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## Teaching sustainable transformation of industrial heritage places: insights from the NIT Urban Heritage Lab

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# TEACHING SUSTAINABLE TRANSFORMATION OF INDUSTRIAL HERITAGE PLACES: INSIGHTS FROM THE NIT URBAN HERITAGE LAB

## ENDÜSTRİYEL MİRAS ALANLARININ SÜRDÜRÜLEBİLİR DÖNÜŞÜMÜNÜ ÖĞRETMEK: NIT KENTSEL MİRAS LABORATUVARI'NDAN İZLENİMLER

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### ABSTRACT

In the autumn of 2021, the Netherlands Institute in Turkey (NIT) offered a post-graduate course addressing the challenges and possibilities for the transformation of industrial heritage from a multi-disciplinary perspective. With a focus on Istanbul's industrial heritage, the course entitled "Industrial Heritage for Sustainable Cities" aimed to explore issues relevant to industrial heritage worldwide. The course took place partly online (lectures and discussions), partly on-site in Istanbul (field trips, study groups and workshops), and was open to early-career professionals or researchers of any discipline from higher education institutions in the Netherlands and Turkey. The course was organized as part of the NIT Urban Heritage Lab. Here we review the course's aims, format, and outcomes and reflect on the potential and limitations of an international, hybrid course on a topical cultural heritage theme.

**Keywords:** Historic urban landscapes, industrial heritage, sustainability, education program, unkapani flour mill, adaptive reuse, research-by-design.

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## ÖZET

Türkiye'deki Hollanda Araştırma Enstitüsü (NIT) 2021 Sonbaharında, endüstri mirasının dönüşümüne yönelik zorlukları ve fırsatları çok disiplinli bir bakış açısıyla ele almayı amaçlayan bir eğitim programı düzenledi. Eğitim programı, bölüm ya da disiplin farkı olmaksızın Hollanda veya Türkiye'de yer alan yüksek öğretim kurumlarından herhangi birine kayıtlı lisansüstü öğrenciler ile kariyerinin başındaki uzman ve araştırmacılara açıktı. İstanbul'un sahip olduğu endüstri mirasına odaklanan "Sürdürülebilir Şehirler için Endüstri Mirası" başlıklı eğitim programı; endüstriyel mirasın korunması, dönüşümü ve sürdürülebilir gelişimi ile ilgili konuları uluslararası bir perspektifle keşfetmeyi amaçladı. Eğitim programı, kısmen çevrimiçi (dersler ve tartışmalar), kısmen ise İstanbul'da (saha gezileri, çalışma grupları ve çalıştaylar) yüz yüze olarak gerçekleşti. Bu makalede, NIT Kentsel Miras Laboratuvarı'nın bir parçası olarak düzenlenen "Sürdürülebilir Şehirler için Endüstri Mirası" başlıklı eğitim programının amaçlarını, formatını ve sonuçlarını kentsel miras alanlarının gelişimine yönelik literatür ışığında gözden geçiriyoruz. Aynı zamanda, günümüzde hem kuramsal çalışmalarda hem de koruma uygulamalarında oldukça güncel bir konu olan endüstri miras alanlarının sürdürülebilir dönüşümü üzerine uluslararası ve çok disiplinli bir yaklaşımla gerçekleşen eğitim programının potansiyellerini ve sınırlamalarını aktarıyoruz.

**Anahtar Kelimeler:** Tarihi kentsel peyzaj, endüstri mirası, sürdürülebilirlik, eğitim programı, Unkapanı Değirmeni, yeniden işlevlendirme, tasarım yoluyla araştırma.

## INTRODUCTION

This article reports on an educational module developed and offered in 2021 by the Netherlands Institute in Turkey that aimed 1) to provide training in sustainable transformations of industrial heritage to advanced students and early career researchers and professionals in an international academic setting and 2) to create an environment for exchange and discussion related to the topics concerned between scholars, professionals, governmental agencies, and community organizations, also in an international setting. It describes the methods and concepts applied in the module and presents insights based on the experiences of the organizers and participants that can have a broader relevance with regard to multi-disciplinary heritage education. The authors of this article were the initiators, coordinators, and organizers of the course.

The course took place within the framework of an ongoing collaboration between the Netherlands Institute in Turkey and the Netherlands Consulate-General in Istanbul as part of the Livable Cities program. In addition, the Centre for Global Heritage and Development of Leiden, Delft and Erasmus Universities was a third organizational partner. A group of 26 participants affiliated with Turkish and Dutch institutions was selected from a large number of applications and represented diversity in nationality, educational background, and interests. The participants included young professionals and students of architecture, urban planning, conservation of cultural heritage, heritage studies, art history and archaeology.

Although the focus of the course was on Istanbul, it was meant to provide insights into global practices for the transformation and reuse of industrial heritage places. It assessed multi-disciplinary approaches to respond to the challenges that confront industrial heritage places in urban settings. To this end, the course brought researchers and practitioners from different disciplines together for interdisciplinary debates on the transformation of industrial heritage places, focusing on issues of sustainability, circularity, and inclusivity in theory and practice.

The concept of sustainability can be generally defined as “meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987, Article 27). For urban areas, sustainability can be defined as maximizing economic and social benefits to enhance living standards considering environmental limitations and socio-economic equity (Mori and Yamashita, 2015). In historic urban landscapes (HUL)<sup>1</sup>, where historical remains from different periods

coexist, social and cultural values of cultural heritage and the authenticity and integrity of the historical remains should also be preserved to achieve sustainability. To do so, there are three pillars to be taken into account in HULs: social, environmental, and economic. The three pillars correspond to the definition of “cultural heritage” in UNESCO Recommendation on the Historic Urban Landscape Approach (2011) and the Valletta Principles of ICOMOS (2011). In these documents, cultural heritage is defined as the broader urban context with its natural environment, buildings and open spaces, social and cultural practices as well as economic processes. Further significance of these documents lies in their approach to integrating sustainable development principles into safeguarding and managing urban heritage places.

