Architectural and spatial environment in the historical settlements of regional significance

O S Subbotin
Kuban State Agrarian University named after I.T. Trubilin, 13, Kalinin St., Krasnodar, 350044, Russia
E-mail: subbos@yandex.ru

Abstract. Important problems associated with the architectural and urban planning situation in the historical settlements are noted. The relevance of the topic is formulated, justified by the new socio-economic conditions and increased urbanization. Separate objects of the architectural heritage in the historical settlements located on the territory of the Krasnodar Region are presented. The main problems and factors that influence the architectural and spatial environment’s formation are identified, and the conceptual proposals for its organization in the context of sustainable development are developed. The unique cultural and historical potential of the settlements is revealed from the point of view of educating the younger generation. Considerable attention is paid to the preservation and operation of historical and cultural heritage in the historical settlements. The popularization of these settlements in the development of tourism activities in them is indicated.

Introduction
The numerous works of scientists have been devoted to the regional historical settlements’ architecture formation peculiarities, taking into account the integration processes of the new and the old, specific features of the planning structure, functional relationships, as well as the architectural heritage preservation, the historical quarters’ regeneration [1-3]. However, there is an urgent need to study these settlements in modern conditions, in the aspect of the architectural and spatial environment formation for making the verified planning decisions in order to avoid the strategic errors.

Historical settlements are a relatively stable single complex of the spatial environment’s interconnected elements, including territories, architectural objects, engineering structures and infrastructure based on the natural, historical and cultural frameworks of settlements. Moreover, these settlements are also a kind of scientific center - a “genetic” data bank for the formation and preservation of the historical architectural and spatial environment over certain periods of development.

In architectural practice, a historical settlement is mainly “defined as the central urban part of the territory dating back to the time from which historical buildings, as well as monuments of architecture and urban planning, have been preserved” [4].

Within the framework of regional identity, as we see it, the historical settlements of the Krasnodar Territory are indicative, namely the cities: Krasnodar, Armavir, Anapa, Yeysk, Sochi and the village of Taman, which have experienced a lot on their way of formation and development. The formation of the
architectural and spatial environment in these settlements took place in accordance with the population concentration and the territories’ development intensity.

Historical settlements have a unique cultural and historical potential, which includes not only the features of traditions, customs, lifestyle of different peoples in the form of a cultural and social heritage combination, but also the historically architecturally-artistic monuments, interesting fragments of planning and much more (Figure 1-2).

**Figure 1.** Krasnodar, Ordzhonikidze street, 39, Block. A, with extensions. Mutual credit society, 1913, architect N.M. Kozo-Polyansky, facade authors - architect M.I. Rybkin and Academician I.L. Kulmykov. Modern view. The author’s photo

**Figure 2.** Sochi, Resort Avenue, 32a. Villa “Vera”. Year of construction - 1910. Modern view. The author’s photo
It should be noted that “the first half of the twentieth century was a time of “storm and onslaught” in all life spheres, including culture and art. In architecture, the explosion of formative searches was largely prepared by the long era of romantic eclecticism, when, within the framework of the almost classic ordering of compositions, the process of liberating architecture from the canons of uniform style forms developed” [5].

Especially vividly diverse styles and trends are manifested in the architecture of the Kuban. So, on the Black Sea coast there is an amazing combination of architectural styles from the pseudo-Russian style, imitating “Old Russian or folk Russian patterns with tents, towers, domes, lancet windows” [6] up to the Stalinist Empire.

Along with this, the architecture of Yekaterinodar (modern - Krasnodar) has also changed several styles from Baroque to eclecticism. This can be clearly seen in the buildings of the late XIX - early XX centuries.

The relevance of the research problem
The timeliness of the research problem is due to a proper analysis of the architectural and spatial environment’s organization in the historical settlements, in the strategy context of maintaining its unique integrity. In this regard, a comprehensive approach to solving this problem is necessary, which is extremely significant, not only as material reality, but also as the cultural and historical potential of identity for the present and future generations.

It should be noted that “cultural and historical potential is a combination of the diverse objects, including architectural and artifacts of historical and cultural heritage (historical and cultural monuments) of both material forms of existence and non-material forms of manifestations” [7].

Taking the foregoing into consideration, a detailed study of the existing urban planning situation and the planning structure of historical settlements should be carried out based on their architectural space formation experience.

Purpose, tasks, research methods
The purpose of the study is to identify the historical regional features of the historical settlements’ development in the Krasnodar Territory.

The main objectives of the study are as follows:
- to identify the main stages of the historical settlements’ territories development;
- to mark the significant changes in planning structure;
- to offer the conceptual solutions for the architectural-spatial environment’s formation.

The object of research is the interconnected regional historical settlements of the Krasnodar Territory.

The subject of the research is the development processes of the studied settlements’ planning structures elements in the architectural and historical aspect.

