The architectural environment authenticity preservation in the updating and renovating urban space context (on the example of the Rostov-on-Don city)

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Abstract. The article discusses the aspects of maintaining the urban space authenticity in the territories’ updating and renovation context. The improvement process was examined by us from the point of view of the social stratification theories by Sorokin P. A., authenticity and the “spirit of the place” as the historical foundation of the Rostov-on-Don city, relevant for the city. The conditions of the city’s preservation historical image are considered taking into account the general actualization of spaces on the example of the renovation and capital works’ photo-analysis in Soborny lane, Sadovaya street, the parks “Osenny” and “Levoberezhny” as well as the design proposals of the linear park “Temernik” Rostov-on-Don. Using the photo-analysis method of the territories “before” and “after” renovation, we were able to find positive trends in spatial changes. In our work, we draw attention to similar features of the city’s architectural fabric authenticity, which can be correlated with the “spirit of the place” united by the Rostov streets’ historical foundation preservation vector. We tried to form a conclusion about the updating possibility of the architectural space without losing its historical content. Through a description of the urban “fragment” and its positive changes. A number of modern and historical publications, as well as the informative works on the research topic have been used as the analytical and theoretical basis.

Introduction
Universal digitalization, rationalization and rapidly changing paradigms of our society’s development make us look for the new ways to adapt to a comfortable existence and life in megacities. The modern look of our cities is determined by a mass of factors characterized by the universal ties in architectural, social and city-forming sphere. However, the totality of these factors is based on the existing fabric of urban areas, displaying various historical layers. In the population public activity dynamic development process, the urban areas are subjected to actualization and a new rethinking of the existing spatial forms. The topic of smart rethinking of our living environment and the development of the latest digital practices is considered in the framework of the scientific work: “Smart City: Comfortable Living Environment”. [1] This system presents 5 key principles:

- human orientation;
- manufacturability of urban infrastructure;
- improving the urban resource management quality;
- comfortable and safe environment;
- focus on economic efficiency, including the service component of the urban environment.
In our study, we will consider the issue of maintaining authenticity in the urban space constant transformation conditions, using the example of the Rostov-on-Don city as one of the rapidly developing cities in the South of Russia. At the same time, numerous proposals for improving the urban microclimate that come from local and regional authorities find a positive response from the citizens.

**Materials and methods**

The modern urban environment is a complex and multi-level system, the development of which will always depend on a large number of factors, including: geographical location, population density, religion, general cultural and historical aspects, technological progress and many others. The number of factors can be in the tens or hundreds, depending on belonging to the scientific field and the tasks of the object or subject being studied. Our study is aimed at studying the urban space from the point of view of the “fragment” and its influence on the general processes of renovating the architectural environment and preserving the historical foundation as one of the authenticity factors using the example of the Rostov-on-Don city. One of the “comfortable” cities’ current state key problems is the process of interaction between the society and the environment. The starting point in this case is the human community, which has the rights and tools to create an objective spatial environment divided by numerous signs: state, cultural, territorial, national, temporary. Such an approach of dividing by attributes in sociology is sometimes described by a geological term for the location of the Earth’s layers - “stratification”.

The founder of the social mobility and stratification theory was Sorokin P. A. in his scientific works, he divided the social and geometric space, explaining the importance of understanding this difference. Architects and designers working in the common geometric space of public urban areas are engaged in landscaping and creating a comfortable and sustainable environment. Subsequently, public forms the conditions of social mobility while in a geometric space. In the collection “Man. Civilization. Society” P. A. Sorokin considers the concept of social mobility: “Social mobility refers to any transition of an individual, or a social object (value), that is, everything that is created or modified by human activity from one social group to another” [2]. Moreover, many identification characteristics of space such as authenticity, for example, help the city to remain not a one-time territory for the opinions’ sake of individual social groups or communities, but to represent and preserve its history.

Authenticity - (ancient Greek “αὐθεντικός” — genuine) refers to the correctness of the beginnings, properties, views, feelings, intentions, sincerity, devotion (according to the version of the site https://dic.academic.ru/).

All these qualities can be correlated with urban space, as inherent in it initially and laid down by the author in the creation process. In the progressive urbanization conditions, an authentic environment is that the city spatial planning structure component should be maintained or even recreated when developing the new strategies for the territorial development. Unplanned infrastructure, spontaneous development does not have the best effect on authenticity and negatively affects the city development from the point of view of preserving its history. The focus is on the conflict that is the characteristic of many modern megalopolises between the residents’ desire for authentic roots and the new beginnings of cities, that is, the residents’ desire to defend their right to determine their residence place in the context of new development, the pressure of rapid changes and the dominance of standardization aesthetics [3].

