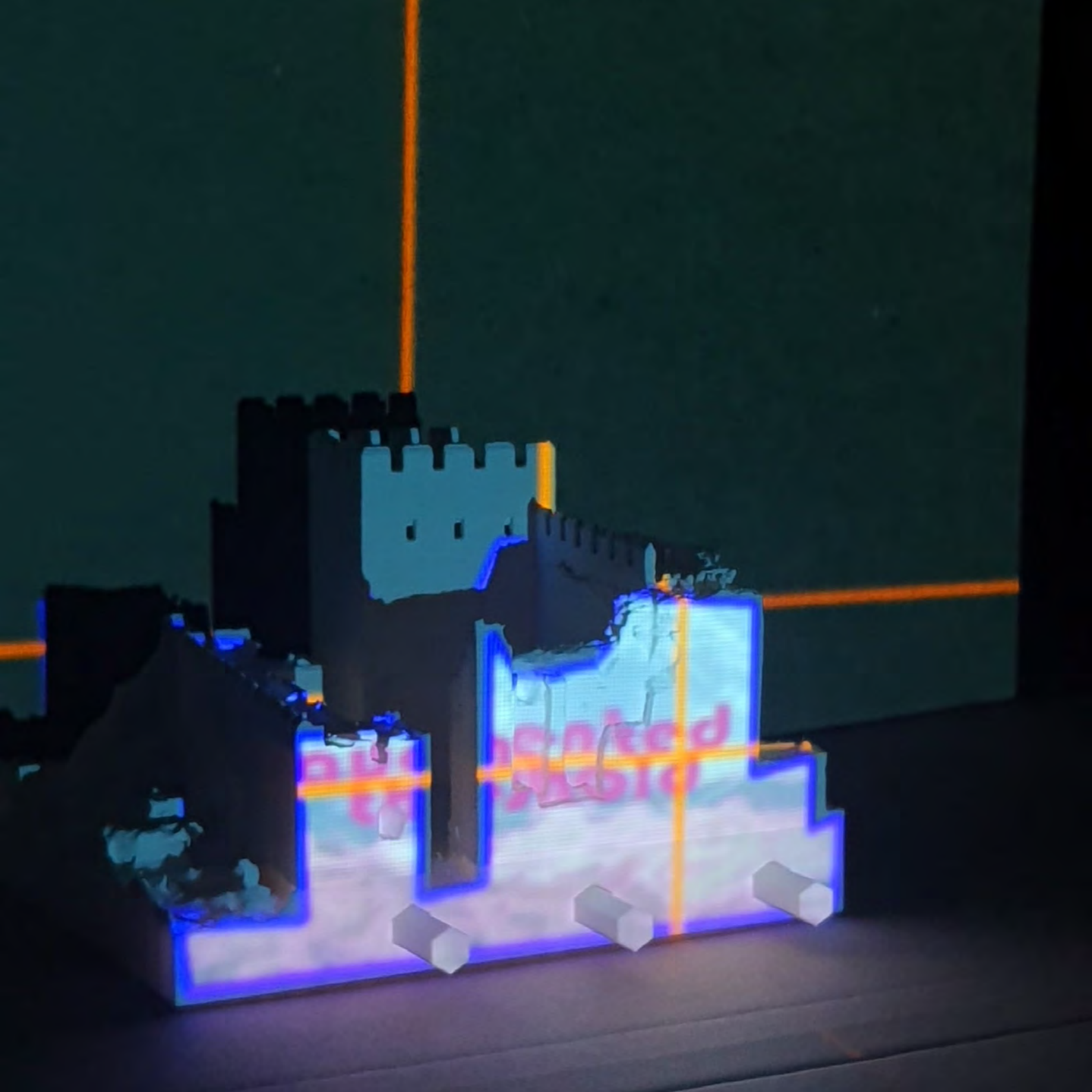
SURGICAL SLICES OF HISTORY

VISUALIZATION OF THE DAMAGE PROCESS OF THE LAND WALL IN ISTANBUL





Special thanks to TETA LAB (Technology, Ecology and Design Research Laboratory) for their support.



GROUP 2

The Conservation Knowledge Project for
a Sustainable and Optimized Intervention:
The History, The Construction, The Materials
of the Theodosia Walls in Istanbul

Studio Conductors

Nora Lombardini (POLIMI)

Miriam Terzoni (POLIMI)

Students

Arthur Machado Dinis (FAUP)

Vimala Sakshi Gangu (POLIMI)

Freddy Quelis Orozco (UGR)

Zeynep Zorlu (POLIMI)

Raul Pavel Holtei Soldea (UGR)



Abstract

Participants will focus on the methodologies for the knowledge of cultural assets of great historical importance. The students, working in groups, will improve experiences in order to:

understand the problems of the goods, find solutions for the goods conservation by adopting optimised and sustainable solutions with respect to the social and economic point of view, involve the local communities and the local stakeholders, understanding the conservation process in the two directions: bottom-up and top-down. The aim is to identify the right strategies aimed to the conservation of a very important cultural asset as the Land Wall of Istanbul are, making the process understandable and acceptable for communities, stakeholders and scholars.

Methodology

In order to better understand its current state, its surroundings and potential needs, we have developed a methodological analysis of the Theodosian Landwalls at different scales, in order to comprehend its general state of conservation and its immediate surroundings (in both inside and outside the Walls):

- Analysis in all its extension, studying each interval between its gates.
- Identification for the Walls in three fragments.
- Choice of the most critical fragment according to the parameters found.

Parameters for Analysis

State of Conservation

- Damaged
- Damaged after Restoration
- Rebuilt
- Restored

Immediate Surroundings

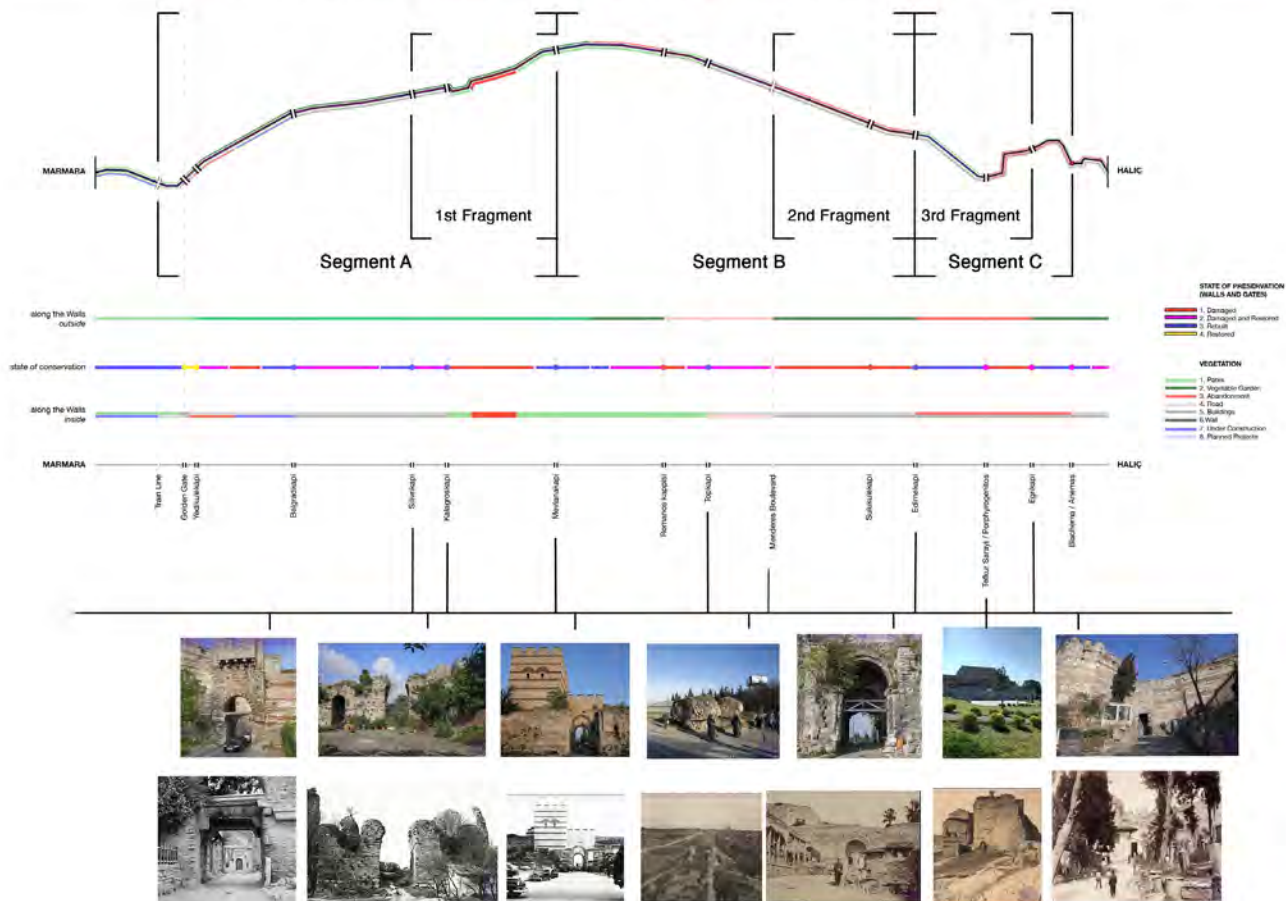
- Parks
- Vegetable Garden
- Abandonment
- Road
- Buildings
- Wall
- Under Construction
- Planned Projects



ANALYSIS



A. Süleyman Paşa Çeşmesi Su Terazisi | B. Hazreti Ebu Şeybe el Hudri | C. Kazasker İvaz Efendi Mosque | D. Tekfur Sarayı Müzesi | E. Mihrimhan Sultan Camii | F. Neslihan Sultan Cami | G. Kemal Türkler Anıt Mezarı | H. Balıklı Meryem Ana Rum Ortodoks Manastırı | I. Eski Kozlu Mezarlığı Takip Memurluğu | J. Riviera Gül Ve Orman Fidanlığı | K. Yedikule Hisarı



INTERVIEWS



Age
25-30

local market

Interview 1

Q. How long have you been living here?

10 years

Q. What do you know about the renewal projects around the land walls?

There were some renewal projects from 5 years ago. They started to demolish the buildings after the Egrikapi that attached to the wall but after that anything.



Age
50-60

local market

Interview 2

Q. How long have you been living here?

Almost 25 years

Q. What do you know about the renewal projects around the land walls?

There are some renewal projects for the zones that 100m away from the wall they started to give paper to the owner of the buildings for them to leave the houses. But they are forcing people to go to another place.



Age
10-15

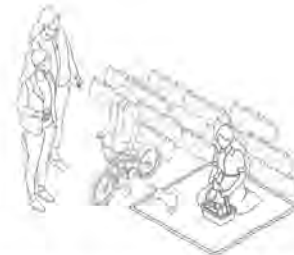
street

Interview 3

So they are separating them from their own community.

After the unfortunate crime happened in the upper part of the wall they forbid people to go up.

Also if you look to the old pictures back in time there were wooden buildings that attached to the walls.



Q. How long have you been living here?

I born here

Q. What do you know about the renewal projects around the land walls?

They are sayings that municipality will renew this area but they didn't do anything.

Q. What kind of functions do you want them to do here?

I don't want them to do park because we already have some. And if they do there are some bad people, smokers and alcoholic, coming to those parks and take over the space. I want them to do sport facility or a library

SWOT

strengths

Historic and cultural significance:
Proximity to the Land Walls, a UNESCO World Heritage site, offers cultural depth and identity.

Existing gate access:
The gate acts as a distinct urban threshold, offering potential for creating a symbolic entrance or transition point.

Mature vegetation and open space:
Green cover around the site enhances microclimate, biodiversity, and visual comfort.

Traditional urban fabric:
Dense, organic street patterns and architecture reflect a rich vernacular character.

Diverse uses:
Presence of both residential and institutional or communal uses (like the cremation ground and adjacent buildings) adds to the functional diversity of the area.

weaknesses

Underutilized or sensitive land:
The cremation ground, while culturally important, may limit development and carries emotional/functional constraints.

Irregular and organic layout:
May pose challenges for infrastructure upgrades, accessibility, and public space integration.

Potential lack of infrastructure:
Informality and proximity to historical walls may mean suboptimal sanitation, drainage, or connectivity.

Encroachments or unmanaged growth:
Buildings attached directly to the walls may be non-compliant or damaging to heritage.

opportunities

Gateway revitalization:
The gate can become a memorable public space or entrance, with signage, interpretation, and landscape enhancement.

Cultural tourism and storytelling:
Integration into heritage walks, cultural festivals, or interpretive trails that link to the larger Land Walls narrative.

Green-blue infrastructure:
Leverage the green areas to enhance ecological buffers or create small urban parks/community spaces.

Adaptive reuse potential:
Some existing structures can be converted into community centers, museums, or artist residences.

threats

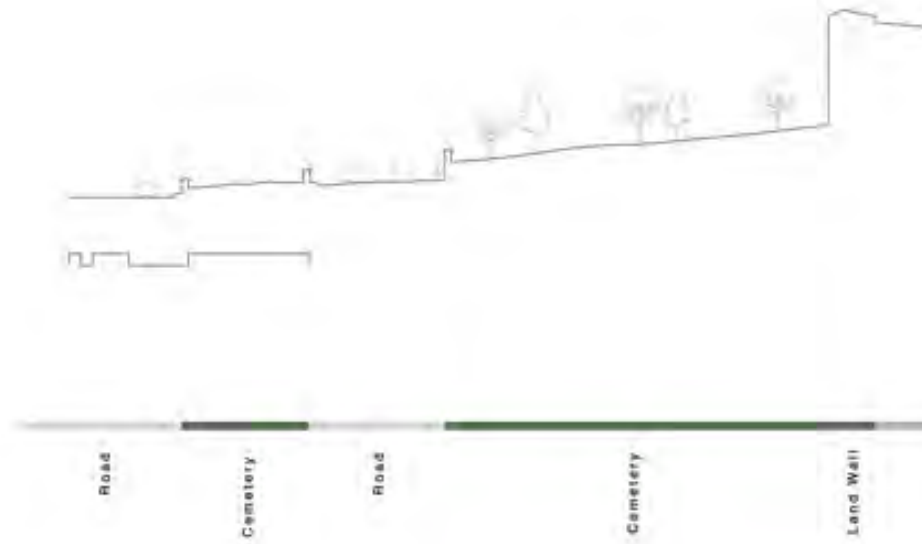
Gentrification & displacement:
Heritage-led development could trigger property speculation and social exclusion.

Neglect or mismanagement:
The area could deteriorate further if not properly maintained, especially the cremation ground.

Heritage degradation:
Invasive construction or lack of guidelines might cause structural or visual damage to the walls.

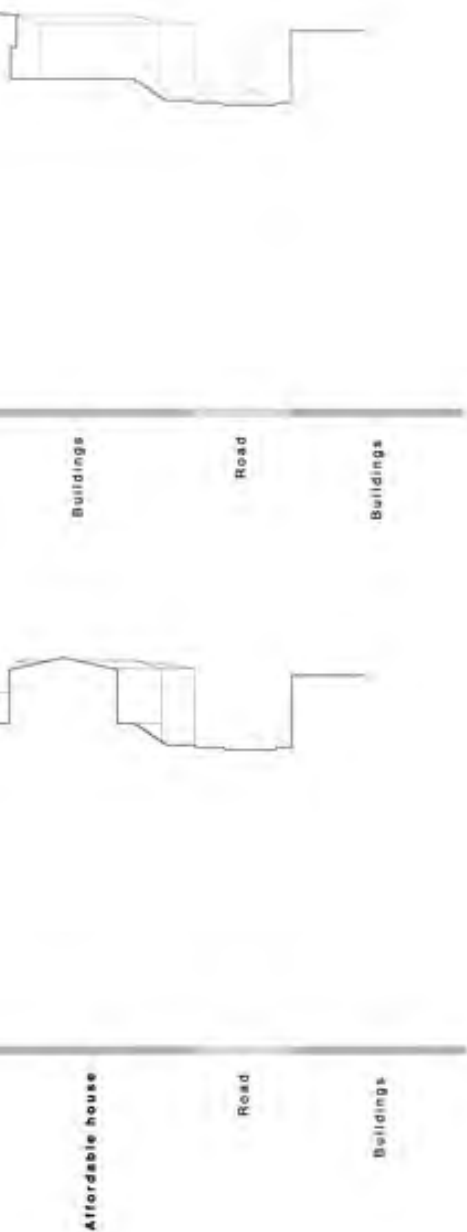
Environmental degradation:
Risk of dumping, pollution, or fire hazards near the cremation ground or open spaces.

