ADAPTIVE REUSE OF INDUSTRIAL HERITAGE: ESKİŞEHİR HALLER YOUTH CENTER

YENİDEN İŞLEVLENDİRİLEN ENDÜSTRİ MİRASI: ESKİŞEHİR HALLER GENÇLİK MERKEZİ

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Abstract

This study analyzes the transformation of the Haller Building in Eskişehir, originally built as a fruit and vegetable market during the Early Republican Period, into the Haller Youth Center. The aim is to assess the spatial, structural, technical, and environmental interventions applied during the adaptive reuse process and their impact on the building's original identity. Using a qualitative case study method, data were gathered through literature review, site observations, analysis of architectural drawings, archival documents, and review of similar projects. While examples such as Covent Garden in London, Valletta Market in Malta, and Kadıköy Market Hall were cited for context, no direct comparisons were made. Findings show that the structural system was preserved, the new function was integrated without altering the spatial layout, and technical infrastructure was updated for modern needs. The reuse process demonstrates a successful conservation practice, ensuring the building's physical and functional sustainability. However, commercial units and interior decorations should be arranged to avoid harming the original architectural fabric. Overall, the project stands as a positive example of industrial heritage reuse and highlights the need to carefully apply conservation principles for the sustainable use of historic buildings.

Keywords: Adaptive Reuse, Interior Conservation and Restoration, Industrial Heritage, Eskişehir Haller Youth Center

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Özet

Bu çalışma, Eskişehir'de Erken Cumhuriyet Dönemi'nde sebze ve meyve hali olarak inşa edilen Haller Binası'nın Haller Gençlik Merkezi'ne dönüştürülmesini incelemektedir. Amaç, yeniden işlevlendirme sürecinde yapılan mekânsal, yapısal, teknik ve çevresel müdahaleleri değerlendirmek ve bunların özgün mimari kimliğe etkisini analiz etmektir. Nitel durum çalışması yöntemiyle yürütülen araştırmada, veriler literatür taraması, yerinde gözlem, mimari çizimlerin analizi, arşiv belgeleri ve benzer projelerin incelenmesiyle elde edilmiştir. Londra Covent Garden, Malta Valletta Hali ve Kadıköy Hal Binası örnekleri bağlamı güçlendirmek amacıyla ele alınmış, doğrudan karşılaştırma yapılmamıştır. Bulgular, yapının taşıyıcı sisteminin korunduğunu, yeni işlevin mekânsal düzeni değiştirmeden entegre edildiğini ve teknik altyapının çağdaş kullanıma uygun şekilde yenilendiğini göstermektedir. Yeniden işlevlendirme süreci, yapının fiziksel ve işlevsel sürdürülebilirliğini sağlamış başarılı bir koruma pratiği sunmaktadır. Ancak ticari birimler ve iç mekân dekorasyonlarının, yapının özgün mimari dokusunu koruyacak biçimde düzenlenmesi gerektiği belirlenmiştir. Sonuç olarak, Haller Gençlik Merkezi örneği endüstri mirasının korunması açısından olumlu bir uygulama olup, tarihi yapıların sürdürülebilir kullanımı için benzer projelerde koruma ilkelerinin titizlikle uygulanması gerektiğini ortaya koymaktadır.

Anahtar Kelimeler: Yeniden İşlevlendirme, İç Mekan Koruma ve Restorasyon, Endüstri Mirası, Eskişehir Haller Gençlik Merkezi

Historic structures may lose their original functions over time. While these buildings may continue to exist physically, they risk becoming obsolete and disconnected from society if they fail to adapt to contemporary functional requirements. The reasons behind this phenomenon include societal development, shifts in value systems, and the evolution of living standards alongside technological advancements. However, historic structures should be preserved not only for their architectural and aesthetic significance but also for their cultural, social, and economic values. As Burden (2004, p. 56) emphasizes, these structures should be regarded as historical documents that require conservation.

In this context, adaptive reuse, a widely preferred architectural conservation method, not only ensures the physical continuity of buildings but also contributes to collective memory. As a significant preservation strategy, adaptive reuse allows historic buildings to be integrated into contemporary life by adapting them to modern functional needs (Ahunbay, 2011, p. 34). Burden (2004, p. 102) asserts that buildings often outlive their original functions and inevitably undergo functional transformations over time. He highlights that while the physical durability of historic buildings may be maintained, their inability to meet contemporary functional demands places them at risk of abandonment.

Without proper maintenance and restoration, these structures deteriorate, lose their functionality, and ultimately face the threat of complete destruction. In such cases, adaptive reuse emerges as a solution to ensure the functional continuity of historic structures within contemporary conditions. However, this process must be carried out without compromising the spatial integrity, architectural essence, or aesthetic values of the building (Ahunbay, 2011, p. 78). The preservation of cultural heritage should not be approached solely from an aesthetic or historical perspective but also within the framework of social and economic sustainability.

Adaptive reuse not only ensures the survival of buildings but also revitalizes the urban fabric and social environment in which they are embedded. Today, this process is considered not only at the individual building level but also within a broader urban context. Conservation and reuse efforts are evaluated in conjunction with urban memory and social dynamics (ICOMOS, 1964).

In the process of adapting historic buildings to contemporary needs, it is essential to ensure that functional transformations do not compromise the authenticity of the structure. In this regard, the Venice Charter (1964), one of the most significant international documents on cultural heritage conservation, establishes fundamental principles for the preservation and adaptive reuse of historic buildings. Article 3 of the Charter underscores that cultural assets must be conserved both as works of art and as historical documents. Furthermore, restoration practices must respect the original characteristics of the structures, ensuring that new functions do not harm their architectural integrity (ICOMOS, 1964).

Over time, the scope of the cultural heritage concept has expanded, and in this context, industrial heritage has emerged as a new subcategory of cultural heritage. Industrial buildings that emerged following the Industrial Revolution played a significant role in shaping the economic and social fabric of cities. However, with technological advancements and changes in production techniques, many industrial facilities have become obsolete. These structures, classified as industrial heritage, are considered integral components of cultural heritage and require conservation (Cengizkan, 2006, p. 41). The emergence of industrial heritage is largely attributed to the abandonment of production facilities due to shifts in manufacturing methods and economic transformations. Additionally, the relocation of industrial sites from urban centers due to changing economic dynamics has contributed to this process (Tanyeli, 2000, p. 92). Industrial heritage comprises structures that reflect socio-economic history, characterized by their spatial configurations, technical equipment, and distinctive architectural features. The preservation of these buildings is crucial for understanding the history of industrial society, production processes, and socio-economic structures (Gökçen et al., 2022, p. 150). Industrial heritage includes various structures associated with mechanized production, such as factories, warehouses, tanneries, mills, foundries, and healthcare complexes. These facilities, which possess historical, technological, socio-economic, and scientific significance, encompass manufacturing plants, workshops, mines, energy production facilities, and infrastructure systems (Tanyeli, 2000, p. 95). The conservation and adaptive reuse of industrial heritage contribute to economic and social sustainability while also supporting the preservation of urban spaces. By repurposing abandoned industrial buildings as museums, cultural centers, educational institutions, or commercial spaces, their physical integrity is maintained, and urban memory is preserved. In industrial heritage conservation practices, it is essential to retain the original characteristics of the structures, ensure spatial continuity, and integrate them into contemporary society in a sustainable manner (Gökçen et al., 2022, p. 157).

