

Problems of Integration of Cultural Heritage Objects with Architectural and Historical Environment of the City

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Abstract. Preservation of the architectural heritage objects concentrated in the historical center of the city cannot be achieved only by means of their restoration. The development of the concept of change management is required to create an integrated historical and architectural environment. The problem of creating an integrated urban environment of the historical center is considered from the perspective of the system-structural approach. The analysis resulted in finding functional, social, environmental and phenomenological indicators, forming a system of layers of integration. The developed scenarios for transforming the historical and architectural environment, taking into account the restoration of cultural heritage objects, will create an integrated space in the architectural, spatial and temporal development.

1. Introduction

Protection and restoration of the heritage of the past is currently considered as an organized process aimed at enhancing the efficiency of the system of conservation and use of cultural heritage objects within the urban historical environment [1]. Preservation of cultural heritage objects (CHOs) is inextricably linked with the need for new functional approaches and strategies for city development, subject to the requirements of harmony and its correspondence to the changing needs of society [2].

The simplest solution in the protection of architectural historical heritage is the restoration of buildings that are CHOS. The focus of this work is the preservation of historical memory, which tends to be associated with nostalgia for the past, exposed in the intangible components of the urban heritage. Practical approaches to the preservation of the heritage are based on various principles: the preservation of the authentic material of the physical environment as the image of an object that brings to life the lost richness of form and color over which the action of time is not powerful and which does not affect the distortion of perception [3]; restoration of the object in perfect condition, i.e. stylistic restoration using Viollet-le-Duc's principles [4].

International charters for the preservation of the historical heritage proclaim the principles of preserving not only individual objects, but entire historic urban landscapes [5, 6, 7]. The concept of the historic urban landscape as a way of preserving and managing the heritage of historic cities is reflected in the Vienna Memorandum (Vienna, 2005) and the UNESCO Declaration on the Preservation of Historic Urban Landscapes adopted on its basis. The basic principles and guidelines of this concept are set out in the UNESCO Recommendation on Historic Urban Landscape (Paris, 2011). The historical



urban landscape is viewed as the result of the historical stratification of cultural and natural values and attributes with the inclusion of a wider urban context and its geographical parameters: topography, geomorphology, hydrology and natural features of a particular object; its character as a historic and modern development; its above-ground and underground infrastructures; its open spaces and gardens; methods of land use and spatial organization; peculiarities of perception and visual relationships, as well as other elements of the urban structure [8]. The historic urban environment is viewed as a collection of material elements (buildings, structures, sculptural and architectural forms), open spaces, images as elements of the individual perception of the open space closed by material elements [9].

The natural development of the historic urban environment implies the coexistence of objects that have arisen at different times, the process of constant changes in the elements of buildings and ensembles, the combination of different historical layers, different models of spatial structure. Therefore, the urban space of historic areas is perceived in the space-time aspect. In addition to the objective elements of the historical environment that form a visual assessment of the urban landscape, the concepts of “the spirit of the site”, “the sense of identity” (genius loci phenomenon) are of significant importance. They reflect the perception of the old urban environment as a landscape of imagination, as the result of interactions of a individual and collective perceptions, intentions, relationships, descriptions, memories, a variety of images superimposed on the material substance of a historical site [10].

The preservation of the environment of the historic center of the city is associated with inevitable changes. Since historic areas form a part of the people’s everyday life, their integration with the modern society is the basis for urban development and land development [7]. The transformation of the historical environment implies the improvement of the environment in accordance with the contemporary social, cultural, economic, environmental needs of society. Possible transformations are reflected in the strategy of preserving the urban environment, in the first place, the historical center of the city with plenty of CHOs used for various purposes. However, the authenticity of the image and the integrity of the historic city center is determined not only by the CHOs forming the spatial and functional spheres of influence, but also by the prototypical architecture with its morphotypes formed during the growth and development of the city.

The urgency of creating an integrated urban environment of the historic center is becoming increasingly important for areas with the prevalence of valuable historic buildings, the principles of preserving the integrity and historical identity of which needs further research.

2. Materials and Methods

The problem of creating an integrated urban environment of the historic center is considered from the point of view of the system-structural approach. The historic urban environment is considered as a system of architectural spaces, consisting of individual components, as well as relationships, relationships, indicators. When developing an integration strategy, a system of natural and artificial layers of integration is applied.