Existing



Proposed

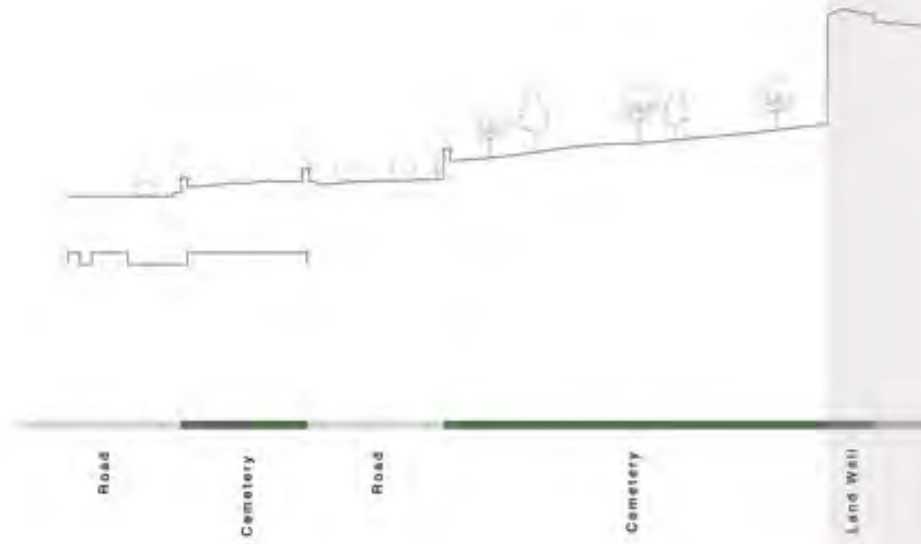




Section 1



Existing



Proposed

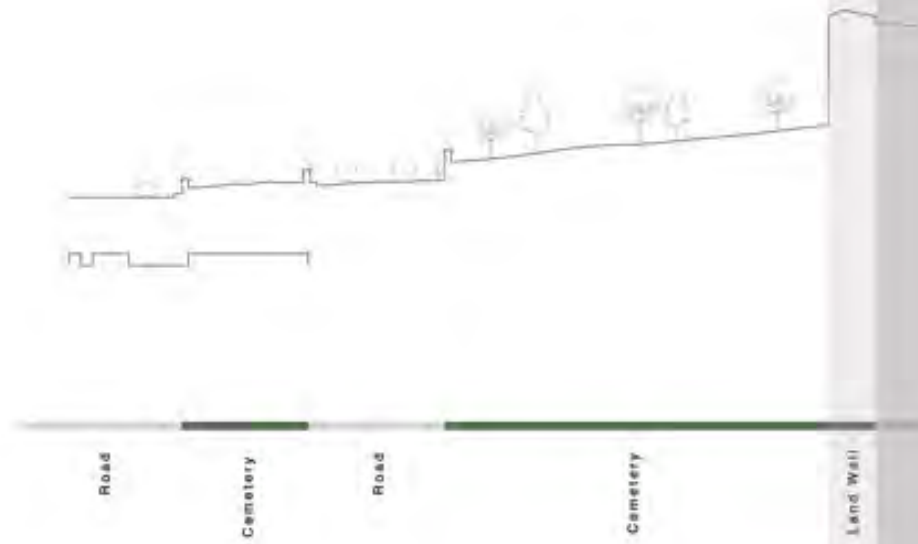




Section 1



Existing



Proposed





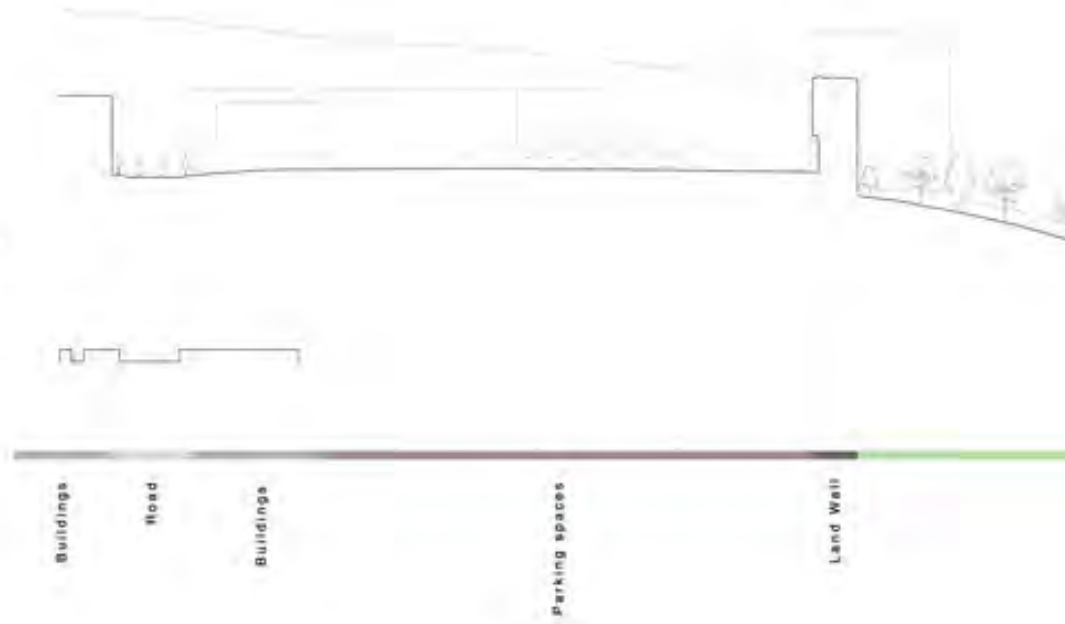
Section 1



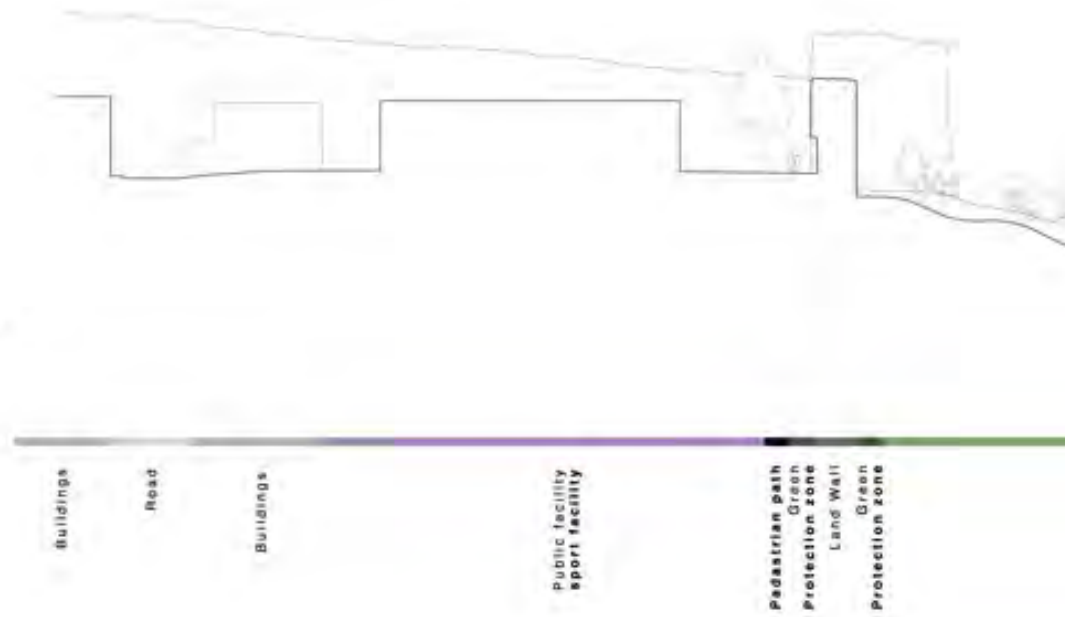




Existing



Proposed

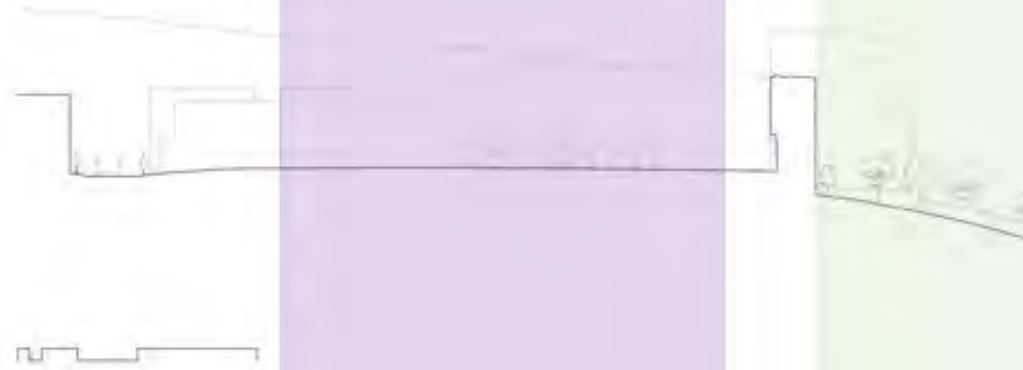




Section 2



Existing



Buildings

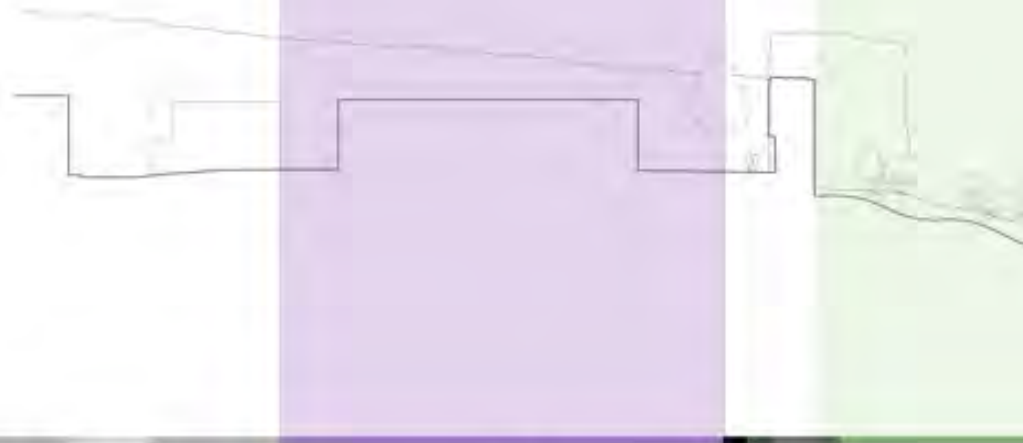
Road

Buildings

Parking spaces

Land Wall

Proposed



Buildings

Road

Buildings

Public facility
sport facility

Pedestrian path
Green
Protection zone
Land Wall
Green
Protection zone



Section 2



Existing



Buildings

Road

Buildings

Parking spaces

Land Wall

Proposed



Buildings

Road

Buildings

Public facility
sport facility

Pedestrian path
Green
Protection zone
Land Wall
Green
Protection zone



Designed green space
Park

Road

Buildings

Section 2



GROUP 3

Diegetic elements of narrative development
in MR: A case of Heritage Interpretation
in Dungeon of Yedikule

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Burak Delikanlı (ITU)

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Students

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Letizia Domenicale (POLIMI)

Lucía Trinidad Martínez (UGR)

Diego Aristófanes Dias de Sousa (FAUP)

Begüm Özcan (ITU)

Serra Acartürk (ITU)



Abstract

In this immersive, one-week workshop, students will explore how Mixed Reality (MR) can bring to life the hidden narratives of Porphyrogenitus (Tekfur Palace). Tekfur Palace is a significant Byzantine-era palace structure located in the Edirnekapı district of Istanbul, adjacent to the city's land walls (Karakaya, 2019). It has a deep historical background dating back to the 10th century and was constructed as part of the Blachernae Palace complex in the 13th and 14th centuries. The palace is rectangular in plan, comprising three floors and a courtyard; the ground floor opens to the courtyard through columned arches. The construction materials employed comprise stone, brick, and wood. Tekfur Palace was used as an official residence by Byzantine emperors. Thereafter, it remained in disrepair and abandonment for a considerable duration during the Ottoman period. In the 18th century, the site transformed into a workshop for the production of İznik tiles. Several tiles manufactured in this facility have been used in prominent historical edifices, including the Fountain of Sultan Ahmed III. Throughout the 20th century, the palace served various functions, including a stable, a refuge for displaced persons, and a glass bottle factory. Currently, Tekfur Palace functions as a museum following archaeological excavations and restoration works. Working in small creative teams, participants will learn how to design diegetic elements within MR environments, blending technology with imagination. Field explorations, hands-on modeling, and narrative design exercises will guide students as they craft site-specific experiences that reimagine the past through the lens of the future. By the end of the week, each group will present a short video prototype—an MR-enabled interpretation of the Palace's history. This is a call for storytellers, coders, designers, and dreamers ready to experiment at the crossroads of memory, myth, and mixed reality.

Team Plants Invasion:

The Green Guardians of the Tekfur Palace

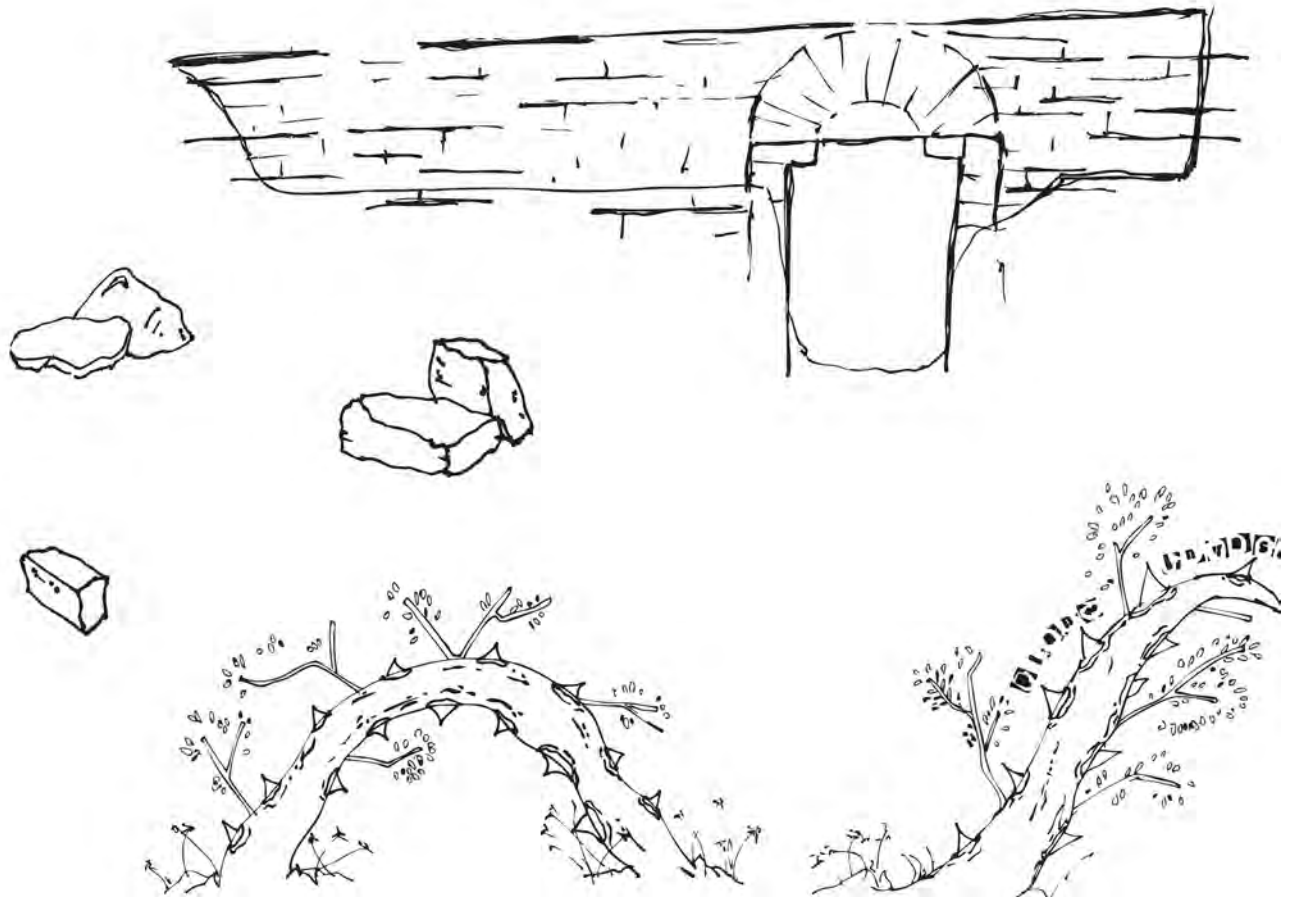
Within the framework of the “a [TRH] Augmented Thresholds” Erasmus+ workshop, our group focused on the layered history of the Tekfur Palace, creating an Augmented Reality video to explore the site’s chronological dimensions. Our project, situated directly at the palace walls, uses AR as a narrative device, guiding visitors through a three-act story of the structure’s life: its glorious past, its fragmented present, and a dystopian future. “Plants Invasion: The Green Guardians of the Tekfur Palace” begins by digitally resurrecting the wall to its original state. Viewers witness a virtual reconstruction of the complete geometry, allowing them to grasp the architectural scale and integrity of the palace in its prime. This vision of the past then dissolves, confronting the user with the stark reality of the present—the collapsed stones and weathered ruins that define the site today. The final act presents a provocative, dystopian future. Here, nature stages a quiet takeover, with resilient vegetation engulfing the masonry. In our vision, these plants are not agents of decay but become the new guardians of the palace, their roots and leaves forming a living shroud that protects and defines the heritage. Through this journey from architectural past to ecological future, our AR installation challenges viewers to reconsider what it means to sustain heritage, proposing a future where nature and ruin coexist in a new, symbiotic relationship.















