Updating the architectural heritage of the Krasnodar Territory, in the context of its preservation and restoration

O S Subbotin
Kuban State Agrarian University named after I.T. Trubilin, 13, Kalinin st., Krasnodar, 350044, Russia

E-mail: subbos@yandex.ru

Abstract. The priority for the preservation and restoration of objects of architectural heritage, which are an important historical and cultural potential of the Kuban is indicated. It was noted that this potential has actual effectiveness and allows it to be realized in the strategic development of the region. The expediency of applying the preservation mechanism for the objects of architectural heritage for the investors and non-budgetary organizations wishing to rent premises in these objects is recommended. An assessment of the economic significance of this mechanism implementation is given. The necessary measures are identified, in the context of “smart space” to carry out appropriate work to create the historical environment comfort, in terms of the innovative technologies’ application.

Introduction
Krasnodar Territory possesses a unique architectural heritage, which is by right an incomparable and priceless heritage of not only the multinational people living in the territory of this region, but the Russian Federation as a whole. The architectural heritage has been created over a long historical period, during which its formation as a cultural and historical potential took place.

This potential is ‘the most important resource for the architectural formation of the material-spatial environment of the city, which should be considered in the relationship between the value characteristics of old and new cultural samples, traditional and modern forms of architectural objects and structures. Therefore, primarily architectural, urban planning, construction, and other activities should be aimed at ensuring the preservation, development and use of this potential [1]’.

Separately, the high importance of monuments of the medieval period with the influence of Byzantine culture should be noted, as well as the combination of various styles in the architectural heritage of the Kuban in the late 19th - early 20th centuries: neoclassicism, modernism, early constructivism, eclecticism. The peculiar original traditions of regional architecture also deserve special attention. At the same time, it quite ‘can be stated that they were based on the humanistic principle [2]’.

Studying the history of any region and even a small settlement on the basis of existing monuments of architectural heritage spiritually enriches and significantly raises the cultural level of the modern generation and is of great importance in the spiritual and moral formation of the future. The preservation of this heritage is impossible without due respect, love and care for it.

It should be emphasized that over a long period of society development, the objects of historical and cultural heritage, in particular, some of the types of this heritage – the monuments and ensembles are the most vulnerable and poorly protected in comparison with the objects from other spheres, and the
measures taken to maintain them did not always lead to the desired result, and sometimes they were wrong and further aggravated their situation. Failure to take prompt measures to preserve individual objects of architectural heritage led to the fact that we lost them irretrievably or they gradually deteriorated over time and were no longer suitable for use.

A specific manifestation of the heritage ideological significance in all periods was a special attitude towards "living" monuments (used for their original purpose) [3]. As a result, it is necessary, first of all, to carefully preserve and strengthen the appropriate measures for updating the architectural heritage, improving the operating conditions and ensuring its accessibility (Figure 1).

![Figure 1. Krasnodar. Architectural monument - Yekaterinodar office of the State Bank. Architect I.K. Malberg (1902, reconstruction in 1954). Modern state. An extensive range of restoration activities have been completed.](image)

It is also necessary to create and further improve the comfortable conditions for the implementation of the listed activities, commensurate with this strengthening of the material and technical base.

**Relevance, purpose, objectives, research methods**

The relevance of the research topic is dictated by the insufficient degree of study of preserving and restoring the architectural heritage problems, in the context of the proposed constructive measures. Some of the measures currently being taken are not always effective, and sometimes even erroneous. Attention is focused on the fact that this area is the most vulnerable and unprotected in comparison with other territories.

The aim of the study is a systematic approach to studying the problems of preserving and restoring the architectural heritage, as well as developing a conceptual proposal for attracting investments in this area.

The object of research is the monuments of architectural heritage in the Krasnodar Territory. The subject of the research is based on an integrated approach to the current state study of the monuments of architectural heritage.

Research methods are based on the systematization and analysis of the existing situation in the field of the specified heritage preservation.
The scientific significance lies in the recommendations’ application of the research carried out in the process of implementing the architectural and urban planning activities by legal entities and individuals, as well as in developing a concept for the future development of the tourism sector.

