

NEW TRENDS OF URBAN DEVELOPMENT IN RUSSIA IN THE 18TH CENTURY

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Abstract. Architectural and urban planning activity has always been the most important component of the social and political life of any country and has always been subject to regulation. However, the nature, scope and organization of this regulation were different and depended on many factors. Russia was no exception in this respect. Since the Petrine time, the control system and regulation of architectural and construction process have constantly become more complex. In the Petrine era, the urban planning activities were involved in the orbit of government reforms. The primary targets were to change the principles of construction of urban society, to introduce the principles of regularity in all spheres of the public life, to form the regulatory structures of architectural and construction processes. Urban planning process in civil construction was one of the central areas of focus of the Russian urban development policy within the period of the late 17th century – the first half of the 18th century. The first half of the 18th century was marked by a significant step from the city of the Middle Ages towards the Modern Age city including all its elements, such as social and economic, organizational and political, urban planning, architectural and artistic.

Keywords: city, civil construction, space-planning development, urban planning policy, architecture and building design, urban geography.

Introduction

Review of the urban development history in terms of political and socio-economic reforms of the society expands the boundaries of the historical and architectural science; it allows specifying the content of urban thinking in solving the urban problems. In the XVIII century in Russia the study of the development of urban planning ideas showed their communion with the Western European ideas in the field. This allows to determine the similarities and to reveal the difference of Russian and West-European views on the reform of the society and volume-spatial organization of urban areas within settlements. The first half of the 18th century determined the main principles of city planning development in general, as well as development of its individual elements. The basis for social and economic development of cities, their management institutions and general space-planning development was laid at that time. In the period of the late 17th century – the 1720-ies, as well as cen-

turies ago, any strategically fortified locality was considered a city. Thus, the corresponding urban layout principles were well in compliance with the following definition of a city set forth in the military encyclopaedic vocabulary: a city is “either a strategically point considered as one of military and strategically objects of prime importance, or a locality object of great importance in tactical activities” (Vysotskiy 1904). After all, growth of Russia in terms of territory, gaining and fortification of sea borders required construction of fortresses and fortress cities. Fortresses were places of military station location, and fortress cities performed strategically, as well as trade and industrial functions. Within the period of the late 17th century – the first half of the 18th century a new state system concept was developed for location of cities and fortresses of strategically importance. The urban planning policy of civil construction was based on a system of reforms related to social and economic, political, legislative, and space-planning aspects.

Background

The research is based on an analysis of legislative acts published during the end of XVII – the first half of the XVIII century (Highest imperial decrees, government regulations – Senate, edicts of provincial authorities). Special emphasis is on legal sources, which laid the foundations of the new directions of social and economic development of the cities and their governance institutions. Programs of regulation of architectural and civil engineering activities are defined in the field of architectural and civil engineering complex. Usually, the period of 1689–1762 stands out as an exceptional period in the history of Russian cities. The nature of urban planning programs was determined by social, political and economic reforms. Thus, throughout this period, the legislator was rearranging local administration on a continuous basis, that eventually resulted in significant changes in previous models of city construction and functioning.

Methods

The urban society of pre-Petrine time, as a social institution, was represented by a conglomerate of population groups interrelated only with economical commitments towards the state; Peter the Great tried to direct reforms towards local administration of the urban commune and its consolidation by integration of commerce and industry groups. In other words, we observe the first step towards organization of local administration, enabling to solve urban economy issues in the future. Addressing the organization of urban society on the Western model resulted in the legislative initiatives to reform the supreme power of the state and local government institutions. The legislation of Petrine time consisted of acts of state as well as of oral and written emperor's statutory ordinances. Despite the fact that the Petrine legislation claims to be considered as entire regulation for all aspects of society life, the decrees and enactments made by the legislator were driven by urgent solution of specific problems and, thus, they generated quite a random system (Sementsov 2003). At the first stage, this particular conglomerate of laws built up the basis for territorial, branch and local administration, and resulted in determining position of authorities for urban planning regulation and architectural and construction supervision within the structure of state institutions of various levels. Peter the Great demonstrated a complete rejection of the patriarchal traditions of medieval Russian city, its institutions of governance, and introduced the new European titles to the local institutions of municipal government. That is how *Bauermeister's Chamber*, the *Town Hall*, the local register office ap-

