doi: 10.19090/i.2019.30.45-68 UDC: 711.4:94(497.11)"04/14"

ISTRAŽIVANJA JOURNAL OF HISTORICAL RESEARCHES 30 (2019) ORIGINAL SCIENTIFIC PAPER Received: 1 June 2019 Accepted: 25 June 2019

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# NATURAL CONDITIONS AS A FACTOR OF URBANIZATION OF THE LOWER POSAVINA IN THE MIDDLE AGES

Abstract: The paper analyzes the influence of the natural environment on the emergence and development of urban settlements located on the lower reaches of the Sava River in the Middle Ages. Medieval people were much more dependent on natural conditions than they are today and, therefore, relief, climate, hydrography, fertility of land and natural resources were of great importance for the formation and development of towns. These factors were extremely important both for their strategic location and for supplying the towns with basic things, either through direct production or trade. That is why it is important to learn about and explain these factors, which comprise the basic preconditions for the locations of settlements and to analyze the opportunities and aggravating circumstances that the lower course of the Sava River provided for the life of the town.

**Keywords**: Lower Posavina, Sava River, towns, Middle Ages, natural conditions.

The analysis of historical processes and phenomena is often incomplete without including in the research the space and terrain where historical events took place. Studying the connections and relationships of the human community and its environment can create a more complete picture of how geographical factors influenced historical events and how various social processes participated in the organization and transformation of the space in which they took place. A prominent representative of this school of analysis, Lucien Febvre, believed that a historian cannot understand the development of human society if they do not take into account the geographical setting in which that development took place, nor that a geographer can perceive changes in nature if they neglect human activity in it. One of his successors, Fernand Braudel, contributed significantly to the development of this view. In his research he gave geography a significant place, characterizing it as immovable history that flows very slowly, about people and their relations with the natural setting and the environment. Geography thus ceases to be a goal and, instead, it becomes a means that allows things to be viewed from a perspective of the longest duration.<sup>2</sup>

reovie 1900. 23.

<sup>&</sup>lt;sup>1</sup> Febvre 1966: 25.

Brodel 2001: 16, 25; Brodel 2010: 23.

In their material life people have always been dependent on the conditions, influences and potentials of nature, so anthropogeography starts from physical geography and it is necessary to be familiar with it in order to determine the natural conditions and influence on the life of people and their culture. Anthropogeography studies the conditions of the whole natural environment for human life, for human spread and creativity, for economic activity and culture in general. In this way, by studying anthropogeographic phenomena and taking into account social factors, it observes and isolates anthropogeographic factors such as natural species, their influence on human life, economy, society, culture. In addition to studying the influence of the environment on man, anthropogeography studies the influence of man, society and the process of history on nature and the overall appearance and changes of the earth's surface under the influence and effect of man.<sup>3</sup>

Febvre points out that physical-geographical conditions should be seen only as possibilities, the exploitation of which depends largely on the economic and social stages of human development. In our country the originator of anthropogeographic research was Jovan Cvijić. He identified the features of relief and climate, hydrography and other features of soil, the characteristics of ground, flora and fauna as the first anthropogeographic factors of the physical or natural kind. On the other hand, in addition to natural anthropogeographic factors, we also have social factors, which are primarily historical, economic and cultural. It is important to emphasize the interaction and conditionality of all factors, both natural and social. In order to monitor different phenomena and processes, the relation, share and character of both factors should be properly evaluated and determined. However, it is important neither to give natural conditions greater importance than they really have, nor to neglect their influence in addition to the influence of historical processes.

Man, i.e. human community is an extremely powerful factor in nature. People are capable of changing and adapting space to their needs more powerfully and permanently than any other being. Their specificity lies in the fact that they operate through social organization, and their technology, which covers not only material tools but also a whole set of human experiences, acts as a very powerful factor in nature. Human endeavours in nature are performed consciously and purposefully for the fulfillment of a specific goal and, therefore, people's relation to nature is in fact conscious and organized exploitation. The changes that people make in nature are, in fact, its transformation into a specific cultural framework that first occured with human beings in the history of the earth's surface and which is the result of people's conscious activity.<sup>7</sup>

Throughout history, people have always been able to find a favourable position and founded their settlements there, so even after an exodus and when they were completely abandoned, these settlements attracted new settlers to move to old locations. Thus, since the

<sup>&</sup>lt;sup>3</sup> Radovanović 1959: 9–14; Mrgić 2013: 33–38; Mrgić-Radojčić 2004: 163–183.

Febvre 1966: 181–182; Brodel 2001: 16; One of the creators of anthropogeography, Friedrich Ratzel, ascribed to the nature great influence on people, but this overemphasized role of the natural environment was not uncritized. Ratzel 1909; Ratzel 1912; Ratzel 1901.

<sup>&</sup>lt;sup>5</sup> Grčić 2004: 31–33; Grčić 2015: 178–180.

<sup>&</sup>lt;sup>6</sup> Cvijić 1922: 11–12; Radovanović 1959: 14–25; Čubrilović 1983: 2.

Stanković 1939: 63–71; Stanković, 1938; Febvre 1966: 181–188; Sindik 1949/1950: 175–176; Radojčić 1924: 475–477; Mrgić 2013: 23–28; Ćirković 1978: 30.

dawn of time people have grouped themselves at certain attractive points, forming at first a small nucleus around which other human layers multiplied and their work and efforts improved thus increasing the value of the geographical position of a place, which attracted others to settle there. The geographical elements of the living space (nature of the soil, heat, height, hydrographic and vegetation relationships) determine the layout of the settlement. As with other living beings, people also have the need to expand and master space. People settle in a certain place which has certain advantages in comparison with others, but since this place also has some disadvantages, they try to correct them, change them and adapt them to their needs. So people build embankments, bridges, wells. Vidal de la Blache defined this relationship by saying: "Nature prepares the terrain and man organizes it according to his needs and desires."

The tie that connects people to an economic area which provides them with food and other necessities of life is quite close. Therefore, people generally reside in the immediate vicinity of the area which provides them with all or at least partial food. This link between people and economic areas is also one of the factors that affects the location and layout of settlements. The location and development of larger settlements such as towns are influenced by the natural circumstances of the vast areas and geographical conditions, whereas the positions of the villages mainly depend on local factors and topographic conditions. While the aforementioned natural circumstances are always the most important in case of villages, for towns they are only one of several significant factors because the general course of historical development, shifts of civilizations, new communications, changes of means of traffic and ethnographic circumstances are just as important and sometimes even more important. Therefore, in defining the conditions that determine the location of the town, one should be aware of the relief, communications, fertility, economic circumstances, and historical development of the whole area and beyond. In this paper, we will discuss the aforementioned natural factors as a precondition for the emergence and development of towns in the lower reaches of the Sava.

# 1. Hydrography and relief

This approach imposes the requirement to delimit and examine the terrain and its surroundings where the towns were founded, which are the focus of this paper. It is the lower course of the Sava River from the mouth of the Drina, all the way to its mouth into the Danube, along with the coastal terrain, i.e. the wider belt on the left and right banks of this river.

The hydrographic features of the areas we analyze in this paper are first determined along the Sava River and partly along the Danube and then along their tributaries in this area. It is important to emphasize that in the Middle Ages river flows were not regulated as they are today, so we must pay attention to the fact that there are some differences in comparison to today. As an element necessary for daily life, water has always attracted people to settle in its vicinity, but it also repelled them with its evil whims reflected in floods. Even today, most settlements lie near water and in the past this was even more necessary. But then, much more often than today because of numerous watercourse regulations, uncontrolled floods were a

<sup>8</sup> Vidal de la Blache 1898: 107.

<sup>9</sup> Cvijić 1922: 234–245; Stanković 1939: 13–14; Radovanović 1959: 258–260; Grčić 2004: 45–47.

threat. For this reason, it was necessary to find a suitable terrain for building a settlement, which would be close enough to the water and again somewhat protected from high water.

The region we analyze in this paper covers the lower reaches of the Sava River, which flows through here, from the mouth of the Drina to the mouth of the Sava into the Danube. This part of the river is about 180 kilometers long, which is not in accordance with the length of the ground terrain because in its lower reaches the Sava often winds and thus creates meanders, which are the result of mild slopes and poor resilience of the river shores. In the past, before the shore was cultivated, the Sava flooded the vast regions of Mačva and the Šabačka Posavina, so the region was full of oxbow lakes. It is through this frequent meandering and movement of the river course that a vast alluvial plain was created. The low alluvial plain stretches along the entire Sava course in the Srem area and is especially broad in southwestern Srem, while downstream its width is much smaller. In the past, numerous oxbow lakes were active parts of the riverbed. Zasavica and Bitva were once active parts of the Sava riverbed. There are many aits on the Sava today. In this section of the flow of the Sava aits are a phenomenon that can occur very quickly, sometimes even in just a few years. <sup>10</sup> In the past, in ancient times and in the Middle Ages, two aits were located near Mitrovica itself. <sup>11</sup>

Like the depth of the Sava, its width is also unequal. Downstream of the mouth of the Drina it is 350 meters wide on average, near Sremska Mitrovica it is 250 meters wide, near Šabac it is 650 meters wide, while at its mouth in Belgrade it is 280 meters wide. <sup>12</sup> While crossing the bridge over the Sava River near Belgrade, Evliya Çelebi wrote that it was 400 steps long, as wide as the riverbed. <sup>13</sup> The Sava River freezes very often, even every other year, and the ice can last for a long time, and it especially lasts longer in the lower reaches of the river. <sup>14</sup> It is also interesting to note that Gabriel from Verona wrote that the Sava rarely or never froze and at the same time said that there was ice on the Danube so ships were pulled into the Sava. <sup>15</sup>

The most significant tributary of the Sava is the Drina, which gives the Sava large amounts of water. For us the most important part is its flow from Zvornik to its mouth, which is 91 kilometers long. In this part it is a lowland river which forms many aits and oxbow lakes, while in the past it often flooded the plains of Semberija and Mačva. Other tributaries of the Sava in this area, the Bosut and the Kolubara, often flooded the terrain and left behind a miry and swampy land. <sup>16</sup>

North of the Sava there is Srem, which consists of a low part and a mountainous part.