Fatih - Istanbul

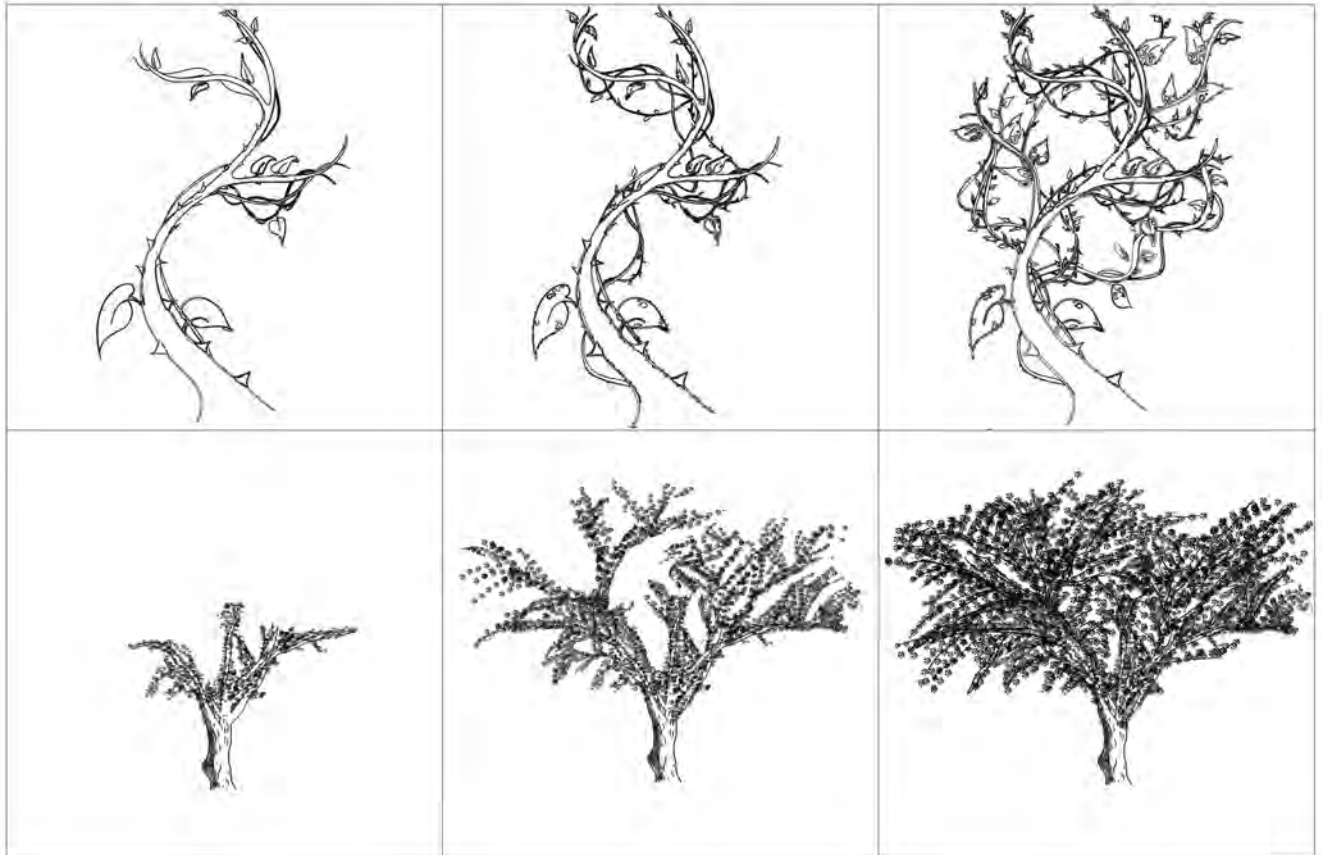


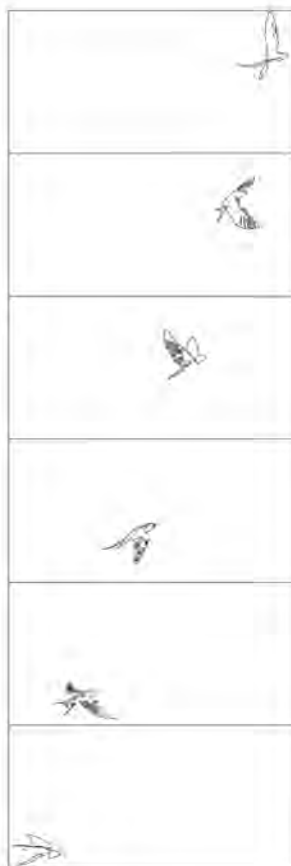
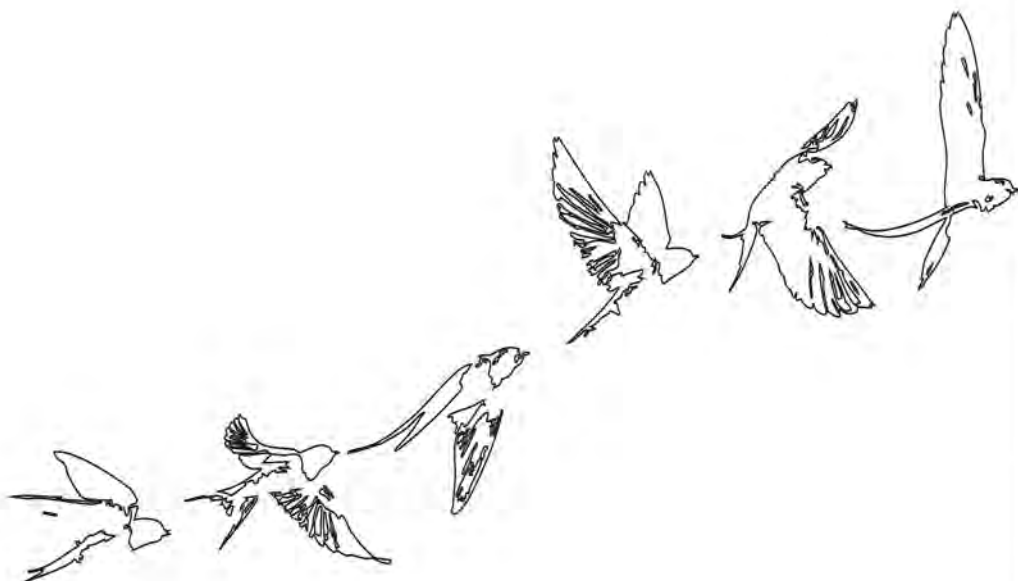
Static Objects



| | | | | |
|---|---|---|---|--|
|  |  |  |  | Flora species <i>Pinus pinea</i> <i>Pinus brutia</i> <i>Populus alba</i> <i>Cercis siliquastrum</i> |
|  |  |  |  | <i>Lavandula angustifolia</i> <i>Quercus cerris</i> <i>Pinus nigra</i> <i>Fagus orientalis</i> |
|  |  |  |  | <i>Acer campestre</i> <i>Hedera helix</i> |

Animated Objects







What is Augmented Reality (AR)?

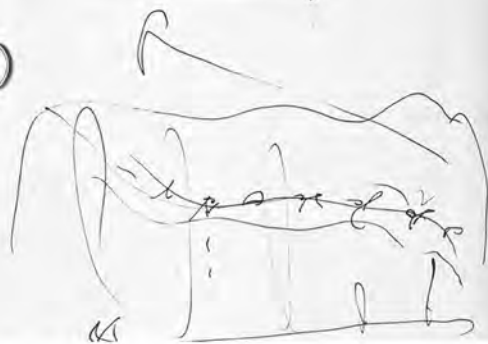
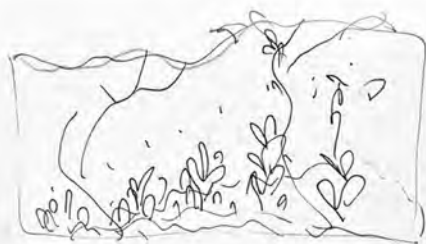
Augmented Reality (AR) overlays digital information (images, sounds, videos, 3D models) onto the real world.

Unlike Virtual Reality (VR), which creates a fully immersive digital environment, AR enhances the physical environment.

Examples of AR Applications in Museums

- AR guided tours
- Interactive exhibits
- Historical reenactments





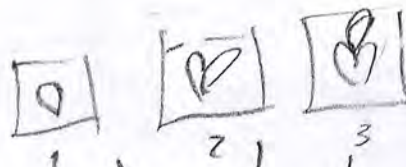
a route with
2 or 3 scene
telling a story
+ tekfor pattern

+ what are the subjects?
other than people, structure
+ users, layered stories
+ aim is to show an
invisible layer

3 body system:
life between
walls



difficult
boston

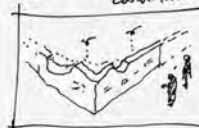


1 phase: the past



+ Architecture
+ users: military
ambassador

2 phase: existing
condition



+ wall disappear
bird cone
+ tourist, birds
local fauna, flora
with seed

3 phase: future
nature takes over



→ vines besides path
+ nature takes over
plants everywhere



QR code on site



QR with context

Team The Last Emperor:

Tekfur Sarayı and the Byzantine Legend

“The Last Emperor” is an augmented reality experience that brings to life the legend of Constantine XI Palaiologos, the last Byzantine emperor, through the ruins of Tekfur Sarayı in Istanbul.

Inspired by the myth that the emperor never died but sleeps beneath the palace, the project merges historical research, narrative design, and immersive technology. The story unfolds during the Fall of Constantinople in 1453, when the Byzantine capital was conquered by the Ottomans. Constantine’s final moments, shrouded in mystery, became the emotional core of the experience.

The narrative was developed as a three-part monologue, where the emperor reflects on the fall of his empire, his fate, and the weight of a disappearing world.

Using Adobe Aero, we constructed an augmented reality space where users can move freely through the story. The environment is layered with 2D visual elements — Byzantine mosaics, symbolic icons, and imperial textures — that merge past and present in a spatial dialogue.

Post-production was completed in Adobe After Effects, refining the atmosphere and transitions to give the piece a cohesive and cinematic rhythm.







As we said, the King, Constantine XI Palaiologos, will tell his own legend, hence his figure is generated according to Byzantine paintings. He will be the guidance this time, to show around the narrative.

Then, press the dialog box and listen to the story!



In the legend, the 1st scene talks about the war resulting in the fall of Constantinople. The defeat drives him to hide in the palace.

↑ Several paintings from that period depict the battle scenario. To make it vivid, like the one above, figures are extracted and put in different depth in order to represent the fierce war.

↗ In the other painting, there is the very metaphor that the falling crown suggests the fall of Constantinople. Therefore, play with the painting and find the crown by yourself!





We have no way of knowing whether he dissolved his court, but the fact is that he was left, standing alone by himself with worthless wealth and decaying pillars.

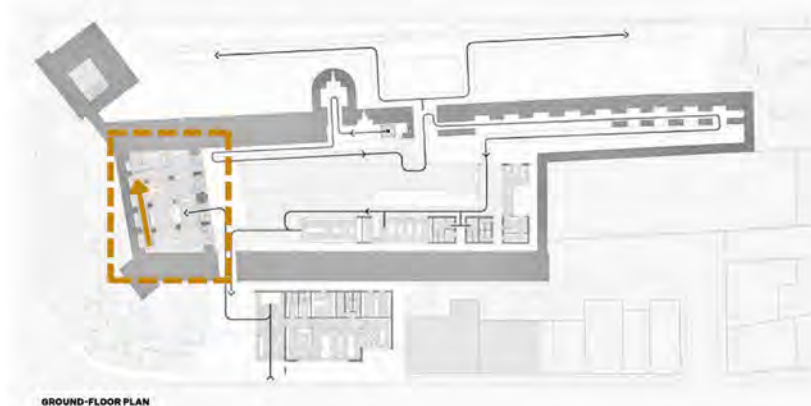
When you find him, you may stop and listen to his monologue, and see that people around him are about to leave.



In the final scene, you will see his dream come true. Perhaps inner peace is what he chases, as precious to him as the ocean landscapes of Istanbul.

“Here I wait,
for how long it will take.
I don’t know...”





This project explores the visual and symbolic power of that legend, reimagining the emperor's figure through imagery, theatrical monologue, and Byzantine aesthetics, bringing back to life the echoes of a past that still lingers between ruins and myths.

Movement through the palace



The movement through the palace unfolds beginning from the stairs, with the introduction. As we move upstairs, we start listening to the echoes of battles and the fall of Constantinople. We move through dark corridors into the chamber of Constantine XI.'s eternal sleep.



Battle Scene



Empire falling Scene



Sleeping Scene

GROUP 4

Participation and Socio-natural Regeneration
in the Land Walls of Istanbul World
Heritage Site

Studio Conductors

Francisco J. Abarca Alvarez (UGR)
Fernando Osuna-Pérez (UGR)
Ecem Karabay Özder (ITU)

Students

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Wiktor Wolny (NYSA)



Abstract

Improving the ecosystem balance and enhancing the quality of life of the local population were approached as fundamental dimensions of heritage conservation in the context of the Land Walls of Istanbul. The work departed from the recognition that cultural heritage cannot be sustained in isolation from its social and ecological environment. The Land Walls, functioning simultaneously as monumental structures and as living spaces for communities, presented complex challenges that required multidimensional and sensitive strategies.

The study concentrated on integrated socio-natural regeneration, prioritising the interconnections between urban ecology, cultural heritage, and community well-being. Active citizen participation played a central role, as the needs, knowledge, and aspirations of local inhabitants were incorporated into the design and decision-making processes. A critical analysis of the site's physical conditions, demographic structure, and social dynamics allowed the identification of both pressures and opportunities.

Through collaborative exploration, the outcomes emphasised community stewardship, biodiversity enhancement, and the improvement of local living conditions. The proposals sought to safeguard the cultural value of the Land Walls while also fostering resilience, inclusivity, and environmental sustainability. Ultimately, the work bridged heritage conservation with regeneration practices, offering holistic strategies that envision a dynamic and participatory future for the Land Walls.

Situation Area





Urban Scale Intervention

STRATEGY

2 GREEN DIRECTION LIKE CORRIDORS

RECOGNIZE AND INCREASE GREEN SPACES - IMPROVE ASSEMBLY AREAS

+ 1 NEW EMERGENCY NETWORK

GATHERING POINT OF INTEREST !!!

NEW ACCESSIBILITY



+ 1 **ARCHAEOLOGICAL** ITINERARY

WATER
(CISTERNS) + LINES
ARCHAEOLOGY + ROMAN
RED INFRASTRUCTURE



GREEN INFRASTRUCTURE

+ 1 **SOCIAL-GREEN** REGENERATION

Demographic and Social Analysis

| Groups of interest | Example roles |
|--------------------|--|
| Local communities | Students, habitants, street animals, families, retired people; |
| Local authorities | Police, Istanbul Metropolitan Municipality; |
| Owners | Families running a family business; |
| Woman | Single mothers, grandmothers, students; |
| Young | Kids, teenagers, junior football players; |
| Researchers | Erasmus students, journalists; |
| Local visitors | Cemetery users, park users; |
| Tourist | Erasmus students, disabled people; |
| Tourism industry | Air B&B owners, tour guides; |
| Local industry | Buffet owners, coffee shop workers, food deliverer; |
| NGO | Union of Historical Towns ,Society of Human Settlements, Turkish Archaeologists Association, National Society for Timber, Foundation for Raising Awareness on Culture, Workshop in Solidarity, Society for the Friends of Cultural Heritage (KUMİD),Istanbul Foundation for Culture and Arts (IKSV), History Foundation; |

| Groups of interest | Example roles |
|--|---|
| Local communities Local authorities Owners Woman Young Researchers Local visitors Tourist Tourism industry Local industry NGO | Students, habitants, street animals, families, retired people; Police, Istanbul Metropolitan Municipality; Families running a family business; Single mothers, grandmothers, students; Kids, teenagers, junior football players; Erasmus students, journalists, PhD students; Cemetery users, park users; Erasmus students, disabled people; Air B&B owners, tour guides; Buffet owners, coffee shop workers, food deliverer; Union of Historical Towns ,Society of Human Settlements, Turkish Archaeologists Association, National Society for Timber, Foundation for Raising Awareness on Culture, Workshop in Solidarity, Society for the Friends of Cultural Heritage (KUMİD),Istanbul Foundation for Culture and Arts (IKSV), History Foundation; |

Roles Analysis

SINGLE MOTHER



Name: Miray

Role: Single mother

Group of interest: Women

Daily routine: I live near the Landwalls and I'm a single mother. My husband died in car accident because of dangerous situation of the road. It's very hard for me to take care of my child and work. I wish there was some space for children near the Landwalls to play, isolated from dangerous roads

Interest related to the heritage: We pass a lot of time next to the Landwalls

Problems in heritage site: Currently the Landwalls are very close to a dangerous, busy road. This leads to a situation in which people do not feel safe, and there is constant noise and chaos next to the walls

Future vision: It would be nice is to have more greenery, eliminate noise, and make the area safer. Additionally, the area should have more playgrounds, educational objects and parks where children can safely spend time

PHD STUDENT



Name: Orsola

Role: PhD Student

Group of interest: Researchers

Daily routine: Istanbul Landwalls could be interesting for my research, but many parts are closed, and I need authorization to visit them. Moreover, there are no connections between the few green areas close to the walls, so to do my research I have to move in a space without greenery and pleasant shade. I hope that one day the green spaces will be connected to each other so that one can get to the walls by walking among the trees, in nature.

Interest related to the heritage: The site could be interesting for my research

Problems in heritage site: Although there is a restored part, usually is closed to the public so I couldn't visit it as it is needed authorization

Future vision: Being able to stay inside the wall and study the area. The area is not well connected with the city as well

