

## SOCIAL AND ECONOMIC HISTORY

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### THE ROLE OF RIVERS IN THE PROCESS OF THE FORMATION OF KHARKIV URBAN SPACE (1765-1914)

The article is devoted to the role of the rivers in the process of the formation Kharkiv urban space. From the point of view of the Actor-network theory it was stressed that the rivers were not passive power, but actors in the urban development. On the base of different sources (texts, maps and photos) the place of water channel in Kharkiv was described. The main rivers in the city were the Lopan and the Kharkiv. The citizens perceived the rivers as the trash remove that led to the serious ecology problems in the end of 19<sup>th</sup> century. Only several publicists discussed these problems in the local community. The rivers identified the city dividing into the parts, the location of small industry and the main activities of inhabitants.

**Keywords:** urban development, urban studies, river, ecology, Actor-network theory, Kharkiv, Ukraine.

Ecology is the main theme of modernity. Our cities are faced with different ecological problems, for example, climate change, need of trash sorting, overpopulation and dirty that lead to the spread of diseases and so on. The roots of all of these are in the historical development of the urban culture. Water pollution is one of the parts of ecological condition of a city. Rivers is often perceived as a passive power in the process of the formation of cities. Sometimes it also shows as enemy: people struggle with nature and make her conditions more comfortably for living. Cities imagine as a human fortress among the wild world. For a long time rivers were trash output for cities. Only nowadays, some big cities clean out their water channels. Contemporary research methods offer to see the rivers from the other side. If we search its role like an equal part in urban development, we can solve ecological problem in modern Ukrainian city. That is why this historical review of the rivers is very important nowadays. Our research is based on Kharkiv material (Ukraine) in the 1765-1914.

World's researchers have already paid attention to this theme. Sociologists, ecologists, architects etc. wrote multidisciplinary papers. Australian urban developer Alexander Cuthbert stressed that modern attitude to the nature was based at the Judo-Christianity traditions, which possessed a man as a lord of other God's creatures<sup>1</sup>. Moreover, he thought that different botanical gardens, parks, zoos are the mockery of nature and an attempt of expressing human priority. English historian Peter Borsay offered to research green and blue space and their place in old cities<sup>2</sup>. The author wrote that we have to change focus from the man-made place to the nature objects and see the impact of the second one. Gillian Tindall described a river as the reason for arising of the urban district in the book about houses near the river Thames<sup>3</sup>. One of the main ideas of the book is that the water pollution could convert prestigious place into the poor space.

But in Ukraine researching the role of the rivers in the urban development was not very popular. The authors often describe rivers as the passive condition of life, or as a tradition path of communication, or the source of fish etc. Situation is changed last years. In the digest of article about the urban development of Kyiv the paper about the flood during March 1917 was published<sup>4</sup>. Vitaliy Skalsky argued that nature and politics were tightly woven together. In the condition of the significant river flood in Kyiv

<sup>1</sup> Cuthbert, A. (2006). *The Form of Cities. Political Economy and Urban Design*. Blackwell, 86.

<sup>2</sup> Borsay, P. (2017). Nature, the past and the English town: a counter-culture history. *Urban History*, 44 (1), 27.

<sup>3</sup> Tindall, G. (2007). *The house by the river Thames and the people who lived there*. London: Chatto & Windus, 5.

<sup>4</sup> Скальський, В. (2016). Київ Револуція та повінь: рівнобіжні процеси у Києві навесні 1917 року. *Живучи в модерному місті: Київ в кінці XIX ст. – в середині XX ст.* Київ: Дух і Літера, 197-211.

the inhabitants of Ukraine showed their interest in nation-building project and wish to help each other to express their political position. Nevertheless, this is one of the rare rivers researching in Ukrainian historiography.

On the Kharkiv material local historians showed water condition of this place. Dmitry Bagaliy and Dmitry Miller famous Kharkiv historians who lived in the early 20<sup>th</sup> century described location of water sources in the territory of Sloboda Ukraine<sup>1</sup>. We can say that historians overlooked the active role of the local rivers and described them only as a geography landmark.