pear. One of the important stages of late 17th century – early 18th century reforms was the city reform of 1699. It was directed towards development of urban authorities as one of the constituents for achievement of political and economic objectives determined by Peter the Great for the society. In order to increase the significance of the society for the state, legislative acts were elaborated, which were aimed at starting of urban authorities' restructuring. In October 1699, a Decree was put into effect, regarding the title of each and every city to dispose of urban land through elected headmen (*starostas*) and administrative officials (*sot-skiye*) upon agreement with and under the warranty of the society without involvement of military governors and estate managers. When local administration – so-called *Zemskiye izby* – was established, suburban population, commercial people of suburbs and districts (*volosts*) fell within their jurisdiction.

Establishment of *Burgomaster Houses* or *Town Halls* in cities took place against the background of implementation of strategic objectives of Russia within the period of the late 17th century – early 18th century. Implementation of these objectives required concentration of powers of the entire society. Thus, arrangement of tradespersons into shops according to the Western European model had no great success. Urban population was in charge for payment of all taxes, and the existed mobilization system applicable to population of suburbs did not promote improvement of urban society social level. As a result, by 1708, the Petrine *Town Hall* got the functions of the central treasury responsible for tax collection and its control. However, program documents of the late 17th century – 1720ies, related to Russian urban planning policy, were a preparatory basis of implementation of further reforms in terms of social aspects. The next document, published on January 16, 1721, was *Articles of Chief Magistrate* (*Full Collection of Laws of the Russian Empire 1720–1722*). The *Articles* determined main characteristics of an ideal city to be established upon putting the document into effect. Actually, the *Articles* stipulated the entire pattern of city organization: it was suggested to improve conditions of manufacturing works, make academies and schools prosperous. This document determined the entire concept of arrangement for populated areas ranked as cities; it also included classification of cities. Cities were broken down by groups: large cities, i.e. those of the most importance (2–3 ths. of households); medium cities, i.e. internal and coastal ones (1–1.5 ths. of households); moderate-size cities (from 250 households); small cities and settlements. A special sheet was generated to determine the group to which a city belonged. Authorities of populated localities were to sub-

mit the following information: drawings of city location (surrounding rivers or seas were of particular interest); city interception with trade routes (types of imported goods and their ultimate destination); description of the social structure of population, etc. Due to strict regulation of social and political aspects, administrative control and centralization of almost all spheres of life during Petrine epoch, appropriate amendments were made into the process of assigning a status of the city to a populated locality. From that moment, government announcement on recognition of a specific populated locality as a city provided such populated locality with the status of the city. The same applied to exclusion from lists of cities generated due to this fact. Such lists of cities were prepared twice during Petrine time, i.e. in 1708 and 1719, and corresponded to the periods of local administration reforms. The reformer's orientation on the structural organization of the Western European urban society and its governing institutions allowed to fill with new content addressing specific urban problems. By 1720-ies, the city was identified as a point of commercial and industrial life, administration point, and location of administrative and judicial authorities of various levels, presenting a unit of strictly centralized vertical structure. It should be noted that in many areas of city life, the legislator just created a pattern of an ideal city without any changes in social policy or economy. However, the first half of the 18th century was the turning point for Russian urban development. At this point the trend in development of the traditional Russian city almost stopped. Implementation of a new approach to arrangement of urban structure and development of its elements, based on the "regularity" concept, which was directly incorporated in legislative practice and were brought into force by state administration and control bodies, became a determining factor. The concept of "regularity" initially adopted as an organizational and legal approach for state development (regular army, regular city dwellers) was introduced into the field of urban planning as well as into architectural and building construction activities. Introduction of new urban development culture required elimination of random laying out of streets and traditional development of Russian cities in the form of manorial dispersed settlement. Ideas of theorists who had promoted the concept of an ideal city in the 15th and 16th centuries, ongoing redevelopment of Western European cities with emphasized ensembles, geometry trend and regular planning were to become an example for implementation in Russian urban development art (Full Collection of Laws of the Russian Empire 1689–1699). The formation of a new Russian town-planning culture was influenced by the ideas of

