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BASIC TYPOLOGY OF THE PUBLIC BUILDINGS PRESENTED ON THE EXAMPLES BUILT IN BELGRADE IN PERIOD BETWEEN 1830 -1900

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Abstract. *Abstract. In this paper, through the analyses of the structures built in Belgrade between 1830-1900, some of the basic types of spatial organization of public buildings are defined, depending on their purpose and content, their position within the urban tissue, size and basic characteristics of the spatial form. Based on the above-mentioned typological researches, it can be concluded that the focused buildings have a special place in the development of the modern Serbian architecture because they show, despite Turkish domination of Serbia at that time, the acceptance and developing of the new type of spatial organization which characterized the regions north of the Sava and the Danube, in the Austro-Hungarian Monarchy, and also the developed European centers. It can be also noticed, even though numerous examples within some types of buildings are not presented, that the basic schemes of the spatial organization formed in this period became the marking points which served as basis for development of much more complex and monumental structures in the first half of the XX century.*

1. SIGNIFICANCE AND BASIC CRITERIA FOR TYPOLOGICAL STUDYING

The public buildings built in Belgrade during XIX the century represent a very broad category which includes the buildings of different purpose and contents [1]. Their classification to certain types, depending on their character, purpose and specific content they are aimed for, as well as studying of their spatial and functional characteristics has special significance for studying the development of buildingship in Serbia because, among other things, they enable realizing of the effect of the purpose and of the building programme to forming of spatial structure of some types of buildings and following the way of their use in different style periods. Research covering the courses of formation and

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development of the public buildings in this period is significant also from the standpoint of the modern buildingship because it enables discovering of certain regularities related to their shaping and noticing of characteristic types of spatial organization which were applied to some types or were a joint characteristic for different building types.

Apart from classifying of the buildings according to their purpose and content, which is in the literature often associated with the typology, it is necessary to apply some detail typological studies of the spatial organization and disposition of some characteristic parts of the building, as well as to study the effect of numerous factors (such as the position of the building, the applied structural system, composition of the whole and others) to shaping of the spatial structure, in order to define certain types of the spatial organization characteristic for the focused period and to determine their relation towards the total buildingship heritage of Serbia and Europe. Among the first theorists who presented the architecture from the aspect of building typology, through historical and modern examples of different buildingship programmes, was J. N. L. Durand, who in his published lectures given at the Ecole Polytechnique in Paris, presented some types of buildings, their origin and functional analysis, as well as the ideal models which he recommended by himself for some purposes. [2]. One of the most comprehensive presentation of some types of public buildings through history was given by Nikolaus Pevsner in his book *A History of Building Types* [3]. However, in both above-said examples the studies referred to researching of individual types of spatial organization within certain types of buildings, i.e. the purpose, because if the global development of buildingship is focused, we can notice numerous examples which point out to a common practice of applying certain types of spatial organization, through history, to the buildings of different types, regardless of the character of its purpose.

In all researches up to now, in the XIX century architecture in Serbia the lack of typology studies can be seen, as well as the lack of comparative analysis related to the spatial organization of the buildings, especially the public ones. There are mostly the descriptions of the internal organization of some buildings, without more detailed analysis of the spatial organization characteristics and without defining certain types in relation to the characteristics of the plan. There are very few presentations of the construction and architectural characteristics of some types of public buildings, and the existing ones contain only basic information about the spatial arrangement and appearance of the building, with no comparative analysis of their spatial structure and typological presentations [4]

It is important to mention that the typological analysis applied in this text, as well as in the magistrate's work of the author, follow the typological studies of prof.dr. Jovan Nešković, presented during the lectures within the subject called *Development and typology of architectural structures* as a part of the post-graduate course called *Protection, revitalization and studying of the buildingship heritage* at the Faculty of Architecture in Belgrade. This method of research which covers initiating and developing of certain architectural programmes, with presentation of modern theories about significance of typology studies in researching the development of buildingship is the basis for other, recently published typological studies of multi-purpose buildings and it opens a new field of research in the architectural creative art which, up to now, has not been the subject of the buildingship development researches [5,6,7,8,9].

There are numerous criteria for establishing basic typological views of buildings,

either for one purpose or for many purposes. The following facts influence formation of certain type: function and technical requirements related to certain contents, position which one building occupies within the urban tissue, its structure, desire to achieve certain compositional solution, emphasizing of certain parts of the building, requirements related to the prevailing style in certain period etc. Apart from the great number of various factors which can influence formation of certain type, the typological studies are additionally made difficult by the fact that in some buildings there is a combination and intermingling of plans present, so that numerous combined and complex forms appear, as a variant of the solution, within some types of spatial organization.

