Industrial Heritage for Sustainable Cities

Proposals for the Transformation of Istanbul's Unkapanı Flour Mill

edited by
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NIT URBAN HERITAGE LAB

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Istanbul's Unkapanı Flour Mill

Istanbul 2023

NIT

Netherlands Institute in Turkey

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Kingdom of the Netherlands

Centre for Global Heritage and Development
Leiden-Delft-Erasmus Universities

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Introducing NIT Urban Heritage Lab and the Industrial Heritage for Sustainable Cities Program

Fokke Gerritsen
Netherlands Institute in Turkey

The Netherlands Institute in Turkey (NIT) has initiated and participated in cultural heritage related projects for more than ten years and plans to maintain cultural heritage as a core field of activity also for the upcoming years. In 2021, it therefore decided to integrate and expand its heritage related programs under the title of NIT Urban Heritage Lab .

NIT Urban Heritage Lab aims to address contemporary issues at the intersections of urban life, heritage and sustainability. It starts from the notion that tangible and intangible cultural heritage is critical in maintaining the livability of cities and the sustainability of urban life. It is also convinced that cultural heritage is not a straightforward stock of historic buildings, landscapes and traditions. Cultural heritage is in a constant state of creation, selective preservation and change. It is constructed in dialogue between past and present, and in ongoing discussions between different interests and discourses.

How to deal with urban cultural heritage under today's spatial, environmental and climatic pressures, is therefore something that needs to be constantly discussed, that requires consensus building and that asks for multidisciplinary approaches. It also requires a new generation of researchers, preservationists, designers and policy makers that can integrate these different aspects and that can help achieve sustainable and inclusive heritage practices. UHL hopes to contribute to an environment where such dialogue can take place and where new generations of heritage specialists can emerge. It wants to help build bridges between academic research and education, architectural and landscape design, urban policy and planning, and public participation. Moreover, as a Dutch organization in Türkiye, NIT aims to provide opportunities for international dialogue and exchange.

The inaugural program of NIT Urban Heritage Lab took place from September to December 2021 and was titled Industrial Heritage for Sustainable Cities. It consisted of several, integrated elements: a series of public webinars, a semester-long academic course for advanced students and young professionals and a research and design project relating to an industrial heritage site in the historical peninsula of Istanbul, the Unkapanı Flour Mill. The Industrial Heritage for Sustainable Cities program was organized in partnership with and with financial support from the Netherlands Consulate General in Istanbul and LDE Centre for Global Heritage and Development.

About this book

The present book is one of the outcomes of the inaugural program of NIT Urban Heritage Lab. Following an introduction on the course, its scope and aims, it showcases the four proposals that the participants of the Industrial Heritage for Sustainable Cities Course developed for the transformation of the Unkapanı Flour Mill. The proposals are original, thought-provoking and inspirational, while at the same time based on solid multi-disciplinary, collaborative work. As such, they are perfect demonstrations of what NIT Urban Heritage Lab tries to achieve.

The book includes chapters on the history of the Unkapanı Flour Mill in its urban context by Namık Erkal, and on a plan developed under the responsibility of Mehmet Alper to transform the building remains into a university campus. Two scholars, Nilüfer Baturayoğlu Yöney and Harry Reddick reflect on the proposals in the final chapters.

Course participants and instructors at MüzeGazhane
Source: NIT Archive

Industrial Heritage for Sustainable Cities:
Course Aims and Overview[1]

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Fokke Gerritsen, Netherlands Institute in Turkey
Aysel Arslan, Netherlands Institute in Turkey

Introduction

In the autumn of 2021, the Netherlands Institute in Turkey (NIT) offered a graduate-level course entitled "NIT Urban Heritage Lab: Industrial Heritage for Sustainable Cities" that addressed the challenges and possibilities for transforming industrial heritage from a multi-disciplinary perspective. A group of 26 participants affiliated with Turkish and Dutch institutions was selected from many applications to generate creative ideas for the sustainable transformation of Unkapanı Flour Mill. The course participants represented diversity in nationality, disciplinary background, and interests. Among the participants were 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 Unkapanı Flour Mill in Istanbul, it was meant to provide insights into global practices for transforming and reusing industrial heritage places. It assessed multi-disciplinary approaches to respond to the challenges that industrial heritage places in urban settings confront. 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 sustainability, circularity, and inclusivity in theory and practice.

In that regard, the course aimed to provide training in sustainable transformations of industrial heritage in an international academic setting and to create an environment for exchange and discussion between scholars, professionals, governmental agencies, and community organizations.

An Overview: Industrial Heritage for Sustainable Cities

"Industrial Heritage for Sustainable Cities" ran between September and December 2021 and was conducted in a hybrid (both online and face-to-face) format and consisted of four parts as follows:

- Weekly online public lectures and discussions presented by leading scholars from the Netherlands and Türkiye (September 2021);

- A three-day intensive program in Istanbul with site visits and on-site assignments (7, 8, and 9 October 2021);

- Development of a project on Unkapanı Flour Mill in Istanbul with online studio presentations and discussions/critiques on participants' progress (October-December 2021);

- 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 Türkiye revolving around this central question:

In what ways can industrial heritage places be transformed, considering their tangible and intangible values and their multiple dimensions (cultural, environmental, social, economic), to achieve urban inclusivity, sustainability, circularity, and public engagement?

During the second part of the education program, the course participants met with the instructors in Istanbul on 7, 8, and 9 October for an

intensive program of in-person lectures, field trips, on-site surveys, and workshops. The field trips were organized to BeykozKundura, an old leather and shoe factory transformed into a film plateau, and Müze-Gazhane, the Hasanpaşa Gasworks converted into a cultural center. The course participants witnessed the transformation of these two sites. They also had the chance to learn more about the architectural, social, and economic dimensions of transformation processes and the plural voices of multiple stakeholders.

The Unkapanı Flour Mill and its surroundings were our case study and the main focus of the second part of the course. The participants were asked to form four main groups to prepare a final project proposal on the transformation of Unkapanı Flour Mill. The three-day-long, intense, on-site meeting in Istanbul concluded with group presentations on their initial ideas for transforming the Unkapanı Flour Mill.

Throughout the third part of the education program (October, November, and 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 Türkiye 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.

On 10 December 2021, the course participants presented their projects on the sustainable transformation and reuse of Unkapanı Flour Mill. This book presents the projects that the course participants developed through "Industrial Heritage for Sustainable Cities" to answer the contemporary heritage and sustainability challenges that urban heritage places confront. As such, the book introduces a wide array of practical solutions based on the participants' research questions considering the values and problems of the mill.

Conclusion

There is an urgency for the conservation, management, and sustainable development as well as transformation of historic urban landscapes 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 existing and new knowledge is shared and discussed. Teaching sustainable transformation to professionals and researchers at the beginning of their careers through knowledge-sharing platforms will contribute to the broader acknowledgment of sustainability and sustainable development.

The proposals for the transformation and reuse of the former Unkapanı Flour Mill presented in the book were developed to emphasize sustainable development's role in solving contemporary urban challenges in multi-layered cities like Istanbul. As such, the hypothetical projects for the mill designed by the course participants are essential to indicate the role of new interventions in achieving urban sustainability.

Acknowledgements

Endnotes

[1] The text is adapted from "Özçakır, Ö., Gerritsen, F. & Arslan, A. (2022). TEACHING SUSTAINABLE TRANSFORMATION OF INDUSTRIAL HERITAGE PLACES: INSIGHTS FROM THE NIT URBAN HERITAGE LAB. TÜBA-KED Türkiye Bilimler Akademisi Kültür Envanteri Dergisi, 25, 97-116. DOI: 10.22520/tubaked2022.25.008"

Once the Belly of Istanbul: Unkapanı as a Food Provisioning Center

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Unkapanı, the site of NIT Urban Heritage Lab 2021, is associated in the present-day mostly with Türkiye's music industry. Shops and offices of music arrangers and managers have been located in Istanbul Manifaturacılar Çarşısı (Drygoods Market, İMÇ after here) in Unkapanı forming one of the centers of the city's celebrated music sector. İMÇ is situated on the eastern side of the large avenue from Bozdoğan Kemeri (Aqueduct of Valens) leading to the Unkapanı Bridge on the Golden Horn. The market is a product of the 1950s and '60s' urban transformations. A master plan replacing the historic fabric (a competition winner project won by C. Fındıkoğlu, K. Bayur, T. Aka, N. Duranay and Ö. Akverdi) was completed in 1960, with the interventions of the Planning Office and revisions of Italian architect planner Luigi Piccinato (Erkol, 2017). İMÇ's architectural project was designed by competition winners Doğan Tekeli, Sami Sisa, and Metin Hepgüler. It follows '60s brutalist architecture and mat-building principles: an urban fabric formed of courtyards and elevated streets — an open version of traditional Ottoman khans — placed in topographic levels in between the modern avenue and historic neighborhoods. The new market is also well-known for its modern artworks (mosaic and ceramic murals, sculptures, reliefs) placed on brutalist surfaces and open spaces.[1] İMÇ, one of the best examples of modernist planning, architecture, and inclusion of art in public spaces, became, ironically, the ground for an unexpected subaltern culture's emergence: the arabesque.

After the 1970s, shops and offices of music arrangers and managers in İMÇ attracted young people from the provinces who pushed their way towards fame and being music stars. The key to fame was seen as a music tape or record produced here. The close relation of İMÇ with Istanbul's fruit and vegetable wholesale markets on the Golden Horn, where immigrants from the provinces found porter jobs, was probably an initial factor for this attraction. Since İMÇ emerged as a celebrated center of the music industry, the name where the marketplace is located, Unkapanı, became its generic label (near more specifically "Plakçılar Çarşısı", i.e. Marketplace of Music Records). As such, Unkapanı became the stage of many musical films based on the young arabesque and folk-pop musicians' dramatic road to success or failure. There have also been films to satirize the fantasy world formed around the music industry at Unkapanı, the most famous of which is "Firuze" directed by Ezel Akay. With all this recent historical background, when the belly of the city and Unkapanı are used in the same heading, such as in this article, most people will first recall arabesque music and oriental belly dance. In fact, the music industry in Unkapanı has faded in the 2000s and lost its glamor. Roads to fame no longer pass through here.[2] There are only a few shops and offices left, which are historical displays of antique musical materials. The cliché of belly dance, an orientalist performance of desire connoted to the Middle East and Istanbul, has also lost its attraction with the exception of cheap touristic entertainment.

The belly of Istanbul refers here to another type of trade related to the location: food. Unkapanı was one of the food provisioning centers in Ottoman Istanbul from the 15th century to the mid-20th century. By introducing Unkapanı's past major character, its urban history between the early modern period to the construction of İMÇ, including the specific site of NIT Urban Heritage Lab 2021: the Unkapanı Factory, will be briefly covered.

When the Ottomans took Constantinople in 1453, the settled areas of the fortified city were mainly clustered towards the Golden Horn harbor and across Galata walled quarter, constructed by the Genoese after the mid-13th century. The Golden Horn quays were formed of an extra-mural strip in front of the fortifications, the walls of which dated back to the 4th century AD and/or were reconstructed in the early 9th century. The maritime customs, harbor facilities, market places, and merchant quarters were placed on the inside and outside of the fortifications connected by a series of landing stages and gates, some of which were part of the Italian city state's concession quarters. After taking the city, the Ottomans removed the concessions but preserved and restructured the existing urban pattern as a kilometer-long continuous harbor zone reserved for different trade items (Kafesçioğlu, 2019: 30-37). These were customhouses acting at the same time as wholesale markets where official weights and measures were established: namely, kapans. From the entrance of the harbor, the customs and wholesale markets were lined up as: the Palace quays; the Great Customs for drygoods; kapans for slaves, salt, fruit and vegetables, wood and building materials; and, innermost of the harbor zone, grain and fish. Some of these places, gates, and landing stages as well as the immediate neighborhoods were named after these kapans; such as Unkapanı, which literally meant "flour weighing scale" but referred to the official grain weighing and distribution center or the grain wholesale market.[3]

Unkapanı was positioned in front of the fifth maritime gate of the Ottoman city (Platea Gate in the Byzantine period) on the Golden Horn. The intramural area of this gate was one of the flattest lands inside Golden Horn fortifications and where the easiest sloped street to the top of the city's ridges commenced. The gate was also easily accessible to great imperial religious foundations such as the Fatih and Süleymaniye complexes. While the customhouse and market were situated on the extra-mural sector of the city gate, the interior neighborhood was spotted by many grain mills and bakeries. This kind of functional distribution can be a reason for the use of the name Unkapanı for a larger area including several neighborhoods.

How the grain wholesale trade (of barley, rye, and mainly wheat) was organized defined the architectural scale and spatial layout of Unkapanı. The Ottoman state —like some early modern European states but unlike many others— did not choose to keep public grain reserves in great amounts. With the exception of emergency reserves for the army, palace, and religious foundations, grain reserves were kept by the millers and bakers of the city. Each establishment had to put aside a six months reserve. This kind of distributed reserve organization helped the state to get rid of the difficulties in keeping large-scale public granaries.

Unkapanı consisted of a waterfront customs square with a market house (divanhâne) and a storehouse (mahzen). The market house —very much like its European counterparts— was a wooden structure with offices and sofas elevated on pillars to survey the flow of imports. It also functioned as a customs court (lonca) where prices were defined, tax tariffs were decided, and the quality of grain was controlled. The sheltered space on the ground floor was an extension of the customs square and included a coffee shop. The weighing scale that gave its name to Unkapanı was located near this area, maybe under the market house. The magazine —called Beylik

Mahzen (seigniorial magazine)— was a more monumental 900 m² building with stone walls, a single gate, and a very high lead-covered hipped-roof. There were shops built attached to the waterside and the way leading to the city gate. The magazine was rebuilt under the supervision of Master Architect Sinan in the mid-16th century, which he called the Greatest Magazine. This unassuming building was actually one of the greatest structures in the Ottoman harbor and formed a landmark in situating other buildings around Unkapanı. Besides, the magazine was a small mosque (Subaşı Süleyman or Unkapanı Mosque) elevated above shops and small depots. It was first constructed as a hipped-roof structure and then reconstructed as a domed building in the time of Mimar Sinan (Master Architect Sinan). This version gave way to a hipped-roof building once again in the 18th century with an imperial lodge in front for watching the customs square. This mosque and its minaret would be reconstructed in the 19th century and demolished in the 1940s. The present replica of the last mosque is not situated in its historical position but further east. It should not be taken as a topographical reference.

The road between the magazine and the mosque led to the Unkapanı Gate and the intra-mural high street lined by millers and bakers. The mills in Istanbul were mainly horse mills; the related equipment of millstones and horse wares were also on sale around this district. The mills and baker shops were simple structures usually located under domestic buildings and within domestic neighborhoods. This was the weak point in the Ottoman grain reserve strategy. Since the neighborhoods were largely made of wooden structures they could perish in great fires with some part of the public reserves.

Unlike the intra-mural sectors of other harbor neighborhoods, the impact of harbor and trade did not penetrate much into the Unkapanı gate. There were a few large khans in the near vicinity, which was mostly formed of residential areas. Of the few religious endowments, Yavuzer Sinan Mosque from the late 15th century is the most important to form a continuous reference point through visual sources from different periods. The site of NIT Urban Heritage Lab is not marked by any clear reference from the 15th to early 19th century. It is possible that the land was at least partially imperial property since it was later selected for development.

The grain provisioning system was transformed by the early 18th century when the state became more involved in keeping public reserves. While large granaries for this purpose were formed in the Imperial Arsenal across the Unkapanı market, other granaries were constructed on the Bosporus in the late 18th and early 19th centuries. In all these stages the wholesale market and its buildings stayed the same. The main difference would be the first Golden Horn bridge's construction in 1836, whose southern end was placed beside the Unkapanı square. The imperial lodge was also restored for this occasion. A few years after this event and the Anglo-British trade treaty that opened the way for international imports with low dues, it is seen in the sources that a new building for housing a steam mill would be constructed near the grain market with instruments imported from Britain. Charles White who stayed in Istanbul for three years in the 1840s noted in his book that the steam mill existed on the left side of the high street from inside the Unkapanı Gate. Military Chief Serasker Halil Paşa was the entrepreneur of this project for the state (White, 1845, vol3: 117). The same mill was rented to Armenian imperial

military bakers Haçador and Kigork in 1844,[4] which can be spotted in 1858-63 Stolpe Map, covering one urban block on the high street. In the first panoramic photographs of the city by Robertson taken in the early 1850s, the mill can be seen as a high building at the back of the Unkapanı magazine. These are the first visual references for the NIT Urban Heritage Lab: Industrial Heritage for Sustainable Cities Course's project site.

In 1862 the steam mill was put on sale, which was finally taken over by the military, thereafter named the Imperial Military Mill (Asâkir-i Şâhâne Değirmeni) and also the imperial factory (Fabrika-i Hümâyun). In the 1870s the area of the mill was enlarged towards the east as part of a partial urban regularization plan, and new buildings were added.[5] The plots around the mill were combined to form a factory area. The facilities consisted of the mill and bread producing parts. The enlarged factory with high chimneys can be observed in the late 19th century photographs as the largest industrial complex within the historical city's silhouette. Meanwhile, since dues in interior trade were abolished in the 1860s, Unkapanı as an official market became obsolete, whose buildings, now overshadowed by the factory, started to be used for its service. A new street from the factory to the waterfront was opened within the old fortification plot pattern passing in front of Yavuzer Sinan Mosque and the old Unkapanı magazine. Narrow gauge-way lines were established between the factory and the quay. The waste water was also canalized to the Golden Horn through this path, which was mentioned in the official documents as the first signs of the city's industrial pollution.[6] The factory in its working years should have developed a workers' quarter in relation to the surrounding neighborhoods.

