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In conversation with the river

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Abstract

In the face of climate change, we are confronted with both rising water levels and water scarcity almost simultaneously. These challenges have brought new attention to rivers as crucial elements in urban planning. Yet often in architectural design, rivers are treated as existing elements on site rather than actors that can express their needs in shaping the city. This research constructs a narrative of the Vistula River's voice in Warsaw, interpreting its needs through its social and ecological significance. It explores how reimagining the river as an active participant of planning debates can inform more responsive, context-sensitive urban design and architecture.

The paper addresses the question of what it means to design with the river, rather than merely around it. It challenges the dominant paradigm, which often disregards the complexity of the environmental role of the water bodies. Instead, the research highlights the intricate relationships between water, land, and community. The emerging global movement of granting legal personhood for rivers has expanded environmental protection, especially in the Global South. The presented approach focuses on building engagement and a personal relationship between the river and people as a key step to protect riverine ecosystems.

The goal of this research was to come as close as possible to the voice of the river – what the Vistula in Warsaw would say about itself and its future. Through qualitative research methods - on-site observation, audiovisual documentation, and interviews with stakeholders connected to the river - the study generated individual narratives that were analyzed and interpreted poetically to construct a collective voice for the river.

Findings reveal that the Vistula's voice is one rooted in biodiversity, historical identity, and inclusivity. While its interpretations differ across user groups, there are aspects that are common and can be defined as the core of the river's voice. Vistula gives life and seeps into its surroundings, influencing the biological richness of the area that it flows through. Animals are seen as the river's primary users, but the Vistula welcomes all living beings, and responsible human activity. Its voice advocates for unregulated flow and improved water quality, while opposing development driven by short-term economic interests. At the same time, it encourages to keep a safe distance from sensitive areas, but bring people close enough to observe nature and be willing to protect it.

The study proposes a design approach grounded in attentiveness to natural rhythms and traditional practices, such as those of the Olęder culture. By shifting perspective toward the river's own voice, designers and policymakers can increase sensitivity to the impact that their project will potentially have. It can also help them build more sustainable, respectful relationships between urban life and the river. The methodology offers potential applications in environmental education, legal frameworks, and further research on rivers in similar contexts.

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Searching for the voice of the river



Introduction

With ongoing climate change, we are facing rising water levels and water scarcity almost simultaneously. Society started noticing its rivers and designing with them in mind. But sometimes, it seems like we design next to the river and not with it, neglecting the invaluable interactions that happen where water and land meet. In the debate, the river is just an existing element on site and not an actor that can express its needs in the process of change. For centuries people struggled to tame the rivers and direct them according to their interests. Some of humanity's biggest engineering achievements include infrastructures that redirect the natural flow of water. Already in ancient Egypt, China, and Mesopotamia people relied on dams, river control constructions and water delivery canals (Crow-Miller et al., 2017). Understanding the river meant being able to calculate and temporarily control it.

This research argues that to design thriving urban and architectural environments, we need a paradigm shift. Instead of understanding the river as something that needs to be tamed, we should try to recognize and adjust to its natural flow and the fluctuations it entails. Rather than treating the river as a commodity, we should see it as an actor with its own needs, contributing to the network of interactions within the city. Finally, instead of just using the river, we should co-exist with it – benefiting from its presence with respect to its natural features. By pouring concrete over the natural riverbanks and populating them with industries, we lost a deeper connection with the river. What once was the pinnacle of engineering achievement nowadays proves inefficient in preventing floods, at the same time having deeply detrimental effects on the natural environment. We start noticing that truly understanding the river means accepting its ever-changing nature.

As a society, we've been educated to see the river as a meandering line on the map or a space between the two lines of its embankments. In urban and architectural design, it is common to follow this representation and see land and water as two separate beings. Following a simple rule, we can build where the map says there is land, and we should avoid the blue patches that represent water. The in-between either stays a mys-

terious terra nullius or becomes a concrete wharf to make the border clear and impassable. Yet the river always exceeds in one way or another the boundaries we try to put it into. It changes shape, color, and speed, sometimes falling out of recognition within a week. When we realize that, designing next to the river becomes obsolete. We need to design with the river to accommodate its fluctuations, without being constantly scared of the seemingly unpredictable element. Riverscapes, if designed with respect towards the river's nature, don't have to remain an unapproachable mystery. Neither do they have to divide between the human and the non-human. A well-designed river environment can be beneficial for its human and non-human users alike, leaving space for the river itself to flow according to its natural rhythms. But before we can start trying to design with the river, we need to truly understand its nature and needs.

Those are represented by different people and groups of interest within the riverscape. Yet sometimes their views on the future of the river differ slightly or are even completely contradictory. Among all the claims, it can be challenging to distinguish what truly is in the interest of the river. This paper, based on the example of the Vistula River in Warsaw, brings together several voices of the river's representatives and, through analyzing and interpreting them, attempts to find the voice of the river itself. It also explores other, non-vocal, ways of understanding the natural and social processes that happen in the water or near it, which enrich the resulting narrative. It is an invitation to build one's own personal relationship with the river and through this bond hear and understand its voice.

Problem statement

And the old Vistula is glad / That the capital has grown so much / Because she remembers her tiny / And today she is so grown up¹ – wrote at the beginning of the 20th century Julian Tuwim, one of the best-known Polish poets. Back then, little did the Vistula know how much she would still witness in the years to come. Undoubtedly, the river holds a special place in Polish history and mentality, it has also become the symbol of Warsaw – the capital city. However, as a figure of such importance, the Vistula has had to face some troubled times, especially in the last century. Until very recently, it was seen as a dividing element, perceived as polluted and disconnected. In the last twenty years, it has been one of the city's top priorities to help Warsaw and its residents turn to face the river again. This approach, increasingly popular all over Europe, raised multiple voices in public debate, sometimes with opposing views on what the idea of "Warsaw facing the Vistula" should entail (Kancelaria Senatu RP, 2017) (tvn24.pl, 2008). The two main ideas contrasted an infrastructural approach, intending to increase the navigability and the degree of regulation of the riverbanks, with an ecological approach, recognizing the role that the wilderness of the Vistula plays in the ecosystem.

The starting point of this research, which brought attention to the debate about the future of the Vistula River, is the case of Port Żerański. It is one of three ports branching out of the main course of the Vistula in Warsaw. Unlike the other two, situated closer to the city center, it is still mostly undeveloped and surrounded by industrial activity, with a big part of the port remaining a natural habitat for animals. In this location as well there are two main sides of the conversation – real estate developers who want to maximize their profit by filling the undeveloped land with housing blocks, and local activists who see it as a severe threat for the area and its natural assets (Pancewicz et al., 2018). There are also nearby residents who need a space for walking and recreation, industries and craftsmen, as well as world-class sports people who train at this branch of the river. Finally, there are the city officials who claim to be trying to reconcile as much as possible all those groups of interest. What strikes in this multitude of wishes

¹ Fragment of the poem „Warszawa” („Warsaw”) by Julian Tuwim, translation by author

and needs is a question too rarely asked – what would the river itself want?

This question, crucial for sustainable urban planning, yet impossible to answer with certainty, is valid not only in Port Żerański, but also for the entirety of the Vistula in Warsaw. If we see the interest of the river through its natural socio-ecological processes, then Warsaw already includes it to a big extent in its planning efforts in recent years. However, there are still several challenges and risks. Firstly, urban planning has long been dictated by economic reasons and included canalization of rivers – looking only at practical issues like drought and flood protection, and water quality management. Potential efforts to make the Vistula navigable might prioritize profit over preservation of nature. Another challenge is the lack of integrity between planning documents in Poland regarding water management. The Water Law Act, which describes water resources management instruments, is consulted with national government administration who, unlike local governments, doesn't have influence on regional planning (Gosk, 2022). Finally, there are recent precedents in Poland of prioritizing political and economic gains, with complete disregard for nature. An example is the recent deforestation of the Bug River area at the border between Poland and Belarus, where works were carried out in opposition to the law protecting this invaluable wildlife area, and without adequate public disclosure (Fundacja WWF Polska, 2024). This is an extreme case of an approach that may pose a threat to the river in Warsaw and Port Żerański area.

The city of Warsaw has been making a lot of efforts to responsibly rebuild the connection between its citizens and the Vistula River. Currently, the challenge faced by planners is to manage the increasing numbers of visitors to the Vistula's riverbanks in respect towards the ecosystem. Some environments might push towards a regulated riverbed with extensive man-made infrastructures. The authorities should recognize the ecological impact of such investments and react accordingly. It is important in various contexts to raise awareness about the natural processes of the river, its social significance and the role it plays in Warsaw.

Research question

This paper explores the voice in the debate that, paradoxically, cannot be vocalized – the voice of the Vistula River itself. Engaging in the topic from different axes, it aims to give voice to the river and notice its agency and influence. It looks for approaches and strategies that would enhance natural socio-ecological processes of the Vistula in Warsaw and allow for a symbiosis between people and nature. It collects various voices in academic field and on site to most accurately represent the one of the Queen of Polish rivers.

The work focuses on the main research question
- how can understanding the voice of the river

help to better connect it with the urban landscape, taking into account the river's needs? In order to answer this question, it is necessary to first define the term "voice of the river". It entails the river's identity, shaped through historical and present interactions with people, as well as the natural processes that happen within the riverscape. It also includes potential claims for a sustainable future for the river in the city it flows through. The research deconstructs the complexity of the river and formulates a new narrative that will allow the inclusion of the river's voice in future debates, through a set of sub-questions.

How can understanding the voice of the river help to better connect it with the urban landscape, taking into account the river's needs?

What makes up the identity of the river?

How to represent the complexity of the river?

How to give voice to the water and hear it ourselves?

How to include the river's voice in the debate about its future?

Outline

The paper is divided into three parts. The first one presents a literature review which results in the theoretical framework for discussing the voice of the river. It includes argumentation for the importance of rivers' socio-ecological integration in cities and existing work regarding the interpretation of listening to rivers. Then, it explains the general context of the Vistula River necessary to understand its historical and present significance in Poland and its capital city. It describes the shifts in approach to the Vistula management and the current challenges it faces. The second part is the result of field work conducted in Warsaw. It is a collection of different perspectives on the river,

seen through six interviews. The interviews are analyzed systematically and interpreted poetically to form narratives from the perspective of the Vistula. This part also includes outcomes of the author's personal engagement with the river. The last, third, part is the main outcome of the research process. It starts with a collective narrative of the Vistula River in Warsaw, followed by conclusions, discussion, and possible applications in design. The research will later inform a design project in Warsaw. However, the findings can be also used and interpreted in other, similar socio-geographical contexts.

Theoretical framework

To start looking for the voice of the river, it is necessary to understand why it should be heard and included in urban planning. Contrary to historically prevalent perception of water bodies as a commodity, modern theories in urbanism suggest that social-ecological integration of rivers is necessary for their sustainable development. In order for them to work, it is also important to build a relationship between the river and its users. The first section of the theoretical framework explores those concepts to later inform the interviewees

selection and the topics of conversation. The second part looks at existing attempts at what can be interpreted as listening to the voice of the river. Starting from the movement of hydrofeminism and seeing river as an element of the hydrologic cycle, it critically assesses various ways of giving agency to rivers. What is made clear in both sections is the crucial aspect of building a personal relationship with the river in order to understand it better and pass its message on to future generations.

Importance of socio-ecological integration of rivers in cities

Throughout history, riverscape management was focused mostly on exploitation of resources. Human actions became stressors for riverine ecosystems, posing a threat to their resilience and regenerative abilities. The pressure on segments of rivers passing through large cities, amplified by rapid urbanization, led to a phenomenon called "urban hydro-system syndrome". On top of ecological challenges faced by urban rivers, it encompasses the difficulties in mitigating them resulting from social and administrative conflicts of interest (Zingraff-Hamed et al., 2021).