Since a great number of public buildings was built in Belgrade in XIX century (though the examples of some types are not numerous), apart from the classification of the buildings regarding their purpose and content, some of the basic typological views can be established which would cover all the constructed buildings, of different purposes and certain types can be defined, regarding the position which the building occupies in relation to the surrounding urban structure, form of their size and characteristics of the spatial structure and internal organization. Beside the mentioned criteria, certain typological characteristics can be seen in the light of researching the position of some significant internal spaces (such as: entrance zones, horizontal and vertical communications, sanitary areas, etc.), but they require more details about the original spatial organization of the focused buildings.

It is necessary to mention that the basic typological views can be established only for the buildings with available information about their original spatial solution or for the buildings for which their original spatial characteristics can be learnt by analyzing the preserved documentation from some later period of some photos of the existing condition. Since there are relatively few original data saved about authentic spatial structure of some buildings which had been put down later, as well as about original spatial organization of some preserved buildings, there are some evident difficulties in researching the spatial organization of the buildings in the said period. However, the necessary data about spatial structure of certain type of buildings can be found in numerous written works such as biographies, travel works, historical works and others, dating from this period [10,11,12,13,14,15,16,17,18,19,20].

2. SHORT PRESENTATION OF THE CONSTRUCTION AND CLASSIFICATION OF SOME TYPES OF PUBLIC BUILDINGS

The young and newly-reestablished Serbian dukedom, later to be kingdom, initiated, in the first decades upon receiving certain independence from the Turkish rule, establishing and foundation of modern governmental and public institutions, looking after, in the beginning, to the examples which immediately surround it, in the regions north of the Sava and the Danube, in the Austro-Hungarian Monarchy, and later Pest, Vienna and other European centers. Apart from the first governmental edifices (administrative buildings, court buildings, military buildings), in the 1830's the first medical, educational, cultural, scientific and social institutions were built. What on a general level characterized the construction of the public buildings was the fact that, despite their variety and difference of types, they were mostly not monumental and

not numerous, mostly grouped in the capital - Belgrade. Also, due to relatively bad economic and financial circumstances in the country, and due to the impossibility of speeding up the construction,- there were few educated builders and there was lack of building material- ,till three last decades of the XIX century majority of governmental buildings was, upon its foundation, housed into the existing buildings,originally constructed for some other, mostly housing, purpose.

On the first governmental edifices built in mid-1830's it is very obvious that a transition was made to a completely new type of spatial organization, which was a result of imitating the similar buildings in Zemun and Pancevo and a consequence of transition to new materials and building techniques brought by the builders from this area. The first governmental buildings were of relatively small proportions and had a simple spatial organization, which was caused by modest possibilities of the country which insufficiently developed buildingship. By arrival of educated builders from Austro-Hungarian Monarchy, in 1840's, there was a more direct transition of the common scheme, characteristic for designing functional governmental and public buildings in central Europe. The public edifices built in the country were gradually, in the second half of the XIX century, achieving the complex spatial structure, determined by the academic designing principles, which is especially obvious on the examples of buildings constructed in the last two decades of XIX century, with more complex spatial organizations of monumental proportions.

If we consider all these public buildings built during the above-said period, we can classify them into certain types depending on the character of their purpose:

I. Governmental buildings, headquarters and administrative buildings were buildings to whose construction a special attention had been paid. The first governmental building which was built immediately upon granting certain governmental independence was the Customs Administrative Building ("Đumurkana") which witnessed about the independence of the re-established dukedom. The construction of the building was started in 1834 on the Sava quay, near the Great Staircase. The construction of the edifice for the state government supreme Council ("Sovjet") was started as early as 1835 in the new governmental center in "Savamala". In the middle of the XIX century, the Governmental Council was housed in a very modest ground-floor building in "Abadžijska Čaršija" (naw Narodnog fronta St.). It was not until the second half of the XIX century that this institution, together with the Central Control, was moved to one-storey building in today's Kneza Miloša Street, built in 1889, according to the design of arch. Dragutin Živanović. Even though the institution of National Parliament existed ever since the re-establishing of the new Serbian dukedom, it did not have the real ruling role in the country, so that its sessions were only occasional, in some buildings appropriate for this purpose. As late as in 1860's the preparations were made for construction of Parliament Building, and even though by the end of 1990's the architectural design of monumental proportions had been made by architect Konstantin A. Jovanović, the question of the Parliament Building was not settled till the end of the century. For housing of executive bodies and governmental administration, and some ministries, in the beginning, some housing buildings or buildings for other purposes were used. Thus, the Ministry of Finances was, at the beginning of 1940's moved into the "Palace in Savamala", whose construction had been started by Duke Miloš Obrenović in 1834. "The Palace" was built and roofed in October 1837 but as early as in 1841 it got in such a bad condition. Soon, in 1842, the Duke

