Actual issues of the settlements’ historical preservation center of the Kuban

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 main architectural and urban issues in the ratio of old and new in the historical center of settlements are considered. Attention is focused on the scale of “intrusions” in the specified center during the 20th century. The assessment of the current urban development situation in this period is given. The concrete examples of the formation and development of these centers in the historical retrospective of the Kuban settlements are given. Some historically valuable city-forming objects are noted. Particular importance is given to the preservation of the historical environment and objects of architectural heritage. Attention is drawn to the principles of “green” architecture for their implementation in the historical center.

Introduction
In the settlements’ intensive historical and spatial development, the question of the existence of a historical center in its planning structure certainly arises. At the same time, various professional, public and private opinions are expressed on this issue, namely the ratio of the old and the new. This was especially clearly manifested throughout the 20th century. This is evidenced clearly by both the traditional city-planning municipalities, for example, and the futuristic currents that arose at the beginning of this century, one of the distinguishing features of which is anti-historicism.

At the same time, the scale of unreasonable individual “intrusions” in the historical center created a great threat to the historical and cultural heritage, namely, the monuments of architecture and urban planning from the point of view of preserving the unique works of outstanding masters of their time. A direct study of domestic and foreign experience provides an excellent opportunity to determine some certain specific solutions that should be taken into account with the proper preservation of the historical center, taking into account the objective and logical proposals. At the same time, with all the obvious study of the topic related to the historical center, the problems of maintaining this center of settlements are still timely.

In view of this, the problem of preserving the historical and architectural heritage is the most urgent in the context of the accelerated pace of modern construction and reconstruction carried out in the historical centers of many cities [1].

Purpose, tasks, research methods
The study is focused on the fundamental relations’ study between the new designed objects and the existing monuments of architectural heritage, in order to identify the principles of their coexistence in
the historical center of settlements, to determine the role and main directions of this center, in the historical and cultural potential stewardship context.

In accordance with the goal, the following research tasks are determined:
- in the process of historical retrospective analysis, to identify the patterns of the historical center formation in terms of the functional-spatial composition of the settlements’ planning structure appropriate elements;
- to analyze the design practice, revealing the scale of construction carried out in the historical center of settlements, in the context of various temporary spaces, as well as taking into account the surrounding natural landscape;
- to determine the principles of preserving the individuality of the historical center on the basis of a holistic and compositional combination of the designed objects in collaboration with historical and cultural heritage in the historical settlements’ center.

The object of study is the volumetric-spatial environment in the historical center of settlements, in the context of preserving the features of its architectural and artistic appearance.

The subject of the study is an integrated approach to the historical center reconstruction based on the proposed conceptual principles for the transformation of this center.

The research methods are based on the historical, cultural, urban and scientific-theoretical approach to modeling the preservation principles in the historical center of settlements.

Analysis of the settlements’ historical center formation and development in the Kuban in retrospect of different eras

Any historical era symbolizing the state of the material and spiritual culture of mankind is, first of all, a transition to a different level of not only cultural, social, but also technical development, a kind of rise to a higher level of the society development. Moreover, each historical epoch, with the help of which the development processes of the specified society are divided into separate periods that are qualitatively different from each other, has its own specific features, while leaving the unique creations – the objects of cultural heritage (historical and cultural monuments), namely, the monuments representing value in terms of architecture and urban planning.

At the same time, in order to perceive these monuments, it is necessary to preserve the historical environment, which is an important element of the settlement’s spatial structure, which determines the specific properties of an architectural or urban development work.

In this regard, the Kuban is a good example of the formation and development of a historical center in the settlements’ retrospective - a region with a long history and a unique historical and cultural heritage, in which, with each era, a tendency towards the sustainable development of the historical centers is observed. Initially, the centers were formed as strategic strongholds at the intersection of the major trade routes. At the same time, along with fortifications, the settlements are formed in the future with a pronounced planning structure of the central part.

This is especially true for the settlements of the Black Sea coast. So, for example, in 1866, on the site of the future city of Tuapse, surrounded by the Veliaminovsky post, a trading quarter with the same name began to take shape. Subsequently, the historically valuable city-forming objects are erected on the territory around the Church Hill (modern name - the Hill of Heroes): Varvarinskaya school, administration and the district court (Figure 1), P.N. Pertsov’s house, who was directly involved in the construction of the Armaviro-Tuapse railway and port in Tuapse and many other facilities.

The streets of Tuapse are beautiful, wide, with solid sidewalks, mostly straight, but located along the hilly terrain. From each place on the street, either a view of the mountains or the sea is opened up [2].
At the beginning of the 20th century historical era, during the formation of the resort industry on the Black Sea coast of Russia, in 1896 on the territory of the central part of the Dakhovsky trading quarter (formerly the Dakhovskoye fortification) renamed Sochi, historical buildings were erected over time classified as the monuments of architectural heritage - the Orthodox Cathedral of Michael the Archangel; villas: “Faith”, “Hope” (Figure 2); cottages of the State Councilor N.S. Zinoviev, artist A.N. Sheveleva, Dr. A.V. Jacobson; sanatoriums, parks, etc.

Speaking about Sochi at the beginning of the 20th century, one should not forget that the city of Sochi developed rapidly not only as a settlement, but even more as a resort [3]. Subsequently, the stations started being laid along the railroads under construction in the Kuban, which subsequently are a kind of core of the future settlements’ historical center. Among such settlements, Armavir, the Kavkazskaya and Tikhoretskaya stations, which will soon be transformed into cities, should be noted.

Ekaterinodar (modern name - Krasnodar) is also marked by a combination of monuments of federal and regional significance in the historical center of the settlement, which occupies more than a dozen quarters (Figure 3).
By the middle of the second decade of the XX century the historical center of Yekaterinodar had a clear, complete spatial organization with a clear planning idea, an extraordinary architectural content, pronounced silhouette and functional zoning [4].