In order to include actors involved in the development of urban riverine spaces in a collaborative and responsible design process, it should be based on the principles of social-ecological river integration. Defined as "the capacity of social-ecological systems to sustain synergies and to alleviate conflicts between the patterns and processes of coexisting ecological and social components" (Forgaci, 2018, p. 50), it is an approach that doesn't limit itself to urban planning. Instead, it aims to integrate transdisciplinary knowledge from fields such as hydrology, river restoration, regional planning and civil engineering. Similarly, the River Culture approach challenges one-sided management that fulfills the needs of the human population at the expense of the river environment. It suggests that human wellbeing is threatened by the same factors as riverine biodiversity, and thus efforts to improve the state of natural river ecosystems will simulta-

neously lead to increasing the wellbeing of people interacting with them (Wantzen et al., 2016). In order to achieve this goal, planners have to adopt an ecosystem-based approach, contrary to the historically predominant, and often economically short-term beneficial command and control approach. The latter focuses on finding simple and predictable solutions. It often involves canalizing rivers and paving riverbanks with concrete to maintain stability and homogeneity. The ecosystem-based approach, on the other hand, recognizes the river as a natural entity, and seeks to maintain its original, irregular flow. The command and control approach separates human activities from the river, while the other one treats them as its integral part (Miradyanti et al., 2021).

It becomes clear that socio-ecological river integration and the following protection of its natural environment involves the aspect of human interaction with the river, or the river's social connectivity. It can be defined as "the communication and movement of people, goods, ideas, and culture along and across rivers" (Kondolf & Pinto, 2017, p. 182) and characterized by three dimensions – longitudinal (transportation), lateral (connection between opposite banks) and vertical (human access to the water). While many activities require all three dimensions, it is the vertical relationship that is crucial to reconnecting cities and their residents with the river. Creating opportunities for human reconnection with the river can lead to the development of positive

feelings towards its natural ecosystem. Having formed a personal relationship with the river, its users would be more willing to engage in its preservation through community engagement (Zin-graff-Hamed et al., 2021).

Urban planners and designers play a crucial role in building this personal relationship of urban residents with the river. Their designs have a direct impact on the riverscape environment, but they also lead to community engagement in a particular space (or the lack thereof). This role, coming with significant responsibility, requires a deep understanding of the river and the abil-

ity to engage specialists from other river-related domains (Prominski et al., 2023). Designers and decision-makers should be advocates for river culture spaces and the preservation of natural ecosystems in balance with social activities. In other words, they should be advocates for the river itself. It is their role to give voice to the river in urban planning debates, where it can't stand for its own rights. To do that, it is necessary to understand the voice of the river as clearly as possible. And ideally, pass on this understanding to the users of the riverine spaces designed.

How to listen to the voice of the river in urban planning debates

The idea of giving voice to rivers is reflected in concepts and movements emphasizing the agency and needs of rivers, as well as carrying them into effect in the real world. It can be argued that those concepts are rooted in the principles of ecofeminism, stating that similarly to marginalized groups being oppressed by the patriarchal system, nature is also denied agency, objectified and exploited (Mies & Shiva, 1993). Hydrofeminism goes even further and suggests that water is a symbol of deep interconnectedness between individuals, places and ecosystems. It criticizes the anthropocentric approach and underlines that we as humans are just one of the elements of the water cycle (Neimanis, 2017). Similarly, Dilip Da Cunha in his book "The Invention of Rivers. Alexander's Eye and Ganga's Descent" challenges defining the river as a line on the map and encourages the reader to put aside the prevalent division between land and water, seen as completely opposite. He sees the river as a constantly changing moment in the hydrologic cycle, an element in flux, complemented by social practices, beliefs and natural phenomena (Da Cunha, 2018).

There are already several movements based on those concepts that try to give rights to nature. The beginnings of the Rights of Nature global movement go back to 1972, when Christopher Stone proposed to give legal rights to forests, oceans and rivers in his article "Should trees have standing? - toward legal rights for natural objects" (Stone, 1972). Forty-five years later, Stone's

claim came into effect in several places around the world, starting with granting legal personhood to Whanganui River in New Zealand, and prompting an unprecedented wave of ecological jurisprudence (Clark et al., 2019). Earlier cases, not directly related to specific entities, included granting legal rights to nature in Ecuador's constitution in 2008, and a similar "Law of Mother Earth" passed in Bolivia two years later (E. L. O'Donnell & Talbot-Jones, 2018). Legal personhood of rivers grants them do possibility to defend their rights in court, which opens new perspectives on nature protection. However, as optimistic as it may seem at first, it also comes with several challenges. Recognizing the legal personhood of a river might lead to a shift of perception in general public and abdication of responsibilities towards its protection, as the river, in theory, should be able to advocate for itself. It can also be seen as a potential adversary in court, leading to a reduced willingness to take action, and potentially risk, needed for wildlife preservation (E. O'Donnell, n.d.). Finally, the legal systems themselves are often flawed, granting rivers rights and obligations a legal person needs in a modern society, but not rights necessary for a legal river person – such as the right to water preserving it from extinction (O'Donnell, 2020).



Figure 1: Maori people sailing on the Whanganui River in New Zealand

Note: Photograph by Hagen Hopkins/Getty Images

While the execution of the legal personhood of rivers idea carries some risks, its underlying principles are an outstanding step in shifting the general approach from seeing rivers as a commodity to recognizing its needs and role in the ecosystem. Legal personhood of rivers was first introduced in post-colonial countries (New Zealand, Bangladesh, India and others), where it reintroduced the custody of natural entities existent in indigenous peoples' beliefs and cultures for thousands of years, and taken away by colonizers' laws and mentality (E. O'Donnell, n.d.). This already existent personal relationship and respect towards rivers is what helped legal solutions function well – they only solidified what was already there. This is also one of the reasons why legal personhood is not necessarily the best solution in Western countries, where rivers have been exploited as a resource for centuries. It is necessary to first build a connection between the river and the people, in order to truly hear the voice of the river in public debate. Recognizing a river as a living entity is a step that helps to shift from anthropocentric to ecocentric perspective, without risks of full legal personhood. However, it is still a solution that can have legal impact. The living entity status granted to Australian Birrarung resulted in forming a new human-nature relationship and the creation of a 50-year community vision created by more than 2500 representatives – the future that people wanted to co-create with

the river (Marshall, 2024). This once again proves that community engagement is key in listening to the voice of the river.

The case of Birrarung also touches on the topic of representation of the voice of the river, which can potentially be heard, but not verbalized by the river itself. Here, it was the community that spoke in its name. In the case of another Australian river, Martuwarra, its rights were represented in a short documentary "Voices of the River" with ten Traditional Owners speaking in the name of Martuwarra (Voices of the River, n.d.). The voice of the river has also become a topic of artistic performances and installations (Cano, 2024; Fortescue, 2022). In Poland, although the legal personhood of rivers still seems to be a distant perspective, there are already several movements fighting for the rights and wellbeing of rivers. The biggest one, Sisters Rivers, unites women who fight for wild and unregulated rivers, and bring public awareness to the topic of rivers' rights (Sklad Solny, n.d.). In Warsaw, a big role is played by education campaigns and activities that help residents engage with the Vistula. Starting from the presented theories and approaches, this research explores strategies allowing for listening to the voice of the Vistula River, and how it can be heard by urban planners and residents alike.



Figure 2: Sisters Rivers collective during an art happening

Note: Blue signs, used to indicate rivers throughout Poland, have become the symbol of river protection movement.
Photograph by Skład Solny.

Theoretical framework diagram

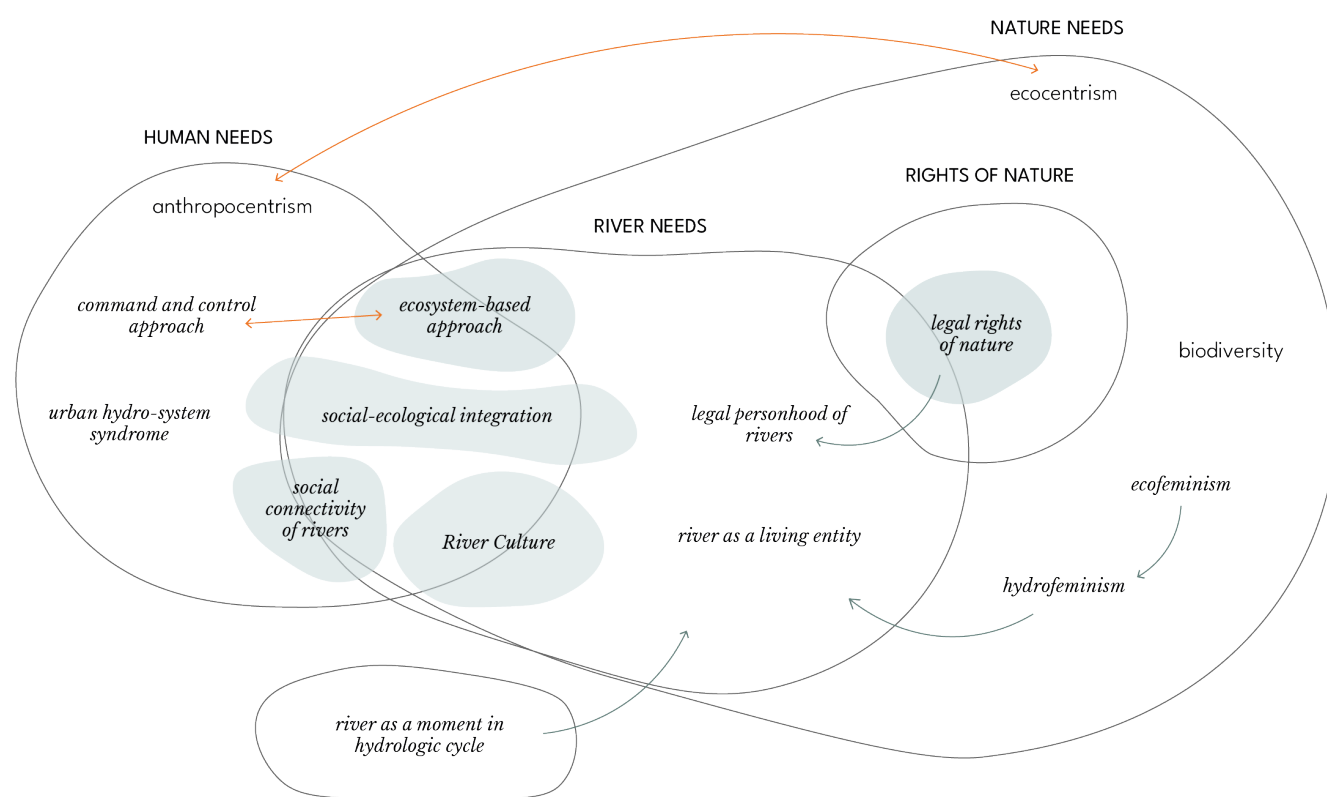


Figure 3: Theoretical framework diagram

Note: Looking for the voice of the river requires exploring the needs of different actors through theory and practice. Some theories involve more than one group (blue patches), others have influence on further theoretical concepts (green arrows), and some are contradictory (orange arrows).

Significance of the Vistula River

Context

There are several reasons why the Vistula is often referred to as “the Queen of Polish rivers”. Stretching 1048km, it is the country’s longest river, it also has the biggest catchment area (Angiel, 2017). It runs from the very south with its sources in Beskid mountains, all the way to the very north of Poland, finding its outlet into the Baltic Sea. On its way, it witnesses, from the very beginning, the development of Poland’s two most significant cities – the former capital in Cracow, and the current one in Warsaw. The Vistula is divided into three sections - upstream, midstream and downstream - marked by its tributaries San and Narew. They are differentiated by the river’s hydrological characteristics, natural landscapes surrounding it and the degree of riverbed regulation (Majewski, 2013). Although the research focuses on the midstream and Warsaw segment specifically, they will be analyzed in a further context, as the entirety of the river functions as a geographical and cultural system.