Dukić 1957: 21–23, 26–28, 55–56,59–61, 56–75; The greatest debouchment of the Sava in the modern age was recorded in 1896, when the whole of Mačva was flooded, followed by 1924, 1926, 1932, 1940, 1944, 1962. Izvod 1973.

VIINJ 1, 96; On Giacomo Cantelli's map an ait was drawn southwest of Belgrade. This ait was formed by the Sava and one of its branches, probably Zasavica with its oxbow lakes. Two rivers, the Kolubara nad the Jagna, which was probably the Jerez, flow into the river branch. The ait was called Metubaris insula nunc Colubara and the town of Šabac was located on it. Nikolić 1972: 101–133.

<sup>&</sup>lt;sup>12</sup> Dukić 1957: 77; Gavrilović, Dukić 2014: 47–48.

<sup>&</sup>lt;sup>13</sup> Evlija Čelebija 1979: 352.

According to the research and observations in the period 1951–1970, Dukić 1957: 132–135; Grčić, Grčić 2002: 104–108; Bogdanović 1982: 110–125.

<sup>15</sup> Thallóczy, Áldásy 1907: 388.

Gavrilović, Dukić 2014: 52–59, 63–65; Grčić, Grčić 2002: 108–109; Dukić 1957: 59; Bogdanović 1982: 97–110; Samardžić 1961: 192.

The low part is located at an altitude of 70 to 100 meters. The Srem relief consists of the Fruška Gora Mountain, loess plains, loess terraces and alluvial plains. Konstantin Jireček wrote that the right shore in Srem, near Slankamen and Zemun, resembles many places in Hungary and looks like a tall light yellow loess section, steep as if cut off with a knife. Eroded by water, the shore often steeply declines. On the loess plain there is a spacious shallow deflection and loess sinkholes. Until recently there was a large pond in that deflection. There is also a loess terrace with an average height of 5-8 meters. East and south of Jakovo it gradually transforms into an alluvial plain of the Sava. <sup>17</sup> In this large alluvial plain, which extends on the right of the Sava, there are numerous abandoned and mostly overgrown old river flows and sometimes very active meanders such as Kupinski Kut and half overgrown Obedska Bara. <sup>18</sup> The bogs by the river Sava on the stretch towards Zemun were also mentioned by Evliya Çelebi. He also said that there was a large muddy area and a swamp on one side of Zemun. <sup>19</sup>

The streams on the south side of Fruška Gora have developed valleys up to the loess plains, while beyond, due to the small slopes, they mire and turn into bogs. Their beds end in vast swamps, where water is lost either by evaporation or because it seeps into loess, so very few streams reach the Sava. 20 The water drained underground by streams from the Fruška Gora still flows towards the Sava and in the alluvial plane of the Sava it appears as an aquifer. It is capable of flooding large surfaces of southern Srem. Groundwater rises to depths of less than a meter and erupts to the surface. Therefore, the yields of otherwise very fertile loess terraces are highly dependent on the whims of nature. High groundwater could have caused other problems such as flooding the roads, which then become muddy and impassable. Groundwater in Srem was also mentioned by Evliya Celebi. He said that in the vicinity of Mitrovica, if one digs a pickax into the ground, five spans of water appear. He also mentions groundwater in Belgrade, stating that the lower city has no trenches because wherever a pickax hit the ground, Danube water erupted, so the city walls had sunk into the Danube and the Sava in some places. 21 Perhaps the Avar mission that went to Sirmium, which was seen by the residents of Sirmium from the top of a bath straying from the path, encountered a boggy and impassable terrain.<sup>22</sup> On the other hand, when a loess plain is concerned, we have a completely opposite problem. Here the aquifer is located at a great depth of about 20 meters and its use was certainly a problem. This is why agricultural crops in this area could often be threatened by a lack of necessary soil moisture, which in turn reduced yields. It is interesting that at such a short distance one area suffers from excess water and the other from the lack of water. Evliya Çelebi states that Konjic (perhaps Karlovčić), a village in Srem, was located in a plain without any water and that the Sultan ordered the wells to be dug here from which water could be extracted with a pulley. He says of the same area that it used to be irrigated with canals in the past.<sup>23</sup> Another feature of Srem is the large number of ponds and bogs. They are located across the whole region, but mostly in southeastern Srem on the alluvial plain,

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<sup>&</sup>lt;sup>17</sup> Zeremski 1960: 83–92; Jireček 1959b: 22.

<sup>&</sup>lt;sup>18</sup> Bukurov 1978: 106–112.

<sup>&</sup>lt;sup>19</sup> Evlija Čelebija 1979:352–353.

Petrović, Bugarski, Ćurčić, Bogdanović 1973: 42–52.

<sup>&</sup>lt;sup>21</sup> Evlija Čelebija 1979: 81, 356.

<sup>&</sup>lt;sup>22</sup> VIINJ 1: 88.

<sup>&</sup>lt;sup>23</sup> Evlija Čelebija 1979:353.

while there are also some on the loess terrace. There are also ponds where water is present all year round, such as Obedska bara, Slezen bara and Breg. There are plenty of ponds on the loess surface. These phenomena were well known in the ancient history. In the Roman times, numerous ameliorations of low and swampy land were made and numerous ditches originate precisely from the Roman period. This is confirmed by the toponym Konavao west of Ruma. The 51.9 km long Jarčina Canal was built in the 3<sup>rd</sup> century. After the Roman period, the barbaric peoples paid no attention to the maintenance of the canals, so many collapsed, were abandoned and buried. They were not restored until the late 19<sup>th</sup> century, when the construction of other canals began. Evliya Çelebi noted that the land near Rača, at the mouth of the Drina into the Sava, was a real swamp in winter because the terrain is low and when these rivers rise, they flood many gardens.

Mačva, Šabačka Posavina and Pocerina are located in the southern part of the bottom of the Pannonian basin. Mačva and Posavina are wetlands and water-flooded terrains that were regularly flooded in the past and throughout which rivers have developed their meanders. In the past this whole region was a swamp. <sup>26</sup> Bitva and Zasavica were once the beds of the Sava, then of the Drina River, and now they oxbow lakes. Now there are ponds in the old riverbed of the Drina. Previously, before the regulation of river beds, this terrain was very flooded frequently and for a long time. Mačva was often flooded in the 19<sup>th</sup> century, which was recorded by contemporaries. In 1820 Weingarten wrote that it was subject to frequent outflows of the Sava and the Drina, which covered Mačva with ponds and bogs during more permanent rainfall, while the Širma swamp almost never dried out. Similarly, Vuk Karadžić wrote that often, especially in the spring, all of Mačva was flooded by the Drina and the Sava, whereas some ponds barely ever dried out. <sup>27</sup>

The relief of the Belgrade Posavina is composed of several types of terrain. Among them, the most important are the basins of river confluences, then the valleys and valley systems, the Pannonian section and alluvial plains of the Sava and Kolubara. This terrain is rich in ravines, glens and sinkholes. The land in Posavina is covered in forests, especially from Moštanica towards the Kolubara. On the northwest side of this region there is Makiš, which is only one part of the terrain created by the Sava river. This is a barren plain near the Sava with many large and smaller ponds separated by balks. Konstantin Jireček noted that numerous swamps and forests were located along the banks of the Sava and Danube rivers.

## 2. Climactic factor

Climatic conditions are a factor that affects water flows, the growth of plants, crops and forests, animals and humans, especially since, in the Middle Ages, the vast majority of the population was engaged in agriculture and others also indirectly depended on it. For the area we analyze in the paper currently there is no research of the data about climate for the

<sup>&</sup>lt;sup>24</sup> Bogdanović 1982: 50–65, 147–153; Ćurčić 1976: 372–376; Bukurov 1978: 106–112.

<sup>&</sup>lt;sup>25</sup> Evlija Čelebija 1979: 486.

Grčić, Grčić 2002: 70–75; In the past these regions were regularly flooded. According to some data, in Mačva in the 19<sup>th</sup> century around 36 ha of land were unusable due to excessive humidity. When waters were high, the area around Šabac resembled a lake. Aleksić 1882: 354–358.

<sup>&</sup>lt;sup>27</sup> Karadžić 1827: 28, 34.

period of the Middle Ages. The written data about the weather, which are found in the annals, chronicles, biographies, accounting books and other sources, are also a great contribution. The phenomena of the meteorological origin are divided into three parts according to the importance attached to them by the medieval man. One is the temperature, which is expressed in simple vocabulary: harsh winters, strong frost, dry, hot and sweltry summers. The second part is rainfall: rain, hail, storm, snow, and the third are the consequences of previous events: floods, bad harvest, invasion of rodents or locust, reduction of the number of hives and more. 28 The same terminology is encountered in domestic chronicles and records: severe or harsh winter, drought, barren year, hunger.<sup>29</sup> Despot Stefan's biographer, Constantine the Philosopher, stated in the description of the Serbian country that it had wonderful air and that when winter and bad weather left the land and when the summer approached, the air was well dissolved and beautiful.<sup>30</sup> Sometimes the weather was also indirectly mentioned in poems. For example, Ivan Česmički addresses the month of December: You build for the Turks, who rage and plunder everywhere, ice bridges across the rivers everywhere so they can cross easily. These verses indicate that the rivers in the area could already be frozen in December or that the winter of 1463 was extremely cold.<sup>31</sup>

Climatic conditions were also discussed by travel writers. In 1621 an anonymous travel writer stated that in Belgrade the air was moderate and the seasons very pleasant.<sup>32</sup> For the year 1624, Louis Gedoyn wrote that it was extremely cold with a lot of snow, which is why his trip from Sarajevo to Belgrade was delayed. In that period the Drina was half frozen and the Danube and Morava were completely frozen. When he finally arrived in Belgrade, he wrote that the snow had been falling there for four days and that residents said

<sup>&</sup>lt;sup>28</sup> Brodel 2007: 33–35; Delort, Wolter 2002: 106–107.