In the 1920s the military factory was taken over by the municipality that functioned partially until the İMÇ project. During the İMÇ project parts of the mill sectors of the factory, which dated from the 1840s, were demolished. The project that took the historical fabric as a reference resulted in the destruction of parts of the existing fabric around. The process of destruction continued; those in situ today mainly belong to the former service functions (Kariptaş, 2011).

The urban history of Unkapanı is about the endurance and transformation of a food provisioning center neighborhood first by economic and technological factors and then by a change in market function to drygoods sale and the music industry. Through this history of transformations, in the present, İMÇ itself faces threats of demolition. Even though the modernist buildings will be preserved, some of its original music market culture has already been lost. There is a saying in Turkish such as "music is the food of the soul". Food for the soul and food for the belly both seem to have retreated from Unkapanı. Proposals for what can take their place or be revitalized can be seen in the projects of NIT Urban Heritage Lab 2021.

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The archive documents on the sale of the mill and the transformation to a military factory in 1866: State Archives of Presidency, MAD.d.. /8720-0-0; A.} MKT.MHM. / 351-35- 0.

The archival document from 1880 on the collection of industrial waste from the mill under the Unkapanı Bridge is: State Archives of Presidency, ŞD. / 6-25-0.

Endnotes

[1] The artworks were realized by celebrated artists: Bedri Rahmi Eyüpoğlu, Eren Eyüpoğlu Füreyya Koral, Kuzgun Acar, Yavuz Görey, Ali Teoman Germener, Sadi Diren, Nedim Günsür.

[2] A documentary on Istanbul's music sector at the start of Unkapanı's decline is "Crossing the Bridge" by celebrated German director Fatih Akın.

[3] The references on Unkapanı wholesale markets in early modern period will be referred here after my two articles on the same subject: Namık Erkal, "Grain Scale of Ottoman Istanbul: Architecture of the Unkapanı Landing Square", JUH; 44(3), 2018, 351-381; "Reserved Abundance: State Granaries of early modern Istanbul" JSAH, 79 (1), March 2020, 17-38.

[4] The archive document in State Archives of Presidency is: MAD.d.. / 12307-0-0.

[5] The archive documents on the sale of the mill and the transformation to a military factory in 1866: State Archives of Presidency, MAD.d.. /8720-0-0; A.} MKT.MHM. / 351-35- 0.

[6] The archival document from 1880 on the collection of industrial waste from the mill under the Unkapanı Bridge is: State Archives of Presidency, ŞD. / 6-25-0.

After the demolition of the chimney of the large mill, looking Northwest
Image retrieved from http://eski.istanbulium.net

A Plan for the Transformation of Unkapanı Mill into an Educational Complex

Mehmet Alper
TURES Mimarlık & Kadir Has University

Introduction

Unkapanı in Fatih District is an area densely populated with people and monuments, some of which have disappeared today. As a result of Unkapanı's economic and social character in the city's life both today and in the past, these monuments represented commerce, industry, education, religious services, and accommodation. The history of the district and its function in providing food to the city were described in the previous chapter. An important moment in the urban development of the area took place in 2006 when Law No. 5366 declared the neighborhoods in the Süleymaniye District, namely Demirtaş, Hacı Kadın, Hoca Gıyasettin, Kalenderhane, Molla Hüsrev, Sarıdemir, Süleymaniye, Yavuz Sinan, the "Süleymaniye Renewal Area" (Gazette, 2006).

Although this area had been included in the UNESCO World Cultural Heritage List already in 1985 as a region documenting the development of Ottoman architecture, the spatial destruction caused by changes in function and use necessitated an immediate intervention (Fatih Belediyesi, 2012). Thus Unkapanı was included in the Süleymaniye Renewal Area. Istanbul Metropolitan Municipality and Fatih District Municipality signed protocol no. 1528 on 13.09.2006 for the works to be carried out in this area with the aim of renewal and protection of the deteriorated historical and cultural immovable assets and ensuring their utilization by revitalization. The protocol covers 728 registered and 1239 unregistered buildings in a total renovation area of 938,718 m² divided into five sections. The project aims to redefine Istanbul and Fatih District as a city where service sectors, commercial, touristic and cultural activities coexist and where historical and cultural values are protected; to ensure that Istanbul and Fatih create a positive and attractive city effect at national, international and local levels; to create a reliable, sustainable and livable urban settlement context that will ensure the protection and survival of the architectural context resistant to all kinds of disasters and risks (Faaliyet Raporu, 2012).

The projects to be prepared in regeneration areas are required to emphasize a preserving approach sensitive to the architectural and cultural character of the area. Projects are submitted to the Regional Board for Conservation of Cultural Assets of Renewal Areas (Yenileme Alanları Kültür Varlıklarını Koruma Bölge Kurulu) as building block concept projects, silhouette proposal maps, and recommendations for functions, together with analytical surveys and structural studies of the structural accumulation in the existing context. In line with the building

Figure 1: The Unkapanı Flour Mill in the urban context

block concept projects approved by the Board, application projects are prepared and submitted to the Board again. In these projects, the mass ratios and construction areas of the registered cultural heritage buildings should remain the same. They also need to consider the region's historical development in a way that will not have a negative impact on the silhouette of the area. The architectural application projects approved by the Conservation Regional Board are evaluated by the District Municipality and approved for license issuance. During the application process, the projects are supervised by the Istanbul Regional Boards for the Conservation of Cultural Assets of Renewal Areas, the Istanbul Archaeological Museums Directorate, and the technical staff of Fatih Municipality. However, the most important responsibility lies with the project developers.

The Regional Board for the Conservation of Cultural Assets of Renewal Areas No. 1 of Istanbul of the Ministry of Culture and Tourism approved the concept project for building block 515 in the Süleymaniye Renewal Area with the decision dated 19.12.2012 and numbered 476. Block 515 concerns the remains of the historical Unkapanı Flour Mill. This chapter outlines the concept project developed by the author and the project team.

Conservation Decisions

Unkapanı Mill is a building complex with various structures built to meet different needs. Before the introduction of the steam system, the mill of Hacı Bogos Veled-i Kirgor was located on the Unkapanı Mill plot. The mill was operated with 9 "horos" stones and 16 horses (BOA; MVL, 494/23). Following this mill's destruction by fire, the Treasury of the Sultanate purchased the land, and in 1845 the Unkapanı Steam Mill, also known as Beylik Değirmeni / Belediye Değirmeni, was built. In 1857 and 1865, the mill underwent repairs, and in 1874 an additional floor was added, a bakery and a barn were constructed, and the land boundaries were expanded by acquiring new plots and houses. At the same time, a railway line to the pier was built, and a private dock was constructed for the mill. In 1892, the Commander of the Armies' Reform Commission for the Imperial Factory (Osmanlı Devleti Seraskerlik Fabrika-i Hümayun Islahat Komisyonu) ordered two steam mills — one large and one smaller — from Hind & Lund in Britain, and the installation of the machines was carried out by British Engineer William (BOA; DH, 185/10248; A.MKT NZD, 46/88).
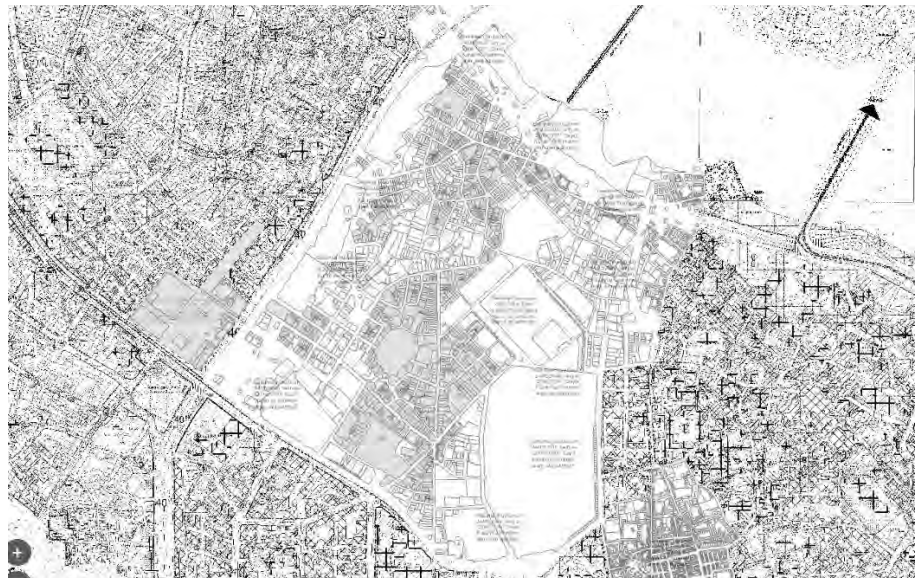
Figure 2: Süleymaniye renewal area (https://kentrehberi.fatih.bel.tr/webgis/)

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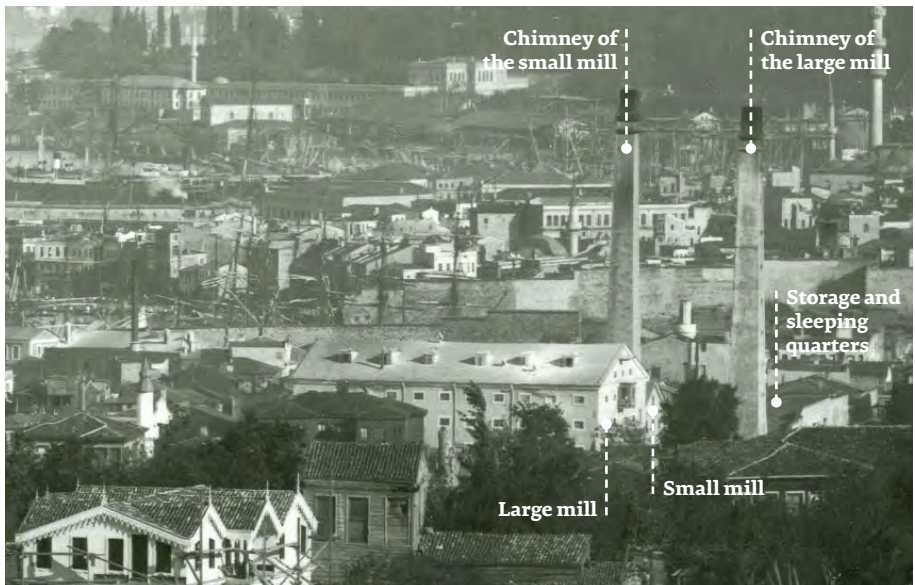
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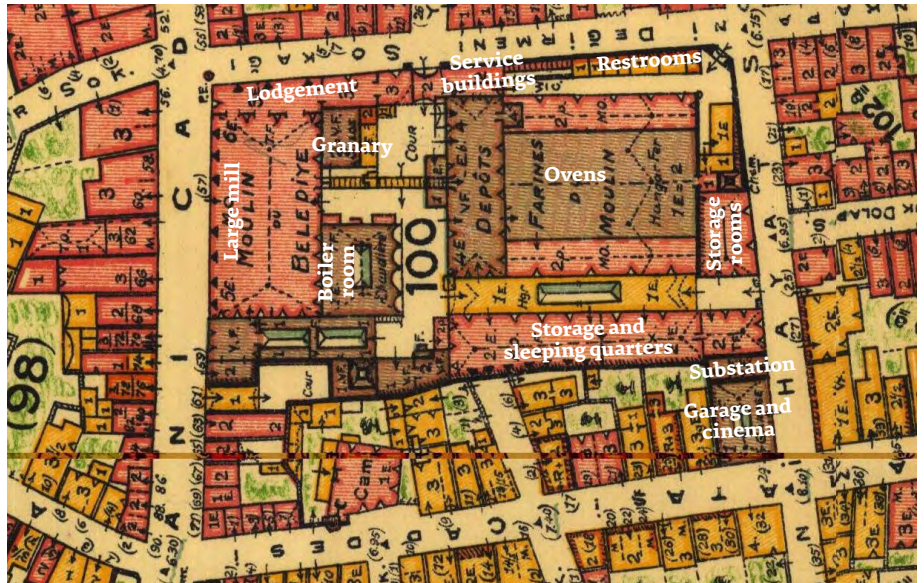
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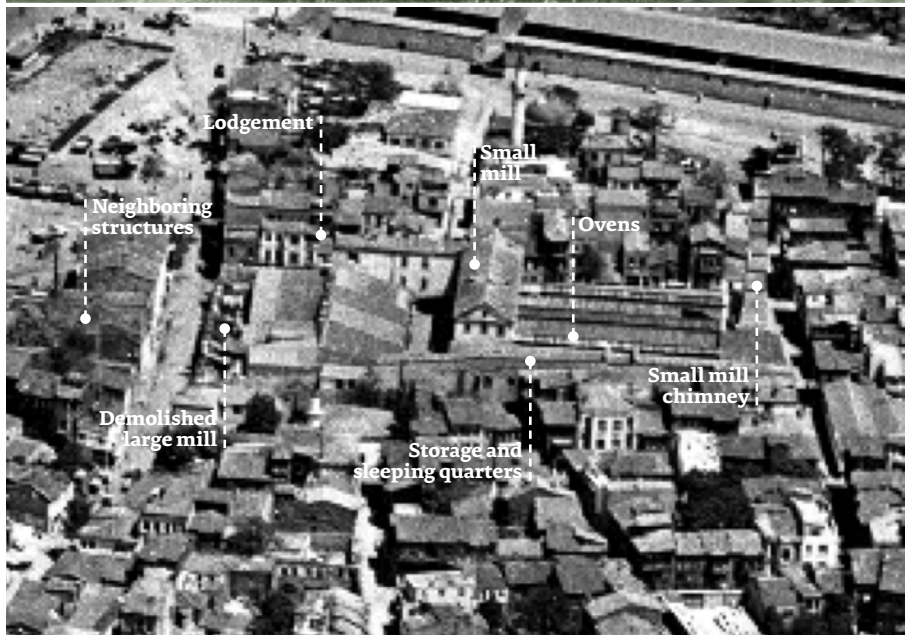
Figure 8: Aerial photo from 1952 (GDM, 1952 R-U-61)
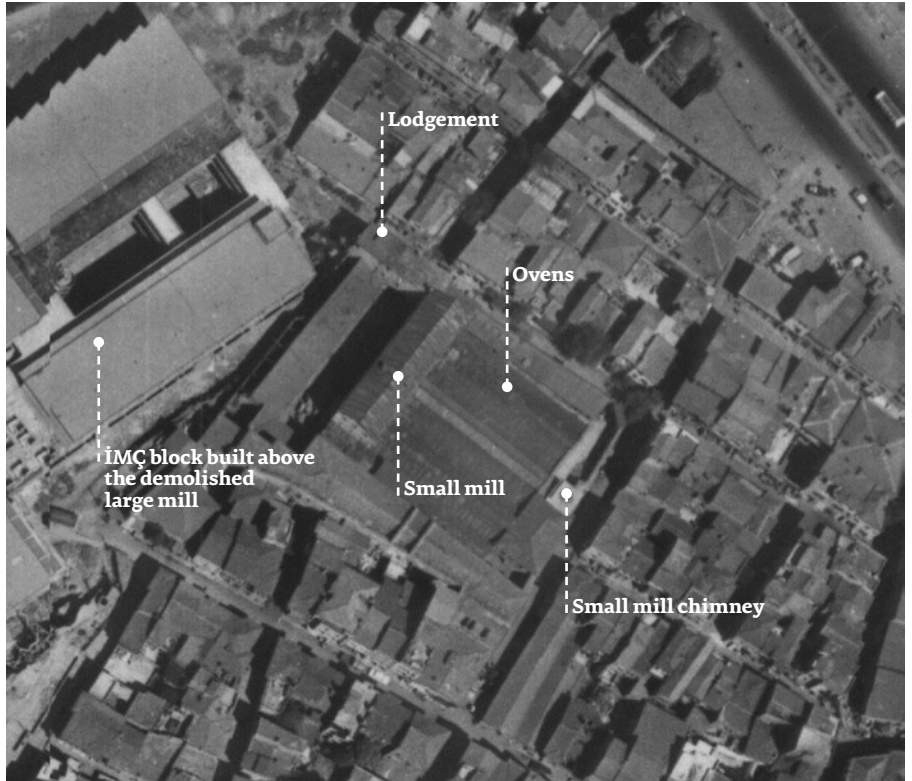
Figure 9: Aerial photo from 1966 pl. 174

Lodgement

Ovens

İMÇ block built above
the demolished
large mill

Small mill

Small mill chimney
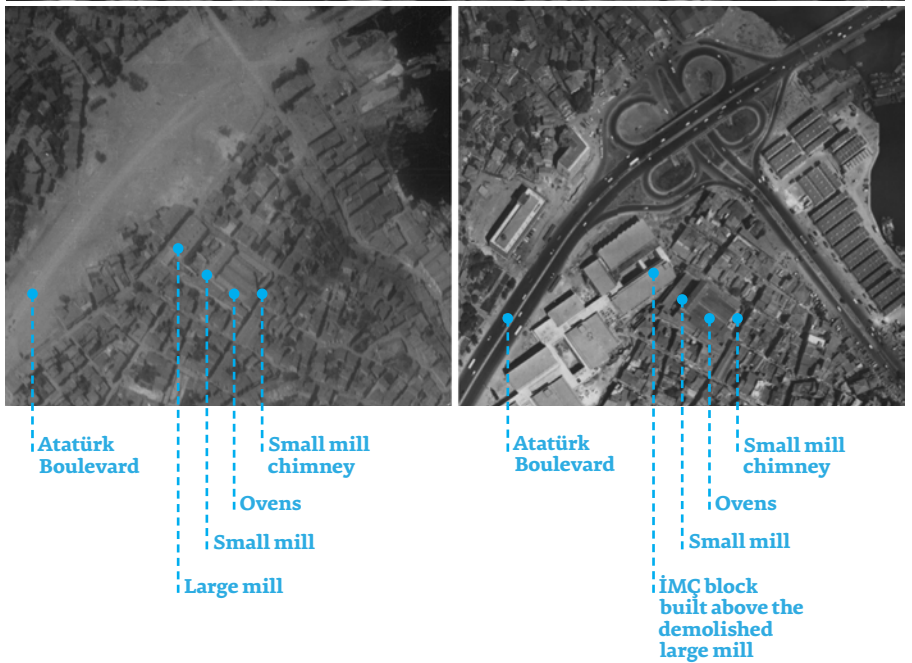
Figure 10: Changes in the Unkapanı Mill from aerial photos between 1942 and 1966

Atatürk
Boulevard

Small mill
chimney

Ovens

Small mill

Large mill

Atatürk
Boulevard

Small mill
chimney

Ovens

Small mill

İMÇ block
built above
the demolished
large mill

As Atatürk Boulevard was opened, first the chimney of the large mill, then the defunct building was demolished. During the construction of the İMÇ blocks, the large mill building's plot was allocated to these blocks, and the small mill's chimney was also demolished. In the 1980s, the defunct complex was purchased by the Mercantile Exchange and managed as a parking lot. Today, the Unkapanı Mill remains to be used as a parking lot, with its roof and floors collapsed and destroyed.

