REFUNCTIONALIZATION OF HISTORICAL BUILDINGS IN LINE WITH THE PRINCIPLE OF SUSTAINABILITY: THE CASE OF BURSA HANLAR DISTRICT

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ABSTRACT

Today, sustainability has become a prominent concept due to the impacts of urbanization and population growth. Historical buildings, which constitute a significant portion of the built environment, play a critical role in preserving cultural heritage and transmitting it to future generations. In this context, the refunctionalization of historical buildings is of great importance within the framework of both sustainability and conservation principles. Refunctionalization refers to the process of reviving structures that have fallen into disuse, lost their original function, or can no longer meet current needs by assigning them new tasks without compromising their physical and cultural characteristics. In this process, the principles of environmental, economic, and social sustainability are taken into account to extend the building's lifespan, ensure the efficient use of resources, and preserve the urban memory. This study discusses the significance, methods, and applicability of refunctionalizing historical buildings in line with the principle of sustainability, evaluating successful examples as reference cases.

1. INTRODUCTION

Buildings that have witnessed history serve as tangible records that convey information about the urban and architectural styles, levels of social awareness, and socio-economic and cultural life of their respective periods. The fact that these structures symbolize historical, architectural, social, and cultural values has led to the understanding that they must be preserved. Since the 19th century, the field of conservation has expanded steadily, aiming to transmit cultural assets—tangible evidence of past ways of life—together with all their values to future generations, despite various threats.

Conservation, which can be described as a form of resistance against the erasure of traces of the past, develops various concepts and practices depending on the conditions of the period in which it is carried out. Historical cities and monuments are legacies from our past cultural heritage. By studying these areas and buildings, it is possible to gain knowledge about past artistic approaches and skills. To ensure the survival and continuity of historical structures, constant maintenance and repair are essential. By this principle, buildings that have lost their original function are also brought under protection. The Italian conservation expert Piero Gazzola expressed his views on this matter as follows: "If an architectural work can no longer serve the purpose for which it was built, its preservation becomes not only a cultural duty but also a practical necessity. The importance given to this matter depends on the cultural maturity of future generations and the priority they will attach to preserving their cultural heritage" (Ahunbay, 2011).

The conservation process, which began with admiration for ancient monuments, took shape after the 19th century and evolved into a distinctive field. As an area of practice, this concept—relatively new—has reached a new dimension under the influence of global conditions. Today, contemporary conservation theories, legal regulations, the necessity of effectively managing interdisciplinary expertise, industrial heritage, modern heritage, landscape planning, advanced documentation techniques, refunctionalization of historical buildings, and the principle of sustainability are among the key issues in the field.

Technological advancements have led to high levels of energy consumption and the depletion of limited resources, thereby highlighting the importance of sustainability and raising awareness in this regard. Within the scope of this principle, historical buildings have been able to maintain their existence by being reused as valuable resources instead of constructing new buildings, thereby minimizing environmental damage and ensuring the continuity of social culture.

Specific criteria must be in place for repair and restoration works on historical buildings. This study aims to raise awareness regarding the importance of preserving cultural assets, determine how their sustainability can be ensured, examine sustainability methods, and provide a roadmap for proper implementation guided by these methods. It also seeks to facilitate the preservation of structures through specific sustainability and refunctionalization strategies. For this purpose, various examples from Bursa have been examined.

2. CULTURAL ASSETS

In the Law No. 2863 on the Conservation of Cultural and Natural Assets, cultural assets are defined as all kinds of movable and immovable properties that possess original value, are related to science, culture, religion, and fine arts, and belong to prehistoric and historical periods, whether located above ground, underground, or underwater (Deniz & Savşkan, 2018). Cultural assets are also defined in international documents. Article 1 of the Convention Concerning the Protection of the World Cultural and Natural Heritage defines cultural heritage, encompassing all

immovable cultural properties within this scope. Accordingly, "Monuments" are defined as architectural works, works of monumental sculpture and painting, archaeological structures and artifacts, inscriptions, and groups of elements that have outstanding universal value from the point of view of history, art, or science. "Sites" are defined as single or combined works of architecture, their ensembles, and their locations in the landscape, which possess outstanding universal value from a historical or artistic perspective.