For the wider area we analyze here it was noted until the end of the 17th century that winters were particularly strong in the following years: 1443-1444 (Long Campaign), 1504 (Stojanović 1905: 90), 1551 (Stojanović 1902: 179), 1595 (Stojanović 1923, 88), 1613. (Stojanović 1902: 281,) 1621 (Ibid. 300), 1624 (Ibid. 309), 1641 (Stojanović 1923:146), 1649 (Stojanović 1926: 116), 1660 (Stojanović 1923: 168), 1668 (Stojanović 1902: 401); Draught was noted in the following years: 1560 (Stojanović 1923: 59), 1584 (Stojanović 1905: 91), 1634 (Stojanović 1923: 138), 1640 (Stojanović 1902: 342), 1678 (Ibid. 421); Unsual phenomena such as snow in spring or summer, strong rains etc. were noted in the following years: snow in April 1587 (Stojanović 1906:103), 1671 (Stojanović 1092: 406), 1676 (*Ibid*. 417), snow in May 1459 (Stojanović 1923: 32), 1676 (Stojanović 1902: 417), in 1651 it was noted that flowers and fruit blossomed in November (*Ibid.* 370), in 1678 there was an invasion of locust (*Ibid.* 421), and in 1694 it rained for 40 days (Stojanović 1905: 100); hail and wind were also frequently noted phenomena and they occurred in 1579 (Stojanović 1902: 227) and 1672 (*Ibid.* 409). Especially impressive are years of famine and barren years: 1358 (Stojanović 1926: 87), 1371 (Stojanović 1905: 43), 1505 (Ibid. 90), 1558 (Stojanović 1902: 178), 1571 (Ibid. 215), 1576 (Ibid. 417), 1587 (Stojanović 1926: 103), 1593 (Stojanović 1902: 249), 1605 (Ibid. 266) 1606 (Ibid. 267), 1608, (Ibid. 273), 1623, (Ibid. 307), 1629 (Ibid. 317), 1641 (Stojanović 1923:146), 1666 (Stojanović 1902: 397), 1672 (Ibid. 409), 1686 (Ibid. 439), 1690 (Stojanović 1095: 92).

Konstantin Filozof 1936: 50.

Panonius1463: 12; Furthermore, information on strong winters can be found with Byzantine writers. For example, John Kinnamos wrote that in 1128–1129 the army suffered because of winter. (VIINJ 4: 169). Theodore Metochites wrote that the winter of 1298–1299 was extremely cold, as he said, more than ever. It was accompanied by abundant snows and strong winds that changed direction, even by rain. (VIINJ 6: 87–91) Pachymeres noted of the same winter that it was the strongest, stronger even than those extreme ones that old people had seen in their lifetime. He also noted abundant snow. (VIINJ 6: 49).

<sup>32</sup> Samardžić 1961: 164.

that no one had experienced such a harsh winter in a hundred years.<sup>33</sup> Evliya Çelebi repeatedly claimed that the climate in the areas of Smederevo and Belgrade was pleasant.<sup>34</sup> Quiclet, on the other hand, wrote that the air in Belgrade was hot in summer and cold in winter, so these two extremes caused major illnesses.<sup>35</sup> Evliya Çelebi said of Mitrovica that winter was very strong here, but at the same time he said the climate was pleasant.<sup>36</sup> He also wrote that when he was travelling from Buda to Belgrade in November-December 1663, so much snow fell near Osijek that thousands of tents were snowed in and that the next day it was warm and the sun shone, followed by heavy rain so that no tent could remain on the ground, while at the same time a terrible wind began to blow, which stopped everyone's breath and soul. The following day was a mildly cold day.<sup>37</sup> On the basis of this information we can conclude that the climatic elements in this area could not be a factor hindering the formation of settlements or hindering their development, especially if we bear in mind that vineyards, which favoured a warmer climate with long summers, flourished here.

## 3. Natural Resources

In the past, forests were much thicker than they are today. Priscus notes that the mission sent by Emperor Theodosius II to Attila's court wandered into a densely wooded area on their way to the Danube and descended into a completely afforested plain.<sup>38</sup> Much later the forests in Srem were mentioned by Evliva Celebi and Quiclet.<sup>39</sup> In the past, the areas around Mačva and the Sava were covered with dense forests. According to Count Marsili's map from 1699, Mačva was uninhabited and full of densely forested wetlands. According to a plan from 1756, Mačva was also covered with forests and had no settlements. In 1887 V. Karić wrote that about one fifth of Šumadija was covered by forests. At the beginning of the 19th century, Mačva was under thick forests of common oak and ash, which spread widely in abundantly wet regions near the Drina and Sava rivers, on fertile and deep soil. Šabačka Posavina and Pocerina were under the forests of Hungarian oak and Turkey oak in a terrain that was not very affected by the floods and high groundwater.<sup>40</sup> While travelling to Constantinople, the famous French poet Lamartine wrote that he passed through an ocean of Serbian forests and did not leave shade for three days. The Austrian general-staff captain Adam Weingarten published his geographical-historical description of Serbia in 1820, stating that Serbia was an almost continuous forest. 41

The slope between Belgrade and Smederevo was still under forest, mostly oak, in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. Mavro Orbin mentioned that the Lomnica forest, behind which Emperor Dušan retreated with the army when he was at war with King Lájos

<sup>&</sup>lt;sup>33</sup> Ibid. 176–178, 181, 183, 184.

Evlija Čelebija 1979: 70.

<sup>35</sup> Samardžić 1961: 194.

<sup>&</sup>lt;sup>36</sup> Evlija Čelebija 1979: 355-356.

<sup>&</sup>lt;sup>37</sup> Evlija Čelebija 1979: 376.

<sup>&</sup>lt;sup>38</sup> VIINJ 1: 13.

<sup>&</sup>lt;sup>39</sup> Evlija Čelebija 1979: 518, 521, 522; Samardžić 1961: 192.

<sup>40</sup> Karić1887: 69–70; Aleksić1882: 360.

<sup>41</sup> Stojanović 1997: 65.

in 1353, was dense and full of thick trees, one day of walking from the Danube bank near Rudnik. 42 The forests were mentioned by numerous travel writers. They were mentioned by Broquière, who said that on his way to Belgrade he walked through many large forests. 43 They were mentioned by Stefan Gerlach on his way from Smederevo to Belgrade and from Kolar to Smederevo, whereby he said that this was an oak forest. 44 Hans Dernschwam also said that the areas north of Jagodina and the ones surrounding Belgrade were forested. 45 An anonymous travel writer in 1621 noted that he travelled through the forest almost all the time on his way from Belgrade via Kolar to Hasan-pasha's Palanka. Poullet wrote a similar thing in 1658. 46 Evliya Çelebi said that Mitrovica lay on a green overgrown place. 47

The waters of the Sava and Danube rivers and their tributaries were rich in fish. In the mid 19<sup>th</sup> century about 66 species of fish lived in the rivers of Serbia before the rivers were artificial stocked with fish. The most frequently caught fish were common carp, crucian, blue bream, moon fish, catfish, swordfish, weather loach, perch, pike, common bream and common rudd. Less common were barbel, zander, trout, orfe and huchen. In the Danube there were belugas and sturgeons that came from the Black Sea all the way to Belgrade. 48 Manuel Holobolos wrote that, more than any other river, the Danube was full of fish which he called "fresh river pig", but it is not clear which fish this was. 49 Theodore Metochites wrote about the Danube fish that it was large and fat and that it was valued in Constantinople, where it was difficult to obtain. 50 In his description of Eastern Europe anonymous said that the Danube and its tributaries were rich in fish and he specifically listed beluga, sturgeon, pike and barbel.<sup>51</sup> Constantine the Philosopher also stated that there were plenty of fish in Serbia.<sup>52</sup> In a later period, fishing on the Danube was well represented.<sup>53</sup> In the Turkish time half of the income of the Smederevo sanjak-bey came from fishing on the Morava and he owned fish ponds on the Sava and Danube rivers. 54 An anonymous traveller recorded extraordinarily large carp and noted that all fish in Belgrade was excellent and fatty because the river had about two feet of silt in the sand. Similar things were recorded by Hans Dernschwam, Jean-Baptiste Tavernier, Quiclet and Louis Gedoyn. 55

An important segment of the life of the medieval man was arable land, especially given the fact that agriculture represented the most important economic branch involving the majority of the population. We also emphasized that in the Middle Ages the town was

<sup>42</sup> Mavro Orbin 2006: 36.

<sup>&</sup>lt;sup>43</sup> Bertradon de la Brokijer 1950: 131.

<sup>44</sup> Matković 1893: 53–55.

<sup>45</sup> Vlainac 1927: 97-99.

<sup>46</sup> Samardžić 1961: 169, 212.

<sup>47</sup> Evlija Čelebija 1979: 354.

<sup>&</sup>lt;sup>48</sup> Pančić 1860: 61–159; In the typicon of the monastery Studenica it says that before the holiday of Saint Simeon the abbot should send people to the Danube or Zeta region to acquire fish. (Ćorović 1928: 125).

<sup>&</sup>lt;sup>49</sup> VIINJ 6: 581.

<sup>&</sup>lt;sup>50</sup> VIINJ 6: 114.

<sup>&</sup>lt;sup>51</sup> Živković, Petrović, Uzelac 2013: 137–138.

<sup>52</sup> Konstantin Filozof 1936: 50.

<sup>&</sup>lt;sup>53</sup> Zirojević 1994: 111–120; Zirojević 2011: 13–31.

<sup>&</sup>lt;sup>54</sup> Bojanić 1974: 21, 23, 51; Šabanović 1964: 26; Hrabak 1960: 59–65.