This study examines a repurposed historical structure located in the Tepebaşı district of Eskişehir, currently serving as the Haller Youth Center. Originally constructed during the Early Republican Period as Eskişehir's first fresh produce market, the building holds a significant place in urban memory. Due to its historical and architectural value, it has been officially registered as a Grade I Protected Structure. Today, the structure has been adapted into a youth center through an adaptive reuse intervention, and this study analyzes the transformation process, focusing on modifications made to the space, the structural system, technical installations, and the surrounding environment. The research is based on literature review, on-site observations, architectural drawings, and archival records from the conservation board.

Materials and Methods

This research employs a qualitative research method, specifically the case study design, which allows for an in-depth examination of a particular event, process, or structure and facilitates the analysis of qualitative data (Yin, 2018, p. 45). The primary objective of this study is to analyze the adaptive reuse process of the Haller Youth Center in Eskişehir, assess its spatial and structural transformation, and determine the impact of interventions on its authentic identity. Accordingly, a descriptive and analytical approach has been adopted (Creswell, 2013, p. 98). The research includes spatial analyses, technical evaluations, and comparative assessments with similar structures to provide contextual support. Data were collected using multiple data collection techniques, as detailed below:

Literature Review: A theoretical framework on adaptive reuse and cultural heritage conservation was established. In this context, international conservation principles such as the Venice Charter (1964) and ICOMOS (1964) were examined to assess approaches adopted for ensuring the sustainability of cultural heritage (ICOMOS, 1964). Additionally, national and international academic publications and legal regulations related to adaptive reuse projects were reviewed to construct a conceptual foundation (Ahunbay, 2011, p. 45). To further expand the theoretical framework, specific regulations related to industrial heritage conservation were analyzed. Key international principles ensuring the sustainable use of industrial structures were identified by reviewing documents such as the Nizhny Tagil Charter (TICCIH, 2003), the ICOMOS Charter for the Conservation of Industrial Heritage (ICOMOS, 2003), and the Dublin Principles (TICCIH, 2011). The criteria for the protection of industrial heritage under the UNESCO World Cultural and Natural Heritage Convention (1972) were also assessed. Moreover, studies on the cultural and economic sustainability of industrial structures were analyzed through international initiatives like the European Route of Industrial Heritage (ERIH, n.d.). In addition, national and international academic literature, as well as legal frameworks related to adaptive reuse projects, were systematically reviewed. This comprehensive analysis provided the basis for developing the conceptual framework of this study, ensuring a structured approach to understanding the role of adaptive reuse in cultural and industrial heritage conservation.

On-Site Observation and Spatial Analysis: The physical and functional transformation of the Haller Youth Center was analyzed in detail, focusing on facade alterations, interior space arrangements, structural modifications, material selection, and restoration processes (Ahunbay, 2011, p. 56). The impact of these interventions on the authentic architectural identity and the relationship between the structure and its spatial context was evaluated.

Data from Institutional Archives: Archival materials from the Eskişehir Regional Board for the Conservation of Cultural Assets were analyzed, including project drawings, restoration permits, reports, and technical documents. These documents provided a documentary analysis of the adaptive reuse process (Burden, 2004, p. 78). The review of these materials was critical in determining whether the restoration process adhered to established conservation principles.

Contextual Support through Comparative Case Studies: While the primary focus of this study is the adaptive reuse of the Haller Youth Center in Eskişehir, additional case studies of structures that have undergone similar processes were examined to provide contextual references. Examples include Covent Garden in London, Valletta Market in Malta, Sofia Central Market, Kadıköy Market in İstanbul, and Bergama Covered Bazaar (Gökçen et al., 2022, p. 140). However, these structures were not included in a direct comparative analysis but rather served as contextual references.

Analysis of Technical Installations and Environmental Interventions: The study assessed the integration of modern mechanical systems (heating, ventilation, lighting), accessibility adaptations, and fire and earthquake safety measures to ensure compliance with conservation principles (Cengizkan, 2006, p. 115). This evaluation was conducted to analyze the process of ensuring both the physical and functional sustainability of the building.

All collected data were analyzed using descriptive analysis, allowing for an assessment of whether the interventions maintained the original fabric of the structure while implementing a sustainable conservation practice. The findings indicate that spatial continuity was preserved and that the adaptive reuse process successfully maintained the historical identity of the structure. In this context, the Haller Youth Center remains the central focus of this study, while other structures are considered supporting contextual references. The following sections of the study examine examples of adaptive reuse within industrial heritage, followed by an analysis of the study area, the methods applied, and the research findings. The final section presents the conclusion and recommendations.

Adaptive Reuse and Industrial Heritage

With the Industrial Revolution, many cities became densely populated with production-oriented structures. However, due to economic transformations, technological advancements, and the impact of globalization, numerous industrial facilities have gradually lost their functions. This situation has necessitated the preservation and adaptive reuse of historic industrial structures. Industrial heritage is not merely a matter of architectural conservation; it is also a crucial component of urban sustainability, economic development, and collective memory (Rodwell, 2007, p. 45). Adaptive reuse refers to the process of transforming abandoned or functionally obsolete buildings into new and sustainable uses. This approach serves as a significant architectural and urban transformation strategy, contributing to urban revitalization, economic value creation, and environmental sustainability (Cantacuzino, 1997, p. 112). While adaptive reuse projects aim to preserve historic structures, they also strive to integrate them into the existing urban fabric. This process typically involves analyzing the architectural, historical, and social values of a structure, implementing structural reinforcements, and defining new functions for the building (Glendinning, 2013, p. 78). The adaptive reuse of industrial heritage is carried out using various methods and approaches. One of the most prominent strategies is the transformation of industrial buildings into cultural and artistic spaces. The repurposing of former factories, warehouses, and power plants as museums, art galleries, and performance venues is among the most common reuse models. Tate Modern in London serves as one of the most successful examples of this approach (Sudjic, 2005, p. 94). Opened to the public in 2000, Tate Modern was created by converting the Bankside Power Station into a contemporary art museum. The original structure, designed by architect Giles Gilbert Scott in the late 1940s, was actively used for about 30 years before becoming obsolete. Located on the banks of the River Thames, the building is particularly distinguished by its tall chimney, which references traditional church architecture (Fig. 1). These characteristic and historical features were preserved during the transformation of the building, resulting in a highly successful restoration process. Since its opening, Tate Modern has become a cultural icon and one of the most visited modern art museums in the world. Furthermore, the museum has revitalized its surrounding industrial district, turning it into one of the most significant global exhibition venues (Arkitektuel, 2020).

Figure 1
Tate Modern Museum, 2020 / *Tate Modern Müzesi, 2020* (Arkitektuel, 2020)

Similarly, the Parc de la Villette project in Paris is a notable example of adaptive reuse, where abandoned slaughterhouses were transformed into urban public spaces (Choay, 2001, p. 156). Beyond cultural functions, some industrial structures have been repurposed as residential and commercial spaces. Large warehouses and factories have been converted into loft apartments, hotels, or mixed-use commercial centers, integrating them into modern urban life. A significant example in this regard is The High Line in New York, which repurposed an abandoned railway line into a landscaped urban park, successfully reintroducing it into the city (Graham, 2016, p. 203). Similarly, Zollverein Coal Mine in Germany has been inscribed on the UNESCO World Heritage List and transformed into a cultural and tourism hub (Frampton, 2015, p. 77). Despite the success of various adaptive reuse projects, the preservation and repurposing of industrial heritage come with several challenges. First, legal regulations and bureaucratic processes related to historic preservation can sometimes complicate adaptive reuse projects (Ashworth & Tunbridge, 2000, p. 132). Additionally, such transformation projects often require significant financial investments, necessitating collaborations between public institutions and private sector entities. Another critical challenge involves technical difficulties, such as retrofitting old industrial structures to comply with modern safety standards or enhancing their energy efficiency (Stratton & Trinder, 1997, p. 88). Despite these challenges, the adaptive reuse of industrial heritage plays a crucial role in preserving the historical and cultural identity of cities while contributing to sustainable urban development. This process is not limited to physical transformations but also supports local economies and ensures the continuity of collective memory (Pendlebury, 2013, p. 51). Successful implementations demonstrate that industrial heritage is not merely a relic of the past but holds significant potential for shaping the cities of the future.