rational philosophy of Descartes by the French military engineer Sebastien Vauban. The planning model of the ideal city is a geometric correctly lined territory with the mutually perpendicular streets. Public spaces were designated by areas, with the right configuration of geometric shapes (square, rectangle, circle). The concept of regularity based on pragmatic ideas and implemented in urban development practice had the following features. First of all, these features related to ordination, geometry of the entire city structure, as well as of its particular areas; consistency of general concept, adherence to specific order and rules; clear emphasis on the city centre and relevant structures; ordination of orientation due to integrity and uniformity.

Case study

For the first time the idea of regularity was implemented at construction of fortress-cities at the southwest of Russia, i.e. Azov and Taganrog. Construction activities were started in the late 17th century. Despite the fact that the trend to create geometry of fortress outlines was previously used, introduction of regular planning inside fortresses was a new phenomenon. The urban development concept of J-B. Le Blond may serve as an example of ideal implementation of the regularity concept in early 18th century; this concept was proposed as a planning pattern for Saint Petersburg (Shvidkovsky 2005). In essence, this concept can be called an urban development program defining the basis for creation of an ideal city. The city surrounded by a regular ellipse of fortifications appeared to be a structure with geometrical layout of streets and channels, parks and squares, places for monuments, emphasized centre and relevant elements. The architect suggested Vasilievsky Island to be the city centre, so he included the Peter and Paul Fortress and Admiralty building into the planning structure, determined general zoning of the city and made a project for location of the outskirts (Clement 2004). Sizes and shapes of squares were accepted along with the general concept of Western European urban planning. With regard to urban development activities carried out for Russian cities, Le Blond's plan developed for Saint Petersburg should be referred to once again (Fig. 1).

It gives the idea of shapes of the squares (square, rectangular, polygonal), their standard sizes and functionality. Further planning solutions for city squares will be developed within the context of classic ideas; besides the shapes and sizes, their functional classification will be enlarged (near-church, cathedral, trade squares, near public offices, city gates and bridges, military squares, etc.). Despite the fact that the plan developed by the French architect was not taken as the

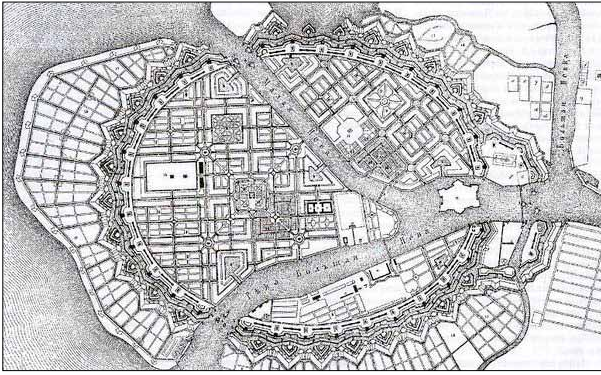


Fig. 1. Le Blond's plan developed for Saint Petersburg

basis, perpendicular location of streets with strictly regulated owned plots of land composed the planning structure of Vasilievsky Island (Fig. 2).

It should be noted that with introduction of the regular street layout, the square and the straight street comprised a unified planning space for the first time in the history of Russian urban planning development. Starting almost from the first years of Petersburg construction, the width of streets was determined and further recognized in legal documents. During the first half of the 18th century, the width of streets in the Admiralty district, Vasilievsky Island, Moscow district and other sections of the city was regulated by decrees. These dimensions were not subjected to further significant changes. Thus, the width of future Nevsky Prospect ranged from 20 to 40 m, and the width of ordinary streets ranged from 14 to 20 m. The new capital city of the Russian Empire became an experimental site for the concepts of regularity applicable to the city