HULs are the results of continuous (and continuing) development processes. Cultural heritage in historic urban landscapes plays a pivotal role in debates revolving around sustainability and sustainable development. As Purvis et al. state (2018: 682), the pillars of sustainability (social, environmental, economic) are also embedded in the current sustainability debate revolving around UN SDGs. Goal 11 of UN SDGs is entitled “Sustainable Cities and Communities” and emphasizes to “make cities and human settlements inclusive, safe, resilient and sustainable” (United Nations, n.d.) Target 11.4. of SDG 11 focuses on “strengthen(ing) efforts to protect and safeguard the world’s cultural and natural heritage”. In this context, sustainability and sustainable development have been on the agenda of policy-makers, professionals, and researchers for some time. Considering that the accelerating pace of change in HULs is mainly linked to economic and political changes (gentrification, tourism uses, real estate pressures, etc.) (Bandarin and van Oers, 2012), there is an urgency for the conservation, management and sustainable development as well as transformation of historic urban landscapes as an attempt to resolve these urban challenges. In this process, research institutions may contribute by providing the newest academic insights through working with various societal partners and establishing a platform where the existing and new knowledge are shared and discussed. Educational programs organized by research institutes may be an example of a knowledge-sharing platform where sustainable transformation practices of HULs are taught. Through such knowledge-sharing platforms, teaching sustainable transformation to professionals and

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setting. HULs consist of “topography, geomorphology, hydrology and natural features, its built environment, both historic and contemporary, its infrastructures above and below ground, its open spaces and gardens, its land use patterns and spatial organization, perceptions and visual relationships, as well as all other elements of the urban structure. It also includes social and cultural practices and values, economic processes and the intangible dimensions of heritage as related to diversity and identity.” (UNESCO Recommendation on The Historic Urban Landscape, 2011)

<sup>1</sup> The historic urban landscape (HUL) is the urban site composed of a historic layering of cultural and natural values and features that include the broader urban context and its geographical

researchers at the beginning of their careers will contribute to the broader acknowledgment of sustainability and sustainable development.

## DESCRIPTION OF THE COURSE

“Industrial Heritage for Sustainable Cities” was conducted in a hybrid (both online and face-to-face) format and consisted of four parts as follows:

- (i) Weekly online public lectures and discussions presented by leading scholars from the Netherlands and Turkey (September 2021);
- (ii) A three-day intensive program in Istanbul with site visits and on-site assignments (7, 8, and 9 October 2021);
- (iii) Development of a project on Unkapanı Flour Mill in Istanbul with online studio presentations and discussions/critiques on participants’ progress (October-December 2021);
- (iv) Public presentation of the course participants’ project proposals (10 December 2021).

The first part of the course was a four-week-long online lecture series during which simultaneous English and Turkish translation was provided to reach a wider audience. Every week the course focused on a particular theme on the current issues of the industrial heritage in the Netherlands and Turkey revolving around this central question:

What are the ways that industrial heritage places are transformed, both considering their tangible and intangible values as well as their multiple dimensions (cultural, environmental, social, economic) to achieve urban inclusivity, sustainability, circularity, as well as public engagement?

The main topic of the first week was various values, different dimensions, and multiple scales of industrial heritage places. In this session, students familiarized themselves with the definition of industrial heritage based on examples from both Turkey and abroad. The first week was followed by a session on the transformation of the Hasanpaşa Gasworks in Istanbul with the participation of the reuse project architects, the policy-makers and the local community involved in the process. By bringing these interest groups together, we aimed to illustrate the diversity of the actors involved in the transformation of industrial heritage places and to show the possibility of establishing consensus between various actors with competing interests. The third week focused on heritage activism. The speakers – heritage

activists themselves – talked about the significance of bottom-up and grassroots approaches as well as the recognition of stories and memories of previous users to achieve a sustainable transformation of industrial heritage places. The last session of the first part was reserved for Dutch perspectives on industrial heritage. Speakers from the Netherlands talked about social inclusion and participation in the transformation of industrial heritage places, and they introduced the concepts of “landscape biography”<sup>2</sup> and “emotion networking”<sup>3</sup> to stimulate participation (Plate 1).

During the second part of the education program, the course participants met with the instructors in Istanbul on 7, 8, and 9 October. The Unkapanı Flour Mill and its surroundings was our case study and the main focus of the second part of the course.<sup>4</sup> In this regard, an intensive program of in-person lectures, field trips, on-site surveys, and workshops (Photo 1) on not only Unkapanı Flour Mill but also rich cultural heritage of Istanbul were organized.<sup>5</sup>

Apart from some lectures on the Unkapanı Flour Mill and Beykoz Leather and Shoe Factory, field trips were organized to BeykozKundura, an old leather and shoe factory transformed into a film plateau (Plate 2), and MüzeGazhane, the Hasanpaşa Gasworks that was transformed into a cultural center (Plate 3). The course participants witnessed the transformation of these two sites, had the chance to learn more about the architectural, social and economic dimensions of transformation processes and the plural voices of multiple stakeholders.

Moreover, the course participants joined “landscape biography” and “emotion networking” workshops, which gave them the opportunity to become acquainted with practical tools to experience and assess the multi-layered nature of (industrial) heritage places and the variable and sometimes conflicting values attached to such places by different stakeholders (Plate 4).<sup>6</sup>

An on-site survey led by Assist. Prof. Dr. Yıldız Salman (Istanbul Technical University) and Prof. Dr. Nilüfer

<sup>2</sup> For more information about “landscape biography” and its various dimensions, see Roymans et al., 2009.

<sup>3</sup> For more information about emotion networking and its application in the heritage sphere, see. Rana et al., 2017

<sup>4</sup> More information on the Unkapanı Flour Mill and its transformation can be found in section 3 of this article.

<sup>5</sup> Before the in-person meetings, Prof. Dr. Mehmet Alper gave an online lecture on the transformation processes of the Unkapanı Flour Mill and Beykoz Leather and Shoe Factory. The Istanbul meeting of the course started with a lecture by Prof. Dr. Namık Erkal entitled “Once the Belly of Istanbul: Unkapanı as the grain provisioning center”.

<sup>6</sup> The Landscape Biography Workshop was organized by Karin Stadhouders; the Emotion Networking Workshop was organized by Indira van Oven.