Any asset symbolizing the social, economic, cultural, political, religious, and aesthetic values of a society and serving as a historical document is defined as a "Movable Cultural Asset." Movable Cultural Assets are objects—either natural or artificial—that reflect the historical, cultural, and aesthetic values of a nation. These include architectural works, works of art, archaeological remains, books, musical instruments, handicrafts, historical documents, coins, mummies, costumes, photographs, films, and many other items. Movable Cultural Assets constitute an essential part of a nation's historical and cultural heritage and must be preserved, promoted, and transmitted to future generations (Asatekin, 2004).

In addition to this definition, "Immovable Cultural Assets" are those that must be preserved in their original location and cannot be relocated. Examples include rock tombs; inscribed, carved, or sculpted stones; painted caves; mounds; ruins; castles; fortresses; bastions; city walls; historical barracks; caravanserais; inns; baths (hamams); madrasas; mausoleums; tombs; epitaphs; bridges; aqueducts; water channels; cisterns and wells; remnants of historical roads; altars; shipyards; docks; marketplaces; covered bazaars; synagogues; basilicas; religious complexes (külliyes); remains of ancient monuments and walls, and similar structures.

As these definitions indicate, cultural assets are almost inseparable from the concepts of "conservation" and "preservation." Furthermore, in Article 3 of the Law No. 2863, the definitions section states that conservation and preservation refer to the safeguarding, maintenance, repair, restoration, renewal, and refunctionalization of immovable cultural and natural assets (Atılgan, 2016).

3. THE CONCEPT OF HISTORICAL BUILDING

The term historical building refers to the historical value of a structure. Historical buildings reflect the historical, cultural, social, and aesthetic values of a settlement or region. They are significant in defining the historical, cultural, and artistic heritage of a country or locality (Atmaca & Reyhan, 2021). Historical buildings are structures identified as possessing historical or architectural significance. These buildings may be protected by laws and regulations that prevent their demolition or significant alteration. Examples of historical buildings include old churches, municipal buildings, museums, and houses constructed in a specific style or period. They are generally considered valuable due to their cultural, architectural, and aesthetic significance and are preserved to maintain connections with the past and to educate future generations (Hasol, 2002).

The most important characteristic of a historical building is that, beyond being a physical space, it serves as a document. The documentary value of cultural assets, which provide abundant information about a society's past, is not evaluated based on their historical proximity. Even if a historical building belongs to the recent past, it holds equal value to older structures if it possesses socio-cultural or societal importance (Asatekin, 2004).

4. THE CONCEPT OF CONSERVATION AND REFUNCTIONALIZATION

From the Hellenistic period to the present day, the concept of conservation has evolved into a more meaningful and qualified practice. Conservation encompasses all interventions carried out to ensure that structures and spaces containing humanity's historical memory and traces of past cultures can continue their functions and avoid disappearance. With the growing awareness of conservation, the concept, once associated solely with "preservation," has gained a stronger meaning through the principles of "keeping alive" and "sustainability." As this awareness developed, specific criteria were established, laws were enacted, and the concept of conservation became more effective in preventing the destruction of important buildings and spaces and safeguarding the historical and cultural heritage of societies (Saraç, 2017).

In Turkey, as in many other countries, the preservation of significant historical and cultural structures is regarded as one of the most essential components of cultural policy. Under the pressures of technological and urban development that began in the twentieth century, the maintenance and protection of monuments have become a cultural component of environmental protection (Tercan, 2018).

A city has a constantly changing, fast, and dynamic structure. It develops as a whole, encompassing all its historical, social, cultural, and economic values, and adapts to an ever-changing order. In such an evolving urban environment, the development of conservation awareness must keep pace with this dynamic nature. In urban areas, conservation is often defined as "the set of measures necessary to ensure the survival of structures, natural values, or urban districts that possess historical or artistic value" (İrkit, 2019).

The first step in ensuring the historical sustainability of cities must be urban conservation. According to the Dictionary of Urban Science Terms, urban conservation is defined as "the safeguarding of works, monuments, and natural beauties of high historical and architectural value located in certain parts of cities against any destructive, aggressive, or harmful actions for the benefit of future generations." Another related concept is the site area, defined as "an area, whether natural, man-made, or a product of both, containing immovable cultural assets worthy of protection." When related to cities, this becomes the concept of an urban site area, defined as "areas that combine urban and local characteristics, whose architectural and art-historical physical features reflect the socio-economic

and socio-cultural structure and lifestyle of the surrounding environment or period, and which display integrity of fabric in these aspects" (Negiz, 2017).