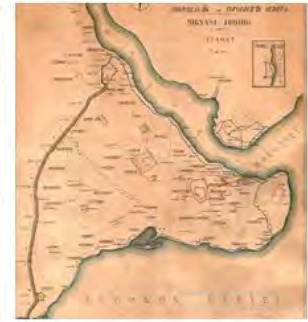




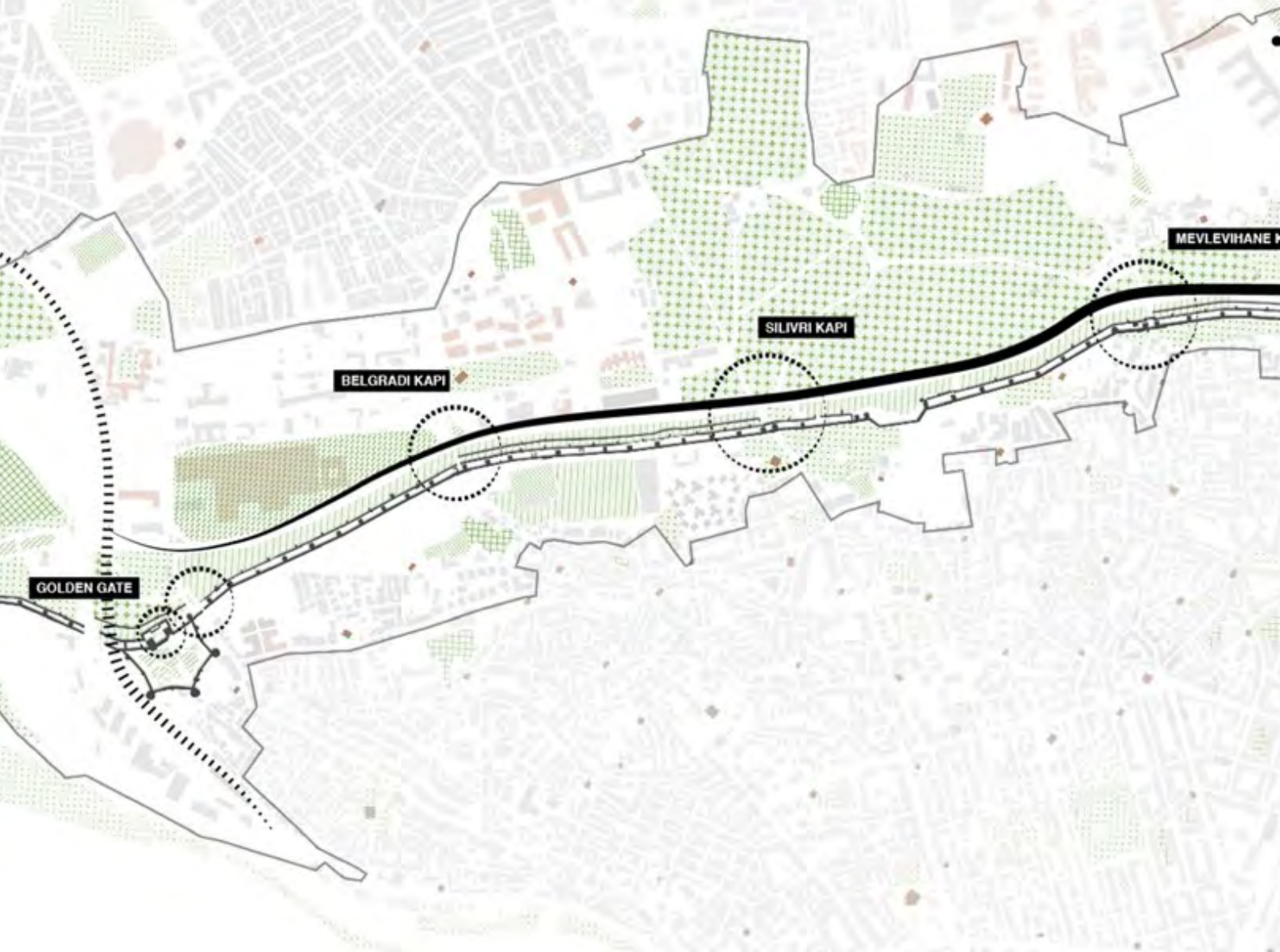
Analysis of The Historic Peninsula

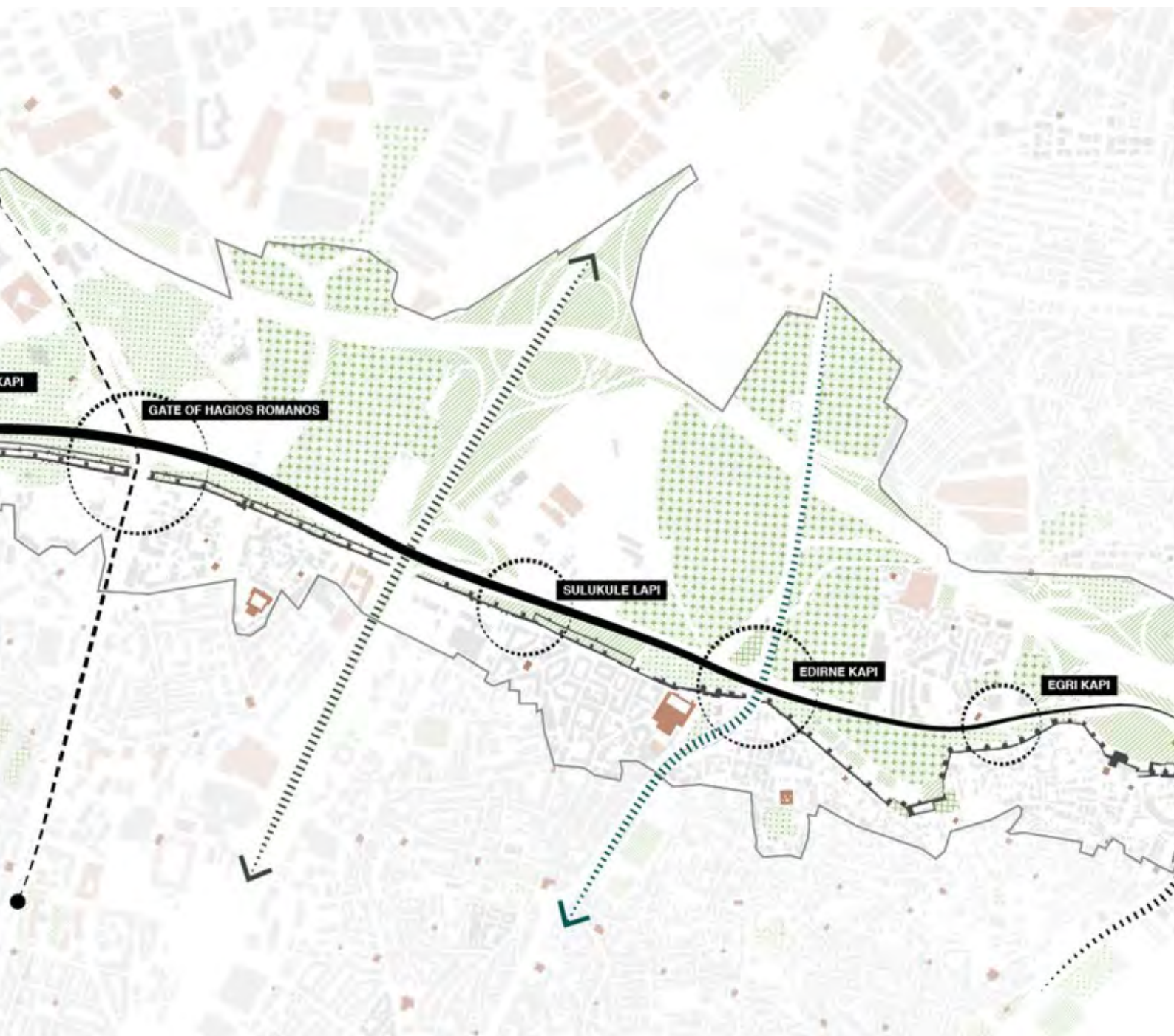


Historical Cartography Research

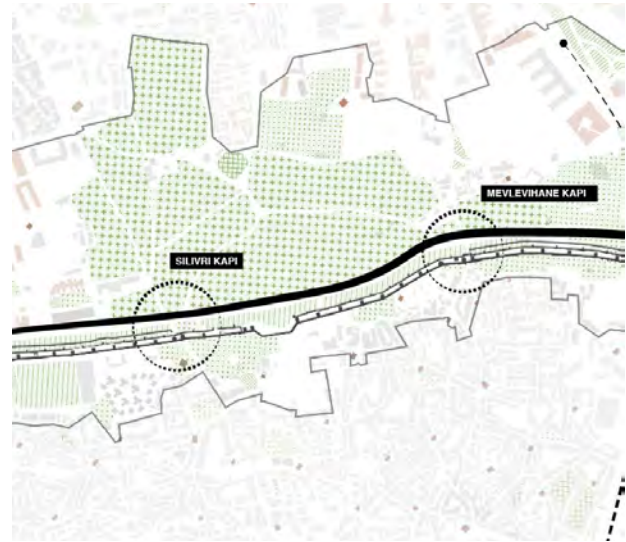
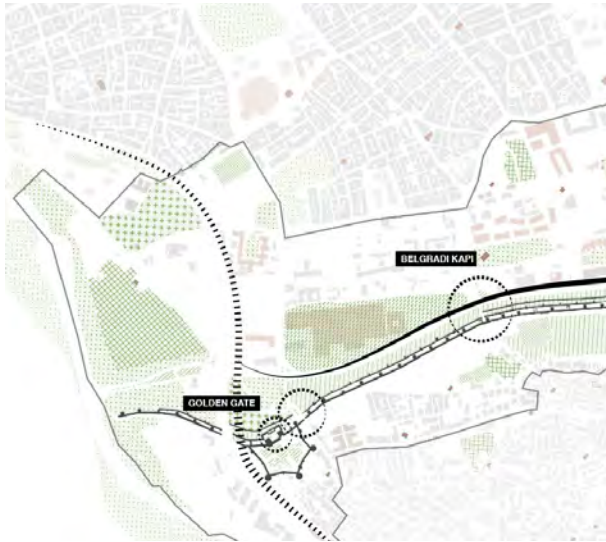


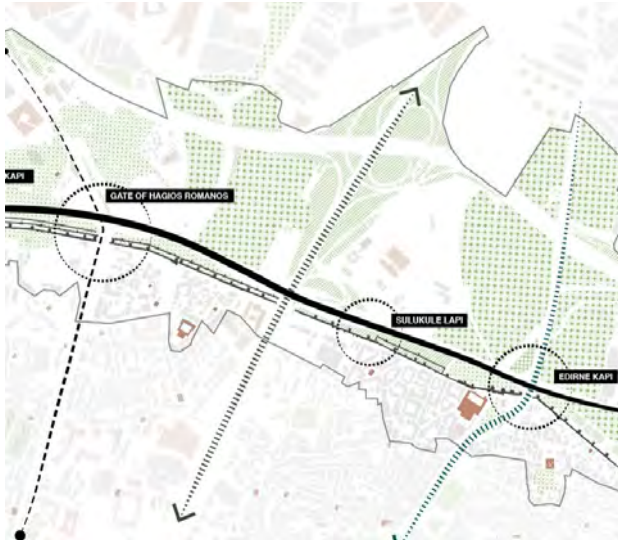
Actual State





Project Proposals







GROUP 5

Documenting/ Storytelling/ Experiencing:
Virtual Realities of Landwalls

Studio Conductors

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Batuhan Esirger (BILGI UNI.)

Handan Aş Çemrek (MSGSU, ISTUN)

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Maria Garcia Mora (UGR)

Beyza Gül Topçu (ITU)

İlayda Şahin (POLIMI)

Álvaro Ruiz Sánchez (UGR)

Margherita Angeli (POLIMI)



Abstract

Reimagining the Past, Immersing in Heritage: A Digital Journey Along the LandWalls

This is a one-week workshop that explores the digital preservation and reinterpretation of the LandWalls, a historically layered architectural structure reflecting Byzantine, Ottoman, and Turkish Republican periods. The workshop follows a three-step methodology: Documenting, Storytelling, and Experiencing. In the first phase, participants will use drone-based photogrammetry to create 3D models of the walls, learning optimization techniques in Unity such as low/high poly modeling and texture baking. This phase also includes vector-based footprint extraction and surface modeling from point clouds, enabling accurate ground plan delineation and geometry analysis essential for the subsequent storytelling and AR/VR development stages. In the second phase, participants will research historical narratives, myths, and events associated with the LandWalls, translating them into digital stories using 2D graphics, collages, and animations.

Finally, these stories will be brought to life through VR/AR experiences, allowing for immersive engagements with cultural heritage. The program includes lectures, hands-on production, and creative explorations of digital heritage, and is aimed at students interested in architecture, history, and immersive media technologies.

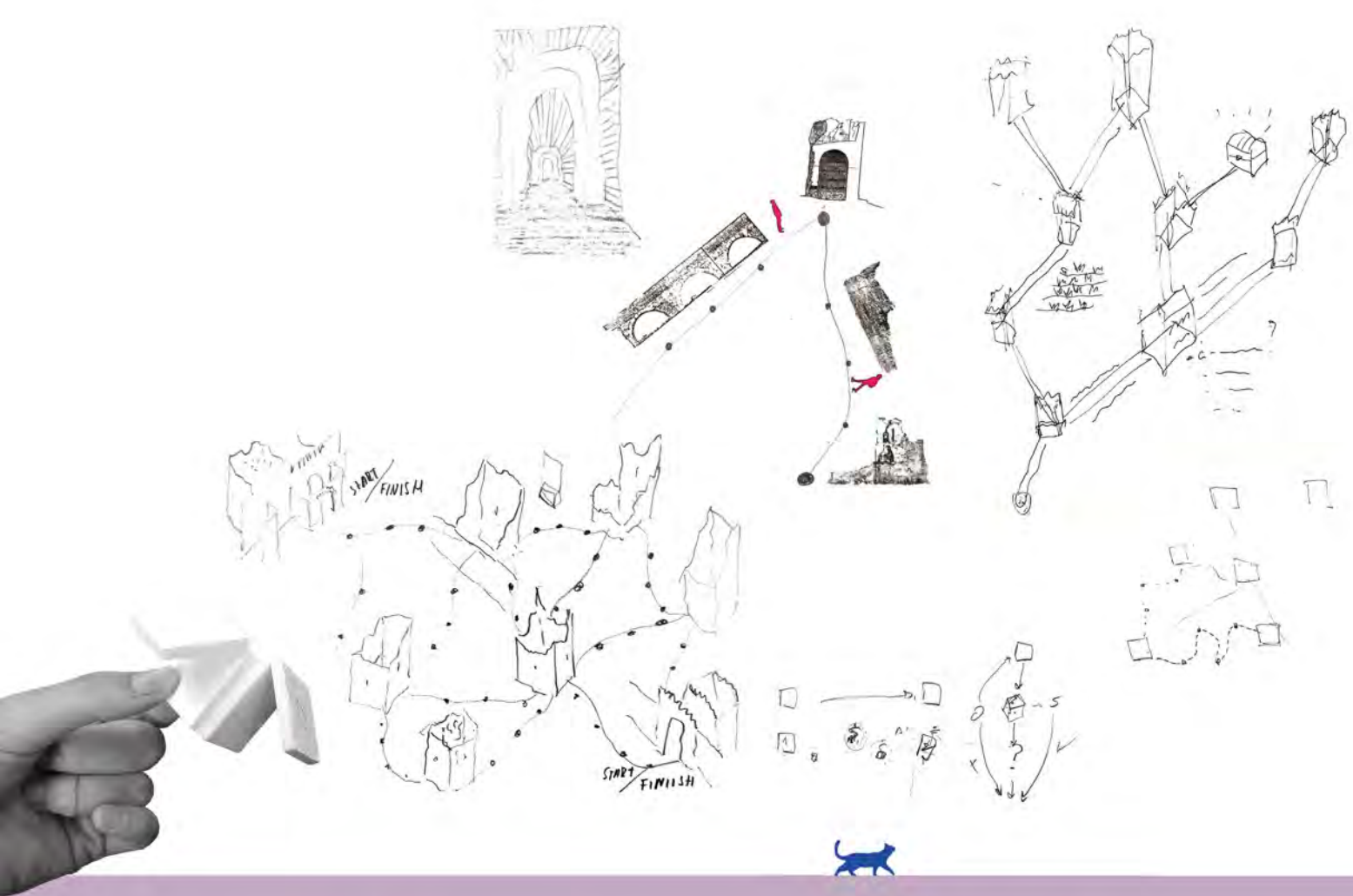


Every step is a passage through time

GEKIT

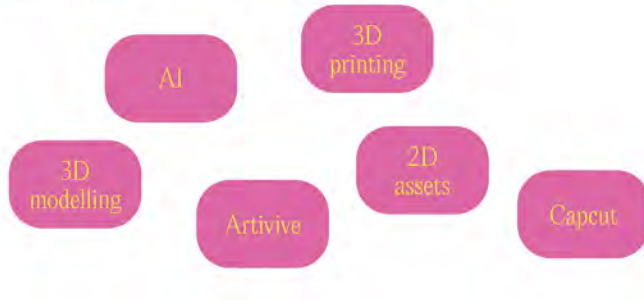


Initial Ideas



Development Process

What resources have we used?



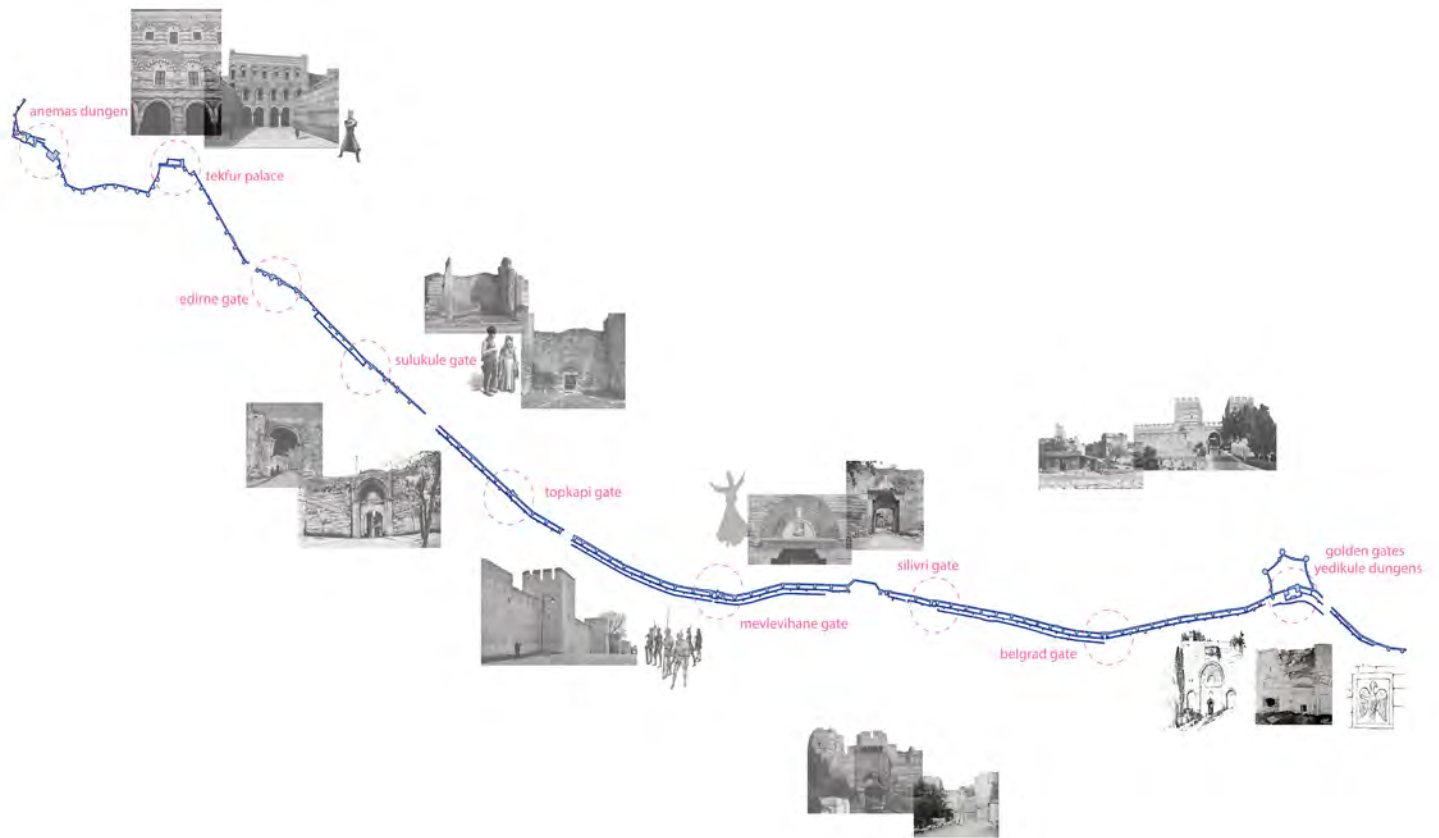
We decided what story we want to tell

We used AI to generate eighty true or false questions.
It also helped us develop the rules of the game and optimize the information we want to transmit.

We designed the board and the other elements of the game.
Our job was to draw the layout of the wall and its gates.
We also modeled them and used a 3D printer to print them out.
We use AI to generate 3D animations of ourselves to use as game pieces.

We create AR visualizations to tell the characters' stories.
We use AI, Capcut and Artivive.

The Story



Geçit Mechanics

Be the first to reach Tekfur Palace and accumulate the highest total points

COMPONENTS



Game Board
path tracing from Yedikule Gate to Tekfur Palace



7 Sided Dice
faces 1-6 and JAIL



3D Gate Models
to be conquered and placed on the correct place in the map



Question Cards
6 decks (one per gate), each containing 10 True/False cards

RULES

1
2
3

Board placement

Starting positions

Objectives: accumulate the highest total points and be the first to reach Tekfur

Gate Capture: 10 points each
Finish Bonuses: Awarded when a player reaches Tekfur palace

Sequence:

Listen to the history from the AR character of the Gate.

Answer a question $\xrightarrow{\text{correct; collect the 3D Model}}$ Roll the dice
 $\xrightarrow{\text{wrong}}$

1-6

7

Move forward exactly the number shown, along preferred path. Choose the route strategically.

landed in the middle

Wait your turn to roll the dice again. Remember, even if you roll high number, you have to reach the each gate and answer the next question.

landed on a gate



GEÇIT

MEVLANA
GATE

MEVLANA PALACE

True or false?
The Tekler Palace
was used as a
mangrove under
Sultan Bayezid II.

BELGRAD GATE

True or false?
In WWII, the gate
was camouflaged
against potential air
raids.

SULUKULE GATE

True or false?
Travellers in the
19th century
described the
neighbourhood's
wooden houses as
multi-story
mansions.