## TEACHING SUSTAINABLE TRANSFORMATION OF INDUSTRIAL HERITAGE PLACES: INSIGHTS FROM THE NIT URBAN HERITAGE LAB

<p><b>01</b> NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p> <p><b>HOW TO DEAL WITH COMPLEXITY? VARIOUS VALUES, DIFFERENT DIMENSIONS AND MULTIPLE SCALES OF INDUSTRIAL HERITAGE PLACES</b></p> <p>03 September 2021, Friday   15.00 - 18.00 [Istanbul Time]</p> <p><b>Welcome Speeches</b> The Netherlands Institute in Turkey (NIT) by Fikriye Geyik [DE Centre for Global Heritage and Development by Marn de Gooijer Netherlands Consulate general in Istanbul by TBC</p> <p><b>Description of the Initiative and the Course</b> Özgün Özgürler [NIT]</p> <p><b>Various Heritage Values and Different Dimensions in the Transformation of Industrial Heritage Places</b> A. Güler Bığcı Akınlar [METU]</p> <p><b>Economic Perspectives in the Transformation of Industrial Heritage Places</b> Ayşe İğnora [EUESSING]</p> <p><b>The Multi-scalar and Multi-Dimensional Approach: An Industrial Network of Turkey Cellulose and Paper Factories (SEKA) as Heritage</b> Bilge Kıvanç [Coblenz GSAFF]</p> <p><b>Discussion   Moderation:</b> Özgün Özgürler [NIT]</p> <p><b>NIT</b> The session will be in English, English to Turkish interpretation will be provided.</p>	<p><b>02</b> NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p> <p><b>CONSENSUS BUILDING FOR THE TRANSFORMATION OF INDUSTRIAL HERITAGE PLACES: HASANPAŞA GAZHANESİ [HASANPAŞA GASOMETER COMPLEX], İSTANBUL</b></p> <p>10 September 2021, Friday   15.00 - 18.00 [Istanbul Time]</p> <p><b>Three Decades of Transformation in Hasanpaşa Gazhanesi [Hasanpaşa Gasometer Complex]: Processes and Conflicts</b> Gökçe Temelli [ITU] Yıldız Salıncı [ITU]</p> <p><b>"Gazhane Çerçevesinde" A Local Initiative to Preserve Hasanpaşa Gazhanesi</b> İpek Demirel [Gazhane Çerçevesinde] Beytülülçayır [Gazhane Çerçevesinde]</p> <p><b>Policy-maker's Perspectives</b> Istanbul Metropolitan Municipality's Works at Hasanpaşa Gazhanesi Merve Güllü [Istanbul Metropolitan Municipality]</p> <p><b>Discussion   Moderation:</b> Cemal Akın [Kadir Has University]</p> <p><b>NIT</b> The names of the speakers are listed in alphabetical order. The session will be in Turkish, Turkish to English interpretation will be provided.</p>
<p><b>03</b> NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p> <p><b>HERITAGE ACTIVISM, CITIZENS' RIGHTS AND THE TRANSFORMATION OF INDUSTRIAL HERITAGE PLACES</b></p> <p>17 September 2021, Friday   15.00 - 18.00 [Istanbul Time]</p> <p><b>Bottom-up and Grassroots Approaches: Activism &amp; Activists for the Preservation of Industrial Heritage Places</b> Gül Bıkkın</p> <p><b>The Social Dimension of Industrial Heritage: What Can the Stories and the Memories of Previous Users Tell for the Future?</b> Ela Yılmaz</p> <p><b>Discussion   Moderation:</b> Ayşe Akınlar [METU]</p> <p><b>NIT</b> The session will be in Turkish, Turkish to English interpretation will be provided.</p>	<p><b>04</b> NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p> <p><b>SOCIAL INCLUSION AND PARTICIPATION FOR THE TRANSFORMATION OF INDUSTRIAL HERITAGE PLACES</b></p> <p>24 September 2021, Friday   15.00 - 18.00 [Istanbul Time]</p> <p><b>Industrial Heritage as a Point of Departure for Emotion Networking and the Role of Living Archive for Social Inclusion</b> İsmet Döğmeç and İsmailhan Eren Zorlu (Keywords: Archives)</p> <p><b>Witnesses between past and future: The impact of interstitial experiences and practices on the rehabilitation of post-industrial sites. The case of the former Quarantine Station in the Beşiktaş harbour area</b> Ekin İcahanlıoğlu [Lisieux University]</p> <p><b>Discussion   Moderation:</b> Fikriye Geyik [NIT]</p> <p><b>NIT</b> The session will be in English, English to Turkish interpretation will be provided.</p>

Plate 1. The announcements for weekly public lectures at Part I / Eğitim programının ilk kısmında haftalık olarak ve herkese açık düzenlenmiş eğitimlerin duyuruları



Photo 1. A Lecture by Namık Erkal in SALT Galata / Namık Erkal, SALT Galata'da verdiği ders sırasında.

Baturayoğlu Yöney (Mustafa Kemal University) around the Unkapanı Flour Mill made it possible for the course participants to gain knowledge about the site and its surrounding, the multilayered history (i.e., Byzantine Era – Valens Aqueduct or Republican Era – Istanbul Drapers Market) and rich cultural heritage of Istanbul, and the ongoing contested transformations projects such as Süleymaniye and the historic ports along the Golden Horn (Plate 5).



Plate 2. Field survey in BeykozKundura / BeykozKundura'da gerçekleştirilen alan çalışması





Plate 3. Field survey in MüzeGazhane / MüzeGazhane’de gerçekleştirilen alan çalışması



Plate 4. Workshop by Karin Stadhouders on “Landscape Biography” (top) and Workshop on “Emotion Networking” by Indira van Oven (bottom) / Karin Stadhouders tarafından gerçekleştirilen “Peyzaj Biyografisi” çalışmayı (üstte) ve Indira van Oven tarafından gerçekleştirilen “Duygu Ağı” çalışmayı (altta)

The participants were asked to form four main groups to prepare a final project proposal that is discussed in detail in the following section (Plate 6). The three-day-long, intense, on-site meeting in Istanbul concluded with group presentations on their initial ideas on the transformation of the Unkapanı Flour Mill (Plate 7).

Throughout the third part of the education program (October, November, December 2022), the participants continued to work on their final projects and online gatherings were organized for progress meetings where they received feedback on their projects. They also attended weekly online public lectures by leading researchers and designers from the Netherlands and Turkey during this period. The projects on the transformation of industrial heritage places are mostly presented in the third part in line with the idea that they might be inspirational for course participants during the development of their projects for the Unkapanı Flour Mill (Plate 8).

The Industrial Heritage for Sustainable Cities education program concluded with group presentations on a hypothetical proposal for the transformation of the Unkapanı Flour Mill in Istanbul based on the significance of the historic urban landscape as a whole.



Plate 5. Field survey around the Unkapanı area and Unkapanı Flour Mill / *Unkapanı Değirmeni ve Unkapanı çevresinde gerçekleştirilen alan çalışması*



Plate 6. Study group meetings in SALT Galata / *Eğitim programı katılımcılarının SALT Galata'da gerçekleştirdikleri grup çalışmaları*

## INDUSTRIAL HERITAGE IN A MULTILAYERED URBAN CONTEXT: THE UNKAPANI FLOUR MILL

As a post-industrial and multilayered city, Istanbul is a unique example of an historic urban landscape with material remains belonging to different time periods, from Byzantine to Ottoman and Early Republican. Istanbul is also home to various kinds of industrial heritage places such as ports, gasometers, and factories with different former purposes. However, due to technological changes, many of these places have been vacant for a long time, and their integration into the city has become both a challenge and an opportunity. In this regard, the course focused on Istanbul's industrial heritage in a multilayered landscape but also discussed case studies from elsewhere in Turkey and the Netherlands.

Within Istanbul, the Unkapanı Flour Mill and its surroundings were chosen as a focus area for the course. The remains of this complex are located within the complex historic urban landscape and face numerous physical, social, and economic issues. The flour mill was constructed in the 19<sup>th</sup> century as an industrial complex consisting of a steam-powered mill to produce flour. It was established in an urban area with a history of flour production and processing going back several centuries, close to the quay on the Golden Horn where grain could be off-loaded. Initially, it consisted of a mill building, lodging, warehouse, administration building, bakery, cinema, and two chimneys (Plate 9).

