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INTERCONNECTION OF OPEN AND CLOSED PUBLIC SPACES IN HISTORIC CITY CENTERS IN RUSSIA

Author
Mariya KOMAROVA
mariya.komarova@polito.it

DAD - Department of
Architecture and Design
Politecnico di Torino
Viale Pier Andrea Mattioli, 39
10125 Turin (Italy)

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Abstract

The theme is dedicated to the problem of urban heritage preservation in the era of globalization with the rapid growth of large cities and megalopolises. The object of research is the Old Town designed in the period of urban and politics reforms of Russian Imperial age. Only in the last 100 years, the territory of modern Russia has undergone numerous reforms and political turmoil. During the research there were studied Moscow as the capital of Russia and some other Russian cities with their historic urban landscapes integrated with contemporary architecture, and also the problems of transport situation of these cities were analyzed. In the last decades the low-rise residential quarters with historical favorable ambience are demolishing; on their places skyscrapers have been building, constant migration from residential areas to the centers and the growing number of vehicles, parking lots are not sufficient.
The aim of this paper is to show the opportunity for preservation of the architectural and landscape heritage in the historic city centers of Russia with a glance of contemporary social requests. Based on the study of information and on the documents of conservation of historic city centers, the opportunity to preserve the urban and architectural heritage is offered with new regulatory standards of urban development and of the use of land in the most valuable historical urban areas. The solution was found in the creation of pedestrian areas in the major public city centers.

1_Urban heritage of the Russian Imperial age

Catherine the Great on the 25 July 1763 issued a decree for the creation of specific plans for all cities and for each province separately. According to the decree, the Commission should supervise the preparation of plans and the construction of cities of the Russian Empire. From that moment, the highest approved general plan became a fundamental planning document having legal status. The new planning of the streets, alleys and squares were performed with allowance for the existing of old buildings, but with mandatory rectification of streets, enlargement of wards and giving the regular shape of the squares. Districts around Central Square and the surrounding streets were signed under the stone buildings. A residential homestead with a complex of household buildings on the mansion (stable, coach-house, woodshed, and hayloft) became the main type of urban development of the period from 1780s. Alexander I, Emperor of Russia, during whose reign the victorious conclusion of the Patriotic War of the year 1812 and the burning of the majority of houses

Figure 1. Pyatnitskaya Streeet, the end of XIX century and the middle of XX century. Painting is made by Shalaev A. in 2008.





in Moscow brought a new unusual strong growth of building construction. 5 May 1813 the Emperor kept a decree on the establishment of the Commission for the construction of Moscow's state with a large amount of manpower and three brick factories. The commission was composed of two parts: surveyors and architects. It was the surveyor's job to make measurement of all parts of the city, streets, squares, streets and neighbourhoods. Based on the data obtained it was necessary to compose the new geometric plans. From architects it was required to create the plants and facades, monitor the construction process and the quality of the materials produced in brick factories. The government of Alexander I attributed great importance to the construction of Russian cities, especially of their centers. It was entrusted to the capital architects to design the facades of residential buildings of various sizes and number of planes and sending them to the provinces. Every December the governors were must report to the Ministry of Interior statement (on a special form) about the quantity of houses built in the city on these facades with the registration number of the facade, taken from the album. The architecture of this period is characterized by the Russian classicism with geometrically regular plans, consistency and firmness of symmetrical compositions, rigorous harmony of proportions and the widespread using of an order tectonic system on the facades. In 1839 plans were announced for 416 cities in the Complete Collection of Laws of the Russian Empire. The Commission completed its work in 1843.

The functionality of the grid of streets-corridors has been already exhausted at the beginning of the XX century, but this technique for a long time still remained in the arsenal of urban planning. Development of electrification, gasification, automation and technological advances has led to the fact that the existing architectural and planning system could not perform new functions. Cars, buses and trams replaced horses and carriages; machines and mechanisms replaced manual labor; villages, towns and small cities gradually began to decline, and medium and large cities began to grow noticeably. The functional relationships and processes got more complex and it became increasingly difficult to organize them in confined spaces and volumes, subordinating them to compositional techniques inherited from classicism, based on symmetry and static equilibrium of the masses. The process of the evolution of urban planning became a natural consequence of industrialization.

