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# NATURAL CONDITIONS AS A FACTOR IN THE DEVELOPMENT OF CITIES ON OPPOSITE SIDES OF THE DANUBE RIVER: A CASE STUDY OF KOVIN AND SMEDEREVO FROM THE 14th TO THE 18th CENTURY

Abstract: This paper analyzes the impact of the natural environment as a condition for the emergence and development of Kovin and Smederevo, two nearby cities on opposite banks of the Danube, during a period ranging from the Middle Ages, when both cities underwent intensive development, until the eighteenth century, when the process of land reclamation began on their locations. In the past, the terrain, climate, hydrography, fertility, and natural resources were highly significant for the formation and development of cities, both for their strategic positions and for supplying cities with basic needs, either through direct production or trade. Thus, it is important to analyze and explain these factors that make up the basic prerequisites for the location of a settlement, and to look at the possibilities and obstacles for a city or town along the lower course of the Danube, especially because the conditions differed on the left and right banks in this particular area.

Keywords: Kovin, Smederevo, Danube River, urbanization, natural conditions.

#### 1. Introduction

n understanding of historical processes and phenomena is often incomplete if research into them does not include the area or terrain where historical events took place. Human life has always been dependent on the conditions, influences, and possibilities of nature, so knowledge of physical geography is needed to understand the

environment and how it influences humans and their culture. In this respect, the process of urbanization should also be considered.<sup>1</sup>

Terrain, climate, hydrography, and the qualities of soil, along with plant and animal life are important factors in the human geography of physical or natural species. In addition to natural factors of human geography, there are also social factors, which are primarily historical, economic and commercial, and cultural. It is important to emphasize the interplay and conditions of all factors, both natural and social. In order to monitor the various phenomena and processes, one must properly measure and determine the relationship, share, and character of both factors, without attaching more significance to natural conditions than they truly have, while also not discounting their influence and the influences of historical processes.<sup>2</sup> This paper, however, will only address natural conditions as one of, but not necessarily the most important, factors in the emergence and development of Smederevo and Kovin. Nevertheless, their economic (and primarily mercantile), administrative, and military functions should also be borne in mind.<sup>3</sup>

Throughout history, people have always found favorable locations for establishing settlements. Even after an area is completely abandoned, these settlements have always attracted new settlers to settle in old places. Since ancient times, people have always grouped together at particularly attractive points. They first form a small core around which other human layers multiply. Through hard work and dedication, these settlements are then perfected and become more valuable geographic locations that attract others to settle there. The geographic elements of a living space—the nature of the soil, temperature, altitude, and the interplay of hydrography and plant growth—determine how the settlement is organized. Just like other living beings, humans also have a need to expand by negotiating a space. Humans settle in a particular space that provides certain advantages in comparison to others, but if the space itself has some drawbacks, they will endeavor to correct, change, and adapt them to their needs. Vidal de La Blache defined this relationship as, "Nature prepares the ground, and man organizes it according to his needs and wishes."

Therefore, when identifying the conditions that determine the position of a town or city, it is necessary to understand the terrain, climate, connections, fertility of the land, economic opportunities, and the historical development of the entire area and beyond.<sup>6</sup> Kovin and Smederevo emerged and developed under completely different historical circumstances. Here, however, we will only look at the aforementioned natural factors as they relate to the emergence and development of these two nearby towns on opposite sides of the Danube during a period spanning between the Middle Ages, when both cities underwent intense development, and the eighteenth century, when a process of land reclamation began.

<sup>&</sup>lt;sup>1</sup> Vasin 2019: 45–46

<sup>&</sup>lt;sup>2</sup> Cvijić 1922: 11–12; Radovanović 1959: 14–25; Čubrilović 1983: 2. Grčić 2004: 31–33; Grčić 2015: 178–180

For more on various factors in the development of Smederevo and Kovin and how they interacted with one another, see: Vasić: 2023.

<sup>4</sup> Vasin 2019: 46-47

<sup>&</sup>lt;sup>5</sup> Vidal de la Blache 1898: 107.

<sup>6</sup> Cvijić 1922: 234–245; Stanković 1939: 13–14; Radovanović 1959: 258–260; Grčić 2004: 45–47.

### 2. Hydrography and Terrain

The hydrographic characteristics examined here resulted from the course of the Danube and by that of its tributaries in this area. It is important to emphasize that, in the past, rivers were not regulated as they are now, and there are certain differences that must be considered. As an element necessary for daily life, water has always drawn humans to settle near it, but its ill nature as seen in flooding has also repelled them. Even today, most settlements are found near water sources, which in the past was even more necessary. In the past, however, much more frequently than now, there was a greater danger of uncontrollable flooding after many attempts to regulate waterways. It was therefore necessary to find terrain that was appropriate for building a settlement that was close enough to the water, but also somewhat protected when the rivers rose.<sup>7</sup>

In the area addressed here, the Danube is located in a section of the Pannonian plain, more specifically in the Serbian part of Banat starting from the mouth of the Sava and extending down to the Ram narrows.<sup>8</sup> At this section of the river, the left bank is lower than the right. On the right bank, there are places with higher and lower terraces on the hillsides leading down to the Danube, and on the left are the alluvial plane and higher and lower Danube terraces.<sup>9</sup> Therefore, the land along the left bank is more vulnerable to flooding when the river rises. On the right bank of the Danube, this sector can be vulnerable to flooding directly below Veliko Selo, between Ritopek and Grocka, slightly further downstream from Grocka, the area around Smederevo, and the land between the mouth of the Mlava and the Ram narrows.<sup>10</sup>

The alluvial plains are the lowest land in this area, ranging between 80 and 66 meters above sea level. Due to frequent flooding, these areas were not appropriate for settlement. The Danube's alluvial plain is rather wide. Before it was regulated, the Danube flooded the alluvial plane and part of the right terrace every spring, leaving devastation in its wake. This is why there are many small watercourses and marshes around Kovin. In the lowest part of the alluvial plane, there are marshes and wetlands. Their surfaces vary depending on the amount of rainfall and the height of the ground and surface water. 11

Here the central stretch of the Danube is a low-lying river. The width at this stretch varies, but averages around 600 meters, but by Smederevo and Kovin it is 1200 meters wide and can rise by up to two kilometers. There are many small islands along this stretch, including Big Smederevo Island and Little Smederevo Island on the stretch between Kovin and Smederevo. Navigation of this sector of the Danube can be hampered by low water

<sup>&</sup>lt;sup>7</sup> Vasin 2019: 47–48

<sup>&</sup>lt;sup>8</sup> Dukić 1983: 15–16, 26–30; Gavrilović, Dukić 2014: 21–26.

<sup>&</sup>lt;sup>9</sup> Đurđević 1960: 67–69.

Over the last 150 years, the city of Smederevo was flooded or threatened by rising water around seventy times. (Opština Smederevo: 91); In the year 1154–1155, John Kinnamos noted that the Danube flooded after heavy rains. (VIINJ 4: 51); Bertrandon de la Broquière wrote that during his time in Belgrade in 1433, the Danube rose higher than people could ever remember it had in the past. He said it had grown to ten Latin miles wide (around fifteen kilometers) and had exceeded its normal high point by six feet (around two meters). Because of the high water, he was unable to travel to Buda. (Brokijer 1950: 147).

Györffy 1987: 305–113; Ivánfi 1872: 153.

Dukić 1983: 30–34; Great Smederevo Island is about one kilometer wide and six kilometers long. Little Island

levels in the shallows and in winter by ice, and it can sometimes freeze completely. <sup>13</sup> *Košava*\* can also have a negative impact on navigability. Between Kladovo and Belgrade, a strong *košava* can create high waves that prevent ships from sailing or push ships up against the rocky banks. <sup>14</sup>

The most important tributaries in this sector that are relevant here, and the courses of which have an effect on the area around Kovin and Smederevo, are the Timiş and Karaš, and on the right the Great Morava and the Jezava.<sup>15</sup>

The Timis rises in modern-day Romania from the eastern slope of the Semenik massif, and flows into the Danube near Pančevo. Due to the low terrain and a small drop in the river flow, the river runoff/drainage is slow and often empties out. Regulation of its course began in the eighteenth century. <sup>16</sup> The Karaš has a rather wide alluvial plain in which many highly branched meanders form. During snow melts and the rainy season, the Karaš floods everything around it, including the entire plain, which essentially becomes a slowdraining lake. The water is slow to drain because it must pass over sandbars, circulate through long meanders due to a very small drop at the sharp curves, and is often slowed by sand deposits formed by the wind. Major flooding can also occur when the Danube is high and when ice sheets from the Karaš cannot flow into it and accumulate at their confluence. Durning a particular season, the Karaš gushes out and floods the surrounding area and then recedes, only to swell again a few days later. When the river returns to its basin, a large surface area remains under water, so the land can only be farmed in the late spring. Some of the lower terrain remains under water all year round. 17 Ever since the early eighteenth century, and up until today, considerable efforts have been made to drain this area and cultivate it. The Timis cuts through a valley in loess terrace all the way to the Danube marshes, and in the past regularly flooded the surrounding area. It was later regulated so

is about two hunderd meters wide and one and a half kilometers long. When the river rises, the islands are partially or completely submerged. (*Opština Smederevo*: 68).

