Globalization in Architecture: Three Examples from Saint Petersburg

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Abstract: In architecture and urban areas development in Russia and ex-USSR republics during the last three centuries, we can see both successful and failed examples of the projects that bear obvious marks of globalization. In the present article we present the analysis of three large-scale objects having different characteristics as to urban development and architecture, belonging to different periods and regions and having different fates. This includes: a clearly successful program of creating a multi-functional capital city – Saint Petersburg, with its large suburban area (early XVIII century); quick and efficient creating of a mono-functional residential city Navoi in Uzbekistan in the vicinity of a large-scale industrial object (mid-XX century), as well as an unsuccessful proposal for design works and construction of an ambitious high-rise office building “Gazprom-City” in Saint-Petersburg, as the initiative of the corporation “Gazprom”, which is one of Russia’s largest companies (late XX – early XXI centuries). In the present article we reveal and describe the role of geopolitical, cultural and economic substantiation for such projects, we mark their significance for social life and importance to improve designing methods and construction technologies. We describe the different fates of those three projects: successful implementation of the former two projects and the practical failure of the third one.

Key words: Globalization • Architecture • Urban areas development • Experience of Saint Petersburg • Russia and USSR

INTRODUCTION

Nowadays, the process of globalization in architecture is ever more intense. It is stimulated by: implementation of new technologies in developing countries, large-scale investment into construction (typical for late XX – early XXI centuries), more and more active cultural exchange between different countries. Major European and American construction companies win contracts in Dubai, China and South-Eastern Asia. The structures that used to be typical for North America or Europe are now being erected in Asia, Africa and Latin America [1, 2]. In Russian cities there also are a lot of new buildings in the same line as the images spread world-wide. Russia and USSR have wide experience of globalization-wise architectural development as well [3].

MATERIALS AND METHODS

Methods: We used a method of comparative analysis of the conditions that predetermined success or failure of the three projects having marks of globalization and located in the territory of Russia and ex-USSR. We use the historic-sociologic analysis in order to examine the conditions of designing and implementation of those projects. On the basis of a cultural- sociologic substantiation of methods for architectural and
urban development in question in the present article, we identify the factors that predetermined success or failure of the tasks related to the economic and social efficiency.

The Main Part:

- XVIII – early XIX centuries. In the Eastern part of the Baltic region, in the Neva estuary, in marshy area that had been used as an agricultural asset, a new capital city is being created, to acquire international geopolitical significance and become a new political and military center of Russia, a location for contacts between the Russian and the Western-European cultures, a connection point between Russia and the world economy. The city is being constructed along the European lines of urban areas development and does not comply with the local trends in either typological respect or in the construction typologies used. It was also assumed that the population had to adapt to new modes of life. Through the personal effort of the Russian emperor Peter I who actively intervened into the work of professional architects, the highest requirements were applied to the creation of the would-be city and its roundabouts during the first 20 years of development of Saint Petersburg. However, no well-defined answers had been prepared for these design and construction requirements throughout the entire European architectural community. It took some time to find the optimal solutions; the best variants were not to be found till late XVIII century. The city and its outskirts were developed with active participation of architects from many European countries. By late XVIII – early XIX, the layout and construction of the capital city and its outskirts had been largely formed; they became the example to be repeated throughout the whole of Russia. This example helped form the unique Saint Petersburg school of urban development; on the basis of its well-honed principles, more than 300 old cities in Russia were reconstructed and almost a 100 new ones built during the period 1760–1830 [4].

During the second half of XIX century and up to early XX, some methods of architectural and urban area development have been modified, but the general trend has preserved and was even further promoted as late as mid-XX century [5]. At the moment, the historical center of Saint Petersburg (actually, the entire historical center within the borders of mid-XIX century) is rated as an object of the world cultural heritage by UNESCO [6].

- Mid-XX century. The Central-Asian desert area in the ex-USSR territory. Near the village Kermine, a new city Navoi is being erected, as a residential area for the workers of a large mining company and their families. In this region there also are ancient cities of Bukhara and Samarkand, with their thousand-years-old masterpieces of ancient architecture. Traditionally, there have been one- or two-level adobe buildings close to one another, in blocks with narrow and curved streets.