Since 1918 noble residential quarters in the historic city centers ceased to be privately owned, and became the property of the state. Practically there are no buildings of the Russian Empire in the historic city centers, preserving the original function of housing and the internal organization of space. From the 1990-s with the change of property laws and with the beginning of privatization of state property, these buildings became ownerless again. In the 21th century the problem of urban heritage preservation in the age of globalization with the growth of population, the increasing number of vehicles, the felling of green areas and the construction of skyscrapers, often falls outside the scope of interest of contemporary architects-practitioners, which project buildings with the maximum number of usable area on small expensive areas of land in the historic city centers.

2_City center's importance in the system of public spaces

In the examples that could show the difficulties of modern urban development, there are no deficiencies. Most modern residential neighborhoods represent sleeping satellite towns: the people did not choose these cities; they are created with the sole purpose – to sell more apartments in residential complexes built on the land with the minimum allowable building area. These buildings provide nearby enterprises with a labor force and trade mega-markets with buyers. Critics have repeatedly noted the poverty of the architectural appearance of such complexes, streets and courtyards, dreary monotony of the facades of houses and public buildings, serious miscalculations in the massive proportions of volumes and spaces, gigantic forms that interferes with their visual communication with a person and doesn't conducive to creating a comfortable and living environment. This is a consequence of serious blunders in dealing with architectural and creative tasks, and often of neglect the objective direct composite laws. Proximity to the workplace is a small advantage, since most jobs are still in the center of the main city, on which depends the satellite town. The buildings of factories and plants, founded on the outskirts of Moscow a couple of centuries ago, now occupy central urban areas. The digital age has replaced the era of scientific and technological progress, which in turn was succeeded by the age of industrialization. Transport and environmental problems have led to the reconstruction of the large city centers, to reconstruction of the production and industrial enterprises and their adaptation to the public multi-functional complexes and business centers. Considering the existence of complex forms of urban space, the question arises, how they relate and what effect they have on the formation of the differences in the various spheres of social life. The main social center of the modern city is not only the main architectural ensemble and vanguard in a system of social and cultural services. It is a comprehensive functional area in which social and political work and management, culture and recreation, transport functions (center – a major transport nodal point) are implemented. The uniqueness of the center, its exclusiveness in relation to all other elements of the city are determined not only by the fact that it collects a higher pattern of activity in different areas, but also the choice of behaviors, activities, forms of communication. It always has been, and so it is natural that the town center was filled with the most valuable architectural buildings, works of landscape art, sculpture, fountains – all that not only improves the comfort of home, but also creates a valuable independent spectacle. Numerous studies confirm that a very large proportion of the visitors center called the goal of his movement to the desire "to stay in the center," to feel its atmosphere. The city center always represents the greatest interest for residents and tourists, and investors, government and public organizations.

Urban architectural and planning structure can be seen as an art of spatial organization of work, life and recreation. However, in the digital age the concept of architectural space should take into account additional components – time and speed: the perception of space the city streets and squares is different from the perspective of a pedestrian walking and from the viewpoint of a racing car driver. The problem of public space is a complex set of

psycho-physiological, social, aesthetic, and other factors. The space in the architectural composition is understood as limited, partially restricted or not material restricted part of the real space. In constructing the system of open public spaces in the city, it is important, first of all, to build a backbone frame – a complete network, including public buildings and structures in the system that will add integrity to it.

One example of where the integrity of the network backbone was broken it is the reform of the State Library named after Vladimir Lenin in Moscow. A significant portion of its assets in 1970 was taken outside the city, in the town of Khimki. This not only increased the cost of extremely unproductive time readers to move, but in many ways to disrupt the work of the library as a scientific institution. The reform was carried out without attention to the adjacent Old Town quarter, which at a reasonable reconstruction of the library could double its space without breaking the concentration of its activities in a habitual place for people. Moreover, the concrete analysis of the situation reveals that library developing in its old place has the ability to substantially link up with the expanding Museum of Fine Arts and Museum of Architecture, which would give an opportunity to organize the Museum and Library Quarter in the historic area. In city center, depending on its size and planning organization should formulate a system of interconnected public open spaces (the main streets, squares, pedestrian areas) and closed spaces (areas in buildings and structures). These spaces must be logically linked, available to people for the normal functioning of the whole city.

The reconstruction of ensembles areas and systems of landscaping is also important. Do not forget that the composition of public open space arrangement is directly dependent on pedestrian accessibility – the value of the urban zone influence of the object is determined by the maximum possible area pedestrian accessibility. It is extremely important to carry out these measures in a complex. Such an approach to solving the problems of open public spaces will allow to reconstruct any city and to improve its architectural appearance.