Mihailo Obrenović gave the building to the Governmental Council and the Ministry of Finances. The Ministry of Interior and Foreign Affairs was housed in the "Palace for the Throne Successor Mihailo", the construction of which started in 1860 (on the place of the present "New Court"). It was not until the end of 1860's that the construction of a series of representative buildings for some Ministries started. One of them was the building of the Ministry of Construction and Fund Administration, for which the design was made in 1865 in the Main Construction Administration, (in today's Kneza Miloša St.) and construction was completed in 1869. The building for the Ministry of Justice and the Terazije Quarter, in the Terazije, built in 1832-83, according to the design of architect Svetozar Ivačković and engineer Jovan Subotić. The Ministry of Army and Navy was built in 1895 in the corner of the present Kneza Miloša and Nemanjina Streets, according to the design of architect Jovan Ilkić, while the building for Mining Department of the Ministry of Economy, in the western "Vračar" area was built around 1880. The buildings for the town government bodies were built in the capital at that time. At the beginning of 1850's, a new ground-floor building was built on the Great Market (today Studentski trg) for the Town Administration Body. In the immediate vicinity, by the end of 1960's, the building of the old hotel "Serbian Crown" was bought for the purpose of housing the Belgrade Municipality in it (today Uzun Mirkova St. 1). By the end of the century there were numerous courts in the town which were mostly situated in non-purpose buildings, so that the construction of the new building of the District Court, in which the Chief Command was housed too, in 1900, according to the design of architect Dragutin Đorđević, in the vicinity of "Terazije", was of great importance [11,12,13,16,18].

II. Residences of the Rulers - Palaces - are a special type of governmental buildings and even though they were primarily built for residential needs of the rulers, they also had the character of public buildings because in them many governmental functions were performed, many governmental celebrations were held, the court administration was situated in them, etc. When Prince Aleksandar Karadjordjević came to the rule, one of the most beautiful private houses was bought off for him, so-called "Simic Edifice" on Terazije square and was adapted as a court, later to become known as "The Old Konak" (it was situated in the area between the Old and the New Court). In the beginning of the 1880's, after the announcement of the kingdom the "King's Court" was built within this court complex on Terazije (later to become known as "The Old Court"), which represented the first residence of monumental proportions (today the Belgrade City Assembly building). This building was built from 1881-84 according to the design of architect Aleksandar Bugarski [12,17,18].

III. Military buildings, barracks and military schools, are specific among the governmental edifices due to their specific purpose, and they were represented by huge blocks of buildings in Savamala, in the western "Vračar" and in "Palilula" during XIX century. One of the first governmental edifices in the new Administrative Center in "Savamala" in 1835 was the "Great Barrack", while 2 years later the "Palilula Barrack" was started. Beside them, in the "Zarić Plan" of 1878 the "Tobd'ija Barrack" and the "Konjička Barrack" were recorded. The first military educational building was built in Serbia at the beginning of 1850's in western Vračar and it was the School of Artillery, constructed according to the design of architect Jan Nevola (it was situated in today's Kneza Miloša St.). After it had grown into the Military Academy, the military school got the new building in 1898, according to the design of architect Dimitrije T. Leko, within

the same complex (the corner of Birčaninova and General Ždanova St.) [11,12,18].

IV. Religious institutions of both administrative and educational purpose got the new buildings by the end of 1840's and beginning of 1850's. A new building was constructed for the Belgrade Mitropoly in place of the old one, across the Saborna Church, while in the immediate vicinity of Kalemegdan there was the new building of Ortodox School, "Bogoslovija" [12,18].

V. Medical institutions, hospitals, were constructed since 1830's and had a military character. The first hospital in the town was "Soldački Špitalj" in Savamala, a garrison hospital within the complex of the Great Barrack. In the documents preserved from this period the "New Military Hospital" within the complex of the "Palilula" Barrack was mentioned, for which the plan had been made by Valentin Mor, "bau-master" from Pančevo in may 1837, while in the same year in October the walls of the building were erected and the building was roofed. Due to the inadequate conditions for treatment and hospitalization of the patients in these old buildings, in 1846-49 a new building of the Military Hospital was built in the western "Vračar", according to the design of architect Jan Nevola. The first civil hospital "Town Hospital", was started in 1865 and completed in 1868 according to the design of the governmental engineer Jovan Francl, in the vicinity of Palilula Square [12,13,18].

VI. Educational and scientific institutions - elementary schools, gymnasiums, Academies and other types of governmental buildings upon their establishing were moved to the existing housing buildings. Even though the adopted sketches for the typical buildings for elementary schools and Gymnasiums (or Academies) from 1835 and 1838 were preserved the idea about their construction was not realized. It was only in 1863 that the representative "Kapetan Miša's" Edifice was completed (today the Rectorate of the Belgrade University), a monumental palace designed a residence of a rich Serbian merchant, which was donated as present to the Serbian people for the educational purposes, and thus, the most important educational institutions, Gymnasium and the Great School (University)- got improved conditions for their work. Since this palace, the second two-storey building in the town, started in 1860 according to the design of Jan Nevola, was exceedingly spacious, many other important institutions were housed in it: Realka School, National Museum, Library and the Ministry of Education. When the High School for Women was established in mid-1860's, in 1865 it got its purpose-made building in "Abadžijska čarsija" (naw Narodnog fronta St.). One of the educational buildings was the building of Meteorological observatory, which belonged to the University and was constructed by the end of the century in the western "Vračar" area, according to the design of Dimitrije T. Leko [12,18,20].

