The Urban Block in Western Serbia Boroughs in the 19th Century

Review article

Received: 29 January 2019;
Received in revised form: 15 February 2019;
Accepted: 29 April 2019;
Available online: 05 May 2019

THE URBAN BLOCK IN WESTERN SERBIA BOROUGHS IN THE 19TH CENTURY

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Abstract: Boroughs in southwestern Serbia were created during the 19th century. Development began after 1830, primarily through the construction of planned settlements (Požega, 1832; Rogačica, 1839; Bajina Bašta, 1858). Thereafter, the reconstruction of old settlements (Užice, 1863) or settlements previously founded according to plans that were not respected began (Ivanjica, 1848). In the third phase, it was accessed by the regulation of the boroughs were formed on the routes of important roads (Kosjerić, 1892) or in addition to important church centres (Arilje, 1880). As one of the important elements of the settlement stands out the urban block. The paper research: the relationship between the block and the street/street front, block and plot, and block and neighbourhood units. The geometry of the block in the planned townships was the result of a definition of the street network. Through the plans, the street network was first defined and the space between the streets was reserved for the block. The block was not the goal of the planning process but the traffic network. In the spontaneously formed towns, the main street was formed along the route of the roads. In Užice, through two plans (1863, 1891) has been finished corrections of the geometry of the blocks, retaining the existing routes of the streets. The plotting within the block depends on the time and the way the borough was formed. In the plan of Požega (1832), only the network of streets and squares is defined (no parcels are planned within the block). The mistakes were partially corrected in the plan of Rogačica (1839), where the plots did not have the necessary site-related characteristics (centre zone of the settlement was not different from the periphery). The final improvement was made on the plan of Bajina Bašta (1858),
where the plan envisages the parcel division into the block. The size of the blocks in Bajina Bašta was 75*100 or 75*150, in Arilje around 140*150, Kosjerić from 60*120 to 60*180 meters. The character and features of the boroughs urban block is necessary to understand as a result of the process of settlement development and the way of life of the local community. In this sense, a better knowledge of the way of forming certain elements of the block will lead to better and more efficient contemporary urban planning.

**Key words:** blocks of boroughs in Serbia, 19th-century urban development in Serbia, the boroughs of Western Serbia, a borough in Serbia, urbanism in Serbia.