<sup>55</sup> Vlainac 1927: 100; Samardžić 1961: 164–165, 186, 194, 183.

inseparable from its agrarian area and in this light we have to look at the urban environment. The arable land was obtained by deforestation of meadows, forests and hills, which were converted into arable land, vineyards or orchards after cultivation. <sup>56</sup> Niketas Choniates wrote that Srem was the most fertile part of the Hun land and that it was densely populated.<sup>57</sup> Constanting the Philosopher said of Serbia that it was fruitful and abundant and that many vineyards were planted there.<sup>58</sup> Broquière also said that on his way to Belgrade he saw large valleys, many villages, good food and especially good wine. <sup>59</sup> In the past the route between Belgrade and Smederevo was considered a fruitful region. Travel writers from a later period also occasionally emphasized the fertility of this area. Hans Dernschwam wrote in 1553-1555 that a beautiful and fertile plain stretched around Smederevo, while around the town itself there were ploughed, large vineyards. There were also vineyards in the direction of Belgrade along the Danube and this travel writer said that they could not see Smederevo before passing the vineyards, noting that there had earlier been vineyards south of the city. That is why wine was cheap and good in Smederevo and Belgrade. But he still said that the wine was not as good as it used to be because the vineyards could not be cultivated as before since very few people remained and the Turkish taxes became too high. <sup>60</sup> Stefan Gerlach also mentioned cheap wine and vineyards in Smederevo. The same writer also pointed out the beauty and the number of gardens in Belgrade, inside and outside the city, and said that in this respect Buda could not compete with Belgrade. 61 In 1608 an Austrian travel writer noted for the area of Belgrade that the region had very fertile land and was fairly well cultivated. 62 An anonymous travel writer also noted that Belgrade had large plains that were so fertile that they could feed ten times more people than there were in the city and that there were many gardens. Poullet noted down a similar thing. 63 Evliya Celebi also frequently mentioned that the area between Belgrade and Smederevo was very fertile and that there were many vineyards and gardens. He also said that there was a plethora of good land in the vicinity of Mitrovica and that vineyards and gardens located on the opposite bank of the Sava adorned the whole world. <sup>64</sup> Evliva Celebi mentioned numerous vineyards and gardens and fertile land in Srem. 65 Antun Vrancčić noted down that Srem, or Fruška gora, was famous for its good wine. 66 The fertile land filled with many beautiful fields in Srem was also mentioned by Ouiclet.<sup>67</sup> Vineyards are also mentioned in the cadastre lists in the Turkish era.<sup>68</sup>

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Blagojević 1973: 79–98; Albert of Aix wrote that in 1096 the Crusaders took cattle from the inhabitants of Belgrade, which grazed in the fields around the city. Kalić 1967: 61.

<sup>&</sup>lt;sup>57</sup> VIINJ 4: 43–44, 118–119, 126.

Konstantin Filozof 1936: 50; Viniculture gained momentum in the mid 14<sup>th</sup> cenutry and vineyards continued spreading in the 15<sup>th</sup> century. Blagojević 1973: 136–137.

<sup>&</sup>lt;sup>59</sup> Bertradon de la Brokijer 1950: 131.

<sup>60</sup> Vlainac 1927: 61, 96, 98–101.

<sup>61</sup> Matković 1893: 53.

<sup>62</sup> Hrabak 1969: 16.

<sup>63</sup> Samardžić 1961: 164, 200.

<sup>&</sup>lt;sup>64</sup> Evlija Čelebija 1979: 356, 379.

Evlija Čelebija 1979: 357, 358–359, 487, 514–516, 518, 520–521, 522, 526–527.

<sup>66</sup> Matković1884: 17.

<sup>67</sup> Samardžić 1961: 192.

<sup>&</sup>lt;sup>68</sup> Šabanović 1964: 26, 144, 148–156.

When we discussed the relief, we saw that the area under scrutiny in this paper is very flat and quite swampy. If plains are associated with abundance and wealth today, in the Middle Ages it could have been quite the opposite. Then the plains, as a rule, represented water collectors. Being immobile, they created an abundance of reed and rush, while in the summer they retained moisture in the air which caused terrible fevers. To steal fields and meadows from the sea, lakes and marshes meant to resort to an expensive solution, which was possible in a country that was technically very advanced and rich in both people and resources. This process of transforming wetland into cultivated soil is a product of the modern age and became widespread in Europe only in the 16th century. In all other cases people were content to take away space from forests and meadows. <sup>69</sup> Wetland, especially in the past, was an extremely unhealthy environment for people. Stagnant water, high air humidity and an abundance of mud favoured the development of infections and diseases. Mavro Orbini noted that, during a conflict with Stefan Dušan, King Lájos's army had to return from the march because they were dying from the rotten air rising from the swamps across which they passed. 70 Poullet wrote in 1658 that the air in Belgrade was at all times infected by the rotting of stagnant water which stayed behind after the debouchment of the river.<sup>71</sup> In his description of Serbia Konstantin Jireček stated that the meadow along the Sava shore was very unhealthy due to the vapour from wetlands. <sup>72</sup> Even in the 19<sup>th</sup> century Mačva was miry and full of mud. In such circumstances people were dying because of bad air and, in addition, there was a scab infection. Also in the 19th century floods were known to cause real turmoil. Even with the lightest of rain, especially in winter, traffic in Mačva was very difficult. It was very hard then to reach Sabac. Regardless of these mudslides. Mačva was still considered a rich region in the mid 19<sup>th</sup> century.<sup>73</sup>

On the other hand, if a swamp was part of everyday life, people would come to terms with it and knew how to take advantage of its benefits. The miry terrain could have hindered access to a fortified city, which could have served as a kind of natural defense and an aggravating circumstance during the siege of the city. According to Inspector Kocijan, in the 18<sup>th</sup> century wetlands were categorized according to their character as a completely useless, selectively useful (for fishing, reed, etc.) or temporarily useful terrain from which additional amounts of hay could be obtained during the drought, when the wetland area was used as a surface suitable for hay gathering and cattle grazing, at least occasionally. Reed was also used for covering roofs. During the Middle Ages we have information that there were ponds in the vicinity of Mitrovica. The natural conditions were very favourable for fishing. The Danube and the Sava, as well as their many branches, meanders, oxbow lakes and bogs provided ideal conditions for fishing, but they were also inhabited by various birds

<sup>&</sup>lt;sup>69</sup> Chaunu 1977: 224–226; Brodel 2001: 59–73.

<sup>&</sup>lt;sup>70</sup> Mavro Orbin 2006: 38.

<sup>&</sup>lt;sup>71</sup> Samardžić 1961: 200.

<sup>&</sup>lt;sup>72</sup> Jireček 1959b: 22.

Aleksić 1882: 348-350; In 1827 Vuk Karadžić wrote that Mačva was flat and swampy, especially in spring when it was flooded by the Drina and the Sava. These floods created ponds that barely ever dried out. Karadžić 1827: 28, 34.

<sup>&</sup>lt;sup>74</sup> Ilić 2014. 124.

<sup>&</sup>lt;sup>75</sup> Györffy 2002: 51–52.

such as wild ducks and wild geese. We think that it is quite reasonable to assume that precisely the ponds located in the vicinity of these cities were used for these purposes.

The river played a significant role in the life of medieval people, which they were well aware of. Water from the rivers was used for drinking. A water supply system that brought water from the Danube to the city existed in Zemun in the 12<sup>th</sup> century. Whether it existed later cannot be said because it is no longer mentioned in the sources. <sup>76</sup> Constantine the Philosopher noted that the Danube fed the Serbian land and that the Sava was like a wall or a fence on both sides. <sup>77</sup> Evliya Çelebi stated that in his time in Belgrade there were few fountains for such a big city, but that water carriers, therefore, brought water from the rivers. He also mentioned a large number of springs around Belgrade. <sup>78</sup> People used the power of the river flow to make watermills and many of them existed in Serbia as an agricultural country. <sup>79</sup> In 1495 Czech masters were engaged in the construction of mills in Belgrade. <sup>80</sup> Even Evliya Çelebi mentioned a watermill on the Danube in Belgrade, as well as watermills on the Sava in Mitrovica. <sup>81</sup>

The use of forests for medieval people was of great importance because they were primarily a source of wood, which was a material used extensively in everyday life at that time. In addition to being used as firewood, in the manufacture of various types of tools, furniture and other household items, wood was a basic building material in the Middle Ages. Only the city walls and houses of noblemen and wealthy citizens were made of stone. The houses of the rest of the population were mostly made of wood. Parts of large and important fortifications had wooden parts and even the fortress in Sabac itself was originally built of wood. Forests were also used for hunting. Various animals suitable for hunting lived there: deer, roe deer, wild boar, rabbits, pheasants, partridges, quails, turtledoves, wolves, foxes, feral cats, weasels, badgers, hawks, sparrow hawks, eagles, and falcons. In the Middle Ages these areas were inhabited by beavers and two species of wild bovine, tur and zubr cattle. Oak and beech forests were used to find acorns for pig food. Furthermore, various fruits used in human nutrition, such as quince, wild walnuts, chestnuts and wild berries, could also be taken from the forest. 82 The forest was also used as a shelter in times of war and the roads could be made by cutting down trees.<sup>83</sup> In addition to the aforementioned benefits of forests, it is important to emphasize that they were excellent air purifiers. This was especially important in wetlands, where the air was unhealthy, which, as we have seen, is the case with the area we analyze in this paper. Likewise, forests could protect people

This water supply system was mentioned by John Kinnamos. During the war between Byzantium and Hungary king István III believed that the town would endure a siege, among other reasons because it had water supplies from the Danube via a canal. VIINJ 4: 85–86; Kalić 2006: 15.

<sup>&</sup>lt;sup>77</sup> Konstantin Filozof 1936: 51–52.

<sup>&</sup>lt;sup>78</sup> Evlija Čelebija 1979: 88, 330.

Watermills in medieval Serbia were often donated by rulers to the monasteries and the rulers regulated the work of mills. Novaković 2005: 410, 415, 422–423, 451, 454–455, 461, 463, 488, 508, 512–516, 611, 634–635, 644, 659, 666–669, 671, 678–679, 695, 702–703, 759, 766, 778–780; Miklosich 1858: 181, 531–533, 563, 565.

<sup>80</sup> Kalić 1967: 291.

<sup>81</sup> Evlija Čelebija 1979: 90, 356.

<sup>82</sup> Spremić 1994: 720; Chaunu 1977: 264–265; Le Gof 2010: 251–252; Brodel 2010: 110–113; Mrgić 2013: 73–80; Mrgic 2010: 87–97; Mišić 2012: 95–102.