Today, the understanding of conservation is shifting away from the idea of freezing structures in time toward the concept of keeping them alive by adapting them to the requirements of the present day. The preservation of a historical building can be ensured sustainably by reassigning it a new function over time. Refunctionalization is the general term for projects in which an existing building is adapted for a use different from its original function. The concept of refunctionalization, which arises in the context of preserving structures significant to urban identity and ensuring the sustainability of this identity, is a frequently preferred method in contemporary conservation approaches (İslamoğlu, 2018). The Venice Charter is the first international document to address the concept of refunctionalization institutionally. Article 5 of the Charter states that refunctionalization can be used as a conservation method provided that the decorations and plans of historical buildings are not altered from their original form (URL-1).

The refunctionalization method not only ensures the sustainability of buildings by repairing them and assigning them new functions in place of lost ones, but also contributes to the economic and socio-cultural context by bringing a new identity to their surroundings. Moreover, it is an approach that supports the formation of ecological systems and enhances the quality of urban life (Kul, 2009).

Refunctionalization of historical buildings is a contemporary approach preferred worldwide to ensure the sustainable development of historical areas. As a result of social and economic changes, historical buildings may lose their functions and be abandoned. Bringing these disused historical buildings back into use with appropriate functions is an essential part of sustainable conservation. The ideal way to preserve and sustain every structure that constitutes the cultural-historical component of a city is to ensure its continued use either with its original function or with functions as close as possible to the original (Yavaşcan, 2021).

5. HISTORICAL BUILDINGS OF THE REPURPOSED HANS DISTRICT IN BURSA

Silk production, trade routes, and the organization of domestic and foreign merchants drove the commercial development of Bursa. Emerging in the 14th century, this area expanded through the addition of bedestens (covered market halls), covered bazaars, *arastas* (Persian origin, meaning market), shops, markets, and bazaars, completing its development by the mid-16th century. During the 17th and 18th centuries, while the state lost its political power, no new constructions were undertaken. Following the proclamation of the Tanzimat Edict in 1839, significant cultural and socio-economic transformations occurred. In this period, administrative and cultural buildings were constructed in Bursa, and new roads were opened to introduce innovations to the transportation system. Irregularities in urban development marked the 19th century. By the late 19th and early 20th centuries, urban projects sought to establish a well-defined central district, and these plans were implemented. In the Republican era, the Hans District continued to maintain its status as a commercial, administrative, and cultural center (Köprülü Bağbancı, 2007).

Photograph 1. Bursa Han District

An examination of the past and current functions of the Hans in the region reveals the following:

Pirinç Han: Commissioned by Sultan Bayezid II between 1490 and 1508 to provide revenue for his mosque and *imaret* in Istanbul, Pirinç Han was designed by architects Yakup Şah, son of Sultan Şah, and Ali, son of Abdullah. Referred to in historical records as *Han-ı Cedid-i Sani* and *Han-ı Cedid-i Evvel*, Pirinç Han is organized around a large square courtyard, featuring fifty rooms on the upper floor and forty-seven rooms on the lower floor, with two-story arcades running along the fronts of the rooms. The walls were constructed using one course of roughly

hewn rubble stone and three courses of brick, while the eastern façade features ashlar stone alternating with three courses of brick. The eastern entrance is adorned with relief motifs. The lower arcade is covered with cross vaults, while the upper arcade is roofed with domes. The 1855 earthquake caused significant damage, particularly to the upper floor. Over time, various annexes were added in the courtyard and interior to restore usability to the damaged sections. The northeast corner was cut off during the opening of Hamidiye Street between 1903 and 1906. Two rows of shops covered with vaults extending eastward were destroyed by fire in 1519 and later repaired. Restoration of Pirinç Han began in 1983 and was completed in 2004. Today, the ground floor houses several cafés, while most of the upper floor remains vacant.