Adaptive Reuse of Industrial Heritage: The Case of Market Hall Structures

Within the scope of this study, industrial heritage buildings have been evaluated in terms of their cultural, historical, and architectural significance. Historically, market halls were constructed in urban centers to meet the demand for fresh fruits and vegetables and are classified as industrial heritage structures requiring preservation (Janicka-Świerguła, 2020, p. 85). In this context, adaptive reuse—one of the architectural conservation methods—emerges as a significant strategy to maintain the functionality of these buildings and integrate them into urban life. This study examines both local and international examples of market halls that were initially designed for the sale of fruits and vegetables but have since acquired different functions due to changing urban dynamics. The selected cases include Covent Garden in London, Valletta Market Hall in Malta, Sofia Central Market Hall in Bulgaria, Kadıköy Market Hall in Türkiye, and the Bergama Meat and Vegetable Market.

Several common characteristics were influential in the selection of these examples. First, all of the buildings were originally constructed as enclosed market halls to fulfill similar public functions. Second, located in urban centers, these structures serve as spaces directly interacting with social life and prioritizing user engagement. Third, after losing their original functions over time, they were repurposed for cultural, social, or commercial uses through adaptive reuse interventions. Lastly, the preservation of their historical and architectural qualities has been prioritized during the adaptive reuse processes, thereby supporting the sustainability of local memory. Based on these criteria, the selected examples offer meaningful comparisons regarding how similar strategies are applied in different geographical contexts.

One of the examined examples in this context is Covent Garden in London. After the Great Fire of London in 1666, the city underwent a major reconstruction process. Covent Garden was designed in 1828 by architect Charles Fowler in a Neoclassical style and opened in 1830 as a fruit and vegetable market (Covent Garden Market, 2025). In the 1970s, the building was planned to be demolished; however, due to public opposition, it was preserved and underwent restoration. Following a five-year process, it was repurposed in 1980 for commercial and cultural uses (Fig. 2). Today, it continues to serve as a multifunctional public space housing restaurants, theaters, and various commercial enterprises, contributing actively to urban life.

Another notable example is the Valletta Market Hall in Malta's capital, Valletta. Built between 1859 and 1861 using local limestone and cast iron, it suffered damage during World War II air raids. A comprehensive restoration process was carried out between 2016 and 2017, and the hall was reopened in 2018, coinciding with Valletta's designation as the European Capital of Culture (Bianco & Busuttil, 2022, p. 67). Today, it consists of three levels- a basement, a ground floor, and an upper floor- housing an organic produce market below, a local food market at street level, and cultural events on the upper floor. The basement houses organic food markets, the ground floor serves as a local food market, and the upper floor is designated for cultural and social events (Fig. 3).

Figure 2
Façade and Interior Images of Covent Garden Building / *Covent Garden Binası Cephe ve İç Mekan Görselleri* (Sherwin, 2019)

Figure 3
Valletta Market Hall Façade and Interior Images / *Valletta Hal Binası Cephe ve İç Mekan Görselleri* (Bianco, 2023)

Sofia Central Market Hall represents another significant example of adaptive reuse. Sofia, the capital of Bulgaria, is one of Europe's oldest settlements. Built in 1911, the structure features a combination of Neo-Renaissance, Neo-Byzantine, and Neo-Baroque architectural styles, with a steel framework designed by Gustave Eiffel (Hiese, 2024, p. 201). The restoration process was completed between 2016 and 2017, and the building was repurposed as a commercial and cultural complex, incorporating food markets, restaurants, retail stores, and event spaces. During the renovation, remnants of Roman-era structures were preserved and displayed in the basement level, giving the building an additional museum function. The original clock tower was restored, and the central fountain was reconstructed in accordance with its historical design (Fig. 4).

Figure 4
Sofia Central Market Hall Façade and Interior Images / *Sofya Merkez Hal Binası Cephe ve İç Mekan Görselleri* (Hiese, 2024)

In Türkiye, Kadıköy Market Hall serves as a key example of adaptive reuse. Designed in 1927 by Italian architect Umberto Ferrari, the structure initially accommodated fishmongers, butchers, and greengrocers. However, after the market was relocated to Ataşehir in 1973, the building lost its function (Alemdar & Özkan Özbek, 2021, p. 145). In 1986, the structure was assigned to İstanbul University, and in 1989, it was converted into Haldun Taner Theatre, giving it a cultural function (Fig. 5).

Figure 5
Kadıköy Market Hall Façade and Interior Images / *Kadıköy Hal Binası Cephe ve İç Mekan Görselleri* (İstanbul Büyükşehir Belediyesi, t.y.)

Another example examined in this study is Bergama Meat and Vegetable Market, located in Bergama, İzmir, Türkiye. Originally built in 1930, the structure was repurposed as an indoor market in 2010 (Gökçen et al., 2022, p. 173). Constructed using rubble stone, the building follows a rectangular plan and features a wooden truss roof system. Today, it functions as a covered market area, housing retail stalls and commercial spaces (Fig. 6).

Figure 6
Bergama Covered Market Façade and Interior Images / *Bergama Kapalı Pazarı Cephe ve İç Mekan Görselleri* (Bergama Alan Başkanlığı, 2023)

The examples analyzed in this study illustrate different approaches to the adaptive reuse of industrial heritage, demonstrating how historic structures have been preserved and integrated into modern urban life across various cities and cultural contexts. Each of these buildings has retained its unique architectural character while acquiring new functions, thereby supporting cultural continuity. In Türkiye, the Haller Building in Eskişehir is another case of adaptive reuse, currently functioning as the Haller Youth Center. The following sections of this study will provide detailed insights into this structure and its transformation process.

To further emphasize the varying methods and outcomes of market hall adaptations, Table 1 presents a comparative overview of these examples. This concise summary highlights their original construction dates, architects or construction techniques, initial uses, and subsequent transformations, thereby revealing both common trends and unique solutions in different urban contexts. This tabular comparison not only underscores the creative potential of industrial heritage reuse but also provides a backdrop against which the case of the Eskişehir Haller Building can be more closely examined.