Due to urban planning requirements, it is currently not feasible for the Unkapanı Mill on Sheet 121, Block 515, Plot 1, within the Golden Horn silhouette of the Historic Peninsula to maintain its old function. The ideal solution for preserving a cultural asset for the future is to retain its original form and function with minimal intervention. However, changing social and economic relations necessitate re-evaluating the existing urban spaces and the structures that define them. Here, it becomes essential to carefully consider and evaluate the integration of the preservation principles of historical buildings or the environment with the current realities of life. Therefore, we believe that maintaining the Unkapanı Mill as an educational facility is the best solution for the public interest, for the general conservation plans of Istanbul, and for the preservation of the complex at the scale of a single building.

The project design of Unkapanı Mill as an urban headquarter with an educational (university) function is in progress. With an indoor area of 13,372 m², the building will house the rectorate, a multipurpose conference hall, a library, administrative and academic departments, institutes, staff and technical units, a cafeteria, a restaurant, and wet areas. The restoration project will preserve the surviving body

Figure 11: Unkapanı Mill's dilapidated buildings and courtyard repurposed as a parking lot, 1980, Taç Foundation Archive
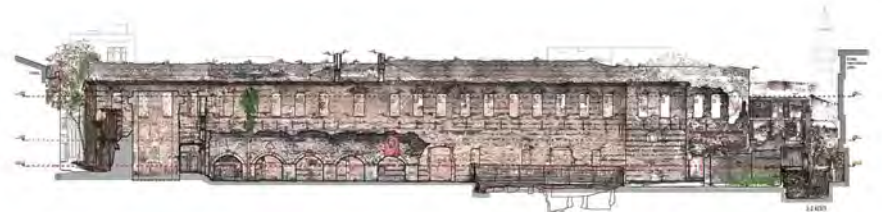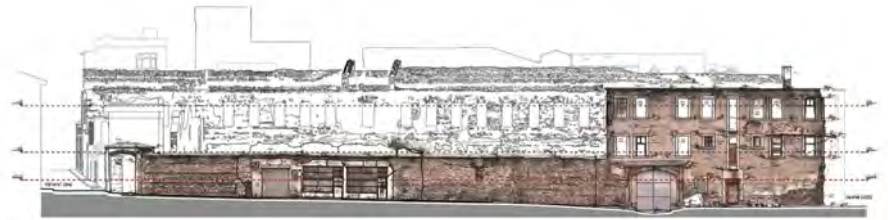
Figure 12:
Measured drawings,
façades

walls on the southeast, southwest, and northeast wings and reconstruct the two collapsed chimneys. While the chimney of the large mill will be rebuilt with modern materials (steel bearing and mesh covered), the small mill chimney will be conserved with bricks similar to the original. The archaeological remains of the foundations uncovered by excavations carried out under the supervision of the Archaeological Museum will be preserved. This area will be exhibited with a glass cover on the floor of the Foyer Area located northwest of the Conference Hall in the project.

The project comprises a ground floor with three regular floors and a basement. The basement floor is 1,475.48 m², the ground floor is 3,796.85 m², the first floor is 4,006.19 m², the second floor is 3,447.96 m², and the third floor is 645.52 m². Access to the ground floor of the education building is through four main entrances. These are the entrance on the eastern corner of the block, which is also the entrance to the Unkapanı Mill, two entries on the southeast wing, and the entrance on the northeast, which is designed for disabled access. Moreover, a fire exit to Unkapanı Street has also been designed to provide the building with access in case of emergencies (see the door numbered ZK58 in the ground floor plan).

The building has a total of eight staircases (four in the southwest, two in the center, and one staircase each in the southeast and northeast wings) and four elevators on the northeast wing, which provide circulation between the floors. There is a technical unit and a warehouse in the southeast wing of the basement floor, two warehouses, two halls, two technical units in the southwest, and a hall and a technical unit in the northwest wing.

The southeast wing on the ground floor comprises three entrances, a security room, a data processing room, a corridor, five restrooms (one of which is for disabled access), and two stage prep rooms. The southwest wing includes a corridor, a seminar room, three classrooms, a storage room, two cafeterias, a hall, a janitorial room, and two restrooms.

The northwest wing consists of two halls, two corridors, four elevators, four classrooms, three restrooms (one disabled), a janitorial room, a storage room, and a fire exit. Finally, the northeast wing has an entrance, a corridor, six offices, and two security rooms. The archaeological assets are exhibited in the center alongside a foyer and a conference hall.

On the first floor's southeast wing are a terrace, a corridor, three halls, three restrooms, two prep rooms, a seminar room, a meeting room, and two offices. The southwest wing has a corridor, seven offices, a cafeteria, a hall, two restrooms, and a maintenance room. The northwest wing has a hall, two corridors, four elevators, four classrooms, three restrooms (one for disabled access), and a maintenance room. The northeast wing has a hall, a corridor, twelve offices, and a restroom. The central part of this floor is designed as a gallery above the conference hall and a foyer.

On the southeast wing of the second floor, there are two classrooms and a hall, one of which has a lounge. There are four classrooms and a corridor, an office and a hall, a cafeteria, one maintenance room, two restrooms, and a hall on the southwest. The northwest wing has a hall, a corridor, four elevators, four classrooms, a maintenance room, and three restrooms (one for disabled access). The northeast wing has two offices, a meeting room, and two halls; the central wing has four offices, a meeting room, a simultaneous translation room, three rooms, and a hall.

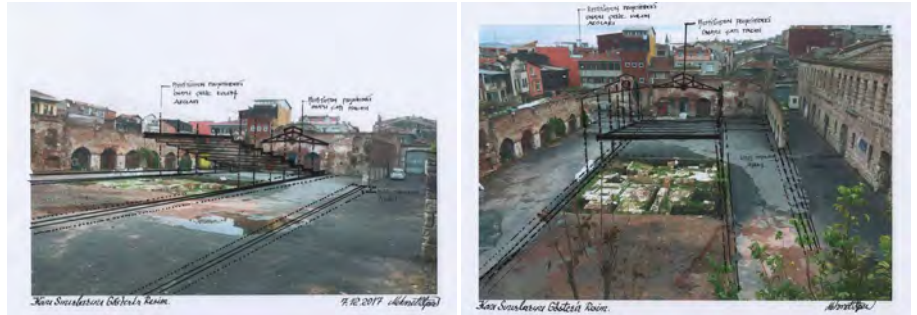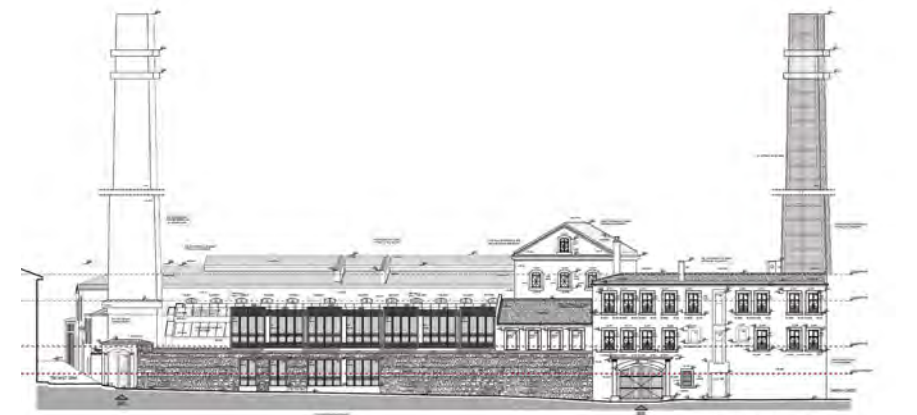*Figure 13: Borders of the
exhibition of the
archaeological area*

*Figure 14: Restoration project,
perspectives*

*Figure 15: Restoration project,
façade*

The southeast-northwest and northeast wings do not have a third floor. The layout of the southwest wing is organized as a stair hall, a terrace, and two storage rooms. In the central part towards northeast-southwest, there is a stair hall, kitchen, and restaurant.

The roof constructions and roof coverings of the building will be made per the restitution, and a skylight roof system will be added on the northwest wing.

The Methodology of Restoration Applications and Intervention Techniques

The methodological proposals for the restoration and adaptive reuse of the Unkapanı Mill have been based on its restitution and the archaeological data. The plans include strengthening the foundations of the surviving body walls of the building by opening the foundations from the interior. This way, we will create a basement floor at -5.90m in the exposed areas and add a mechanical space to accommodate heating, cooling, ventilation, and electromechanical solutions by utilizing new technologies. Based on the georadar data, we do not expect to find any remains of the building in the area of the large mill building, which was destroyed during the construction of the İMÇ blocks. Whenever necessary, foundations will be reinforced with minimal intervention in their original locations, and the load-bearing steel system will be supported in their original locations.

The Regional Board for the Protection of Cultural Assets decided to expand the existing archaeological area with the decision dated 12.06.2013 and numbered 882. According to the restitution data, the archaeological excavations of the site intended to be exhibited in the project will be carried out under the supervision of the Archaeology Museum. The excavations will start after the archaeological drilling, and foundation applications are made according to the restitution data and following the decision that the applications above the ground level will not damage the archaeological area. The remains of the archaeological site will be preserved and exhibited with glass panels and raised platforms.

Material analyses will be conducted regarding the existing building walls, and the necessary reinforcements will be completed using the original materials. The missing pieces in the rubble and alternating walls will be filled, and repairs will be made to the joints and the plaster. The missing structural elements will be completed as per the restitution plans.

The new buildings will be constructed with steel construction solutions and covered with brick or alternating wall features to preserve authentic materials and styles. Following the restitution project, window and door openings will be created in the same proportions.

Upon the conclusion of the archaeological excavations, the materials obtained from the mill floor will be restored and exhibited in their original color and dimensions.

The buildings with no existing floors will be elevated according to their restitution and function and will be made of wood and steel to match the original.

The roofs will be made of wood and steel construction insulated by layers of Marseilles tiles and lead-colored zinc roofing. *Corten* (artificial rusted zinc) will be applied to the newly proposed additional façade, which resembles the visual effect of
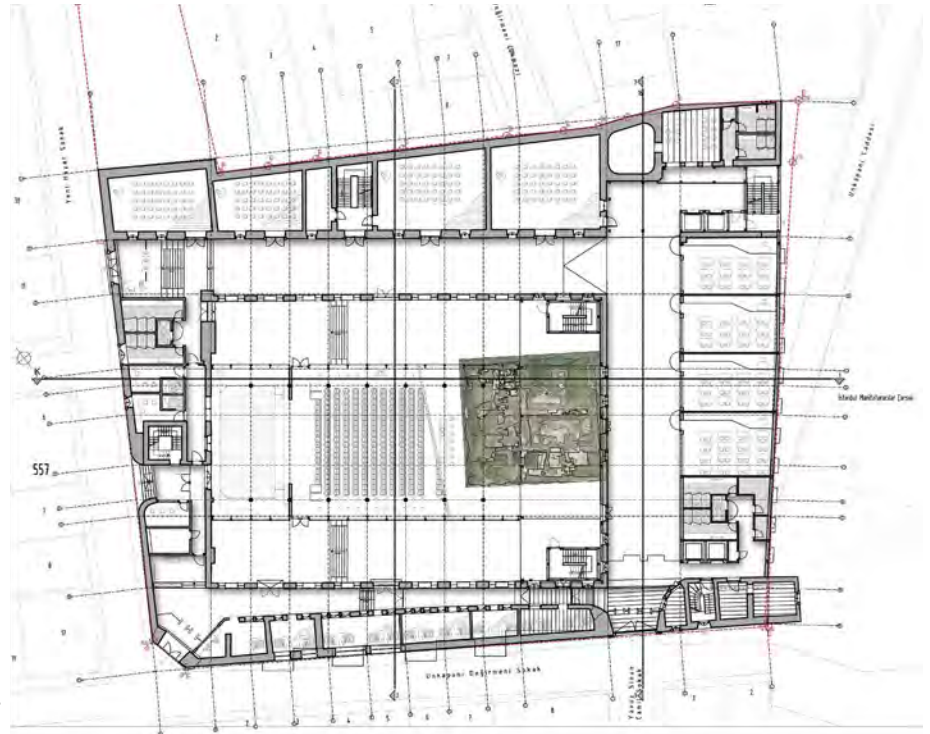
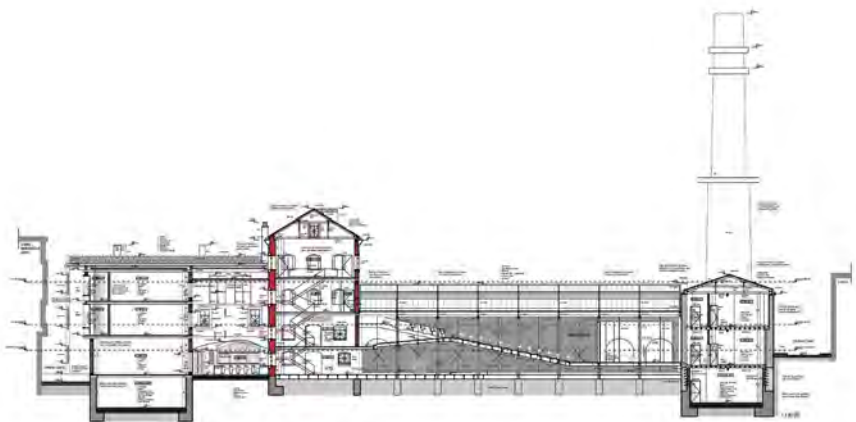*Figure 16: Restoration project, ground floor plan*

Figure 17: Restoration project, section and façade

the rusted sheet metal surfaces on the façade of the old building located on Block 400 plot 5 on Yeni Hayat Street.

By using novel technologies for the electro-mechanical system, the external units for heating, cooling, and ventilation systems are installed beneath the floor, so they do not create any visual pollution. Mechanical systems such as ventilation ducts will be displayed within the building, thus allowing visitors to perceive the additional modern systems in the building.

According to the restitution data, two chimneys were part of the building; however, they are not present, so these will be reconstructed. By directing the mechanical systems to these chimneys, the exhaust of dirty air will be led through these chimneys. Furthermore, the second chimney will be designed in a transparent modern construction style. Laser-assisted light shows and visual effects will be organized on special occasions.

The archaeological remains will be restored and exhibited below protective glass flooring per the permissions and recommendations of the Renovation Board and the Archaeological Museum. At the same time, the restoration process and the old mechanical system of the mill building will be displayed in the exhibition areas.

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Gazette, 2006: The decision of the Council of Ministers numbered 2006/10501 published in the Official Gazette dated 22.06.2006 and numbered

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BOA Başkanlık Osmanlı Arşivi (Prime Minister Ottoman Archives)

A.MKT NZD Sadaret Mektubî Kalemi Nezaret ve Devair Yazışmaları Evrakı

DH Dahiliye Nezareti

MVL Sadaret Mektubî Kalemi Meclis-i Vâlâ Evrakı

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Project Proposals

Unkapanı Community Garden:
By the Community, for the Community

Yelyzaveta Nesterova, Batoul Mesdaghi, Tijana Veljkovic,
Gülhayat Kılcı, Yonca Atabay

Introduction

The structures of the Unkapanı Flour Mill once served as one of the most important transitory locations for grain in Istanbul in the Ottoman Empire and during the Industrial Revolution. Today, this site no longer functions as a transitory station, and the remains of the depot and the bakery are unused. The site was vital for and effective in the provision of grain for 400 years. The objective of this vision statement is 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.

In this study, we have conveyed field studies by implementing the Landscape Biography and Emotion Networking activities. Relevant information was gathered from secondary sources and an interview with the Municipal Headman (Muhtar) of the area. This allowed us to investigate possibilities for temporary use based on heritage-led development guidelines. Information on climate risks was retrieved from news reports about climate-related hazards and scenarios from the national climate adaptation strategy of Türkiye.