From the complex's establishment to the present day, the Unkapanı Flour Mill site has undergone significant transformations. A large portion of the Unkapanı Flour Mill was demolished during the construction of the





Plate 7. Study group meetings and the presentations in MüzeGazhane on preliminary findings of the course participants' projects / *Eğitim programı katılımcılarının MüzeGazhane'de gerçekleştirdikleri grup çalışmaları ve projelerin ilk çıktılarının sunuşları*

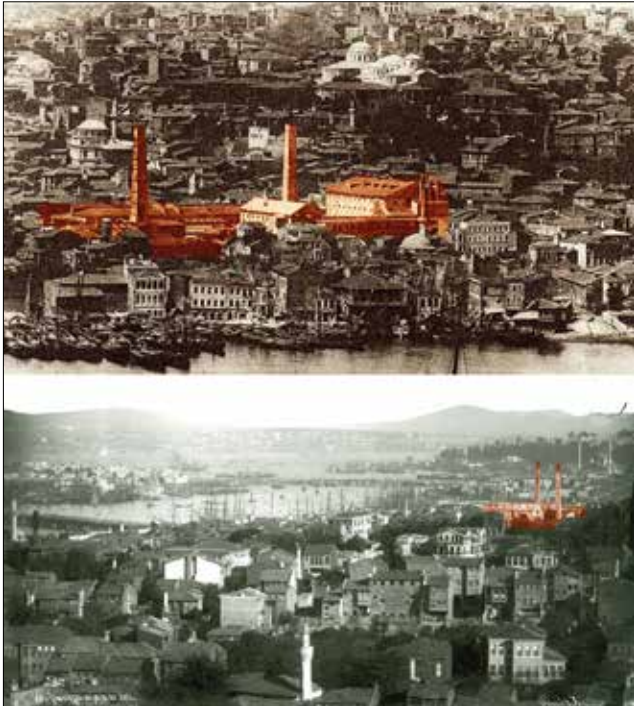


Plate 9. Unkapanı Flour Mill before its demolition. Source: Mehmet Alper Archive / *Yıkımından önce Unkapanı Değirmeni*. Kaynak: Mehmet Alper Arşivi

Istanbul Drapers Bazaar (İMÇ) Blocks in 1961 (Seçer Kariptaş, 2011), and the destroyed buildings can be traced in Photo 2. The Unkapanı Flour Mill has been in

the national register since 1995, and thus, it currently has legal conservation status. In the 2010s, the Istanbul Archaeological Museums conducted archaeological excavations on the grounds of the mill (Seçer Kariptaş, 2011) and there is currently a small excavation trench left open in the middle of the site.



Photo 2. The current state of Unkapanı Flour Mill. Source: Mehmet Alper Archive / *Unkapanı Değirmeni'nin güncel durumu*. Kaynak: Mehmet Alper Arşivi

After the mill lost its function once the Istanbul Drapers Market's construction started, the mill was used as a parking area for a while and then became vacant. The building is currently in a ruined state and not used (Photo






















 <p>NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p>  <p><b>THE TRANSFORMATION OF SÜMERBANK KAYSERİ TEXTILE FACTORY INTO THE AGUS SÜMER CAMPUS</b> Prof. Dr. Nihal Batısoyğulu Yüney (Mustafa Kemal University) 15 October 2021, Friday   15.00 - 16.00 [Istanbul Time] <i>The session will be in English.</i></p>	 <p>NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p>   <p><b>TRANSFORMATION OF A SHOE FACTORY INTO A STORY FACTORY: MEMORY OF KUNDURA</b> Süreyya Topaloğlu (Kundura Memory Project Coordinator) 22 October 2021, Friday   15.00 - 16.00 [Istanbul Time] <i>The session will be in English.</i></p>
 <p>NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p>   <p><b>ON THE TRACES OF THE OLD: ARCHITECTURAL CONSERVATION AND ADAPTIVE REUSE OF BRITISH OIL MILL IN MERSİN</b> Umut Bulğıcı (ANB Architecture), Merve Çolak (ANB Architecture), Seray Türkay Coşkun (Stüdyo Növe, TED University), Esatcan Coşkun (Stüdyo Növe, TED University), Onur Yılmaz (Onur Yılmaz Architects, TED University) 5 November 2021, Friday   15.00 - 16.00 [Istanbul Time]</p>	 <p>NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p>    <p><b>INTERNATIONAL APPRAISAL OF INDUSTRIAL HERITAGE: UNESCO WORLD HERITAGE LIST, EUROPEAN HERITAGE/EUROPA NOSTRA AWARDS, AND ERH, LINKS WITH TOURISM</b> Yonca Erkan (Kadir Has University) 12 November 2021, Friday   15.00 - 16.00 [Istanbul Time]</p>
 <p>NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p>    <p><b>ENDÜSTRİ MİRASININ GÖRÜNÜR VE ANLAŞILIR KILINMASINDA STK'LARIN ROLÜ: ÇEKÜL VAKFI ÇALIŞMALARI</b> Gülşen Hazal Çatalbaş (ÇEKÜL Vakfı) 26 November 2021, Friday   15.00 - 16.00 [Istanbul Time]</p>	 <p>NETHERLANDS INSTITUTE IN TURKEY [NIT] URBAN HERITAGE LAB INDUSTRIAL HERITAGE FOR SUSTAINABLE CITIES</p>   <p><b>TRANSFORMATIVE ARCHITECTURE</b> David Gianotten (OMA / Office for Metropolitan Architecture) 03 December 2021, Friday 15.00 - 16.00 [Istanbul Time] / 13.00 - 14.00 [Amsterdam Time]</p>

Plate 8. The announcements for weekly public lectures at Part III / *Eğitim programının üçüncü kısmında haftalık olarak ve herkese açık düzenlenmiş eğitimlerin duyuruları*

1). However, the transformation of the mill through its adaptive reuse was on the agenda of the owners for a couple of years. The Unkapanı Flour Mill has been owned by the Istanbul Commodity Exchange since 1980 and there have been plans to transform the mill by giving it new functions for a while (Taşdelen Erli, 2013). It was planned to transform the historical mill into a congress center in 2013, and more recently a project has been developed but not implemented to transform the mill into university buildings.