### Introduction

For more than two centuries, boroughs play an important role in the settlement system of Serbia. The towns of southwestern Serbia were created after 1830, as a subject of systematic development by the state administration. Also, the settlement was developed at the place where the area gravitated already. The boundaries between the territory of municipalities are defined on the basis of topography and previously established communication paths. The emergence of the boroughs, the conditions and influences that shaped their life during the 19th century remain underdeveloped. Also, it is necessary to know the reasons why some elements of the settlement got exactly the kind they have today. In this case, we will not have to be in town planning, we are looking at solutions that are against the value of the settlement, the habit of the population, and the laws of everyday life. One of the important factors of the visual identity of the town is an urban block. The block with its characteristics (geometry, proportions, dimensions, parcellation, neighbourhood) has a great influence on the shape of the building (character, volume, form), the street, the neighbourhood, and the physical identity of the borough. It is necessary, that through contemporary urban practice, preserve the visual values of the boroughs in western Serbia, understand the reasons and ways of creating the elements of the boroughs, the forces that shape and the reasons why the boroughs have exactly the form they have today. The boroughs of southwestern Serbia were founded in four ways: planned settlements (Požega 1832, Rogačica 1839, Bajina Bašta 1858), settlements whose construction was started according to the plan, but not respected (Ivanjica 1846), developed settlements that were reconstructed by urban plans (Užice 1863) or completely spontaneously formed settlements regulated in the process of proclamation for the borough (Arilje 1880, Kosjerić 1892, Čajetina 1930). The space of the paper is a central part of southwestern Serbia (Bajina Basta, Pozega, Rogačica, Kosjerić, Arilje, Čajetina, Ivanjica and Užice). The historical framework of this work begins in 1830 and ends with the symbolic end of the 19th century - 1914.
The literature used in this paper, and deals with some of the aspects of boroughs in Western Serbia, was written by: Stojan Obradović (Obradović, 1858), Felix Kanic (Kanic, 1985), Ljuba Pavlović (Pavlović, 1925, Pavlović, 1930), Jovan Cvijić (Cvijić, 1931), Dragiša Pantelić (Pantelić, 1936), Oto Dubislav Pirha (Pirh, 1983), Arnold Arčibald Patona (Paton, 1845), Joakim Vuijić (Vuijić, 1902), Maksim Evgenović (Evgenović, 1877), Branislav Kojić (Kojić, 1949; Kojić, 1941; Kojić, 1970; Kojić, 1976), Branko Maksimović (Maksimović, 1962; Maksimović, 1978), Novak Živković (Živković, 1979; Živković, 1984; Živković, 1981a; Živković, 1981b; Živković, 2000), Nadežda Pešić-Maksimović (Maksimović-Pešić, 1974), Dejan Šabić et al. (Šabić and Vujadinović, 2017; Šabić, Pavlović and Krstić, 2016; Gajić, Vujadinović and Šabić, 2011; Golić, Pavlović and Šabić, 2010; Šabić and Pavlović, 2007; Šabić and Pavlović, 2005), Duško Kuzović (Kuzović, 1998; Kuzović, 2013a; Kuzović, 2013b; Kuzović, 2013c; Kuzović, 2013d; Kuzović, 2014a; Kuzović, 2014b). References that include similar questions but in other areas of Serbia were created by Vladimir Macura (Macura, 1983; Macura, 1984). The aim of this paper is to analyze and specify the characteristics of the town block. The analysis covers geometry, block dimensions, block and settlement relationships, block and street relationships, block impact on parcels and construction. The analysis will be completed by analyzing the examples of settlements. The result of the paper should help in better understanding of the emergence and development of western Serbian boroughs for future studies and for modern urban planning.
The relationship between the block and the centre of the settlement can be seen through the roles that the centre of the settlement has in the life of the borough. The paper will analyze two aspects of the centre of the settlement: the administrative and economic centre. The administrative centre varies depending on the way the settlement originated. In spontaneously formed towns, the administrative centre is not in the geometric centre of the settlement. The settlement lived for several decades without the need for administrative administration and facilities. Thus, in Kosjerić and Arilje, the administrative building is located at the end of the main street, and the location is not in the centre of the settlement. In the planned towns (Rogačica, Požega, Bajina Bašta), the administrative centre is on the main square, because it is planned in the urban plan. In Užice, the place for the administrative centre of the settlement is emphasized by the square (which, apart from urban reasons, has a historical background).

The commercial centre of the settlement is the main street (čaršija) and the place where the market and fair are taking place. The main street performs its economic role daily, while a trading day (once a week) or a fair (several times a year) takes place on the city market. The economic role has had a decisive influence on the formation of the attractiveness of the site, which reflected on
The price of the land, the volume and the elevation of the building, the quality of the building, the value of the property, the function of the building, etc. The functional division of the settlement was carried out under the influence of economic zones in the borough. The main street and the square were given mixed-use functions (business-residential). Other locations have a monofunctional role because they are unattractive for business (far from the main pedestrian flows). Therefore, the economic attractiveness of locations in the townships is connected with pedestrian flows and could be changed by the urban plan a little.

Capture 03. Center and an urban block in spontaneously formed boroughs (Arilje, Kosjerić, Ivanjica) (distance 100 m).

The effect of the function on the block form is large. The need for the inhabitants to be present along the main pedestrian flow in the borough has put a lot of pressure on the street front: the price of a meter long street has grown so that the boundary of the plot along the street has become short - precisely as long as it is necessary to organize the business premises of a craft or trade type. Catering facilities, as large consumers of space, are moved to the periphery of the main street along the main access routes into the settlement, or in addition to administrative centres.

