

THE PROBLEM OF RESTORATION AND PRESERVATION OF THE HISTORICAL QUARTERS OF BUKHARA

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Annotation:

This article is devoted to the problems of restoration and preservation of historical monuments of architecture in the city of Bukhara, Uzbekistan. The article deals with the main problems associated with the restoration of monuments, as well as innovative and scientific methods for solving them. In addition, the article describes the problems of the residential historical quarters of Bukhara, including the lack of green areas and parks, and suggests solutions to improve the comfort of life in the city, such as the creation of new parks, greening the streets, and the preservation of historical gardens and parks.

In conclusion, the importance of the preservation and restoration of historical monuments of architecture, as the cultural heritage of the city and the national treasure of Uzbekistan, is emphasized..

Key words:

Bukhara, historical quarters, restoration, preservation, architectural heritage, green areas, parks, ecology, urbanization, tourism, cultural heritage, conservation issues, innovation, scientific methods, city management, residential areas, microclimate, urban environment.

There are many historical monuments in Uzbekistan, which are not only objects of cultural heritage, but also important sources of information about the history and culture of this country. However, many of these monuments are in a deplorable state due to natural aging, wars, misuse, vandalism and other factors.

Restoration and preservation of architectural monuments are important tasks for Uzbekistan, but these processes are also complex and raise many questions. There is a problem of choosing the methods of restoration, conservation and use of architectural monuments, as well as the problem of ensuring sufficient funding for these works.

The purpose of this article is to analyze the problems associated with the restoration and preservation of architectural monuments in Uzbekistan, as well as to consider possible ways to solve them. The article will review an overview of existing restoration methods, as well as propose new approaches based on scientific principles and modern technologies.

In this article, we turn to the teaching staff to discuss the problems of restoration and preservation of architectural monuments in Uzbekistan. We hope that our work will be useful for the development of new approaches and methods for the restoration, conservation and use of architectural monuments in Uzbekistan.

Within the framework of this article, we will focus on the problems of restoration of architectural monuments in the city of Bukhara, which is one of the cultural centers of Uzbekistan and is included in the UNESCO World Heritage List.

Bukhara is an ancient city with a rich history and cultural heritage, including many architectural monuments such as mosques, madrasahs, caravanserais, baths, mausoleums and houses..



However, many of these monuments are in a deplorable state due to various factors such as natural aging, wars, misuse, vandalism and insufficient funding for restoration work.

Particularly acute is the problem of preserving architectural monuments in the old city of Bukhara, where many buildings are of great historical value and are part of the UNESCO cultural heritage. But despite this, many buildings are in disrepair and in urgent need of restoration..

Another problem is the lack of qualified specialists who can carry out works on the restoration and preservation of architectural monuments in accordance with scientific principles and standards.

In this article, we will analyze these problems using the example of Bukhara and consider possible ways to solve them. We will also look at scientific and innovative restoration methods that can help preserve the cultural heritage of the city of Bukhara for years to come. Several innovative and scientific restoration methods can be proposed that can help preserve architectural monuments in Bukhara:

1. 3D scanning and modeling - this technology allows you to create an accurate digital model of an architectural monument, which can help in planning and carrying out restoration work. Using the 3D model, you can also determine which parts of the building need restoration and how much time and materials will be required..
2. Application of new materials - there are new materials that can help in the restoration of architectural monuments. For example, using synthetic materials instead of traditional bricks or stones can reduce restoration costs and make a building more durable.
3. Digital technologies - there are special programs that can help architects and specialists in restoration work. For example, programs for analyzing the thermal insulation of a building, which allow you to identify areas where heat is lost most intensively. This may help to preserve traditional building heating methods.

4. Electric impulse technology is a new method for cleaning and preserving the surface of ancient buildings. Electric impulses can remove dirt and other contaminants from the surface while maintaining the structure of the building.
5. Methods of biotechnology - there are methods that can help in the conservation of ancient buildings using biotechnology. For example, the use of microorganisms to clean the surface of a building from pollution or the use of vegetation to improve the microclimate in a building.

These and other innovative and scientific restoration methods can help preserve the architectural monuments in Bukhara and preserve the rich cultural heritage of the city for future generations.

Unfortunately, in the process of restoring architectural monuments in Uzbekistan, construction companies may make some mistakes that may adversely affect the condition and preservation of monuments.