VII. Cultural Institutions - theater, reading rooms, libraries and museums were not numerous in the Serbian capital in the XIX century. As said above, the National Museum and the library were, immediately upon foundation, housed in kapetan Miša's Edifice, while the Museum was later moved to the neighboring housing building. In the 1850's, the main subject of consideration was construction of theater building and the location in the "Zeleni venac" was selected, while the design was made by engineer Josif Kasano. However, the selected terrain was marshy and the works very soon stopped, so that the first permanent theater building, today's National museum, was started in 1868 and completed in 1869 according to architect Aleksandar Bugarski's design, in the free place near "Stambol" Gate (today The "Republic" Square). The houses of various

associations had a specific, mostly cultural, educational and humanitarian purpose. The new one-storey building for the House of "St. Sava" in "Dorćol" was built from 1889-1890, according to the design of architect Jovan Ilkić. The representative Officers' House, with spacious ball-room was built in 1895 according to the design of architect Jovan Ilkić and Milorad Ruvidić, in the area of the old Cavalry Barrack [12,18].

VIII. Mercantile institutions - banks, saving banks and cooperatives, upon their foundation, were housed in the existing buildings adequate for their purpose. The new building of the Lass lottery was built in 1896, in today's Vasina Street, according to architect Milan Kapetanović's design, while for the administration building for the National Bank, a representative palace, the most monumental in the capital at that time, was built near Saborna Church, according to the design of architect Konstantin A. Jovanović [12,16,18].

IX. Hotels were the most numerous public buildings in the XIX century Belgrade. The oldest hotels, recorded in 1830's, mostly followed the tradition of the old Turkish hans. The first in modern style constructed buildings in mid-XIX century were hotels "At the Deer" and "The Serbian Crown". The hotel "At the Deer", later to be called The Old Edifice ("Staro zdanje") was started in 1841 near the Saborna Church, represented the first two-storey building in the town and covered the whole town block. The "Serbian Crown" Hotel, near the Great Market, built around 1854, was arranged in a very representative way, with a big hall where the concerts and balls were held. It can be noticed that the greatest number of new hotels was built during the 1860's, such as "London", "Balkan", and the new "Serbian Crown", which makes us realize that the development of the Serbian capital took a faster space at that time [4].

X. The buildings for special purposes - railway stations and covered markets - were represented at that time only by several examples. The Belgrade Railway Station was built in 1884, (at the time when the construction of the first railway road was completed in Serbia), according to the design of the Viennese architect Von Schlicht, which was elaborated in the Ministry of Construction by architect Dragutin Milutinović, and, if compared with the similar European examples of that time, it had very modest proportions. Apart from the numerous open markets in Belgrade, by the end of the century the first covered market was built in the "Vračar" Square (today the Square of Flowers), in the form of a simple rectangular hall [12,15,18].

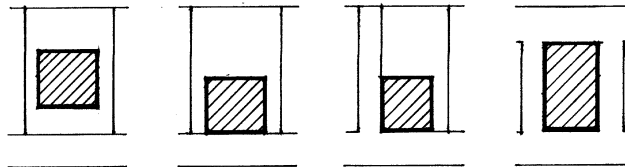
According to the above-presented view of the public edifices it can be clearly understood that there are very few examples of the same-purpose buildings (in some examples one or two edifices), which leaves almost no possibility for establishing certain typological views of the spatial organization on the buildings of the same type. However, all the public buildings can be seen as a whole because based on the total buildingship development, it can be concluded that for different types of public buildings the similar or the same spatial concepts were applied, which only points out to the fact that their purpose did not have the crucial effect to formation of the spatial structure.

3. CLASSIFICATION OF THE BUILDINGS IN RELATION TO THEIR POSITION ON THE SURROUNDING URBAN TISSUE

If we inspect the public buildings from the focused period from the standpoint of their

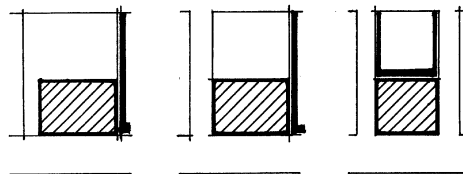
position towards the surrounding urban tissue, and based on the data about the location recorded in the old plans (mostly Zarić's Plan of 1878), we can distinguish two basic groups (Fig.1):

