The settlements public spaces formation basic concepts in the southern Russian region

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Abstract. The new Town Planning Code determined the urban planning activities fundamentals restructuring in the modern conditions of our country, which is reflected both in urban planning theory and in urban planning practice. Not only the urban planning documentation content, but also the approach methods to solving the urban problems have been changed [1]. At the same time, the town-planning policy in our country is consonant with modern approaches in the European states urban planning, in particular, to a wider landscape approach in the practice of designing and building urban settlements, known as “landscape urbanism”.

Introduction

One of the main directions of the town-planning policy is the Federal Program “Forming a Comfortable Urban Environment for 2018–2022” adopted in the country, which includes a set of measures to improve the environment quality and comfort in the settlements territories in order to improve the ecological condition and appearance hygiene and aesthetic conditions, including public areas (streets, parks, gardens, squares, embankments area, etc.), which for a long time were not paid enough attention to.

The settlements public spaces current state in the southern region

The territories sustainable development principles provide for the settlement of any level the structure consideration as a dynamically developing “living” organism. Practice has shown that public green spaces are objects that can give the territories a better environment for the population life. They become not only the attraction centers, but also stimulate the new level of residential formations development around them [2].

Such examples include the experience of designing and building the Martin Luther King Park in the 17th arrondissement of Paris “Clichy-Batignolles”. This is an excellent example of a modern, original public park, created along with an awareness of environmental problems and a fairly high design level. The area renovation and a new solution on the subject of “Sustainable Development” were developed by Jacqueline Osty, one of the leading landscape architects in France.

Within the environmental comfort State program framework, the department of urban planning and building design of the DSTU conducted the research on the public spaces state in urban and rural areas. A number of projects on landscape organization and the urban and rural settlements public spaces improvement were developed.

The analysis showed that modern public spaces in the south of the Russian Federation most often represent green areas free from building, intended for holding various events or holidays. Some objects
have separate improvement elements: scenes for performances of artistic amateur groups, small playgrounds or freestanding gym equipment, etc. As a rule, these public spaces are similar to each other, do not have their own individuality or their distinctive features, allowing to isolate some among other objects, even in different types of urban entities. In these territories, walkways and grounds have poor paving, low light levels. The facilities improvement level in general does not meet the modern requirements and the population needs.

Conceptual proposals for shaping the settlements public spaces appearance. Analysis of the design practice and the design solutions implemented by the department for the settlements public spaces formation allowed to determine the basic, in our opinion, concepts of their formation, allowing to solve the tasks presented by the environmental comfort State program.

One of these principles is the integral “IMAGE” formation of a space that would distinguish a given public space from others by its individuality. In each particular case, the designers have their own tasks in connection with the place history, prevailing urban planning, natural, transport and pedestrian conditions, the environmental situation and many other factors. For example, one of the conceptual changes by the British LDA Design bureau when developing the Gorky Park master plan in Moscow was to form a linear embankment along the Gorky Park, uniting the main public spaces from Sparrow Hills through Gorky Park and “Museon” to “Red October”, The Tretyakov Gallery and Red Square. At the same time, seven parks are united in one and each of them is solved taking into account their historical individuality and the different historical periods objects value.

This concept implementation example could also be the project proposals for the landscape-planning organization of the settlement center Bolshaya Neklinovka, Neklinovsky District, Rostov Region (project manager is Candidate of Architecture Vorobyova A.M.). The project proposes the public center single integrated structure formation around a historic drinking well that has survived to our day, as a symbol of the life and the settlement prosperity (Figure 1).

The water source (water well) was the village Neklinovka formation beginning. People began to settle around it in 1796. In 1820, the settlement belonged to officer Nikolay and Aleksey Fedorovich Malchevsky. Officially, the well does not have the cultural heritage monument status. Now it is mothballed. But this object has an important historical and cultural significance for the settlement itself. The idea of preserving the well in the planning structure of the public center, as an associative image of the village historical past, was put into one of the concepts for the center public territory developing project - “WATER WELL-LIFE OF THE VILLAGE”. The historic well is the main focus of the entrance area from the village administrative square.