The building has recently been featured in the national press for being the victim of vandalism. Nevertheless, the building itself provides enormous potential with

its multilayered and multi-dimensional heritage values representing Istanbul's archaeological and industrial past. For that reason, the Unkapanı Flour Mill fits better with the objectives of the education program compared to other industrial heritage sites that were considered as case study. First of all, the Unkapanı Flour Mill is located at the very center of the historic city, which means that the remains representing different periods co-exist together in the mill and its surrounding. Besides, the Unkapanı Flour Mill is not intact and the ruined state of the structure raises questions related to the mill's integrity as well as the possible new intervention approaches and strategies for the "reconstruction". All these reasons add both extra challenges and spare room

for creativity regarding the projects on the Unkapanı Flour Mill in Istanbul. To this end, the participants were given the assignment to develop, in groups, proposals for the adaptive reuse of Unkapanı Flour Mill, in which they had to indicate how the complex could be integrated into the daily life of *Istanbulites*, taking into account its multilayered history and heritage values, and considering issues of sustainability, circularity and inclusivity. The proposals are briefly presented below.

## PROPOSALS FOR THE SUSTAINABLE TRANSFORMATION OF THE UNKAPANI FLOUR MILL IN ISTANBUL

The course participants were asked to consider the problems of the mill and its surroundings in the broader context, and then to develop a hypothetical project for the appreciation, transformation and/or reuse of the Unkapanı Flour Mill. In this regard, the project development consisted of four interrelated stages:

Analysis of the tangible (relation of the mill with its surrounding, architectural and urban features of the mill, spatial and visual qualities, etc.) and intangible (uses, events, people, and memories associated with the places, economic activities, etc.) aspects of Unkapanı Flour Mill;

Determination of the significance and importance of Unkapanı Flour Mill;

Definition of Unkapanı Flour Mill's current problems and challenges;

Development of a project for the sustainability of Unkapanı Flour Mill considering the importance, significance and problems identified in the previous stage.

As the course was set up as a research-by-design exercise, it critically explored the state of the art in the transformation of industrial heritage places.

The participants had different professional backgrounds, so they were asked to develop multi-disciplinary solutions. They formed four project groups to pool their expertise in different fields to approach the research question.<sup>7</sup> The projects aimed to solve contemporary problems that the Unkapanı Flour Mill faces, such as a lack of community

awareness, security problems, abandonment, vandalism, and climate change risks.

The “Unkapanı Community Garden – by the community, for the community” project<sup>8</sup> intends to adapt the Unkapanı Flour Mill to contemporary needs while preserving its values through community engagement and reducing the climate risks that the mill confronts. To this end, the project team developed a detailed vision statement / strategic action plan and tested it through an adaptive reuse project for temporary uses.

Their vision statement aims “to propose guidelines and measures for the temporary reuse/experimental use of the Unkapanı Flour Mill to address historical preservation, community needs and climate risks” (Nesterova et al., 2021). The project team's proposal – based on the problems that they identify in three perspectives as heritage, social and environmental – is a community garden in which the conservation of the Unkapanı Flour Mill is guaranteed, community needs are satisfied, and the climate resistance is addressed with the involvement of various stakeholders as policy-makers, NGOs, universities and private enterprises (Plate 10).

For the conservation of the historic values of Unkapanı Flour Mill, Nesterova et al., 2021 proposed a *memory storage exhibition* with modular and temporary structures. They constructed protective platforms around the excavation trench in the middle of the Unkapanı Flour Mill, reinterpreted and reconstructed the chimneys of the mill with contemporary materials to reveal the contribution of the building to Istanbul's silhouette. Indeed, as a general principle, contemporary materials are used for the new elements inserted into the historic mill (Figure 1).

To answer the needs of the community, the project team proposed temporary structures to be used as wheat processing workshops and bakeries as inspired by the original function of the flour mill. The team also proposed a marketplace around the archaeological site to allow local businesses and shop owners to sell their products (Nesterova et al., 2021). As for climate resistance, the project team introduced rain gardens for rainwater storage; green areas, grapevines, and wooden shading against the heat stress, especially for the public spaces where many people gather; revolving doors and roof openings to provide natural ventilation (Plate 11).

The second project, entitled “Adaptive Transformation of the Mill through Urban Promenade: Monologue,

<sup>7</sup> For their projects, the course participants benefited from different sources of information such as historical maps, photographs and demographic data retrieved from TURKSTAT. By applying methodologies such as on-site field surveys, social surveys and unstructured interviews the participants also generated new primary data.

<sup>8</sup> This project was developed by Batoul Mesdagi, Gülhayat Kılıç, Tijana Veljkovic, Yelyzaveta Nesterova and Yonca Atabay.

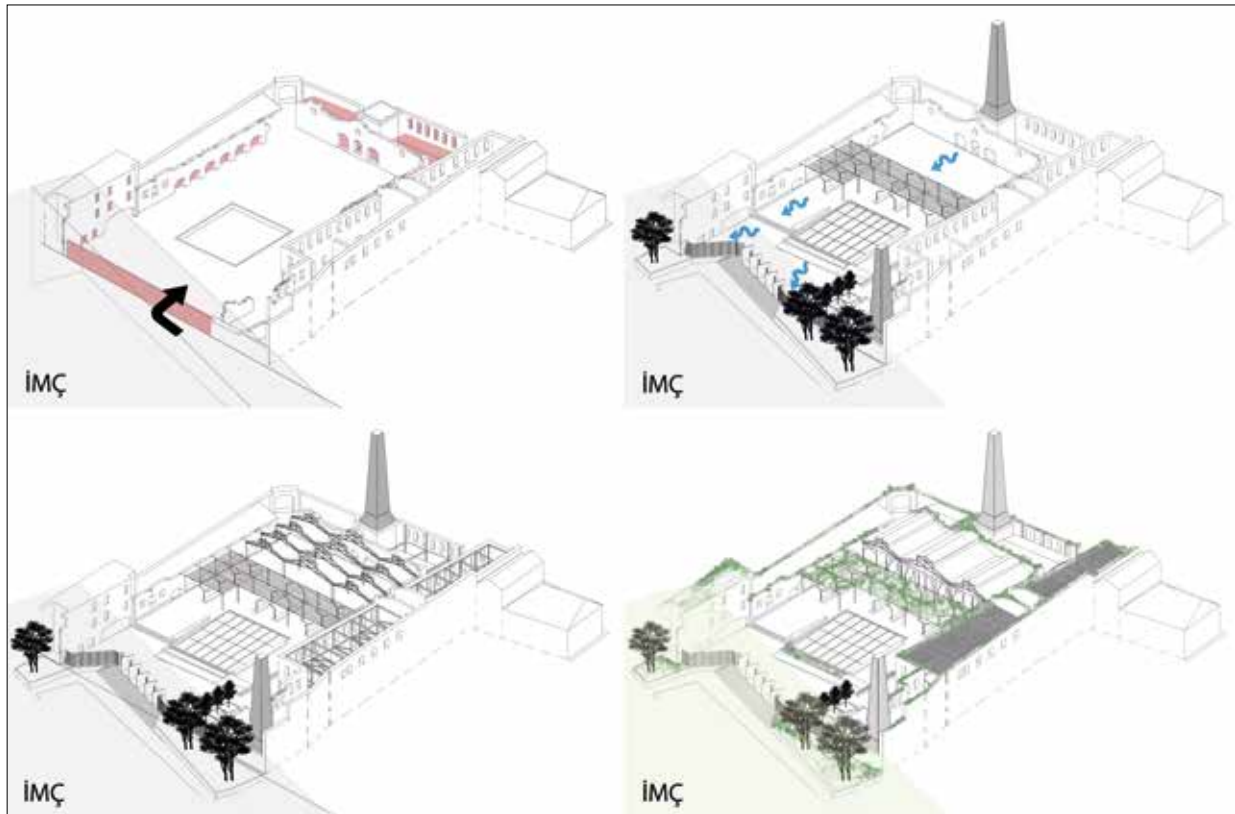


Plate 10. Step by step interventions in Unkapanı Flour Mill. Source: Nesterova et al., 2021 / *Unkapanı Değirmeni için önerilen müdahalelerin aşamaları*. Kaynak: Nesterova vd., 2021