Ensuring that the reuse of the site is conducted in a climate-resistant manner

Preserving the historical layers and values of the Unkapanı Flour Mill as an industrial heritage site.

Basing the reuse Unkapanı Flour Mill on contemporary needs in its surrounding area.

Determining stakeholder engagement for the reuse of this site
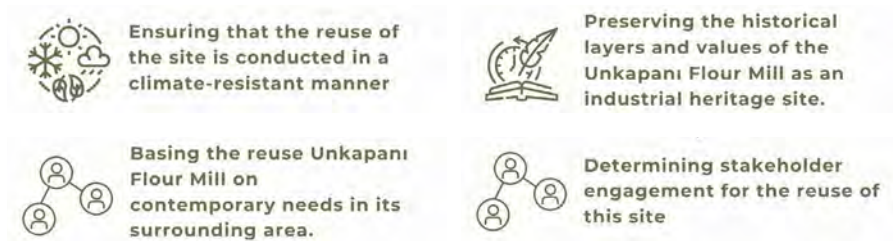
Figure 1: Goals

Climate Resistance

According to Türkiye's National Climate Change Adaptation Strategy and Action Plan for 2011-2023, the number of the heavy precipitation days is projected to increase all over Türkiye according to scenarios until 2040. Heavy precipitation implies that the daily precipitation is at least 10 kg/m². These impacts are already visible in Istanbul. One notable example was 2019, when heavy rainfalls caused flash floods, and one casualty at the Unkapanı bridge. In this respect it is crucial to design water resources management and operation policies to establish a system for the optimal balance for risks from disasters.

Climate Risk 1 (Urban Heat): According to Türkiye's National Climate Change Adaptation Strategy and Action Plan for 2011-2023, heat waves cause many deaths occur due to heart attack, cardiovascular diseases, kidney diseases, respiratory tract diseases and metabolic diseases. High risk groups, such as the elderly, are vulnerable to heat stress. Heat waves also negatively impact the productivity of workers, a group highly present surrounding the Unkapanı Flour Mill. Climate change projections show that the surface temperature is projected to increase all over Türkiye until 2070 (around 1.5 °C in winter and to about 2.4 °C in summer). High surface temperature increase the urban heat island effect. Apart from spreading public information about proper heat-health and heat-related information, reducing the exposure to heat is also possible and necessary through physical interventions in public areas.

Figure 2:
View from İMÇ - wheat crop

Definition of Values

Unkapanı Flour Mill contains tangible and intangible values as an industrial heritage. Before developing field-oriented interventions, it is important to identify and correctly understand these values in order to offer effective recommendations. We have briefly defined the values of the field that guide our work as follows.

Historic Value

The site played an important role in the trade history of Istanbul and contains physical layers belonging to different time periods. The industrial structures of the westernization period of the Ottoman Empire reflect the technology of the period and the life of the society throughout the years.

Age and Rarity Value

The site is one of the few surviving examples of Istanbul's 19th-century industrial heritage.

Memory Value

The complex is important enough to give its name to the district in which it is located. The name Unkapanı comes from the Arabic word "kabban", which means "weighing warehouse". This region on the shores of the Golden Horn was used to trade flour. The largest mill structure in the district, which has wheat warehouses, mills, and bakeries on almost every street, is Unkapanı Flour Mill.

Architectural Value

The building is an example of the architectural formation of steam-powered mill structures built in Istanbul at the end of the 19th century. The building has architectural value with its design and proportion features, the original function of a building's architecture, and the contribution and information it provides to the quality of the daily life experience (Orbaşlı, 2008).

Document Value

It conveys the technology and economic order of the period and reflects a certain process that the society went through. The document value is not only related to its structural existence, but also to the technological development of its age.

Sustainability Value

Sustainability value is a process that aims at many stages and benefits. It has the potential to create a new perspective on the living environment and quality of life. In addition to the management of natural resources, it is a value of the area that has the potential to meet many daily needs such as safety, health, economic, cultural, and artistic in relation to the place and its environment.

Cultural Value

The building offers information on various aspects of the past era, from life-style to the use of materials, crafts, and techniques (Orbaşlı, 2008).

Figure 3: Market area

Assessment of Stakeholder Involvement

Believing that synergy in support between different organizations and people is important for implementation of the effective educational outreach (Apaydın, 2016), we expect that several state and nonstate organizations can provide support for this educational program. Among them is local municipality, Fatih Municipality, regional department of the Ministry of Culture and Tourism - Istanbul Culture and Tourism Directorate, and an Istanbul-based NGO, Cultural Awareness Foundation (Kültür Bilincini Geliştirme Vakfı) which is concerned with disseminating knowledge about heritage of Istanbul. ÇEKÜL Vakfı and TMMOB Mimarlar Odası, Netherlands Institute in Turkey, Kadir Has University are also potential stakeholders who can provide input and set up educational programmes.

Sergikur could be involved for the practical aspects of installation of the memory museum and the speakers who presented Unkapanı in the workshop can be involved in the content creation. Istanbul Permakultur Kolektifi and other NGOs would be involved in finding citizens and business interested in wheat production.

Figure 4: Workshop area

Safety Measures for Experimental Reuse

Prior to opening the site, it is important to detect potential safety risks in order to provide a safe environment for future visitors. The analysis of the physical state of the existing structure was based on academic studies of the Unkapanı flour mill (Seçer, 2002; Reşitoğlu, 2019). For this purpose the following steps are advised:

Reinforcement:

The existing buildings need to be strengthened by additional steel sheer walls and, where necessary, cross-braces, which can ensure a proper distribution of forces even during earthquakes.

Consolidation:

Considering the long period of exposure of the existing walls to rainfall, frosts and other environmental impacts, a damage assessment will be necessary for proper planning of consolidation works. Interventions like injection grouting and removal of vegetal roots are strongly advised.

Protection from water infiltration:

In order to prevent water from entering walls and weakening their structure, it is necessary to plan a water drainage system at ground level and to implement soft capping on top of the exposed walls.

Design Strategies

To ensure readability of the original fabric, inappropriate modern additions will be removed thus providing an additional entrance between the Unkapanı site and the İMÇ building (Figure 5).

The existing slope will be used to lead rainwater towards a rain garden in order to manage excess water drainage. The archeological site will be covered with glass panels and the surrounding will be lifted thus obtaining enough space for new foundations and drainage installations to prevent digging and damaging the archeological site (Figure 6).

The central multifunctional area will be covered by a steel frame inspired by the original structure. The bakery and museum will be designed in smaller structures installed between the existing walls (Figure 7).

The patina of the walls will be preserved and complemented with vegetation to keep the existing visual effect. The vegetation is also important to create shade during heat waves (Figure 8).

Figure 5 (left):
Differentiation of the original fabric
Figure 6 (right):
Landscape design
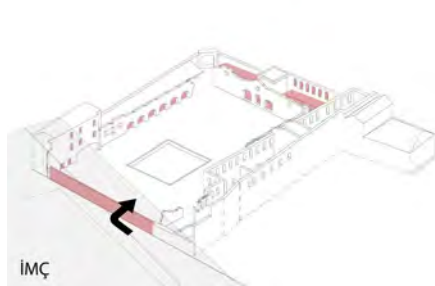
Figure 7 (left):
Definition of closed spaces
Figure 8 (right):
Restoring the visual identity

- Memory Storage Exhibition
- Offices
- Bakery
- Services & WC
- Local Shops
- Temporary Use
- Marketplace
- Archeological Site
- Multimedia Saloon
- Circulation

Figure 9: Proposed plan
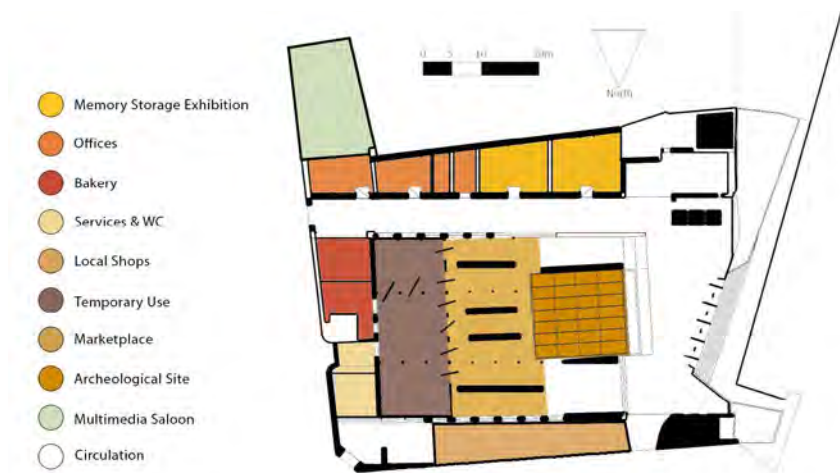
Value-Based Design Strategies

From the beginning of the project, the most important goal was to make all the layers and values of the building visible through minimal intervention in the building. Once the values of the field were determined, each decision was made by establishing a relationship with the values (Figure 10).
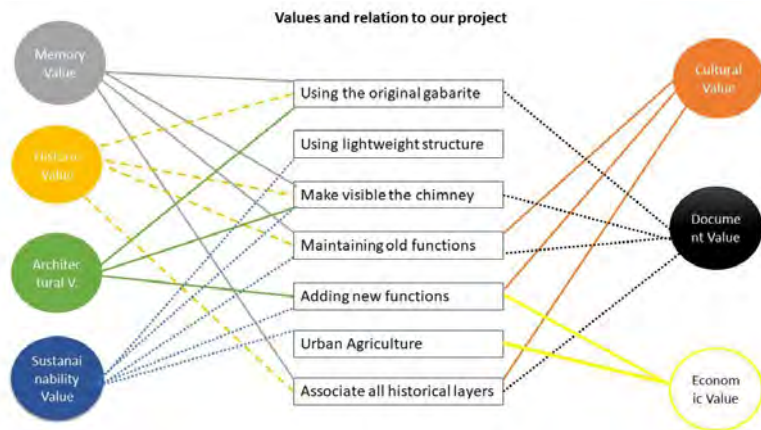
Figure 10: Values and its relation to proposed project

Tracking the past of the space

Archaeological traces in the middle of the building, which continue underground, and the tracing of the walls of the Unkapanı Flour Factory which are known to have existed in the past but no longer exist today are important in making the historical layers of the building visible and preserving its memory. The red traces belong to the walls built of bricks that no longer exist. The building's gauge has been preserved on a plan scale in this way. The black traces represent the areas where archaeological remains are thought to be present in the area. An attempt is made to provide information about the area by differentiating the ground and annotating it appropriately (Figure 11).
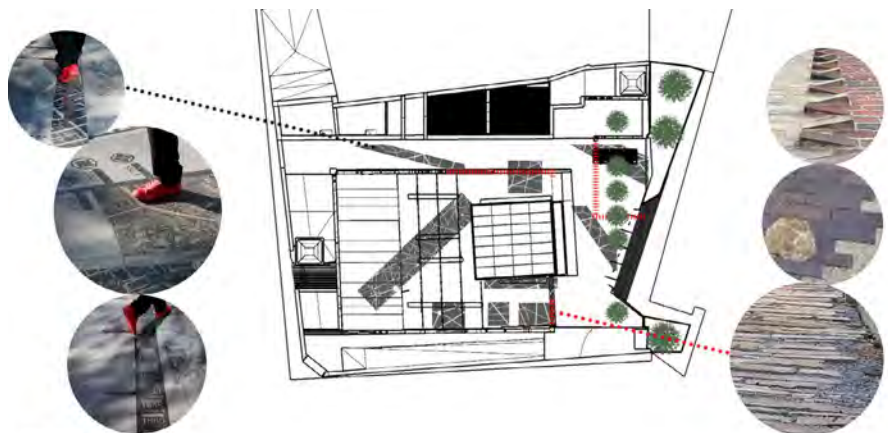
Figure 11:
Tracking the past of the space

Materials

In order to ensure the visibility of the building in silhouette and to reveal its memory, we have brought the chimneys back to their feet with a modern and artistic language. The chimneys were touched with contemporary materials, referring to the works of artist Edoardo Tresoldi and referencing the past with steel and light materials. A modern material, *corten*, was used in the intervention at the pedestrian entrance, designed in conjunction with the side street belonging to the İMÇ building (Figure 12).
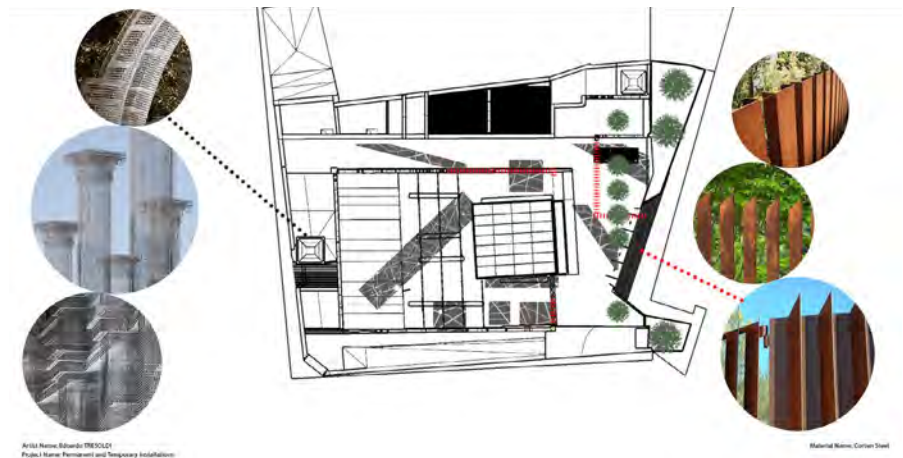
Figure 12:
Utilizing modern materials

Educational Outreach

The educational outreach designed for the implementation at the Unkapanı Community Garden has several aims. Firstly, this outreach seeks to learn what people think of the place and which ideas and perspectives they have about it. This step is important to acknowledge the values that people attach to the place, especially as some of them may not form part of official, scientific statements, also referred to as Authorized Heritage Discourse (Smith, 2006; Waterton and Watson 2013, 549). Secondly, it aims to inform people about history of the site and raise awareness about its values, acknowledging that as of now the local community hardly knows anything about the place, according to the testimony of the local governor with whom we had an in-depth communication as the research was going on. Thirdly, the program has an objective to explain practical aspects of the wheat and flour production which were the activities associated with the former function of the place. Lastly, the program will examine the controversies associated with the wheat and flour production in the past and present and will bring up such pressing present-day issues as waste management and climate change.

These aims can be effectively achieved through the use of experiential learning pedagogical approach, a widely used approach in heritage education across the world. Being one of the approaches corresponding to the tenets of the constructivism logic and tenets of learner-centered methods, it is an emphasis on the

alteration of the experience which creates a basis for acquiring new knowledge (Kolb et al., 2001, 228). Also, this pedagogical approach typically requires on-site presence of participants and is characterized by elaborate implementation of various hands-on activities (Cole 2015, 122-123).

To begin, the participants will be encouraged to interpret the site in the way they see it using activities of the Emotion Networking Approach. This approach, that has made a rather recent appearance in the heritage management and interpretation practice, is based on sharing the diversity of the perspectives and emotions, whether those are positive, negative, or neutral, about heritage for the sake of having a better perspective on it. The process of identifying and naming emotions results in creation of the so-called "emotional constellations" which demonstrates complexity and diversity embedded in any heritage site. Importantly, this approach to interpretation allows to recognize feelings as heritage and as a part of heritage sites (Rana, Willemsen & Dibbits, 2017). Similar to the pedagogical approach mentioned above, this approach likewise prioritizes learners, that is, people on both collective and individual levels.

Figure 13: Analysis: hosting different functions in the same space, based on the needs of the community
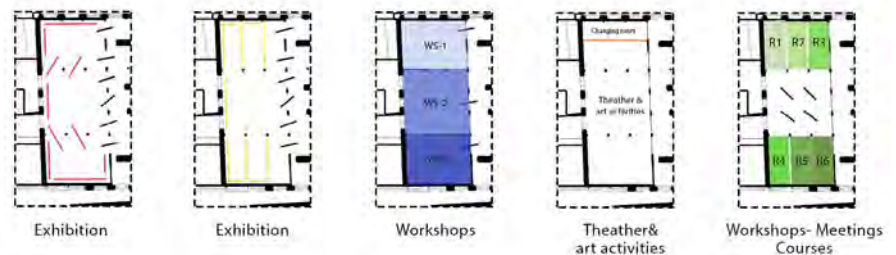
Having explained the approaches to be used, it is also worth to describe its format and structure. The educational program will consist of the following learning activities. The Emotion Networking will open up the program and is to be conducted in the first session. This will be a starting point to identify the emotions people experience towards the site without having any scientific information about it yet. The program is to be followed with a brief presentation to familiarize participants with the multilayered history of the site, its former functions, and its values will be shown in the former cinema space. Another Emotion Networking session is to be conducted after participants are introduced to the new information. In this way, it can be possible to spot out their new emotions and new perspectives about the site. After that, the hands-on activity session will introduce participants to the wheat growing and manual flour production. In the context of these activities, issues of climate change and waste management in the association with the agricultural production will be discussed. Of note, these issues are relevant to both past and the present. Especially the waste management is the issue affecting the Unkapanı neighborhood (Fatih, Istanbul) where the site is located today. Finally, Emotion Networking activity will conclude the event and will provide further perspectives of the way people see the site.