We know the Danube froze over in 1048. (VIINJ 3: 163); There was also ice in the Danube near Kovin in 1431 (Thallóczy, Áldásy 1907: 88). It was also frozen over in 1463 (J. Panonius, Smrt majke Barbare, stihovi 35–36, str. 12) There was ice again in 1476 (Thallóczy, Áldásy 1907: 388). King Matthias and his army were on their way to Wallachia but were unable to reach it due to high water and ice on the Danube. He had to resort to pulling up his ships and dragging them overland to the Sava River, which, according to a witness, Bishop Gabriel of Eger, rarely or never froze. (Thallóczy, Áldásy 1907: 388; Kisić, Vasić: 81–95). King Matthias would later note that he was unable to conquer Smederevo after Šabac because the Danube was too low. (Fraknói: 354–355; Kisić, Vasić: 93–95). Evliya Çelebi noted that, during winter, the Danube would freeze, when the ice was ten spans (around 75 centimeters) thick, certain duties were not charged, which was favorable for merchants. The impression from his account is that this was not an unusual occurrence. (Evlija Čelebi 1979: 93); Quiclet also mentioned ice on the Danube in a similar context. (Samardžić 1961: 194).);

<sup>\*</sup> The Serbian name for a strong southeasterly wind that often blows in this part of the Lower Danube —Trans.

<sup>&</sup>lt;sup>14</sup> Đurđević 1960: 67–69; Gavrilović, Dukić 2014: 33–38.

<sup>15</sup> Dukić 1983: 24, 29, 38.

<sup>&</sup>lt;sup>16</sup> Gavrilović, Dukić 2014: 65–66.

Milovan 1958: 8–15. Theophylact Simocatta mentioned the wetlands in this region in his description of the campaign Priscus launched from Viminacium against the barbarians. In one of them, the Roman army subdued the enemy and drove them into a marsh, where many drowned, including sons of the khagan. VIINJ 1: 123; Broquière also mentioned the marshlands in Banat. (Brokijer 1950: 147) Antun Vrančić wrote that the marshland near Titel completely flooded whenever the Tisa and Danube overflowed their banks. (Matković 1884: 17–18).

that now it floods much less often. A description from January 1768 states that across the Timiş there were reed marshes and bogs, and there were a lot of reeds and marshes between the floodplains and the Danube around Kovin on the left and right.<sup>18</sup>

There is an aquifer near Kovin at a shallow depth of around one to three meters. It is fed by water from the Danube, atmospheric precipitation, and influx from higher loess areas. This water is very important for crops that have been adapted to make use of them, yet a high-level aquifer can have a negative effect on developing crops. Likewise, high groundwater can make land cultivation and travel difficult. According to information from the urbarium of Kovin from 1771, the total flood and marshlands covering the field bordering Gaj and Ostrovo, the banks of the Danube, the stretch along the Dunavica and Ponjavica, and the marsh called Crna Bara amounted to wetlands covering 21 percent of the entire area. A significant part of the area was covered by the Crna Bara marsh. This marsh had its own water source and never dried up. In a description of the area where a German colonizing regiment was located in April 1768, Anton Kocian, a business inspector, said that it was flat terrain, and a third of it was a stretch of marsh overgrown with reeds along the Danube, with a depth of up to four klaftera (7.56 meters).

The Great Morava is formed by the merging of the South and West Morava rivers at Stalać. The town of Kulič was built at this confluence. In the past, it was about 60 meters longer because many meanders were cut when it was regulated and shortened. Very often in the past—almost every year—it spilled over and destroyed everything in its path, which resulted in the land constantly flooding and becoming marshy, and the river changing course.<sup>22</sup> The Jezava is a distributary of the Great Morava and emerges two kilometers downstream from the mouth of the Jasenica. In 1897, it was separated from the Great Morava by an embankment. Water only flows through its upper course during the spring and late summer. In the past, the Jezava flowed into the Danube, and the Smederevo fortress was built at its mouth. After heavy rains and when the Danube was high it overflowed its banks and flooded into the wider area around its mouth. It was eventually diverted and now flows into the Morava.<sup>23</sup>

In the Lower Danube region around Smederevo, there is primarily gently rolling terrain with wide hillsides and shallow valleys. Along the stretch from Grocka to Kulič, the Danube valley is asymmetric. The right bank is hilly and highly exposed to the sun's rays. Throughout the day, there is nothing hindering insolation. For this reason, this part of the area has been inhabited since the earliest periods. In Roman times, this was a golden riverbank full of vineyards. Godomin field is generally a very fertile plain, although the success of the harvest is subject to the whims of the river. The terrain tends to become marshy. During the despot Stefan's reign, there was a kind of "mud" in Godomin that was referred to as *Mrtva Morava* or Dead Morava.<sup>24</sup> Antun Vrančić wrote that the plain near

<sup>&</sup>lt;sup>18</sup> Ilić 2014:144; Ilić Mandić 2020: 211.

<sup>&</sup>lt;sup>19</sup> Tomić 1981: 23–27.

<sup>&</sup>lt;sup>20</sup> Ilić 2012: 199–229.

<sup>&</sup>lt;sup>21</sup> IIlić Mandić 2020: 188.

<sup>&</sup>lt;sup>22</sup> Morava 2006: 115–116; Gavrilović, Dukić 2014: 67–74; Simonović 1990: 184; Mišić 2007: 18.

Opština Smederevo 1992: 74–75; Gavrilović, Dukić 2014: 73.

<sup>&</sup>lt;sup>24</sup> *Opština Smederevo* 1992: 31; Mihaljčić 1976: 105

Smederevo was so low, that if the Danube rose even a little, it would immediately become flooded. <sup>25</sup> Evliya Çelebi claimed that the land in Smederevo was marshy. <sup>26</sup> Quiclet said that on the road from Kolar to Hasan-pašina Palanka in the summer of 1658, he crossed through long marshes and the road had been particularly muddy. Interestingly, he claimed they had traveled at night because it was unbearably hot during the day, which meant these marshes did not dry out, even in summer. <sup>27</sup>

# 3. Suitability of the Terrain

Each kind of terrain has certain advantages and disadvantages. It is just a matter of what is considered crucial at the time a settlement is conceived in order for it to be established at a particular spot. As has been described, the area here is flat and rather marshy and prone to flooding; but often only one small advantage to an area can be decisive and overrule a number of disadvantages.<sup>28</sup>

Cities were often built at the confluence of two rivers or on their components, primarily because it was easier to defend, but also to take advantage of the benefits of two rivers. Smederevo emerged at the mouth of the Jezava where it empties into the Danube. It is located on a gently rolling lowland area on the southern rim of the Pannonian Basin, where it meets the Banat plain, Pomoravlje, and the Šumadija hills. This is highly fertile land suitable for cultivation. A favorable geographic position at the meeting point of different natural and geographic formations, along with lowlands with valleys, plentiful water, and agricultural land provided the necessary conditions for the development of settlements. The location on the banks of the Danube that had important areas with small gradients in the surrounding area basically ensured that the terrain would not be a limitation to exploiting the land. The entire region had a favorable climate with plenty of water resources.<sup>29</sup>

As was mentioned previously, here the left bank of the Danube is somewhat lower than the right bank, which means the left side is more vulnerable to flooding if the rivers rose. Settlements that emerged on higher and better drained Kovin developed where the loess terrace and the Danube's lower alluvial plain meet, on a protruding, triangle-shaped loess marsh that ends with a sharp high point on the bank of the Danube. Medieval Kovin was located at the very tip of this triangle. It was thus built on higher and drier land which, in the past, provided security from flooding and high groundwater. The alluvial plain is at its narrowest here due to this protruding loess marsh, which is a highly significant factor for river crossings. This means that Kovin is located at the most favorable spot in all of southern Banat for crossing the Danube.<sup>30</sup>

Kovin is surrounded on the east and west by the Danube's low alluvial plain and its now long-abandoned distributary. At the north, it is open toward the expansive loess terrace. Kovin is thus naturally protected by steep slopes to the south, west, and east, and only

<sup>&</sup>lt;sup>25</sup> Matković 1884: 20

<sup>&</sup>lt;sup>26</sup> Evlija Čelebi 1979: 313

<sup>&</sup>lt;sup>27</sup> Samardžić 1961: 195

<sup>&</sup>lt;sup>28</sup> Febvre 1966: 345

<sup>&</sup>lt;sup>29</sup> Opština Smederevo 1992: 31–44, 208.