The practical significance lies in the use of materials from scientific work in the preparation of a strategy for updating the preservation and restoration of the architectural heritage, which makes it possible to increase the efficiency of its use.

**Conceptual proposals for regulation in the field of conservation of monuments of architectural heritage**

When strengthening and restoring the monuments of architectural heritage, great importance is attached to the restoration of these objects. At the same time, attention should also be paid to the objects of historical and architectural value, in spite of the fact that the objects located in the historical environment do not have the status of a monument [4].

At the same time, the main problem that is most often encountered in the preservation and restoration of the lost parts or the entire object of architectural heritage is the lack of sufficient financial resources. In most cases, it is required to attract the additional investments from the individuals or legal entities in order to reimburse the necessary costs for carrying out these activities.

Therefore, to solve this problem, it is advisable to develop an appropriate mechanism to stimulate investors, to determine the directions and methods of their support, in particular the tax instruments. In this case, a proper agreement should be legally formalized, which specifies the rights and obligations of the parties, as well as their responsibility for their obligations’ fulfillment.

Assessing the economic significance of the presented scheme of actions, namely, the expediency of using the funds from individuals and legal entities, makes it possible to speed up the process of preserving and restoring monuments of architectural heritage without attracting public funds.

A clear example for solving this problem in the Krasnodar Territory is the preferential rental program "1 ruble per 1 square meter", aimed at restoring the decaying architectural monuments, which has been implemented in Moscow since 2012. The key point is that, provided that tenants fulfill their security obligations, for the purpose of effective functioning and targeted use of these monuments, the object is preserved as an important strategic basis for the society development, being at the same time a solid foundation of our historical memory.

So, according to the calculation performed by the author of the study, this program promotes the restoration and repair work on architectural monuments of the federal and regional categories of historical and cultural significance, which are in an emergency condition in the amount of approximately 1.2 billion rubles, while the rent for the year will be make up to 360 thousand rubles.

It should be emphasized that in the approximate calculation (as an example) only 1/5 of the objects of the architectural heritage in the Krasnodar Territory from their total number, which presumably require restoration or appropriate repair, were taken. The total number of architectural and urban planning monuments located in the Krasnodar Territory with newly identified objects, according to the state register as of July 15, 2020, is over 1,300 units.

The economic significance of the results obtained, by attracting the funds from private investors and non-budgetary organizations in order to possibly adapt the individual monuments of architectural heritage that have specific utility, which is limited to a certain type of use, consists in obtaining the actual total economic effect from the action plan proposed by the author. In general, this contributes not only to the individual objects’ preservation, but also the valuable historical environment of the Krasnodar Territory.

Consequently, granting investors the right to preferential lease of the monuments of architectural heritage, after carrying out repair and restoration work, has a decisive role in preserving the historical and cultural potential.

At the same time, one of the measures for the preservation of objects of historical and cultural heritage is ‘the creation of an open information system on objects of protection and restrictions on possible transformations for the territory with historical buildings [5]’.
Criteria for the "smart space" of the settlement in order to create the proper comfort of the historical environment

Also, in most cases, when solving the problem of preserving and restoring the architectural heritage, we often face the problem of engineering networks deterioration, in particular, the life-support systems that do not meet the normal conditions of their operation, which undoubtedly affects the state of this heritage.

For example, in the case of the historical center of Krasnodar, we are talking about the utilities’ deterioration - energy, heat and water supply facilities, sewerage, as well as the modernization of public transport. Also, one of the most problematic issues in the coastal cities: Sochi, Novgorossiysk, Gelendzhik and the settlements of the Crimean region is unsatisfactory water supply, high water consumption in the summer season, all this negatively affects the architectural heritage, in the context of the tourist space in the Krasnodar Territory.

At the same time, the scale of unjustified individual “invasions” into the historical center created a great threat to the historical and cultural heritage, namely to the monuments of architecture and urban planning in terms of preserving the unique works of outstanding masters of their time [6]. Therefore, a comprehensive historical and cultural study of the city allows solving a number of issues related to the assessment, preservation and use of the architectural and urban planning heritage [7].

Along with this, the analysis of the engineering networks state of the past years has revealed that even the construction of new boiler houses to replace the worn-out ones gives a significant economic effect. The payback period for these structures is also reduced by attracting private investment in the modernization and further operation of heat supply systems. In some cases, it is necessary to use autonomous engineering equipment, while preserving the historical appearance of an architectural heritage monument.