1. free-standing buildings



2. built-in buildings

- built-in only from one sides



- built-in both sides

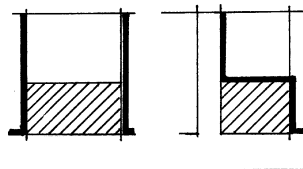


Fig. 1. Classification of the buildings in relation to their position on the plot

1. Free-standing buildings with all four sides free, which can be constructed:

- inside the plot (such as: "The Sovijet", the old Ministry of Finance, The Old "Konak", Palilula elementary school, Town Hospital, The Great barrack etc.)
- alongside the regulation line of one street (such as: The Throne Sucessor's Mihajlo Palace);
- alongside the regulation line of two streets, on the corner (such as: The Artillery School, Ministry of Construction, Ministry of Army and Navy, The Old Palace, The Officers' House etc.); and
- in the free public area - square or surrounded with streets on all four sides, so that they form a town block (such as: the Theater in the "Stambol" gate).

2. Built-in buildings, which are situated alongside the regulation line of the street and run alongside one or both sides of the lateral borders of the plot, so that we can distinguish:

- buildings built-in only from one (lateral) side, which can be erected alongside the regulation line of one street (such as: The Customs Administration), or alongside the regulation line of two streets - on the corner (such as: Town Administration, "Bogoslovija", hotel "London" etc.) or alongside the regulation line of three streets, on two corners (such as: the new "Serbian Crown" Hotel, and the "Serbian King" Hotel); and
- buildings built-in on both (lateral) sides, which can be erected alongside the regulation line of one street, covering the width of the whole plot, so that the main facade and the courtyard facade are free-standing (such as: The Ministry of Justice, The House of "St. Sava", Hotels "Casina" and "Paris") or alongside the regulation line of two streets, on the corner, so that they have two street facades (such as: Class Lottery, National bank and "Greek Queen" Hotel).

According to the above analysis, it can be seen that the greatest number of edifices had a corner position, with two representatively finished facades and a corner finished as a special composition motive, as an expression of a tendency to achieve a monumental and representative impression. Also, it is obvious that the buildings built in the 1830's were most often located in the internal part of the plot, as free-standing edifices, while later there was a tendency of building alongside the regulation line of the street, mostly alongside the full width of the plot, i.e. with detached, neighbouring buildings on one or both sides. This was the result of the process of urbanization within which the European examples had been followed, so that the buildings built in the central town zone were most often erected alongside the regulation street line in order to form a continual street line with the neighbouring buildings.

4. TYPOLOGY OF THE BUILDINGS ACCORDING TO THE SHAPE OF THE PLAN

One of the criteria for distinguishing the characteristic building types is the shape of their plan. It can be noticed that the great number of public buildings, especially in the period of classicism, regardless of their content, had the same or very similar size shape and most commonly of was an elongated rectangular shape. Out of this shape, certain variant solutions had been developed. In some examples, in order to enlarge the capacity of the buildings, the courtyard aisles of different shapes were added to them. Also, as a result of a wish to achieve certain architectural composition and to emphasize some parts of the front facades, the bay elements were used, which enhanced the appearance of the flat facades. Even though the application of bay elements sometimes was the result of functional requirements, i.e. the result of a wish to express the internal spatial organization in an external form and to emphasize some of the important parts (such as halls, entrance vestibules, halls, staircases etc.), this application was most commonly the result of strict following of academic principles in composition of the mass, regardless of the internal arrangement of the rooms.

In some cases of public buildings their basic shape was the result of certain functional and technological requirements which referred to, primarily, purpose and content. This was the case with theater buildings whose shape was mostly determined by the shape and position of the auditorium and the stage area. Also, some of the buildings followed by their shape certain traditional solutions characteristic for this particular purpose. Thus, some of the hotels had square base plan with internal courtyard, following the example of

the old plans which characterized the previous period, so that this shape represented the acceptance of the traditional shapes in certain types of spatial solutions. The basic shape of some buildings sometimes depended on the position which they had within the urban tissue, as well as depending on the plot on which they were built, which can be obviously seen on the example of corner buildings whose shape was adjusted to the corner shape and the form of the corner.

The buildings built in the focused period can also be analyzed according to the shape drawn on the old plans, data about their spatial structure in the literature and based on the photos in the Institute for protection of the Cultural Monuments of Belgrade.