Our main idea is that the rivers were actors (not passive power) in the formation of urban space. From the point of view of our idea, our challenge is to determine the role of the rivers in the process of the formation of Kharkiv territory in 1765-1914. We will study this theme from the point of view of Actor-Network theory by Bruno Latour (ANT). B. Latour considered that all structures are the result of interaction between human and non-human (including different material agents, for example, buildings, relief, weather and so on)<sup>2</sup>. We moved away from anthropology and imagine human as one of the many actors of urban development. It helps us avoided traditional opposite between man-made and green places in the city. The good example of network with nature actors is the article about anglers in the fjords written by J. Law and V. Singleton<sup>3</sup>. They connect growing of salmons, oxygen, economic and social life in the one text for illustrating using ANT for the social studies.

The sources for searching this question can be divided into three groups. First group conclude the describing of the Kharkiv rivers in «The description of Sloboda Ukraine cities delivered to the Catherine commission for composition new laws 1767»<sup>4</sup> and «The descriptions of the Kharkiv region in the end of 18<sup>th</sup> century»<sup>5</sup> and from the guidebooks from the end of 19<sup>th</sup> and early 20<sup>th</sup> century<sup>6</sup>. This text helps us to understand the place of rivers in the every-day life of the inhabitants. Many public person from the end of 19<sup>th</sup> century (first of all professors from the Emperor University and the Polytechnic institute) investigated the problem of water pollution in Kharkiv and invoked citizens to solve this problem with the help of a central sewage<sup>7</sup>. They published their papers and people could read the information about Kharkiv ecology.

Maps are in the second group. We have the plan of the city of the end of 18<sup>th</sup> century<sup>8</sup>, the plan of urban development in 1834<sup>9</sup>, the city maps from the 1871<sup>10</sup> and 1902<sup>11</sup>. These documents showed changing of the riverbeds and its connection with formation of the urban districts. Last third group included photos from the Kharkiv Historical museum (early 20<sup>th</sup> century) with the river landscape and flood<sup>12</sup>. With this picture, we can image the scale of the destroying during such disasters.

<sup>1</sup> Багалеї, Д.І., Миллер, Д.П. (1905). *Історія міста Харків за 250 років його існування*. Харків: Парова Типографія і Літографія Л. Зильберґ і С-в'я, I, 48; Багалеї, Д.І., Миллер, Д.П. (1912). *Історія міста Харків за 250 років його існування*. Харків: Парова Типографія і Літографія Л. Зильберґ і С-в'я, II, 53.

<sup>2</sup> Латур, Б. (2014). *Пересборка соціального: вступ до акторно-мережової теорії*. Москва: Видавничий дім. Вищої школи економіки, 46.

<sup>3</sup> Law, J., Singleton, V. (2013). ANT and politics: working in and on the world. *Qualitative Sociology*, 36 (4), 485-502.

<sup>4</sup> Чорний, Д.М.: укладач (2016). *Історія Слобідської України: хрестоматія*. Описи слобідсько українських міст і містечок, доставлені в Катерининську комісію для складання проекту нового уложення 1767. Харків: Видавець Олександр Савчук, 35-40.

<sup>5</sup> Пірко, В.О., Гуржій, О.І.: укладач (1991). *Описи харківського намісництва кінця XVIII ст.* Київ: Наук. думка, 223.

<sup>6</sup> Гусев, А.Н. (1902). *Історико-справочний путеводитель. Харків, його прошле і настояще в рисунках и описаниях*. Харків: Типографія Адольфа Дарре, 274; Устинов, И.А. (2009). *Описание г. Харькова. Путеводитель по г. Харькову*. Харків: Сага, 179.

<sup>7</sup> Шимков, А. П. (1881). *Во что обходится Харькову его неблагоустройство*. Харків, 22.

<sup>8</sup> Пірко, В.О., Гуржій, О.І.: укладач (1991). *Описи харківського намісництва кінця XVIII ст.* Київ: Наук. думка, 128.

<sup>9</sup> Федоровский, А. (1916) *К истории города Харькова*. Харків: Печатное дело, 1.

<sup>10</sup> *Харьковский календарь на 1871 год*. С картой Харьковской губернии. (1870). Харків, приложение.

<sup>11</sup> Гусев, А.Н. (1902). *Історико-справочний путеводитель. Харків, його прошле і настояще в рисунках и описаниях*. Харків: Типографія Адольфа Дарре, 274; Устинов, И.А. (2009). *Описание г. Харькова. Путеводитель по г. Харькову*. Харків: Сага, Приложение.

<sup>12</sup> Харківський історичний музей (2018). *Відділ фотографії*. № 1141, 9449, 16375.