Therefore, there is a tendency to keep the contact line of the block and the main street as long as possible, to allow access to as many parcels as possible. This is especially noticeable in Kosjerić and Arilje, as spontaneously formed boroughs. The blocks in plan-based boroughs have the length of the site towards the main street considerably shorter. [Figure 04.1]

In the report of Stefan Stefanovic Tenka, general-major and supreme senior, from 1838, there were, among other things, irregularities in the development of Ivanjica. In 1839, when the settlement had 26 tax heads and 45 houses, the Ivanjica municipality asked the “Committee for interpreting the constitution” to ex-
pand the area of the Ivanjica settlement. By then, the borough was constantly spreading to Christian immigrants from Turkey. The settlers wanted to build houses, but there were no free parcels. It is, therefore, necessary to add the land to the existing surface of the village from rural municipalities around the township (Živković, 1984: 59). [Figure 04.2]

Capture 04.1. Rogačica, the urban plan from 1839. (author J. Vukajlović)

Capture 04.2. Ivanjica borough, house and parcels owned by Sima Janković (1847)
Block and street network

The ratio of the side of the block in the boroughs is the result of economic demands in the settlement: the spontaneously formed boroughs first formed the main street (in the vicinity of the church, han), which had a tendency to develop in length (without crossing with the side streets). In the process of proclamation for the borough, there was an obligation to complete an urban plan for the settlement. But with subsequent regulation, there was little that could have been done or changed in the current situation. Therefore, the main streets in spontaneously built settlements have an accentuated length, and thus the block gets an outdated form, following the street. After the First World War, a new phase of urbanization of spontaneously formed townships emerged. At this stage, roads that cross the main street (and form the first urban blocks) formed. The development of the settlement was the goal and not the need to define an urban block. In the case of planned settlements, the street network is the first element defined by the planning act. The Požega plan does not provide for the internal blocking of the block, but only the route of public corridors (street and square). Apart from the street network and squares, in the Bajina Bašta plan, the parcel within the block was envisaged. The traffic load during the period of the emergence of boroughs was small. In the meantime, the width of the streets is imposing, because even today, after nearly 150 years of design, the streets have a profile sufficient to meet contemporary needs. In Požega, the main roads that cross the city square are about 14 meters wide, secondary streets are 8-12 meters wide (depending on location). In Bajina Basta, the width of the regulation of the main streets is about 20, the street of the first order 14, and the second-tier street 12 meters. [Capture 05]

In spontaneously formed, road, settlements such as Arilje and Kosjerić, the width of the street is in line with the width of the state road on which the settlement was built. In Arilje, the width of St. Ahilije Street is 16 and in Kosjeric about 20 meters. The side streets in both settlements have a regulation width of about 14 meters. [Capture 06]

In Užice, the width of the street network before the regulation of 1863 remained in the regulation plan of 1891. The 1863 plan envisages the dimensions of city blocks: from 50 * 100 to 50 * 150 meters. After regulating the street they received a width of 16-20 meters (the main street), and the secondary street of 12-16 meters. According to the preserved sketches, the old street network had in some places a width of 3 meters (blocks on the square of the St. Sava) (Kuzović, 2013: 393-398). [Capture 01]
The geometry of the block is the result of the way the town is formed (spontaneously or built according to the urban plan). In Užice, until 1863, the geometry of the block was incorrect. The block was created as a result of spontaneous urbanism that was valid for the majority of Ottoman empire settlements. After regulation of the settlement from 1863 (Kuzović, 2013b: 68-73) and especially the plan from 1891 (Kuzović, 2013: 393-398) the geometry of the city block has become correct. The state was determined to change the appearance and character of the settlement and take over as many elements of urbanism in Central Europe. However, the idea of applying a geometric block scheme has sometimes been brought to an absurdity. Namely, in the field where, because of the slopes, it was impossible to draw the streets they were traced on paper as if the terrain was flat. Therefore, today there are streets that are traced administratively to isopubs and have a long longitudinal slope.