The Vistula has secured its reputation as “the last wild river of modern Europe” (Grochowski, 2001). And although its ecological significance is undeniable, it is not true that the river is not regulated, as some claim. This aspect of the Vistula reflects its history, and the division of the country between three occupants – Russia, Austria, and Prussia. While the river was largely regulated in the Austrian and Prussian partitions, the Russian governors neglected this matter and thus for a long time the midstream segment was left untouched. It was in the 70s that this section was partially regulated with innovative, environmentally friendly solutions. Rocks and willow branches, used as the primary material, gradually overgrew with bushes and became a natural habitat for animals, while still influencing the flow of water (Angiel, 2017). Those very limited measures led to the unique image of Warsaw’s Vistula and the preservation of its ecological role. On the other hand, minimal necessary regulation has an influence on the Vistula’s navigability. The river is characterized by large monthly and yearly differences in water level. This became an asset for 16th and 17th-century merchants, who used high

water levels in spring for transporting goods to the ports in the north of the country. At the same time Swedish invaders, inexperienced in this territory, lost their loots to the Vistula, when they tried to sail its low waters in the summer of 1655 (Kowalski & Magnuszewski, 2020). Nowadays, while thinking about designing with the river, we should still consider its remaining wilderness and volatility.

Examples such as that of the Swedish invaders demonstrate how we can learn a valuable lesson from history. Looking at the Vistula from a broader perspective is key to understanding it better and developing a sense of humility towards its power - the power that people have been trying to harness for centuries. The first uses of the Vistula river included fishing and transportation of goods that were practiced already in the prehistoric period. The first written record of the river dates back to the 1st century B.C., when it was mentioned in Pomponius Mela’s oldest geographical treaty written in Latin. In the early Middle Ages Vistula, like other rivers in European cities, was one of the main axes of human settlements and first cities. One of the tribes living on Poland’s territory were named after the Vistula. With a chain of villages along its banks, the river maintained its role in trade both for locals and for foreigners, with consecutive developments of infrastructure and sailing techniques (Duchnowski, 2013). The transportation of goods down the Vistula River even got its specific name – flis. This rafting tradition thrived until the 17th century, when it started being restricted due to wars and political changes that made it more difficult for trade and river navigation to operate fluently. Such intensity of using the river as a traffic route shaped the contact points of the Vistula and the cities built on its banks. The panorama seen from the river was a showcase for incoming merchants and to this day it is often the most attractive view of a riverside city (Plit, 2012). In the 19th century multiple factors led to the marginalization of the Vistula as a water transport artery in this part of Europe. The partitions of Poland made it difficult to manage the river as a whole, and lack of devel-

opments in the midstream part limited navigation possibilities. Additionally, newly introduced rail-

ways offered the ability to transport much larger amounts of cargo (Duchnowski, 2013).



Figure 4: Warsaw by Canaletto (1770)

Note: "View of Warsaw from Praga side" (fragment) - a painting by Canaletto (Bernardo Bellotto). Open source image from Wikimedia Commons

The Vistula witnessed Poland's economic prosperity throughout centuries, but it has also seen its struggles. It was the scenery of numerous battles, including those during World War II and especially the Warsaw Uprising. The reference to the river is particularly clear in the battle of 1920, where Poland's victory became crucial for the country's and Europe's future. The battle, even though it wasn't carried out directly at the riverbanks, is still remembered as the "Miracle on the Vistula" (Angiel, 2017). The memory of the Vistula's significance during the hardships of wars is preserved in many songs and poems written at that time. As a national river and a crucial element

of Polish territory, the Vistula became the symbol of Polish resistance. The songs mentioned in various ways the main message – as long as the Vistula flows, or flows into the Baltic Sea, Poland will not die (Bartmiński, 2017). The river is also mentioned in the Polish national anthem:

*We'll cross the Vistula, we'll cross the Warta,
We shall be Polish.*

*Bonaparte has given us the example
Of how we should prevail.*

(Daria Więcek, 2022)

Figure 5: (right) Warsaw: on the Vistula by A. Gieryski (1881)

Note: One of a series of sketches by Aleksander Gieryski, who is known for his drawings and paintings depicting the everyday life of people working on the Vistula River. Image available in public domain.



Warszawa: Na Wiśle. Rysunek A. Gieryskiego.

But wars and battles weren't the only topics related to the Vistula River in the popular perception. In some proverbs and texts was portrayed as a powerful element or force. In others it is part of a romantic setting for lovers or a natural divider that has to be crossed (Bartmiński, 2017). The Vistula even functioned during the first partition of Poland as the official border between Poland and

Prussia. It proved that borders marked on rivers, sometimes named “diplomats’ borders”, are the hardest ones from all natural land divisions. Even though tracing the line on the map was easy, the Vistula repeatedly changed its course in the unregulated area, giving large pieces of land to one or the other side of the dispute (Twardowski, 2015).



Figure 6: The border between Prussia and Austria on the Vistula river in 1908

Note: The map shows planned regulatory works. Image from the National Archive.

Unstable waters divided, but they also brought people together, especially after Poland regained independence in 1918. The river became socially active, with new means of water transportation, also for tourists, and people going on walks along the embankments. In the 60s and 70s residents of the Vistula riverfront cities used it for sports and recreation, spending time on beaches and swimming pools on the river. However, 1970 is the onset of decline for the Vistula's connection with cities and people. With the termination of passenger transportation in cities and changes in recreation modes, residents started to turn their backs on the river, which started being seen as polluted and unattractive (Angiel, 2017). The pollution was mostly caused by the development of industry after World War II and the lack of sewage treatment plants. At the end of the 20th century, water

quality in all measurement points in and around Warsaw was described as “not meeting the standards” (Biernacki, 2000). The terrible quality of water and its negative influence on health started being noticed by residents, who looked for alternative modes of recreation. While warning signs prohibiting swimming in the Vistula were placed on the banks, people explored newly built public and schools' swimming pools. Their increasing popularity, also in winter when they were used as ice rinks, contributed to the plummeting reputation of spending time by the river (Chwalba, 2023a). The transformation and political changes at the turn of 1980s and 1990s led to privatization processes which left many river transportation companies without funding and eventually ceasing to exist (Kancelaria Senatu RP, 2017). Those changes had a strong impact on the perception

of the Vistula River in society. The challenges started being addressed in the first decade of the 21st century with efforts to meet EU water quality standards and the construction of sewage treat-

ment plants, as well as public campaigns aiming for Warsaw to face the Vistula again – described in subsequent sections of this paper.

Infrastructural role

Rivers come under intense influence from human activities. At the same time, they are historically proven crucial elements of civilization development, which is mostly manifested in technological advancements. The Vistula had a significant role in the development of Poland and riverbank cities, connected by a network of progressively improving water transportation. Although the uses of the river have shifted to a more recreational profile, it still plays an important infrastructural role. In Warsaw, the Vistula is the main source of drinking water, obtained through infiltration surface intakes located under the riverbed. Additionally, it provides water for the industrial needs of the city's two power plants. It also receives clean water from wastewater treatment plants (Krajowy Instytut Polityki Przestrzennej i Mieszkalnictwa, 2018).

The riverbed in Warsaw varies in width and in the central segment, called the “Warsaw corset”, it is more than three times narrower than at Warsaw's southern border. This is partially due to regulatory works carried out at the end of the 19th century and strengthening parts of the riverbanks with concrete against erosion (Biernacki, 2000). Those infrastructures, together with levees, although they're not big engineering projects, influence the image of the Vistula in Warsaw. The technological role of the river is undeniable and already extensively researched on. In the times of shifting approach, it is the understanding of rivers and their associated processes that can lead to the desired balance of riverine ecosystems (Wang & He, 2022). Therefore, this research focuses on social and environmental aspects of the Vistula.



Figure 7: Drinking water intake facility “Gruba Kaska” on the Vistula in Warsaw

Note: Photograph by author.

Social significance

The idea of “Warsaw facing the Vistula” dates back to the 20th century, when the president of the city, Stefan Starzyński, started the construction of the boulevards. However, the initial interest in activities along the Vistula’s riverbanks faded away in the 1970s, due to the construction of an expressway along the central section of Warsaw’s river, and the growing disgust towards the polluted water (Gosk, 2022). Records of using the Vistula for recreational purposes date back much further than the “Warsaw facing the Vistula” slogan. Already at the beginning of the 18th century king Augustus III organized festivals on the embankments. Other early pastimes included bathing in the river and water tourism, later in the 19th century joined by a dynamic development of water sports scene in Warsaw (Duda-Gromada, 2018). The most prominent discipline was rowing, with its own association opened, first illegally,

in 1878 - the oldest sporting club in Poland. The association functions until this day, with two boat-houses in Warsaw (Warszawskie Towarzystwo Wioślarskie, 2023). During troubled times of the inter-war period, Warsaw dreamed about beautiful, representative promenades along the Vistula, envisioned in the capital’s most popular daily paper of the time:

The Vistula is gradually gaining recognition in Warsaw. (...) Great boulevards... Magnificent thoroughfares, wide, smooth, shining, level, with rows of trees planted, stand before your eyes. A great world parades along them. Dazzling lights spread spells of effects. Lovely tones of music flow from them. From the high terraces one can admire the colorful symphony of sky and water.

- Kurier Warszawski 1930: 5-6, as cited in (Potr-zuski, 2018), translation by author