<sup>&</sup>lt;sup>30</sup> Tomić 1981: 27–32; Ivánfi 1872: 173–174.

needed additional defense to the north. The loess terrace near Kovin is rugged, which can certainly be attributed to the Danube. There are many elongated depressions within it, which can offer some protection to a settlement when filled with water. Sandstone on the north side, which was uninhabited in the past, can also provide a sort of protection. This location where two geomorphological features (the somewhat drier loess terrace and the wetter alluvial plain) meet enables the population to exploit both of these. The alluvial plain is very humid and contains wetlands, marshy terrain, and moist pastures. In the past, it flooded when the Danube was high, after which lush, marshy vegetation would grow. Another morphological unit on which Kovin is located is a loess terrace with excellent fertile soil, but it is rather dry due to deep the phreatic zone and low precipitation.<sup>31</sup>

#### 4. Plant and Animal Life

In the past, the tree canopy was much denser than it is today. Priscus noted that, while on the way to the Danube, a delegation sent to Atilla's court by Emperor Theodosius II found itself in a densely forested area and had descended into a completely forested plain.<sup>32</sup> In a much later period, Evliya Çelebi and Quiclet also mentioned forests.<sup>33</sup> Broquière, on the other hand, mentioned that on the way to Belgrade and Szeged through Banat, he never saw a single tree apart from two small forests surrounded by a river.<sup>34</sup>

On his way to Constantinople, the well-known French poet Lamartine wrote that he had passed through an ocean of Serbian forests and did not emerge from the shade of trees for three days. Adam Weingarten, an Austrian staff captain who published a historical and geographical description of Serbia in 1820, wrote that Serbia was an almost uninterrupted forest. 35

In the late nineteenth century, the plain between Veliko Selo and Vinča was covered in willow trees, and there used to be oak trees laden with acorns used in pig breeding. In the late eighteenth and early nineteenth centuries, the hillsides between Belgrade and Smedervo were completely forested, mostly with oak trees. These forests were mentioned by numerous travel writers. They were mentioned by Broquière, who said that he crossed through many large forests on his way to Belgrade. Antun Vrančić wrote that the area around Smederevo was wooded. Tephan Gerlach, on his way to Smederevo from Belgrade, and again from Kolar to Smederevo, mentioned that there were forests of oak. Hans Dernschwam also said that the areas north of Jagodina and around Begrade were forested. Hasan-pašina Palanka via Kolari, he continually traveled through forests. Poullet wrote similarly in 1658. In this climate, the

<sup>&</sup>lt;sup>31</sup> Tomić 1981: 8–13, 117–118, 56–57, 66–86; Bukurov 1970: 20–21; Krstić 2006: 28–30. 
<sup>32</sup> VIINJ 1: 13

<sup>&</sup>lt;sup>33</sup> Evlija Čelebi 1979: 518, 521, 522; Samardžić 1961: 192

<sup>&</sup>lt;sup>34</sup> Brokijer 1950: 147

<sup>35</sup> Stojanović 1997: 65

<sup>&</sup>lt;sup>36</sup> Brokijer 1950: 131.

<sup>&</sup>lt;sup>37</sup> Matković 1884: 22.

<sup>&</sup>lt;sup>38</sup> Matković 1893: 53–55.

<sup>&</sup>lt;sup>39</sup> Vlajinac 1927: 97, 99.

<sup>&</sup>lt;sup>40</sup> Samardžić 1961: 169, 212.

forests are filled with several species of oaks. <sup>41</sup> A variety of game animals are found in these forests, including deer and roe-deer, wild boar, hares, pheasants, gray partridges, common quail, European turtle doves, wolves, foxes, European wildcats, weasels, European badgers, Eurasian goshawks, sparrowhawks, eagles, and falcons.

The natural conditions around Kovin and Smederevo are very favorable for fishing. The Danube, along with many distributaries, meaders, oxbow lakes, and ponds provide ideal conditions for catching fish, but they are also inhabited by varieties of birds such as mallards and graylag geese. The Danube and its tributaries were teeming with fish. In the midnineteenth century, before rivers were artificially restocked, there were around sixty-six varieties of fish in Serbian rivers. The most commonly fished were Eurasian carp, crucian carp, blue bream, wels catfish, ziege, weatherfish, European perch, pike, freshwater bream, and common rudd, while barbel, zander, trout, ide, and redfish were less common. Beluga and sturgeon that had come all the way from the Black Sea could also be found in the Danube even in Belgrade. 42 Manuel Holobolos wrote that the Danube had more of a kind of fish he referred to as a "fresh river pig" than any other river. It is not clear, however, which fish this was.<sup>43</sup> Theodore Metochites wrote of a Danube fish that was large and oily, and was highly prized in Constantinople, where it was difficult to find.<sup>44</sup> In the *Descriptio* Europae Orientalis, an anonymous author claimed that the Danube and its tributaries were filled with an abundance of fish, and he made specific mention of beluga, sturgeon, pike, and barbel.<sup>45</sup> Constantine of Kostenets also wrote that there were many fish in Serbia.<sup>46</sup> Fishing on the Danube was certainly prevalent in the later period.<sup>47</sup> During the Ottoman period, taxes on fishing were collected at Golubac, Kulič, and Ram. Half of the sanjak-bey of Smederevo's income came from fishing on the Morava, and he possessed fishponds on the Sava and the Danube. 48 An anonymous travel writer noted extraordinarily large carp and commented that all the fish in Belgrade were excellent and fatty because the riverbed had two feet of silt. Similar observations were made by Hans Dernschwam, Jean-Baptiste Tavernier, Quiclet, and Louis Gedoyn.<sup>49</sup>

41 Karić 1887: 70.

Pančić 1860: 61–159; In a typicon from the Studenica monastery, it is instructed that people to be sent to the banks of the Danube and the Zeta to gather fish before the Feast of Saint Simeon. (Ćorović 1928: 125).

<sup>&</sup>lt;sup>43</sup> VIINJ 6: 581.

<sup>&</sup>lt;sup>44</sup> *VIINJ*6: 114.

Živković, Petrović, Uzelac 2013: 137–138.

<sup>46</sup> Konstantin Filozof 1936: 50.

<sup>&</sup>lt;sup>47</sup> Zirojević 1994: 111–120; Zirojević 2011: 13–31; Fish are most easily caught in eddies. The most well-known is the Gospođin vir on the Danube, which *knez* Lazar granted to the Ravanica monastery. He also granted hunting grounds on the Danube the the Gornjak monastery. (Mladenović 2003: 32, 35, 58, 61; Miklosich 1858: 194; Škrivanić 1970: 249–250; Novaković 2005: 771; Nikolić 1973: 152); Krstić 2006: 131–142; In the fifteenth and early sixteenth centuries, Germany and northern Italy often procured live or semi-wild livestock from Poland, Hungary, and the Balkans. The people of the Balkans were often mentioned in in sources in Venice as butchers and livestock traders (most often from Dalmatia). Later, until the eighteenth century, pike and very large hake from the Sava and Danube rivers were highly praised. (Brodel 2007: 180).

<sup>&</sup>lt;sup>48</sup> Bojanić, 1974: 21, 23, 51; Šabanović 1964: 26; Hrabak 1960: 59–65

<sup>&</sup>lt;sup>49</sup> Vlajinac 1927: 100; Samardžić 1961: 164–165, 186, 194, 183.