Figure 1. Overall view of proposed interventions in the mill. Source: Nesterova et al., 2021 / *Değirmende önerilen müdahalelerin genel görünümü*. Kaynak: Nesterova vd., 2021

Dialogue, Travelogue”<sup>9</sup> aimed at increasing public awareness of the Unkapanı Flour Mill by integrating people with different backgrounds into the conservation decision-making processes to achieve circular, social, and economic transformations. The project team was inspired by Social Identity Theory (Tajfel and Turner,

<sup>9</sup> The second project proposal was developed and presented by Miraç Ayça Türkiliz, Mustafa Can Terzi, Seda Naniç, Tuğçe Hacı and Yiğit Li.

1979 in Türkiliz et al., 2021). According to the project team; food preparation, consumption and purchase are both individual and collective actions because other people can demand the food prepared by an individual. Türkiliz et al. (2021) claim that “[...] the food and food practices have become a communication tool between individuals, and the maintenance of types of eating practices are thus part of that group’s social identity”. Considering Unkapanı’s long-time association with food production starting from the 19th century, the project team positions their proposals within the theme of food.

After conducting online and on-site surveys, the project team both revealed the perception of the Unkapanı Flour Mill in the public eye (Figure 2) and defined the site’s main problems: security, lack of awareness, and the disconnection between the mill and the inhabitants of the surrounding area.

Based on their survey results, the team developed decisions in three scales under the central theme of “dialogue.” At the macro-scale, they proposed an *industrial route* that follows the route of flour from the mill to the marketplace (Figure 3). At the meso-scale, they promoted establishing a *cultural bakery* at the Unkapanı Flour Mill where different social communities can come together (Figure 4). Finally, at the micro-scale, they developed circular





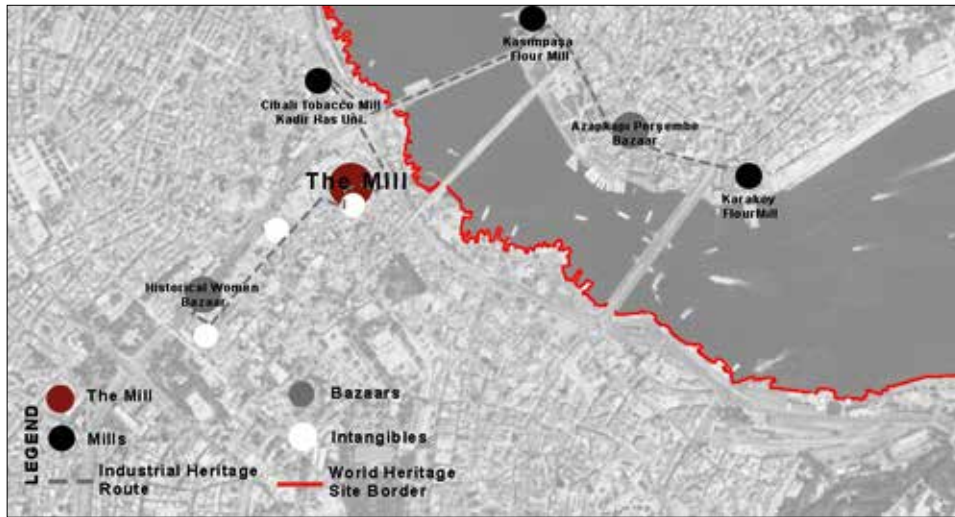


Figure 3. Industrial route. Source: Türkiliz et al., 2021 / *Endüstri rotası*. Kaynak: Türkiliz vd., 2021

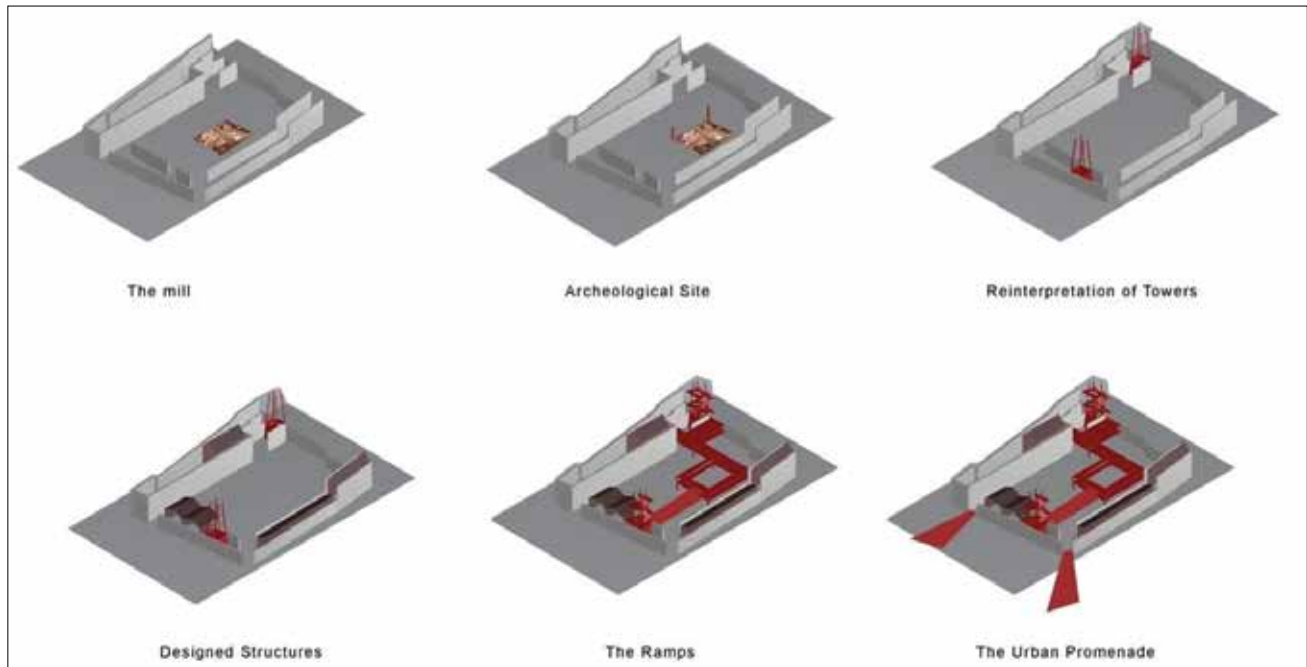


Figure 4. Step by step interventions in Unkapanı Flour Mill. Source: Türkiliz et al., 2021 / *Unkapanı Değirmeni için önerilen müdahalelerin aşamaları*. Kaynak: Türkiliz vd., 2021

area is viewed negatively, and people are usually not aware of the heritage values of the site.