<sup>83</sup> Mavro Orbin 2006: 36–37; Thallóczy, Áldásy 1907: 266.

against strong wind gusts such as košava, which is characteristic of this region. The benefits of the forest are also reflected in the fact that they could protect people from floods because trees use large amounts of water for their growth and, in a sense, they can retain water and prevent torrents that can be formed on bare ground where there is no high vegetation. In the summer, they moderate the excessive heat, while in the winter they prevent the soil from overly cooling down.<sup>84</sup>

## 4. The suitability of the terrain

We have already mentioned the famous and often quoted sentence by Vidal de Blache that explains the relationship between nature and cities: nature prepares the terrain and people then shape it according to their needs and desires. Each terrain has certain advantages and disadvantages. The question only is what is crucial to choose that particular location at the moment when the settlement is founded there. We have seen that the area we analyze is flat and rather miry, prone to river debouchment, but often only one small advantage over the environment can affect the choice and suppress a number of other disadvantages. <sup>86</sup>

Settlements can be divided into two groups according to their characteristic topographic positions. The first group includes edge settlements and the second group internal settlements. Edge settlements are those built at the contact of two geomorphological units, whereas internal settlements are built within a more spacious geomorphological unit. The boundary of the two geomorphological members is the point of the interface between two types of forms, which, by their nature, are intended for different exploitation, so the settlements constructed on these boundaries have the possibility to be categorized as either type.<sup>87</sup>

Towns were often built at the mouths of two rivers or their confluences, firstly because of ease of defense, as well as the possibility to use the two rivers. There are many such cases. Belgrade was built at the mouth of the Sava into the Danube, on a strategically very suitable terrain that followed it for centuries. From Avala the hills descend to the very mouth of the two rivers. The fort built on a hill above the mouth of the Sava did not withstand any flooding and the city was surrounded by fertile land. In the alluvial plain of the Danube, where the Lower City was built at the time of Despot Stefan, flood protection was provided by the monumental city walls. Costantine the Philosopher also mentioned the existence of spring water in the city. Below the monumental city walls.

If we consider that the confluence of the two rivers is an obvious advantage of the terrain, along with all the other benefits that we have named in the previous cases, we can look at other towns in this region that are not located at the mouths of rivers. Mitrovica, or the ancient Sirmium, was built at the contact point of the diluvial terrace and the inundation

<sup>84</sup> Pančić 1998: 49–52.

<sup>85</sup> Vidal de la Blache 1898: 107.

<sup>&</sup>lt;sup>86</sup> Febvre 1966: 352–354.

<sup>87</sup> Cvijić 1922: 257; Basically, this statement by Cvijić primarily referred to villages. However, as in the Middle Ages the town was inseparable from its aggrarian surroundings, we believe that it is reasonable to apply this theory to town settlements in the Middle Ages.

For exampe, Lyon, Grenoble, Linz, Edirne, Devin, Stalać and many others.

<sup>&</sup>lt;sup>89</sup> Konstantin Filozof 1936: 86.

plain. The fact that it was established in this area was influenced by several factors. These are soil morphology, the possibility of economic exploitation of the environment, crossing the Sava river and land transport. The position on the river itself was made possible by the fact that at this point the diluvial terrace extends to the river bed of the Sava itself and the city could be built on the bank of the river. This gives this site a number of advantages. One of them is the easier crossing of the river because at that point the Sava has always been somewhat narrower and its alluvial plane is significantly narrowed by a protruding loess terrace. More precisely, it is important that the alluvial plane is narrow at the river crossing since it more dangerous for travellers at periods of greater endangerment than the debouched river itself. It is also important that the considerable relative height of the terrace on which Sirmium, later Mitrovica, was built provided greater safety against floods than the environment. It is also important that a marshy alluvial plain stretched on three sides of the terrace, with active streams and oxbow lakes of the Sava, which in case of danger could have provided favourable conditions for defense. In the past, the Sava formed two aits at Sirmium, Cassia and Carbonaria. These two morphologically and hydrographically different areas also presented different possibilities for exploitation: the alluvial plain of the Sava for wet crops, hayfields and livestock grazing, the Sava for fishing, and the loess terrace for dry crops and livestock grazing. 90 The letter of Pope Innocent IV from 1247 states that the monasteries of St. Dimitri and St. Gregory in Srem were potential new seats of the diocese because they were suitable for the erection of fortifications. 91 Cassia, one of the two river aits located near Mitrovica, was inhabited as far back as ancient time and the monastery of St. Irenaeus was there in the Middle Ages. The settlement was located on a higher part of the Sava inundation area. Mačvanska Mitrovica is located in this area today and it is limited on the south by the fossil bed of Zasavica, once an active stream of the Sava River. 92

Zemun was built in the narrowest southeast part of the Srem loess plateau, at the point where it ends in the shape of a cape between the Danube in the northeast and the Sava in the southwest. The fort was erected at the far end of this cape and was thus protected in the northeast, southeast and southwest, while the city itself was located below the fort. In the hinterland of Zemun there was a spacious pond, which could possibly have hindered access to the city from that side and helped its defence during the siege. 93 Niketas Choniates says that the south side was inaccessible because of the earthy hill that stretched there and was protected by the course of the river. 94

Šabac was built right next to the Sava on its terrace, in the lowland and along the right shore of the Sava. Hills that represent the fluvial-denundation plains of the Sava and its tributaries the Dumača and the Dobrava rise to the south and southeast of the town. We have emphasized that in the past, prior to the regulation of river flows, the land in Mačva was flooded very often and abundantly. Thus, from that side floods often approached Šabac and the streams in Pocerina in the south flooded the terrain around Šabac. Therefore, it could

<sup>90</sup> Smuđ 1962: 121-123.

<sup>&</sup>lt;sup>91</sup> Fejer 1829: 476.

<sup>92</sup> Smuđ 1964: 169–173; Ćurčić, Đuričić, Marjanović 2002: 327.

Milojević 1960: 56; Zeremski 1960: 85. Contemporaries were aware of the advantages of such a position. Bertradon de la Brokijer 1950: 133.

<sup>&</sup>lt;sup>94</sup> VIINJ 4: 134.

have been surrounded on several sides by wetlands and ponds that lagged after the floods, which, strategically, represented some protection for the town. <sup>95</sup> Zaslon, the predecessor of Šabac, was located on the terrace at the site of the present-day Donjošorsko cemetery. This section was surrounded by wetlands even in the last century. The name Zaslon meant a cover, <sup>96</sup> i.e. it could mean an earthen balk or hill, which were, as we have seen, characteristic points for the establishment of settlements since such a position was more protected from floods in relation to the environment. <sup>97</sup>

### 5. River and land routes

An important segment of urban development was their accessibility and the possibility of connecting with other centres. The Sava and the Danube, whose valleys are located at the southern rim of the Pannonian basin, form the northern border of the Balkan Peninsula. In planning the routes, people greatly used the advantages of terrain, river streams, valleys and gorges, but if there was a great need, the road would pass through very inaccessible and barely passable terrains, which people then tried to adapt to their needs. <sup>98</sup>

In this sense river traffic can be viewed from several points. The river itself could first be used as a route to transport people and goods. It could have been of a local character, for the purpose of crossing from one place to another, or for the continuation of a mainland route that was often traced by river valleys. In addition, the river was crossed for economic, primarily commercial needs, or for military purposes. 99 In the Middle Ages, rivers were crossed mainly by floats and smaller ones by bridges. In the region of southern Hungary, which is our focus here, there were no bridges in the Middle Ages so all traffic across the Sava and the Danube was carried out by floats. We know that in the Roman times there were bridges in certain places. 100 In some places the constructin of the 'ships' 101 was influenced by a number of circumstances, mostly geographical in nature. They were mainly formed at the points of intersection of land routes, which were often traced by river valleys and, therefore, a number of 'ships' were located near the mouth of the two rivers. 102 In addition, certain natural conditions related to the terrain and the possibility of crossing the river at that point had to be satisfied. We have emphasized that it was important that the alluvial plain was as narrow as possible at the point of crossing, because even at high water levels, when the river debouched, favourable conditions for crossing it did not disappear.

<sup>95</sup> Marković 1970: 28–29; Karadžić 1827: 45–46.

<sup>96</sup> Rečnik 2007: 416.

<sup>97</sup> Novaković 1887: 6.

Febvre 1966: 317–319, 330; Porčić 2004: 183–218.

<sup>&</sup>lt;sup>99</sup> Febvre 1966: 323–324.

There were two bridges near Sirmium. (Buzov, Lalošević 2015: 25) Khagan Bayan built bridges on the Sava to hinder the defence of Sirmium. One bridge was built next to the town and the other one was located in the west to prevent the transport of supplies from Belgrade and from Dalmatia. VIINJ 1: 92–97.

The name 'ship' was used in the Middle Ages in a meaning different from the modern meaning of this word. In the Middle Ages this name stood for a place where the river was crossed and where a fee was charged for the crossing of people and goods across the river that could be crossed with a raft, by boat or in a ford. (*Leksikon:* 1999, Brod (Mišić), 64–65).

<sup>&</sup>lt;sup>102</sup> Rokai 1983: 139–140; Szende 2011: 162.

Therefore, adequate river flows were a significant addition to land routes and were sometimes even more important than land routes, as was the case of the road from Buda to Belgrade. River traffic was cheaper, more comfortable and easier and there was less danger of being attacked by robbers. Transport was carried out both upstream and downstream by traction. The Danube flow was particularly used in river transport, both for war and for commercial purposes. 103 Likewise, the Sava was a significant transport link, carrying both war material and agricultural products in both directions. In ancient times it was a significant route. 104 The Drina River was navigable from Zvornik and from there it was possible to sail to Mitrovica and further to Belgrade. The Drina was navigable for shallow draught ships from Višegrad as well. 105 By the end of the Ottoman rule easy and cheap traffic on the Drava brought greater profits than land routes although this river was navigable only by rafts. 106 In the Roman times and in the Middle Ages the Morava was navigable, but later it became wild and created many bends. Previously it did not have such an irregular flow as it has today, which is why it was navigable. It is well known that the Turks kept ships on the Morava near Stalać. 107 In 1669 travel writer Brown wrote that Belgrade was in a very convenient location for trade because it was close to the Danube and the Sava, the Tisa, the Drava, the Morava and the Black Sea. 108 Streams of the Tisa, the Tamiš and the Begej were used for the same purposes. 109 In the lower reaches of the Sava land routes that led from Dubrovnik via Srem or Belgrade further to Hungary were significant. For these reasons, it was important to ensure a smooth passage across the river. The most important 'ships' on the Sava were Jarak, Gomol (Gomolava), Pabar, Mitrovica, Sentpeter, Rača, and on the Danube Hram, Kovin and Zemun. 110

The entire region we analyze in the paper had a densely connected land route network in addition to the river network. It was developed both in the direction north-south and in the direction east-west. In this region Belgrade was the most important intersection of routes and all the roads that passed this way went by or through Belgrade. The most famous of all roads in this area was certainly the Belgrade-Constantinople route, which was in fact the

Evliya Çelebi wrote that many ships came to Belgrade and that is why merchandise was so cheap there. Evlija Čelebija 1979: 92.