#### 5. Climate

Climate has a significant effect on water surfaces, distribution of plant and animal life (specifically on the growth of crops and forests), and thus on humankind. This is particularly relevant because, in the Middle Ages and the early modern period, most of the population was engaged in agriculture and the remainder was also largely dependent on food production. Temperatures in central Europe were slightly higher between 900 and 1300. Evidence for this is that the level of forest cover increased from one hundred to two hundred meters above sea level. Tilling the land and cultivating crops became possible at higher latitudes and elevations than in the past. What has been called the Medieval Climate Optimum favored biological growth throughout the entire West. At higher latitudes, weather conditions began to worsen as early as the thirteenth century, and this deterioration ushered in an era often referred to as the Little Ice Age. This worsening extended throughout the fourteenth and fifteenth centuries when the northern hemispheres cooled. The Little Ice Age began slowly and imperceptibly, beginning with occasional harsh winters. Worsening weather followed in the mid-fifteenth and early sixteenth centuries with wet, cool summers and long, cold winters. This lasted from approximately 1400 to 1850, with the coldest periods around 1550 and between 1700 and 1850, when there was a series of cold winters.<sup>50</sup>

There has so far been no research on the climate in this part of the Danube region in the Middle Ages. Various descriptions of the weather found in chronicles, biographies, travel writings, and other sources contribute to our understanding of this period. An anonymous travel writer wrote that in 1621, the air in Belgrade was mild and the seasons were rather pleasant.<sup>51</sup> Louis Gedoyn wrote that in 1624, it had been extremely cold with lots of snow, and because of this he had to postpone his journey from Sarajevo to Belgrade. At that time, the Drina was half frozen and the Morava had frozen over completely. After he arrived in Belgrade, he wrote that it had snowed for four days straight, and no one had ever experienced such a harsh winter for over a hundred years.<sup>52</sup> Evliya Celebi mentioned in several places that the climate around Smederevo and Belgrade was very pleasant. He said that in Smederevo specifically, the winters were very pleasant and mild, and that in July, the air in the city was unusually hot, which he attributed to the high walls, and that in the town outside the walls the climate was pleasant.<sup>53</sup> He also noted that when he traveled from Budapest to Belgrade in November and December of 1663, so much snow fell in Osijek that thousands of tents were completely covered, but then the next day it was warmer and the sun was shining, and after that such heavy rains fell that there were no tents left standing. At the same time, tremendously strong winds began blowing, but the next day it was cooler.<sup>54</sup> He said the climate in Banat, however, was good, and the climate in the area east of Smederevo was lovely and pleasant. 55

The temperate continental climate offers ideal conditions for settling down and building settlements. Throughout this region, the level of insolation is relatively equal, and

<sup>&</sup>lt;sup>50</sup> Brodel 2007: 33–35; Delort, Wolter 2002: 106–107; Hoffmann 2014: 318–329.

<sup>&</sup>lt;sup>51</sup> Samardžić 1961: 164.

<sup>&</sup>lt;sup>52</sup> Samardžić 1961: 176–178, 181, 183, 184; See also Note 13.

<sup>&</sup>lt;sup>53</sup> Evlija Čelebi 1979: 70, 313

<sup>&</sup>lt;sup>54</sup> Evlija Čelebi 1979: 376

<sup>&</sup>lt;sup>55</sup> Evlija Čelebi 1979: 543, 547–548

although the amount of sediment is low, it is approximately evenly distributed throughout the entire year, making this area suitable for agriculture. Wind is frequent but not strong. <sup>56</sup> All this indicates that, despite certain periods when conditions were somewhat harsher, the climate in this part of the Lower Danube did not adversely affect the formation of settlements nor hinder their development. Also indicative of this is the number of vineyards in the area (which will be discussed later), which require a warmer climate and longer summers.

# 6. Soil Fertility

Arable land played an important role in this period when agriculture was the most important part of the economy and in what the majority of the population was engaged. It was reached by clearing groves and virgin soil, which, after being tilled, were turned into fields suitable for growing grain or for planting vineyards and orchards. Up until the sixteenth century, cities and towns were still inseparable from their agrarian surroundings, so it is necessary to consider the city's surroundings from this viewpoint.<sup>57</sup>

In the mid-twelfth century, John Kinnamos wrote that the south of Banat was full of people and all sorts of goods. <sup>58</sup> The travel writer Muhammad al-Idrisi wrote that Kovin and Bač were beautiful, well-built, wealthy, bustling cities with many estates. <sup>59</sup> Constantine of Kostenets wrote that Serbia was fertile, had an abundance of everything, and there were many vineyards. <sup>60</sup> Broquière wrote that, on his journey to Belgrade, he saw large valleys, many villages, good foodstuffs, and especially good wine. <sup>61</sup> The villages along the Danube, and in Braničevo and Pek, which Prince Lazar had granted to Ravanica, had many vineyards. <sup>62</sup> Vineyards and other riches on the Rudište estates, which belonged to Belgrade, were also mentioned. <sup>63</sup> The ban of Belgrade also had vineyards. <sup>64</sup>

In accounts of travel writers from a somewhat later period, there are references to the fertility of this part of the Lower Danube. Hans Derschwam wrote in 1553–1555 that a beautiful, fertile plain extended around Smederevo, and that around the town there were extraordinarily large vineyards. There were also vineyards along the Danube in the direction of Belgrade, and he wrote that Smederevo could not be seen until they had passed the vineyards. He also remarked that there appeared to have been vineyards in the areas south of the city. For this reason, wine in Smederevo and Belgrade had once been good and cheap, but he claimed that it was not as good has it had been because few people were left in the area, and the Ottoman taxes and had become too high, meaning that vineyards could not be maintained as they had been in the past. Antun Vrančić said of the area south of Smederevo that it was a spacious, beautiful,

<sup>&</sup>lt;sup>56</sup> Bukurov 1983: 114; Dinić 1988: 17–23; *Opština Smederevo* 1992: 65

<sup>&</sup>lt;sup>57</sup> Blagojević 1973: 79–98; Albert of Aachen wrote that in 1096, the crusaders stole livestock grazing in fields around Belgrade from the local residents. (Kalić 1967: 61, nap 114).

<sup>&</sup>lt;sup>58</sup> VIINJ 4: 43–44, 118–119, 126

<sup>&</sup>lt;sup>59</sup> Szende 2011: 184–187; Stojkovski 2009: 63–64.

<sup>60</sup> Konstantin Filozof 1936: 50; Štetić 2021: 188–204.

<sup>&</sup>lt;sup>61</sup> Brokijer 1950: 131

<sup>62</sup> Mladenović 2003: 53–54, 93–94.

<sup>63</sup> Teleki 1853: 519-521.

<sup>&</sup>lt;sup>64</sup> Thallóczy, Áldásy 1907: 344.

<sup>65</sup> Vlajinac 1927: 61, 96, 98–101

and fertile land with many orchards and vineyards.<sup>66</sup> In 1564, an imperial courier named Jakov Becek wrote that Serbia was a desolate place and the people impoverished, but that it produced a great deal of grain and wine, which showed how fertile the land was.<sup>67</sup> Stephan Gerlach also made note of the vineyards in Smederevo and the cheap wine.<sup>68</sup> In the Morava valley near Smederevo the beautiful fields of grain were noted in 1578.<sup>69</sup> Evliya Çelebi mentioned several times that the area between Belgrade and Smederevo was very fertile and had many gardens and vineyards. He said of Smederevo that there was no end to all the gardens and vineyards.<sup>70</sup> Çelebi also mentioned vineyards in Banat in the area around Vršac.<sup>71</sup> He also mentioned those east of Smederevo near Kulič, Hram, and Golubac.<sup>72</sup> Vineyards were often mentioned in the cadasters compiled during Ottoman rule. During this time, wine was imported to Smederevo, but those living in Smederevo had their own vineyards.<sup>73</sup>

During a period of scarcity after 1555, the City of Dubrovnik sought supplies from the deeper within the Balkan peninsula in Belgrade, Smederevo, and other areas. In years of famine and scarcity, and as a consequence of navigational difficulties caused by military conflict at sea, only small quantities of wheat were imported from around Belgrade and Smederevo. There is information from the year 1564–1565 and after the harvest of 1565 about Dubrovnik's efforts to obtain permissions to import grain from Belgrade, interest in prices, and the orders themselves. People in these parts were also engaged in beekeeping. In 1428, King Sigismund freed the citizens of Kovin from all taxes except for those on wax production. The Archdiocese of Kalocsa-Bacs was granted tithes on grain, food, bees, and wine from Belgrade estates. Immediately after the fall of Belgrade, the conqueror began taxing the hives of Christians. During the Ottoman period, wax in particular was exported from areas around Belgrade and Smederevo. Honey was taxed on ferries at Belgrade, Smederevo, Golubac, and Ram.

According to travel writers, the wider area around Smederevo, Kovin, Southern Hungary, and northern Serbia was quite fertile. They were impressed by the forests, vineyards, gardens, and plowed fields, which they mentioned in their writings.<sup>79</sup>

#### 7. Use of Natural Resources

As was mentioned in the section about the terrain, Smederevo and Kovin's surroundings are low-lying and rather marshy. Today lowlands are associated with fertile

<sup>66</sup> Matković 1884: 20–22

Matković 1887: 86; We know of a mixture of wheat and barley grown near Belgrade that was obtained by mixing the seeds together when they were sown. (Blagojević 1973: 100–101).

<sup>68</sup> Matković 1893: 53.

<sup>69</sup> Matković 1893: 51-53.

<sup>&</sup>lt;sup>70</sup> Evlija Čelebi 1979: 69–70, 91, 94, 314, 330, 378.

<sup>&</sup>lt;sup>71</sup> Evlija Čelebi 1979: 543.

<sup>&</sup>lt;sup>72</sup> Evlija Čelebi 1979: 547–548, 551, 552.