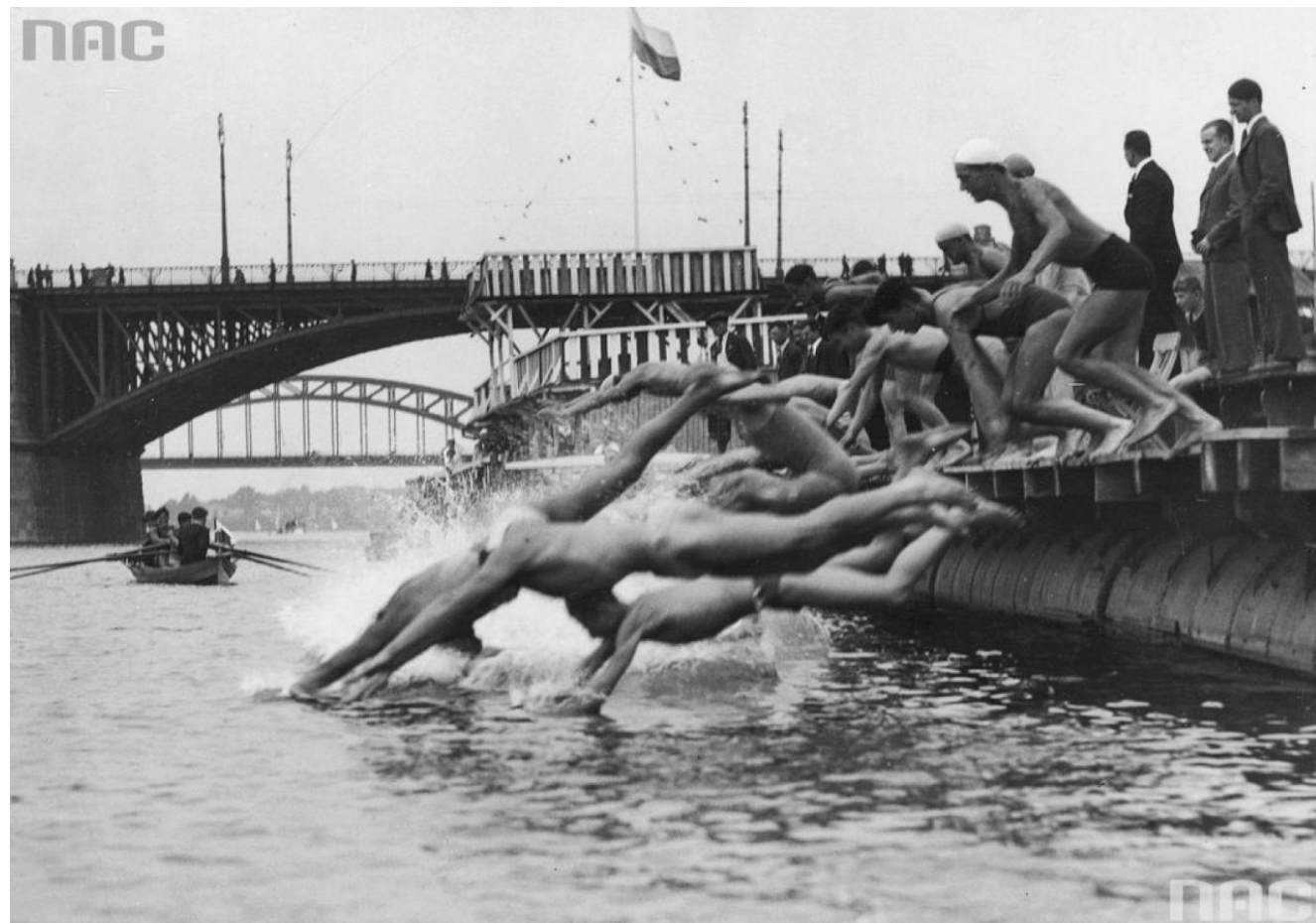


Figure 8: A race across the Vistula, 1933

Note: Image from the National Digital Archive

Water-based tourism and recreation continued to develop until the second world war and was reintroduced shortly after the war ended in 1945 (Duda-Gromada, 2018). Memoirs from the 50s and 60s portray the Vistula as the socially central point of Warsaw. One where people would spend their free time, making use of public and wild beaches, and even three holiday resorts on the riverbanks. There were swimming pools in the river and there was a culture of going for a swim with family and friends. Until the 1970s, when history came full circle, and the perception of Vistula shifted to that of sewage again – which remained standing until the early 2000s (Ludwicki, 2017).

Understanding the historical periodicity in the Vis-

tula’s perception gives a broader understanding of how it is currently seen and what are the perspectives for its future. What pulled people away from the river was mostly pollution and industrial activity. On the contrary, what drew them closer to the water were urban beaches, organized recreation, sports and the possibility of social interactions in a natural setting. The vision for the bright future of the Vistula presented in 1930 became true in a big part. The central segment of the river is regulated on the western side with boulevards, social and public functions. The eastern embankment, however, remains almost entirely wild. As a Natura 2000 site, a rich ecosystem with numerous animal habitats, it is still very popular with



Figure 9: The Vistula in the center of Warsaw

Note: The Vistula in Warsaw is characterized by the duality of its embankments - from man-made and bustling with social life to a nature reserve on the other side. On the left in the distance the national stadium. Photograph by author.

Warsaw’s citizens.

There were multiple factors that influenced the process of Warsaw turning to face the river again. A major one were EU regulations regarding inland water quality, which led to the construction of sewage treatment plants (Stefanowska, 2014). The Vistula was also included in urban planning documents as “an area of key importance for the creation of the spatial structure of the city due to ensuring the protection of historical and cultural

values” (Studium Uwarunkowań i Kierunków Zagospodarowania Przestrzennego m.St. Warszawy, 2021, p. 239). In the early 2000s, the city started working on investments on various scales to rebuild the connection between Warsaw and its river (Stefanowska, 2014). There were several milestones that helped to shift the perception of the riverside and attract both local citizens and tourists to the Vistula. The biggest events were the construction of Copernicus Science Center on the boulevards in 2010, the opening of the

National Stadium in 2011, and the inauguration of the Multimedia Fountain Park in 2012 (Duda-Gromada, 2018). Those major investments were accompanied by smaller initiatives, activities and campaigns.

Currently, the riverside areas in Warsaw offer a wide range of spaces and activities for people of different interests, ages and needs. With the significant increase in the quality of water in the last 20 years, many people are eager to spend time with their friends on the embankments and beaches. Others are enthusiastic about the cultural range of events, workshops, lectures and festivals. Both locals and tourists use the recreational and public transport boats that sail on the river. And finally, there are those who choose to spend time by the Vistula because of its natural assets and the possibility to escape the bustle of

Spiritual meaning

The Vistula (Wisła, a feminine noun in Polish) is represented and referred to as a woman in Polish culture. Like a woman, the river gave and maintained life. She was seen as a caring mother to her children – her tributaries, and the Polish nation. She symbolized fertility, as thanks to her cities, nature and arable land could prosper (Chwalba, 2023b). Legends trace the beginnings of the Vistula back to the Beskid mountains, where its geographical source can be found. Two sisters with different characters have been asked by their queen mother to distribute water over the lands of their kingdom. At first, they walked separately, to later join their efforts and together send pathfinder waves towards the unknown. Not one of the waves returned – they all found their way to the Baltic Sea, forming the Vistula River with two streams at its source (Zdzitowiecka, 2010). In another legend, Wisła is a queen who has tragically fallen in love with a young fisherman, despite being destined for a marriage with another land's ruler. The woman escaped with her lover and threw herself into the waters of a river in an act of sacrifice for love. The river took her name and became a symbol of purity and devotion (Legendy i Mity o Rzekach: Fascynujące Opowieści z Różnych Kultur, 2024). The Vistula maintained her position in love stories long after Slavic legends were born – as a scenery for trysts or as a barrier keeping lovers apart. In all

the city (Grębowiec, 2019). The touristic, social and educational activities are coordinated under the name “The Vistula District” (“Dzielnica Wisła” in Polish). Although the Vistula isn't officially recognized as a legal subject or a separate district, this project, coordinated by the city's authorities, grants the river a very prominent role in Warsaw. The initiative mostly entails educating, organizing cultural events, and offering possibilities for river-based sport and recreation (Duda-Gromada, 2018). To celebrate the place that the river holds in Polish history and culture, the parliament appointed 2017 as the Year of the Vistula River, marking the 550th anniversary of the first freely available rafting down the Vistula (Rok Rzeki Wisły, n.d.). This resulted in an even bigger surge in promotional, educational and cultural events on and along the river.

contexts, the Vistula was a reference that didn't need any explanation – it was a common element of Polish culture since forever (Bartmiński, 2017). The Vistula was a witness to the country's turbulent history, but also the bliss and hard work of everyday life, often depicted by painters.

Poems about the Vistula or events related to it, written throughout the past centuries, express a personal connection of their authors with the river:



Figure 10: Sandblasters by A. Gierymski (1887)

Note: Open source image from Wikimedia Commons



Figure 11: Rafters on the Vistula by W. Stryowski (1881)

Note: Open source image from Wikimedia Commons

*Wisło, rzeko płynąca w przeszłość.
 Jak to dawno, barbarzyńsko rudy,
 Kwitłem na wodzie twojej, po wierzchu
 kreślonej w gwiazdy, rośliny i runy.
 Jeszcze wiszą widma nad tobą:
 - jelenie, wilki, niedźwiedź złoty
 i rzeźbiony drewniany obłok -
 - rysowany w powietrzu motyw.
 Moje dawne ramiona z miedzi,
 w których słaby jak w ramię wiszę.
 Jestem domkiem, który zaśniedział
 przez tysiąclecia twoją ciszą.
 Tylko dotknąć: sypnie się próchno.
 Tylko spojrzeć: nawisłe miasto.
 Tylko żółty promień został
 między tobą a wieczną gwiazdą.
 Rzeko snów o zielonym wodniku,
 płyną tratwy, kry i przyszłość.
 Taki długi żal jak żal skrzypiec,
 Wisło.
 30 III 41 r., Krzysztof Kamil Baczyński*

*Translation:
 Vistula, a river flowing into the past.
 How long ago, barbarously ore,
 I blossomed on your water, across the top
 Drawn in stars, plants and runes.
 Still hang specters above you:
 - deer, wolves, golden bear
 And a carved wooden cloud -
 - a motif drawn in the air.
 My former arms of copper,
 In which weak as my shoulder I hang.
 I am a cottage that has snowballed
 Through millennia with your silence.
 Just to touch: the decay is loose.
 Just look: the overhanging city.
 Only a yellow ray is left
 Between you and the eternal star.
 A river of dreams of green aquatic,
 rafts flow, orifices and the future.
 Such a long grief as the grief of a violin,
 Vistula.*

Source: https://poezja.org/wz/Krzysztof_Kamil_Baczyński/579/Wisła. Translation by author.

*Nieubłagana Wisło, próżno wstrząsas
 rogi,
 Próżno brzegom gwałt czynisz i hamujesz
 drogi;
 Nalazł fortel król August, jako cię miał
 pożyc,
 A ty musisz tę swoje dobrą myśl położyć,
 Bo krom wiosel, krom prumów już dziś
 suchą nogą
 Twój grzbiet nieujeżdżony wszyscy deptać
 mogą.
 1584 r., Jan Kochanowski*

*Translation:
 Inexorable Vistula , in vain you shake your
 horns,
 Vainly do you rape the banks and hinder
 the roads;
 King Augustus has found a clever way to
 live,
 And you must put down your good thought,
 For you have not paddles, you have not
 prums, You have not a dry leg to stand on
 Your back unruffled all may trample.*

Source: https://poezja.org/wz/Jan_Kochanowski/2693/Ksiegi_wtore_Na_most_warszewski. Translation by author.

*[...] Gdybyś ujrzeć chciał
 Nadwiślański świt
 Już dziś wyruszaj ze mną tam
 Zobaczysz, jak przywita pięknie nas
 Warszawski dzień*

*Translation:
 If you'd like to see the dawn at the Vistula
 Start out there with me already today
 You'll see how nice a welcome is
 awaiting us by the Warsaw day.*

*Mam tak samo jak ty -
 Miasto moje a w nim:
 Najpiękniejszy mój świat
 Najpiękniejsze dni
 Zostawiłem tam kolorowe sny [...]
 1969 r., Czesław Niemen*

*I do have like you,
 my town and in it:
 my most beautiful world
 most beautiful days
 I left there colorful dreams*

Source: <https://genius.com/Czesaw-niemen-sen-o-warszawie-lyrics>

Source: <https://lyricstranslate.com/pl/sen-o-warszawie-dream-warsaw.html>

The Vistula remained rooted in Polish mentality until current times. A study conducted in 1990, 2000 and 2010 showed that for young Poles the Vistula had primarily a symbolic meaning (Bartmiński, 2017). They saw the river as a connector between the former and the present capital, the symbol of Poland and Polishness, and an element present in the country’s history since Slavic times, through partitions and wars, until the present. In Warsaw, one of the biggest events of the year is closely related to the Vistula. “Wianki nad Wisłą”

The natural environment

At the turn of the millennium, when the Vistula was still mostly disregarded, or even forgotten by Warsaw and its residents, scholars already noticed its potential and the crucial role it plays in the ecosystem – both locally and across Poland. In Warsaw, the Vistula is an important ventilation corridor, providing fresh air from suburban forests (Ronikier-Dolańska, 2000). The valley of Vistula is the main ecological corridor for the region and the whole country. Its stability in Warsaw is ensured by lack of barriers along the whole river segment, and good connections between the urban river and other nearby elements of natural landscape. Moreover, the Vistula is part of an international ecological corridor that connects the Baltic Sea with the Dniester and the Danube basin, serving as one of the main migration route for birds and a wildlife sanctuary for the rich avifauna of the region (Krajowy Instytut Polityki Przestrzennej i Mieszkalnictwa, 2018). The river, in the entirety of its length, is home to 76% of Poland’s breeding species. The biggest concentration occurs in the midstream segment, which is why big parts of it, including the eastern riverbank in Warsaw, are a Natura 2000 site (Angiel, 2017). Besides the large population of birds, the Vistula in Warsaw is also a habitat and a migration route for mammals, fish, and the least studied group – amphibians. Beavers and otters can be witnessed almost along the whole length of the riverbanks. Some species in the Warsaw’s Vistula are rare or even endangered, like loach and little tern (Krajowy Instytut Polityki Przestrzennej i Mieszkalnictwa, 2018). This unique urban biodiversity is possible largely thanks to riparian (or river-floodplain) forests growing in the Vistula’s floodplains. Those riparian zones, sometimes referred to as water meadows, consist mostly of alluvial forests of

(Wreaths over the Vistula) is held every year on Midsummer’s Eve, referencing directly the Slavic tradition of floating wreaths on the river. Historically, the celebrations also included bathing in the water, collecting herbs and flowers, dancing and jumping over fire. And although times have changed, people are increasingly drawn to some of the river-related practices and spirituality. The event still takes place by water and involves a reconstruction of a Slavic village, floating wreaths and crafts workshops (Glegoła, 2024).

willow and poplar. The ecosystem that they form, with multiple layers of vegetation and diverse plant species, is seen as potential natural vegetation (Krawczyk & Węclawowicz, 2001). It entails a hypothetical state of vegetation which could be achieved if human impacts were eliminated and regional vegetation could take full advantage of the opportunities provided by diverse habitats (Wolski, 2023).