![Figure 3. The historical center of Krasnodar, Krasnaya street, 106. The north-eastern side between the Pashkovskaya street and M. Gorky street. Residential houses with commercial premises on the ground floor. Buildings of 1890 – 1900s. Modern view. The author’s photo.](image)

From the very beginning of the settlements’ establishment, these centers become the most attractive for living and business activity. In most cases, the core of the settlements’ historical centers composition the Cathedral Square with a temple near which administrative and public buildings were located. Thus, the historical center, leading its origin from time immemorial to the present day, visually displays its consistent formation and development over various eras, while testifying to its pronounced cultural, architectural and urban planning past.

**Conceptual proposals for the settlements’ historical center preservation**

The transformation of the historical center “should be of a successive nature, taking into account the existing structure of buildings and the natural landscape” [5].

Therefore, one of the important issues that should be addressed in urban planning practice is the natural and climatic conditions of the terrain and the ecological state of the natural environment of the settlement’s historical center, while the new design objects should be harmoniously integrated into the surrounding landscape.

The issues of the historical center preservation should be dictated by a detailed review of the specific parameters of the historical environment, primarily the analysis of innovative technologies and materials used to preserve the historical and cultural heritage, which includes a wide range of actions - not only when it is necessary to carry out the simple repairs and conservation in the existing form, but also the restoration of the lost architectural and artistic appearance. It follows that the innovative materials and technologies used in the monuments’ restoration of architectural and urban planning heritage should not develop without an established orientation to the specified qualities of the historical environment, in particular architectural and artistic buildings.

Along with a focus on traditional architectural forms, the practice of introducing modern forms that are gently “attached” to the environment [6] is developing. The transition to “green” construction, that
is, to a minimum environmental impact, is also important in order to increase energy efficiency, the lowest energy consumption [7].

Professionally executed architectural and town-planning decisions in the historical center allow preserving its amazing and peculiar appearance, which is one of the basic principles of designing in the indicated center. In this case, the skill of the architect is the ability to correctly enter a new object into the historical development structure using the means of urban planning composition - plastic, spatial, light-colored. Along with this, the compositional and planning framework of the historical settlement is also important.

Moreover, in matters of preserving the historical center, “understanding the environment as applied to the historical and cultural monuments included in it makes it possible to reach another value level - the historical and cultural environment, which in this case is regarded as a certain sphere of functioning of the cultural heritage” [8].

Summary
The analysis of the settlements’ historical center formation of the Kuban over the past centuries makes it possible to fully present the problems of its conservation, to identify the basic components of these processes. In the periods under review, the historical centers developed under the influence of various factors: political, economic, social, but their unique architectural and artistic identity remained unchanged, in the context of historical and cultural heritage monuments - a combination of the material and spiritual memory of the people.

Therefore, in modern conditions, special attention should be paid to the historical center of the city - a unique cultural and historical heritage, which contains a large number of historical monuments, architecture, urban planning, monumental art, representing the cultural and historical value of the past eras [9]. These monuments are a valuable inner world of a person, his special “genetic” code [10].

In this regard, a program should be developed, the main directions for preserving the integrity of the historical center of each, even a small settlement, on the basis of the legislatively established borders should be identified, the ways to solve them not pointwise methods, but an integrated approach to this preservation process should be identified.

The program should also contain the suggestions and recommendations on the historical part buildings and territories’ use with the provision of the modern comfort level [11]. The old city gives excellent examples of the scenario organization of impressions in the main movement directions. In a historically developed urban environment, as a rule, structural logic and the hierarchy of its construction are clearly read [12].

Preserving the historical center is an important task facing not only specialists in this field, but also the state and society as a whole. Its further fate in many respects depends on our joint thoughtful decisions. The historical center - the spiritual and strategic potential in the moral education of the young generation.

References
[1] Subbotin O S 2018 Problems of reconstruction of historical center of the city Materials Science Forum 931 745-749.
[2] Vasyukov S I 2012 The land of proud beauty (I. Platonov, Krasnodar).
[3] Gordon K A 2005 Old Sochi late XIX - early XX centuries. (recollection of an eyewitness) (2nd ed. corrected and add. ZAO Doria, Sochi).
[4] Bondar V V 2007 Krasnodar: the fate of the old center. To the problem of the modern crisis of the historical and architectural appearance of the city (I. Platonov, Krasnodar).
[5] Subbotin O S 2018 Architectural and planning principles of the organization of coastal areas Materials Science Forum 931 750-753.
[6] Zavarikhin S P 2007 City and architect. Architectural School of Civil Engineers in St. Petersburg / auto-composition (GOV VPO SPbSACU, SPb.).
[7] Subbotin O S 2019 Building materials and technologies of modern housing: Architectural and environmental aspects *IOP Conference Series: Materials Science and Engineering* **698** 033044.

[8] National space / under total. ed. V.V. Lazarev 2008 Russian Academy of Architecture and Building Sciences (RAASN) and others (ASV, Moscow).

[9] Subbotin O S 2020 Cultural and historical potential of the urban environment (regional aspect) *IOP Conference Series: Materials Science and Engineering* **775** 012036.

[10] Subbotin O S 2019 Features of the building materials use in architectural and urban heritage restoration *IOP Conference Series: Materials Science and Engineering* **698** 033045.

[11] Gulyanitsky N F 1972 About the modern meaning of the concept “architectural monument” Theory and practice of restoration works, Collection No. 3. NSRIPSPS. (Publishing house of building literature Moscow).

[12] Schenkov A S 2011 Reconstruction of historical buildings in Europe in the second half of the XX century: historical and cultural problems (LENAND, M.).