Whereas the Emotion Networking activity already provides valuable information and feedback about the activity, the program will be evaluated using Heritage Learning Outcomes (HLO) framework which is based on the four fundamental elements: Key Competences (KC), Generic Learning Outcomes (GLO), Generic Social Outcomes (GSO), and Specific Learning Outcomes (SLO) (Hansen, 2014, 8). The benefit of using this approach for the evaluation is that it not only measures acquired knowledge, but also looks at the deeper matters such as social impact and possible behavioral change that educational program may have contributed to. This evaluation will be conducted in the end of the activity, whereas the the Emotion Networking session will help to ensure that the initial stance of the participants towards the site is recorded as well.
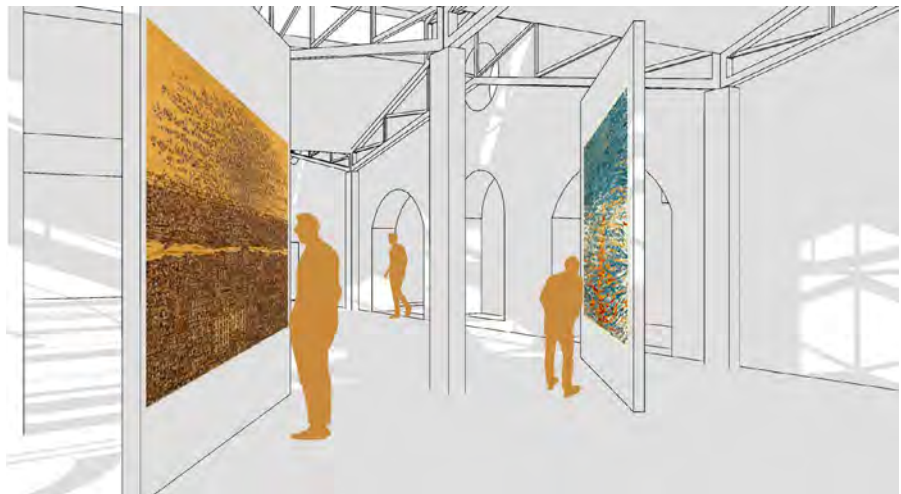

Figure 14: Exhibition area

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Adaptive Transformation of the Mill through Urban Promenade:
Monologue, Dialogue, Travelogue

Miraç Ayça Türkfiliz, Mustafa Can Terzi, Seda Naniç, Tuğçe Halıcı, Yihan Li

Introduction

Identities allow us to make sense of who we are and can help in maintaining one's well-being, especially if the identity is meaningful and important to the individual. Social Identity Theory (SIT; Tajfel & Turner, 1979) helps us understand the motivations of identity construction. Tajfel (1978, 63) defined social identities as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups), together with the value and emotional significance attached to that membership." SIT is a social psychological theory that describes how people conceptualize themselves in terms of groups- through group membership, processes, and intergroup group relations (Hogg, 2006). SIT indicates that individuals are, in part, motivated to identify themselves as group members because of the need for positive self-esteem. One of the ways identities are constructed is through self-categorization, where individuals define themselves in terms of social categories such as race, religion, and gender.

Since food preparation, food consumption, and food purchase are often simultaneously individual and social processes as individuals procure, prepare, and consume food that is also demanded by others, and alongside others in food establishments and since 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.

Unkapanı has a long-time entanglement with food as it once engaged in food production, food distribution and now has a rich culinary heritage. Therefore, the authors propose this project through the lens of food.

Figure 1: Historical analysis

Research Results

An online survey with 39 participants was conducted to understand the perception and awareness of the knowledge about Unkapanı Flour Mills. Participants' profile was as follows: 25+ age, well educated, working-class, living in Istanbul (at least for the past 7 years) women and men. All participants know the area quite well, they either visit or pass through the area several times during one year for various reasons. Safety is one of the important issues that need to be taken into consideration for the location. It is not perceived as safe during the evening however their perception is not the same during the day.

İMÇ, Music Industry (once), Haliç, and old Istanbul connotations are the most remembered ones for Unkapanı. The area is not known about its flour mills or any related history, especially about bakeries and multicultural inhabitants.

Figure 2: Unkapanı free association received from the survey

Issues

According to the observations made in the region and the results of the research, there are some problems with the area listed below.

- About the environment
  – The poor state of conservation
  – Risk for the structure itself
  – Security
  – Recognition of the place
  – Lack of awareness

- Social Inclusion: Boundaries between local and immigrants
  – Lack of sense of belonging of
      (i) people working there
      (ii) immigrants living there
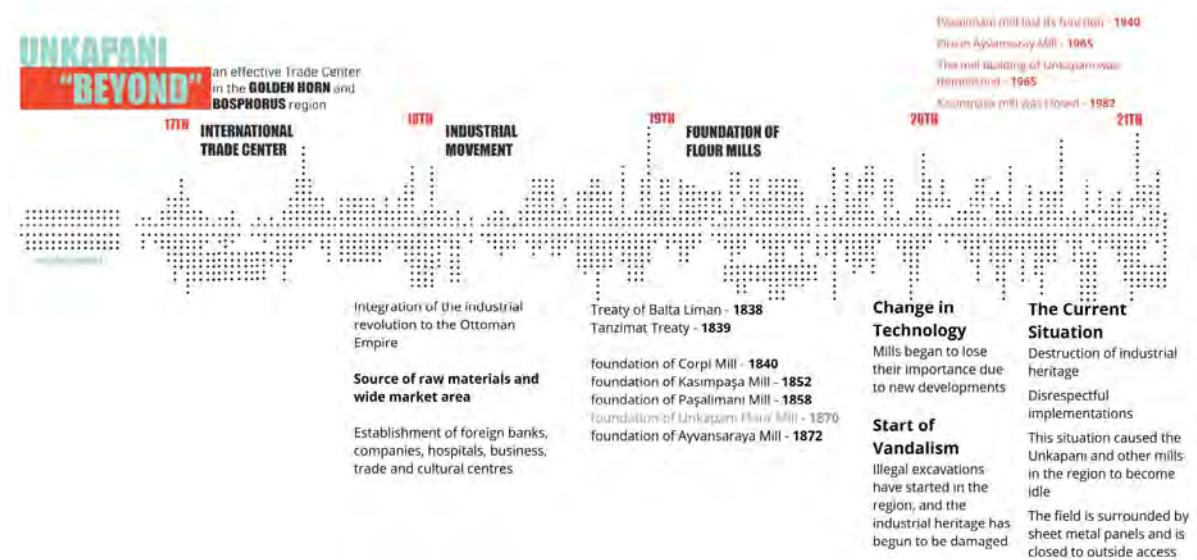
Values

Although there exist lots of problems to be solved, Unkapanı district also contains abundant values which provide possibilities if it is well reused. At the economic level, it has commercial and industrial values. Moreover, social and cultural values of this area are more prominent due to its diversified resources: musicians and art, world heritage site, intangible values and traditions, cuisine (Vefa Bozacısı, Unkapanı Pilavcısı), rituals (Ayın Biri Church), religious buildings (mosques, churches), educational buildings (primary schools, high schools, universities, libraries), structures (Valens aqueduct, İMÇ, SSK, Galata Bridge, traditional houses, Beyazıt Tower, Eminönü-Kadıköy Pier).

Potentials

Potentials can help to revive the lost value of the site and neighborhood and bring solutions to problems. Several possible potentials were found after analyzing existing problems and values (Table 1).

Economic	Reconstruction of industrial memory
	Revival of the production zone
	Integration of local society to local economy and contributions to local development of the area.
Social	Rising awareness related to existing flour mills in Istanbul and the area
	Integration of students to the neighbourhood
Implementation	Establishing a dialogue with sea and historical layers by abstracting the chimneys
	Preparedness of Risk Management Plan for the site
	Creating industrial memory routes
	Physical intervention for the conservation and structural problems

Table 1: Possible potentials after conservation and adaptive reuse project

New economic and social developments can be provided with interventions to the site, as defined in Table 1. In addition to that, some implementations can support these interventions to strengthen the positive effects of the interventions. For instance, the missing dialogue of the building can be established, and the old flour mill can interact with the neighborhood.

Moreover, to understand the potential of creating an industrial memory route, the link between the site and industrial heritage sites in the area are analyzed (Figure 3).

Figure 3: Analysis for under-standing the industrial heritage nearby the flour mill

Conservation and Adaptive Reuse Project

The research revealed that the link between values are missing. To create that link and fulfill the site's potential, the project is based on creating a dialogue between local, site, and neighborhood. The decisions are taken to establish the dialogue, and interventions to the site are suggested accordingly.

The decisions are considered in three scales:
– macro: the neighborhood;
– meso: Unkapanı flour mill;
– micro: local community.

Macro

Establishing an industrial route will help create the dialogue between the site and old industrial zones & intangible heritage (Figure 4). A historical flour road route will be created. People following the route can understand how flour traveled from mills to bazaars and interacted with intangible heritage. For example, when travelers visit the heritage sites with a completed tour, they can stop at Unkapanı Pilavcısı and have a quick lunch as locals.

Figure 4: Suggested industrial memory route

Meso

The sites and neighborhood's missing function is always related to food. At first, the site was the point of food distribution, and later it was the point of food production. In that case, to revive the missing food function, the decision is taken in the direction of food consumption. As a result, to create the dialogue between the site and neighborhood, society, refugees, and the sea, the idea of opening a cultural bakery was chosen. In addition to the cultural bakery, several functions are assigned to different spaces (Figure 5). The potential of food to create dialogue aims to tackle the problems at the meso scale. In addition to the project's food function, common spaces aim to integrate locals into the site and help them interact with each other. For example, the municipality can use a workshop for some bread-making classes, and it can help create a bond between local people and immigrants.

Throughout the years, the Unkapanı flour mill has been represented with chimneys and functioned as a landmark in the neighborhood. However, today, the Unkapanı flour mill is missing its visual interpretation and affecting its visibility. Because of that, re-interpretation of chimneys to (re)create the dialogue with historic layers vertically, the sea visually, archaeological ruins, and the site as the elevated promenade.

Figure 5: Site plan and functions after conservation and adaptive reuse project (adapted from Mehmet Alper's plan for the mill)

Site Plan

Micro

According to interviews, the authors found that the local community is missing its economic resilience after the flour mill lost its function. To integrate locals into new functions, a new circular business model is designed. With that business model, an economic dialogue between Unkapanı and locals is planned to be established.

The circular business model aims to create collaborative ecosystems to generate multidimensional positive outcomes (Girard, 2019):

– Keep the intrinsic value of the place

– Increase local community identity

– Provide job opportunities

The business model is inspired by sourdough bread-making. To make sourdough, only simple ingredients and time is needed. After sourdough is prepared, it can be used for a limitless time by adding simple ingredients. With the revitalized mill, they can create products that will give several opportunities and help cover the expenses of the mill and society.

The fundamental way of creating a circular business model is closing the loops and eliminating waste. With the bakery business model, the authors aim to improve existing take-make-waste bakery loop and eliminate the wasting of bread by using waste as a resource of flour (by special devices), yeast (by lactic acid fermentation), and beer (by using as its waste situation) (lesaffre.com, 2021).

Figure 6 (left): The linear business model for making bread (take-make-waste)

Figure 7 (right): The circular business model for making bread (closing the loops and eliminating the waste)
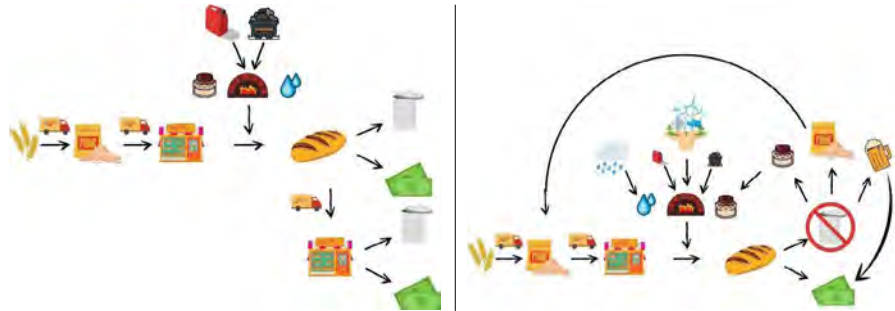
Interventions

Within the project scope, the interventions will take place in different phases (Figure 8).

First, the archeological ruins will be covered for their preservation with a transparent material (Figure 8-b). Thanks to the transparent material, the dialogue between the site and the archeological ruins will not be unlinked.

Second, to (re)establish the visual identity of the mill, chimneys will be re-interpreted as towers (Figure 8-c). With that re-interpretation, the missing visual connection will be created, and the landmark function of the mill will be regained. The material to construct the towers will be *corten* steel.

Third, structural interventions will provide space for functions designated at decisions (Figure 8-d). In addition to structural strengthening, new spaces will be created to host different functions. The new space will be created reversibly. In other words, the placed space can be easily removed by the site in the future.

Forth, to provide vertical and horizontal circulation in the site, a ramp will be placed (Figure 8-e). The ramp will start from the inner court of the mill, cover the ruin rectangularly, and reach towers. The ramp will complete the dialogue of the inner and outer parts of the mill. It will make the archeological ruins visible, and it will allow walkers to relate the site with the surroundings. Rustic steel will be used in the ramp for vertical circulation.

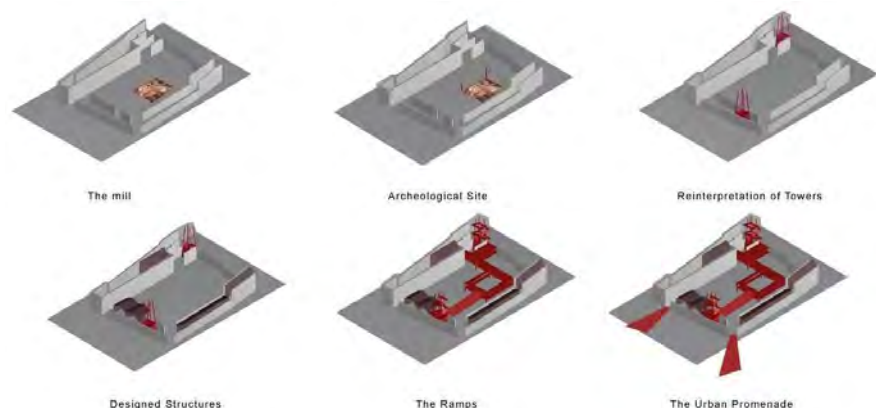Finally, the urban promenade will be created after all of the interventions.

Figure 8: Intervention process - from upper left to lower right: a, b, c, d, e, f.
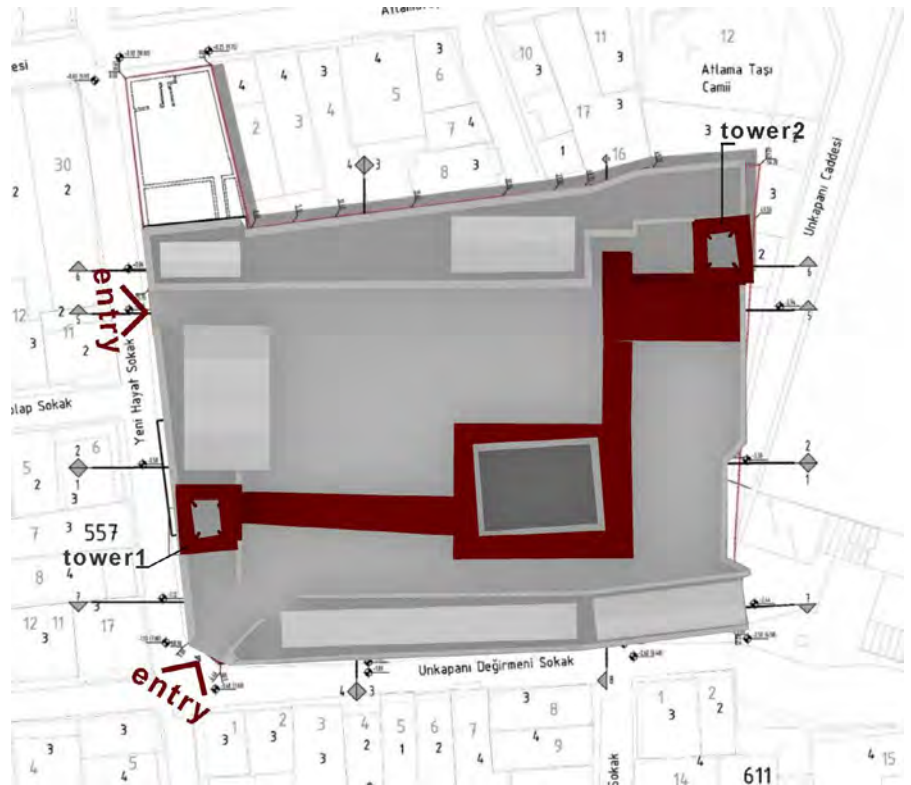
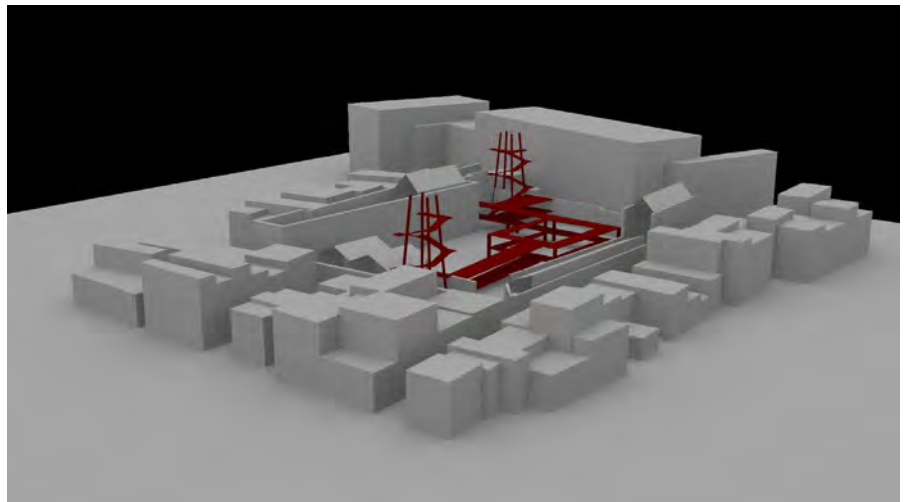*Figure 9: Representation of the ramp adapted from Mehmet Alper's plan*

Figure 10: A perspective view of the site

Conclusion

Industrial heritage buildings and areas are important cultural assets that need to be preserved, which carry a message about the architectural language, technical knowledge, production traces of the period in which they were built, as well as the social, cultural, and economic structure of the period.