<sup>&</sup>lt;sup>104</sup> Hrabak 1982: 40–53; Karbić, Škreblin, 2015: 175–176; Buzov, Lalošević 2015: 22.

Karaulac 1998: 112–115; In 1476 Pál Kinizsi wrote that the Turks had ships on the Drina near Višegrad, which they would sail all the way to Šabac and Belgrade. (Nagy, Nyari 1877: 309); Evliya Çelebi also wrote that in Zvornik ships sailed on the Drina all the way to Belgrade. (Evlija Čelebija 1979: 484); Quiclet noted that one could arrive to Belgrade in 2-3 days in a ship from Zvornik. (Samardžić 1961: 191) We learn from Menander Protector that the stream of the Sava was used in the early Byzantine times. He described Bayan's siege of Sirmium and said that the khagan built bridges on the Sava to prevent to supply of wheat and other necessities to the town, VIINJ 1: 94–97.

<sup>&</sup>lt;sup>106</sup> Živaković-Kerže 2002: 46.

Bertradon de la Brokijer 1950: 129.

He said that the goods from Serbia and some parts of Bulgaria were transported on the Morava to the Danube and after that where necessary, and from Hungary and Austria and the surrounding area the goods were taken up the Morava for the regions upstream. Novaković 1891: 36–38.

Zirojević 1987: 126–127; Erdeljanović, Nikolić 1899: 184–186; Kalić 1983: 109–126; Hrabak 1978: 15–38;
 Mišić 2007: 155–156; Even according to Priscus the rivers Tisa and Tamiš were navigable. VIINJ 1: 14.

<sup>110</sup> Rokai 1983: 154–171.

successor to the Roman road *Via militaris*. <sup>111</sup> The medieval road had a route from Belgrade to Braničevo, where the road left the Danube stream and turned south. From the second half of the 15<sup>th</sup> century the route was partially changed since it crossed the Morava near Ravno and continued to Belgrade. <sup>112</sup> The road from Belgrade to Buda had two routes that met in Vukovar and then continued to Buda. <sup>113</sup> In the Roman times the road came from the direction of Osijek (Mursa) towards Mitrovica and Belgrade. <sup>114</sup>

Belgrade was connected to Timisoara and Lipovo and other cities in Banat. <sup>115</sup> It was also connected to Szeged by a two-lane route. From Szeged the road again led to several sides, towards Buda, Eger and Timisoara. <sup>116</sup> From Viminacium, later Braničevo, the old Roman route that was used in the Middle Ages continued along the Danube further to Vidin. <sup>117</sup> In the Roman times, a road from Emona (Ljubljana) also led to Sirmium along the right bank of the Sava, it crossed the Drina leading to the present-day Mačvanska Mitrovica, where the bridge crossed to another side of the river. <sup>118</sup>

One of the main land links of Posavina and the Danube region was the connection with the coast, especially Dubrovnik, since this city was the main seat of trade in the region. The road from Dubrovnik went via Trebinje, Bileća, Gacko, through Čemerno to Vratar and Tjentište, across the Drina valley to Foča, and from there to the north also along the Drina valley to Ustikolina and Goražde. This route was known as Via Drine, or less frequently as Via Bosne. From there it led further north to Rogatica, where it separated towards Sokolac, Višegrad, Srebrenica and further to Mitrovica. 119 Another important route went from the mouth of the Neretva River through Drijeva Square. It often forked and its branches reached Srebrenica and Zvornik, from where people could travel to Mitrovica, Šabac and Belgrade. 120 Another ancient road that was used in the Middle Ages also led from Belgrade to the west of Avala and then along the valleys of the Kolubara and the Ljig towards Rudnik. Part of the road also led to Valjevo, which, as we saw, was also connected to Zvornik. From Rudnik the roads branched off towards Gradac and further east towards Višegrad, towards Ras (Trgovište, Novi Pazar), or west towards the road to Constantinople. 121 From Belgrade one road went along the right bank of the Sava towards Debre and from there towards Zaslon. There was also a road on the left bank of the Sava that went from Sabac, by Kupinik towards Zemun. There was also probably a road connecting Šabac with Mitrovica, and

Jireček 1959a: 75–120; Mirkovic 2003, Petrović 2015: 299–317.

<sup>112</sup> Jireček 1959a:121–162; Erdeljanović, Nikolić 1899: 186–210; Škrivanić 1974: 82–98; Zirojević 1970: 24.

Zirojević 1976: 4–5; Erdeljanović, Nikolić 1899: 180–183; The route that went along the Danube was used in the Roman times. Petrović 2015: 198–232; 236–247.

<sup>114</sup> This was actually a section of the Roman road from Aquileia via Aemona and Celje, down the valley of the Drava towards Singidunuim. Petrović 2015: 217–232.

<sup>&</sup>lt;sup>115</sup> Zirojević 1987: 119–121.

<sup>&</sup>lt;sup>116</sup> Zirojević 1987: 122; Bertradon de la Brokijer 1950: 146–147.

<sup>&</sup>lt;sup>117</sup> Škrivanić 1974: 115–117; Petrović 2015: 247–298.

<sup>&</sup>lt;sup>118</sup> Petrović 2015: 166–189; Buzov, Lalošević 2015: 22–23, 30.

<sup>&</sup>lt;sup>119</sup> Škrivanić 1974: 43–50.

Jireček 1959c: 293–296; Škrivanić 1974: 53–59; Erdeljanović, Nikolić 1899: 36–44; The branch that led from Visoko towrds Vrhbosna was part of the Roman road Thessaloniki-Argentaria and continued further across Romanija to Sokolac and then via Han Pijesak to the valley of the Jadar. Petrović 2015: 119–121.

<sup>&</sup>lt;sup>121</sup> Jireček 1959c: 302; Škrivanić 1974: 103–109.

Šabac was also connected with Zvornik with a road that went from Zvornik to Mitrovica along the right bank of the Drina. One road also led from Šabac to Valjevo. 122

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Medieval people struggled to make the most of nature. For this reason, settlements were often established in accordance with the terrain. The natural features of the terrain often determined the positions of cities, villages, settlements in general, as well as fortresses and borders. Natural conditions include, first of all, relief, soil characteristics, quantity of water and climate. We have emphasized that water has always been an important condition for life and it has always been the easiest to find in rivers, streams and springs, so around them settlements usually formed. Even today, when techniques for obtaining water from great depths have long been known, most settlements lie near bodies of water. However, the water in the plains was also a major impediment for settlements. The alluvial plains of rivers and depressions were flooded every year by rivers and aquifer waters that could linger until the next flood. Because of this, quite small differences in the relative heights between these flood terrains and slightly higher terrains may have been an important factor in establishing the settlement. These differences could also be decisive in the life of the population in settlements on low altitudes. This was precisely the purpose of balks and terraces present in the region we have analyzed in the paper. They were suitable for the formation of villages. Towns with more population required better conditions and a wider terrain with drainage. The loess capes that entered the rivers were ideal positions because they were relatively well protected from floods and also facilitated crossing the river. On such a level ground even the slightest elevation could have been of strategic importance in times of war operations. The well-developed river network with large, navigable rivers enabled good communication which was a very important factor for the life of towns. Fertile river valleys stretched along the rivers and provided land routes. Consequently, land communication was greatly facilitated by the natural terrain. The forests and animals that lived there, fertile land and waters were the basic factors for the life of people that were necessary at that time. The area we have analyzed in this paper abounded in everything.

The towns located on the lower reaches of the Sava each had a specific geographical position, which offered it some advantages. For example, Belgrade and, to some extent, Zemun were built at the mouth of two rivers. Such a position was of great strategic importance in the Middle Ages. In addition, the fort located on a hill above the mouth did not suffer any flooding. Zemun was originally built on a hill above the river. Mitrovica was established in the area that was extremely favourable for crossing the river, on somewhat more drained soil than the surrounding area. Zaslon was founded in a place where the Sava was extremely wide, but very shallow. At low water levels people could walk across it. This was an important factor for a trading post such as Zaslon and later when the Turks established Šabac, they were motivated by the idea of an easy crossing towards Hungary. It can also be noticed that river aits were very often found near cities. In addition to their strategic role,

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Jireček 1959c: 301–302; According to Kanitz, the Roman road went along the right bank of the Sava until the mouth of the Kolubara, then along its valley up to Valjevo and from there towards Požega. Škrivanić 1974: 110–112; Erdeljanović, Nikolić 1899: 219–221.

they also played an important role in transport. Crossing such wide rivers as the Sava has always been dangerous and aits have been intermediaries although they were often prone to flooding. Therefore, we believe that the geographical location is a very important factor in the history of towns and that it says a lot about their original function and purpose. The factor of the process of long duration has been fully illustrated with the examples of towns in the lower reaches of the Sava, since life in them has endured for centuries up to the present day. The influence of natural conditions was one of the important frameworks for the formation of towns, but also for their wider economic development and survival.

#### REFERENCES

#### Sources:

De la Brokijer, B. Putovanje preko mora, Beograd: Naučna knjiga, 1950. (Serbian Cyrillic)

Bojanić, D. Turski zakoni i zakonski propisi iz 15. i 16. veka za smederevsku, kruševačku i vidinsku oblast, Beograd: Istorijski institut, 1974.

Ćorović, V. *Spisi sv. Save*, Beograd-Sremski Karlovci: Srpska kraljevska akademija, 1928. (Serbian Cyrillic)

Evlija Čelebi, Putopis - Odlomci o jugoslovenskim zemljama, Sarajavo: IRO "Veselin Masleša", 1979.

Fejer, G. Codex diplomaticus Hungariae ecclesiasticus ac civilis IV/1, Budae: Typis Tipogr. Regiae Universitatis Ungaricae, 1829.

Konstantin Filozof, *Život despota Stefana Lazarevića*, Stare srpske biografije 15. i 17. veka, Beograd: Srpska književna zadruga, 1936. (Serbian Cyrillic)

Karaulac, M. *Priče francuskih pisaca sa puta po otomanskoj Bosni*, Novi Sad: Matica srpska, 1998. (Serbian Cyrillic)

Matković, P. "Putovanja po Balkanskom poluotoku", Rad JAZU, 71, 1884, 1-60.