In comparison to the previously mentioned aspects, certain characteristic types can be distinguished and it is also possible to point out certain variant solutions, depending on the fact if we consider the shortened or the developed size form (with lateral or central bay elements or aisles, which usually have many variants on the front and backyard facades) so that we can differ (Fig.2):

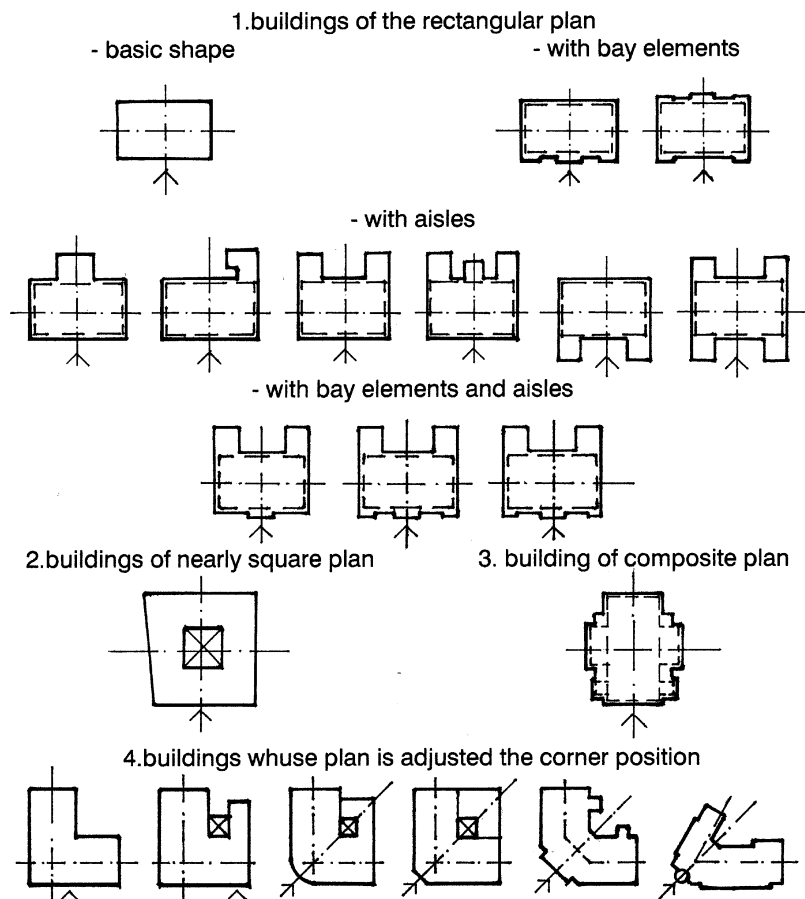


Fig. 2. Typology of the buildings according to the shape of the plan.

1. Buildings Of the Rectangular Plan :

- *of basic shortened shape* (such as: House of "St. Sava")
- *of developed shape with bay elements* - which can be represented only on the front facade, in the middle or laterally (such as: Governmental Council and the Main Control); or can be on the front and on the backyard facade - two lateral on the front and middle and two lateral on the backyard facade (such as: The Ministry of Construction);
- *of developed shape with aisles* - where we can have one backyard aisle in the middle or laterally (such as: Town Hospital, The Customs' Administration and the Ministry of Justice), or two lateral backyard aisles (such as: Military Hospital) or one backyard aisle alongside lateral and back edge of the plot (such as: the old "Serbian Crown" Hotel), or middle and two lateral aisles (such as: Mitropoly), or two lateral aisles on the main facade (such as the Great Barrack in "Savamala"), or two lateral aisles on the main and on the backyard facade (such as: The Throne Successor Mihailo's Palace)
- *of developed shape with bay elements and aisles* - with one middle bay element on the front and backyard facade and two lateral aisles on the backyard facade (such as: "Kapetan Miša's" Edifice), or one middle and two lateral bay elements on the front facade and two lateral backyard aisles (such as the old Ministry of Finance), or middle and two lateral bay elements on the front facade and one middle and two lateral backyard aisles (such as: The Old "Konak" and the Palilula elementary school).

2. Buildings of Nearly Square Plan

- with spatial structure developed around the internal courtyard (such as the new Hotel "Serbian Crown"); and
- buildings with spatial structure developed around the central hall (such as: the Old Palace).

3. Buildings of Composite Plan

- with the core in the shape of elongated rectangular with addition of different shapes so that a composite developed form is achieved (such as: Theater on the "Stambol" Gate, where the core is made of the auditorium and stage, with additional parts for halls, staircases, cloakrooms etc.).

4. Buildings whose plan is adjusted to the corner position and which can be:

- without especially emphasized corner, with only two aisles which are developed alongside the regulation line of two streets (such as "Macedonia" and "Bulevard" Hotels) or the same solution with added backyard aisle (such as : "Russia" Hotel); and
- with especially emphasized corner - i.e. cut or rounded corner and plan of nearly square shape, with internal backyard (such as: "Greek Queen"), or with the plan in shape of a enclosed block and with glazed hall in the core (such as: National bank).

5. TYPOLOGY OF BUILDINGS IN RELATION TO THEIR SPATIAL ORGANIZATION CHARACTERISTICS

If we take a deeper insight into the very structure of the buildings constructed in the focused period, they can be seen only in relation to the basic character of their spatial organization (to the extent which is available from the available sources), without going further into some more detailed inspection of the arrangement of rooms, so that certain types can be defined depending on the characteristics of their spatial structure and the

arrangement of the rooms inside the main corpus and the aisles of the building.