Today, this area with its heritage, which has lost almost all of its functions and remained idle with the changing environmental conditions, social needs, and technological developments, is to be protected by adapting it to today's conditions with new functions.

Approaches to the protection of industrial heritage should be considered in the context of the tangible and intangible values of the heritage. It should be taken into account that this heritage, unlike other cultural assets, has technological and production values, and projects should be developed to monitor the traditional production process by preserving all the mechanisms of the heritage.

The proposed function was discussed with the title of "multicultural, traditional culinary, cooking, eating and sharing". The planned functions contain and are distributed to open, semi-open, and closed areas, taking into account the building and building remains in the area. It has been suggested that flour production, cooking, and training should be given with traditional methods, that the production areas will be open to the visitors and the production methods should be monitored.

At the stage of developing a new function proposal to re-evaluate and protect the area in today's conditions; it has been taken into account that the historical, cultural, and economic values of the Unkapanı district and the factory area, including production and trade, are emphasized, and the existing mixed structure of the area will have different functions related to each other.

Figure 11: A perspective view of the site

Figure 12: A section view of the site with materials
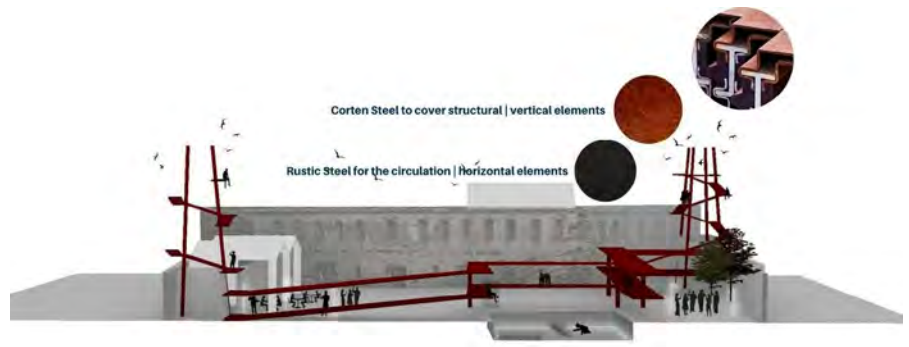
Figure 13: A perspective view of the site
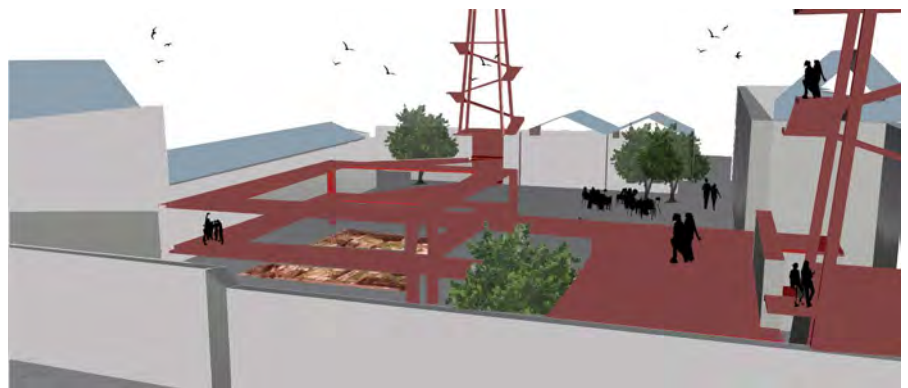
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Unkapanı Beyond the Walls: Regeneration of Urban Space Through the Recovery of Post-Industrial Places

Cem Balcan, Elif Leblebici, Nurşah Atamtürk, Tuğçe Türk, Yanming Wu

Aim & Scope

The primary purpose of this study is to understand the influence of this historic industrial site on urban context and community (Figure 1) and further explore how to better integrate the landmark industrial area in the central area of the city into the sustainable urban development process. In this regard, the research question is determined as: How can Unkapanı contribute to the local community in sustainable ways? The proposal's vision statement aims to ensure that this abandoned property has the potential to become a community place for the neighborhoods while contributing to the social, cultural, and economic dynamics in creative ways. The value of the Unkapanı flour mill has to be revealed beyond its walls, metaphorically, as the project's title suggests, to dissolve the boundaries and thresholds between the heritage and the local people, especially the İMÇ community (Figure 2).

Figure 1: Mind map showing some generic negative perceptions about post-industrial areas

Figure 2: A view from the demolished brick of the wall built between İMÇ and Unkapanı site

The photo collage showing the courtyard between the walls (Figure 3), which is both physically and ideologically located between Unkapanı and İMÇ Blocks, represents the way the project foresees the potential of Unkapanı beyond the walls, with the integration of local communities from different age groups and art collectives. This visual is a representation of the urban catalyst effect of this re-functioning proposal. In this study, it is proposed that the revitalization of Unkapanı can play a catalyst role in the revitalization of the city, from the smallest unit to the whole.

Figure 3: The photo collage showing the re-imagined courtyard

Field Survey

For the study, qualitative research methodology is employed, and a case study is chosen as a research method. In this regard, semi-structured interviews and face-to-face field surveys are conducted with the locals of the Unkapanı neighborhood for four days in November 2021, with a snowball method to understand the system of the Unkapanı region by a neuro-urbanism approach.

In the first part of the five-part survey, demographic data was gathered to figure out the general profile of local people and their socio-economic structure (Figure 4). Looking at the histogram of the age of 36 interviewees, the youngest being 17 and the eldest 73 years old, the mean age is 40.86. Of the 36 interviewees, 10 are women, 24 are married with at least one child. Briefly, participants are occupied in the İMÇ music industry, local shops, or students, homemakers, and unemployed. The second part is designed to determine the flow of people in the area and their reason for being in the Unkapanı region.
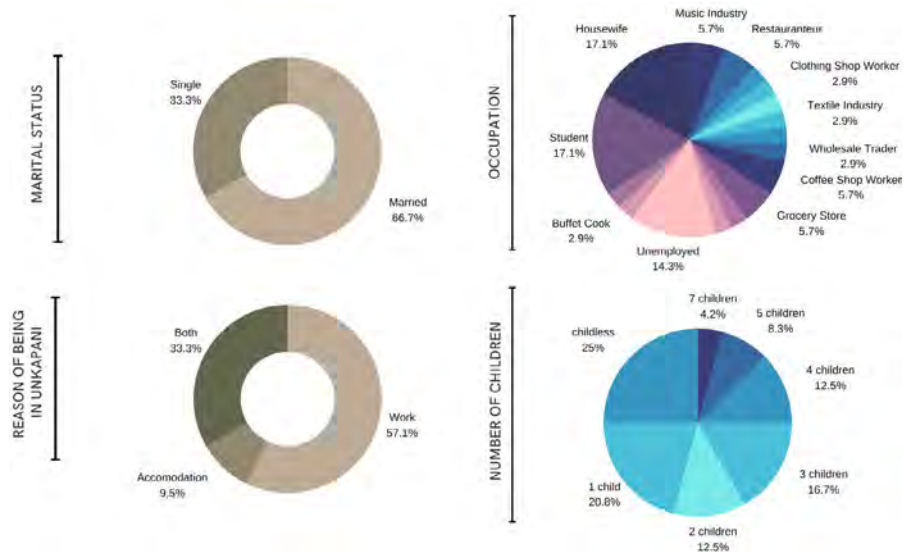
Figure 4: Graphs showing demographical data and participants' answers for being Unkapanı

The third part is about dimensions of belonging, which questions the presence of binding economic activity, space/midpoint/landmark of attaching, social rituals, and traditions (Figure 5). It was concluded that women and men gather in isolation from each other in the region, generally in closed areas and private properties. Also, it can be said that people who work here have social attachment among themselves but do not have any place to come together. As a result of this section, it has been determined that there is a serious need for a meeting and socializing area in the area.

Figure 5: Graphs showing dimensions of belonging

The fourth part measures the level of awareness, including their perceptions, feelings, and knowledge about both the historical and contemporary value of Unkapanı Flour Mill (Figure 6). Users were asked to evaluate the old Unkapanı flour mill buildings, with the help of a 5- point scale placed between adjective pairs that were positive or negative. Only 15 out of 36 people stated that they had an idea about Unkapanı's past. Only 6 of them knew the correct function of the remains in Unkapanı.

Considering the current situation of the old Unkapanı Flour Mill in your neighborhood, please select the option that suits you best in the evaluation below.

	5	4	3	2	1	
Beautiful		2	1	7	10	Ugly
Complicated	11	7	1		1	Tidy
Silent	10	5	3	2		Noisy
Trustworthy		2	1	7	10	Dangerous
Practical		1		2	16	Useless
Spacious	1	2	4	8	4	Depressing
Inviting		2	2	7	9	Repulsive
Peaceful	1		2	5	12	Disturbing
Colorful		1	4	6	9	Colorless
Sufficient			2	2	16	Insufficient

Do you have any idea about the historical and cultural characteristics of your neighborhood?

Yes 41%
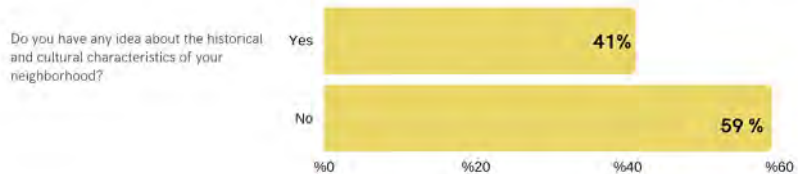No 59 %

%0   %20   %40   %60

Figure 6: Graphs showing the level of awareness

Finally, the fifth section of the questionnaire requests users' function suggestions and opinions in case of re-functioning old mill buildings (Figure 7). A respectable number of locals expressed their demand for the restoration and reuse of building remains as a kind of cultural facilities (museum, concert hall, theater, art galleries, etc.) that will create economic vitality and small shopping units (marketplace coffeehouses).

How would you like to transform the old Unkapanı Flour Mill buildings into a place that will contribute economically to your neighborhood?
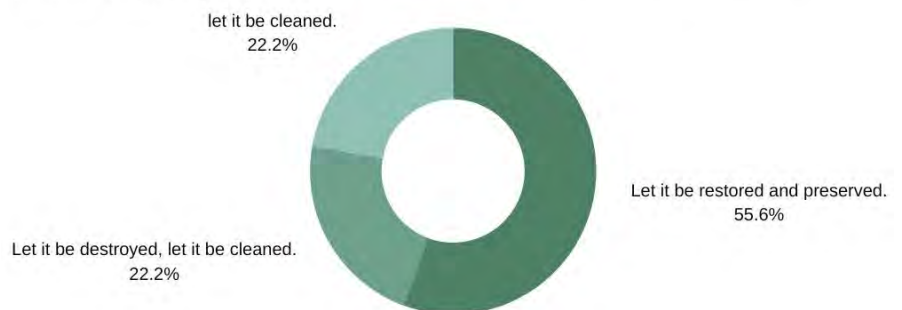
let it be cleaned.
22.2%

Let it be restored and preserved.
55.6%

Let it be destroyed, let it be cleaned.
22.2%

Figure 7a: Graphs showing re-functioning areas

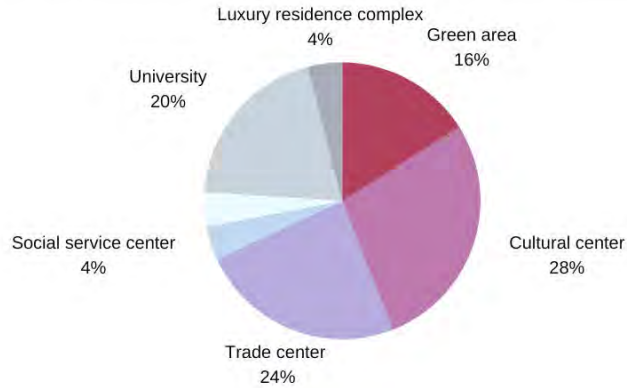For what purpose and with what function do you want-prefer-suggest these structures to be used?

- Luxury residence complex 4%
- Green area 16%
- University 20%
- Cultural center 28%
- Social service center 4%
- Trade center 24%

Figure 7b: Graphs showing re-functioning areas

Design Strategy: Re-functioning Proposal for Unkapanı Mill

- Videotheque
- Multi-purpose Courtyard
- Urban Corridor / İMÇ Axis
- Commercial
- Workshop Areas
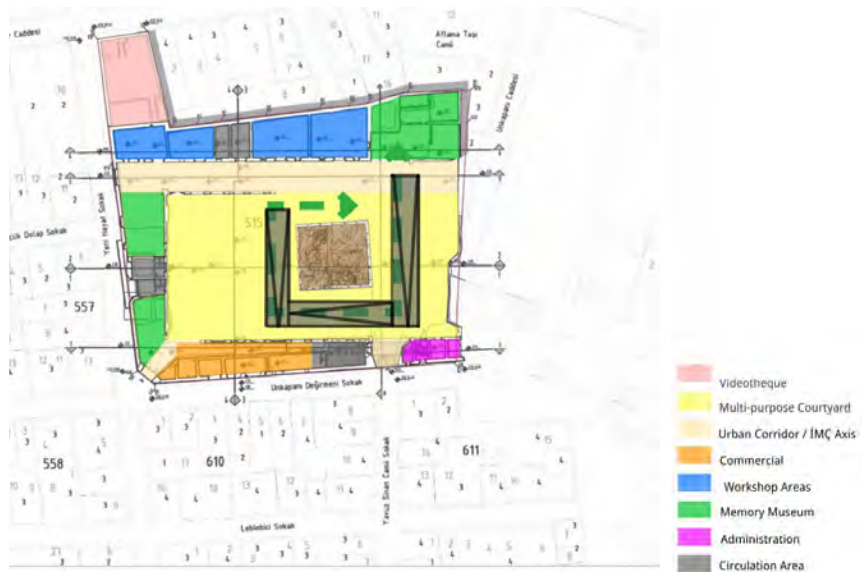- Memory Museum
- Administration
- Circulation Area

Figure 8: Re-functioning proposal on the master plan for Unkapanı Flour Mill

Old Cinema Building, New Videotheque

A building with a separate entrance was used as a cinema building in its original state (Figure 8). Compared to the other buildings in the mill complex, the cinema building, having a triangular pediment, moldings, and reliefs, has a rather ornate facade. In the re-functioning plan, it is proposed to use this building as a video-theque. This function has been provided to host film and documentary screenings to showcase the history and archives of Unkapanı, as well as art installations.

The Memory Museum

The display function is located in the memory museum, which refers to the historical accumulation of the area, and also some parts of it host some temporary art exhibitions. It was noticed in the survey results that even the people living near this area have no idea or curiosity about the function and history of Unkapanı. One

of the main goals of creating a memory museum is to eliminate the disinformations and establish a direct link with Unkapanı's historical and spatial memory, see its photos from old times, and create new memories on them. Oral, graphical, and theatrical representations of the former buildings and functions can be seen to transfer the memory of the place and increase a sense of belonging and awareness about the area, as it is planned for Unkapanı Memory Museum. Additionally, the old chimneys of the factory are proposed to be reconstructed in order to revive the symbolic memory of Unkapanı. As it is visible from the old archival visuals of Haliç, including the silhouette of Unkapanı, the chimney was the most visible component of the factory.

The Courtyard as a Community Space

Figure 9: Longitudinal section showing the relation between the historic buildings, the ramp, and the courtyard

In the courtyard, there is a proposal of a ramp coming from the memory museum and ending at the courtyard as an observation deck where one can perceive the whole area and the ambiance. While providing a different flow route, this ramp allows experiencing the field from different levels. In addition to adding a new architectural layer and increasing social integration there, another purpose of the ramp and this multi-purpose courtyard is to increase community engagement.

Figure 10: Photo collage showing the ramp around the archaeological site

Contextual Relation between Unkapanı and İMÇ

Having presented the design ideas for the central courtyard and ramp, Figure 11 shows the strategy for the pedestrian streamlines. The exhibition and observation axis created by the ramp comes from the museum and reaches the courtyard. The commercial axis passes by the local shops and cafes. Lastly, the main pedestrian axis creates an urban corridor between Unkapanı and the rest of the neighborhood.

Figure 11: Pedestrian streamline diagram

To explain its contextual relationship with İMÇ, it can be said that Unkapanı is located in a potential urban sub-center, or at strategic points close to the city center, supported by existing infrastructure, and dependent on highly accessible transportation systems. To use its urban potentials and locational advantages, an axis passing through the site and reaching to İMÇ is proposed (Figure 12).

This axis works as an urban corridor and a place for public interaction. Performing arts, music, film, video, and photography industry coordinated with İMÇ, handicrafts, and gastronomy workshops are some functions recommended in the design field. It is intended that İMÇ will also profit from this urban recreation and achieve economic revival. Heritage-led regeneration positively affects the neighborhood and broader markets where a substantially new economic base has been necessary.