The authenticity preservation in the urbanization conditions is inseparably linked with the concept of the “spirit of the place”. But the “spirit of the place” (genius loci) may disappear forever due to significant disagreements in the development of modern trends in urban modeling and planning. This process was described by Sharon Zukin (professor of sociology at Brooklyn College) in the book “Naked City: The Death and Life of Authentic Urban places”, where the author analyzes the loss of the “genius loci” of the major megacities on the planet. The spirit of the place (lat. genius loci) according to the professor, the totality of the properties and qualities of the architectural environment’s certain fragment that are responsible for its identity, that is, originality, perceived on an intuitively
sensual level. A close concept is “impression of the place” [5]. The concept that, on the one hand, is formed on the basis of concrete, material components, such as landscape, architecture, people, history, function of a place, on the other hand, is characterized by the abstract properties or relationships, emotions, impressions. Today, with all the stylistic diversity of modern architecture, the public neglects historical contexts to please the conditions of economic and cultural globalization. Of course, attention to the features of a particular place, to its landscape, cultural-historical, social and other contexts, to its “spirit” requires special sensitivity from the architects. This is an individual approach that cannot be put on stream, to become massive. But the need for just such an approach is extremely important today.

As a part of our study, we were engaged in the analysis of territories that underwent large-scale renovation, reconstruction and major repairs or construction in the Rostov-on-Don city over the past few years. As a result of studying the architectural environment, we compiled a photo-analysis of the territories “before and after” the accomplished landscaping works:

**Figure 1.** Soborny lane before reconstruction

Soborny lane, which was subjected to renovation during the preparation of the World Cup in 2018

**Figure 2.** Soborny lane after reconstruction

**Figure 3.** Sadovaya Street before reconstruction

**Figure 4.** Sadovaya Street after reconstruction

Bolshaya Sadovaya Street underwent a major ideological transformation with green areas and plenty of seatings. The project was carried out by the Architectural Bureau “Project” and Design Bureau “Strelka”, 2018-19.
Autumn Park was changed beyond recognition in 2019, the project was approved by the city community and the citizens. A lot of green spaces were completely removed in their place, young trees were planted and an interesting road-path network was organized with a lot of park decorative elements for the outdoor fitness machines and even a summer open stage appeared.

Levoberezhniy Park was opened on May 1, 2018 and was a very priority project since in the vicinity is the new stadium, which had been built for the start of the 2018 FIFA World Cup.
The linear park “Temernik” will become perhaps one of the most ambitious projects that the city has embodied over the past decade. A detailed study of all possible development paths and the comparative photo analysis makes it possible to see the scale of ongoing urban improvement works, but not everywhere the work done helps to simultaneously update the space and maintain its authenticity [6]. As a result of the work in Soborny lane (Figure 1.2), we came to the opinion of the competent use of historical city space by the authorities in an aesthetic sense. After the work, one of the city’s central historical lanes started acquiring its authenticity. In the reconstructive work with the coloristic scenario for planning Soborny Lane, the architects adhered to the original color scheme for this part of the city. The historical architectural environment of the Rostov-on-Don city is replete with details - panels, pediments, cornices, pilasters - all of these elements form the image of the facade of the building. Each color and material strictly recreates the original appearance of a historical building. This technique of preserving the historical image of the city in the active urbanization process is widely used in the city’s historical environment design.

Improvement of Sadovaya Street (Figure 3.4) can be more attributed to the process of updating the urban environment. The central street of the city has become more environmentally friendly, walking and pedestrian as well as the seats designed in a modern style and can set the new trends for the design of the architectural environment appeared. In this case, the contrast with the historical facades and architectural decoration of the buildings gives the street a new aesthetic appearance and makes it more interesting for different age categories. The creation of new parks such as “Osenny” and “Levoberezhny” (Figure 5,6,7,8) in undeveloped areas is a process of positive trends in the public and urban programs for the urban spaces’ renovation and modernization. To a greater extent, the park projects are focused on the smart city system where each fragment of urban fabric should be used as efficiently and effectively as possible.

One of the most anticipated projects in our city will be the embodiment of the new “Temernik” linear park (Figure 9, 10). This is one of the most talked about, non-standard and difficult to implement projects in the last few years. There is a possibility that this project will be able to claim to maintain the authenticity of the central and remote parts of the city, update the urban areas and give a new walking and walking highway.

The uniqueness and necessity of each project for urban space can be analyzed in more detail, but our task is to provide the basis of each studied “fragment” the maximum overall picture of the growth of landscape and architectural points in the urban environment.

Summary
Every day, the concept of authenticity becomes more and more relevant for architecture in all its fields: from urban planning and urbanism to elements of urban design, but the relationship of public opinion and the empirical component of the “spirit of the place” becomes more significant in this matter. Therefore, as a part of our study, we came to the conclusion that it is possible to form new and to modernize the existing landscape and architectural points, which in turn will become the source of modern formations of the spirit of the place for the citizens. The historical foundation on the example of the Rostov-on-Don city may be subject to change in terms of respect for the details and small things that open in the new walking areas provided for in the central part for the city’s guests and residents.

Rostov-on-Don has every chance of becoming a modern and progressive city with powerful historical roots, and the interweaving of small architectural forms’ new elements and the space rationalization will keep the interest and color of the southern metropolis.

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