with the majority of civil population; previously, these concepts were applicable only to construction of fortresses. It should be noted that problems of street layout and building adjustment needed to be solved not only in Petersburg. These tasks were determined in some other populated localities. Much earlier, attempts to solve these problems were taken in Moscow, as it was required to locate new stone buildings “along the streets and not in the yards”. In the existing cities, such as Moscow, redevelopment activities were mainly performed in the areas suffered from fire. In 1736, due to fire destruction of the area near Novinsky Monastery close to Arbatskaya Street, a decree was issued concerning “arrangement of straight and wide streets at those areas suffered from fire”. This decree listed names of streets and side streets with previous and design dimensions. For example, “the crossroad between the Church of Nine Martyrs and Presnenskiye ponds, which previously had the dimensions of two to three sagues, should be now increased up to four sagues; and the traffic street to Presnensky pond shall be increased up to six sagues; the roads shall be straightened if possible and converted to traffic roads; no blind side streets are allowed” (Full Collection of Laws of the Russian Empire 1740–1743). Devastating fires in cities often caused the government to take actions related to planning in order to provide fire safety. As an example, a decree dated by 1742 may be referred to in relation to building development of the city of Astrakhan, suffered from fire. According to the decree, “the buildings shall be located at a distance, and streets shall be wide and straight; no building construction is allowed without

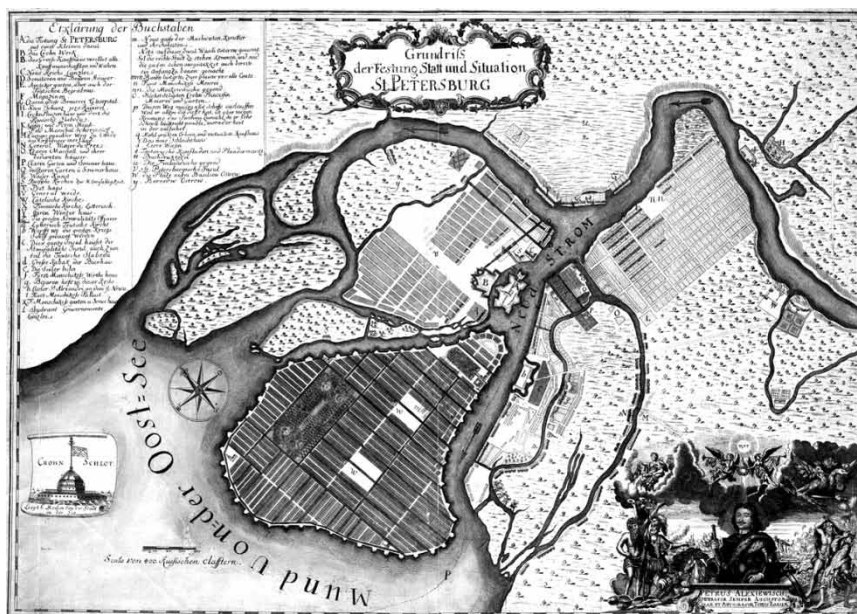


Fig. 2. Developed plan for Saint Petersburg, 1717

authorization from the Chief Police Office”. Also a decree aimed at planning regulation of the city of Novgorod was issued. It instructed to implement new regular planning with wide streets in the city areas suffered from fire (Full Collection of Laws of the Russian Empire 1723–1727). Introduction of the regular planning system in new cities which started from the first years of Petrine regimen caused significant changes in populated localities’ architecture, their streets and squares. Regular geometry of streets, and squares configuration were considered as the main regulation for designing new cities. In conjunction with arrangement of buildings along the boundaries of a land plot, it supported integrity of city development in the Modern Times. However, a regular city is not only a city developed in accordance with prepared scaled drawing, which was designed and constructed as per the uniform rule for planning structure. The definition of “regularity” is considerably wider in urban development practice. It includes strict zoning of city areas, determination of space-planning development for each zone (construction material, height, etc.), regulations related to development by types of specific buildings of public and private nature. Besides that, the term of regulation provides for continuous state control of all design and building construction activities. It should be noted that the requirement to ask for permission to construct a governmental building has been typical since the first years of Peter the Great regimen. For example, in the “Instruction to the Kazan military officer regarding management of governmental and land activities” the following can be found with regard to construction activities within the fortress: “...to submit to the Kazan office to the attention of the Great Sovereign; no construction activities shall be carried out without decree or letter from the Great Sovereign”. For the first time, types of public buildings and structures within a city were determined by the Articles of the City Magistrate. It may be noted that these structures were the first real estate owned by society of the city. Such real estate also included Town Hall buildings, stock markets (in coastal and large merchants’ cities), prisons, hospitals, orphanages, small schools. This list was enlarged in time in accordance with city needs. As it was defined in the treatise-code “Architectural Expedition Responsibilities”: “What is a public building? A public building is considered as such due to its location and population needs” (Arkin 1946). Legal basis for design and construction activities related to the following types of public buildings was formed in the first half of the 18th century: governmental, civil, religious, military, particular. Standard projects were developed almost for all of these building types. Being