Figure 12: Photo collage showing the main pedestrian axis as an urban corridor

Intervention Methods, Construction Techniques, and Materials

Original masonry walls of the mill are planned to be preserved and consolidated. Integration with original buildings is proposed only with contemporary construction techniques and materials. Thus, original parts of the mill and new additions can be distinguished. Besides, new floors, mezzanines, eaves, and ramps are integrated into the existing walls of the mill to provide a rich spatial experience for visitors and users. New floors are constructed with steel structures by avoiding touching the original masonry walls. It is also possible to create an entrance by using the remaining original walls and building new eaves. The buildings are covered with a steel-structured and metal-covered roof. As an integrated part, the new roof is distinguished from the original structure by using glass and any other contrast surface material.

Conclusion

Through the analysis of theoretical and practical data, this re-functioning proposal raises the issue of emotional links with the built environment and the feeling of genius loci, contributing towards the identity of Unkapanı. The results show that since the birth of the Unkapanı Mill factory, productivity and the exchange culture has had a significant impact on the development and transformation of industry. Therefore, it is worth mentioning that the gradual disappearance of various facets of the cultural heritage is a severe blow to the "spirit of place" and the coherent atmosphere of urban environments. In the light of these, this re-functioning proposal aims to increase the sustainable productivity in this region in terms of economic, social, and cultural aspects.

Unkapanı Flour Mill:
An Urban Catalyzer

Aybüke Safi, Yasemin Çakır, Meriç Altıntaş Kaptan, Merve Torlak,
Nazlı Arslan, Sena Kayasü, Taiwo Samuel Orisade

Vision

In a contemporary context, the problems associated with Unkapanı Flour Mill can be viewed with three different lenses: socioeconomic, political, and physical/environmental problems that lead to lack of security, social exclusion, abandonment, building deterioration, poorly planned urban areas, and climate change-related problems. As a result, unauthorized, unplanned, and ostensibly unwanted activities have long appropriated the Unkapanı Flour Mill in ways that makes the site invisible, forgotten, and imprisoned.

However, a conscious effort to meticulously reveal and restore the state of the Unkapanı Flour Mill is requisite. To do this, we need a toolbox that includes commemorative, historical, symbolic, architectural values as well as others. There is a need to protect, maintain and stabilize the existing materials, form and integrity of the Unkapanı Flour Mill. Guerrilla urbanism was chosen as a conceptual framework to sustainably achieve these aims as well as address the ills associated with the site.

Figure 1: View of İMÇ from Unkapanı Flour Mill

Guerilla Urbanism

Guerrilla urbanism, also known as tactical urbanism, is a bottom-up model that promotes an alternative strategy for balancing public-private partnerships. This concept employs minimal or scalable intervention as a means for large-scale or long-term transformation. Tactical urbanism is all about action characterized by temporality or adaptable intervention, informality, urban acupuncture, urban prototyping, low-cost and high impact.

Cities around the world are creating adaptable, short-term industrial heritage projects to meet long-term goals and creating a paradigm shift in the way communities think about heritage reuse. Under the umbrella of guerrilla urbanism, our approach is a four-stage process: analysis (site conditions and interviews), raising awareness, fostering a state of belonging, and creating the conditions for the sustainable reuse of the building through a participatory design process.

Material Deterioration Analysis

The mill building which used to be the main facility of the complex does not exist today; it was demolished during the construction of İMÇ blocks. The furnace building, which was located in the middle of the complex at the time it was built, was also subjected to significant losses such as loss of volumes, walls, floors, and roof. Today only several walls of the furnace are standing. The warehouse building, of which only the walls are standing today, was a 2-storey structure. Some significant losses in regards to that include loss of floors and roof. The housing building, a 3-storey building located in the north of the site, has lost a façade during the construction of İMÇ blocks. The floor of the service building and some of its walls/facades have been lost along with window and door profiles. The plaster surfaces/facade of the cinema building has been damaged, and similarly, the door and window profiles have been lost.

Other than volume and building element-related losses, the remains of the complex had also faced other deteriorations as well. At several points at the site, inappropriate interventions have been observed such as walls built and doors to block trespassing. Furthermore, decay caused by uncontrolled vegetation and higher plants growing at various areas within the site were noticed.

Figure 2: Unkapanı Flour Mill deteriorations in elevation (Modified from Alper, 2021)

Interviews

Following the problem definition and site analysis, it was necessary to understand what various groups within the community know about and expect from the site. Unstructured interviews were carried out as a precursor to the participatory design process to inform initial design ideas. The various groups identified in the surrounding community were residents, tradesmen (both from the neighbourhood and İMÇ), and the muhtar. The tradesmen from the neighbourhood and the residents were interviewed on 23 October 2021. They stated that four or five years ago, the site of the flour mill and the neighbourhood, in general, was not secure. Today, the service sector (including hotels, restaurants etc.) are taking the place of small-scale industry and ateliers, which makes the neighbourhood more inviting. The tradesmen from İMÇ expressed that the building is very self-sufficient, they have very little contact with the neighbourhood, and they think the area is uncanny, weird, and unsafe.

The interview with the muhtar, Hüseyin Öztürk, took place on 5 November 2021. He noted that security issues are rampant in the flour mill's site, even after it was enclosed with concrete walls. He also stated that the neighbourhood was very different before the food market ("hal") moved away in 1986; the white-collar

and blue-collar employees of the market mostly lived in the area and formed the socio-cultural backbone of the neighbourhood. After the market closed, the neighbourhood lost much of its long-time population and the void was filled with seasonal migrants or domestic migrants fleeing from terrorism in eastern Türkiye.

Öztürk touched on the sense of temporariness in the neighbourhood. Even during the days of the flour mill, most of the workers were seasonal and lived in temporary housing. The muhtar stated that the temporariness is infused into the area's culture and that the fact that two of its streets are named Atlamataşı ("stepping stone") and Yenihayat ("new life") reflects that most residents view the area as a stepping stone. At the last election, there were approximately 220 registered voters (permanent residents) in the neighbourhood, while an estimated 3000-4000 people are unregistered and temporary.

Although the temporariness is etched into the neighbourhood's fabric, it has increased since the end of the food market, and it severely hurts the area's potential because most residents are not interested in its future. Öztürk noted that the area has become a backyard for the more touristic Eminönü district and experiences vehicular/parking overload and excess garbage issues due to this situation. However, Eminönü's proximity has been helpful in one aspect: tradesmen from the Egyptian Bazaar in Eminönü helped fund the soup kitchen that Unkapanı's residents started on their own, which continued for more than a year until the Covid-19 pandemic.

Özdemir further stated that the neighbourhood does not require more green areas or playgrounds. There are no children and the green areas of the nearby mosques meet the residents' needs. He expressed that the neighbourhood's main need was planned, possibly multi-storey car parks to alleviate the parking situation that currently obstructs access to the shores of the Golden Horn. He also mentioned summer cinemas and singers' performances (from the İMÇ) as a pleasant, collective memory of the past.
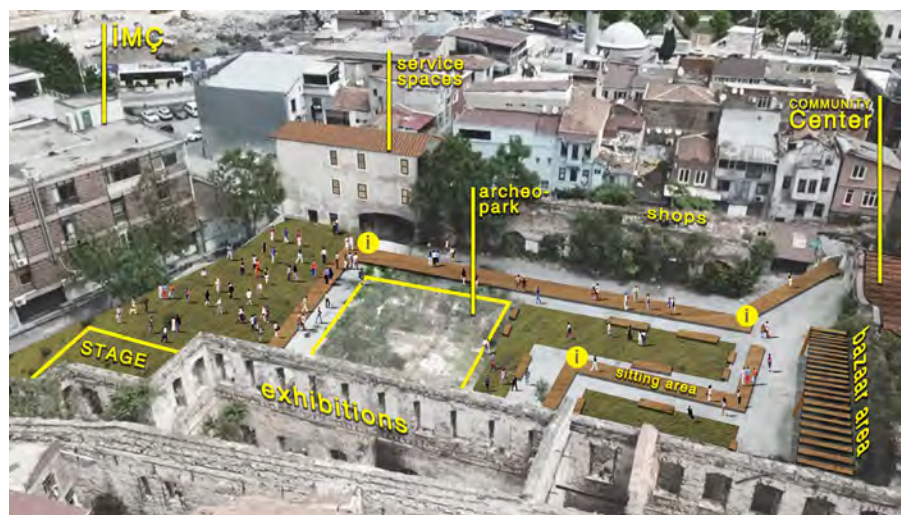

Figure 3: Conceptual collage of uses (2021, Photo modified from NIT Urban Heritage Lab Archive)
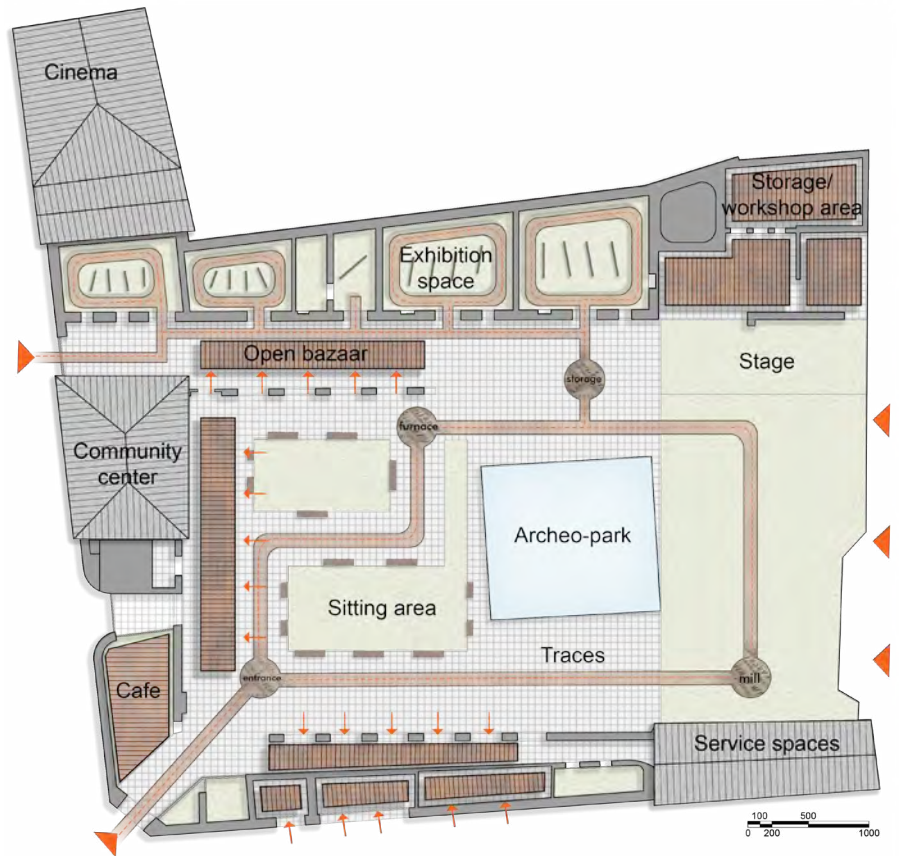
Figure 4: Proposed site plan

Participatory Design Process

The data collected from the site analysis and oral research is the main source for defining the interventions on site. To open the site to pedestrian traffic, the first step was tearing down the wall facing İMÇ Block 6 and regaining contact with a modern temporal layer in the history of the site. By blocking traffic from Atlamataşı Street, the site became a pedestrian zone. Then, a route with the traces on the ground that references the flour coming from the port and being processed and stored is designed in the courtyard. The original flour storage area turned into an open exhibition informing the visitors about the timeline of the site. In this scenario, the site is being used as a recreational area and some small-scale shops and the community centre are introduced to the site more permanently. Some events and weekly bazaars are more than welcome to create funds for the care of the site. The bazaar is also a reference to the memory of the food market that was in the area between the 1940s and 1980s.

Figure 4 shows how the proposed temporary scenario works on the plan. Firstly, the same materials, wood and polycarbonate, are decided to be used for

everything that is introduced to the site so that all the interventions would have the same distinguishable language. Some openings are closed with a wooden roof in need of closed spaces like small shops and storage for the events. The shops facing Unkapanı Street would service both the street and the courtyard to have a connection with the surrounding area as well.

In this plan, the traces on the ground visit the exhibition area explaining the history of the site. However, the archaeological remains are covered and protected with glass without further excavations. The original cinema building is planned to serve as a cinema in the new function as well. Also, a new temporary stage area is defined for contemporary events.

The areas around the original chimney restored as the community centre and cafeteria, are planned to be the heart of the site. The new community centre is designed as a flexible meeting area (Figure 5). A mezzanine floor is introduced to create more space inside, but this intervention is reversible and does not damage the original feeling of the interior. The area below the chimney on the plan is proposed to be covered with a wooden roof and serve as a cafe to the inner courtyard.

1ST FLOOR PLAN   MEZZANINE PLAN
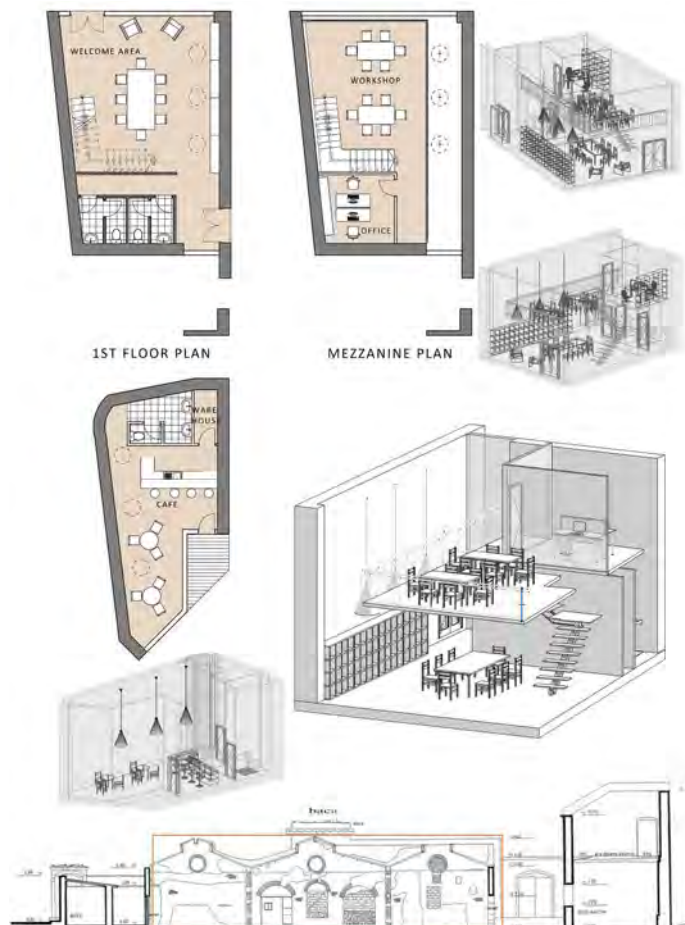
Figure 5: Proposed design for the community center and cafeteria
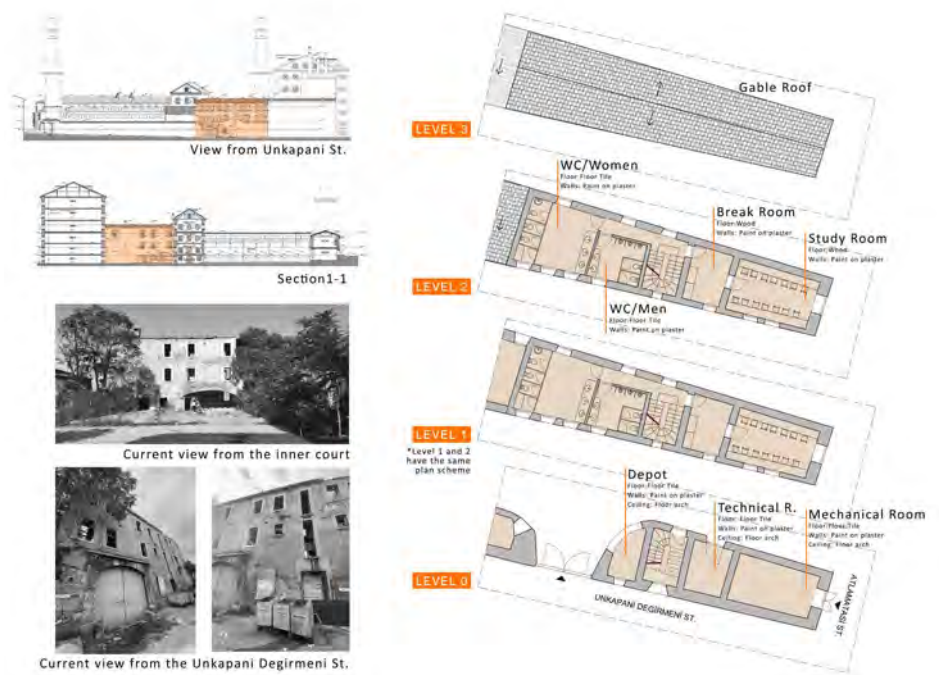
Figure 6: Proposed design for service spaces

The building in Figure 6 is chosen as the service building because it is from a later period and has a lot of its original material remaining. According to the proposal, the bathrooms, study rooms and some technical spaces are underneath this building's completed roof.