In parts of the city where there was not yet enough developed street network, the blocks were formed between the agricultural roads. Thus, blocks were formed several hundred meters long, and one or two rows of parcels were wide. It is also the influence of the topography on the shape of the city block, with which neither the city nor the administrative service could be struggling. Thus, in parts of Užice: Koštica, Begovina, Pora, long and narrow blocks were formed. In the centre of Užice, the road routes follow the routes of streams and watercourses, so in that area, they often built a corridor that was also intended to accept the watercourse and to be a street. Such solutions, due to frequent floods, are very quickly abandoned because the required trough profile for the
period of large waters and for the period of normal water level in the mountain regions varies considerably. [Capture 01] The largest dimensions of the block are in Požega because the terrain allows it (individual blocks have a dimension of 300 * 100 meters). Over time, the need for a secondary network of roads was reported in the settlement. In the northeastern part of the settlement, in the zone around the city market, it was not possible to implement the planned geometry of the block (most likely due to property relations). Therefore, in this zone of the city, the block boundaries have an irregular geometry. [Capture 05] The average size of the block is 75 * 100 meters in Bajina Bašta. The blocks along the road that crosses the city square are 150 * 75 meters long. [Capture 05] The size of the city block in Arilje is about 140 * 150 meters. Defining the city block was created by dividing the side streets in relation to the main (which happened between the two world wars). In Kosjerić, as a village of road origin, it is characteristic of the dimension of the block 60 * 120 meters, although there are blocks and 60 * 180 meters (SKN Užice: 1934). [Capture 06] The building blocks, located on the periphery of the settlement, were larger in size than the blocks in the city centre. The main shortage of peripheral zone blocks is in traffic routes, which: either at any cost are designed as orthogonal (although they are in complete conflict with topography of the terrain because the streets are administered at right angle to the contour lines), or have taken the routes of old streets to the estates around the city which produced a large length and a small width of the block). [Capture 01]

Capture 05. A dimension of the blocks: Kosjerić and Ivanjica.

Block and parcel

The parcellation within the block is related to the way the settlement was formed and the time of the plan (in the case of planned towns). Parcellation
within the block, in the planned townships (Požega, Rogačica, Bajina Basta) differs precisely because of the experiences that have been acquired over time in the application of planning documents on the ground. When the Požega was founded (1832), only the public zone of the settlement (street and square) was defined until the parcel within the block. The plan was applied to the existing state of the site and the landing that existed was transferred to the zones within the boundaries of the block. This caused a large number of problems in practice: the angle of the side boundaries of the plot and the street was not right (which affected the organization of the house, volume, organization, form), the plots were long and narrow (it was not possible to organize a yard or garden), many plots they walked on two streets (impeding the formation of a city block and a street front), etc. Therefore, in the plan of Rogačica (1839) partly foreseen parcelation (due to problems with property relations this plan did not come to life). In the Bajina Bašta plan (1858), the plan envisages a complete parcel within the block (two types of plot: angle and plot between the two corners of the block). The plot area was about 6.5 acres so that it was possible to organize a house and auxiliary facilities within it. [Capture 07]

Capture 07. Požega and Bajina Bašta, subdivision (beg. of the 20th century)

The division into spontaneously formed and then (subsequently) regulated boroughs (Kosjerić, Arilje) had special characteristics. Namely, during the emerging of the settlement, the areas along the main road were taken. The houses courtyards contained all the characteristics of the rural household. From the beginning to the proclamation for the borough, there were two generations that led to the division of the garden and the reduction of the width of the street in front of the plot. The plan that has been drafted cannot alter the existing situation much, but only legalized the situation: the dimension of blocks are too large for the borough form (at the ends of the main street) or narrow and long (in the middle of the main street). [Capture 09]
The settlement in Užice, as a specific case of the settlement, is the result of centuries-old settlements. Therefore, the plot areas are small and the width of the street front is narrow. This situation led to the blocks of relatively low width (two rows of parcels to two streets). In the centre of the city, the dimensions of the block are smaller (small plots) than on the periphery (larger plots), precisely reflecting the state of the subdivision. With new plans (1891), the size of the block in the central part of the city was reduced by dividing the crossroads. The parcel within the block has long existed and defined the way of construction. In some settlements (Požega) after settlement regulation, the parcellation of agricultural land was retained and, in a large number of blocks, it defined the geometry and the shape of the building plot. In contrast, if the plotting within the block is correct with a well thought-out geometry (especially at the corners of the block and the city square) (in Bajina Bašta), there was a little problem during the life of the settlement. [Capture 01]
Block, a unit of neighbourhood and street front