<sup>&</sup>lt;sup>73</sup> Šabanović 1964: 26, 144, 148–156; Bojanić 1974: 16–18, 21.

<sup>&</sup>lt;sup>74</sup> Hrabak 1971: 247, 291, 336–337, 379, 446; Hrabak 1957: 59–68.

<sup>&</sup>lt;sup>75</sup> Kisić, Vasić 2021: 7–23.

<sup>&</sup>lt;sup>76</sup> Thallóczy, Áldásy 1907: 306–307.

<sup>&</sup>lt;sup>77</sup> Šabanović 1964: 26, 140.

<sup>&</sup>lt;sup>78</sup> Bojanić 1974: 21–22, 35; Hrabak 1985: 87, 96.

For more detail, see: Krstić 2020: 295–338.

terrain, but in the past before land development began, it could have been the complete opposite. At that time, the lowlands mostly collected water. Because this water is stagnant, it becomes surrounded by reeds and cattails, and during the summer months noxious fumes are emitted. These waters are also conducive to mosquitoes, which can spread serious diseases. Although wetlands were first cultivated in the Middle Ages, it was not common practice until the sixteenth century, and people mostly found arable land through clearing forests or virgin soil. In the past, wetlands generally took up much more space than they do today<sup>80</sup> and were considered to be unhealthy. Stagnant water, high humidity, mud, and mosquitoes facilitated the spread of infectious diseases— especially malaria, which is transmitted by mosquitoes.<sup>81</sup> Contemporaries considered these environments to be unfavorable for human habitation. Hans Dernschwam said that Smederevo was an unhealthy settlement because the walled city was susceptible to flooding, and the lower town was a true lake of mud where stinking puddles of mud were accumulated in the largest streets. 82 The poor quality of the water was often mentioned in reports by civil servants when they visited the colonized settlements of German regiments. In April 1768, a commerce inspector named Kocian recorded that, among other things, the well water was very salty, which made it mostly unusable for cooking or drinking, and the inhabitants were forced to take water from the Timis and Ponjava rivers, and even from the Danube. Kocian believed the air in this region was poor due to evaporation from the marshes and bad water, and that it was no surprise that foreigners who came there fell ill, while the old and sick mostly perished. 83

However, because wetlands are part of the human environment, people must find some way to wrestle with them and learn how to take advantage of some of the benefits they offer. Marshy and muddy terrain can make access to the city quite difficult, which can serve as a kind of natural defense and a hindrance to besieging the city. In the eighteenth century, Inspector Kocian divided marshy terrain into three categories: completely unusable; partially usable for fishing or gathering reeds; and terrain occasionally useful for gathering additional hay during dry periods. This area was marshy before a drought but then dry was used for hayfields and livestock grazing. 84 According to a 1771 urbarium from Kovin, some parts of the wetlands were completely unusable due to dampness and plant cover. However, the largest part of the floodplain in the area was meadowland on both sides of the Ponjavica River, which could be used for harvesting hay in the dry season. Considering the general lack of trees in Banat, the marshy terrain along the Danube due to a large number of trees such as willow, alder, and oak.85 Broquière wrote that in Banat, straw and reeds were used for kindling because wood was scarce.<sup>86</sup> Reeds could also be used for thatching roofs. Information from the medieval period indicates that there were fishponds in the vicinity of Kovin.<sup>87</sup> The Danube and its many distributaries, meanders, and oxbow lakes provide ideal

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<sup>80</sup> Chaunu 1977: 224–226; Brodel 2001: 59–73.

For malaria in this context, see: Hoffmann 2014: 300–303.

<sup>82</sup> Vlajinac 1927: 61; Krstić 2009: 55–56.

<sup>83</sup> Ilić Mandić 2020: 197–198.

<sup>84</sup> Ilić Mandić 2020: 186-187.

<sup>85</sup> Ilić 2012: 199–229.

<sup>86</sup> Brokijer 1950: 147.

<sup>&</sup>lt;sup>87</sup> Magdics 1888: 5.

conditions for fishing. It would be reasonable to assume that the ponds located near these cities were used for this purpose.

In the past, forests have played an important role in everyday life, primarily because they were a source of wood that had a variety of uses. Timber was a basic material for construction and was additionally used for firewood and for making various tools, weapons, and other necessities. Momčilo Spremić poetically observed that the Middle Ages were in fact an age of wood hidden behind a false image of stone. This is only because city walls and the houses of noblemen and the wealthy were built of stone. The homes of the rest of the population were mostly made of wood. Even parts of large and important fortifications had wooden elements. Forests were also highly important for hunting since they were a natural habitat for all sorts of game animals. These included varieties of deer, wild boar, hares, pheasants, gray partridges, common quail, European turtle doves, wolves, foxes, European wildcats, weasels, European badgers, Eurasian goshawks, sparrowhawks, eagles, and falcons. During the Middle Ages there were also beavers in this area of Serbia, and there were known to be two varieties of wild cattle: aurochs and the European bison. Pigs were able to feed on acorns in the forests of oak and beech. Various types of fruit suitable for human consumption could also be found in the forests. These could include wild walnuts and chestnuts, quince, and a variety of berries. 88 During times of war, the forest could provide shelter, and enemy advances could be stopped by felling trees.<sup>89</sup> Forests are also excellent at cleaning the air. This is especially important in wetland areas where the air quality was poor. Similarly, forests also provide protection from strong winds, including the košava. Forests can also partially protect against flooding because they use up large amounts of water and can to some extent retain water. In the summer months, they reduce temperatures and prevent the ground from getting too cold in the winter. 90

#### 8. Roads

One of the rather important advantages of the terrain is for aligning roads. River currents, valleys, and gorges have been used for this purpose. If the need was great enough, roads were built over difficult terrain.<sup>91</sup>

There are two types of communication: river and land transport. First and foremost, rivers can be used as travel routes for transporting people and goods, but there was also a need to cross from one side to the other, either for crossing from one place to another on opposite banks of the river or continuing an overland route that often followed along river valleys. 92

Regarding transport, rivers do two things: They essentially cut off or disrupt transport over dry land and create a variety of problems for crossing from one bank to the other. They also connect distant places and enable easier transportation of people and goods. In the Middle Ages, bridges were only built over smaller rivers, so rafts were mostly used

<sup>88</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>89</sup> Orbin 2006: 36–37; Thallóczy, Áldásy 1907: 266.

<sup>90</sup> Pančić 1998: 49–52.

<sup>91</sup> Febvre 1966: 317–319, 330; Porčić 2004: 183–218

<sup>92</sup> Febvre 1966: 317–318, 323–324; Vasić, Božanić 2021: 86–87

for crossings. There were no bridges spanning this particular section of the Danube during the Middle Ages, so rafts were used for crossing, although there had been bridges in some places during the Roman era. There were several elements that influenced raft, which were mostly related to geography. Fords are mostly found where land routes intersected, and they were very often aligned with rivers valleys, so many of them were located near river mouths. Also, some natural conditions had to be dealt with that were related to the conditions of the terrain itself and the possibilities for crossing at a particular place.

As was already mentioned, it was important that the alluvial plane to be as narrow as possible, so that even when the river is high or when it overflows its banks, the ability to cross is not jeopardized. These natural conditions led to a ford near Kovin. 94 Evidence of its importance is that it was often used when large numbers of troops, horses, and equipment needed to be moved to the other side of the river, and that many military campaigns passed through Kovin. When King Louis I launched a campaign against Bulgaria in 1365, he crossed the Danube at Kovin. The raft was also used for military purposes many times during the reign of King Sigismund. In early November 1389, he penetrated Serbia, most likely through Srem and Mačva, since he had been in Mohács just prior to this. 95 When the campaign ended, the king returned to his own lands through Kovin before taking another short journey to the Lomnica River and then returning to Kovin. 96 In September 1390, the ban of Severin, Miklós Perényi, announced from Kovin his intent to attack Serbia, which he did.<sup>97</sup> The last campaign against Serbia was led by King Sigismund in the summer of 1392. The Ottomans were stationed on the right bank of the Danube across from Kovin, but they withdrew ahead of the king's army. The king's army stayed in the area around Braničevo and pushed their way to the town of Ždrelo on the Mlava River, and then returned to Hungary via Kovin. 98 An army led by Pippo Spano and sent by the despot Stefan Lazarević in 1409 as part of his fight against his brother Vuk, also traveled through Kovin. 99 When King Sigismund tried to retake Golubac in 1428, he remained for some time in the southern parts due to the Ottoman threat. He stayed in Kovin and was in Belgrade by the beginning of November.<sup>100</sup>

In early 1431, rumors were circulating that the sultan was preparing a hundred large vessels for an attack on Hungary. In response, Franko Talovac, the captain of Belgrade, ordered the lords of Kovin to occupy the Danube with infantry and cavalry. And in early 1432, it was said that the Ottomans might strike at the southern reaches of Hungary. For this reason, Franko Talovac ordered the vice-ispan of Kovin to go down to Kovin with an army, and when word came that Belgrade might also be a target, nobles from the county of Kovin were told to come to Belgrade within two days. <sup>101</sup>

<sup>&</sup>lt;sup>93</sup> Trajan's Bridge near Pontes, east of where Kladovo is now. (VIINJ 1: 69).