Historically, the Vistula in Warsaw was a braided river, with sandbars and islands gradually overgrown by riparian forests. Isolated from human activity, they were crucial habitats for riverine fauna. The regulation of Warsaw’s segment of the river in the late 19th century onwards led to the straightening of the riverbanks and the disappearance of natural islands in Warsaw (Biernacki, 2000). Warsaw regularly undertakes efforts to protect and reintroduce biodiversity and habitats resembling natural ones. In the years 2011-2018 the city built a permanent island, 2 sandbars and 5 floating islands to provide opportunities for breeding for birds (Urząd m.st. Warszawy, 2022). To an inexperienced eye of a passer-by, the islands might look natural, being a part of the “wild river in the city”. However, they had to be reconstructed after previous degradation caused by human activity. This example is a telltale reference to conclusions drawn by scholars already at the beginning of the century – “In Europe, huge expenditures are being used to restore regulated rivers to near-natural condition. In our country, it is enough to NOT DESTROY, and to plan and carry out the necessary hydro-technical and safety works taking into account both human and natural safety” (Ronikier-Dolańska, 2000, p. 94).

Significance of the Vistula in Warsaw	
Area of significance	Key points
Infrastructural role	<ul style="list-style-type: none">• Water transportation (historically)• Main source of drinking water• Water supply for industrial needs• Output for wastewater treatment plants
Social significance	<ul style="list-style-type: none">• Historical records of water festivals, bathing and tourism already in the 18th century• Peak use of the Vistula for recreational purposes in the first half of the 20th century• “Warsaw facing the Vistula” concept reintroduced in the early 2000s• The Vistula District – coordination of touristic, social and educational activities• 2017 as the Year of the Vistula River – a new surge in activity on and along the river
Spiritual meaning	<ul style="list-style-type: none">• The Vistula portrayed as a woman and motherly figure in Polish culture• A strong presence of the Vistula in legends• The Vistula as a witness to Polish turbulent history and victorious battles• Many artworks representing the river – poems, paintings and music• A rebirth of riverine traditions and Slavic festivals in recent years
Natural environment	<ul style="list-style-type: none">• Important ventilation corridor in Warsaw• Main ecological corridor for the region and the whole country• Migration route and habitat for birds, mammals and amphibians• Home to rare and endangered species• Crucial role of the riparian zone (water meadows)

Figure 12: Significance of the Vistula in Warsaw - summary

Note: The table summarizes key points from the section presented above.

Potential directions for the future

History has shown that the Vistula is, literally and metaphorically, an entity in constant flow, difficult to frame in one context or one definition. Its primary role changed throughout the years, shifting back and forth between providing water, being a means of transportation, a place of recreation, a crucial ecosystem element and a national symbol. Poland's biggest river has the potential to develop its significance in Warsaw in all the fields mentioned in this section. According to the advocates of inland navigation, the future of the Vistula lies in its regulation and construction of a water threshold that would stabilize the water level in Warsaw (Konferencja "Warszawa Wracą Nad Wisłę," 2017). On the other hand, the city will have to face the challenge of recurring droughts that threaten the supply of drinking water. This is one of the reasons why the ecological significance of the river is gaining attention and coverage both in political debate and in media. The suggestion from almost 25 years ago to not destroy the ecosystem is still valid, as the Vistula in Warsaw remains a critically important ecological corridor in this part of Europe. While in the early 21st century the priority of Warsaw for the Vistula was to

clean its water, now city officials set a priority to maintain the uniqueness of the riverbanks and a symbiosis between nature and humans (Konferencja "Warszawa Wracą Nad Wisłę," 2017). Educational campaigns pay off – over half of the respondents in a study conducted in 2022 see the Vistula in Warsaw primarily as a habitat for wild plants and animals (Fundacja Sendzimira, 2022). The second main function mentioned in the study is river-based recreation, the development of which has been the city's goal for almost 20 years. Now that the image of the Vistula has changed from that of a repulsive divider to that of an attractive leisure space, more people are expected to use infrastructures and natural areas on the riverbanks. This might become a challenge for different reasons – from threatening the ecological functions of the river to crowd management in case of emergencies (Gosk, 2022). In the upcoming decades, in accordance with the city's development strategy, Warsaw will undertake initiatives to further develop the recreational potential of the Vistula, while keeping a balance with its role in the ecosystem.

The Warsaw case

It is clear that the Vistula River holds a prevalent spot in Polish mentality, it also plays a major role in the capital city – Warsaw. In its current state, the river and its adjacent areas are a space of social interactions and a biodiversity hub. The official strategy of the city of Warsaw envisions the Vistula as an attractive public space that contributes to the protection of cultural and ecological values (Studium Uwarunkowań i Kierunków Zagospodarowania Przestrzennego m.St. Warszawy, 2021):

The Vistula River with the Vistula green areas will be an example of harmonizing the values of the cultural and natural landscape by strengthening and expanding the role of the river in the spatial structure of the city, as well as attractive development of the riverbanks corresponding to the requirements of protection of natural and cultural heritage values.

- Study on Conditions and Directions of Spatial Development, art. XII A 1.1.1 (translation by author)

On the other hand, environmental activists in Warsaw are warning against planned investments in infrastructures that could be detrimental to the river's natural rhythm and lower the water level even more – like the construction of a rapid, an open cooling system of a power plant, and more intensive sand excavation from the Vistula (Miasto Jest Nasze, 2024). There is also a lobby advocating for the navigability of Warsaw's Vistula, which would match "most of riverbank capital cities". The aim would be achieved through the introduction of multiple man-made infrastructures – weirs, locks and possibly a hydropower plant - and regulating the flow of water (Porozumienie Bezpieczne Rzeki, 2019). Such tendencies, if supported by financial means and authorities' approval, can lead to the degradation of the Vistula's natural character and role in the ecosystem.

Like other cities in Europe and around the world, Warsaw should seek to mitigate the consequences of climate change, one of the means to achieve that being the social-ecological integration of the Vistula River. It will also help to make riverine areas more attractive for residents and potentially increase their overall wellbeing. Above all, especially in Warsaw, nature and biodiversity already have a prominent role in the urban river ecosystem, and bringing attention to them is one of the ways in which they can be preserved. To take a step towards these goals, this research tries to understand the voice of the Vistula River to include it in the discussion about the future of riverbank areas and adjacent ports. It aims to build awareness, primarily in designers, about the complexity of the river, which is rarely thought of and taught about in architecture schools. Rather than offering a fixed set of rules and guidelines, this paper suggests a shift in thinking about the rivers – from that of a resource represented by a line or a patch, serving political purposes, to that of a living entity that should have a saying in the debate about its own future. By being rooted both in academic findings and in the local context of Warsaw and the Vistula, the research aim is to propose an approach to design that might lead to a better connectivity of the city with its river. To achieve this goal, it explores alternative (to the traditional design process) narratives and representations of the river that help to better understand it. Although this paper provides insights that can be of value to all users of the river, its message is firstly meant for designers, urban planners and city officials. To people who have most agency over the course and use of the river. If they hear the message in the voice of the Vistula, they can convey it in their projects, initiatives and legislations.

Methodology

To achieve the designed outcomes, this research implements an extensive methodology with multiple ways of data collection and analysis. They can be primarily divided into on-site and off-site research. Field research was conducted in Warsaw and consisted of data collection through interviews, sketching, journaling, photography, and audio-visual recordings. The activities were mapped and compared with other mappings developed in the research process. The off-site part of the research consists of a literature review,

analyzing the data acquired on-site, which result in a set of narratives written from the perspective of the river. The chosen methods are designed to answer the research sub-questions. They overlap and intertwine, resulting in using several methods to answer one question and different questions being partially answered by the same method. This way, they result in a thorough overview of the topic and a voice of the river that considers various parameters and perspectives.

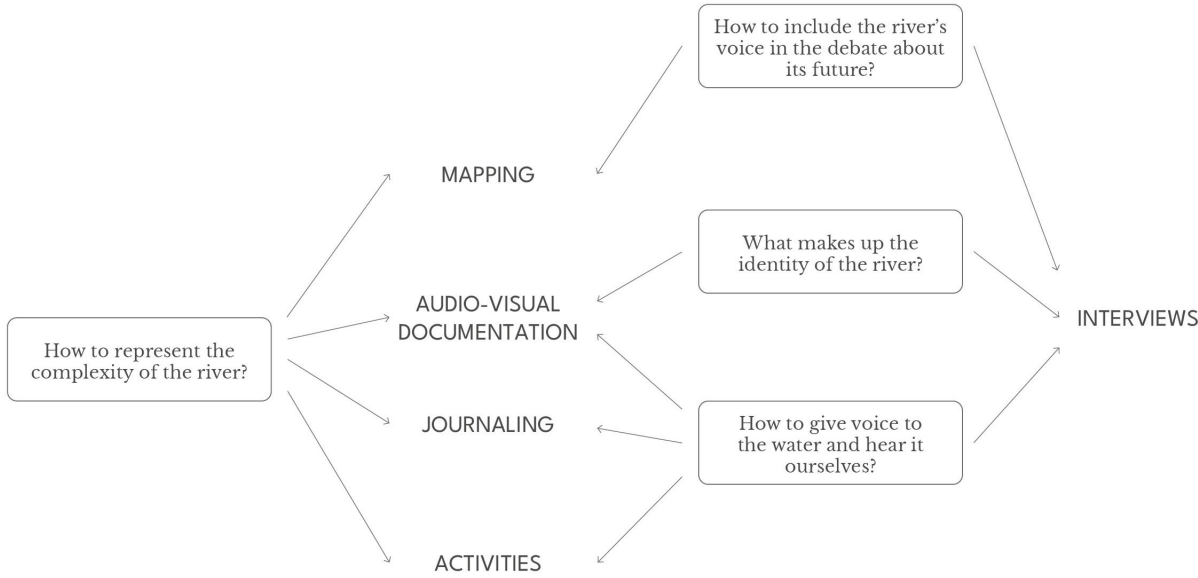


Figure 13: Research subquestions and methods answering them

Field research

One of the main research methods used was field research conducted along the Vistula River and on the specific project site of Port Żerański. Observations and interviews on-site were key elements to understanding the volatility of the river and its social significance. The field research focused on the main study trip in October but also included additional activities in September and December. The research can be divided into two main parts – interviews and documenting the river in various ways, including photography, sketching, and journaling. The results are also accompanied by a mapping of the research process itself

and the image of the life of the river and its users that developed in the research process. The high number of methods used in the field research is justified by the aim of the research, which is a profound understanding of the multithreading of riverscape stories, told by multiple actors and seen from a variety of perspectives.