Photograph 2. Pirinç Han, Bursa

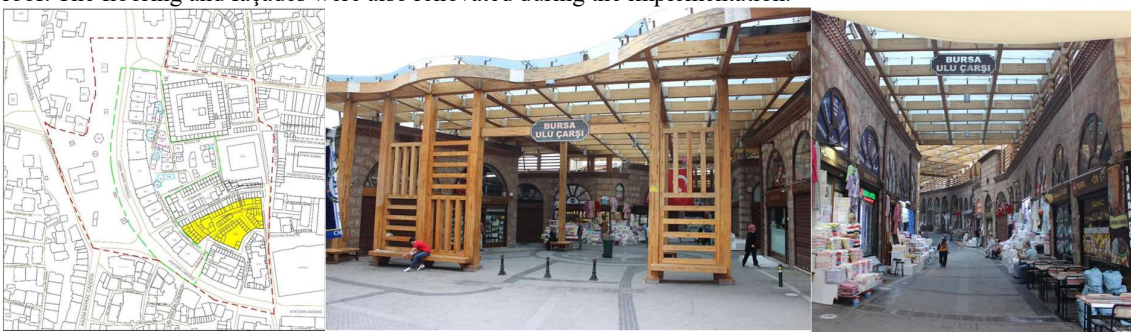
İpek Han: Located between the Grand Mosque (Ulu Cami) and Pirinç Han, İpek Han was commissioned by Sultan Çelebi Mehmed in the first half of the 15th century to generate income for the Yeşil Külliye. In historical records, it is referred to by various names such as *Sultan Hanı*, *Han-ı Harir*, *Yeni İpek Hanı*, and *Eski İpek Hanı*. At one time, it was also known as *Faytoncular Hanı* or *Arabacılar Hanı* due to the presence of manufacturers and repairers of Landon-type carriages. According to several sources, the architect of İpek Han was Hacı İvaz Paşa, a distinguished statesman, soldier, and architect of the Çelebi Mehmed era. Constructed with rough-cut stone and brick masonry, archival documents indicate that the han originally contained 76 rooms—38 on the ground floor and 38 on the upper floor—along with a stable, a central fountain, four rooms, and a mescit (small mosque) situated above these rooms. The arcades in front of the rooms are covered with domes and vaults, while the rooms themselves are roofed with barrel vaults. In later periods, some spaces were converted into rooms, increasing the total number to 81. During the late 19th century, under Governor Ahmed Vefik Pasha, the eastern entrance façade of the han was demolished during the opening of Mecidiye Street; this section was rebuilt after 1958. Today, the Han houses tailor workshops and clothing shops.

Photograph 3. İpek Han, Bursa

Bakırcılar Bazaar: Bursa court records indicate that in 1620, coppersmiths conducted trade in the Bit Bazaar and Gelincik Bazaar, often spreading to these markets to sell both new and second-hand copper goods. At one time, lathe workshops were also located in this bazaar. The bazaar suffered severe damage in the fire of 1958 but was reconstructed afterward. Today, it is primarily engaged in textile-oriented trade.

Photograph 4. Bakırcılar Bazaar, Bursa

Ulu Bazaar: The historic bazaar, restored after the 1958 fire, underwent its most recent restoration in 2018. As part of the project, the bazaar, consisting of nine streets and three squares, was covered with a wooden and glass roof. The flooring and façades were also renovated during the implementation.



Photograph 5. Ulu Bazaar, Bursa

Mahkeme (Vaiziye) Madrasa: Known as Vaiziye Madrasa, this madrasa-market complex was commissioned by Amcazade Hüseyin Çelebi and is located to the west of the Grand Mosque (Ulu Cami). Built during the reign of Sultan Bayezid I (1389–1402), the madrasa suffered significant damage during the 1855 earthquake. In 1957, archaeological works revealed its foundations, allowing for a reconstruction of its original plan. The complex features 21 rooms and a domed classroom, several domed rooms to the east, and a colonnaded courtyard surrounded by 37 shops. The structural walls of the madrasa are constructed with brick and rubble stone—currently, the building functions as a business center.

Photograph 6. Mahkeme (Vaiziye) Madrasa, Bursa

Kapan Han: Located on Atatürk Street (originally Saray Street, later known as Government Street), Kapan Han was built by Sultan Murad I in the second half of the 14th century. The han is a two-story structure with rooms opening onto arcades surrounding a courtyard. Records from 1685 indicate that it had 29 rooms. However, during the widening of Government Street under Reşit Mümtaz Pasha, the southern part of the building was completely demolished. Today, the han is used primarily by textile merchants, with only the entrance—partially covered by a vault—and several northern rooms retaining their original form.

Photograph 7. Kapan Han, Bursa

6. EVALUATION AND CONCLUSION

Turkey is a country rich in cultural heritage. However, cultural heritage assets under state protection in Turkey cannot be adequately preserved due to insufficient conservation policies, lack of supervision, public unawareness, and inadequate urban planning. Bursa, a city with a significant cultural heritage, has seen numerous efforts aimed at the preservation of its historical buildings. Similar to developed countries, important steps have been taken in Bursa to repurpose immovable cultural assets, particularly for tourism activities. It is increasingly recognized that the protection of such facilities can be more effectively managed through administration and that serving cultural tourism will contribute to Turkey's tourism economy. The ability of these high-economic-impact facilities to provide better services depends on a rational tourism policy, a sound understanding of conservation economics, and raising public awareness.