<sup>94</sup> Rokai 1983: 139–140; Szende 2011: 162.

<sup>95</sup> Mályusz 1951: 142, 146; Fejér 1834a: 515–516; Fejér 1834b: 442; Rokai 1983: 160;

<sup>96</sup> Mályusz 1951: 147, 150

<sup>97</sup> Pesty 1878: 12; Mályusz 1951: 185;

<sup>&</sup>lt;sup>98</sup> Mályusz 1951: 281; Fejér 1834b: 48, 419–420; Thallóczy, Áldásy 1907: 32–33.

<sup>&</sup>lt;sup>99</sup> Történelmi Tár 1884: 226.

<sup>&</sup>lt;sup>100</sup> Kammerer 1895: 356; Nagy, Véghely, Nagy 1886: 459–459; Thallóczy, Áldásy 1907: 88.

<sup>&</sup>lt;sup>101</sup> Thallóczy, Áldásy 1907: 90–93. Iorga II 1915: 291–292.

During skirmishes near Kovin in 1437, the Hungarian troops were supposed return to their lands, but they were attacked by the army of Ali Bey from Vidin, who wanted to cut off their retreat. Nevertheless, the Hungarians won a decisive victory at Godomin field near Smederevo. During one of the incursions, they ransacked Kovin, and the inhabitants fled or partly relocated to the island of Csepel, south of Budapest. When Hunyadi moved against the Ottomans in 1448, he sent arms to Belgrade, and gathered an army in Kovin, where he crossed the Danube in September and set up camp at the mouth of the Morava.

In 1450, Hunyadi and his army went down to Belgrade and Kovin with the intention of attacking Serbia, but this never happened.<sup>105</sup> When he failed to conquer Smederevo, in early August 1454, the sultan withdrew at the news of Hunyadi gathering his forces near Kovin and Belgrade.<sup>106</sup> Hunyadi had gathered his army and his fleet when he needed to defend Belgrade from an Ottoman assault in 1456.<sup>107</sup>

Upon hearing that Golubac had fallen to the Ottomans in 1458, Matthias ordered Szilágyi to come to Kovin with his army. When Mahmud Pasha learned of this, he left supplies at Golubac and he and his army withdrew. In December 1458, King Matthias convened a diet in Szeged, where it was decided that all inhabitants of the kingdom had to participate in the defense of Belgrade and other cities along the Sava and the Danube. All of these decisions were meant to shore up the defenses along the southern border. Not long after, the Ottomans took Kovin and razed it. In Michael Szilágyi rebuilt it and supplied it with necessities. The Ottoman progression in this region was not easy to stop, so in 1478, the Hungarian diet voted to rebuild the fortresses at Kovin, Hram, and Požeženo. This was carried out over the following years, but these measures failed to stop the Ottoman advance. Attacks by *akıncıs*\* were a regular occurrence, and things became particularly chaotic after the Hungarian defeat at Mohács in 1526. Banat finally fell to the Ottomans in the year 1551–1552, but it is certain that parts of this region, and especially those along the Danube, had fallen to them even earlier. Crossings at Kovin became less frequent when the Ottomans took Belgrade in 1521.

River traffic on the Danube in this region was of twofold significance. First and foremost, it was important for local travel by connecting places on opposite banks of the river; and second, it was significant for long-distance travel to places lying further along the river. It is clear from what has been covered so far that the two sides of the Danube have different geographic, and therefore commercial, characteristics. For this reason, there are crops that are much more likely to thrive in moist soil on the lower left side. This is particularly significant for farming and breeding livestock. On the left side, the cliffs and hillsides are more suitable for crops that thrive in drier soil, and especially for wine and fruit

<sup>102</sup> Rokai 1969: 107.

<sup>&</sup>lt;sup>103</sup> Magdics 1888: 21–25; Kisić, Vasin 2020: 35–44.

<sup>&</sup>lt;sup>104</sup> Teleki 1852: 74–75.

<sup>&</sup>lt;sup>105</sup> Spremić 1994: 380–381.

<sup>&</sup>lt;sup>106</sup> Teleki 1853: 430–431; Thallóczy, Áldásy 1907: 185–186; Kammerer 1899: 464.

<sup>&</sup>lt;sup>107</sup> Iorga IV 1915: 160; Teleki 1853: 526–527; Teleki 1852: 403.

<sup>&</sup>lt;sup>108</sup> Nagy, Nyáry 1875: 35.

<sup>109</sup> Kammerer 1907: 111.

<sup>\*</sup> Ottoman Raiders—Trans.

growing. Thus, the left and right sides have varying commercial and geographic features, which resulted in a need for transport links. Long-distance travel was also highly important for connecting settlements up and down the river, and especially for connecting very remote places. <sup>110</sup> Therefore, rivers were a sort of compliment to overland roads, and were sometimes even more important. River transport was cheaper and easier, and on the river, there was less chance of being attacked by bandits. The Danube was used extensively for both military and commercial transport. In the Roman era and during the Middle Ages, the Morava River was navigable not as winding as it is today. We know the Ottomans kept vessels at Stalać on the Morava. <sup>111</sup> The Tisa, Timiş, and Begej were also suitable for river travel. <sup>112</sup>

The most well-known land route was the Belgrade–Constantinople route, which was the successor to the old Roman *Via militaris*. The marked medieval route went from Belgrade to Grocka, then followed the Danube to Smederevo and continued on to Braničevo. From Braničevo, the road left the Danube and turned south toward Ravno, Ražanj, and Bovan, continued down to Niš, and then headed toward Sofija and further on to Constantinople. At Niš the road split into three, with one branch leading to the Timok Valley and Vidin; the second to the Toplica valley, Kosovo polje and the Adriatic; and the third toward Skopje and Thessaloniki. However, in the mid-fifteenth century, the Great Road was partially altered so that at Ravno it crossed the Morava at the left bank and continued through Batočina, Kolar, and Grocka toward Belgrade. Many roads from various regions connected to this road, and of one the most significant connections was with Buda, Timişoara, and Szeged.

The old Roman road, the *Via militaris*, therefore went from Belgrade to Viminacium, where it branched off to the south. However, from Viminacium, after Braničevo, the old Roman road used in the Middle Ages continued along the Danube toward Hram, Golubac, Višesava, and further on to Vidin. <sup>117</sup> In the Ottoman period, there was also a road connecting Ram on the Danube with Timişoara via Vršac. <sup>118</sup> Because it was located on the old Great Road on the way from Belgrade to Braničevo, Smederevo had well-developed connections, as did nearby Kovin. From Smederevo, there was a road that led through the Jezava and Great Morava valleys to Batočina, where it connected to the left route of the Great Road. <sup>119</sup>

#### 9. Conclusion

Kovin and Smederevo, two nearby cities on the banks of the Danube, emerged and developed under completely different historical circumstances, but in many ways experienced similar natural conditions. They shared the same stretch of the Danube and

<sup>110</sup> Milojević 1960: 50-51.

<sup>&</sup>lt;sup>111</sup> Brokijer 1950: 129.

Zirojević 1987: 126–127; Erdeljanović, Nikolić 1899: 184–186; Kalić 1983: 109–126; Hrabak 1978: 15–38;
 Mišić 2007: 155–156; According to Priscus, the Tisa and Timiş were also navigable. (VIINJ 1: 14).

<sup>&</sup>lt;sup>113</sup> Jireček 1959: 75–120; Mirkovic 2003; Petrović 2015: 299–317.

<sup>&</sup>lt;sup>114</sup> Škrivanić 1974: 82–98; Jireček 1959: 121–149.

<sup>115</sup> Jireček 1959: 150–162; Erdeljanović, Nikolić 1899: 186–210; Škrivanić 1974: 82–83; Zirojević 1970: 24.

<sup>&</sup>lt;sup>116</sup> Zirojević 1976: 4–5; Erdeljanović, Nikolić 1899: 180–183; Zirojević 1987: 119–122; Brokijer 1950: 146–147.

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

<sup>&</sup>lt;sup>118</sup> Krstić 2019: 24–24, 100; Zirojević 1987: 121.