With regard to this, we can distinguish the following buildings (Fig.3):

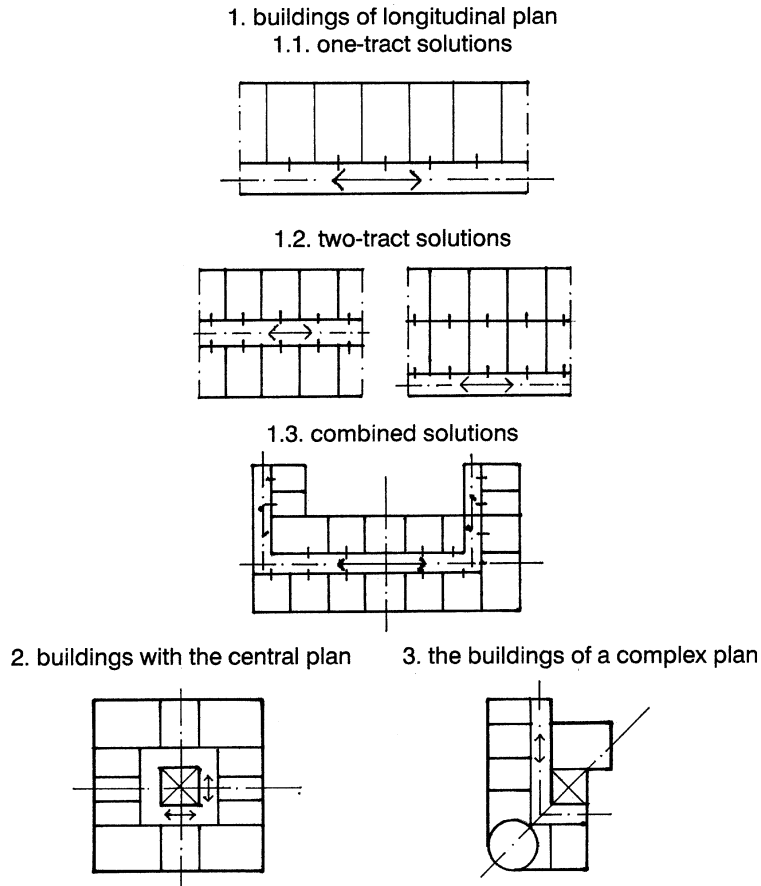


Fig. 3. Typology of buildings in relations to their spatial organization characteristics

1. Buildings of longitudinal plan, where the rooms are arranged alongside the communications - corridors, in the direction of the longitudinal axis of the rectangular corpus and the yard aisles (if there are any), and these buildings can have:

1.1. one-tract solutions - with one broader tract with rooms arranged longitudinally and with one corridor that connects them. The corridor in the free-standing buildings is most commonly on the backyard side, both in case of the main corpus and the aisles, so that the rooms are arranged alongside the street front (such as Town Hospital and Palilula elementary school). In the case of the built-in buildings, the corridor is either on the main corpus side and alongside the lateral side of the plot in the case of the aisle, so that all the rooms in the aisle receive the light directly from the yard (such as: The Ministry of Justice); or the corridor is both in the main corpus and in the backyard aisle, so that the rooms receive the light indirectly through the corridor (such as: Hotel "Kasina"). This

solution is very common in the case of corner buildings, where one-tract aisle, with corridor turned towards the yard goes along the regulation line of two streets (such as: "Dorćol" Elementary School); or around the internal yard, on three sides such as "Staro zdanje");

1.2. two-tract solutions - with longitudinally arranged main rooms and one corridor between the tracts- were applied in the case of headquarters and administrative buildings (The old Ministry of Finances, The Governmental Soviet, the Main Control and the Ministry of Construction), as well as on the example of hotels ("London", and "Paris"); and

1.3. combined solutions - where one-tract and two-tract solutions were combined in the main building corpus and the aisles, so that in this case there appear many variants of the solution: the main corpus may have two-tract solution, with corridor towards backyard, while the backyard aisles can have one-tract solution, also with corridor towards the backyard (such as: "Vračar" Military Hospital); or the main corpus and one aisle may have one-tract solution, with corridor alongside backyard, while the other aisle may be two-tract one, with corridor between the rooms (such as: Hotel "Serbian King"), or the main corpus can be two-tract one, with the corridor in the middle, with the backyard one-tract aisles and corridor turned towards the yard (such as: "Kapetan Miša's" Edifice).

2. Buildings with the central plan which have the origin in the tradition of the spatial plan of the atrium house, where the rooms are grouped around the central yard can be: either with one tract of rooms and with glazed corridor (backyard side) which include the yard (such as: Hotels "The Greek Queen" and "The Serbian Crown"; or with one tract of rooms and a corridor in the form of a gallery around the central hall (winter garden), with glazed roof (such as: The Old Palace).