3_Old Street as a new element of urban development

I previously had a very strange idea: I think it's quite not hurt to have in the city of one such street that accommodates itself to the architectural chronicle... This street would have done then, in some respects, the history of development of taste, and who is lazy turn over thick volumes that would have had only to pass through it to see everything. (Gogol, 1835)

The appearance of horse tramways, tram, and then the car breaks the fragile harmony of streets and roads. Containing thousand vehicles, the road cut into the body of the city, breaking the safety of its traditional boundaries. At the beginning of the XXI century the city road pushed pedestrians into narrow pavement. Attempts to protect the sidewalk from the proximity of cars and exhaust gas led to the practice of urban planning in the sustained expansion of "street" and thus – to its disappearance. Often the opposite pavements have to link the underground passages because of the organization of parking next to the building where once was pedestrian traffic. Car parked badly, it can create difficulties in the movement not only of other cars, but also for pedestrians.

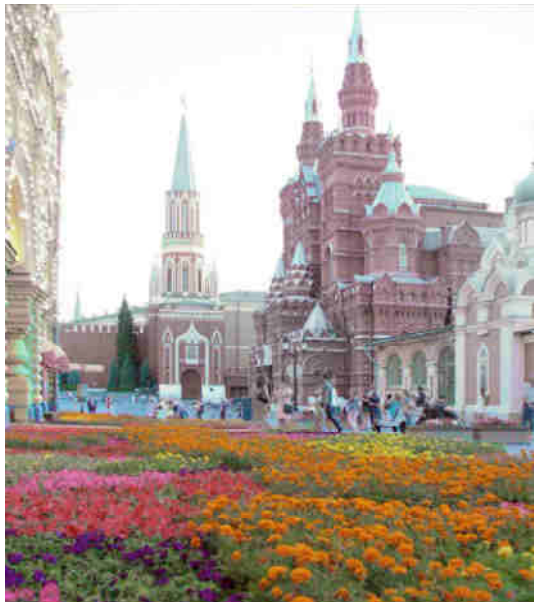
Moscow architects and urban planners found a way out of the situation in the city center, turning the old streets and alleys in the pedestrian. This idea came from a situation where from point A to point B has become easier and faster to walk than to drive between them. The plan is now implemented quite deliberately, to unload the center of the vehicle, and for an easier interconnection of public open and closed spaces.

Reconstruction of Pyatnitskaya Street is an example of an integrated approach to organization of quality pedestrian space in the city center. It is one of the oldest streets, until June 2014 it was an important traffic artery of historical conservation part of Moscow. The movement of vehicles on it was one-sided into the city center; it had four lanes with a total width of 14.6 meters of the carriage-way without cycling infrastructure. After reconstruction Pyatnitskaya Street became a comfortable space for pedestrians and cyclists. The roadway was narrowed to two lanes and pavements were widened to six meters and paved with granite. Within the bounds of the project also pockets of parking, public transport and lighting were equipped; benches, bicycle parking, and boxes have been installed. Work on a further improvement of 54 yards, adjacent to the Pyatnitskaya Street, was conducted. Almost all the 66 objects of cultural heritage located here have been renovated, and reconstruction of 10 monuments of architecture has also been completed. St. Clement's Church, Church of St. John the Baptist by Bohr and the house built in the late XVIII – early XIX centuries were restored at the expense of the city budget. As a result of the project, in the historic center of Moscow, another one comfortable public space appeared for everyday life and leisure Muscovites and visitors. Citywide fairs, festivals and celebrations are held on the pedestrian street.

There have also been reconstructed Nikolskaya Street leading from Red Square to the metro station Lubyanka and Klementovsky Lane leads from Pyatnitskaya Street to Tretyakovskaya metro station. These streets today are exclusively pedestrian areas connecting large open spaces with objects of public transport and create a favorable environment for visiting closed public spaces – the central department store (GUM), cafes and restaurants,

Figure 2. Close public spaces of the building of GUM and open public spaces of Nikolskaya Street after its reconstruction, summer 2014. The festival of flowers.





trade and service facilities, theaters and museums. In Moscow's historic center in the period from 2010 to 2016 during the improvement work there were organized pedestrian streets and zones with a total length of about 100 km. This fact only proves that the pedestrian streets and areas in the historic centers of Russian cities are an essential element in the present stage of urban development.

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