The site visit in September focused on the preliminary understanding of the site, including a kayaking session in Port Żerański, which allowed for seeing the river from a point as close as possible to its own perspective. During the visit in October, the walks were planned in advance in order

to cover multiple riverbank locations with diverse characteristics. Each activity included taking photographs and videos, sketching, and journaling. The route was documented in a fitness tracking application - Strava.

The two primary axes of qualitative research (interviews and documenting the river) were analyzed separately, but also as an attempted

Interviews

The aim in looking for and contacting potential candidates for interviews was to represent as wide a range of interest groups as possible in a limited number of conversations. In the end, seven people took part in the interviews, representing different, yet complementary backgrounds. The interviewees provided this research with insights from both local activists and city officials side, as well as other people involved in planning and activating the riverscape in Warsaw. Each of them represents a wider group of interest, being either residents, authorities, or other human and non-human users of the river. Through the variety of backgrounds of interviewees and their repre-

entirety of the river's image. In the final results, interviews are accompanied by mappings and photographs. On the other hand, visual documentation was looked at with the background of knowledge gained from the interviews, trying to illustrate the emerging narratives and recurring patterns.

sentative roles, it can be argued that the interviews conducted in this research offer a broad and diversified perspective on the topic.

The duration of the interviews varied from 45 minutes to 2 hours. All of them were based on the same set of questions, which allowed to accurately compare the answers across conversations and look for patterns. Besides the main questionnaire, some interviews included questions regarding the person's specific field of expertise or follow-up questions during the interview. All interviewees consented to the interviews being recorded in audio and video format.

Desk research

The data collected in the ethnographic field research was analyzed mostly qualitatively, leading to building narratives of the river seen through different lenses. An extensive and diversified dataset allows for integrating multiple perspec-

tives in the final results. Different backgrounds of the interviewees and comparing their stories with visual documentation additionally helps in minimizing bias.

Outcomes from the interviews

The aim of the methodology for analyzing the interviews conducted on-site was to identify themes that were common throughout all of the conversations and ways in which the specific perspectives of each interviewee complement each other. This helped to formulate a collective narrative of the river seen through the experiences of the interviewees and the interest groups they represent.

The first step in the methodology was writing down a summary and impressions directly after the conversation. Those impressions don't have a fixed structure and represent shortly and spontaneously the narrative of the river that can be

understood from the conversation. They were used in later phases of the research to formulate a longer, more structured narrative for each interview, representing the possible voice of the river.

Each of the interviews, with consent from the interviewees, was recorded in audio format. Firstly, for each of them, the research described the context and possible preconceptions it might lead to, chose key quotes that represent the general message(s) of the conversation, and identified keywords. The next step looked at the interviews in a still qualitative, yet more systematic way, focusing on the main set of questions, repeated throughout the interviews. Answers to those questions

were organized in a spreadsheet in order to more easily see the relationships between them. This also helped with identifying the main themes recurring throughout all of the conversations, as well as potentially existing patterns and factors

From the images

The qualitative analysis of the photographs and videos, similar to the interviews, was conducted with the main aim of identifying recurring themes of the riverscape. They were used to illustrate the textual narratives, but they can also be seen as a narrative themselves, capturing the ephemerality of the river.

influencing answers in specific groups. Lastly, the individual narratives derived from each interview, together with the systematic analysis, led to formulating one predominant narrative of the voice of the river in Warsaw.

The research collected and compared images concerning specific thematic groups, including:
relationship between water and land, users of the riverscape, different actors of the river

Methodology diagram

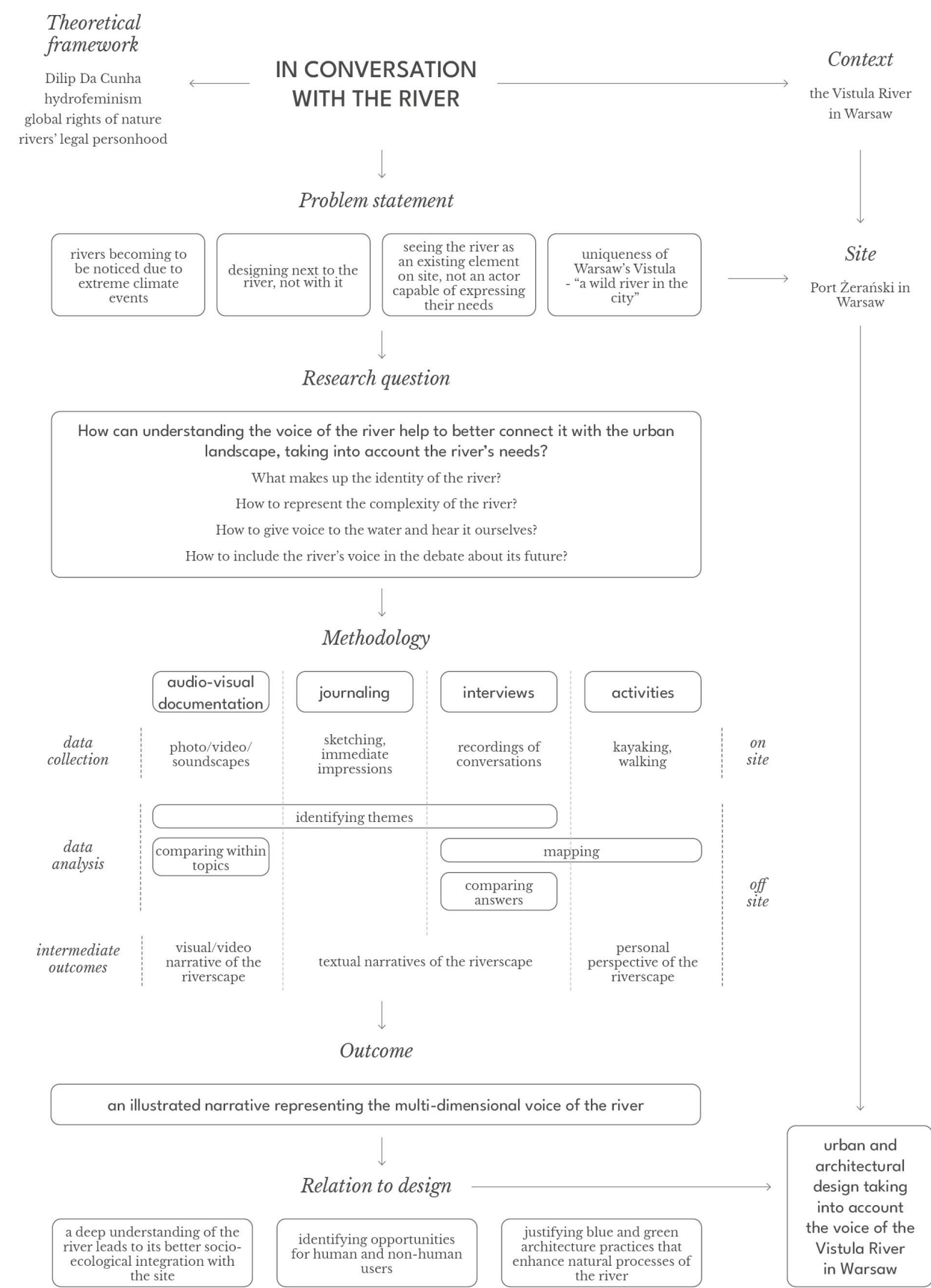


Figure 14: Research methodology diagram

Conversations with the river



The aim of this research has since the beginning been to uncover the Voice of the River, the Vistula River, which I deeply believed existed already in the very center of Warsaw, and was waiting to be heard by more people. From my own experience of living in the city, and from various media covering the topic, I knew that my hometown was slowly turning to face the Vistula again. At the same time, I would still sometimes stumble upon debates about riverine areas, discussing possibilities of development and profits drawn from the proximity of the river – in those visions meticulously paved and organized. My first thought became a question that got stuck in my head and turned into the main axis of this paper – what would the river say?

The single yet significant challenge to asking the river itself was that the river doesn't have a voice in our human understanding of the notion. To find it, I needed to find out what it means to me personally and to the broadly defined design profession. Firstly, I decided to talk with people who were more in contact with the Vistula than I was, and who could convey its message. The interviewees came from different, sometimes almost contrasting, backgrounds, and each of them represented a broader group – residents of nearby housing, city officials, nature activists, or the water sports community in Warsaw. They were like translators of the voice of the Vistula, filtering it through their own personal and professional relationship with the river. Those voices are collected as narratives resulting from the interviews, filtered again through my own interpretation. They are also brought together in a more analytical form, allowing to identify which aspects of the narrative are

Cross-analysis of the interviews

Analyzing the interviews in a systematic way was a necessary background to properly understand the Vistula River and to be able to distinguish between recurring elements of a broader picture and aspects present only in specific conversations. The table shows a synthesis of each interviewee's answers to each of the questions from the basic set. They are analyzed as a matrix of information – conclusions from every row represent key takeaways from each interview, columns summarize answers within the same topic, and all of them together are used to define general

contrasting, complementary, and where the voice of the Vistula was represented in unison. This way, I started understanding what the river would want to tell us.

However, I still felt like I needed to go a step further, like the interaction lacked reciprocity. In the research process, through exploring academic literature, but also following my intuition, I realized that to truly understand and care for the voice of the Vistula, I needed to build a personal relationship with it. Not only listen to the river's representatives, but hear what the Vistula wants to say. Not only listen to the voice, but enter in conversation with the river. It was a difficult task, as we still didn't speak the same language. I tried to come closer, swim in a kayak and wade in the cold water. I started identifying other than human representations of the Vistula's voice – its sounds, natural rhythms and interactions happening at its fluctuating borders. My replies, expressed in journaling, sketching and photography, became softer, more attentive. And finally, I felt like we were truly talking. In the water, we found common ground.

All those conversations are represented in this part of the paper. Starting from systematically analyzing the interviews, this section gradually evolves into a personal conversation. Each of the interviews results in a narrative, an attempt to represent what the Vistula would say. Written in the first person, they become chords in the voice of the river. Similarly to the personal immersion, which makes the voice unique. It is still included here, though not as an interview, but as a conversation.

conclusions and patterns. A detailed overview of answers from the interviews is available in the appendix.

The image of the Vistula that emerges from this analysis is that of a wild, and therefore dangerous, river in the city. Its identity varies in the perception of different user groups, however a common denominator is the uniqueness of the Vistula's natural characteristics, distinguishing it from other European rivers flowing through capital cities. At the same time the identity is rooted

in the river's historical and cultural significance, and the past and present river-based traditions, including those of Urzeczze microregion and the craft of boat building. The Vistula brings together contrasting elements. It has become a symbol of community and openness, yet some still perceive it as a divider. It encompasses both the calm flow of people around it and the dynamic one of the water itself. Finally, it allows for the coexistence of man-made, social life on the boulevards, and the space for wildlife on the opposite bank. What is characteristic for the Vistula in Warsaw is its ever changing landscape. On one hand it results in a kaleidoscope of beautiful perspectives of the river and the city. On the other – it threatens the capital with dynamic changes in water level, floods and droughts.