approved at the highest level, these projects formed a law, and, in the course of building construction, control of adherence of erected buildings to standard drawings was performed. Municipal administration represented by governors and military officers was responsible for control of construction process; monetary assets to be used for construction and repair of city-owned buildings should be taken from land taxes and city revenues. Building construction as per the standard had been previously wide-used in Russia. Construction of similar buildings and use of repeated elements may be noted in residential houses, urban and religious buildings. Such experience as well as study of Western European experience served as the basis for introduction of standard building construction in cities at Petrine time. First attempts to introduce standard projects into mass housing construction in the early 18th century was related to the requirements to building development of clay-type houses at several Moscow areas. For clarity of city dwellers, some experimental standard buildings were constructed in the village of Pokrovskoye. However, standard projects were mostly used when construction activities started in Saint Petersburg. To make the capital city look like a European one, particular actions should be taken within a short period of time. Forced populating of the city was aimed to fill it with people of various material statuses. According to the decree, “court nobilities and people of other ranks” were to have plots of land within the new capital with appropriate building development. Upon regular urban planning, the city was divided into specific areas to be populated with people of particular social status. Thus, the representative areas were intended for rich and famous building developers. These areas were mainly situated along the Neva River at Vasilievsky and Admiralty Islands. Merchants’ area was located at Gorodskoy Island near the trading area (Sementsov 1993). Other city dwellers and military people settled at remote territories. Initially, housing development at plots of land determined by the City Affairs Office was random. Development of standard projects for private house owners served as a solution for the issue. Now persons involved into building development were provided with projects according to their social status, which they were required to follow for construction purposes. In 1714, for clarity purposes and in order to demonstrate the required planning and new look of building facades, a number of standard projects for residential houses approved by the decree signed by Peter the Great was issued by the Building Office. Standard projects were developed by Domenico Trezzini, an architect of the Office. Availability of various social strata within the city determined the set of

standard projects intended for building development. The simplest building structures of clay-walled type were intended for soldiers, working people, office employees, lower level officers; nobility-type houses were intended for merchants and lower level noblemen; prominent people houses were to be constructed by rich and famous city people at their own plots of land. According to the decree, it was required to use “drawings by architect Trezzini” for construction activities. It should be noted that standard projects of residential houses were of importance not only due to urban planning purposes. Their artistic concept was also of importance. With consideration of the requirements, architectural components of these buildings were influenced by artistic trends of the Western Europe; however, they had their own individuality (Fig. 3).

As for standard projects, an object intended for noble people was taken as a unit of a land plot. A territory with the dimensions of 50 x 25 sagues was considered as the site. If the land was intended for ordinary people, it was divided into four plots of land with the dimensions of 12 1/2 x 25 sagues. Or it could be divided into six plots of land of the following dimensions: 8 sagues and 1 arshin x 25 sagues, i.e. in proportion of 1/2 or 1/3. Houses with longitudinal building facades with the length of 10 or 5 1/2 sagues were positioned within a plot of land along the side ends of the site, thus generating a building development line along one side of two parallel streets of the 50-sagues section (Beletskaya *et al.* 1961). In 1714, a decree aimed at regulation of building order for houses in Saint Petersburg was issued. Besides the requirement to construct building structures along the building line only, the pattern for house positioning at the plot of land and development of the plot of land itself were also covered by this decree. A main house was to enter a street with its longitudinal or end building façade, and