Matković, P. "Putovanja po Balkanskom poluotoku", Rad JAZU, 116, 1893,

Miklosich, F. Monumenta Serbica spectantia historiam Serbiae, Bosnae, Ragusii, Viennae: Apud guilelmum Braumüller, 1858.

Milojević, M. Dečanske hrisovulje, Beograd: Državna štamparija, 1880. (Serbian Cyrillic)

Nagy, I, Nyari, A. *Magyar diplomacziai emlékek Mátyás király korából 1458–1490 II,* Budapest: A M. Tud. Akademia, 1877.

Novaković, S. "Beleške doktora Brauna iz srpskih zemalja", *Spomenik SKA*, 9, 1891, (Serbian Cyrillic) Novaković, S. *Zakonski spomenici srpskih država srednjeg veka*, Beograd: Lirika, 2005. (Serbian Cyrillic) Orbin, M. *Kraljevstvo Slovena*, Beograd: Plavo slovo 2006. (Serbian Cyrillic)

Samardžić, R. *Beograd i Srbija u spisima francuskih savremenika*, Beograd: Istorijski arhiv Beograda, 1961. (Serbian Cyrillic)

Stojanović, Lj. *Stari srpski zapisi i natpisi 1*, Beograd: Srpska kraljevska akademija, 1902. (Serbian Cyrillic)

Stojanović, Lj. *Stari srpski zapisi i natpisi 3*, Beograd: Srpska kraljevska akademija, 1905. (Serbian Cyrillic)

Stojanović, Lj. *Stari srpski zapisi i natpisi 4*, Beograd: Srpska kraljevska akademija, 1923. (Serbian Cyrillic)

Stojanović, Lj. *Stari srpski zapisi i natpisi 6*, Beograd: Srpska kraljevska akademija, 1926. (Serbian Cyrillic)

Šabanović, H. Turski izvori za istoriju Beograda 1/1, Beograd: Istorijski arhiv, 1964.

Thallóczy, L, Áldásy, A. Magyarország és Szerbia közti összeköttetések oklevéltára 1198–1526,

- Budapest: M. Tud. Akademia, 1907.
- VIINJ 1= Vizantijski izvori za istoriju naroda Jugoslavije I, Beograd: Naučna knjiga, 1955. (Serbian Cyrillic)
- VIINJ 4= Vizantijski izvori za istoriju naroda Jugoslavije IV, Beograd: Vizantološki institut SANU, 1971. (Serbian Cyrillic)
- VIINJ 6= Vizantijski izvori za istoriju naroda Jugoslavije VI, Beograd: Vizantološki institut SANU, 1986. (Serbian Cyrillic)
- Vlainac, M. "Iz putopisa Hansa Dernšvama 1553-1555. godine", *Bratstvo*, 21, 1927, (Serbian Cyrillic) Živković, T, Petrović, V, Uzelac, A. *Anonimov Opis istočne Evrope*, Beograd: Istorijski institut, 2013. (Serbian Cyrillic)

#### References:

- Aleksić, A. "Mačvanska blatišta", Godišnjica Nikole Čupića, 4, 1882, (Serbian Cyrillic)
- Blagojević, M. *Zemljoradnja u srednjevekovnoj Srbiji*, Beograd: Istorijski institut, 1973. (Serbian Cyrillic) Bogdanović, Ž. *Hidrološki problemi Srema*, Novi Sad: Prirodno-matematički fakultet, 1982. (Serbian Cyrillic)
- Brodel, F. Materijalna civilizacija, ekonomija i kapitalizam od XV do XVIII veka I, Strukture svakodnevnice, moguće i nemoguće, Beograd: JP Službeni list SRJ, 2007.
- Brodel, F. Mediteran i mediteranski svet u doba Filipa II, tom I, Beograd: Geopoetika, 2001.
- Brodel, F. Identitet Francuske, Podgorica: CID, 2010.
- B. Bukurov, *Bačka, Banat i Srem*, Novi Sad: Matica srpska, 1978. (Serbian Cyrillic)
- Buzov, M, Lalošević, V. "Rijeka koja spaja: slika Save u duhovnoj kulturi kasnoantičkih rimskih središta", u: B. Ostajmer (ur.), *Rijeka Sava u povijesti*, Zbornik radova sa znanstvenog skupa, Slavonski Brod: Hrvatski institut za povijest, Podružnica za povijest Slavonije, Srijema i Baranje, 2015, 17–42.
- Cvijić, J. *Balkansko poluostrvo i južnoslovenske zemlje*, Beograd: Državna štamparija Kraljevine Srba, Hrvata i Slovenaca, 1922. (Serbian Cyrillic)
- Chaunu, P. Civilizacija klasične Evrope, Beograd: Jugoslavija, 1977.
- Ćirković, S. "Jedno stoleće istorijsko-geografskih istraživanja srednjovekovne Srbije", u: S. Ćirković (ur.), M. Dinić, *Srpske zemlje u srednjem veku*, Zbornik radova, Beograd: Srpska književna zadruga, 1978, 9–30. (Serbian Cyrillic)
- Ćurčić, S, Đuričić, J, Marjanović, V. Geografske monografije vojvođanskih opština Opština Sremska Mitrovica, Novi Sad: Prirodno-matematički fakultet, 2002. (Serbian Cyrillic)
- Ćurčić, S. "Prilog poznavanju geomorfoloških prilika u ravnom Sremu", *Zbornik radova prirodno-matematičkog fakulteta, Serija za geografiju*, 6, 1976, (Serbian Cyrillic)
- Čubrilović, V. "Značaj proučavanja plovidbe na Dunavu i njegovim protokama", u: V. Čubrilović (ur.), *Plovidba na Dunavu i njegovim pritokama kroz vekove*, Zbornik radova sa naučnog skupa, Beograd: SANU, 1983, 1–14. (Serbian Cyrillic)
- Delort, R, Wolter, F. Povijest europskog okoliša, Zagreb: Barbat, 2002.
- Dukić, D. Sava potamološka studija, Beograd: Srpska akademija nauka, 1957. (Serbian Cyrillic)
- Erdeljanović, J, Nikolić, R. T. Trgovački centri i putevi po srpskoj zemlji u srednjem veku i u tursko doba, Beograd: Štamparija D. Dimitrijevića, 1899. (Serbian Cyrillic)
- Febvre, L. A geographical introduction to history, New York: Barnes & Noble, Inc, 1966.
- Gavrilović, Lj, Dukić, D. Reke Srbije, Beograd: Zavod za udžbenike, 2014. (Serbian Cyrillic)
- Grčić, M. "Gnoseološki model antropogeografije prema koncepciji Jovana Cvijića i njegova naučna aktuelnost", *Demografija*, 1, 2004, 25–48. (Serbian Cyrillic)
- Grčić, M. "Cvijićeva antopogeografska škola", u: V. Jović i A. Kostić (ur.), *Jovan Cvijić, život, delo, vreme*, Zbornik radova, Beograd: Geografski institut "Jovan Cvijić", 2015, 177–182. (Serbian Cyrillic)

- Grčić, M, Grčić, Lj. *Mačva, Šabačka Posavina i Pocerina*, Beograd: Geografski institut, 2002. (Serbian Cyrillic)
- Györffy, Gy. "Pregled dobara grčkog manastira u Svetom Dimitriju na Savi (Sremska Mitrovica) iz 12. veka", *Spomenica istorijskog arhiva Srem*, 1, 2002, 7–64. (Serbian Cyrillic)
- Hrabak, B. "Osmanlijska mornarica u porečju srednjeg Dunava 1428–1566", *Godišnjak grada Beograda*, 26, 1979, 15–44. (Serbian Cyrillic)
- Hrabak, B. "Putnici iz hrišćanske Evrope o privrednim prilikama slovenskih zemalja na Balkanu pod Turcima u 16. veku", *Zbornik Filozofskog fakulteta u Prištini*, 6, 1969, 45. (Serbian Cyrillic)
- Hrabak, B. "Ribolov i riblja pijaca u Beogradu u 16. i 17. veku", *Godišnjak grada Beograda*, 7, 1960, 59–66. (Serbian Cyrillic)
- Hrabak, B. "Turski brodovi na Savi i tranzit preko Beograda u 15, 16. i 17. veku", *Zbornik Istorijskog muzeja Srbije*, 19, 1982, 41–53. (Serbian Cyrillic)
- Ilić, J. *Banatska vojna krajina u drugoj polovini 18. veka*, Beograd: Doktorska disertacija u rukopisu, 2014. (Serbian Cyrillic)
- Izvod iz studije regulacije i uređenja reke Save za teritoriju SR Srbije, Beograd: Združeno opšte vodoprivredno preduzeće "Sava", 1973.
- Jireček, K. "Vojna cesta od Beograda za Carigrad i balkanski klanci", u: M. Dinić (ur.), *Zbornik Konstantina Jirečeka*, knj. 1, Zbornik radova, Beograd: Naučno delo, 1959a, 71–191. (Serbian Cyrillic)
- Jireček, K. "Srbija, zemlja i narod", u: M. Dinić (ur.), *Zbornik Konstantina Jirečeka*, knj. 1, Zbornik radova, Beograd: Naučno delo, 1959a, 19–71. (Serbian Cyrillic)
- Jireček, K. "Trgovački putevi i rudnici Srbije i Bosne u srednjem veku", u: M. Dinić (ur.), *Zbornik Konstantina Jirečeka*, knj. 1, Zbornik radova, Beograd: Naučno delo, 1959a, 205–305. (Serbian Cyrillic)
- Kalić, J. Beograd u srednjem veku, Beograd: Srpska književna zadruga, 1967. (Serbian Cyrillic)
- Kalić, J. "Dunav u ratovima 15. veka", u: V. Čubrilović (ur.), *Plovidba na Dunavu i njegovim pritokama kroz vekove*, Zbornik radova sa naučnog skupa, Beograd: SANU, 1983, 109–126. (Serbian Cyrillic)
- Kalić, J. "Zemun u 12. veku", u: T. Živković (ur.), *Evropa i Srbi srednji vek*, Zbornik radova, Beograd: Istorijski institut, 2006, 409–443. (Serbian Cyrillic)
- Karadžić, V. Geografičesko-statističesko opisanije Srbije, *Danica*, 2, 1827, 25–120. (Serbian Cyrillic) Karbić, M, Škreblin, B. "Grad na rijeci ili pored nje: srednjovjekovni Zagreb i rijeka Sava", u: B. Ostajmer (ur.), *Rijeka Sava u povijesti*, Zbornik radova sa znanstvenog skupa, Slavonski Brod: Hrvatski institut za povijest, Podružnica za povijest Slavonije, Srijema i Baranje, 2015, 163–180.
- Karić, V. *Srbija: opis zemlje, naroda i države*, Beograd: Kraljevsko-srpska državna štamparija, 1887. (Serbian Cyrillic)
- Le Gof, Ž. Srednjovekovna civilizacija Zapadne Evrope, Novi Sad: Izdavačka knjižarnica Zorana Stojanovića, 2010.
- Leksikon srpkog srednjeg veka, Beograd: Knowledge, 1999. (Serbian Cyrillic)
- Marković J. "Fizičkogeografski prikaz okoline Šapca", u: S. Filipović (ur.), *Šabac u prošlosti 1*, Zbornik radova, Šabac: Istorijski arhiv, 1970, 11–35. (Serbian Cyrillic)
- Milojević, B. "Panonski Dunav na teritoriji Jugoslavije", *Zbornik Matice srpske za prirodne nauke*, 18, 1960, 5–65. (Serbian Cyrillic)
- Mirkovic, M. Römer an der Mittleren Donau, Römische Strassen und Festungen von Singidunum bis Aquae, Beograd-Požarevac: Kompromis design, 2003.
- Mišić, S. "Dubrave u srednjevekovnoj Srbiji", *Beogradski istorijski glasnik*, 3, 2012, 95–103. (Serbian Cyrillic)
- Mišić, S. Korišćenje unutrašnjih voda u srpskim zemljama srednjeg veka, Beograd: Utopija, 2007.