3. Results

The problems of integration of cultural heritage objects into the urban environment of the historic city center are explored through the example of the city of Tambov. The city areas have different types of architecture; the degree of preservation of historic buildings varies; the city center has a number of CHOs surrounded by modern facilities [11].

The urban environment of the historic center of the city is characterized by a polytypological structure, a diverse morphology of architecture, taking into account the demolition of old buildings and the construction of new buildings, heterogeneous stylistics, and various degrees of social activity. Along with this, the historic center has not lost the integrity of perception, or its historic value.

As a social and spatial phenomenon, the city center can be viewed from different perspectives: that of its residents (vernacular area), professional urbanists (saturation with socio-functional processes), and architects (visible composition and environment structure as the best model) [12].

As the practice of the city of Tambov shows, the boundaries of the central historic part of the city in the above representations do not coincide, but enable to find the zone of consolidation. The historic center of the city as a vernacular area covers the largest territory, including the areas that do not have a single architectural monument, but in some representations it does not include the territories on which the city was founded.

Understanding the essence of the city center as a concentration of socio-functional processes leads to the allocation of the structure of streets, squares, and neighborhoods associated with the greatest activity of residents. The center is not seen as a single configuration, but it represents a set of separate centers of activity. The center has the greatest semantic context as a sample of the architectural and compositional structure of the historic area.

Evaluation of the quality of the architectural environment of the historic center is often based on the principles of Renaissance and classic architectural forms. At the same time, the significance of the object environment and the stylistics of individual buildings is viewed from the perspective of social activity (activity - oblivion); the dominant style of typological architecture, for example, a merchant's house, a commercial apartment building, is not taken into consideration.

The urban environment of the historic center can be considered as a system of space components in accordance with its state, activities and work on its maintenance - urban, architectural, environmental [12].

In the central historic part of the city, there is a small network of streets, repeating the outlines of natural barriers (rivers, serf ditches). The typology of buildings is denser with characteristic atrium courtyards, buildings inside the courtyards with thoroughfares and stone arches; the angular arrangement of buildings (shops, hotels, commercial apartment buildings) is typical at the intersection of streets as urban landmarks.

The architecture of the historic center demonstrates traditional representations about style preferences: the careful design of the structure and elements of facades, the plastic solution of surfaces, the proportional character of the arrangement of the openings, the quality and variety of the materials used. The monolithic construction of typologically monotonous two-storey merchant houses is interfered with large public buildings of banks, clubs, the electric theater, the local government, apartment houses, entertainment societies, etc. They are distinguished by a large scale, characteristic plasticity of the forms with the identification of the main rooms of the halls, and the accentuation of the entrances. The architecture of educational and charitable institutions of the city is solved differently: in the form of symmetrical buildings, modest in decoration, with a rhythmic arrangement of windows, or ensembles consisting of several layers, with complex plastic shapes and an abundance of decor. High quality of architectural solutions is inherent to large state buildings: they were built on the basis of standard schemes with symmetrical plans and facades, sometimes with the use of order elements. The buildings of the angular location along the streets had an angular main entrance - the starting point of the entire composition with an active element in the form of a bay window, a tower, a rotunda, an attic; the entrances, internal staircases and halls were important elements of the composition as well.

The environment is represented by the elements of the design, the nature of urban improvement, the presence of small architectural forms and urban sculpture. In accordance with the socio-functional use the historic center is characterized by the active use of visual markers of the environment: signs, signposts, posters, advertisements, benches, recreation zones, fountains, flower beds, bus stops, etc. An important role in identifying the historical value of the environment is played by the urban sculpture and the quality of amenities. The maintenance of the traditional life of the historic center is possible only with the help of amenities that facilitate the movement of pedestrian flows, local recreational spaces, and visual communication with the courtyard of historic neighborhoods.

When considering ways of transforming the urban environment of the historic center it is vital to focus on preservation of its integrity as identity, and integrity in the principles of visual organization [13]. Since the historic center of the city of Tambov is distinguished by the polytypological structure and the evolutionary nature of the layers in the urban environment, the integrity indicators are less

pronounced, but the urban “fabric” has its semantic integrity.