<sup>&</sup>lt;sup>119</sup> Škrivanić 1974: 93; Erdeljanović, Nikolić 1899: 103–106; Zirojević 1970: 27–29.

made use of the river's vast resources for transportation, natural defenses, water sources, and its plant and animal life. There was fertile soil on both sides of the river. Its distributaries in this region enabled the formation of fishponds. The Danube's narrow alluvial plain near Kovin and the two river islands in this area made crossing the Danube easier. The two cities also shared the same climate. However, in this section of the river, the left bank of the Danube is lower than the right, leaving the area around Kovin more exposed to flooding than Smederevo. Likewise, the Danube basin near Smederevo is more heavily forested and has access to more resources provided by the forest.

Until the eighteenth century, the towns of Kovin and Smederevo each had a particular geographical position that provided some advantages. Smederevo was built at the confluence of the Jezava and the Danube. In the Middle Ages, this was a highly strategic position. Kovin was built primarily on elevated land above the river at a location highly favorable for river crossings, and on land that was partially drier than the land around it. There are also two river islands on this stretch of the river. They had an important role in transportation because crossing such a wide river as the Danube was quite dangerous. The river islands served as intermediaries and eased the crossing. This was an important factor for trading hubs such as Kovin and Smederevo.

Geographic position is an important aspect in the history of cities that, to a certain extent, influences their emergence and development. Thus, the effect of natural conditions has become one of the important factors in the long-term formation of cities, and they have made a particular contribution to their development and survival.

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#### 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.

Fejér, G. 'Codex diplomaticus Hungariae ecclesiasticus ac civilis', X/1, Budae, 1834. a

Fejér, G. 'Codex diplomaticus Hungariae ecclesiasticus ac civilis', X/2, Budae, 1834. b

Ilić, J. 'Urbar naselja Kovin (1771. godina)', *Mešovita građa – Miscellanea*, XXXIII, 2012, 199-229 (Serbian Cyrillic)

Iorga, N. 'Notes et extraits pour servir l'histoire des croisades au XVe siècle', II, IV, Bucarest 1915. Konstantin Filozof, *Život despota Stefana Lazarevića*, Stare srpske biografije 15. i 17. veka, Beograd: Srpska književna zadruga, 1936. (Serbian Cyrillic)

Kammerer, E. 'A zichi és vásonkeői gróf Zichy-család idősb ágának okmánytára. Codex diplomaticus domus senioris comitum Zichy de Zich et Vasonkeo', IX, Budapest, 1899.

Kammerer, E. 'A zichi és vásonkeői gróf Zichy-család idősb ágának okmánytára. Codex diplomaticus domus senioris comitum Zichy de Zich et Vasonkeo', X, Budapest, 1907.

Kammerer, E. 'A zichi és vásonkeői gróf Zichy-család idősb ágának okmánytára. Codex diplomaticus domus senioris comitum Zichy de Zich et Vasonkeo', VIII, Budapest, 1895.

- 'Magyar Történelmi Tár', Budapest 1884.
- Magdics, I. Ráczkevei Okmánytár, Székesfehérvár 1888.
- Mályusz, E. 'Zsigmondkori oklevéltár I (1387–1399)', Budapest, 1951.
- Matković, P. 'Putovanja po Balkanskom poluotoku', Rad JAZU, 71, 1884.
- Matković, P. 'Putovanja po Balkanskom poluotoku', Rad JAZU, 84, 1887.
- Matković, P. 'Putovanja po Balkanskom poluotoku', Rad JAZU, 116, 1893.
- Miklosich, F. Monumenta Serbica spectantia historiam Serbiae, Bosnae, Ragusii, Viennae: Apud guilelmum Braumüller, 1858.
- Mladenović, A. *Povelje kneza Lazara, tekst, komentari, snimci*, Beograd: Čigoja štampa, 2003. (Serbian Cyrillic)
- Nagy, I, Nyáry A. 'Magyar diplomacziai emlékek Mátyás király korából 1458–1490', I, Budapest, 1875
- Nagy, I, Véghely, D, Nagy G, 'Zala vármegye története. Oklevéltár. Első kötet 1024–1363', Budapest, 1886.
- 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)
- Pesty, F. 'A szörényi bánság és Szörény vármegye története III', Budapest, 1878.
- Šabanović, H. Turski izvori za istoriju Beograda 1/1, Beograd: Istorijski arhiv, 1964.
- Teleki, J. 'Hunyadiak kora Magyarországon', II, Pest 1852.
- Teleki, J. 'Hunyadiak kora Magyarorságon', X, Pest 1853.
- 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 3= Vizantijski izvori za istoriju naroda Jugoslavije I, Beograd: Naučna knjiga, 1966. (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', *Brastvo*, 21, 1927, (Serbian Cyrillic) Živković, T, Petrović, V, Uzelac, A. *Anonimov Opis istočne Evrope*, Beograd: Istorijski institut, 2013. (Serbian Cyrillic)

#### References:

- Blagojević, M. Zemljoradnja u srednjevekovnoj Srbiji, Beograd: Istorijski institut, 1973. (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.
- \_\_\_\_\_. Mediteran i mediteranski svet u doba Filipa II, tom I, Beograd: Geopoetika, 2001.
- . Identitet Francuske, Podgorica: CID, 2010.
- Bukurov, B. 'Geografske osnove postanka i razvoja naselja u Vojvodini', *Glas SANU*, 49,1983, 112–116. (Serbian Cyrillic)
- \_\_\_\_\_. 'Naselja u Južnom Banatu', *Zbornik Matice srpske za prirodne nauke*, 39, 1970, 5–68. (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, 17–41.
- 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.
- 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, 9–30. (Serbian Cyrillic)
- Dinić, J. 'Problem agroklimatskog reoniranja SR Srbije', *Geografski godišnjak*, 24, 1988. (Serbian Cyrillic)
- Dukić, D. 'Dunav-hidrografski pregled', u: V. Čubrilović (ur.), *Plovidba na Dunavu i njegovim pritokama kroz vekove*, Zbornik radova sa naučnog skupa, Beograd: SANU, 1983, 15-51. (Serbian Cyrillic)
- Đurđević, J. 'Jugoslovenski deo Dunava i njegov saobraćajni značaj', *Zbornik Matice srpske za prirodne nauke*, 18, 1960, 66-94. (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)
- \_\_\_\_\_. 'Cvijićeva antopogeografska škola', u: V. Jović i A. Kostić (ur.), *Jovan Cvijić, život, delo, vreme, Z*bornik radova, Beograd: Geografski institut "Jovan Cvijić", 2015, 177-182. (Serbian Cyrillic)
- Györffy, Gy. 'Az Árpád-kori Magyarország történeti földrajza', III, Budapest: Akadémiai Kiadó, 1987.
- Hoffmann, R. An Environmental History of Medieval Europe, Cambridge: Cambridge University Press 2014.
- Hrabak, B. 'Beograd kao žitno tržište i žitarstvo šire beogradske okoline u 16. veku', *Godišnjak Muzeja grada Beograda*, 4, 1957, 59-70.
- \_\_\_\_\_. Izvoz žitarica iz Osmanlijskog carstva u XIV, XV i XVI, stoleću, Priština: ZNUK, 1971.
- \_\_\_\_\_. 'Osmanlijska mornarica u porečju srednjeg Dunava 1428–1566', *Godišnjak grada Beograda*, 26, 1978, 15-44. (Serbian Cyrillic)
- . 'Ribolov i riblja pijaca u Beogradu u 16. i 17. veku', *Godišnjak grada Beograda*, 7, 1960, 59-66. (Serbian Cyrillic)
- \_\_\_\_\_. 'Sirovine Podunavlja u trgovini Dubrovčana iz Beograda 1521–1640', *Godišnjak grada Beograda*, 32, 1985, 85-99.
- Ilić, J. *Banatska vojna krajina u drugoj polovini 18. veka*, Beograd: Doktorska disertacija u rukopisu, 2014. (Serbian Cyrillic)
- 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)
- Kalić, J. Beograd u srednjem veku, Beograd: Srpska književna zadruga, 1967. (Serbian Cyrillic)
- \_\_\_\_\_. '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)

