

**PRESERVING THE ARCHITECTURAL IDENTITY OF HISTORIC CITIES:
ADAPTIVE REUSE AND INTERNATIONAL EXPERIENCE**

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Annotation: This article examines contemporary international approaches to preserving the architectural uniqueness of historic cities through the practice of adaptive reuse. It analyzes the theoretical foundations and evolution of this approach, as well as its role in the context of sustainable urban development. Particular attention is given to international case studies demonstrating various strategies for integrating historic buildings into the modern urban environment while preserving their cultural and architectural value. It is shown that adaptive reuse is becoming an important tool for implementing the concept of a sustainable and circular city, integrating environmental, economic, and sociocultural aspects. Based on international experience, conclusions are drawn regarding the feasibility of applying these approaches to the historical cities of Uzbekistan, including Samarkand.

Relevance

The urgency of preserving the historical and architectural uniqueness of the historic parts of Uzbekistan's cities is heightened by contemporary global challenges: urbanization, climate, tourism, and economic pressures, restoration that violates heritage conservation principles, and the need for renovation and improvement of infrastructure. These conditions pose a risk of losing historic buildings, their structure, and their cultural context.

Given the relevance of the problem, it is important to consider global practice, where a number of studies and practices are being implemented that allow for the preservation of the historical authenticity of cities to be combined with the demands of modern life.

One of the strategies was Adaptive Reuse. Adaptive reuse is the process of repurposing existing buildings for new purposes while preserving their historical value as their function changes. It is a sustainable alternative to demolition, reducing carbon footprint, conserving resources, and preserving architectural heritage. Examples include repurposing old buildings into diverse spaces for people.

The purpose of this article is to examine modern international approaches and practices for the reconstruction and adaptation of historical buildings, and to provide recommendations suitable for the city of Samarkand.

Introduction

Adaptive reuse of buildings often proves less cost-effective in the short term: the costs of restoration, structural reinforcement, and upgrading utility systems can exceed the cost of demolition and new construction. However, such an assessment only provides a narrow financial horizon and fails to consider a broad range of values, including material, environmental, and cultural ones.

In the classical sense, adaptive reuse combines three points:

Preservation of architectural form, functional transformation and implementation of modern standards (communications, comfort, sustainability) without destroying historical value.

Recent research broadens the approach to include environmental sustainability, sustainable resource consumption, climate adaptation and energy retrofitting – all important for the long-term preservation of buildings.

Theoretical foundations of adaptive reuse

Adaptive reuse of buildings of historic value is also addressed in various internationally recognized charters. For example, the ICOMOS Burra Charter cites adaptive reuse as a conservation strategy for buildings of historic value that maintains their historical value while enhancing their functionality and future usefulness. The UNESCO Recommendation on the Historic Urban Landscape also mentions the need to apply a "conservation through transformation" approach, which emphasizes the need to manage change in a historic urban area. [1], [2]

At the same time, new technologies are emerging: digital recording, monitoring, smart climate control systems, energy-efficient solutions that can be implemented with minimal damage to the historical fabric.

International practices of adaptive reuse

1. Saint Sophia Cathedral is an Orthodox church located in the Daoli District of Harbin, Heilongjiang Province, China. Built in the early 20th century, it ceased serving as a religious building after restoration in the 1990s and was converted into the Harbin Architecture Museum. Today, it is a popular tourist attraction and a symbol of the cultural interaction between China, Russia, and Europe.

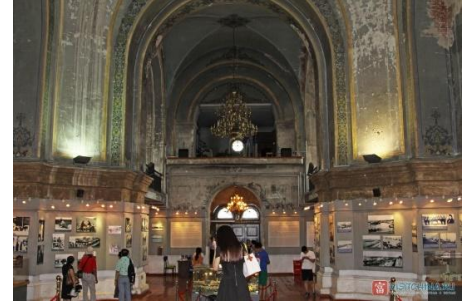


Photo <https://visitchina.ru/>

2. Monastery of Sant Francesc (Santpedor, Spain):

An abandoned 18th-century church was transformed by architects David Closes into a cultural center and auditorium. The historic walls were preserved, and new elements (staircases, ceilings) were created in a contemporary style, contrasting with the ruins.



Photo: <https://archi.ru/> <https://www.reddit.com/>

3. Coal Drops Yard (London, UK):

Heatherwick Studio transformed 19th-century coal yards, built to handle London's coal, into a contemporary retail and public complex. Two long Victorian buildings were meticulously restored, and a new roof was created between them, connecting the buildings.



Photo: <https://www.archdaily.com/>

Cau Dat Tea Museum, Dalat, Vietnam: This is an example of the revitalization of an industrial site, where production facilities have been transformed into a public space. The Cau Dat Tea Museum has been restored from its original 1929 building.