For the transformation of the Unkapanı Flour Mill, the project team proposed a set of new workshop spaces for creative industries and commercial areas from which the neighborhood community might benefit as well as a memory museum aimed at increasing the sense of belonging and awareness about the area (Plate 13). An urban passage between Istanbul Drapers Market (İMÇ) and the mill is also introduced to increase the interaction between them (Figure 6).

The last team adopted *guerilla urbanism* (also known as tactical urbanism<sup>12</sup>) in their project, “Urban Catalyzer,”<sup>13</sup> as a bottom-up approach to balancing the competing interests of public and private actors (Figure 7). The project team conducted oral interviews with the residents, tradespeople, and the *muhtar* (elected neighborhood mayor) of the neighborhood and based

<sup>12</sup> Lydon and Garcia (2015) define tactical urbanism as “[...] an approach to neighborhood building and activation using short-term, low-cost, and scalable interventions and policies. Tactical Urbanism is used by a range of actors, including governments, business and nonprofits, citizen groups, and individuals.”

<sup>13</sup> The Urban Catalyzer project was prepared by Aybüke Safi, Yasemin Çakır, Meriç Altıntaş Kaplan, Merve Torlak, Nazlı Arslan, Sena Kayasü and Taiwo Samuel Orisalade.

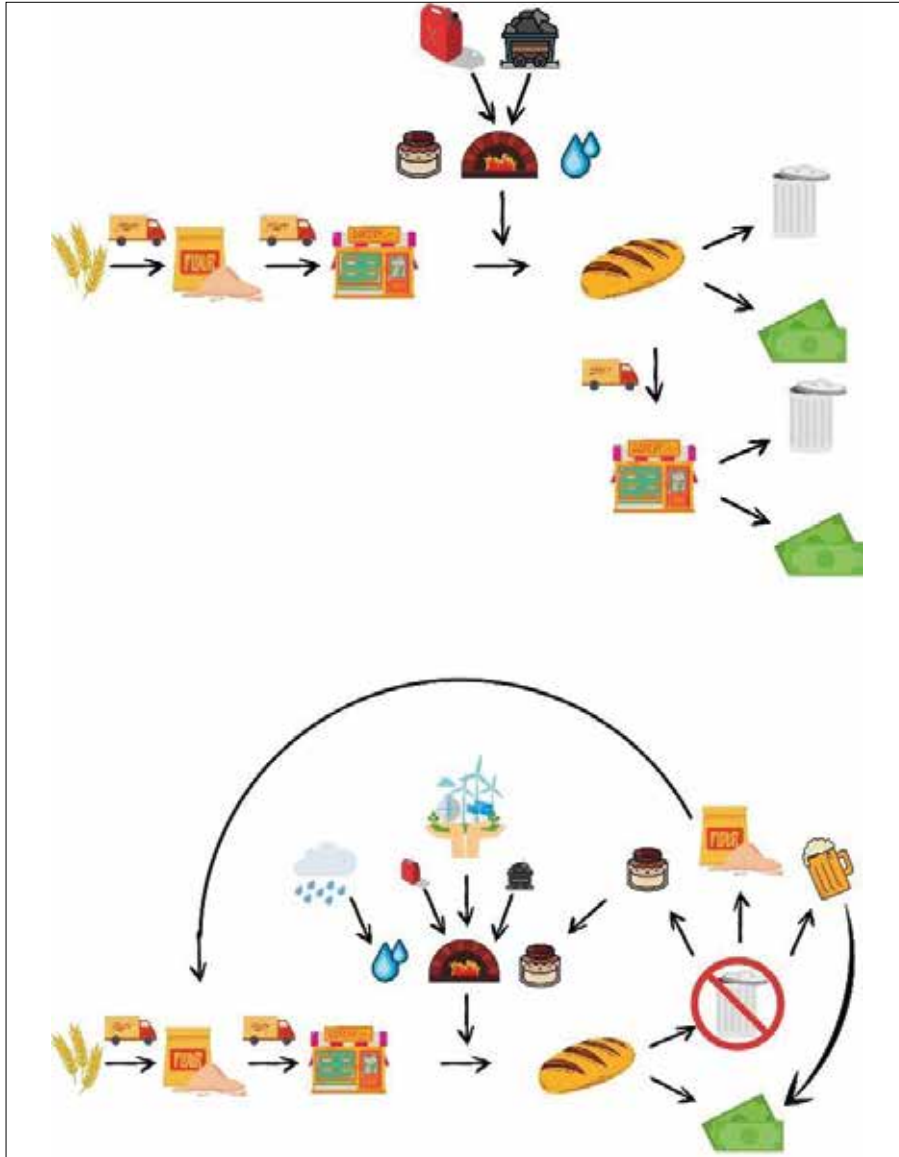


Plate 12. The linear (top) and the circular (bottom) business models for bread making in Unkapanı Flour Mill. Source: Türkiliz et al., 2021 / *Unkapanı Un Fabrikası'nda gerçekleştirilen ekmeğin doğrusal (üst) ve dögüsel (alt) iş modelleri*. Kaynak: Türkiliz vd., 2021



Figure 5. Unkapanı Beyond the Wall. Source: Balcan et al., 2021 / *Duvarlarının Ötesinde Unkapanı*. Kaynak: Balcan vd., 2021



Figure 6. Urban passage connecting İMÇ and the Unkapanı Flour Mill. Source: Balcan et al., 2021 / *İMÇ ve Unkapanı Değirmeni'ni bağlayan kentsel pasaj*. Kaynak: Balcan vd., 2021





Figure 7. Urban Catalyzer for Unkapani Flour Mill. Source: Safi et al., 2021 / *Unkapani Değirmeni için Kentsel Hızlandırıcı*. Kaynak: Safi vd., 2021



Plate 13. Workshop (top) and Memory Museum (bottom). Source: Balcan et al., 2021. / *Atölye (üstte) ve Anı Müzesi'nden (altta) görünüm*. Kaynak: Balcan vd., 2021

their transformation proposal on the feedback they gained from these interviews. The interview results showed that the area was seen as unsafe, with many unregistered inhabitants seeking to move to a better neighborhood once they had more income temporarily living there.