To prevent the erasure of traces of the past and historical environments, the sustainability of the use of these areas has been emphasized. Accordingly, the functional value of the building's use and the priority of its conservation necessitate exploring the possibilities of adaptive reuse for buildings that have lost their original function.

Within the scope of this study, the importance of adaptive reuse of historical buildings and their compatibility with the existing historic fabric were determined, and the selection of an appropriate function for conservation purposes was targeted. To this end, while determining the spatial requirements of the applied function, a roadmap was proposed to test the suitability of the building for the new function.

Firstly, a literature review was conducted to identify the necessary spatial requirements for the new function planned for the historical building, resulting in the preparation of a space-function diagram based on the obtained data. Secondly, the success of the adaptive reuse and compatibility of the new function should be compared with the existing building characteristics. For successful outcomes, the building's environmental features, as well as spatial properties, must be analyzed for compatibility with the new function. The analyses should evaluate the building's environmental and architectural features (such as dimensions, height, form, and spatial configuration) about the new function. Additionally, opinions should be collected from residents regarding whether the building's location within the urban context aligns with the new function.

For this purpose, the building's accessibility for pedestrians and vehicles, presence of green areas, parking availability, and the suitability of sales areas must be assessed to determine whether these meet the functional requirements. The analysis of the building's spatial configuration for the new function should investigate the appropriateness of the building's size, height, spatial arrangement, circulation scheme, and equipment for the intended use.

REFERENCES

Ahunbay, Z. (2011). Historical Environment Conservation and Restoration. Yem Publishing, Istanbul.

Asatekin, N. G. (2004). Our Cultural and Natural Assets: What, Why, and How Should We Protect? Ministry of Culture and Tourism of Turkey, DÖSİMM Printing House, Ankara.

Atılgan, C. (2016). An Evaluation on the Conservation of Immovable Cultural Properties in Turkey in the Light of National and International Regulations. Art and Art Journal, (6), 249-261.

Atmaca, G., & Reyhan, K. (2021). Adaptive Reuse in Restored Historic Buildings: A Field Study in Unye. Journal of Interior Design and Academy, 1(2), 82-99.

Deniz, T., & Savaşkan, Y. (2018). Contribution of Hagia Sophia Museum to Istanbul Cultural Tourism within the Scope of Immovable Cultural Properties. Safran Journal of Culture and Tourism Research, 1(2), 92-103.

Hasol, D. (2002). Encyclopedic Dictionary of Architecture. YEM Publishing, Istanbul.

The Venice Charter (1964). http://www.icomos.org.tr/Dosyalar/ICOMOSTR_tr0243603001536681730.pdf

İslamoğlu, Ö. (2018). Building-Function Compatibility in the Adaptive Reuse of Historic Buildings: The Case of Rize Museum. Journal of History, Culture and Art Research, 7(5), 510-523.

Negiz, N. (2017). Cultural Heritage in the Historical Sustainability of Cities: Reflections on Its Importance and Value. Academia Journal of Social Sciences, 3(1), 159-172.

İrkit, G. K. (2019). The Role of Local Governments in Cultural Heritage Areas. Master's Thesis, Mimar Sinan Fine Arts University, Istanbul.

Köprülü Bağbancı, Ö. (2007). Examination of the Change and Transformation Process of Bursa Hanlar District and a Study on Its Conservation. Istanbul, Turkey.
Kul, B. (2009). Reconstruction and Adaptive Reuse to Prevent Uselessness in Historic Urban Areas: The Case of Kayseri Tavukçu Neighborhood. Master's Thesis, Erciyes University, Kayseri.
Saraç, Ö. (2017). Attractive Factors Affecting Sustainability in Adaptively Reused Historic Buildings. Master's Thesis, Kastamonu University, Kastamonu.
Tercan, B. (2018). Conservation Policies: Protection of Historical, Cultural, and Natural Assets Against Disasters. Journal of Social Sciences Institute of Yüzüncü Yıl University, (40), 299–318.
Yavaşcan, E. E. (2021). Design in the Historical Environment: Workshop Education on New Buildings and Adaptive Reuse. Modular Journal, 4(1), 1-15. ISSN 2651-5210.