SILIVRI GATE

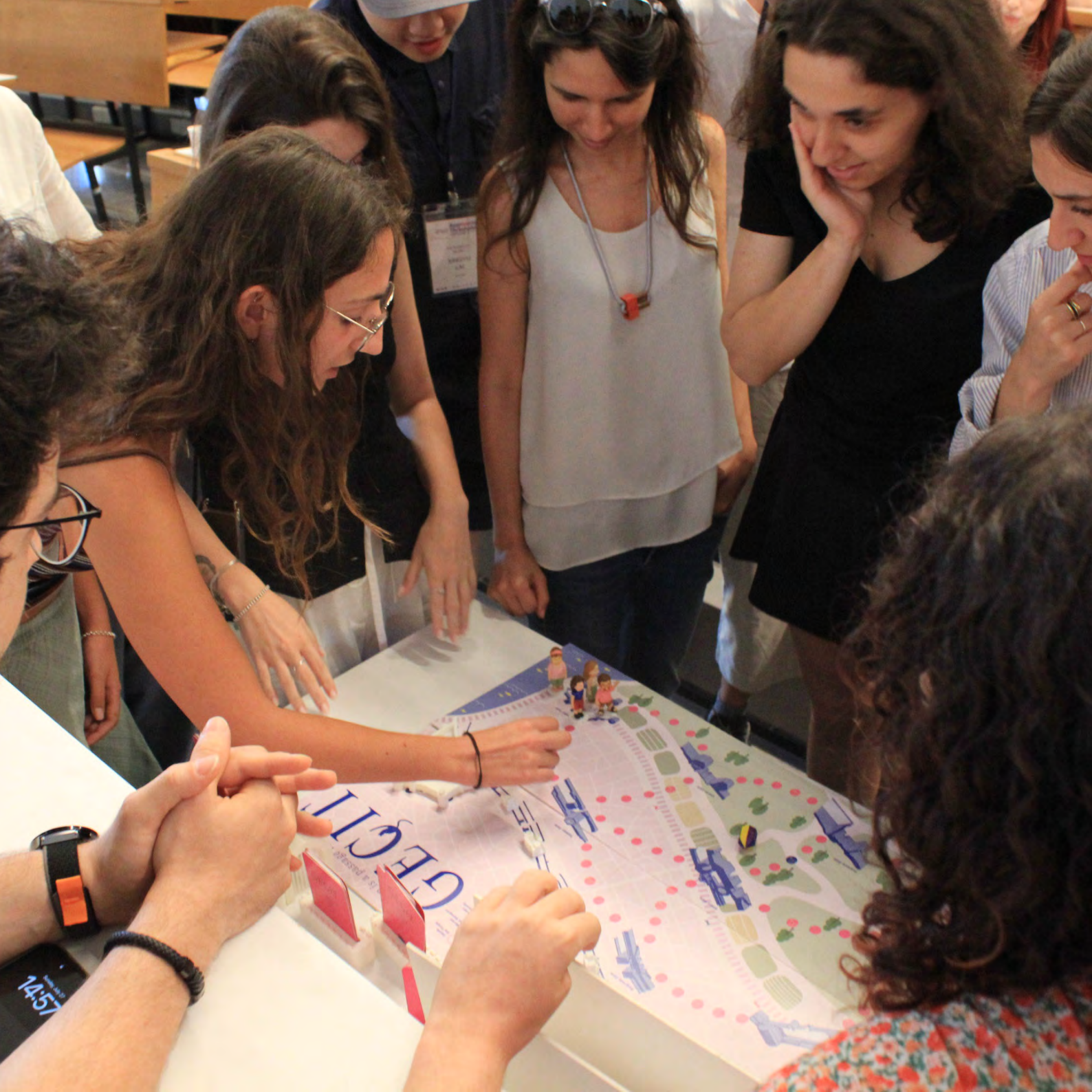
True or false?

Caravanserais once
lined the road
immediately inside
Silivri Gate.

Sulukule Gate

Edirne Gate

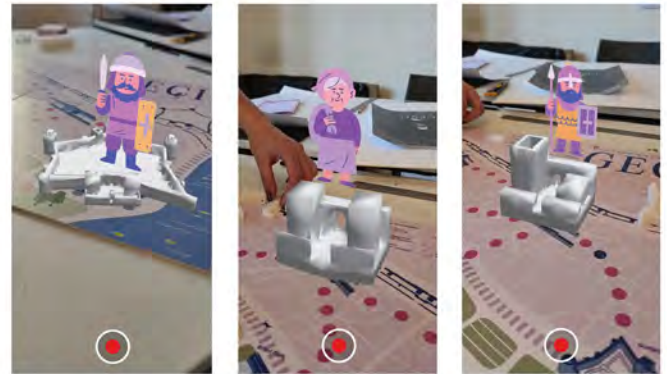
+2



AR Proposal

We used ChatGPT to generate the character drawings and created audio tracks with CapCut to tell their stories. Finally, we used Artivive to place each character on a door on the board.

Just point your phone's camera at them to hear them speak!



Ulubatlı
Hasan



Belgrade
migrant



Merchant



Byzantine
soldier



Gypsye



Architect



Semazen



Andronikos III
Palaiologos

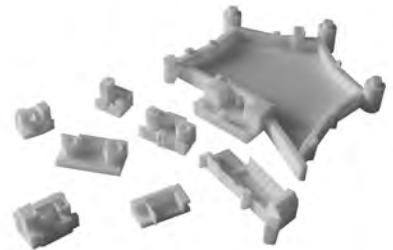


Final Results

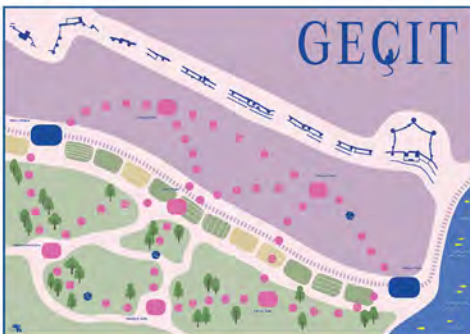
Cards



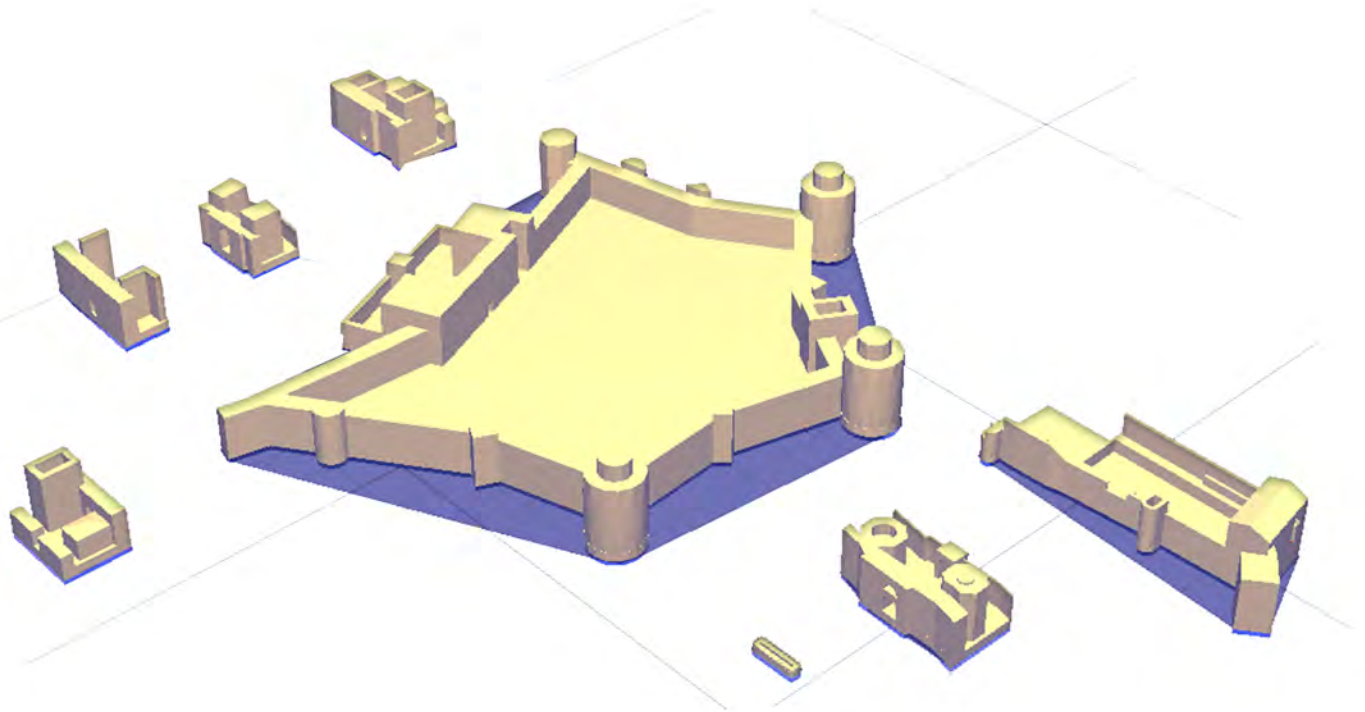
3D models



Board



3D MODELS





Final results

Board





MASTER LEVEL STUDIES

The studio, conducted within the scope of the Architectural Design II course of the Istanbul Technical University (ITU) MTZ Architecture Non-Thesis Graduate Program, aimed to develop an interdisciplinary approach to reinterpreting the Istanbul Land Walls through new architectural perspectives and transferring them into a sustainable future. The process was structured through three modules.

The first module, Flâneur – Walking Experience, involved exploratory walks along the Land Walls to observe, document, and analyze the spatial and sensory qualities of the site through sketches, videos, collages, and sections. The second module, Storytelling, encouraged the discovery, writing, and animation of narratives rooted in the historical, cultural, or spatial aspects of the Land Walls. The third module, New Spatial Investigations, focused on architectural design proposals that reinterpret the layered context of the site through model-making, spatial analysis, and speculative interventions.

Within this scope, the works of the students Livia Arnaldi, Nicolo Gallo, and Simon Picot are presented.

AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
MTZ of the Architectural Design
Assoc. Prof. Dr. Duygu Güler Öner

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Istanbul Landwalls and new spatial investigations

The project is located in a suggestive area, right next to the ancient walls of Constantinople, in a section that includes Bosphorus and Marmarasi. The intervention is structured into nine functional modules distributed along the line of the wall, integrated within a landscaped system that includes two equipped public parks, located at the upper and lower parts of the site. These parks feature green spaces, picnic areas, and two children's playgrounds, designed to encourage social interaction and community engagement.

At the heart of the intervention lies the true essence of the project: a modular system that promotes a model of circular economy and social inclusion. The cultivated fields beyond the wall provide raw materials that are processed in the kitchen of one of the modules. From here, the food is redistributed in various directions. In those in need through the workshop modules, to the library cafe, or used for catering services in the event space and meeting room.

In order to serve this redistributive function, the workshop modules temporarily accept their use, turning into food distribution points when necessary. Another module houses a veterinary clinic for stray animals, which are also fed with food derived from the harvests, appropriately processed.

The organic waste produced in this process feeds a compost area located beyond the wall, closing the loop and returning fertilizer to the fields.

The project also includes physical and visual connections between the two sides of the wall, elevated walkways with panoramic views allow passage and pause, also linking to the nearby highway. A central connecting module hosts a ramp and an elevator to ensure full accessibility across the different levels of the park.



The Slopes of the Kalligaris Gate



Microclimatic analysis of the site

SW / Change
Shade
Cool and humid

NE / Poyraz
Wind and
Warm
Cool and dry

W / Graduate
Through
Moderate

SE / Kocaköy
Warm
Warm and dry

SW / Lullies
Shade
Warm and humid

S / Kalligaris
Warm and sunny
Warm and sunny

SW / Lullies
Shade
Warm and humid

S / Kalligaris
Warm and sunny
Warm and sunny

SW / Lullies
Shade
Warm and humid

S / Kalligaris
Warm and sunny
Warm and sunny

SW / Lullies
Shade
Warm and humid

S / Kalligaris
Warm and sunny
Warm and sunny

SW / Lullies
Shade
Warm and humid

S / Kalligaris
Warm and sunny
Warm and sunny

SW / Lullies
Shade
Warm and humid

S / Kalligaris
Warm and sunny
Warm and sunny

Circular economy



Urban design elements integrated into the site



AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
MITZ 310 Architectural Design I
Drawing, Ryan De, Derya Güler, Ömer

LIVIA ARNALDI



Shading Meets Overhangs
The roof overhangs, made of recycled metal, are dimensioned to block direct summer rays, preventing overheating of interior spaces and reducing the need for artificial cooling.



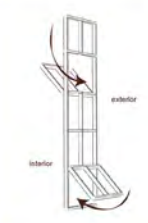
Solar Screens with Bars
For the south-facing façades, used in some cases also on the north, the overhangs integrate sun-shading ribs that filter light and create dynamic shadow patterns. These elements respond to the quality of natural lighting while limiting heat buildup during the hottest hours.



Vertical Orientation Screens for Microclimate Regulation
At the end of the building, orientation screens for the southern side, combined with vertical fins, are installed to optimize the building's microclimate. They contribute to reducing a cooler and more comfortable microclimate in the surrounding outdoor space.



Sustainable Materials
The main structure is made of perforated SLAM concrete, which is made from local resources. While the roof, walls, and other elements are built with recycled metal. This approach reduces the overall environmental impact and enhances the building's durability and ease of maintenance over time.



Controlled Natural Ventilation
The system uses integrated wind and thermal air-powered ventilation, while the central section remains closed. The system allows the creation of a controlled airflow, improving air circulation and ensuring thermal comfort without relying solely on the climate.

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Istanbul Landfills and new spatial investigations



Site Plan | 1:500



Section AA' | 1:500



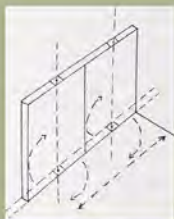
Section BB' | 1:500



Section CC' | 1:500

AUGMENTED STORYTELLING

ITU Department of Architecture
2024-25 Spring Term
MTE 5115 Antimicrobial Design
Advisor: Prof. Dr. Seray Güllüoğlu



The wall structure provides a ventilation system with the grid openings to allow the circulation of the air.



Multi-functional workspace and integrated self-ventilation system that allows the circulation of air through the grid openings.



The room is designed to provide a ventilation system with the grid openings to allow the circulation of the air.

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Istanbul Landmarks and new spatial investigations



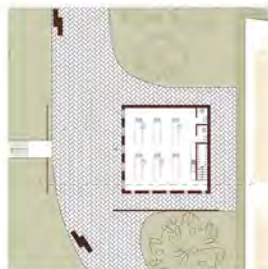
Section | 1:200



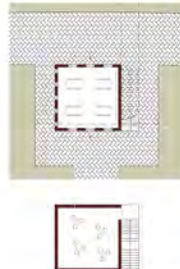
Section | 1:200



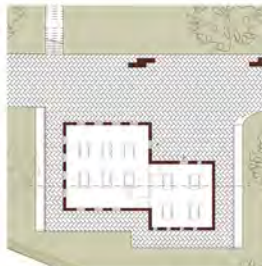
Section | 1:200



Ground floor Plan | 1:200



Ground floor Plan | 1:200



Ground floor Plan | 1:200



First floor Plan | 1:200



Section | 1:200



Section | 1:200



Ground floor Plan | 1:200



Ground floor Plan | 1:200



Ground floor Plan | 1:200



First floor Plan | 1:200



First floor Plan | 1:200



Section | 1:200



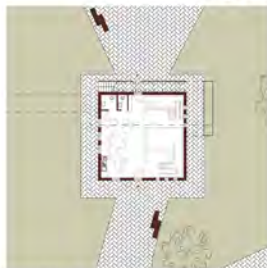
Section | 1:200



Section | 1:200



Ground floor Plan | 1:200



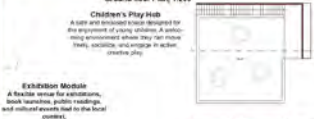
Ground floor Plan | 1:200



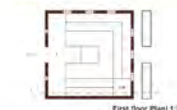
Ground floor Plan | 1:200



First floor Plan | 1:200



First floor Plan | 1:200



First floor Plan | 1:200

Exhibition Module
A flexible venue for exhibitions, book launches, public readings, and cultural events held in the local context.

Distribution Pavilion
Located between the park and the project area, the pavilion features a central theater and a panoramic, wavy-roofed permanent exhibition on the floor of the building.

Solidarity Kitchen
An open kitchen where the shared food from the urban gardens is turned into meals for people in need. Through shared technology and collective cooking.

General Pavilion with Garden Roof
A freestanding pavilion for gatherings, rest, and creative activities. The green roof provides the roof of the building, housing the kitchen and other rooms.

Veterinary Pavilion and Animal Shelter
A sheltered pavilion for the care of dogs and cats, with a small office and a covered space for veterinary services.

Library & Café
A welcoming space to read, study, or meet. Books and coffee are free for the city and community.

Children's Play Hub
A safe and inclusive space designed for the enjoyment of young children. A colorful environment where they can play freely, explore, and experience in action.

AUG MEN TED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
MITZ 918 Architectural Design 6
Analog, Ryut, Dr. Deniz Güler, Öner

LIVIA ARNALDI

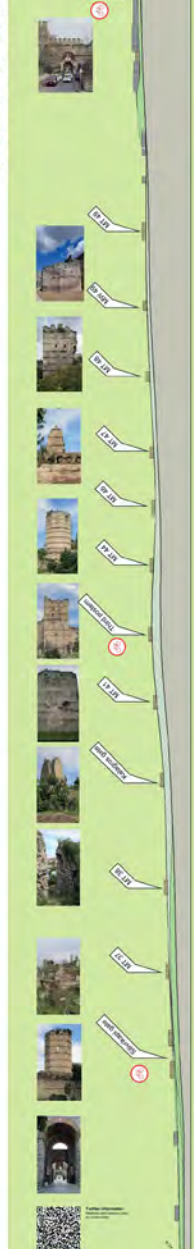
the Living edge | *meet, learn, share*

Istanbul Landwalls and new spatial investigations



AUGMENTED STORYTELLING

ITU Department of Architecture
2023-2025 Augmented Storytelling
MSc Thesis, Architectural Design II
Assoc. Prof. Dr. Deniz Gökçe Öner
2023/24

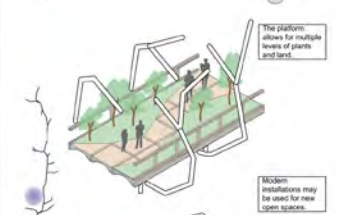
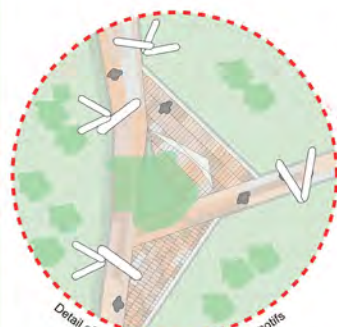


Beyond the wall: new lifes, new stories.