To facilitate the participatory design process in the Unkapani Flour Mill, the team proposed to remove the concrete wall facing İMÇ and pedestrianize the Atlamataşı Street, located between the mill and İMÇ. In this way, the building could be transformed into a recreational area



Figure 8. The distribution of architectural program elements in Unkapani Flour Mill. Source: Safi et al., 2021 / *Unkapani Değirmeni'nde öneri mimari program elemanlarının dağılımı*. Kaynak: Safi vd., 2021

equipped with several permanent uses, such as shops, a community center, and a weekly market in the mill (Figure 8). Wood and polycarbonate were chosen to be the construction materials for the new interventions to create consistency in new interventions and distinguish them from the original mill structure (Plate 14).

In order to avoid gentrification, the project team emphasized that the suggested functions need the approval of the inhabitants of the area by measuring their tendencies and interests in a participatory manner. The project team also proposed a vision for the future of Unkapani Flour Mill's surrounding and thus, they envisaged that the transformation of the mill will contribute to the regeneration of the wider area (Figure 9).

The four project proposals briefly summarized above were presented to the public on 10 December 2021. Three discussants were invited to approach the proposals from different perspectives as cultural heritage specialists from academia, the practice, and the NGOs (Figure 10). NIT is currently working on publishing a book, the log of the





Plate 14. Views from the courtyard. Source: Safi et al., 2021 / *Avludan görüşler. Kaynak: Safi vd., 2021*



Figure 9. A vision for the future of the surroundings of Unkapanı Flour Mill. Source: Safi et al., 2021 / *Unkapanı Değirmeni çevresinin geleceği için bir vizyon önerisi. Kaynak: Safi vd., 2021*



Figure 10. The participants of NIT Urban Heritage Lab: Industrial Heritage for Sustainable Cities during their final project presentation / *NIT Kentsel Miras Laboratuvarı: Sürdürülebilir Şehirler için Endüstri Mirası eğitim programının katılımcıları son proje sunumları sırasında*

first NIT Urban Heritage Lab entitled “Industrial Heritage for Sustainable Cities,” on the detailed accounts of the final project proposals on the hypothetical transformation of the Unkapanı Flour Mill.<sup>14</sup> Some reflective essays on these proposals from cultural heritage experts and some articles on the history and transformation of the site and its surroundings will also be included in the book. We hope that it will serve as a guide in terms of the methodology it adopted for those who would like to organize multi-disciplinary and international education programs for young professionals in the future.

## DISCUSSION AND CONCLUSION

“Industrial Heritage for Sustainable Cities” was tailored for early-career researchers and professionals. The course aimed to enhance international cooperation between academics and researchers in the Netherlands and Turkey through public lectures, study group meetings, workshops, and project development. As a matter of fact, training/education programs for young researchers and professionals are not rare practices, and leading cultural heritage organizations such as the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM)<sup>15</sup>, Historic England<sup>16</sup>, and Centre for Global Heritage and Development (LDE CGHD)<sup>17</sup> come to the forefront with the programs they regularly organize. Similar to the NIT Urban Heritage Lab experience, these institutions collaborate with various relevant stakeholders (academicians, practitioners, etc...) in order for young researchers and professionals to develop the skills and necessary knowledge for understanding, conservation, and sustainable transformation of the historic urban landscapes. It has also been noted that these institutions have started to include online components besides face-to-face training in their education programs with the COVID-19 pandemic.

Given that the course was held during a time of COVID-19 related restrictions, the program was conducted online except for the three-day field trip in Istanbul. Our experience showed that this combination worked well and that it can be a preferred format for international courses, also after all restrictions are lifted. The program took more than three months and having the entire course

in person would have been complicated and costly for course participants coming from abroad. Obviously, the pool of guest lecturers, professionals and representatives of international and non-governmental organizations that can be invited to give lectures, participate in discussions or give feedback becomes greatly enlarged with an online format.

Although an entirely online format would have additional advantages, especially in minimizing the negative climate-related impact of international travel, it was felt by the organizers and participants that the in-person component was critical to achieving the overall goals of the course. The short, in-person period was very effective, especially because it followed the first set of public lectures on various theoretical dimensions of industrial heritage places. During the field trip, the participants acquired a more profound, first-hand knowledge of the general topic and the case study. They held informal and structured discussions with other participants, lecturers, and specialists and talked to residents and tradespeople. Several workshops introduced innovative concepts and tools and helped the participants quickly discover the varied capacities, experiences, ideas, and viewpoints present among the group members. This created an atmosphere of shared commitment and dedication that greatly benefited the online group work in the later stages of the course.

Following the course, the organizers received feedback from the participants. The multi-disciplinary seminars that brought various perspectives on industrial heritage together were highly appreciated. However, the participants also felt that some dimensions were not well covered in the program, referring primarily to the perspective of real estate developers. Another issue pointed out in the evaluation was the limited variation in the background of the participants. Although the course was open to early-career professionals and students from any discipline, architects and architectural students were overrepresented. This situation was due to the number of applications from various disciplines. However, the organizing committee plans to be more careful about establishing a balance regarding the number of participants from different disciplines in the future. The education program intended to bring Dutch and Turkish expertise on industrial heritage together, but some of the course participants also expressed an interest in practices and perspectives from other parts of the world, from contexts like China, where urban transformation dynamics are quite different from the Netherlands or Turkey.

<sup>14</sup> The book is being co-edited by Sena Kayasü, Fokke Gerritsen, Özgün Özçakır and Aysel Arslan and will be published in June 2022 (Kayasü et al., forthcoming).

<sup>15</sup> For the training programs organized by ICCROM, see <https://www.iccrom.org/get-involved/courses>

<sup>16</sup> For the training and skill development opportunities provided by English Heritage, see <https://historic-england.org.uk/services-skills/training-skills/>

<sup>17</sup> For the education programs organized by LDE CGHD, see <https://www.globalheritage.nl/education>

Another valuable feedback was that, although the Unkapanı Flour Mill was very suitable for a research-by-design exercise as it presented a complex, multilayered situation that required a multi-dimensional approach, it lacked the opportunity to contribute to an actual transformation process. However, the participants' projects were recently shared with the policy-makers at Istanbul Metropolitan Municipality, and we hope that the hypothetical projects developed by the course participants will contribute to the actual transformation of the mill.

The organizing committee plans to use the participant feedback for the education programs to be organized in the following years. In the fall of 2022, NIT will organize another education program that focuses on Istanbul's rich water-related heritage. NIT thinks that water heritage is a concept that connects the Netherlands and Turkey as both countries have different types of water-related heritage and immense expertise in their understanding, appreciation and conservation. Considering the water-related challenges of the contemporary cities, NIT Urban Heritage Lab: Water Heritage for Sustainable Cities education program will be a timely action.

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