By 1830, the unit of the neighbourhood (modern name) waved. It was gathered around the religious centre and its boundaries were not related to street routes or block boundaries. That is, the topographic characteristics and the gravitational flow of the inhabitants defined the boundaries of the old mahalla (Ottoman unit for town division). Simple principles that defined the boundaries of the city blocks have made many parts of the city of Uzice still bear the names/borders of the former mahals (Rosulje, Lipa, Pora, Koštica, Slanuša, etc.). Neither modern influences nor the plethora of plans and concepts of the life of the settlements (local communities) have failed to erase the need for subcategories in the city. In the planned townships (Požega, Rogačica, Bajina Bašta) the neighbourhood unit is planned to be a street. Mahala did not manage to form a network of streets and blocks. New towns did not have a basis in tradition and did not have the place to take over the old division of the settlement. In spontaneously formed towns (Kosjerić, Arilje) the gravity of the inhabitants in some form of subgrouping existed (also by topography). However, the size of the settlement required that they all belong to an urban whole. A small number of residents did not allow further division into subgroups. After the Second World War, with increased population inflows into towns, there was an increase in the area of settlements and the possibility of forming subcontinents (the Kosjerić municipality: Vaoč, Beli Gaj, Dusko polje, Drmanovina, Grbići, etc.). [Capture 08]
The street, according to plans for the construction or reconstruction of the boroughs, has been envisaged to be a building element of the settlement. Through the urban plan and regulations, all elements that would help the street to live as a unit of neighbourhood are planned: the construction on the regulation line, the buildings in a row, the main facade must contribute to the street appearance, uniformity of floors, support to increase the number of floors of buildings (and increase the density of housing) for the transformation of settlements into urban centres of the slopes, etc. Therefore, it should be noted that the plan influenced the formation of the character of the street through the floors of buildings, the way of construction, the composition of the street façade, the volume of the building, the floor, etc. By the beginning of the 20th century, a small number of buildings had a higher floor area than the ground floor. At the end of the 19th century, the construction of communal facilities began to take place, first along the city’s central street and then on the city’s squares. Before the beginning of the Second World War, thanks to the development of constructive systems and rapid industrialization, the first buildings with more than one floor (two and three floors) were built in Užice on the Grain Market. Thus, the silhouette of the city (objects located on the city squares) began to change by announcing a new era in the development of settlements in Serbia. [Capture 10]
Conclusion

Boroughs in southwestern Serbia were created during the 19th century. They began to develop after 1830, first through the construction of planned settlements (Požega, 1832, Rogačica, 1839, Bajina Bašta, 1858). In the second phase, the reconstruction of settlements started (Ivanjica, 1848; Užice, 1863). In the third phase, it was accessible to the regulation of towns that spontaneously emerged on important routes (Kosjerić, 1892) or in addition to important church centres (Arilje, 1880). This situation has given the character to the boroughs who are present today. As one of the important elements of the settlement, the block stands out. In order to know the law of urban development and quality urban planning, it is necessary to know the way of the block formation, the role of the block in the settlement, the relationship between the block and the street/street front, block and plot, and the block and unit of the neighbourhood. The geometry of the block in the planned townships was a result of a defined street network. Through the plans, the street network was first defined so that the space remaining between the streets was left for the block - the block was not a goal of planning, but a traffic network. In the spontaneously formed towns, the main street was formed along the road. In the most important settlement in the region, Užice, through two plans (1863, 1891), the geometry of the block was corrected, retaining the existing routes of the streets. The plotting within the block depends on the time and the way the town is formed. In Požega (1832), only the network of streets and squares was defined by the plan, there is no envisaged partition within the block. After the transfer of the plan to the field, a blocked parcel was adopted on the terrain (agricultural land) that did not correspond to urban construction. The mistakes were partially corrected in the plan of Rogačica (1839), where the parcel was planned, but the plots did not have the necessary urban features. A final quality solution was made on the case of Bajina Bašta (1858), where the plan envisages the division into the block. In addition, two types of parcels have been specifically developed: at the corner and inside the corners of the block. The size of the block in Bajina Bašta is 75 * 100 or 75 * 150 meters, in Arilje about 140 * 150 meters, Kosjerić from 60 * 120 to 60x180 meters. The character and characteristics of the urban block of borough must be understood as a result of the process and way of life of the community - it is not the result of the desire or the position of the architect who worked the urban plan. In this sense, a better knowledge of the conditions of creation and the way of forming the block should lead to better and more efficient contemporary urban planning.
Origin of Captures

Capture 01,02,03,05,06,07,08,09,10. Author (after: Vojno-geografski institut Beograd).

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Катастарски план Којерића, Пожеге и Бајине Баште из 1934. године, СКН Ужице.