Figure 7: Proposed design for the open-air exhibition space

In the context of the scenario, it is important to separate the periods from each other and to reflect the architectural values of the past with modern technology. For this reason, it is aimed that the disappearing structural elements can be abstracted and added to the spirit of the space. In this sense, a new approach has been developed that reflects the volumetric proportions of the collapsed chimney and its modern effects on the silhouette are imagined. The use of timber and polycarbonate in the courtyard, as in the chimney, not only reflects today's technologies but also reveals the difference of the periods by creating a contrast with the masonry buildings. (Figures 8 and 9)

Figure 8: Revitalized chimney and courtyard

Figure 9: Revitalized chimney and courtyard

Aspirations for the Future

The inactive spaces around the project area could be an asset rather than a handicap to determine the future of this neighborhood. The collapsed buildings and inactive lots currently create security and safety issues. Further stages of a participatory design process may consider that drawing creative industries into these lots and reignite the potential of the neighborhood (Figure 10). Commercial buildings around the Unkapanı Flour Mill outnumber residential structures and there is a very small population of permanent residents, so this solution may boost economic and social sustainability with little danger of gentrification.

In conclusion, this study seeks to transform the Unkapanı Flour Mill through a participatory design process to reveal the importance of industrial heritage to communities and livelihoods. Within the new industrial heritage paradigm, guerrilla urbanism is a pragmatic and a useful tool to deliver Unkapanı Flour Mill in the full richness of its contemporary interpretation; it may also help to rebuild a permanent population and a sense of belonging that was found to be missing. Industrial heritage sites require rethinking areas in the context of urban change because they have tremendous socio-economic potential. However, it is important to note that heritage is a product of conservation, and conservation is a key act that leads to the deliberate creation of heritage.

Reflections on Project Proposals

A Multidisciplinary Studio on the Sustainability of Urban Industrial Heritage

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Organized by NIT in collaboration with the Netherlands Consulate-General in Istanbul as part of the Liveable Cities program and the Centre for Global Heritage and Development of Leiden, Delft and Erasmus Universities in 2021, the NIT Urban Heritage Lab: "Industrial Heritage for Sustainable Cities" opened up new perspectives for heritage experts and researchers in terms of informal education as well as administrations and communities in terms of increasing the quality of sustainable urban life. 26 students attending the program, presented 4 different group projects about the old Unkapanı Flour Mill at the end. This is a summary evaluation of the final projects.

"Unkapanı Community Garden" focuses on an "integrated" solution, bringing together all stakeholders, in terms of a minimal intervention to the site with environment-friendly proposals. The multi-purpose building and the memory space / museum are intended as an educational outreach for the people living in the area and visitors through an experiential learning approach. The negative points could be the design of the steel trusses, which are similar to historic forms, which could be confusing, and the use of soft capping, which, although good at non-urban sites, is not appropriate for dense urban areas. The design of the multi-purpose building, which transforms the open space into usable space without changing its composition, and the physical and social integration with the surrounding urban areas and communities, are all positive points. The use of the transformed space for wheat processing and baking workshops, inspired by the original function of the mill and supporting local businesses, storm/rain water collection and management for the community garden and the market place would create social urban attractions. The community involvement and visitor experience are designed with a plan to integrate all stakeholders, including the community, NGOs and local administrations.

"Adaptive Transformation of the Mill through Urban Promenade: Monologue, Dialogue, Travelogue" focuses on establishing a previously non-existing physical and social dialogue through the creation of a sustainable and inclusive community around the mill. This approach is inspired by the "social identity" theory, developed by Tajfel and Turner in 1979. The current disconnected "monologue" of the site is proposed to be developed into an urban "dialogue" through the creation of an industrial heritage route in Istanbul, and a local "dialogue" around a "cultural bakery", which serves metaphorically, and the tangible and intangible heritage of the culture of food, provision, production, distribution, and consumption, which the group defines as one of the social identities of the community and proposing a circular process of "sourdough bread making". Although not as organized as in the first proposal, the identity and community development ideas, including various urban actors and stakeholders is positive. For this purpose, the proposal makes use of the existing structures through consolidation and minimal intervention while adding an "urban promenade" with a re-interpreted reconstruction of the two mill towers as urban landmarks. Reversibility is an important factor in the interventions and the new additions utilize rustic steel and *corten* sheets to be easily distinguished from the authentic materials.

"Unkapanı Beyond the Walls" focuses on the inherent value of the site as a post-industrial place to be transformed into a new urban sub-centre. A limited survey carried out in the area shows a lack of information and awareness about the site and

a generally negative public view. The new urban sub-centre is envisioned as a dynamic and creative common place for Unkapanı communities. The urban corridor or axis, proposed between the old movie theatre and İMÇ, along the south border of the site, helps the integration of the area with its surroundings, providing an alternative pedestrian route through the event spaces and shops. The courtyard is left open with the addition of a ramp, identified as a "memory route" while the existing spaces are consolidated and reused. The interventions do not change the general appearance of the buildings but create new interior spaces with upper floors. These spaces will house a series of functions designed around cultural and creative industries both social and commercial. The architectural ideas in this proposal are better developed in comparison to the other ones while the use definitions are vaguer except for the commercial spaces. Community building social and cultural functions are not clearly defined and environmental sustainability issues are not addressed.

"Urban catalyser" focuses on a citizen-led, short-term, low-cost and adaptable approach, inspired by the idea of "guerrilla" or tactical urbanism, defined by Lydon and Garcia in 2015. The four senses of this system are identified as downwards/redistribution, forwards/sustainability, upwards/participation and backwards/memory. The identified problems of safety, temporariness and lack of green areas are addressed and the community involvement is achieved through a series of events, including information meetings, interviews, flyers, chalkboards and open-air movies. The resulting interventions and aspirations are proposed as a two-stage participatory design process (PDP). PDP1 or interventions include consolidation of the existing buildings and the archaeological site, re-igniting identity through the reconstruction of the two mill chimneys, and temporary functions such as an open weekly bazaar, community centre and entertainment events. The open space is only landscaped. PDP2 or aspirations propose to re-activate other unused spaces in the urban environment around the site for a wider audience. Although this bottom-up approach has its advantages, the temporary nature of stakeholder involvement and interventions may lead to a second abandonment in the long run if this process is not somehow directed.

In general, these proposals show us, heritage professionals, the value of informal education and multi-disciplinary approaches. Each proposal has its own merits and likely to succeed at different levels, if applied, despite their shortcomings at other levels. Their shared points in raising awareness, creating communities and formulating stakeholder involvement are all necessary for a successful urban intervention. Similarly, their suggestions for minimal and reversible interventions while creating urban activity centres and reconstructing landmarks through environmentally sustainable approaches, are essential for physical and social visibility. It would be wonderful to see the eventual application of a synthesis of these proposals at the Unkapanı Mill in the near future in order to provide a good-practice example for a more sustainable Istanbul.

Recovering Unkapanı for a Different Future

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To be a student of heritage in contemporary times is necessarily to engage with the conflicts of an unclear and changing present, which bears the residues of past ways of life. Given the thoughtfulness and level of analysis that its complexity deserves, heritage goes beyond many of the phenomena associated with the term. Old buildings, musealized objects, and statues point to some of the most classically-conceived heritage items, but these alone can't get to the heart of how heritage is experienced for many people in their day-to-day lives. Heritage may, for many, be something much less grandiose, and indeed possibly much less noticeable. It may be emotional, it may be messy, it may be fractious.

The complex of the former Unkapanı Flour Mill, in Istanbul, provides a good example of how the different tensions in heritage sites can nest within and alongside each other. Here, the past ruptures into the present, and disturbs plans for the future. The students partaking in the NIT Urban Heritage Lab: Industrial Heritage for Sustainable Cities course (2021), were, as a general indicator, students of architecture and a range of other disciplines, all of which served as useful for rendering meaning onto heritage spaces. In doing so, the groups demonstrate an instinctive ability to embed their projects, and their plans for the future with the kind of thoughtfulness needed to expose these adjacent tensions. This exposure presents opportunities for designing interventions and/or making transitions to sustainable cities, without neglecting the conflicting perceptions, and the complex memories of former industrial spaces.

Heritage work is often a balancing act between what from the past is allowed to remain present in both physical and immaterial forms, and what is made to fall silent, be forgotten, or be unseen. Industrial sites — and the heritageization of them — often finds the complex, multi-layered stories of labor, class, and production smoothed over in favor of the retention of an industrial aesthetic utilized for other — often gentrifying — means (High, 2018). Across each of the group's contributions during the Urban Heritage Lab project however, the capacity for and intention of architectural forms to make visible the memorial fabric of the Unkapanı Flour Mill is realized in strikingly original ways. The fourth group's Urban Catalyzer project makes this an explicit goal, seeking to address the 'forgotten, imprisoned, and invisible' past of Unkapanı.

That such memories have become absent in these diffuse ways speaks to the challenge facing the architectural and urban planning designs aiming to repurpose Unkapanı. Each group used the Emotion Networking technique, co-developed between the Amsterdam heritage research institutions Imagine IC and the Reinwardt Academy, to both establish a dialogue between the many different populations relevant to the mill and its surroundings, and bring to the surface aspects of its history that may be painful or unnoticed. Following initial distance and onsite training, the student groups implemented the methods themselves in their projects. In doing so, the past is able to be envisaged as something active, that moves between people in their day-to-day life, and enables connections with other communities who may have very different experiences of what Unkapanı and the nearby İMÇ complex means to them.

Group one's Unkapanı Community Garden design incorporates a marketplace, offering economic opportunities alongside a place to meet and increase social cohesion. This space — and the integrative physical space should be considered vital here — is shown as particularly important

in integrating the immigrant population with the pre-existing community around the mill. Proposed educational workshops focusing on the history of the area, and the community, augment this further.

In having a focus on the social cohesion of the immigrant and more established populations of the area, group one wasn't alone. Group four's co-designed approach, and its architectural emphasis of temporary interventions of a vernacular nature, implements a communal and communicative space for increasing a sense of belonging. This aims to bring into contact the memories of different groups, in a manner reminiscent of Michael Rothberg's multidirectional memory concept (Rothberg, 2009). On a broader level however, this speaks to the way in which issues of heritage are constant recalibrations, a continual reckoning of stability amongst change and nonlinearity, which must remain in the space of discussion.

This theme was prevalent in every group's contribution, with various communicative approaches being utilized in order to continually engage with the potential conflict arising from this ongoing discussion. Group three's project, Unkapanı Beyond the Walls, conducted extensive demographic analysis and surveying, which meant receiving explicitly dissenting opinions about the history of Unkapanı, and how feasible (or not) it was to feel a sense of belonging there. Again, communication (and the capacity for it) is key here. Some of the most common responses from those surveyed deemed Unkapanı to be 'ugly, dangerous, complicated, useless', and — perhaps most interestingly — 'silent'. What kind of things might Unkapanı say, if it was granted a voice, and how urgent would those utterances be? What kind of further disturbances to the idea that people mentally hold of the flour mill area might arise from

a stronger communication between space, time, and inhabitants? A collective understanding of merging pasts and futures that is not necessarily a consensus, but is at least a dialogue with room for uncertainty, is surely preferable to a prescribed narrative that is 'safe' and generalized (see: Wollentz et al., 2020). By 'transferring the experience of the factory to today's users' within the refunctioning idea of the 'memory museum', group three indicate the possibility for archeological and architectural practice to have memorial or identity aspects embedded within it, just as occurs unintentionally when industrial places are both literally and metaphorically stained by their histories. Memory, identity, and architectural practice can thereby each be in dialogue, within these reconceptualizations of Unkapanı.

The notion of the past both being part of plans for the future, and having a dialogue with it, was further explored within the Monologue, Dialogue, Travelogue project of group two. Again indicating how meaningfully multidisciplinary the course was overall, the group grounded their work in the notion of Social Identity Theory (SIT). A psychological theory first established by Henri Tajfel and John Turner in 1972, SIT argues that individuals conceptualize themselves in terms of groups, via identifying as group members, in order to engender (positive) self-conceptions. Aiming to work with (and indeed work through) the identities that the inhabitants of Unkapanı maintain today, participants were encouraged to engage with the history of the site, and come to reconsider their position in the wider social fabric based on the output of this former industrial site: food, or — more specifically — bread.

The group argues that the procuring, preparation, and consumption of food is a social and communicative process, thus making bread, and

its production here, part of the social identity of those who previously worked and ate at or around Unkapanı. However, surveying showed that the current inhabitants or users of the site were largely unaware of its history, and none were aware of the meaning behind the name. As a result, a design with a variety of links between food practices and phenomena through past, present, and future was drawn up. Bakeries and culinary workshops; a cultural heritage traveling route beyond Unkapanı's walls including three other (former) mills in the area; even a business model inspired by the process of sourdough bread-making: each of these were worked into the design, bringing the past craftspeople of Unkapanı, and their baking skill, into contact with the present day, and helping to co-shape the narrative, and the identity, of the area in the future.[1]

Working with the heritage of a place often means the production of difficult questions that demand asking but do not necessarily have a coherent answer (see: Diez, 2019).[2] Group two touch upon one of their own when they say that locals today 'aren't aware of the real story behind the area.' But what is the 'real' story? How much can any one story claim to be the 'real' story? And which other stories are suppressed in the reification of the 'real' story? Why — as one invigilator of the presentation session put it — should the past matter at all? Such questions point less towards a weakness in the group's methodology, but rather towards the fact that solid, pragmatic heritage work, as has been embedded into the design of each group here, encourages a robust criticality which is rarely settled. It is this critical approach which demonstrates how heritage, across the spectrum of the tangible and the intangible manifestations, can engage with the issues that are close to the individual lives of people who have some kind of relationship with Unkapanı.

What if we zoomed out a little however, and put some distance between ourselves and Unkapanı's inhabitants and workers? The projects created here demonstrate that the relevance of the past persists even in the face of wider societal — even global — issues, when applying the right analytical lens. Even though designs relating to Unkapanı are understandably centered around the local context, the plans made show how reuse of industrial space could potentially present microcosmic solutions addressing the climate crisis. Adaptive reuse of (post-)industrial spaces is nothing new: striking examples can be found in Amsterdam, Silesian Voivodeship, Belgrade, and beyond, wherein the facades of former industrial spaces are retained for a repurposing relevant to contemporary needs (Barba Lata & Duineveld, 2019; Szromek et al., 2021; Nikolić et al., 2020). The best examples of this thread historical or memorializing insights through the forward-facing momentum of sustainability practices. Group one, for example, combines a 'memory museum' (situated in the former grain storage of the mill) with adaptive water management techniques and heat-resistant building materials. Group two, meanwhile, bases its bread-based reinterpretation of the space around a system of circularity, minimizing environmental impacts from the process of sourcing, transport, production, consumption, and waste. These examples show the potential for the sunken material fabric of Unkapanı to be reused in a way that embeds progressive sustainability practices addressing climate problems. Further, they encourage an experimentation in the notion of what constitutes a museum or musealized space, embedding with these new forms a criticality that can address the urgency of climate change (see:

Harrison & Sterling, 2021).

The need for a continual critical reappraisal of the ways heritage is understood, manifested, and used, speaks to an attempt to inject into the idea of heritage a values-based response to the myriad problems facing myriad societies today. The heritage landscape is always built — whether consciously or unconsciously — on certain values. Laurajane Smith's notion of the Authorized Heritage Discourse (AHD) is one of the most foundational critiques of the types of values underpinning heritage and its various manifestations. Specifically, the AHD sees certain (generally mainstream and well-known) heritage items as promoting certain nationalistic values which — sometimes violently — silence and homogenise, rather than open up space for dialogue and debate (Smith, 2006). Industrial heritage itself, often (but not always) outside of the AHD, also can be problematised by characterizing it as a history not of admirable work and productivity, but as based on the values of extractivism (of non-replenishable resources) and exploitation (of vulnerable laborers) (see: Reddick, 2022). Values that, in short, one should be very wary of.

Using different values as a basis for understanding heritage and its processes opens up possibilities for it to work in more sustainable and dialogical ways. Values of openness, creativity, and curiosity are for example some of the values underlying each of the four group's approaches to the Unkapanı mill. The projects constructed from such approaches accordingly transmit these values to the potential users and participants in the ongoing process of defining and developing what the mill is and does. That these potential future redevelopments seem set to address the most vital issues relevant to both Unkapanı and the wider context it exists within, indicates that a heritage-centered architectural and programmatic redesign of industrial spaces could be a catalyst for positive social change.

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Endnotes

[1] As will be familiar to many jaded millennials who took up sourdough baking during the sudden months inside during the pandemic, sourdough requires the long-term, regular feeding of an active starter that becomes the basis of each loaf.

[2] The approaching of potentially-difficult heritage questions using Emotion Networking is also part of the methodology of the CENTRINNO project, in which Imagine IC and the Reinwardt Academy are also partners. See: Tomas Diez, 'Part B: New CENTralities in INdustrial areas as engines for inNOvation and urban transformation', Centrinno, CE-SC5-20, (2019).

The Unkapani Flour Mill in the urban context
Source: Mehmet Alper Archive

Drone image of the mill
Source: Mehmet Alper Archive

What are the ways that industrial heritage places are transformed, both considering their tangible and intangible values as well as their potential to achieve urban inclusivity, sustainability, circularity, as well as public engagement?

The present book is one of the outcomes of the inaugural program of NIT Urban Heritage Lab. Following an introduction on the course, its scope and aims, it showcases the four proposals that the participants of the Industrial Heritage for Sustainable Cities Course developed for the transformation of the Unkapanı Flour Mill. The proposals are original, thought-provoking and inspirational, while at the same time based on solid multi-disciplinary, collaborative work. As such, they are perfect demonstrations of what NIT Urban Heritage Lab tries to achieve.

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