Table 1
Comparative Summary of Different Market Halls / *Farklı Hal Binalarının Karşılaştırmalı Özeti*

Market Hall	Location	Construction Date	Architect / Technique	Original Function	New Function	Notable Features	Reference
Covent Garden	London, United Kingdom	Designed in 1828, opened in 1830	Charles Fowler / Neoclassical style	Fruit and vegetable market	Commercial and cultural center (1980)	Demolition was prevented due to public pressure; five-year restoration preserved the historic façade and central courtyard	(Covent Garden Market, 2025)
Valletta Market Hall	Valletta, Malta	1859–1861	Built with local limestone and cast iron	Local food market	Ground floor: local market, basement: organic produce, upper floor: cultural events (2018)	Damaged in WWII; comprehensive restoration 2016–2017; reopened in 2018 to coincide with Valletta's role as European Capital of Culture	(Bianco & Busuttil 2022, p. 67)
Sofia Central Market Hall	Sofia, Bulgaria	1911	Steel framework by Gustave Eiffel; mix of Neo-Renaissance, Neo-Byzantine, and Neo-Baroque	Food market and commercial space	Commercial and cultural complex (2017)	Roman-era ruins preserved and exhibited in the basement (museum function); original clock tower and central fountain restored in line with historical designs	(Hiese 2024)
Kadıköy Market Hall	Kadıköy, İstanbul, Türkiye	Designed in 1927, put into use in the 1930s	Umberto Ferrari / Space for fishmongers, butchers, and grocers	Fish, meat, and produce market	Repurposed as Haldun Taner Theatre (1989)	Lost its function after relocation of the market in 1973; later assigned to İstanbul University, then adapted as a cultural venue	(Alemdar & Özkan Özbek 2021, p. 145)
Bergama Meat and Vegetable Market	Bergama, İzmir, Türkiye	1930	Rubble stone walls, rectangular plan, wooden truss roof	Meat and vegetable market	Covered market area (2010)	Converted into an indoor market; original stone walls and wooden roof preserved, integrated with modern commercial units	(Gökçen et al. 2022, p. 173)

Location, Architectural Analysis, and Adaptive Reuse of Eskişehir Haller Building

The Eskişehir Haller Building is located in Tepebaşı District on Üniversite Street, in close proximity to the city center and major transportation routes (Fig. 7). Its accessible location makes it a focal point for both the local population and university students. Its proximity to Anadolu University and Eskişehir Osmangazi University has contributed to its transformation into a social and cultural hub, particularly catering to the student population. As part of the adaptive reuse project, the Haller Youth Center is registered under block 474, parcel 11 in the cadastral records.

Figure 7
The Location of Haller Youth Center / *Haller Gençlik Merkezi'nin Konumu* (Yandex Map, 2025)

By the decision of the Eskişehir Cultural and Natural Heritage Preservation Board (E.K.V.K.K.) dated November 7, 2003 (Decision No. 2603), the building was officially classified as a Grade I Protected Structure due to its historical significance as the first market hall constructed during the Early Republican Period and its essential role in the city's urban memory. Owned by Eskişehir Metropolitan Municipality, the structure was originally built for the trade of fresh fruits and vegetables, making it an integral part of Eskişehir's industrial heritage.

The two-story building features a reinforced concrete structural system with brick infill walls. Its roofing system consists of a wooden framework covered with traditional Turkish tiles (E.K.V.K.K. Archive). Constructed in the 1930s, the Haller Building functioned as a market hall until 1998. However, after the relocation of the marketplace to a new site in 1990, the structure was abandoned and gradually deteriorated (Fig. 8a, 8b, 8c).

Figure 8
Before Restoration: a) Front Facade, b) Front Facade, Second Entrance, c) Rear Facade. After Restoration: d) Front Facade, e) Front Facade, Second Entrance, f) Rear Facade / *Restorasyon Öncesi: a) Ön Cephe, b) Ön Cephe, 2. Giriş, c) Arka Cephe. Restorasyon Sonrası: d) Ön Cephe, e) Ön Cephe, 2. Giriş, f) Arka Cephe* (E.K.V.K.K. Arşivi, 2024).

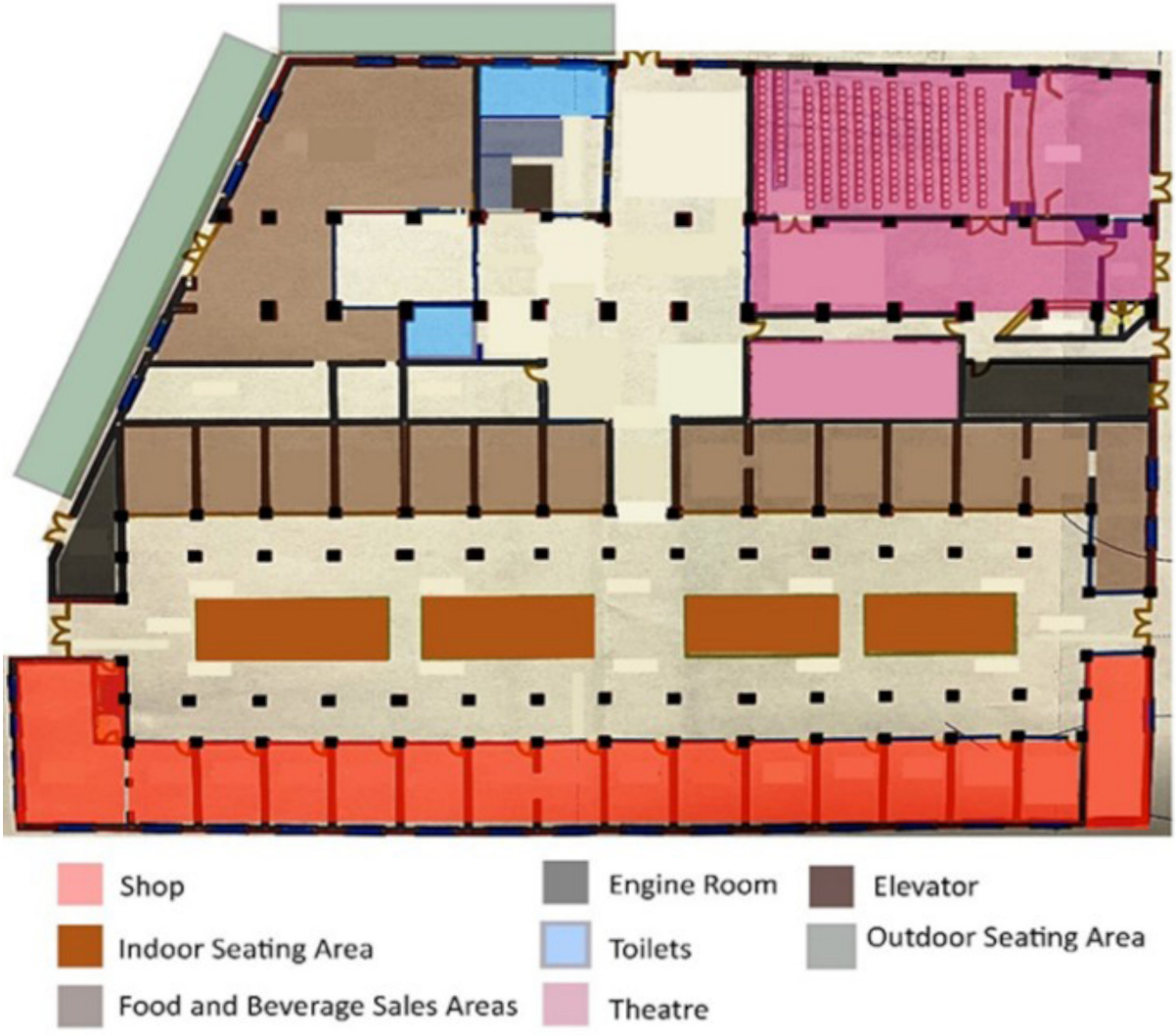
While its abandoned state and visual deterioration led to discussions about its demolition, a restoration and adaptive reuse project was initiated in 2000. Following the completion of the restoration process, the building was reopened in 2001 as the Haller Youth Center (Fig. 8d, 8e, 8f). The various functions assigned to the building from its original construction to its adaptive reuse as a youth center are summarized (see Table 2).