The research methods will include an integrated approach to solving the stated topic. The work uses a structural and functional analysis of the spatial environment, as well as an analysis of the interaction of historical, planning, aesthetic and artistic components of a particular environment of the settlements based on archival data, scientific research and literature.

An empirical review of the problem’s state
Solving the problem of organizing the architectural and spatial environment in regional historical settlements in the context of a combination of interconnected planning elements is a particularly important strategic task.

For a proper definition of approaches to its solution, it is necessary to proceed from the formation of the historical center as an integral organism of the settlement at the main stages of its formation. At the initial stage of the settlement’s formation, the dominant factor is the defensive function, in the form of fortifications.
In the future, the spatial environment formation will be influenced by the political, economic, cultural and urbanization processes that have changed not only the settlement’s boundaries, but the settlement development’s character (Figure 3). The spatial environment is transformed, in accordance with these processes, which will certainly affect the life level.

The specific urban development tasks were also filled with new social and functional content [8]. Basically, the development of historical settlements of regional significance in the Krasnodar Territory can be represented in three stages:
- I – the period of the military settlement formation;
- II – the civil settlement formation period;
- III – the soviet period.

The development stages of the historical settlement of Yeysk are presented as an example, while despite the fact that the settlement’s boundaries periodically increase, the historical center remains unchanged (Figure 3).

![Figure 3. The development stages of the historical settlement in Yeysk](image)

The indicated center is a kind of core and supporting framework of the settlement and has a significant impact on the architectural and spatial environment’s formation not only on the territory of the historical settlement, but also on the nearby peripheral ones. Therefore, the urban transformations of individual elements in historical settlements should be based on the basic principles of the existing planning structure.
Conceptual proposals for the architectural and spatial environment’s organization in a historical settlement

The organization of the architectural-spatial environment should be carried out with the basic principles of its formation in all aspects, in the first place: functional-spatial, compositional-aesthetic and environmental, it is also necessary:

- to establish the appropriate urban planning regulations in the architectural and spatial environment of a historical settlement;
- to ensure the proper preservation of the historical and cultural heritage objects and historically natural landscape with the legislatively protected protective borders’ establishment;
- to carry out the necessary restoration, reconstruction and repair of the historically valuable buildings and engineering networks, as well as the equipment while maintaining the nature of the existing historical buildings;
- to ensure the environmental safety of the architectural and spatial environment and the corresponding resettlement system;
- to create the favorable mutually beneficial conditions for the investment attractiveness of the historical settlement territories, while allowing to improve the infrastructure;
- to evaluate the indicators that determine the design decisions’ effectiveness in the historical settlements and analyze the resource effective potential;
- to provide for the tourism infrastructure creation in order to develop the economy for the historical and cultural heritage.

It should also be noted that the most important characteristic of an architectural and spatial environment that develops over time is the compositionally integrated planning elements that create “the connections with the environment and relief, a common picturesque settlement system in which people would feel the natural environment” [9].

Summary

Thus, there is an urgent need to create a comfortable living environment in these historical settlements, preserving their unique individual architectural appearance in the new socio-economic conditions. At the same time, historical continuity plays an important role in the organization of the architectural and spatial environment, as an inextricable link between the eras and destinies. The transformation of a historical settlement, without changing its legislatively established borders, is an important convention adopted in the organization of the architectural and spatial environment.

Sustainable development of the state is impossible without preserving the national cultural traditions of the people, which were formed throughout its history. Each people inhabiting a certain part of the territory brought its traditions and customs to the region’s culture, forming a single unique cultural system of the state [10].

References

[1] Akhmedova E A 2019 Methodology for comprehensive studies of the spatial planning structure of a historical settlement (on the example of Samara) Problems of urban reconstruction: Sat. articles. SSTU 28-35.
[2] Gelfond A L 2019 The architecture of public spaces: a monograph (Moscow, INFRA-M) 412. (Scientific thought).
[3] Babylonian T V 2019 Methodological approaches to the preservation and development of the historical environment (for example, the city of Samara) The builder of Donbass 1 (6) 23-26.
[4] Subbotin O S 2018 Problems of reconstruction of historical center of the city Materials Science Forum 931 745-749.
[5] Zavarikhin S P 2011 The architecture of the second half of the XX century (St. Petersburg, Trinity bridge) 240.
[6] Ivyanskaya-Hessen I S 2008 Russian-English architectural dictionary: about 13,000 architectural terms with ill. (Moscow, Astrel: AST) 719.
[7] Subbotin O S 2020 Cultural and historical potential of the urban environment (regional aspect) *IOP Conference Series: (Materials Science and Engineering)* 775 012036.

[8] Savarenskaya T F 1987 West European urban planning of the XVII - XIX centuries *Aesthetic and theoretical background* (Moscow, Stroyizdat) 191.

[9] Alekseeva Yu V 2009 Urban planning principles for the development and reconstruction of residential buildings *Scientific publication* (Moscow, DIA) 640.

[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.