The Vistula already is a widely chosen place for sports and recreation in the city. It is frequented by residents, nature enthusiasts, public services and tourists. However, the main users are still animals and we shouldn't forget that the river is their home. It is a source of biological richness and therefore a threat to the Vistula's wellbeing is also a threat to ours, and the natural environment in general. To protect it, and to raise aware-

ness about the unique biodiversity, we should use zoning and keep people away from the most vulnerable areas. At the same time, we should bring people as close as possible to nature, and create opportunities for witnessing the presence of animals and admiring the natural beauty of the river. It is through more "practice", more personal engagement with the Vistula, that we can build a willingness in people to protect it, and the consciousness about its crucial role for the environment.

Our goal should be to literally and metaphorically bring the residents closer to their river. It raises a challenge of excessive anthropogenic impact and requires balanced policies, education and infrastructures. What the Vistula itself would fight for is the right to flow naturally and follow its own paths and cycles. It would advocate for clean, safe water, protecting its natural environment and animal residents, and opposing profit-driven regulations. In order to achieve those goals, we need to pay attention not to repeat the mistakes of other European cities. The Vistula has never been largely industrialized and paved over, and if it stays this way, we will never have to renature it.

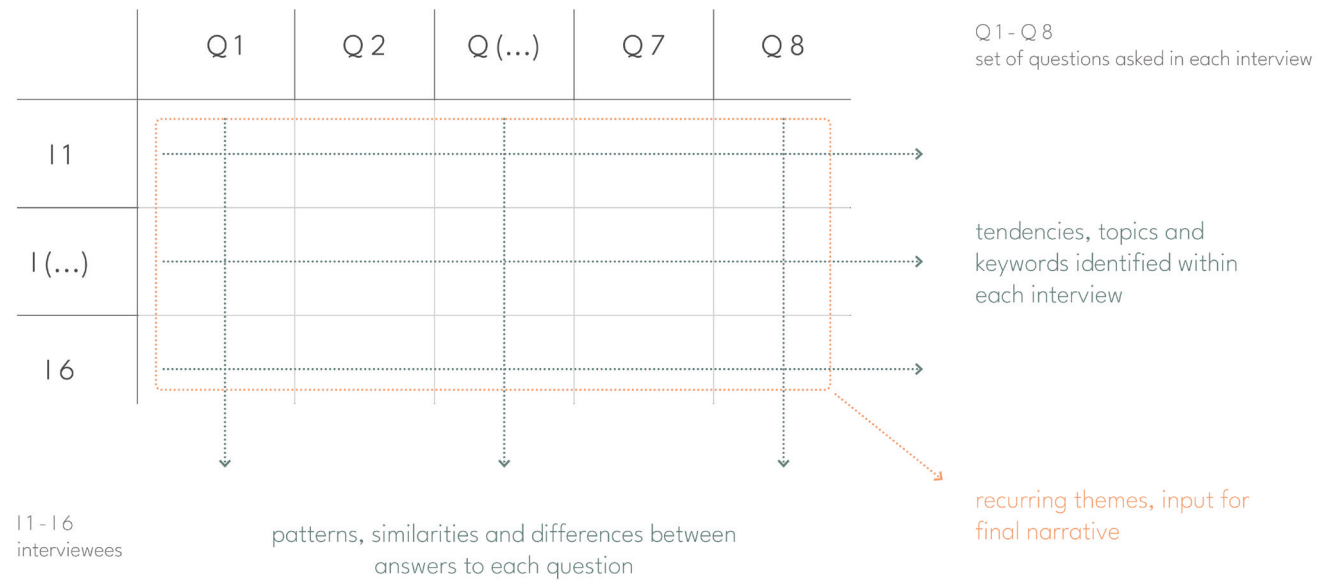


Figure 15: Cross-analysis of interviews

Note: The diagram illustrates the interviews analysis process. The answers were organized in a table to provide an overview both across questions and individual conversations. Answers to the questions can be found in the appendix.

Mateusz Senko



Białoleka District council member, Port Żerański area resident, active in the local community. He made it his mission to protect the natural environment of the port and make it a socially active park. To this end he engages in discussions both with fellow residents and city authorities at a higher level.

*In the beginning there was Nature
My voice was not disturbed, because there was no reason to disturb it
Now I have become sensitive
I am more easily offended
But I know that Animals will find a place
The question is whether you want to keep them with you
Or forever emphasize the question:*


US OR THEM?

*You find it hard to believe, but I know
That we will endure anyway
Our collective perseverance will outlive your ideals*

"Certainly, the identity of this river is created by nature. In my opinion, the Vistula is also inscribed in the identity of Warsaw. In recent years, the accessibility of Vistula has increased, Warsaw has basically opened up to the Vistula."

"I have very good memories associated with the river. I think that the fact that I settled down in such a place, that is by Żerański Canal, but also in close proximity to the Vistula River, it basically, and I'm not saying it as a high-minded thing, that it changed my life."

"There's a lot of awareness in Warsaw, and kind of also a commitment to the Vistula, to its protection, that this [the granting of legal personhood] could really work. And I think it would be projected upon the perception of rivers throughout Poland."



My name is Vistula, and I would like to welcome everyone with open arms. And with an open heart – so vast it might seem impossible to reach from one of its banks to the other. Yet spacious enough to hold a place for everyone. I wish for each person to feel that with me, they can find their own little corner – not always equal to the luxury of a velvet sofa, but honest and truly theirs. I especially want to offer shelter to those whose voices ask for their rights more quietly. They say sound carries well over water. I would like to carry especially their voice – that of all the creatures to whom I am home. And though water has always been drawn in blue, I somehow feel much more green. Up to the point when the green doesn't fit inside me anymore and overflows through every crack. Something in me breaks when I see trees levelled to the ground, and animals gripped by fear, forced to bend to human whims.

If I must, I am ready to fight for their rights and mine. Without hesitation, without unnecessary politeness, without warning signs – which you so often ignore anyway. You could say setting out on my waters and meeting their untamed currents is a fight for life – your life. But it's also a fight for mine – flowing and nourishing, giving energy to everything I touch. I hope we don't have to fight each other for that life, but that we can face the future together. You can help me breathe by clearing my pores of tons of waste. I will help you breathe, taking with me the toxins – the side effects of progress. Together, we can set an example for other cities and other rivers, celebrating beauty and diversity. And in the end, sit down together, stretch out lazily in the summer sun, and soak in wonder.

Waldemar Kamiński & Renata Brząkała



Waldemar Kamiński - Białołęka District council member, active citizen and initiator of the #ParkPortŻerański campaign, aiming to prevent building residential blocks in the area. Passionate about nature and wildlife, he organizes activities to share his knowledge with others.

Renata Brząkała - Ecological activist, volunteer in the Polish Society for the Protection of Birds, organizer of slow jogging events in Białołęka and bird observation walks along the river in Warsaw. Together with her husband Waldemar Kamiński she engages in activities to raise awareness about the unique natural characteristics of Port Żerański.

I have many faces and cannot be locked up

In one identity

It is impossible to step into the same river twice

And impossible to twice in the same manner hear

Its voice

And yet it's beautiful to listen

To the kaleidoscope of monologues

"We have a very big problem in Warsaw with refuge sites for amphibians. By these I mean shallow bodies of water with natural banks - not vertical, not paved, but natural. We are very short of such water reservoirs."

"As we build infrastructure, one meant for nature, it is good to think about the fact that it should also serve people. To build public acceptance for these projects."

"Rafting down the Vistula River for several days is a great experience, because there are long stretches where you don't see any signs of human presence. You can't see developments, no buildings, no structures. Just the shore. A fantastic experience, especially in a group of people, nature-sensitive people, who are rafting for the same purpose. [...] From the middle of the Vistula River, this Vistula looks completely different than from the shore."

"When there was a gigantic drought this year, it uncovered places that are normally completely unknown. You could go into the middle of the Vistula, stand on some island and see it from a point that is normally inaccessible. Well, and the states when the Vistula is higher. It takes away the banks, changes the terrain, takes away the trees. It's so extraordinary. As I walk along the Vistula often in the same sections, I can see how it all changes around. It's something very fluid all the time, just like a river."

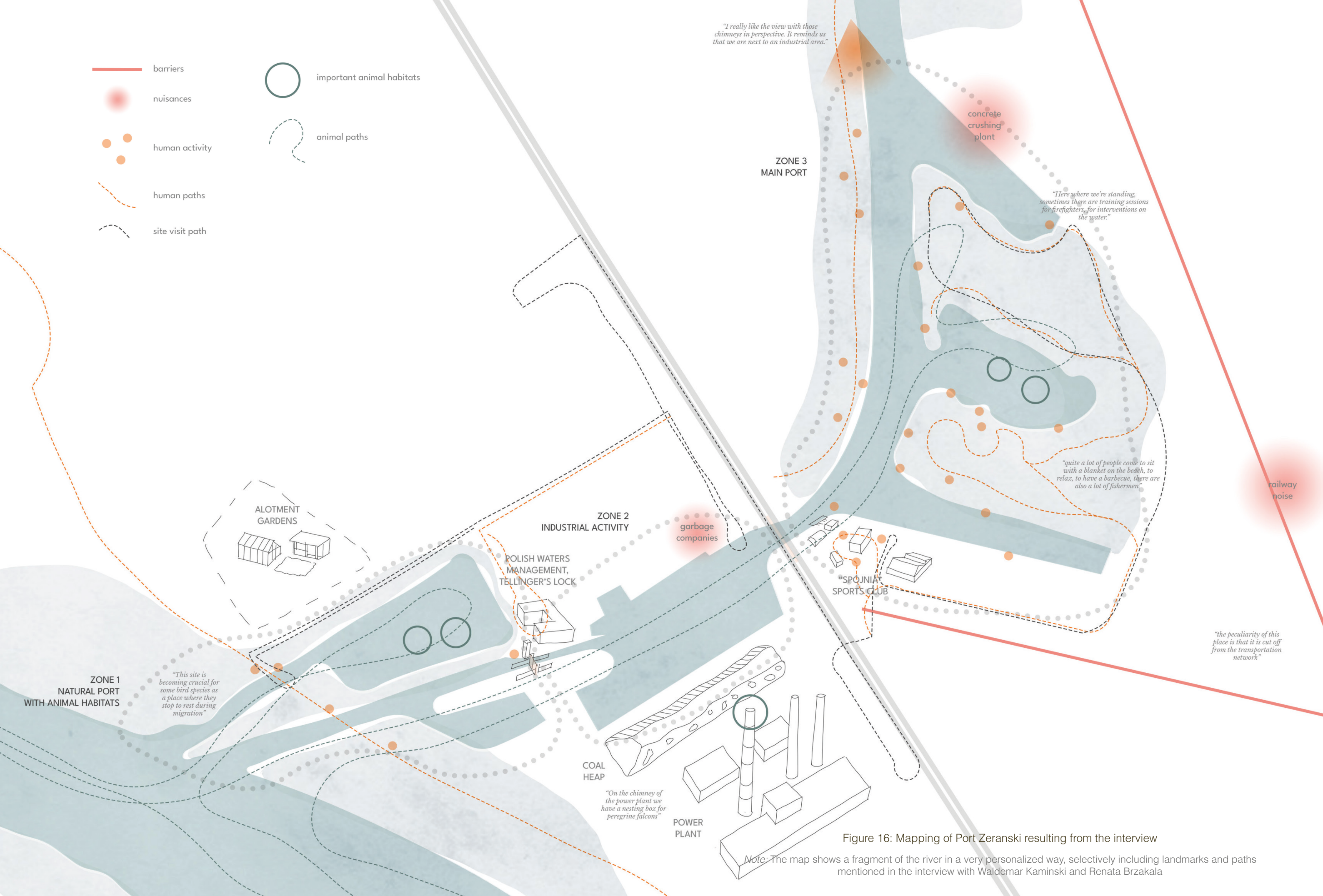


Figure 16: Mapping of Port Zeranski resulting from the interview

Note: The map shows a fragment of the river in a very personalized way, selectively including landmarks and paths mentioned in the interview with Waldemar Kaminski and Renata Brzakala

Do you remember that story about the Bar by the Pond? Over by Modlińska, in Białotłęka. A lovely little fry shack, good fish, almost felt like the Masurian Lakes. Then came the time when the bar was still called By the Pond, but the pond itself was already gone. The groundwater had dropped too low, and even pumping it in couldn't bring it back. Not long after, the bar disappeared too - the owner gave up. Now imagine that this isn't just the story of a bar by a pond, but of a city by a river - say, Warsaw by the Vistula. If you think of my identity as the relationship you've built with me, then for many years, that relationship was barely hanging on. Fortunately, things are changing. You're starting to remember that it was I who gave rise to Warsaw - and every other city I pass through. I grow into them, flow through their roots, run through your taps and spill into your bodies with every glass of water you drink.