Table 2
Functions Assigned to the Eskişehir Haller Building Since its Construction / *Eskişehir Haller Binasına İnşa Edildiği Tarihten İtibaren Yüklenen İşlevler*

Periods	Function Loaded to the Structure
1930-1990	Fresh Fruit and Vegetable Market
1990-2000	The Structure has no Function
2000 - to the Present Day	Haller Youth Center (Culture and Art Center)

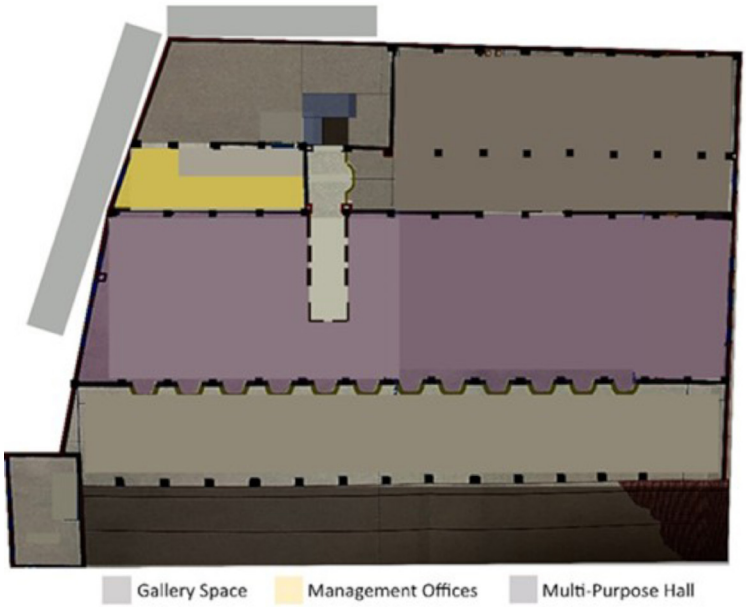
As part of the adaptive reuse efforts undertaken by Eskişehir Metropolitan Municipality, the Haller Youth Center has been transformed into a cultural and entertainment complex, incorporating cafés, bars, souvenir shops, a theater stage, exhibition halls, and a bookstore. This transformation aimed to create a meeting point that bridges the city center with Anadolu University, facilitating social and cultural interactions. Furthermore, this project is considered a pioneering initiative that has inspired the adaptive reuse of other historic buildings in the area (Koç, 2018, p. 124). The schematic ground floor plan of the Haller Youth Center is shown in Figure 9. The ground floor accommodates retail shops, dining areas, seating spaces, a theater hall, restrooms, and a mechanical room, catering to visitors' needs.

Figure 9
Haller Youth Center Ground Floor Schematic Layout Plan / *Haller Gençlik Merkezi Zemin Kat Şematik Yerleşim Planı* (E.K.V.K.K. Arşiv Belgeleri Kullanılarak Yazar Tarafından Oluşturuldu)



The first floor of the Youth Center houses seminar rooms, study areas, and a library, providing spaces for students and visitors to engage in academic activities, conduct research, and attend seminars (Fig. 10).

Figure 10
Haller Youth Center First Floor Schematic Layout Plan / *Haller Gençlik Merkezi Birinci Kat Şematik Yerleşim Planı* (E.K.V.K.K. arşiv belgeleri kullanılarak yazar tarafından oluşturuldu)



The original layout of the building has been largely preserved, and structural additions using steel and glass materials have enabled the design of new spaces that remain consistent with the historical character of the building. In this context, the following sections examine the Eskişehir Haller Youth Center example through a holistic approach, focusing on spatial and volumetric alterations, structural system interventions, technical equipment integration, and environmental arrangements implemented during the adaptive reuse process. Within the scope of spatial and volumetric alterations, modifications to the plan layout in accordance with the new functions, the addition of mezzanine floors, partition walls, and circulation elements have been analyzed. Under the heading of structural system interventions, the strengthening, preservation, or transformation efforts targeting the load-bearing system are evaluated. Technical equipment integration addresses the compatibility of heating and cooling systems, lighting infrastructure, and mechanical-electrical installations with the historic fabric. In the section on environmental arrangements, the building's physical and functional relationship with its immediate surroundings is analyzed through the lens of open space usage, landscape elements, and urban design interventions. These analyses aim to reveal how a balance is achieved between preservation and adaptation to contemporary needs in the process of repurposing a historic building.

Spatial and Volumetric Interventions for the New Function

In the adaptive reuse process of historic buildings, various spatial arrangements and architectural interventions are carried out based on the requirements of the new function. These interventions include the creation of transitional zones to connect different spaces, the addition of mezzanine levels or partition walls, the removal of non-load-bearing interior walls, the implementation of horizontal and vertical circulation elements, and the construction of supplementary annexes for areas that cannot be integrated into the existing structure (Selçuk, 2006, p. 57). Today, interventions required by new functions in historically and architecturally significant buildings are implemented in accordance with zoning regulations and cultural heritage conservation principles. The primary aim of this process is to preserve the structural system and architectural character of the building while adapting it to contemporary needs. Especially in buildings registered as cultural heritage, it is essential to retain the original architectural and artistic values as much as possible and to integrate the new function without compromising the authenticity of the structure. As discussed under the heading "Adaptive Reuse and Industrial Heritage," it is critical to operate within the framework of internationally recognized laws and regulations in the field of architectural conservation. Throughout the adaptive reuse process, the new function should be compatible with the building's existing potential, and the original layout and spatial features must be preserved with minimal intervention.

As one of Eskişehir's industrial heritage buildings, the Haller Building has undergone a variety of spatial interventions during its transformation into a youth center. The ground floor houses cafés, bars, souvenir shops, the Tepebaşı City Theatre stage, exhibition halls, and bookstores, thus functioning as a cultural and recreational venue. Figure 12 illustrates the current spatial arrangement of the ground floor of the youth center, while Figure 11 shows the original plan layout, which features parallel retail units arranged along both sides of the building, consistent with its historical function (Yükselir, 2022, p.102).

Figure 11
Haller Building Interior Image Before Restoration / *Haller Binası Restorasyon Öncesi İç Mekan Görseli* (Eskişehir.net, 2024)

Figure 12
Ground Floor Interior Images After Restoration / *Restorasyon Sonrası Zemin Kat İç Mekan Görselleri*

It has been observed that the interior spatial fabric of the building has largely been preserved. However, various food and beverage venues and commercial units within the youth center have adopted their own decorative approaches (advertisements, posters, menus, etc.), which hinders the perception of the building's original architectural qualities and sometimes creates an atmosphere inconsistent with its historic character. On the first floor, seminar rooms, a library, administrative offices, and study areas are located. To accommodate the needs of the new function, partition walls have been added on this floor, and horizontal and vertical circulation elements have been increased. Designed primarily for educational and administrative purposes, the upper floor has lower circulation density compared to the ground floor. Additionally, spatial and volumetric interventions on this floor have enabled the separation of spaces based on function and include structural additions that support the organizational requirements of the new function (Fig. 13).

Figure 13
First Floor Interior Partitions / *Birinci Kat İç Mekan Bölmeleri*

Analyses reveal that several spatial and volumetric interventions were implemented during the transformation of the Haller Building into a youth center. The ground floor has been allocated to cultural and recreational functions such as cafés, bars, souvenir shops, a theater stage, and exhibition spaces. The upper floor accommodates educational and administrative uses, including seminar rooms, a library, and study areas, with additional partition walls and increased circulation infrastructure. These interventions have resulted in different spatial arrangements on each floor according to their usage intensity. However, the individual decorative choices (such as advertisements, posters, and menus) employed by commercial units on the ground floor may obstruct the perception of the building's original architectural character. Overall, while the interior fabric of the building has largely been preserved, some interventions were inevitable to meet the needs of the new function. This highlights the necessity of balancing the original architectural character with contemporary functional requirements in adaptive reuse projects.