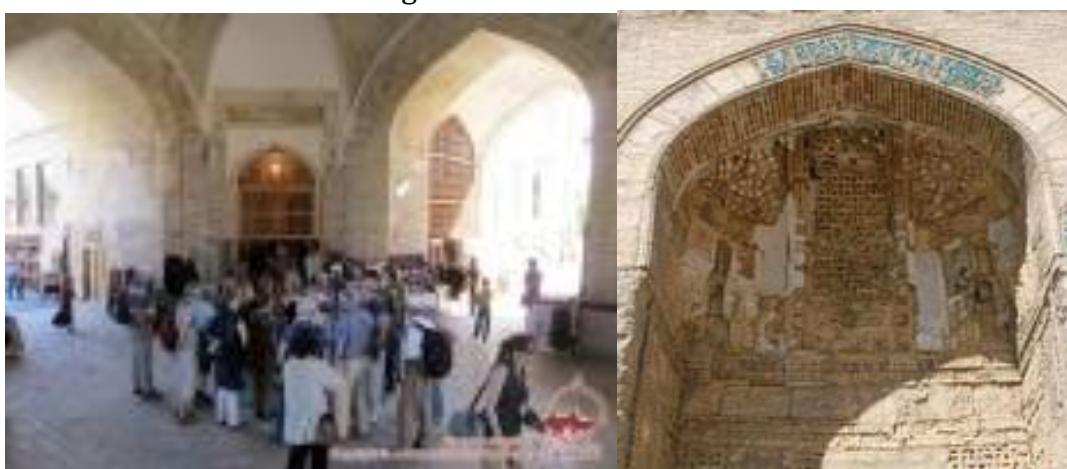
One of the main mistakes is the discrepancy between the restored objects and historical analogues. Often, restoration projects do not take into account the historical features and nuances of monuments, which leads to a distortion of the architectural appearance of buildings and the loss of their historical value.

Another mistake may be the wrong choice of materials for restoration work. The use of inadequate materials can lead to accelerated destruction of monuments, as well as make them more vulnerable to different climatic conditions.

It is impossible to make mistakes in the planning of restoration work without taking into account in sufficient detail the technical aspects of restoration and the requirements for the preservation of historical monuments.

In addition, some construction companies may ignore local traditions and cultural characteristics when carrying out restoration work, which can lead to the destruction of unique elements of the architecture and history of buildings.

In general, we must pay more attention to the historical and cultural features of architectural monuments, as well as properly plan restoration work in order to preserve the rich cultural heritage of Uzbekistan for future generations.





The quarters of the old part of the city of Bukhara are a real storehouse of historical and cultural values that attract tourists from all over the world. However, these neighborhoods also face a number of challenges.

Studies show that most residential areas in Bukhara are in need of restoration (Saidov and Khasanov, 2018).



One of the main problems is the degradation and destruction of historical buildings and quarters. This is due to the lack of appropriate maintenance and restoration work, as well as the lack of funds for the maintenance of cultural heritage.



Another problem is modern housing construction in the old quarters. The construction of new buildings in the historical part of the city leads to the loss of authenticity and uniqueness of the quarters, as well as the deterioration of the ecological situation in the city.

Another problem is the lack of infrastructure and comfortable conditions for residents and tourists. The old quarters often lack squares and parks, as well as utilities and entertainment for tourists, which makes the stay in the city not very comfortable.



Finally, one of the problems is the preservation of traditional architecture and building design. With the development of the city and the infusion of modern cultural trends, traditional architecture may be forgotten and this may lead to the loss of part of the national identity of Bukhara..

To solve these problems, it is necessary to carry out comprehensive work to preserve historical quarters and buildings, as well as develop infrastructure and create comfortable conditions for residents and tourists.

Data from a 2019 report by the Ministry of Ecology and Environmental Protection of Uzbekistan indicates a low level of green spaces in Bukhara (Ministry of Ecology and Environmental Protection of Uzbekistan, 2019).

“As noted by Mukhamedov and Turdiev (2020), there is a problem in Bukhara with a lack of green spaces and parks.”

It is also necessary to develop strict rules and regulations for the construction of new buildings in the historic part of the city in order to preserve its authenticity and uniqueness..

1. Several reasons that create discomfort for residents and tourists:,,,
2. The presence of only paved roads and the lack of green areas in the historical quarters.
3. Hot summer and lack of microclimate in the city.
4. Lack of green areas for recreation and picnics, as well as parks for children and adults.
5. Poor air quality and city pollution due to lack of green space.
6. The presence of health problems caused by the lack of green areas and open spaces.



As Khan and Memon (2019) highlight, the creation of new green spaces and parks can improve the ecological situation in Bukhara.

The creation of new parks, green areas and landscaping of streets in the city is one of the most important steps to improve the comfort of life in Bukhara. Below are a few suggestions that can help solve the problem of the lack of green spaces in the city:

1. Creation of new parks and green areas in the city. New parks and green areas should be located in different parts of the city in order to cover all areas as much as possible.
2. Gardening of streets: to carry out work on gardening of streets and squares in the city. This may include planting trees and shrubs on sidewalks, creating lawns and planting flower beds.
3. Infrastructure for sports and recreation: create infrastructure for sports and recreation in parks and green areas, such as running tracks, bike paths, football fields and playgrounds.
4. Preservation of historical gardens and parks: There are several historical gardens and parks in Bukhara that can be preserved and restored. These gardens and parks can become the pride of the city and attract tourists.
5. Education and Outreach: Conduct educational campaigns and outreach on the importance of green spaces for the health and well-being of citizens. This may include hosting events and conferences on greener cities..

The implementation of these proposals will help improve the quality of life in Bukhara and make the city more attractive for residents and tourists.

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