An important role should be given to the investment targeted programs for the residents’ resettlement from architectural heritage sites that are in disrepair.

At the same time, the process of preservation and restoration should take place without destroying the integrity of the historical building structure. It is necessary to develop a comprehensive model for the historical environment regeneration of the settlements with backbone pillars in the form of objects of architectural heritage using various elements of urban planning tools for further sustainable territorial development.

The preservation and restoration of the architectural heritage is inextricably linked with the preservation and regeneration of the historical background environmental buildings, as well as with the creation of public spaces, taking into account the cultural context, existing restrictions and existing urban planning regulations.

The formation of the so-called "smart space" of the settlement with innovative infrastructure, including transport, digitalization of restoration and repair of architectural heritage objects in conjunction with functional transformation and development within the boundaries of historical territories is of fundamental importance.

The identified criteria for the "smart space" of a settlement based on assessing the historical environment comfort quality, in order to preserve and restore the architectural heritage, include the following activities:
- the use of energy-saving technologies in the restoration or restoration of both whole objects and their individual parts;
- complex integration of all management and control systems for the energy and water resources consumption;
- the use of solar panels for converting solar energy into electrical energy, solar systems for converting solar rays into heat;
- use of devices for autonomous lighting, in particular innovative laser lighting;
- the use of innovative solar lighting technology, such as a world-famous brand Solatube®;
- introduction of green technologies, as well as the proper formation of green environmental infrastructure;
- introduction of current modern environmental safety systems for the territorial environmentally balanced development;
- development of a unified tourist map with the main routes for the objects of architectural heritage and unique attractions.

At the same time, the complexity of the internal organization of objects for various purposes is a general pattern not only of architectural monuments, but also of the usual buildings of past eras [8].

At the same time, the developed strategy of "smart space" in conjunction with the concept of preserving and maintaining in proper form monuments of architectural heritage, based on domestic foreign experience in the restoration of these objects, makes it possible to solve the complex problems of historical quarters’ regeneration.

The specified concept, which is a structural and logical model, should reflect the sequential nature of the actions performed, while determining the primary goals and priorities when carrying out the relevant activities.

Summary
The architectural heritage is an integral part of the social, cultural and economic life of any settlement.

At the same time, these settlements are also a kind of scientific center - a "genetic" data bank on the formation and preservation of the historical architectural and spatial environment during certain development periods [9].

The importance of its preservation in the modern world and its indispensable maintenance in good condition is the guarantor of urban and rural areas’ sustainable development, in the context of unique historical development. The inclusion of monuments of architectural heritage in conjunction with the surrounding natural landscape and ordinary historical buildings makes it possible to create a favorable and comfortable living environment.

Not only architectural objects that are the monuments of cultural heritage are significant, but also the historical town-forming buildings and structures that are of architectural and artistic value and are an element of the town-planning context that forms the spatial historical environment of the settlement and the compositional silhouette of the building. These buildings and structures, united by scale, structure and other elements, constitute an integral part of the historical and urban planning environment.

At the same time, the solution of the problems related to the preservation and restoration of the architectural heritage in some cases is possible only in the presence of public-private partnership, namely through the joint efforts of the state, private and legal entities. With a lack of appropriate budgetary funds necessary for the preservation and restoration of monuments of architectural heritage, the joint use of material resources of economic entities is the most urgent.

To a greater extent, this partnership is of great importance when it comes to socially significant projects, as well as the objects of particular historical value. Thus, fundamental in defining the actualization of the architectural heritage is the immutability of its preservation and restoration, effective use and integration into modern life. For the full-fledged work of this cooperation, an appropriate legislative base, which determines the procedure and nature of actions in this area, a special program must be developed to identify and eliminate problems associated with the preservation and restoration of the architectural heritage should be adopted.

Therefore, one of the most important tasks of our time is to preserve, restore and protect the historically important architectural objects and pass them on to the younger generation. ‘At all times and all over the world the monuments of the past tell us about their time [10]. This is our memory, spiritual and material values, and we are obliged to preserve our unique heritage.

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