In this context, the adaptive reuse process of the Haller Youth Center was designed in accordance with principles of horizontal and vertical spatial relationships between functions, continuity of internal circulation, and functional hierarchy. Public-oriented functions such as cafés, exhibition areas, theater, and bookstores were organized on the ground floor with a horizontally permeable and interaction-focused layout, enhancing spatial flow and user experience. Continuity between interior and exterior spaces was reinforced through outdoor seating areas, establishing a strong connection between the building and its surroundings. More private and controlled spaces such as the library, seminar rooms, and administrative offices located on the upper floor were connected to the ground level via vertical circulation elements. These vertical relationships reinforce spatial hierarchy and functional separation. Overall, the horizontal and vertical functional relationships within the building were organized to ensure a user-oriented circulation system and to achieve balanced integration between the historical character of the structure and contemporary spatial requirements.

Structural System Interventions for the New Function

When historic buildings are repurposed for new functions, it is essential to reinforce their structural integrity and meticulously carry out necessary repairs. This process requires detailed research and analysis of the load-bearing system and structural elements, ensuring that interventions are implemented based on scientific data. Research findings indicate that the most appropriate approach to architectural conservation is to preserve the original structural and load-bearing system characteristics while conducting necessary reinforcement work (Yalaz & Yaldız, 2020, p. 78). A comprehensive study and examination of the Haller Youth Center's structural system have been conducted, and as a result, the building's load-bearing system has been reinforced with a reinforced concrete and steel frame system. As part of the adaptive reuse efforts, it has been determined that the original load-bearing system has been preserved and strengthened (E.K.V.K.K. Archive). These interventions have been carefully designed to align with the new function of the building, ensuring that modifications are carried out without causing damage to the historic structure. In terms of interior spatial organization, interventions have been designed to preserve the aesthetic and structural integrity of the original building. Notably, the interior columns have been clad with wooden materials, maintaining harmony with the architectural composition. Additionally, necessary repair and renovation work has been conducted on window frames and doors. The original stone flooring, which was a characteristic feature of the former marketplace, has been restored and preserved to maintain the authenticity of the space (Yükselir, 2022, p. 102). The roofing system of the building has also been preserved in its original form, with necessary repairs carried out to adapt it to modern conditions. In the interior, wooden structural roof elements have been exposed, reflecting the distinctive architectural features of the historic building (Fig. 14). This approach enhances the experience of the historic identity of the repurposed building, allowing users to engage with its original character in a tangible way.

Figure 14
Haller Youth Center Interior Images Before and After Restoration / *Haller Gençlik Merkezi Restorasyon Öncesi ve Sonrası İç Mekan Görselleri* (Eskişehir.net, 2024)

Furthermore, band windows positioned on both the right and left sides of the first floor allow for natural daylight penetration, which significantly improves spatial comfort and lighting conditions. These interventions contribute to the spatial continuity of the building, ensuring that the original design is preserved while enabling a sustainable use in alignment with its new function.

Technical Equipment Interventions for the New Function

Technical equipment interventions in repurposed buildings encompass modifications and enhancements made to align the existing structure with its new functional requirements. These interventions not only involve the architectural aspects of the building but also include necessary improvements to its infrastructure. The adaptation of historically significant buildings to contemporary standards is a critical phase in the adaptive reuse process. In this context, it is essential to upgrade the technical systems of buildings in accordance with modern conditions while ensuring necessary maintenance and repairs are conducted (Kocabıyık, 2014, p. 64). The infrastructure and mechanical systems of the Eskişehir Haller Building have been modernized in line with its new function. Electrical installations, lighting, heating, cooling, ventilation, and plumbing systems have been redesigned to meet contemporary comfort standards and revised according to current regulations (Fig. 15, 16). These interventions have been carried out while preserving the historical fabric of the building and ensuring that its original structural characteristics remain intact.

Figure 15
Examples of Indoor Climate Control / *İç Mekan İklimlendirme Örnekleri*

Figure 16
Examples of Indoor Lighting/ *İç Mekan Aydınlatma Örnekleri*

Moreover, improvements in vertical circulation elements have been implemented, including the integration of elevators, staircases, and ramp extensions into the building (Fig. 17). These modifications have been made to enhance accessibility, particularly for individuals with physical disabilities, thereby increasing user diversity and supporting the social and functional sustainability of the building.

Figure 17
Haller Youth Center (a) Ramp and Staircase, (b) Elevator and Staircase Example / *Haller Gençlik Merkezi (a) Rampa ve Merdiven, (b) Asansör ve Merdiven Örnekleri*

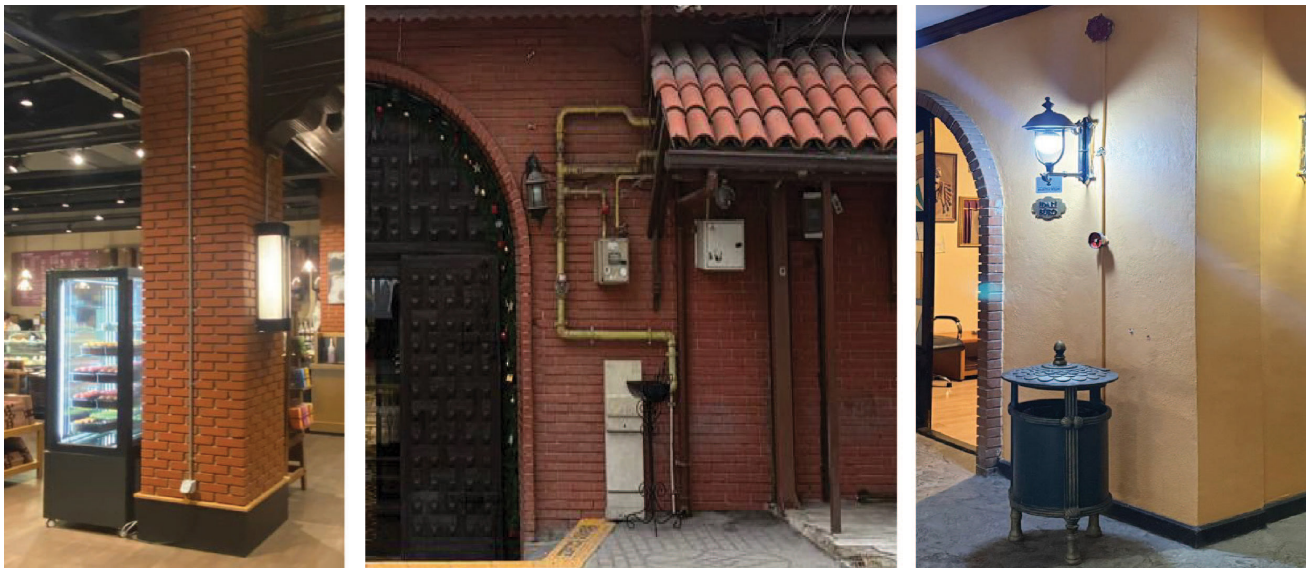
A part of the adaptive reuse efforts of the Haller Youth Center, the structure has been renovated in compliance with fire and earthquake safety regulations. In historical buildings registered as cultural properties to be preserved, the installation of fire safety systems requires consultation with the Cultural and Natural Heritage Conservation Board to ensure that detection, warning, and/or extinguishing systems are integrated without compromising the building's characteristic features (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, 2024, p. 235).