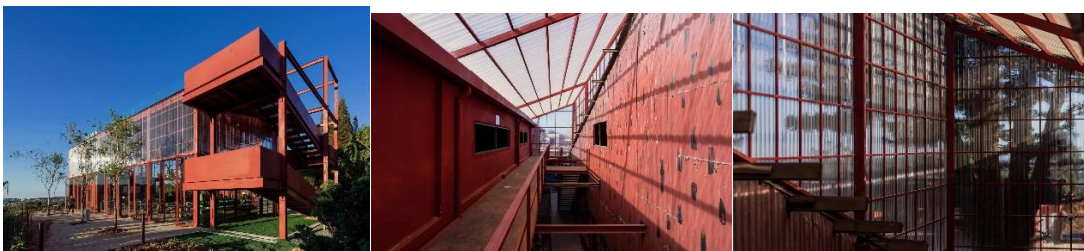


Photo: [tps://museemagazine.com/](https://museemagazine.com/)

6. Tate Modern Gallery (London, UK) is housed in the former Bankside Power Station, built between 1947 and 1963 to designs by architect Sir Giles Gilbert Scott. Closed in 1981, the power station was renovated by the Swiss firm Herzog & de Meuron and opened as a contemporary art gallery in May 2000.

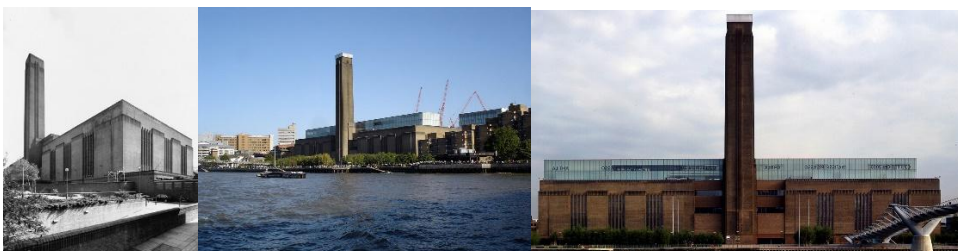


Photo: <https://redeveloper.ru/>

7. Orsay Museum (Paris, France): The former Orsay train station and Hotel, built in 1900, has been converted into a museum specializing in 19th- and 20th-century European painting and sculpture. The high vaulted ceilings and original architecture of the station have been preserved.



Photo:<https://all-andorra.com/>

An analysis of international practices shows that successful adaptive reuse projects are based on a balance between preserving the historical features of a building and its functional integration into the modern urban environment.

Application prospects for Uzbekistan

This is particularly relevant for Uzbekistan, which possesses a significant reservoir of historical architecture from various periods, some of which has lost its original function or is ineffectively utilized. In such circumstances, adaptive reuse of buildings represents a promising approach for preserving the historical and cultural value of structures, ensuring their functional integration into the modern urban environment, and extending the life cycle of architectural heritage. 5. Ecological, economic, and cultural synthesis – the concept of circular heritage

The concept of circular heritage and sustainable development

In 2025, the paper "Adaptive Reuse of Cultural Built Heritage: Towards the Implementation of the Circular City Model" was published, examining the adaptive reuse of cultural heritage sites as one of the tools for implementing the circular city model. The authors emphasize that the adaptive reuse of historic buildings contributes to extending their life cycles, reducing construction waste, reusing materials, reducing energy and water consumption, and developing social interaction and local communities [10]. The study notes that cultural heritage can act not only as an object of preservation but also as an active element of sustainable urban development, integrating environmental, economic, and sociocultural aspects of the urban environment. This paradigm is particularly relevant for regions with limited resources, where it is important to minimize the environmental impact while preserving historical and cultural heritage.

Conclusion

An analysis of international experience shows that the adaptive reuse of historic buildings is becoming one of the most effective tools for preserving architectural heritage in the context of modern urbanization. Adaptive reuse not only preserves the historical identity of buildings but also integrates them into the modern urban environment through new functions, ensuring their continued use and economic sustainability.

The international examples reviewed demonstrate various approaches to the reconstruction and adaptation of historic buildings—from minimal intervention to a contrasting blend of historical and modern architectural elements. Preserving the architectural authenticity, historical morphology, and cultural context of the urban environment remains a key factor in successful adaptation.

Contemporary research also shows that adaptive reuse is considered part of the concept of a sustainable and circular city, where historical heritage becomes an element of environmental, social, and economic sustainability. Reusing existing buildings helps reduce construction waste, lower resource consumption, and extend the life cycle of architectural structures.

For Uzbekistan, which possesses a significant historical and architectural heritage, this approach is particularly relevant. Many historic buildings from various periods have partially lost their original functions or are being used ineffectively. Under these circumstances, the application of adaptive reuse principles could become an important tool for preserving the historic environment of Samarkand and other historic cities in the country, allowing heritage protection to be combined with contemporary societal needs and sustainable urban development.

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