Kharkiv main rivers are the Lopan and the Kharkiv. The second one gives her name to the city. In addition, we have little rivers – the Udy, the Netch – that often dried out but made significant bogs around the city<sup>1</sup>. During all describing period, people can cross the rivers with the help of the dam and bridges, but they use the wade in the hot period as well. Drink water Kharkiv citizens took from the fountains.

The rivers divide the city into the districts. According to the describing of the Kharkiv in 1765, they were the barriers of the urban space. The citizens have the ferry at their own expense to have possibility cross the rivers when they overflowed. We can propose that the ferry was pure because of the little amounts of local inhabitants. That was why the Kharkiv community asked the empire authority to make the bridges in Kharkiv at state expense as it was in other territory of the Russian empire<sup>2</sup>. At the middle of 19<sup>th</sup> century the Kharkivska Miska Duma (the Kharkiv government) regularly repaired bridges<sup>3</sup>.

From the end of 18<sup>th</sup> to the early 20<sup>th</sup> century, the rivers divided city into three parts – The Center, Zalopan (it is literally translated as «over the river Lopan») and Zakharkiv («over the river Kharkiv»). By the way the Zakharkiv part was inhabited slowly than Zalopan one. It was because the crossing over river Kharkiv was more difficult. In the early 19<sup>th</sup> there were only two big squares at Zakharkiv. For comparison, there were big nobility district and several quarters of different artisans at Zalopan in this time. When in 1820-ies the Kharkiv government had made the new bridge into Zalopan, the local market became the central one of the all city. D. Bagaliy and D. Miller mentioned «Zanetch»<sup>4</sup> as well, but this little part was distinguished only at 18<sup>th</sup> century.

Kharkiv was not healthy city. Historians mentioned many infections – cholera, plague, typhus and fever<sup>5</sup>. Moreover, the rivers were the main source for these illnesses. From the early 19<sup>th</sup> rivers were describing like very dirty. All authors wrote that water from rivers was not used for drink<sup>6</sup>. But if we analyze the location of water wells, we understand that, at least, people who lived in Zakharkiv used water from river.

At the early of 19<sup>th</sup> century in the Russian Empire laws were included first ecological rules<sup>7</sup>. The plants and fabrics must be removed from the urban space. In Kharkiv small industry was situated on the outskirts of the city. However, one of the main sources of river pollution was dung of horses. Kharkiv was a big trade center and merchants brought their goods on carts with horses to the city center. The rivers helped to move this dung from the city.

As we said above the rivers made bogs and levadas (the big wet meadows). The wet air was the reason of illness as well. Such territory was unable to building and interrupted the urban growing. The inhabitants for a long time try to avoid rebuilding of these districts. The extremely growing of Zalopan had begun after the railway was built. This magnificent project, which was financed by the empire authority, led to the dry up of the bogs. After this, the Kholodna Gora and other villages were incorporated in Kharkiv territory because the nature barrier was destroyed. Another situation was in the Zakharkiv part. The citizens bypassed small levada and the city growing further. Only in the end of 19<sup>th</sup> century this territory was also rebuilt: new railway station was constructed here. By the way, the new one was named Levada.

Near the river arose beautiful and prestigious quarters. The rivers always attracted people with their good looks landscape. Nevertheless, buildings on the embankment were dangerous. Such example was the construction near the Netch embankment. This river was the affluent of Kharkiv one. Majestic black house of merchant was built in the end of 19<sup>th</sup> and destroyed in the end of 20<sup>th</sup> because of wet river ground.

<sup>1</sup> Пірко, В.О., Гуржій, О.І.: укладач (1991). *Описи харківського намісництва кінця XVIII ст.* Київ: Наук. думка, 41-42.

<sup>2</sup> Чорний, Д.М.: укладач (2016). *Історія Слобідської України: хрестоматія.* Описи слобідсько українських міст і містечок, доставлені в Катерининську комісію для складання проекту нового уложення 1767. Харків: Видавець Олександр Савчук, 39.

<sup>3</sup> Державний архів Харківської області. *Ф. 4, оп. 11, спр. 803, арк. 3.*

<sup>4</sup> Багалей, Д.И., Миллер, Д.П. (1905). *История города Харькова за 250 лет его существования.* Харьков: Паровая Типография и Литография Л. Зильбербергъ и С-вья, I, 50.