All active fire safety systems implemented in historical buildings must be selected in accordance with national and internationally recognized standards and regulations. Moreover, these systems should be installed in a manner that does not harm the building's original character. Additionally, necessary precautions must be taken to safeguard the historical structure itself, along with any culturally and historically valuable objects within it, as well as to ensure the continuity of its physical existence (Özgünler, 2018, p. 18). In this context, fire protection strategies tailored to the structural characteristics of the Haller Youth Center and its surrounding area have been developed and implemented (E.K.V.K.K. Archive).

Within this scope, electrical, heating, and ventilation systems inside the building have been modernized in compliance with relevant regulations, and routine inspections of these systems are conducted regularly. Fire escape areas have been designated, and additional emergency exit staircases have been planned as part of the adaptive reuse process. Furthermore, emergency exit signage has been integrated into these areas in accordance with the standards established by the Turkish Standards Institute (TSE). Fire alarm and warning systems have been installed along fire escape routes, ensuring their visibility and accessibility. Additionally, fire cabinets and portable fire extinguishers have been placed at appropriate locations within the interior spaces of the building. In parallel, structural reinforcement and repair work has been carried out in accordance with earthquake regulations. Originally constructed as a masonry structure, the Haller building has been reinforced using reinforced concrete and steel frame systems, thereby increasing its earthquake resistance in accordance with current regulations. Technical repairs and additions have been executed without compromising the building's original fabric, with interventions applied externally on plastered surfaces (Fig. 18).

As a result, it has been observed that the Haller Youth Center has been redesigned in compliance with fire safety regulations, updated in accordance with earthquake safety measures, and structurally reorganized. The technical interventions have been implemented while maintaining the building's cultural identity and fulfilling modern safety requirements.

Figure 18
Wall Surface Application Examples / *Duvar Yüzeyi Uygulama Örnekleri*



Additionally, lighting, ventilation, heating, and cooling systems have been enhanced, particularly in the theater hall, where they have been integrated with acoustic systems to meet the needs of the new function. These technical interventions not only improve user comfort but also contribute to the sustainability of cultural and artistic events within the repurposed building.

Environmental Interventions for the New Function

In adaptive reuse projects, historical buildings should not be considered solely as individual architectural entities but rather as integral components of their environmental context. In this regard, integrating the historic building with its surroundings in a manner consistent with its new function strengthens its relationship with the urban fabric and supports sustainable use (Selçuk, 2006, p. 89). Aligning the structure with the physical, social, and functional context of the city enhances user interaction and contributes significantly to the overall success of the adaptive reuse process.

In line with this approach, various landscape arrangements have been implemented around the Haller Youth Center. To increase the usability of the commercial food and beverage areas located on the ground floor, outdoor seating areas have been designed. These open-air areas, which are particularly active during the summer months, strengthen the relationship between interior and exterior spaces, supporting spatial continuity.

Figure 19
Interventions in the Surrounding Area / *Yakın Çevrede Yapılan Müdahaleler*

As shown in Figure 19, various urban design interventions were carried out in the immediate surroundings of the building following its adaptive reuse. These interventions include the arrangement of lighting elements, bicycle and automobile parking spaces, and urban furniture, all of which contribute to the integration of the historic structure with its environment. These changes have not only improved the user experience but also facilitated the harmony of the building with the existing urban landscape, ensuring a holistic spatial integration.

The relationship between the building and its surroundings has been redefined both physically and socially through the transformation process. Previously serving a limited user group with predominantly logistical functions, the structure has evolved into a dynamic public space catering to a broader demographic after its conversion into a youth center. The integration of landscape elements and open spaces has enhanced social interaction and strengthened the bond between the local community and the site. Furthermore, the addition of pedestrian pathways, seating areas, and urban furniture has ensured spatial continuity, allowing the structure to become not only functionally relevant but also socially and culturally embedded within the urban context. Thus, the building has preserved its historical character while becoming a vibrant urban node that responds to contemporary urban needs.

Conclusion and Recommendations

Historic buildings often lose their functionality and become obsolete due to changing social, economic, and technological conditions over time. The preservation and continued use of such structures are not only essential for the sustainability of architectural heritage but also play a crucial role in maintaining cultural and social memory. Adaptive reuse stands out as a method that allows historic buildings to be preserved while being adapted to contemporary usage requirements. Particularly, structures classified as industrial heritage face the risk of losing their architectural identity when they become functionally obsolete and, if not properly restored, may eventually deteriorate and disappear.

This study has examined the adaptive reuse process of the Haller Building in Eskişehir, which was originally constructed as a fruit and vegetable market during the Early Republican Period. The spatial, structural, technical, and environmental interventions undertaken during this process have been evaluated. The analyses indicate that the original fabric of the building has been largely preserved, and the interventions carried out align with conservation principles. The adaptive reuse process has ensured the sustainable use of this historic edifice while also allowing it to retain its connection with urban memory. The continued use of the structure as a public space has helped maintain its cultural and social functions, making it a successful example of industrial heritage conservation. The interventions at the Haller Youth Center reflect key principles that should be considered when repurposing historic buildings for modern use. Preserving the load-bearing system, maintaining spatial organization as close to the original as possible, and integrating the new function without harming the historic structure are identified as the fundamental components of a successful adaptive reuse process.

However, it has also been observed that some commercial interventions may negatively impact the architectural perception of the original interior. Notably, decorative elements and signage used by restaurants and commercial units should be arranged in a manner that aligns with the historical identity of the building. Additionally, ensuring compliance with modern safety, fire, and earthquake regulations has been an essential technical aspect of the adaptive reuse process. Updates have been made to the lighting, ventilation, heating, and cooling systems, and the theater hall has been equipped with acoustic systems to improve spatial comfort. To enhance accessibility for individuals with disabilities, elevators and ramps have been added, contributing to the inclusivity of the building from a social accessibility perspective. Furthermore, environmental interventions carried out as part of urban design have facilitated the integration of the building with its new function. The planning of outdoor seating areas, arrangement of urban furniture, and creation of bicycle parking spaces have contributed to the transformation of the building into a social attraction point.

This research presents significant findings regarding the sustainable conservation and repurposing of historic buildings. Based on the results, several recommendations have been proposed for similar future projects. The most critical criterion in adaptive reuse processes should be the integration of contemporary use without compromising the original identity of the structure. Planning for cultural heritage conservation should not merely consider the building as a physical object but also take into account its relationship with spatial and social memory. Commercial interventions in historic buildings should be designed to respect their architectural character, ensuring that modern elements do not overshadow the historical fabric. Sustainability principles should be prioritized in adaptive reuse projects, and the restoration process should be planned with consideration for energy efficiency and environmental factors. Additionally, interventions aimed at enhancing accessibility for individuals with disabilities should be implemented without compromising the historical integrity of the building.

The Eskişehir Haller Youth Center is considered a representative example of the adaptive reuse of a historic structure. The research findings indicate that the building has been restored in a manner that meets contemporary functional requirements while maintaining its connection with urban memory. However, certain critical aspects that should be considered in adaptive reuse processes have also been identified. In particular, commercial uses should not undermine the original character of the building, sustainable conservation principles must be meticulously applied, and accessibility and safety measures should be enhanced in similar projects. Increasing academic research on adaptive reuse, promoting collaborations among experts from different disciplines, and developing conservation plans that adhere to international standards are necessary steps in improving future practices. In this way, more comprehensive and successful projects can be implemented, safeguarding industrial heritage and ensuring the continuity of cultural identity for future generations.