During that period, dozens of new cities were constantly under construction at any time in the USSR. Architectural project for Navoi were developed in Leningrad (now, Saint Petersburg). The investment level for design and construction was above standard, which made it possible to implement more expensive solutions both for the engineering infrastructure and public utility systems. Architects from Leningrad paid particular attention to the social role of architecture, which reflected world tendencies during the period of 1960–1970 [7, 8]. They regarded that their primary task was to create friendly environment for living in particularly difficult desert conditions, and, only as a secondary task, if necessary – to implement some particular decorative preferences. It can be stated that, in this project, it became possible to implement the principles of urban development that were above the norms adopted in the USSR. The Soviet school of urban development was based on the principles of the Athenian agreement [9], but the city Navoi does not at all comply with the historic traditions of the region. In Navoi, wide straight streets were constructed and areas of greenery were intensively developed. Large-scale investments were made for water supply and sewage systems. The residential blocks were organized as micro-districts and schools, kindergartens, shops and public utility objects were constructed in the immediate vicinity of the residential area. The system of recreational objects was implemented, with consideration of local conditions: a large park with sports grounds and recreational areas was positioned downtown, but not on the outskirts [10, 11]. Also downtown was a large artificial water body positioned and canals were constructed through residential areas. For the first time in Uzbekistan, high-rise residential buildings were erected; some country people rode their donkeys for a few miles to take a ride in elevators.
The architects who developed design solutions for that city did not have enough experience in creating facilities in the extreme desert conditions in hot regions, initially. At that time, multistory residential buildings of the gallery layout were considered to be one of the architectural symbols of that city, because that layout was supposed to ensure the end-to-end ventilation of all the flats, as was stipulated by the normatives. However, the operating experience showed that hot dry air blowing through such buildings does not improve the comfort: what would be an advantage in hot and humid atmosphere, turned out to be a shortcoming in the desert. Later on, they started erecting wide buildings in Navoii, so that the temperature and air conditions could be more easily adjusted.

The mode of life of Navoii residents is quite different from what is traditional in that region. This could also be explained by the fact that most of them are not local, but immigrants from Russia or the Ukraine. Some of the design solutions were later criticized but, generally, the project was approved as a successful one and awarded the Patrick Abercrombie’s prize of the International Architects Association for creating friendly residential environment in regions with difficult climate.

- Early XXI century. In Saint Petersburg, like in other Russian cities, international contacts are being developed. Multinational corporations post their ads on facades. Streets boil with vehicles from Germany, France, Korea and China. Imported materials are widely used in construction. Local construction companies start using modern technologies and employ specialists from Finland, Britain, Turkey, Sweden etc. New buildings are being erected, that were almost unknown during the Soviet times, or were not prevailing – such as large shopping malls, multi-level parking lots, office centers [12].

**DISCUSSION**

Early in XXI century, within the framework of the tender contest for the Russia’s largest company “Gazprom”, five construction design agencies with international reputation worked on the variants for a high-rise office building for the area in the historic center of Saint Petersburg. A primary condition was set: the height of the building shall be over 300 meters. There have been no buildings that tall in the city. In the historically formed skyline, horizontal lines prevail, with only a few vertical objects – spires or domes – reaching 100 meters or more. The local citizens consider that it is necessary to conserve this type of skyline. The proposed sky-scrappers greatly contrast with the traditional skyline. Probably, such building could have been erected in the USSR, but times have changed in Russia. Prominent architects from Saint Petersburg and abroad refuse to partake in the committee, the society show discontent about the project, discussions are getting hot [13-15].

![Fig. 1: This is how Neva’s estuary looked before construction of Saint Petersburg started](image)
Fig. 2: Panoramic view of Saint Petersburg. Taken from the Saint Isaac’s Cathedral (year 2000)

Fig. 3: A traditional view of residential areas in the Central Asia

Fig. 4: Buildings in the city Navoi (1970)
This early in the project, the international reputation of the city is already jeopardized; there is a risk that Saint Petersburg may lose the status of the world cultural heritage object. There is a strongly negative attitude towards this globalization project. No one, including the customer’s representatives can explain why such tall building should be erected in such prestigious location close to the city center. There is criticism as to architectural and urban-development-related characteristics of the project, as well as the financial conditions that are too favorable for the customer. Afterwards, the customer and the city administration turned down the projects and started trying to find another location – on the outskirts of the city. However, such decision is not optimal and should cause even more questions.

CONCLUSIONS

Here we have three examples that concern different periods and regions. They demonstrate possibilities that globalization processes in the urban development and architectural sphere can succeed or fail. The result usually depends not on the activity of the area developer, architect or engineer, but on some higher-order factors. We can see that success is achieved in large-scale tasks that are designed for undoubted economic and social efficiency, with active and large-scale financial and technical support, for new objects in unoccupied (or relatively unoccupied) territories. It should also be considered that projects bring about certain changes in traditional cultural basics and modes of life of local population. A spectacular example of the modern process
of architectural globalization nowadays is the city of Astana. The new capital city of Kazakhstan is created in an under-populated region; it is created by local construction specialists with active participation of prominent foreign architects. Designs made by architects from various countries and various architectural schools standing side-by-side in Astana make a unique image of that city, even though a bit eclectic.

REFERENCES