3. The buildings of a complex plan which have specific spatial solutions originated from the functional requirements related to the very purpose of the building. These buildings can be formed of one central core of rectangular shape (in the case of "Theater building at the Stambol Gate" it is the auditorium of horse-shoe shape and the stage) with addition of other spaces which are either of rectangular or of square shape (halls, staircases, ancillary premises etc.) Within this type, there are many elaborated shapes, especially in the case of corner buildings, so that in case of Officers' House the main corpus is developing into two aisles (one of them for ballroom, and the other, one-tract one -for offices) which are connected with round vestibule in the shape of a circular tower (with the staircase as the central element). There are also many solutions in the shape of encircled block, such as in case of National Bank building where two one-tract aisles (with offices and corridor) encircle, on both sides, the representative hall with triple flight of stairs and glazed roof, while the ceremony hall is located in the internal part of the block, alongside the third side of the hall.

6. BASIC CONCLUSIONS

Based on the above-presented classifications and typological reviews of the public buildings built in Belgrade between 1830-1900, it can be concluded that the prevailing type was the rectangular plan type, of a shortened and developed form, with bay elements and yard aisles. There are few examples of square-like forms, which follow the tradition

of the spatial organization with internal backyard or with central hall. There are numerous examples of corner buildings whose shape was adjusted to the form of the parcel, and they represented the expression of an attempt to emphasize monumentality by the corner position.

Regarding the characteristics of the very spatial organization it can be seen that, regardless of the variety of its purpose and content, in many buildings it was very similar. The longitudinal spatial organization prevailed, in the form of one-tract, two-tract and combined solutions. Very significant joint characteristic of the focused buildings was the predominantly symmetric spatial solution, where the basic communication spaces, entrance vestibules and the main staircases developed in the direction of the longitudinal axis of the building, while the horizontal communications, corridors, were positioned vertically to them, in the direction of longitudinal axis. If the building had corner position, the similar scheme was developed in the direction of the symmetric axis of the corner. Also, it was a common practice to emphasize the entrance vestibule within the structure of the building as a special architectural motive, in the shape of a bay element.

Based on the presented characteristics of the spatial organization, a conclusion can be drawn that the public buildings mostly had a relatively common spatial organization appropriate for different purposes, which was adapted to the constructive possibilities of the period and subordinated to certain principles of the classic building composition. The tendency was to achieve functional and rational solution, and the buildings, till the last two decades of the century, were of relatively small dimensions. If we compare these buildings with the European examples of the kind from the same period, we will see that these solutions here are much more modest and that, mostly, the new techniques and construction possibilities well-known in Europe of that time were not applied. Also, some of the tendencies, modern for that time related to spatial solutions of some public buildings (such as theaters) were not used, instead of them the common, traditional solutions were used.

Finally, it is necessary to underline the specific significance which the focused buildings had in the process of development of the Serbian modern buildingship, because on these buildings some of the new spatial organization solutions for public and governmental buildings were initiated and developed, in the beginning by imitating the immediate surroundings and later taking after the big European centres, such as Pest, Vienna, Munich, Berlin, Karlsruhe, Zurich etc. The designs for all governmental buildings were made in the governmental construction department, while the similar types of spatial organization were applied in construction of public buildings in the whole country. Thus, the basic types of spatial organization for the public buildings were formed within one centre, and later, by the beginning of the new century, were further developed, but with far more monumental proportions, more representative structures and forms.

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OSNOVNA TIPOLOGIJA GRAĐEVINA JAVNIH NAMENA ANALIZIRANA NA PRIMERIMA IZGRAĐENIM U BEOGRADU OD 1830. DO 1900. GODINE

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U ovom radu se kroz analizu strukture zgrada izgrađenih u Beogradu od 1830. do 1900. godine definišu pojedini osnovni tipovi prostorne organizacije građevina javnih namena u zavisnosti od: namene i sadržaja, položaja u okviru urbane strukture, oblika gabarita i osnovnih karakteristika prostornog sklopa. Na osnovu navedenih tipoloških istraživanja uočava se da posmatrane građevine imaju posebno mesto u razvoju srpske arhitekture novijeg doba jer je kod njih, u trenutku kada je Srbija još uvek bila pod turskom dominacijom, prihvaćen i razvijan novi

tip prostorne organizacije karakterističan za prostore severno od Save i Dunava, u Austrougarskoj monarhiji, i razvijene evropske centre. Takođe se zaključuje da mada nisu ostvareni brojni primeri u okviru pojedinih vrsta javnih građevina osnovne sheme prostorne organizacije formirane u ovom periodu činile su polazište na osnovu koga su razvijane znatno složenije i monumentalnije strukture tokom prve polovine 20. veka.