(Serbian Cyrillic)

Mrgić, J. Zemlja i ljudi, iz istorije životne sredine zapadnog Balkana, Beograd: Equilibrium, 2013.

Mrgic, J. "Some considerations on woodland resource in the medieval Serbia and Bosnia", *Beogradski istorijski glasnik*, 1, 2010, 87–101.

Mrgić-Radojčić, J. "Srednjevekovni čovek i priroda", u: S. Marjanović-Dušanić i D. Popović (ur.), Privatni život u srpskim zemljama srednjeg veka, Beograd: Clio, 2004, 163–183. (Serbian Cyrillic)

Nikolić, M. "Karta Srbije Đakoma Kantelija da Vinjole iz 1689", *Istorijski časopis*, 19, 1972, 101–133. (Serbian Cyrillic)

Novaković, S. "Beleške k istoriji Šapca i šabačke vladičanske stolice", Godišnjica Nikole Čupića, 9, 1887, (Serbian Cyrillic)

Opština Smederevo, Beograd: Geografski institut "Jovan Cvijić", 1992. (Serbian Cyrillic)

Pančić, J. "Nešto o našim šumama", u: B. Jovanović i M. Janković (ur.), *O našim šumama*, Beograd: Zavod za udžbenike i nastavna sredstva, 1998, 217–221. (Serbian Cyrillic)

Pančić, J. *Ribe u Srbiji*, Beograd: Državna štamparija, 1860. (Serbian Cyrillic)

Petrović, J, Bugarski, D, Ćurčić, S, Bogdanović, Ž. Vode Fruške gore, Novi Sad: Matica srpska, 1973. (Serbian Cyrillic)

Petrović, V. *Rimska naselja i komunikacije od Jadrana do Dunava 1–4 vek*, Beograd-Niš: Balkanološki institut SANU, Filozofski fakultet Niš, 2015. (Serbian Cyrillic)

Porčić, N. "Putovanje – život u pokretu", u: S. Marjanović-Dušanić i D. Popović (ur.), *Privatni život u srpskim zemljama srednjeg veka*, Beograd: Clio, 2004, 183–218. (Serbian Cyrillic)

Radovanović, V. S. Opšta antropogeografija, Beograd: Građevinska knjiga, 1959. (Serbian Cyrillic)

Radojčić, N. "Odnos između geografije i srpske istoriografije", u: P. Vujević (ur.), *Zbornik radova posvećen Jovanu Cvijiću*, Zbornik radova, Beograd: Državna štamparija, 1924, (Serbian Cyrillic)

Ratzel, F. Anthopogeographie, I Teil, Stuttgart: Verlag von J. Engelhorn, 1909.

Ratzel, F. Anthopogeographie, II Teil, Stuttgart: Verlag von J. Engelhorn, 1912.

Ratzel, F. Der Lebensraum, Tübingen: H. Laupp, 1901.

Rečnik srpskog jezika, Novi Sad: Matica srpska, 2007. (Serbian Cyrillic)

Rokai, P. ""Brodovi" na Dunavu i pritokama na području Južne Ugarske u srednjem veku", u: V. Čubrilović (ur.), *Plovidba na Dunavu i njegovim pritokama kroz vekove*, Zbornik radova sa naučnog skupa, Beograd: SANU, 1983, 139-175. (Serbian Cyrillic)

Sindik, I. "O zadacima istorijske geografije", *Istorijski časopis*, 2, 1949/1950, 175-182. (Serbian Cyrillic)

Smud, S. "Mačvanska Mitrovica", *Zbornik Matice srpske za prirodne nauke*, 26, 1964, 169–183. (Serbian Cyrillic)

Smuđ, S. "Morfološke crte Sremske Mitrovice", *Zbornik Matice srpske za prirodne nauke*, 23, 1962, 120–144. (Serbian Cyrillic)

Spremić, M. *Despot Đurađ Branković i njegovo doba*, Beograd: Srpska knjževna zadruga, 1994. (Serbian Cyrillic)

Stanković, S. *Životni prostor*, Beograd: Politika i društvo, 1939. (Serbian Cyrillic)

Stanković, S. "Ljudsko društvo i živa priroda", Sociološki pregled, 1, 1938, (Serbian Cyrillic)

Stojanović, T. Balkanski svetovi, Beograd: Equilibrium, 1997. (Serbian Cyrillic)

Szende, K. "Towns along the way. Changing patterns of long-distance trade and urban network of medieval Hungary", In: H. Houben and K. Toomaspoeg (eds.), *Towns and Communication*, Vol.
2: Communication between Towns (ICHT). Proceedings of the Meetings of the International Commission for the History of Towns, Lecce: Mario Congedo Editore, 2011, 161–225.

Škrivanić, G. Putevi u sredenjevekovnoj Srbiji, Beograd: Kultura 1974. (Serbian Cyrillic)

Vidal de la Blache, P. "La Géographie politique d'apres les écrits de M. Fr. Ratzel", *Annales de géographie*, 7/32, 1898, 97–111.

Zeremski, M. "Reljef Beogradske i Zemunske Posavine", Zbornik radova Geografskog instituta, 7,

- 1960, 55–98. (Serbian Cyrillic)
- Zirojević, O. *Carigradski drum od Beograda do Budima u 16. i 17. veku*, Novi Sad: Institut za izučavanje istorije Vojvodine, 1976. (Serbian Cyrillic)
- Zirojević, O. Carigradski drum od Beograda do Sofije (1459-1683), Beograd: Istorijski muzej Srbije, 1970. (Serbian Cyrillic)
- Zirojević, O. "Mreža turskih puteva (vodenih i kopnenih) na području današnje Vojvodine i Slavonije", *Istorijski časopis*, 34, 1987, 119–129. (Serbian Cyrillic)
- Zirojević, O. "Ribolov na Dunavu", *Spomenica istorijskog arhiva Srem*, 10, 2011, 13–31. (Serbian Cyrillic)
- Zirojević, O. "Ribolov na srednjem Dunavu (16–17 vek)", *Zbornik Matice srpske za istoriju*, 49, 1994, 111–120. (Serbian Cyrillic)
- Živaković-Kerže, Z. "Drava kao os života, razvoja i odnosa kroz povijest (poseban osvrt da donji tok rijeke)", *Anali Zavoda za znanstveni i umjetnički rad u Osjeku*, 18, 2002, 41–69.

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# ПРИРОДНИ УСЛОВИ КАО ФАКТОР УРБАНИЗАЦИЈЕ ДОЊЕ ПОСАВИНЕ У СРЕДЊЕМ ВЕКУ

#### Резиме

Сагледавање историјских процеса и појава често је непотпуно уколико се у истраживање не укључи и простор односно терен на коме су се одвијали историјски догађаји. Проучавањем веза и односа људске заједнице и њеног окружења може да се створи целовитија слика о томе како су географски фактори утицали на историјска збивања и како су разни друштвени процеси учествовали у организацији и преображају простора на коме су се одвијали. Сваки од градова који су се налазили на доњем току Саве је имао одређен географски положај који му је давао нека преимућства. Један од фактора је био стратешки положај града у односу на околину који је био од изузетног значаја у епохи средњег века, јер је било важно да град може да има што бољу одбрану у случају напада. Положај града у односу на ширу околину је такође био значајан због економског развоја града. У тај домен спадају и путне мреже које су опет добрим делом зависиле од природних услова. Због тога су рељеф и хидрографија од изузетног значаја у процесу урбанизације. За живот самог града такође су важни природни ресурси, плодност земљишта и живи свет од којих је човек црпео основне потребе неопходне за живот. У том смислу је посебно била важна близина воде, али на месту што безбеднијем од поплаве. Клима је такође била један од значајних фактора у процесу урбанизације. Стога, сматрамо да је географски положај врло важан фактор у историји градова и много говори о њиховој првобитној функцији и намени. Доња Посавина је била под утицајем климе која није ометала процес урбанизације. Ова област је добро била повезана путном мрежом са широм и ближом околином. Пружала је одличне услове за пољопривреду, лов и риболов. Насеља су махом грађена на оцедитом терену који је био заштићенији од поплаве у односу на околину и који је пружао добре стратешке услове. Фактор процеса дугог трајања је дошао у пуној мери до изражаја на примерима градова на доњем току Саве, будући да је живот у њима претрајавао вековима, све до данашњих дана. Утицаји природних услова чинили су један од важних оквира формирања градова, али и шире њиховог економског развитка и опстанка.

Кључне речи: Доња Посавина, река Сава, градови, средњи век, природни услови.

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