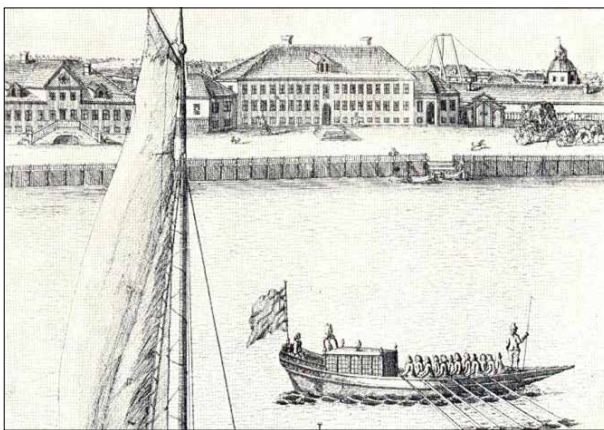


Fig. 3. Development of buildings according to standard projects in Saint Petersburg

auxiliary buildings were to be located along land plot boundaries. The Chief Police Office Instruction dated 1722 included outlined prospects for redevelopment of Moscow areas, despite Moscow was a fully developed city. The police was to monitor linear arrangement of houses in streets to “make the width of streets even in time”. Generally, the Office was to decide urban amenity issues. In 1736, regulations for building development in the capital city were issued as well. These regulations covered redevelopment activities in the area between the Admiralty meadow and the Moyka River, which was damaged by fire. Generally, the document was devoted to street layout within this area. In particular, it was required to make the Moyka River embankment a traffic road and straighten it if possible. Also, according to the decree, it was decided to renew the process of land plot sharing (“the first ones shall be twenty five sagues in width, the medium-sized plots shall be of fifteen sagues...”) and to distribute these plots of land to noble people. Two drawings were included into the regulations (for different standard sizes of land plots); these drawings were to be used for the purpose of stone buildings’ construction. Thus, in 22 years after the first issue of standard projects in 1714, the revised drawings for “large, medium and small houses” were re-issued for the purpose of building development at sites of fire in Saint Petersburg. In 1721, standard projects were issued for country residential houses, providing for regular garden layouts which included small objects (summerhouses, fountains, ponds). Such projects were used to develop embankments of the Fontanka and Moyka River, Malaya Neva which formed suburban area at that time. Also these projects were used for the purpose of area development in Moscow historically tending to this type of site planning pattern. A standard section of rural housing was developed as well. A relevant Decree determined site planning and a distance between the house and the household outbuilding, provided for distribution of drawings in villages and cities, as well as introduced supervision over implementation of the Decree by the Collegium of Estates. Such method of housing development was also applicable at similar suburban areas near Petersburg, which can be observed on city plans dated by 1745–1753.

Results

1. Between the end of XVII – the first half of the XVIII century the urban management in Russia, their social and economic basis, the regulation of their architectural and civil engineering processes are involved in the orbit of government reforms.

2. In the first half of the XVIII century the basis of the documents in the field of town planning legislation was on the legal documents of various level of governance (the highest imperial decrees, government regulations – Senate, edicts of provincial authorities).
3. In the first half of the XVIII century urban planning, architectural and civil engineering practice expanded not only in the capital, but also in other cities.
4. The idea of regularity became predominant in the urban planning and architecture. The standard construction and construction in accordance with the recommended standards are actively introduced in the civil engineering practice.

Conclusions

The government policy related to urban planning in the first half of the 18th century included the entire complex of related tasks from state construction activities to regulation of architectural and planning parameters. At that time, the comprehensive idea of regularity, implemented throughout all areas of the state system and public life, naturally applied to urban planning and architectural-and-construction spheres. In this regard, introduction of a new approach into arrangement of city structure and development of its elements is considered as a determinative factor.

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