<sup>5</sup> Там само, 32.

<sup>6</sup> Гусев, А.Н. (1902). *Историко-справочный путеводитель.* Харьков, его прошлое и настоящее в рисунках и описаниях. Харьков: Типография Адольфа Дарре, 71.

<sup>7</sup> Пирожкова, И.Г. (2017) *История строительного законодательства Российской империи.* Москва: Канон-Плюс, 94, 96.

Its neighbors, which were building further from the riverbank, are stayed by nowadays. In addition, these districts suffer from the floods.

River spill was an ordinary phenomenon for Kharkiv in the first half of 19<sup>th</sup> century. However, from the 1883 they became real catastrophes. Every 3-5 years some districts of the Zakharkiv part suffer from the floods. In spring, Fish square changed into fishpond. Photos showed us magnificent flooding, which can overhang the work of the electric station. Water fulfilled basements of the houses.

It was not poor districts. The merchants lived there during all 19<sup>th</sup> century and built prestige stone houses. We think that flood started destroying this district only from the end of 19<sup>th</sup> century. New construction changed territory, pavement streets as well and water started overflowed. However, peoples did not want leave their place and try to adapt to the situation. Some historians wrote that inhabitants grew mushrooms in basements after floods<sup>1</sup>. It seems like a joke, but this thesis proved by information about mushrooms trading.

Next, we argued how the river motivated the inhabitants to choose their activities. Swamps and wet meadows made difficult rebuilding of Kharkiv, but motivate the citizens growing different cattle. We can assume that this conduces specific of their occupation during all 19<sup>th</sup> century. In the description of city in 1765 the author stressed that Kharkiv citizens did not grow wheat and other agricultures. They had not even built mills in the city. Kharkiv rivers could not be a transport ways, that's why they didn't play a big role in growing of merchants. Nevertheless, as we see they had conduced the activities of citizens in another way. Such situation would be described in the text from the end of 18<sup>th</sup> century. It was no wonder that in 1850-ies The Veterinary clinic had separated from the Kharkiv Emperors University. Kharkiv really needs many veterinarians because of the specific of local business.

The rivers made possible growing of different small industry. They removed dirty from the city. The old maps show the location of the several forges and woolen-washes, which were situated on the riverbank<sup>2</sup>. As we wrote above, the Russian Empire laws forbid building plants and factories in the city center but there were no laws about location near rivers. Such pollution and reconstruction of roads led to the changing of riverbeds and reliefs.

Kharkiv citizens did not decide the problem with water. It determined terrible ecological situation in the city to the early 20<sup>th</sup> century. Publicists started to write papers about it. Ecological situation must be improved with sewage and water pipes. People noticed the rivers and start to discuss their conditions. However, The First World War and the Revolution pushed these questions into background. A famous Ukrainian writer Ju. Shevelov wrote in his memories about the early of 20<sup>th</sup> century that rivers had dried up: «The city had eaten these small rivers»<sup>3</sup>. However, we must stress that rivers in Kharkiv always were little. They could not play a role of transport channel, but they interact with other urban actors in another way. Kharkiv rivers can not be compared with the Dnipro (Kyiv) and the Neva (St. Petersburg) because of its magnificent and role for their cities. But similar situation was in Lviv with the Poltva river. The Poltva situated in the center of Lviv. In the 19<sup>th</sup> century during the city reconstruction the Poltva was included into the underground sewer system of Lviv and hidden in the collector. If Kharkiv was as old as Lviv, the Lopan and the Kharkiv would await the same fate.

Turning to conclusions, we can say that the rivers were important actors in the process of formation the territory of Kharkiv. They determined urban structure and divided city into the three parts. The rivers motivate citizens to growing cattle. Their location also conditioned this one of small industry. The pollution of water led to the serious ecological problems and floods. Kharkiv became a city bad for live. However, the main problem was that the people do not noticed rivers as actors in urban space that was why we have ecological problems by nowadays.

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<sup>1</sup> Можейко, И.Ю. (2012). *Харьков: пульс прошлого: исторические очерки*. Харків: Сага, 367.

<sup>2</sup> ДАХО. Ф. 4. Оп. II. Спр. 559.

<sup>3</sup> Шевельов, Ю. (2017). *Я – мені – мене... (і довкруги): Спогади*. Харків: Слобожанський світ, 37.

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