- Karić, V. *Srbija: opis zemlje, naroda i države*, Beograd: Kraljevsko-srpska državna štamparija, 1887. (Serbian Cyrillic)
- Kisić Božić, M, Vasin, D. 'Povelje kralja Vladislava o preseljavanju Srba iz Donjeg Kovina na Čepel', Zbornik radova sa međunarodnog naučnog skupa Seobe od antike do danas, tematski zbornik, ur. Snežana Vukadinović, Svetozar Boškov i Ifigenija Radulović, Novi Sad, 2020, 35-44.
- Kisić Božić, M. Vasić, D. 'Povelja kralja Žigmunda gradu Kovinu iz 1428. godine', *Mešovita građa Miscelanea*, 42, 2021, 7-23. (Serbian Cyrillic)
- Krstić, A. *Između brega i rita: Er(d)šomljo Vršac u srednjem veku*, Beograd: Centar za napredne srednjovekovne studije, 2019. (Serbian Cyrillic)
- . 'Iz istorije srednjevekovnih naselja jugozapadnog Banata', *Zbornik Matice srpske za istoriju*, 73, 2006, 27-55. (Serbian Cyrillic)
- . 'Posedi manastira Drenče i Ždrela u Braničevu iz vremena kneza Lazara', *Istorijski časopis*, 53, 2006, 123-144. (Serbian Cyrillic)
- \_\_\_\_\_. 'Smedereski kraj u drugoj polovini 15. i početkom 16. veka', *Smederevski zbornik*, 2, 2009, 45-72. (Serbian Cyrillic)
  - . 'Vegetation in the Territories of Serbia and Southern Hungary in Travel Accounts (Fifteenth—Seventeenth Centuries)', in: *Voyages and Travel Accounts in Historiography and Literature. Volume 1. Voyages and Travelogues from Antiquity to the Late Middle Ages*, edited by Boris Stojkovski, Budapest: Trivent Publishing, The Faculty of Philosophy of the University of Novi Sad, 2020, 295-338.
- Le Gof, Ž. Srednjovekovna civilizacija Zapadne Evrope, Novi Sad: Izdavačka knjižarnica Zorana Stojanovića, 2010.
- Leksikon srpkog srednjeg veka, Beograd: Knowledge, 1999. (Serbian Cyrillic)
- Mihaljčić, R. 'Prilog srpskom diplomataru, darovnice vlasteoske porodice Vukoslavić', *Istorijski glasnik*, 1-2, 1976, 99-106. (Serbian Cyrillic)
- Milojević, B. 'Panonski Dunav na teritoriji Jugoslavije', *Zbornik Matice srpske za prirodne nauke*, 18, 1960, 5-65. (Serbian Cyrillic)
- Milovan, T. 'Dolina Karaša regionalno geografski prikaz', *Zbornik Matice srpske za prirodne nauke*, 14, 1958, 193-222. (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)
- \_\_\_\_\_. Korišćenje unutrašnjih voda u srpskim zemljama srednjeg veka, Beograd: Utopija, 2007. (Serbian Cyrillic)
- Морава, Београд : Завод за уџбенике и наставна средства, 2006
- Mrgić, J. Zemlja i ljudi, iz istorije životne sredine zapadnog Balkana, Beograd: Equilibrium, 2013.
- \_\_\_\_\_. '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. 'Vlastelinstvo manastira Ždrelo', *Istorijski časopis*, 20, 1973, 149-155. (Serbian Cyrillic) *Opština Smederevo*, Beograf: 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)
  - . Ribe u Srbiji, Beograd: Državna štamparija, 1860. (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)
- 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)
- \_\_\_\_\_. 'Poslednje godine balkanske politike kralja Žigmunda', *Godišnjak Filozofskog fakulteta u Novom Sadu*, 12/1, 1969, 89-109.
- Simonović, Đ. 'Tipologija sela srednjevekovne Srbije', *Seoski dani Sretena Vukosavljevića*, 13, 1990, 171-187. (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)
- . 'Ljudsko društvo i živa priroda', Sociološki pregled, 1, 1938, 46-59. (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: M. Congedo (ed.), *Towns and Communication*, Vol. 2: Communication between Towns. Proceedings of the Meetings of the International Commission for the History of Towns, Lecce: ICHT, 2011, 161-225.
- Stojkovski, B. 'Arapski geograf Idrizi o Južnoj Ugarskoj i Srbiji', *Zbornik Matice sprske za istoriju*, 79–80, 2009, 59-69. (Serbian Cyrillic)
- Šabanović, H. Turski izvori za istoriju Beograda, Beograd: Istorijski arhiv, 1964.
- Škrivanić, G. Putevi u sredenjevekovnoj Srbiji, Beograd: Kultura 1974. (Serbian Cyrillic)
- . 'Ravaničko vlastelinstvo', Istorijski časopis, 16–17, 1970, 235-254. (Serbian Cyrillic)
- Štetić, M. *Vinogradarstvo u srednjovekovnoj Srbiji*, Beograd: Univerzitet u Beogradu-Filozofski fakultet, 2021.
- Tomić, P. *Geografske monografije vojvođanskih opština Opština Kovin*, Novi Sad: Institut za geografiju Prirodno-matematičkog fakulteta 1981.
- Vasić, D. Istorija periferije. Pogranični srpski i ugarski gradovi na Savi i Dunavu od 14. do 16. veka, Beograd: Naučno društvo za istoriju zdravstvene kulture, 2023.
- Vasić, D, Božanić, S. 'Medieval merchants on the route between the Dalmatian (Ragusan) littoral and the cities on the southern Hungarian border: Impact of trade on movement', *Istraživanja-Journal of Historical Researches*, 32, 2021, 83-99.
- Vasin, D. 'Natural conditions as a factor of urbanization of the lower Posavina in the Middle Ages', Istraživanja-Journal of Historical Researches, 30, 2019, 45-68.
- Vidal de la Blache, P. 'La Géographie politique d'apres les écrits de M. Fr. Ratzel', *Annales de géographie*, 7, 1898, 97-111.
- Zirojević, O. *Carigradski drum od Beograda do Budima u 16. i 17. veku*, Novi Sad: Institut za izučavanje istorije Vojvodine, 1976. (Serbian Cyrillic)
- \_\_\_\_\_. Carigradski drum od Beograda do Sofije (1459–1683), Beograd: Istorijski muzej Srbije, 1970, (Serbian Cyrillic)
- \_\_\_\_\_. 'Mreža turskih puteva (vodenih i kopnenih) na području današnje Vojvodine i Slavonije', Istorijski časopis, 34, 1987, 119-129. (Serbian Cyrillic)
- . 'Ribolov na Dunavu', Spomenica istorijskog arhiva Srem, 10, 2011, 13-31. (Serbian Cyrillic)
- \_\_\_\_\_. 'Ribolov na srednjem Dunavu (16–17 vek)', *Zbornik Matice srpske za istoriju*, 49, 1994, 111-120. (Serbian Cyrillic)

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# ПРИРОДНИ УСЛОВИ КАО ФАКТОР РАЗВОЈА ГРАДОВА НА СУПРОТНИМ ОБАЛАМА ДУНАВА. СТУДИЈА СЛУЧАЈА СМЕДЕРЕВА И КОВИНА ОД 14. ДО 18. ВЕКА

#### Резиме

При анализи процеса урбанизације важно је у истраживање не укључи и простор односно терен на коме су настајали и развијали се градови. Човек у свом материјалном животу је одувек био у зависности од услова, утицаја и могућности природе, тако да је познавање физичке географије потребно ради утврђивања природних услова и утицаја на живот човека и његову културу. Ковин и Смедерево два оближња града на супротним обалама Дунава настали су и развијали се у потпуно различитим историјским околностима, али су у многоме имали сличне природне услове. Делили су исти водоток Дунава и користили се богатим ресурсима ове реке и као речне комуникације, природне одбране, извора воде и животињског и биљног света. Плодност земљишта је такође била обезбеђена на обе стране реке. Његови рукавци на овом подручју омогућавали су формирање рибњака. Сужена алувијалан раван Дунава код Ковина и постојање две аде на овом подручју омогућавали су лакши прелазак преко Дунава. Такође клима је у оба града била истоветна. Са друге стране, чињеница да је лева обала Дунава на том потезу нижа од десне, подручје Ковина је било угроженије од поплава него Смедеревско. Исто тако, смедеревско подунавље је имало више шумског покривача и самим тим више ресурса које је шума давала. Градови Ковин и Смедерево у периоду од средњег до 18. века су сваки за себе је имали одређен географски положај који му је давао нека преимућства. Смедерево је сазидано на ушћу двеју река. Такав положај је у средњем веку био од изузетног стратешког значаја. И Ковин је првобитно био саграђен на узвишењу изнад реке, на потезу који је био изузетно повољан за прелаз преко реке, а на нешто оцедитијем земљишту од околине. Такође на овом потезу постојале су две аде. Оне су поред стратешке имале и важну саобраћајну улогу. Прелаз тако широких река као што је Дунав је увек био опасан и аде су имале улогу посредника мада су биле често изложене поплавама. То је био важан чинилац за трговачка места какави су били Ковин и Смедерево. Утицаји природних услова чинили су један од важних фактора дугог трајања формирања градова, њиховог економског развитка и опстанка.

Кључне речи: Ковин, Смедерево, река Дунав, урбанизација, природни услови.

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