References

Ahunbay, Z. (2011). *Tarihi çevre koruma ve restorasyon.* Yem Yayınları.

Alemdar, Ö., & Özkan Özbek, M. (2021). Mekân dizimi ve yol bulma metotları ile yaya hareketliliği ve arazi kullanımı ilişkisinin Kadıköy Tarihi Merkezi'nde irdelenmesi. *Journal of Architectural Sciences and Applications, 6*(1), 77-96.

Arkitektuel. (2020). *Tate Modern.* Retrieved February 06, 2025 from https://www.arkitektuel.com/tate-modern/

Ashworth, G. J., & Tunbridge, J. E. (2000). *The tourist-historic city: Retrospect and prospect of managing the heritage city*. Pergamon.

Bergama Alan Başkanlığı. (2023). *Cumhuriyet Dönemi.* Retrieved February 06, 2025 from https://unesco.bergama.bel.tr/miras-alanlarimiz/cumhuriyet-donemi/

Bianco, L., & Busuttil, D. (2022). The restoration of the historic covered market of Valletta, Malta. *Urbanism Architecture Constructions, 13*(2), 133-150.

Bianco, L. (2023). Adaptive re-use of historic covered markets: A review of selected cases in European Capital Cities. *Heritage 2023, 6*(2), 1089-1102.

Burden, E. (2004). *Building reuse: Sustainability, preservation, and adaptive reuse.* McGraw-Hill.

Cantacuzino, S. (1997). *Re-architecture: Old buildings, new uses.* Abbeville Press.

Cengizkan, A. (2006). *Modernizm ve endüstri mirası.* ODTÜ Mimarlık Fakültesi Yayınları.

Choay, F. (2001). *The invention of the historic monument.* Cambridge University Press.

Covent Garden Market. (2025). *Market directory.* Retrieved January 01, 2025 from https://coventmarket.com/market-directory/

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.

Çevre, Şehircilik ve İklim Değişikliği Bakanlığı. (2024). *Binaların Yangından Korunması Hakkında Yönetmelik Kılavuzu.* Retrieved March 15, 2025 from https://meslekihizmetler.csb.gov.tr/binalarin-yangindan-korunmasi-hakkinda-yonetmelik-kilavuzu-yayimlandi-haber-289797

European Route of Industrial Heritage (ERIH). (n.d.). *About ERIH.* Access date: 15.03.2025. https://www.erih.net/

Eskişehir Regional Board for the Conservation of Cultural Assets (E.K.V.K.K.). (n.d.). Archive records.

Eskişehir.net. (2024). *Yaş Sebze ve Meyve Binası'ndan Haller Gençlik Merkezi'ne.* Retrieved November 10, 2024 from https://www.eskisehir.net/yas-sebze-ve-meyve-binasnden-haller-genclik-merkezine

Frampton, K. (2015). *Modern architecture: A critical history.* Thames & Hudson.

Glendinning, M. (2013). *The conservation movement: A history of architectural preservation.* Routledge.

Gökçen, B., Demirci, Ş., & Özdemir, S. (2022). *Endüstri mirasının korunması ve yeniden işlevlendirme uygulamaları.* Yem Yayınları.

Graham, S. (2016). *Vertical: The city from satellites to bunkers.* Verso.

Hiese, M. (2024). *Revitalization: How Kaufland is developing a market hall into the new tourism magnet of Sofia.* Retrieved December 10, 2024 from https://www.across-magazine.com/revitalization-how-kaufland-is-developing-a-market-hall-into-the-new-tourism-magnet-of-sofia/

ICOMOS. (1964). *Venedik Tüzüğü: Anıtların ve Sitlerin Korunması ve Restorasyonu Hakkında Uluslararası Belge.* Access date: 14.03.2025. https://www.icomos.org.tr/Dosyalar/ICOMOSTR_tr0243603001536681730.pdf

ICOMOS. (2003). *Endüstriyel Mirasın Korunmasına İlişkin ICOMOS Tüzüğü*. Retrieved March 15, 2025 from https://www.icomos.org/charters/industrial_e.pdf

İstanbul Büyükşehir Belediyesi. (n.d.). *Kadıköy merkez Haldun Taner Sahnesi restorasyon projesi.* Retrieved February 06, 2025 from https://sehirplanlama.ibb.istanbul/haldun-taner-sahnesi-restorasyon-projesi/

Janicka-Świerguła, J. (2020). *Industrial heritage and adaptive reuse: A European perspective.* Springer.

Kocabıyık, Y. (2014). *Yeniden işlevlendirme kavramı ve bu kapsamda İTÜ Taşkışla binasının incelenmesi* [Unpublished Master's Thesis]. Maltepe Üniversitesi.

Koç, E. (2018). *City branding / image building as a new paradigm: The case of Eskisehir* [Unpublished Doctoral Thesis]. Middle East Technical University.

Özgünler, M. (2018). Tarihi binalarda yangına karşı korunma ve mevzuatın irdelenmesi. *Mehmet Akif Ersoy Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 9(*1), 14-21.

Pendlebury, J. (2013). *Conservation in the age of consensus.* Routledge.

Rodwell, D. (2007). *Conservation and sustainability in historic cities.* Blackwell Publishing.

Selçuk, M. (2006). *Binaların yeniden işlevlendirilmesinde mekansal kurgunun değerlendirilmesi* [Unpublished Master's Thesis]. Selçuk Üniversitesi.

Sherwin, T. (2019). *On location photographing Covent Garden.* Retrieved December 10, 2025 from. https://www.trevorsherwin.co.uk/blog/on-location-photographing-covent-garden

Stratton, M., & Trinder, B. (1997). *Twentieth century industrial archaeology.* Taylor & Francis.

Sudjic, D. (2005). *The edifice complex: How the rich and powerful shape the world.* Penguin.

Tanyeli, U. (2000). *Sanayi Devrimi ve mimarlık: Endüstri yapılarının dönüşümü*. Literatür Yayıncılık.

TICCIH. (2003). *The Nizhny Tagil Charter for the Industrial Heritage.* Retrieved March 14, 2025 from https://ticcih.org/wp-content/uploads/2013/04/NTagilCharter.pdf

TICCIH. (2011). *Dublin İlkeleri: Endüstriyel Miras Alanlarının, Yapıların, Bölgelerin ve Peyzajların Korunmasına Yönelik İlkeler*. Retrieved March 14, 2025 from https://www.icomos.org.tr/?Sayfa=Icomostuzukleri&dil=tr

UNESCO. (1972). *Convention Concerning the Protection of the World Cultural and Natural Heritage.* Retrieved March 14, 2025 from https://whc.unesco.org/en/conventiontext/

Yalaz, E. T., & Yaldız, E. (2020). Yeniden kullanım sonrası yapısal müdahalelerin değerlendirilmesi: Tantavi Ambarı örneği. *Artium, 8*(2), 105-117. https://artium.hku.edu.tr/tr/pub/issue/56173/747707

Yandex Map (2025). Edited by the author. Retrieved February 05, 2025 from https://yandex.com.tr/harita/103835/eskisehir/satellite/?ll=30.513650%2C39.781444&z=17

Yin, R. K. (2018). *Case study research and applications: Design and methods.* Sage Publications.

Yükselir, H. (2022). *İşlevini yitirmiş endüstriyel alanların yenileme/dönüşümünün Eskişehir kent örneklemi üzerinden değerlendirilmesi* [Unpublished Master's Thesis]. Gebze Teknik Üniversitesi.