For consideration of historic center from the point of view of its integrity, a site in the historic part of the city with the most fully preserved front of architectural monuments - CHOs and typological buildings of commercial apartment buildings and merchant houses in the area of the market square - was allocated. For this local integral part, the following indicators of integrity can be singled out [12]: architectural (the number of storeys, the scale of construction, the availability of the ground non-residential floors, symmetry, courtyards, the presence of basement, visual diversity, etc.), stylistic (facade materials, small architectural forms, elements of improvement, types of landscaping), social (permanent social activity), functional (a single function or polyfunctionality), semantic (intangible signs of the environment).

The practice of integrating the architectural heritage with the historic environment of the city implies the establishment of guidelines for the preservation and development of the center in the considered area of the city of Tambov, taking into account the restoration of the CHOs, a system of permissible interventions ensuring the preservation of the historic integrity of the site. The integration process necessarily includes a mechanism for organizing the participation and interaction of the city administration, the local community of residents, architects, historians, entrepreneurs and creative communities.

The implementation of integration strategies is presented in the form of a continuous process, and consists in mastering the layers of integration. Under the integration layer we mean some pro-active interference: restoration work, additions or demolitions, improvements, changing of infrastructure, lighting, mode of operation (Fig. 1-3), with particular attention to the sequence of integration layers: from the micro-level of perception (street advertising, small architectural forms, lighting) to a large-scale level (new buildings, demolition, infrastructure), and this sequence can be different depending on the urban planning parameters for a historic site, the degree of the urban environment and preservation of individual buildings, the current operation mode, etc. The stage of intervention shall be replaced by the stage of natural transformation, in which the results of transformation are adopted, and new links and modes of operation and communications are developed.

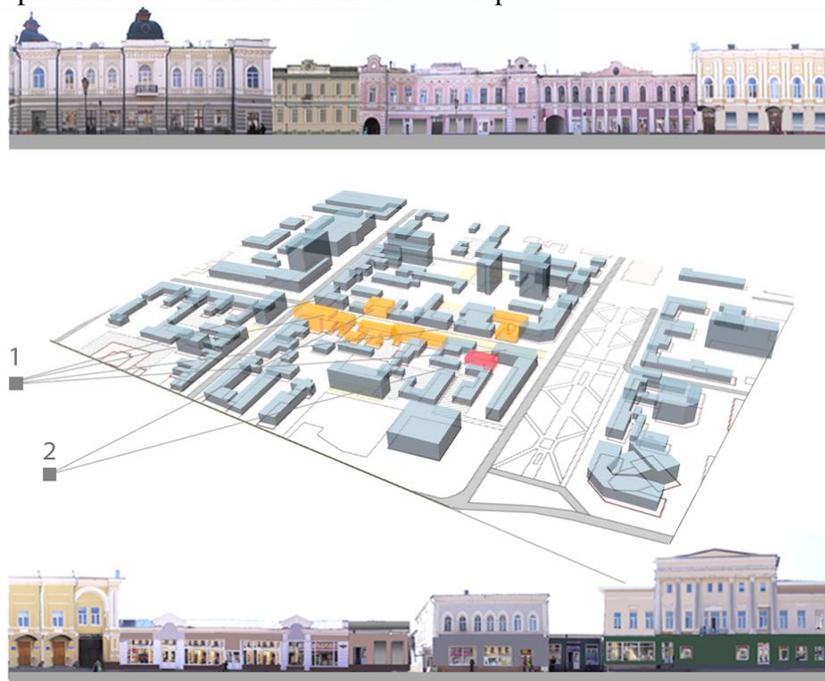


Figure 1. Integration of the historic center in Tambov.

“Buildings” layer. Restoration, reconstruction, polyfunctionality:

- 1 – cultural heritage objects subject to restoration, preservation of functions;
- 2 – reconstructed buildings, change of functions



Figure 2. Integration of the historic center in Tambov. “Spaces” layer. Public spaces. Integrity of architecture:

- – demolition of non-value temporary buildings;
- – multifunctional public spaces;
- – local public spaces (courtyards);
- – closed public space (indoor gallery).



Figure 3. Integration of the historic center in Tambov. “Urban amenities” layer:
 1 – artificial relief (multi-level recreation); 2 – lighting (security, zoning, design); 3 – small architectural forms (public spaces); 4 – arty-objects (urns, posters, urban sculpture)

The developed scenarios for the transformation of historic urban environment, taking into account the restoration of cultural heritage sites, will help maintain the integrity of both local town-planning solutions of the historic center and create an integrated space.

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