Istanbul landwalls and new spatial investigations

A new paradigm for the LandWalls

The project proposes the use of an elevated pathway working together with the pathways on the ground in a new way to experience the walls from above, while creating aggregation places. In addition to that, the display of historical heritage may be explained and promoted via the use of totems, which may even project aspects of history to the nearby wall or be supported by AR technologies. An analysis of the site allowed us to proceed to highlight the most relevant parts of the walls.



Urban renewal - use of totems



Site Plan - 1:1000



The module
The pathway above is composed of wood and it is held by a structurally designed structure of steel, which in turn also holds a system of lights, mimicking the looks of a

AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 (Spring semester)
M.Sc. Thesis, Landscape Architecture
Advisor: Prof. Dr. Maria Kostas, DArch
Student: NICOLO' GALLO

A new story - Justinian II - life and folly



▲ New stories - ARTIVIVE

The UNESCO heritage is held alive and developed through the use of adventurous stories from real life events, to the facts of the former emperor Justinian II, and enhanced through the use of AR apps to the likes of ARTIVIVE.

Beyond the wall: new lives, new stories.

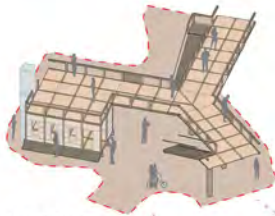
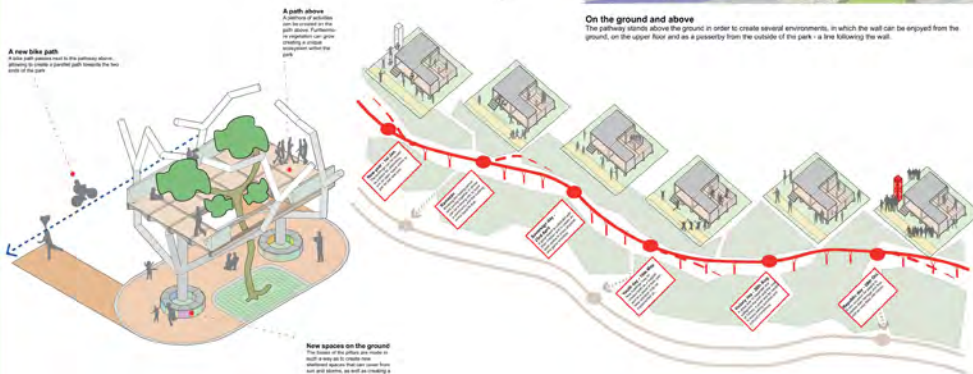
Istanbul landwalls and new spatial investigations
A new paradigm for the LandWalls

The place is designed so that it may be adapted to any event and season; in which the buildings may be assembled ad hoc to satisfy each and any situation. The pathway stands at a distance from the wall to create a buffer zone in which a bike lane may pass through. Gathering areas are also created in which the pathways may be connected to the ground. A variety of not only actions but also possible cultural events can be considered, too.



On the ground and above

The pathway stands above the ground in order to create several environments, in which the wall can be engaged from the ground, on the upper floor and be a passivity from the outside of the park - a line following the wall.



Life on two levels

New environments are created using the development of a two-level system of enjoyment of the new park. The shadow and height of 3 meters provided by the project allows for a unique interaction of otherwise separated realities.



Simple and effective combinations

The module may be repeated in a number of different ways - houses may be simple examples but allow for infinite activities, which can be interchanged according to time and season of the area, adapting for smaller scale activities and even bigger potential enterprises.



New gathering areas

New buildings may be created both as a support and as a space of their own. New activities may be implemented on more than one floor and go as far as create new squares from nothing.

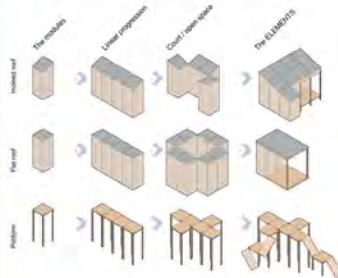


Beyond the wall: new lifes,
new stories.

Istanbul landwalls and new spatial investigations

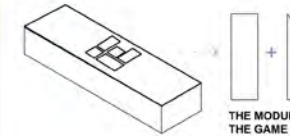
A new paradigm for the LandWalle

The module is a 1.5x1.5x3m structure, which can be adapted for all sorts of uses. It is mainly composed of a timber structure, corrugated steel roof and blocks of Hempcrete. It can be readapted with other materials, such as blocks of mycelium or adobe. The module is designed for multiple actions and uses and can use a trombe wall to create a cooler environment in its inside space. The entire area is then reused by creating pathways that connect the outdoor spaces with the interior. The site includes open spaces thought for all sorts of activities and relies on the perspective on two levels to create a unique scenery.



From simple elements to complex solutions

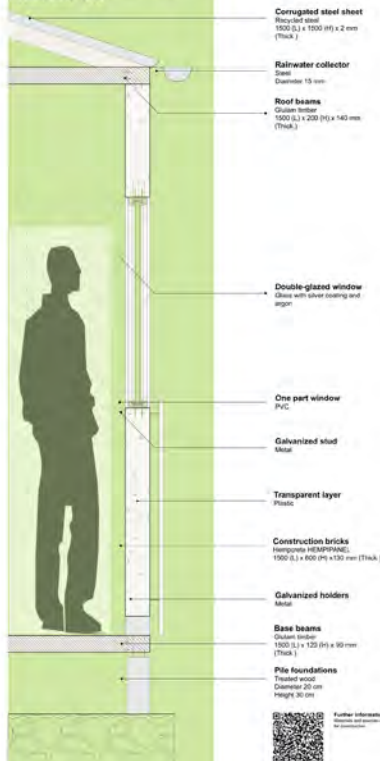
A matrix of simple elements has been employed, starting from the smallest unit of the box next to its functions, creating in the end an hybrid solution, especially studied for the multipurpose concept and solution required in such a sensitive environment. It is a final game of open and closed spaces, where you can stay in, pass by or stand above creations which may be dismounted according to each one's needs.



Simple and effective combinations

The module may be repeated in a number of infinite ways - the ones shown on the right are some of the assembled examples which could be used in a variety of settings and which leave virtually infinite room for expansion.

Beyond the wall - a section of the modular unit - 1.10



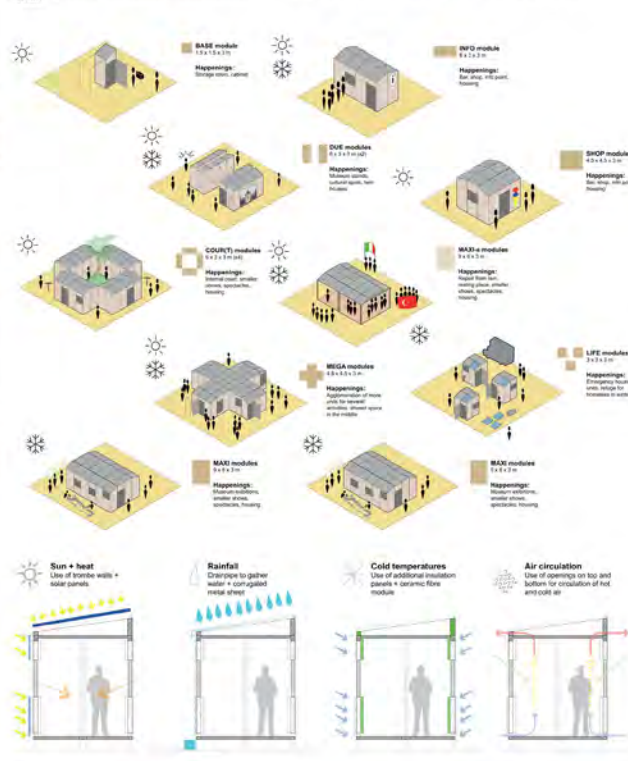
Beyond the wall - variations



Beyond the wall - variations



Beyond the wall - one module, infinite possibilities
1:200



AUGMENTED STORYTELLING

THE UNIVERSITY OF SPARTANBURG
SCHOOL OF ARCHITECTURE
AND PLANNING
RESEARCH CENTER
ARCHITECTURAL RESEARCH CENTER

Activate the ruins An architectural journey through history, matter and community

Istanbul Landwails and new spatial investigations

This project is rooted in an architectural, urban and historical exploration, anchored in the remains of the walls of Theodosius II in Constantinople. Using this emblematic structure as a starting point, I set out to explore the role of memory, materials and experience in rehabilitating an abandoned heritage site.

The study is located at the heart of an urban area characterised by a marked contrast between a dense built-up fabric and open, natural areas or areas undergoing transformation. On the right-hand side of the image, the old town centre is characterised by a network of narrow, winding streets lined with typical red-cubed buildings, forming a compact, homogeneous whole. This traditional structure bears witness to historic urbanisation, organised around small squares and communal spaces.

On the outskirts of this ancient core, particularly in the central and western parts of the image, more open spaces extend. There is a large, well-developed urban park with geometric walkways, sports pitches (football, tennis, multi-sports), playgrounds and tree-lined recreation areas. The park provides a green lung for the neighbourhood and a leisure area for local residents.

Near the park and on the edge of the residential areas, a large area of derelict land, partially terraced and dotted with a few isolated structures, appears to be left over or awaiting a future development project. This right-of-way is a strategic land reserve that could be used for new infrastructure or urban expansion.

Finally, along the main road to the west of the image, a strip of agricultural plots or allotments can be seen, demonstrating the continued cultivation of crops on the fringes of the urban fabric. This space creates a gentle transition between the town and the stretches of woodland beyond the main road.

This urban landscape thus illustrates the cohabitation of different functions: traditional housing, recreational areas, peri-urban agriculture and future areas, offering numerous possibilities for evolution and reflection for future development projects.

The cubic frame is the common thread running through my approach: a simple, modular structure that becomes the medium for architectural operations such as duplication, superposition, assembly, subtraction or mixing. This formal vocabulary makes it possible to imagine contemporary devices rooted in history and designed for collective activation.

My approach is also based on the use of sustainable materials, reused wood, textiles and plant-based insulation, to make the project part of an ecological and participatory approach. Each intervention brings structure, action and environment into dialogue, taking inspiration from the Roman spolia reused in the wall of Theodosius II - a reappropriation of materials and meanings through time.

The project is based around nine features spread across the site, each offering a unique experience:

- Grove Tower: a self-heating, vegetated spiral tower
- Mail Corridor: a misted sensory tunnel
- The Story Capsule: an adobe space for listening to archives
- The Learning Garden: an open-air educational garden
- The Archives Box: a closed cube projecting visual narratives
- Play Area: a play area inspired by traditional forms
- The Seed Area: a space to raise awareness of urban agriculture
- The Gateway: a pedestrian footbridge crossing the wall
- Coffee's Wall: a cultural café and friendly reception point

By combining historical memory, contemporary materials and collective use, this project seeks to bring the past and the present into dialogue, through simple yet meaningful gestures. The aim is to create a living, narrative place that can be transformed, in the image of the city itself.



THE HISTORY OF THE WALL OF THEODOSIUS II AND THE SPOLIA

CONSTRUCTION OF THE WALL OF THEODOSIUS II



CONSTRUCTION OF THE WALL OF THEODOSIUS II



THE WALL AND ITS INTERNAL SYMBOLISM



STITCHES AND MODIFICATIONS TO THE WALL



NATURE OF CONSTRUCTION BY THE OTTOMANS



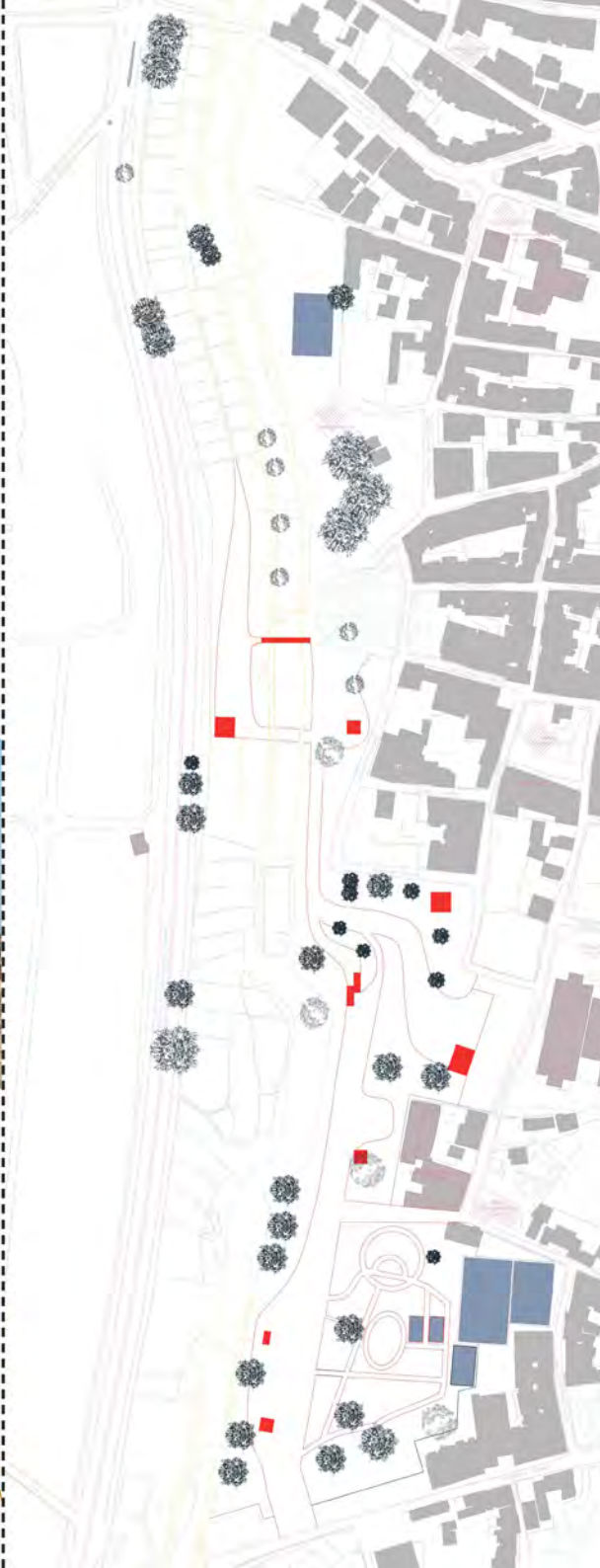
EXTERIOR OF THE WALL TO THE ADJACENT RE-USE



ABANDONMENT AND MODERN DEGRADATION



CURRENT CONDITION AND CONSERVATION OF THE WALL



CONCEPT AND STRUCTURAL DETAILS

CONCEPT

The idea is to use simplified structures to adapt to the needs of each programme on the site.

Here, each architecture will use a common base which will then be subjected to simple transformations to create the modules in the best possible way to accommodate each programme.

The basic shape used will be a cubic structure. The external dimensions are 4 metres wide by 4 metres long by 4 metres high. This structure will be built from reclaimed wood with a cross-section of 20x20cm. Each element will be treated and painted to ensure that it will stand the test of time.

The volume available inside each frame will be 46.7m³ and the available floor area will be 12.8m².



CUBIC FRAME



SURFACE

Architectural operations



OPEN SPACE



CLOSE SPACE

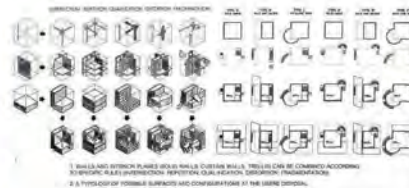


DEPLICATION



SUPERPOSITION

Les folies du Parc de la Villette by Bernard Tschumi



Bernard Tschumi designed the 'Folies' at the Parc de la Villette in Paris in the 1980s as red architectural structures in a variety of geometric shapes. These light, playful constructions do not have a single function: they serve as visual landmarks, exhibition spaces, meeting points and places to relax. The Folies project illustrates Tschumi's desire to blend architecture and landscape by creating elements that stimulate the imagination, invite exploration and transform users' experience of public space.

As for my structures, they have rather simple forms, with the aim of maximising the chances of construction using recycled materials.



Structural details

Assembly of wooden components

TIMBER FRAMING

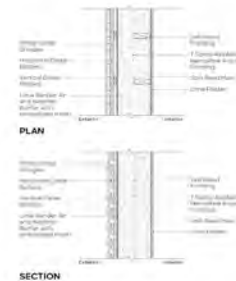


INTERLOCKING
MORTISE & TENON JOINT
WITH CAR TENON

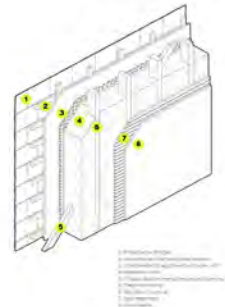
POST & BEAM



SQUARE CUTS
WITH STEEL PLATES
* THROUGH BOLTS



Wall's detail



Piezoelectric paving stones



Reusing Greywater: A Simple Step Toward Sustainability

Why it's interesting ?
To reduce freshwater consumption, lower wastewater treatment costs, and protect natural water resources.

Treated greywater can be used for garden irrigation, toilet flushing, or cleaning outdoor areas. This sustainable practice supports water conservation, especially in regions facing drought or water scarcity.

The Gateway
(scale x material x sustainable)

New pedestrian bridge crossing part of the destroyed wall to reach the garden area.

The Seed Area
(events x material x sustainable)

A space for cultivating and sharing knowledge about gardening. Organisation of events related to gardening and awareness raising and discovery workshops for young children.

The Story Capsule
(scale x structure x sun/light)

Enclosed space with two alcoves serving as a sound projection room for period atmosphere and information on the history of the wall.

The archives box
(happenings x material x sustainable)

Module serving as a projection room for films and archive images on the history of the wall. Simultaneous projection of four media in the four cells.

Grow Tower
(actions x structure x sustainable)

Spiral tower made of reclaimed wood, planted with edible vegetation. This tower offers a panoramic view of the entire historic site.

The Learning Garden
(actions x detail x sustainable)

An open-air educational area with benches. This venue can host various events such as music performances or theatrical readings.

Mist Corridor
(happenings x material x climate)

An openwork steel tunnel covered with a damp textile net offers an immersive experience in the middle of a historical walk along the walls.

Coffee's Wall
(events x texture x climate)

Social area of the site, information point, toilets, cultural café. Atmosphere: friendly, banners, fairy lights, jazz/Balkan/Turkish music.

Play Area
(actions x structure x texture)

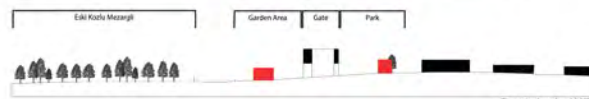
A climbing tower inspired by traditional games, featuring ramps, nets, tactile surfaces and a climbing wall.