No less important aspect in the design of public areas is the formation of a full-fledged “ENVIRONMENTAL SPACE”. As a rule, these issues are resolved with the automobile and pedestrian traffic reorganization, the use of environmentally friendly and natural materials, the creation of favorable sanitary and hygienic and microclimatic conditions in the territory, etc. Thus, Bolshaya Neklinovka proposes a restriction on the entry of any type of transport from the Pamyatnyi lane, punching a new transport artery in the south-western part of the Streiteley street to organize the transport services, the formation of an environmentally comfortable pedestrian zone near the central square with public administration buildings, libraries, cafes, etc. Here, the cycle path for cyclists is separately allocated. Bicycle parking is combined with the passenger vehicles parking behind the chess zone next to the EMERCOM of Russia building (Figure 2).

Preserving and revealing the beauty of “NATIVE NATURE” places complements the public territories holistic image formation. In large cities, nature often has to be “restored”. For example, in the same project proposals of the British LDA Design bureau for Gorky Park in Moscow, the conceptual solutions suggested an increase in the area of green areas 3 times (now green areas occupy about 3% of the territory total area). For small settlements, the green areas issue is not so urgent yet, but at the same time, a decision to ban the building development in the landscape objects areas is needed. During the Bolshaya Neklinovka project development, all the community center green areas were preserved. However, there are old-growth trees requiring removal or pruning.
The plants range selection for the settlement determined the historical fact. So, literature sources say that the village name also has its own history. Neklen or neklyon, in some regions of Russia - means “enclosed”, in botany it is called “field maple” or “flat maple”. And it is a typical inhabitant of steppe woodlands, ravines and river banks on the southern borders of Russia. “Neklen”, in fact, “unfinished”, it was called for the small size of the crown leaves, in contrast to the large size of the maple leaf, also widespread throughout Russia. Well, and considering the all-time population ignorance and the population illiteracy, it is not surprising that even on maps and in statistical descriptions Neklenivka systematically turned into Neklinovka, as it was heard and written. Therefore, the project proposes planting maple of Norway, along the main avenue, and using other types of maple trees on other green areas.
To create a modern conditions life quality on the territory, it is necessary to organize a “SMART” social center providing the human capital growth. This concept introduction is possible by the settlement social capital formation and by organizing virtual classes for various segments of the population (lectures, seminars) in real time using information and communication technologies (ICT), allowing to open wide access to educational, methodical and scientific information; organize operational advice, etc. This concept was implemented in the Bolshaya Neklinovka project in solving the chess zone, on the territory of which several different thematic sites were organized.

Figure 3. Fragment of the Wi-Fi zone and the Workshop site in the community center Bolshaya Neklinovka, Neklinovsky District, Rostov Region

Figure 4. Bolshaya Neklinovka settlement community center chess zone fragment

The chess zone itself has a single stylistic solution. It is designed as a comfortable and safe environment for visitors; It has a convenient layout with the shortest distances between the centers of attraction. They are several places organized here: a platform for training in the Workshop system in order to gain the knowledge by the interaction of people interested in it, a platform with a Wi-Fi zone with a gazebo, a playground for outdoor games (including chess, checkers, etc.).

The “FUTURE GENERATION” concept should form the basis of any project of the public zone territory. This conceptual thesis means the creation of a place in the territory for communication and development of children of different ages. The solution of these tasks is possible by creating an independent territory for children, contributing to their communication, full development and recreation. At the same time, the organization of playgrounds for children should be based on their age categories. In the project under consideration, a children’s area has been designed in the north-eastern part of the territory. It provides the area with an integrated children playground for the children’s play creation. It
includes playgrounds for children of preschool and school age. For high school students the playground is equipped with a sports complex. In addition, high school students can actively use the nearby sports area. It houses a workout area for adults and a skating rink, which can be used throughout the year. In the summer - roller skating, and in winter, a skating rink with a concrete surface can be poured. And in winter, it can be used not only for skating, but also for conducting figure skating classes and other winter sports.

The concept of “ENVIRONMENT SAFETY” means not only the traffic and pedestrians’ separation, the creation of walking routes safe for visitors, but also the barrier-free environment on creation of the public space territory. In addition, ramps and stationary folding lifts are provided for easy accessibility of entrances to buildings, etc.

Summary
The settlements public spaces should be designed on the basis of a place history deep study, the natural features of the territory, the urban planning situation and the development prospects of specific settlements.

The development of a public spaces project general concept in each specific case will allow to identify the postulates that are most significant for a given territory, which will allow to create a single integrated organized space satisfying the needs of all categories of citizens.

Each of the projected public spaces should have an individual perusal and its own individual appearance, based on a comprehensive account of all factors and territorial characteristics.

References
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[2] Vorobyov A M Urban design. Tutorial.
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