Site plan 1:3000



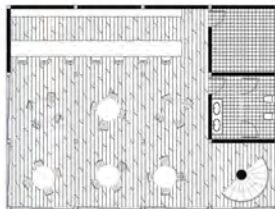
Site section (level / east) 1:500



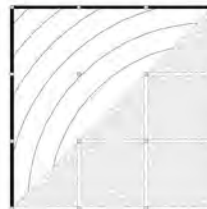
Site section (level / east) 1:1000

Presentation of the 9 Modules

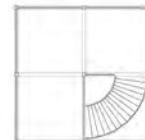
COFFEE'S WALL



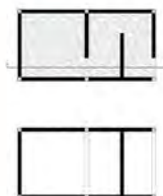
LEARNING GARDEN



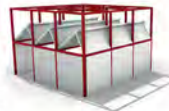
GROW TOWER



STORY CAPSULE



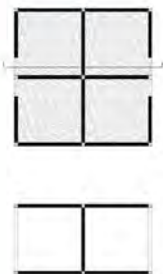
SEED GRADEN



GATEWAY



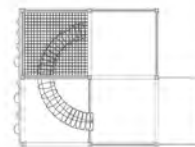
ARCHIVES BOX



MIST CORRIDOR



PLAY AREA



UNDERGRADUATE LEVEL STUDIES

The studio, conducted within the scope of the MI-M211E–212E Architectural Design III–IV course of the Istanbul Technical University (ITU) Department of Architecture during the 2024–2025 Spring Semester, also focused on developing an interdisciplinary approach to reinterpreting the Istanbul Land Walls through new architectural perspectives and transferring them into a sustainable future. Similarly, the process was organized around three modules.

The first module, Flâneur – Walking Experience, emphasized site observations and documentation through exploratory walks, sketches, and collages. The second module, Storytelling, explored the creation of narratives that connected the historical and cultural layers of the Land Walls with contemporary interpretation. The third module, New Spatial Investigations, guided students in producing speculative architectural interventions supported by model-making and spatial analysis.

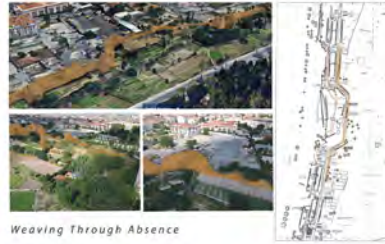
Within this scope, the works of the students Emira Bulku, Bengisu Sarı, Emine Esra Şengül, Nouhayla Zahir, and Süeda Elçi are presented.

LIVING PALIMPSEST
Istanbul Landwalls and new spatial investigation

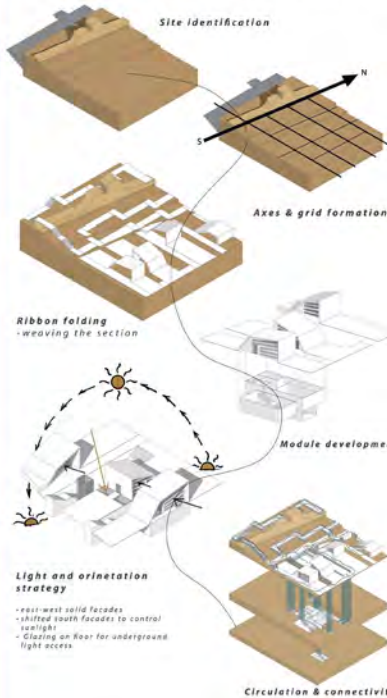
This project engages as a spatial dialogue with the fragmented Land Walls of Istanbul—a contemporary weaving of movement, memory, and experience. Rather than repairing the gaps of history, it amplifies them, allowing absence to become a space of presence. Architectural ribbons unfold across the landscape, guiding movement through a rhythm of ascent, pause, and connection. These ribbons are deliberately positioned perpendicular to the north-south-oriented wall, creating a spatial rhythm that draws people toward it and reactivates the monument as the central spine of the experience. This approach is further articulated in the Signa segment, where the heavily destroyed wall becomes the backdrop for a concentrated intervention. Between these lines, distinct modular host collective elements—spatially defined by the wall and the ground—offer a platform for layered past, not by replicating it, but by composing a new narrative that embraces change, honors silence, and invites renewed encounters with the heritage that surrounds it.

DETAILED STUDY AREA

Sigma Segment



CONCEPT & FORM DEVELOPMENT



MASTERPLAN 1/1000

MEVLANA GATE

•GATHERING ZONE

Near the Evans Gate at the upper end of the site, the Gathering Zone offers open structures that foster collective presence. With community tables, a coffee space, and an amphitheatre module, this area becomes a shared terrace—supporting performances, meetings, and daily rituals at the edge of the wall.



•PLAY & EXPLORATION ZONE

Adjacent to an existing park, this zone encourages discovery through structure. Playgrounds and foldable forms blend with exploratory tunnels, allowing children and families to interact with the site through curiosity and movement—redefining how history can be experienced through play.



• QUIET ZONE - THRESHOLD

Located just above the Active Zone, this area functions as a soft transition—both physically and atmospherically. Set beside a school and near the heavily ruined Sigma section of the wall, it offers calm. Reading and working pavilions, resting structures, and a stepped amphitheatre create space for contemplation, stillness, and pause within the sequence.

KALAGROS GATE

• ACTIVE ZONE

Positioned near Silviri Gate and closely connected to the main road, the Active Zone becomes a vibrant entry point. Surrounded by daily urban life—residences, mosques, and circulation—it offers spaces for cultural display and exchange. Open and closed exhibition paths, traditional market pavilions, and cafés invite movement, curiosity, and informal interaction.



SILIVRI GATE

AXONOMETRY



LEGEND

- ☐ 2025年
- ☒ 2026年
- ☐ 2027年
- ☐ 2028年
- ☐ 2029年
- ☐ 2030年

AUGMENTED STORYTELLING

ITU Department of Architecture
1034-2091 Spring Semester
2016-17, HPC-25 Architectural Design (10-15)
Assoc. Prof. Dr. Borge Gökçe, Doç.
Dr. Ekin

EMIRA BULKU 020230982

WALKING PALIMPSEST

We walk the city and rewrite
its memory.

MOVEMENT

Each step draws a new layer on
the street.

PERCEPTION

Urban space is re-shaped
through personal experience.

EXPLORATION

Paths allow us to actively
engage with layered histories.

VISUAL TRACE

We read the city like a
manuscript of time.

RE-

CONSTRUCTION

Old and new are interwoven in
space and mind.

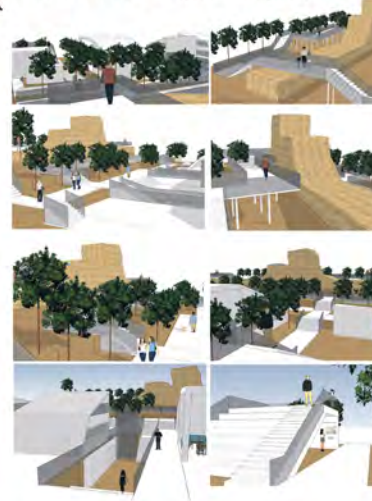
TEMPORAL MAPPING

Techniques that uncover the
hidden.

fragments
don't only
belong
to the past
—
they shape
how we walk,
pause,
and
remember

LIVING PALIMPSEST

Istanbul Landwalls and new spatial investigations



SITE PLAN 1/200

MATERIALITY & STRUCTURAL DETAILS



White Fiber Cement Panel (Cladding)

- Sustainable: Made from natural materials (cement, cellulose fibers), long lifespan, recyclable
- Weather Resistant: High UV resistance, salt- and freeze-tolerant
- Low Thermal Expansion
- Low Maintenance
- Lightweight



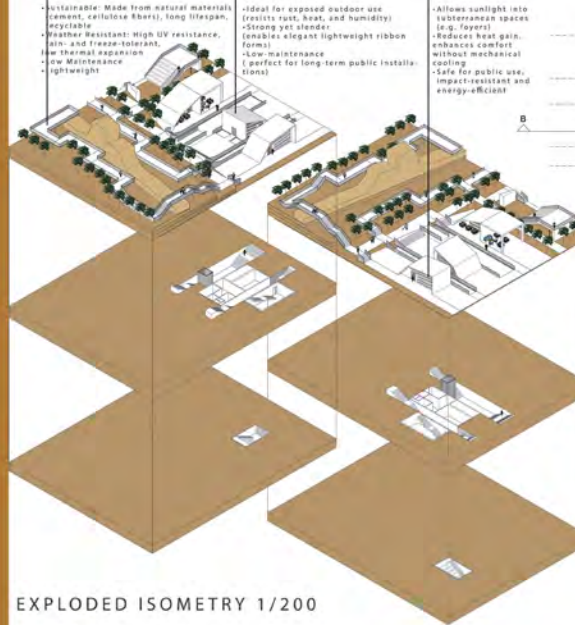
Powder-Coated Steel (Structure)

- Ideal for exposed outdoor use (resists rust, heat, and humidity)
- Strong yet slender (enables elegant lightweight ribbon forms)
- Low maintenance (perfect for long-term public installations)



Low-E Tempered Glass (Glazing)

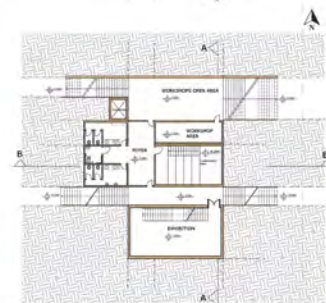
- Allows sunlight into subterranean spaces (e.g., layers)
- Reduces heat gain, enhances comfort without mechanical cooling
- Safe for public use, impact-resistant and energy-efficient



EXPLODED ISOMETRY 1/200



GROUND FLOOR PLAN 1/200



BASEMENT FLOOR PLAN 1/200



A-A SECTION 1/200



B-B SECTION 1/200

AUGMENTED STORYTELLING

TU Department of Architecture
2014-2015 2nd Semester
Site 2014-2015 Architectural Design Office
Assoc. Prof. Dr. Feyza Öztürk (Site)
Site Project

unprogrammed environment that functions like a "backyard" for the residents of Fatih and Istanbul

Meydanakapi

Silivrikapi

Baharçesme

IDLEAND

Istanbul Landwalls and new spatial investigations

Land walls, due to both their original purpose and the long periods of neglect they have endured, have gradually become isolating and alienating **thresholds** for the society. So how is it possible to reuse this vast and empty volume that passes right through the middle of the city and bring it back to the city? This project offers a space based on **idleness** as an answer to this question, which is considered the starting point of it. This structure, which the residents of the city and Fatih district can use as a backyard, was designed to walk on and around the walls, to experience the cultural heritage area without feeling obligated and to make this area, which belongs to every person living in this city, usable.



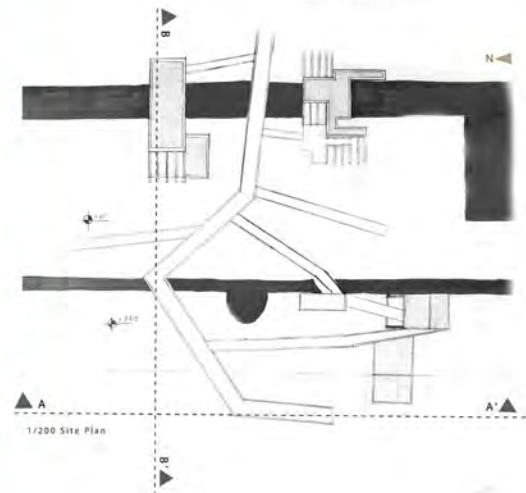
1/500 Site Plan

The historic land walls of Istanbul and the spaces surrounding them can be perceived through the **fringe belt** concept. As defined in urban morphology, fringe belts are peripheral zones formed during pauses in urban growth, often hosting functions such as cemeteries, parks, military zones, or agricultural land.

1/500 Axonometric Drawing

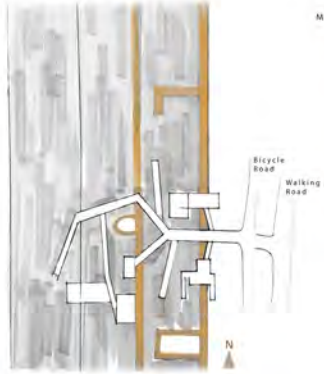
In order to perceive the project area as a threshold and to make this threshold unifying rather than isolating, this **unprogrammed environment**, which can be used by all residents of the city, also has gardens in the most area of the walls.

These gardens, which are used only to spend time together and without generating income, is one of the main factors in the emergence of the project. Road module, which connects the pedestrian and bicycle path passing through the park from east of the walls to the other modules of the project, reaches down to the gardens and brings together the experiences in the gardens and other modules.



1/200 Site Plan

A-A' Section



Modules are passing over the main wall, which is located between the T44-T45 towers and has been largely demolished, and the road module that connects these modules to each other, perceive the passage as a space and give the experience of being on top of the city wall and in its close vicinity without damaging the structure.



Idleand, an unprogrammed environment that invites residents to interact with the site freely; walking along the walls, resting, gathering, or simply being. Within this reimagined fringe belt, **communal gardens** take root in the most zone, encouraging collective use. These gardens provide space for informal labor; aligning with the slow, layered texture of fringe belts.



This project reclaims the fringe belt formed around the Theodosian walls, reinterpreting it not as a void or leftover, but as a **fertile threshold** for urban commoning. Rather than emphasizing its role as a boundary, the design activates this belt as a **common space**; an open, inclusive landscape where the people can gather, grow, and coexist.



3 BOYUTLU SUR ÇİZİMİ YAPILTIK

AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
MSc of Landscape Architectural Design (LAD)
Assoc. Prof. Dr. Başak Güneş Öner
Alin Güneş

LANDPLAYNETS

İstanbul Landwalls and new spatial investigations



Children perspective of LandWalls
Game is a 'culturemaker' according to Homo Ludens of Johan Huizinga. People get to know the world and learn new things through games since childhood. The aim of this project was to enable children to meet the landwalls through play and to establish a connection with their culture and history.



A-A' SECTION 1/500



B-B' SECTION 1/500



C-C' SECTION 1/500



D-D' SECTION 1/500

LandPlayNets playground, where children meet the walls, consists of climbing areas which are nets designed to develop motor skills, and sand play areas. Rather than defined objects, this design allows children to reveal the productivity in their own world and to speak their imagination.



MEVLANA GATE

LANDWALLS

STREETS

PLAYGROUND
NETS

BUILDINGS

BUS STATION

ELEVATED
WALKING
PATHS

MAIN ROAD

BOSTANS
(GARDENS)

TREES

SIR WATCH
TOWER

PEDESTRIAN
CROSSING

SILIVRI GATE

1/1000

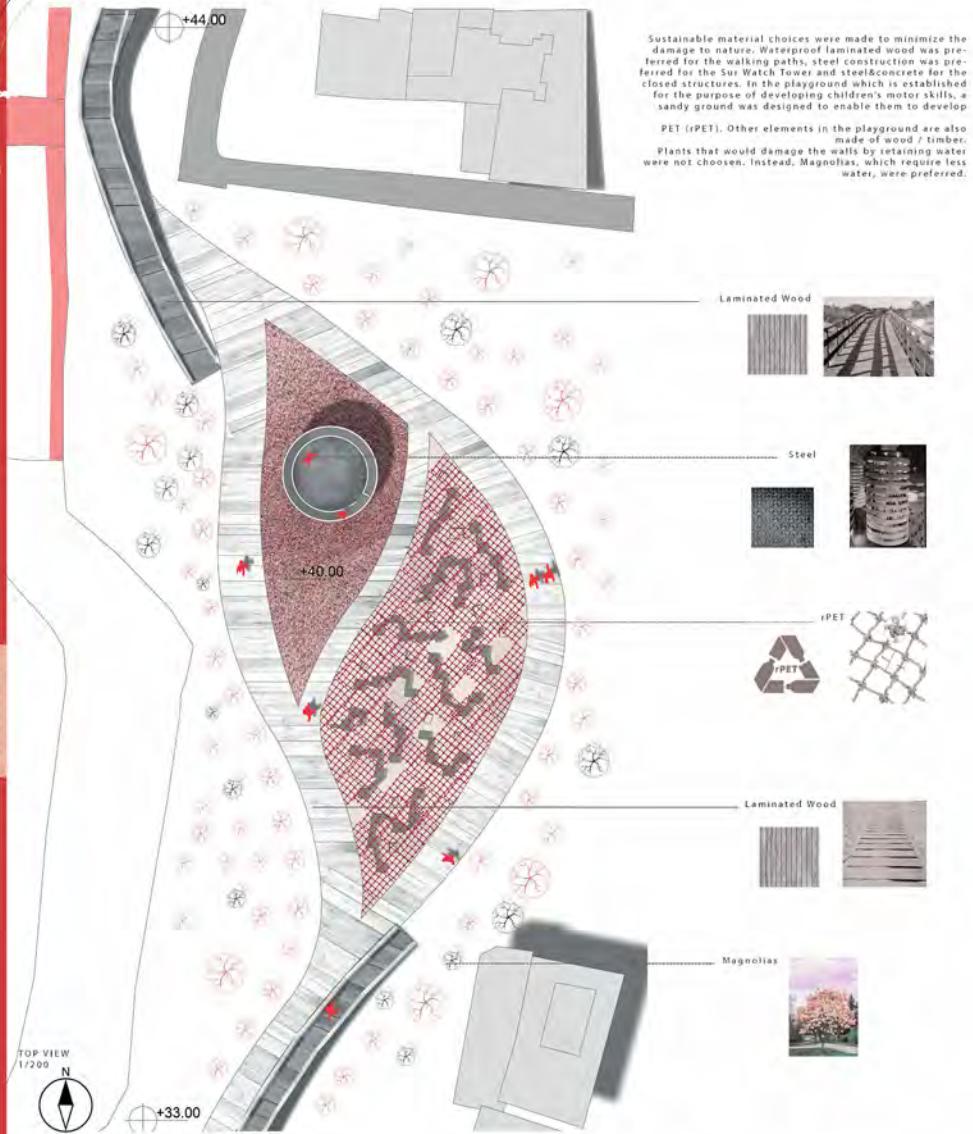


AUGMENTED STORYTELLING

ITU Department of Architecture
2020-2021 Spring Semester
MSc 3.15.00.001 Environmental Design II
Kırsal Arş. Dr. Derya Güler Baş
Elif Aker

LANDPLAYNETS

İsten. ul Landwalls and new spatial investigations



Sustainable material choices were made to minimize the damage to nature. Waterproof laminated wood was preferred for the walking paths, steel construction was preferred for the Sun Watch Tower and steel/concrete for the closed structures. In the playground which is established for the purpose of developing children's motor skills, a sandy ground was designed to enable them to develop

PET (rPET). Other elements in the playground are also made of wood / timber.

Plants that would damage the walls by retaining water were not chosen. Instead, Magnolias, which require less water, were preferred.

Laminated Wood



Steel



Laminated Wood



Magnolias



EAST ELEVATION

Sun shading elements for east facade.



PLAN VIEW

1/100



A-A' SECTION

1/100

Some closed spaces for children designed. This space is marbling workshop. With marbling workshop children will learn while having fun and will be introduced to an art form belonging to their culture.



B-B' SECTION

1/100

AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
01010 - Environmental, Urban and Architectural Design
Assistant Prof. Dr. Ayşe Yıldırım

ECHOES OF THE WALL

ISTANBUL LAND WALLS

TOPOGRAPHY MODEL
ACCOMPANIED BY
DESIGN MODEL

SCALE 1/200

In this visual presentation, I aim to offer a clearer understanding of the form, scale, and spatial relationships of my 3D model by showcasing it from various angles.

THE REPRESENTATION OF MY 3D MODEL FROM DIFFERENT ANGLES

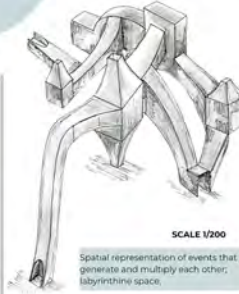
These perspectives not only highlight the overall massing of the design but also bring forward its detailed architectural elements. In this way, I invite you to experience both the holistic structure and the refined craftsmanship of my model together

THE SECTION OF MY AREA, M1, WITHIN THE LAND WALLS

This drawing represents the sectional view of the M1 area, which is a part of my assigned region along the historic Land Walls of Istanbul. The section highlights the spatial relationship between the original wall structure and the newly proposed architectural elements. By cutting through the site, the drawing reveals how the design interacts with the topography, the scale of the fortifications, and the contextual features of the surrounding environment.



MY MODEL'S TOP VIEW
FOCUSING ON THE CITY WALLS



AXONOMETRIC DRAWING

SCALE 1/200

Spatial representation of events that generate and multiply each other, labyrinthine space.

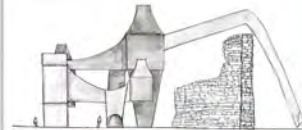


SECTIONS OF MY MODEL WITH THE CITY WALLS FROM THREE DIFFERENT ANGLES



THE PLAN I HAND-DREW AT A 1/200 SCALE

SCALE 1/200



MY ELEVATION DRAWING AT 1/200 SCALE

MATERIALS USED IN MY PROJECT

STEEL PIPE STRUCTURE

A lightweight, durable, and reusable structural system that allows the structure to sit on the ground with minimal intervention. Compatible with modular construction, it enables the design to be dismantled and relocated when needed. Its recyclability makes it highly sustainable.

■ In this project, I used a steel pipe structure because it allowed the building to rise lightly from the ground and provided a sustainable, reusable structural system.



CAST-IN-PLACE CONCRETE

A strong and permanent material that enables sculptural forms to be created. It reflects the historical weight of the walls and expresses the grounded, solid presence of the design.

■ In this project, I used cast-in-place concrete because it emphasized the formal strength of the modules while referencing the lasting nature of the historical walls.



MOVING FLOORS AND INTERACTIVE SURFACES

Spring-loaded platforms and sensory surfaces physically engage the visitor in the experience. This connection with the ground intensifies spatial awareness and bodily perception.

■ In this project, I used moving floors and interactive surfaces to allow the visitor to physically engage with the space and feel the memory of the wall through their body.



AUGMENTED STORYTELLING

ITU Department of Architecture
010-2023 Zahira Zahir
Nouhayla ZAHIR 020230084

GALLERY OF LANDWALLS

Istanbul Landwalls and new spatial investigations

Landwalls of Istanbul is a cultural heritage with a rich story, yet people do not pay attention despite encountering them everyday. This project aims to connect people with the landwalls, its history and its unique story. The landwalls are "framed" like an artwork eager to be seen, placed in different places. People who visit the Gallery of Landwalls look at them from a distance/close range, upwards, downwards, on eye level, or slightly below/above eye level. This affects their sight, allowing them to focus on different parts of the landwalls and notice the silent details. Throughout the gallery, people can scan the frames and activate Artivive responses. This way, visitors can learn about the history of landwalls or see movie scenes that take place in that area. They can also take photographs and upload them to the visitor's book area at the entrance. This way, people can see other visitors' photographs while entering. The entrance is via a long steel mesh ramp that rises on the Bostan. The Bostan is illuminated with solar powered lights. Visitors slowly walk to the gallery while enjoying and noticing the Bostan. They can also visit the amphitheater and watch the projection mapping show on the Kalagaras gate. Or they can wander around the landwalls after their gallery tour. The landwalls are also illuminated with solar powered lights, allowing people to enjoy their sight even at night. Gallery of Landwalls is a unique experience where visitors are connected to the landwalls, its architecture, history, stories and heritage.



Looking at a distance



Looking close



Eye level



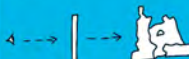
Above eye level



Above eye level



Landwalls are illuminated with solar powered light, making it possible to experience them with a different ambience at night.



Take photos or scan the frames with Artivive



Ramp goes above the Bostan. The Bostan is illuminated with solar powered light.



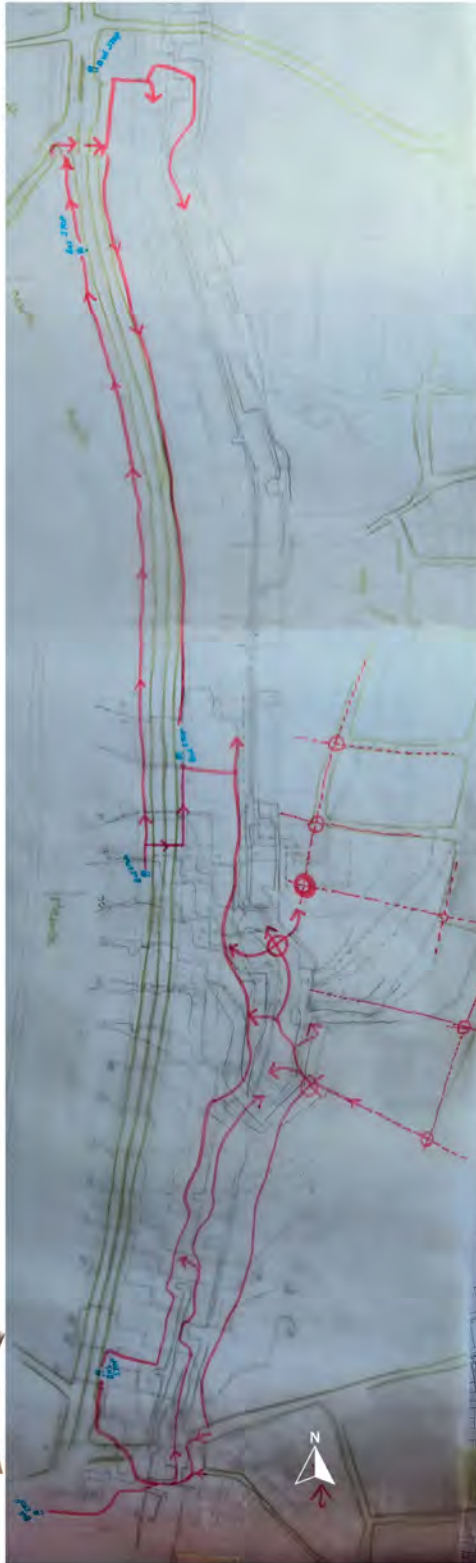
Steel Mesh ramp makes it possible to see what's below



Amphitheatre for projection mapping at Kalagaras



SITE PLAN OF THE AREA



AUGMENTED STORYTELLING

150 Department of Architecture
150-151 Faculty of Architecture
150-151 Building (150-151 Building) (150-151 Building)
150-151 Building (150-151 Building) (150-151 Building)
150-151 Building (150-151 Building) (150-151 Building)

Nouhayla ZAHIR 020230084

MATERIALS:



Fabric Facades



Steel profiles



Solar Powered lights

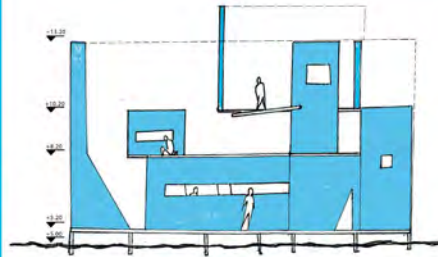


Steel Mesh Ramp

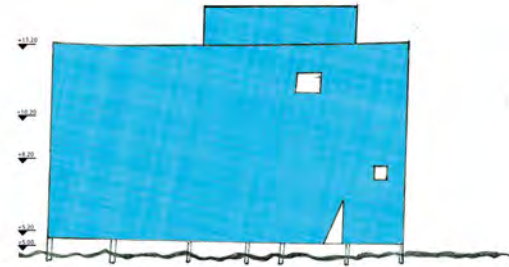
MODULES:



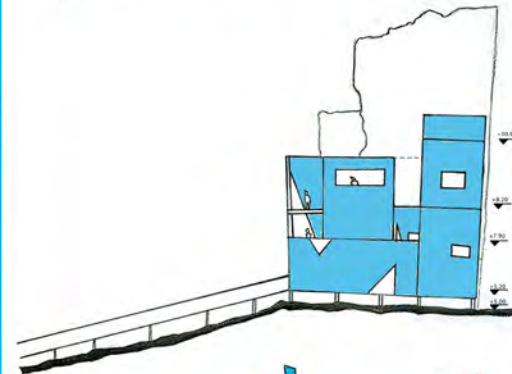
PLAN 1/200



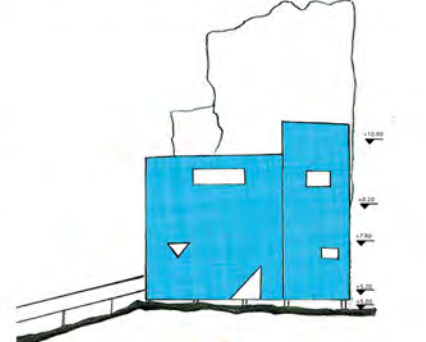
ELEVATION 1 1/100



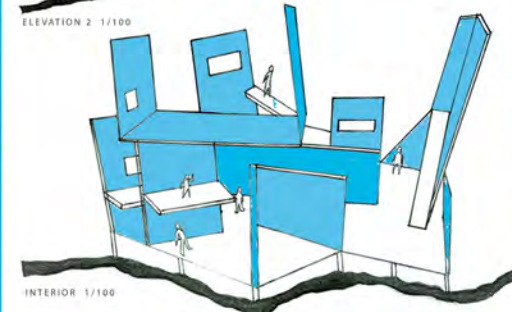
ELEVATION 1 1/100



ELEVATION 2 1/100



ELEVATION 2 1/100



INTERIOR 1/100



AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
MUS 2127 Workshop: Environmental Design
10000
Assoc. Prof. Dr. Barış Dönüş Özer
Elif Arslan

WHAT SLIPS THROUGH

Istanbul Landwalls and new spatial investigations

Reclaiming the Informal Through Light Intervention
Set within the layered voids of Istanbul's Land Walls, this project proposes a light, modular system that transforms a once-informal landscape of play, agriculture, and settlement into a field of spatial potential.
Red steel frames, floating timber paths, and tensile textiles create porous, adaptable "rooms" — spaces that invite gathering, pause, and performance without disturbing the historic terrain.
By tracing the subtle imprints of past "sizma" — local acts of intrusion and appropriation — the intervention reinterprets informal memory as a design tool. Architecture here becomes not an imposition, but an extension of latent urban rhythms.



FOLLOW THE PATH

Along the Land Walls, moments of spatial detachment and bodily solitude are deeply present. This module reflects those experiences through enclosed, textile rooms and framed voids that emphasize individual presence and silence — allowing the user to withdraw, pause, and occupy space alone.

SELF OF ISOLATION

Movement along the walls has historically been informal and fluid. This concept is materialized through elevated timber walkways that meander, bridge, and skip — inviting multiple trajectories that respect the unpredictability of the user's rhythm and choice, much like the paths once carved by local inhabitants.

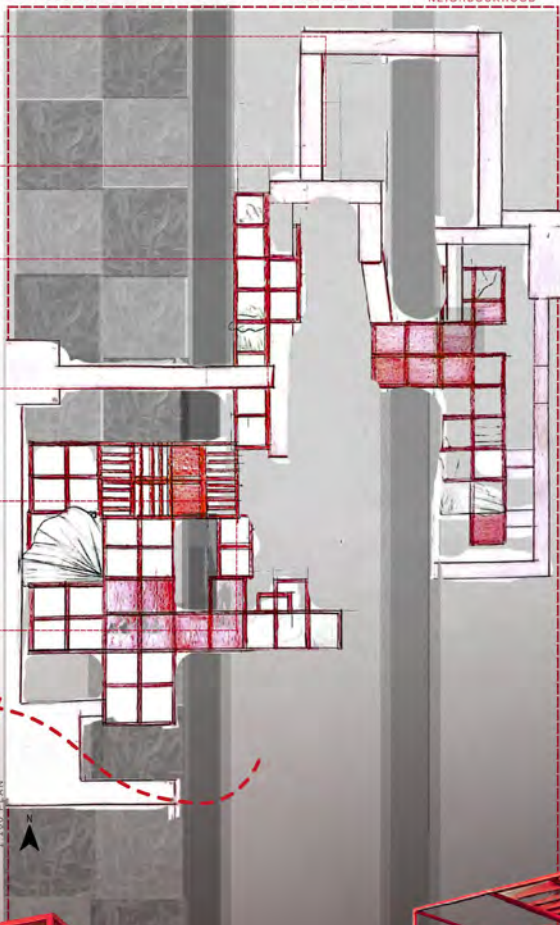
RESTRICTED EYESIGHT

The fragmented visibility created by the layered walls and makeshift interventions inspired this module's spatial ambiguity. Framed views, semi-transparent textiles, and partial enclosures recreate a controlled visibility — shaping perception and guiding attention, just as the site once dictated selective exposure and concealment.

BOSTAN

THRESHOLD

NEIGHBOURHOOD



TRESHOLD

1:100 PLAN

SUEDA ELÇİ



AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
WU 215-1002210 Architectural Design (II) (WU)
Assist. Prof. Dr. Derya Güneş Akar
Elif Elçi

SUEDA ELÇİ



FROM FRAME TO RITUAL

Architecture here is not imposed, but inhabited. This board illustrates how modular frames evolve into lived spatial rituals — activating scenes of gathering, pause, observation, and play. Each structural gesture becomes more than form; it transforms into a vessel for human-scale interactions, shaped as much by bodies, rhythms, and stories as by architecture itself. From a child's leap to an elder's rest, each movement is a trace — echoing the quiet appropriations that once defined this layered threshold. These everyday actions do not merely occupy space; they narrate it, turning the design into a living archive of memory, improvisation, and collective presence.

Elevated Routes of Observation
Inspired by the powerful linearity of the walls, this intervention introduces elevated timber walkways that follow and frame the historic edge without interrupting it. These light, non-invasive paths allow visitors to circle around and above the spatial modules — offering shifting perspectives while respecting both built heritage and ground-level activity.



This space reinterprets the layered threshold between wall, garden, and neighborhood as a multisensory ground of interaction. Children and adults alike encounter the Land Walls through ramps, platforms, and hidden enclosures — transforming the monumental edge into a playful architectural landscape of discovery and flow.

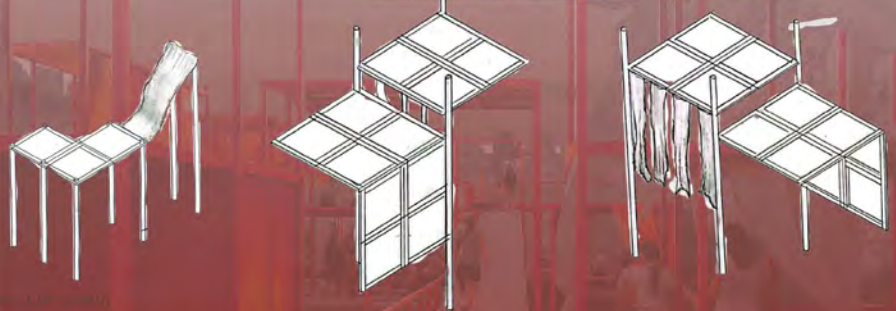
playful threshold

1.100 ISOMETRIC

following the path

harvest zone

Collective Ground of Gathering
Located near the urban gardens, this area embodies the spirit of "harvest" — not only of crops, but of community. Spatial configurations here allow for collective actions such as communal meals, workshops, and open-air performances. The expanded scale invites the public to gather, share, and reclaim the ritual of coming together.



AUGMENTED STORYTELLING

ITU Department of Architecture
2024-2025 Spring Semester
MSc 2118-2119-2120 Architectural Design
(M.Arch)
Advisor: Prof. Dr. Derya Güneş Özer
Elçi Sueda

Seen from above, the project reveals a network of informal routes — red frames gently tracing the paths once shaped by footsteps, shortcuts, and daily rhythms. These are not planned streets but echoes of lived movement. The square modules emerge from a flexible grid — a structural logic that brings order without rigidity. While the grid provides a compositional backbone, its openness allows space to respond to how people move — allowing for deviations, overlaps, and improvisation. Rather than impose a fixed masterplan, the design follows these flows. Absence becomes structure, and movement becomes memory. This is not a destination, but a scaffold for navigation — open, adaptive, and alive.



section before



section after



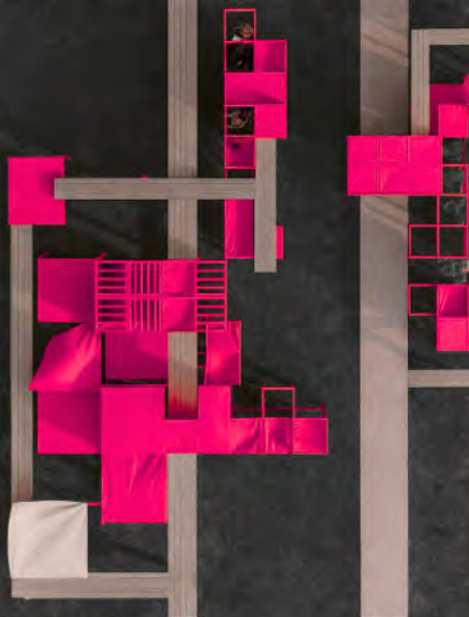
Textile-to-Steel Connections
Soft textiles meet rigid steel frame to form light, semi-enclosed space that breathe with wind and light. Materials like rPET mesh and UV-treated hemp blends offer sustainability, comfort, and reversibility — supporting the project's adaptive, non-invasive ethos.



Timber Path Joins
Raised timber walkways trace informal paths around the Land Walls. Built from FSC-certified laminated timber, these modular joints ensure easy assembly without permanent anchoring — minimizing terrain impact and echoing past local movement.



MODELS OF THE MODULES



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