And because we're so deeply connected, I don't want you to vanish from my life. Quite the opposite. I want to bring you joy, to serve you - but I need to be treated with respect. A bit more sensitivity wouldn't hurt, and maybe a closer look now and then. It's thanks to me that so many birds live in Warsaw or stop here on their journeys. Most of them you don't even notice,

because the most extraordinary natural performances happen when your kayaks are already tucked away for winter. You rush to pave over more land - "because nothing's happening there." But more is happening than you realize. You just have to open your eyes to see it. Sometimes I wonder if you only know how to appreciate and how to behave in what's official and ordered. Is that why I attract like a magnet people who always seem to leave their trash just beyond the designated bins? Still, the biggest threat isn't neglect or being called "undeveloped land." The real danger comes when you develop a place so thoroughly that it can never be reclaimed - neither for me, nor for yourselves.

I have so much to offer. Something for everyone. Sometimes I feel like a minor - young, dependent, and sitting on a vast fortune. And everyone wants to make decisions on my behalf. The boat owners want to sail me all year long, but I'd rather choose myself when the time is right. I ache from the dams and levees pressing in on me. I don't want a weir, and as for the power plant - it can learn to manage without reshaping the river. What I truly want is to show you how breathtaking nature can be when seen from the water's perspective. And to be, along my entire length, a national park.

Piotr Gawel



Head of Spatial Policy Department in Warsaw's Architecture and Urban Planning Office. The office is responsible for developing urban planning strategies for the city on small and big scales, including long-term policies.

We didn't have the best relationship until recently

You were just pouring out your dirt

And you counted on me to listen indefinitely

Things have changed a bit since then

Maybe you are growing up?

And instead of stomping your foot you hear the reason in the voice of an adult?

"Żerański Canal was constructed in the 40-50s. It also influenced peculiarly this whole hydrological system, because it was a district.... I mean, at that time it wasn't a district, but there were these various villages in Warsaw, crossed by streams, small rivers, and they dried up after the construction of the Żerański Canal, because the water table lowered."

"The river is still, excluding the boulevards part, rather treated as a natural element of the city. In my opinion it's a good thing, but different, for example, from other large rivers in European cities [...] there, the rivers are so heavily urbanized and sometimes you can say that they're sewage, while the Vistula is a natural watercourse. In my opinion, this natural character prevails."

"It seems to me that educational, promotional activities are better, so that people appreciate the Vistula and pay attention to it and treat it as an asset, as something that needs support and care. And not something to take for granted, because it's easy to lose that what you don't pay attention to."

"It's nice to see in autumn and spring, when you drive along Wisłostrada and there are these flocks of birds, they treat the Vistula as their highway to the south. You can see how they fly, sometimes they fly a little over the road, a little over the river. I think that for them it's also a nuisance - the roar of cars and exhaust fumes. If it were somehow enclosed in a tunnel, it would of course be outrageously expensive, but it would be both for the benefit of nature and the city."

*"And now, let's all come together and talk about the future of the port."
The moment I heard it, I nodded in approval - after all, it's a part of my long body, though lately somewhat neglected. And everyone did gather, and everyone had their say. Everyone but me. No one asked for my opinion, even though my well-being is the well-being of all. Someone even mentioned the poor animals - "It's unfortunate, but they'll have to move."
Do you realize I could say the same about you? I could, but I'd rather not. Instead, I choose to flow gently into your hearts. I see that the more time you take to reflect, the more you recognize the unique natural refuge I offer. I wish that before any debate, every participant was required to spend a week in nature, to know me up close. But in the end, this is a debate where I have no voice.*

So I need voices to defend me with the same determination that developers fight for new foundations poured into my ribs. I need you to protect the nature I bring to life - the honking and cries of birds flying in formation above me. If you neglect me, I won't disappear all at once. I'll wither slowly, fading bit by bit. Until one day, you wake up to silence, and only a dried birch whispers: "If you see me, it means it's already too late."

Remember, our relationship is yours to shape. When you polluted and abandoned me, you had to turn away. The moment you cared for my waters, you drew closer again. So much is in your hands. I'm glad you want to spend more time with me. I only hope that your embrace will be warm - but not so tight that it leaves me gasping for air.

Jakub Sitkowski



Former water sports (SUP, canoeing) competitor and current coach in the sports club in Port Żerański. He shares his passion for professional sport with the new generation, advocating for safe and efficient infrastructures. Through sport he comes into direct contact with the river and observes its changes.

Wild river in the city

It abides by its own rules

Or maybe in our city it should abide by ours

It is unpredictable and capricious

But if we put all our heart into it

It will also give us its own

On the river stage we can grow

The river shapes the land around us

But it shapes us too

"I've been here since 2007 and I've been trying to get to know the Vistula. I think it is a wild river in the city. This is my opinion on the subject. [...]Recreationally I think it is a great place. Sports-wise, for me it is still to be discovered."

"What do I see as the goal? Security, to find some sense of security, unless this Vistula is just to look nice in pictures. Well, because currently it is not really functional."

"It's simpler for me if I get the knowledge package. I'm not necessarily going to wind up talking about it all the time, yes? But if a topic comes in for me under the title of ecology, or animals, or anything like that, then yes, I'm able to pass on that knowledge - as I think all trainers who would potentially do such recreational activities would. Because it clearly fits into what we should be doing here."

"In fact, this wild current, the impulsiveness of the Vistula, how it accumulates abruptly at some points, is really very interesting. And the boulevard shows a peaceful lifestyle. So I think these are two interesting temperaments that meet within this river."

I am a wild river in the city. That's what you call me, and I can't say I disagree. The more I think about it, the more I like it. It could even work as a slogan, don't you think? "Vistula – the wild river in the city. Visit now in Warsaw." Sounds pretty good, doesn't it? I like to show my true nature sometimes - especially where you try to suppress it. The more you drive your piers and bridge piles into me, the more I rise and churn, just to remind you who you're dealing with. But I know that my restlessness, my constant changes, make you wary of spending time in my presence, as if I were some untamed animal. And yet, just like that animal, I long for connection. I want to show myself to you, to help you understand me.

I want to begin my day with the older athletes, those whose competitive careers ended long ago but who can't imagine their mornings anywhere but on the water. I want to spend my afternoons with the younger ones, for whom being with me fills the future with hope. And finally, I want to

end my days with those who somehow find solace in my unpredictability, in a world full of turbulence. Maybe it's selfish, or maybe it's beautiful, but thanks to rowers and kayakers, I feel seen. Someone out there looks at the city the way I do. I am not alone. Someone gets close enough to try to understand me. I may not be easy to tame, but I want to be your second home.

And I still want to be the first home for the animals. I hope that from the seat of a kayak, you will learn to see them with greater care, but I won't let you get too close. No beaver should wake up one day to find a human's room built next to his lodge. I can't speak in your voice, so I rely on those who spend their days with me, who know me best, to speak responsibly on my behalf. Many voices are strong, but I hope the strongest one will be the one closest to my own. My future is in your hands.

Jan Piotrowski



Warsaw President's Plenipotentiary for the Vistula River, position assigned to the city's Board of Greenery. His tasks include coordinating events centered around the river in Warsaw, as well as promoting and educating about the Vistula's biodiversity. He is in charge of the project "The Vistula District" - a set of events and activities related to the river, organized from spring to autumn.

HUMILITY

The river teaches us humility

In the face of the unpredictability of the elements

Towards its inhabitants

The real ones

For we are only guests

The river connects

Even if we think it divides

VISTULA IS FOR EVERYONE

"It sounds a little bit like a crazy idea, but I have an ambition to get to the point where every schoolchild in Warsaw swims at least once in their life on the Vistula River."

"We invite residents to use these boats, get on these boats and see that this kind of recreation is highly recommended, very Warsaw-like and very beautiful. And we always repeat the slogan, which I like very much, that "Warsaw from the deck of a boat is the most beautiful," and indeed it is."

"Once when I was winter swimming outside of our official event, I just happened to be in the water with a beaver, and in such situations I am the one who feels uncomfortable. I'm generally afraid of all animals, but when I see a beaver within desk distance, let's say, and he sticks out from above that water as I do, I feel a lot of respect."

"So it's still surprising that in literally half an hour we are all able to be in the most beautiful place in the world, which is simply the natural Vistula River in the middle of the city."

"It is absolutely not necessary to make the mistakes that the West made and now return to renaturalization. We don't have to do it, because we never engineered it the way they did."

"The Vistula is my place on earth. In fact, it is the place where I feel best. A place to which I immediately want to invite my loved ones who visit me. To which I take my children, where I play sports, where I walk my dog. This is the first place that comes to mind when I want to go somewhere, to relax a little, to have a little fun. Everything I need in the city, I can find by the Vistula River. So this is simply my place on earth."

As a river and a woman, by my very nature, I am a hydrofeminist. By giving you drinking water, I nourish not only you but also the web of dependencies and meanings of which we are all a part. Boaters often think I belong to them, but the truth is, I belong to no one - I carve my own paths. I belong to no one, yet I am here for everyone. For the athletes and those who just want to sit and watch, for cyclists and pedestrians, for the old and the young, for the believers and the non-believers. You are all the same to me, just as I am the same for you. For you, I have always been a symbol of freedom, and I wish to remain one. But you must remember that freedom must be used wisely, with respect for others. With respect for the animals that were here long before you and for whom I am home.

You may think I am exactly as you see me now. You believe you can tame me, even as the planet and its climate shift in unpredictable ways. But no, I can do things you will never foresee, and my power will remind you of your true place on this Earth. That is my role - to keep a red warning light flickering, to make sure you guard against both excess and scarcity. If drinking water runs out, there will be no recreation, and animals will lose one of their most vital migration corridors. And you - disconnected from nature - will become less human, less alive. It is true, I do not offer you swimming areas in Warsaw like those of the beautifully constrained rivers of the West. But not because I wish to take something away from you, and not even because you once took something from me by polluting my waters.

We have moved past that - I have healed, and you have learned. I simply wish to be myself and to keep my natural state within your city. I am not dangerous like a poacher, but rather like an innocent child's shoe to an ant crossing its path. I am stronger, and through that strength, I continuously teach you humility.

You sometimes say I split Warsaw in two, dividing it into "us" and "them." But I divide so rarely. I flow into the gaps between your beliefs and prejudices, showing that we can simply be "us." After all, would you say that an aorta splits the body in two? I want you to know me better, to spend more time with me. Stay longer, and I will show you how close wild boars, beavers, and herons live to you. Immerse yourself in the moments where, on the surface, not much seems to be happening. Walk, observe, listen. Just be. Stop for a moment and appreciate the beauty that simply exists. Drift with me and see how breathtaking your city is from my perspective, the one I see every day.

I have one request for you. Do not repeat the mistakes of the West. There is no need - you can learn from what they did to my sister rivers. You are wiser, more mature, but you shouldn't get too comfortable in that feeling of superiority. Stay sensitive and show your children the wealth I offer you. So that in forty years, we may meet again at least as we are now - or perhaps, even better.

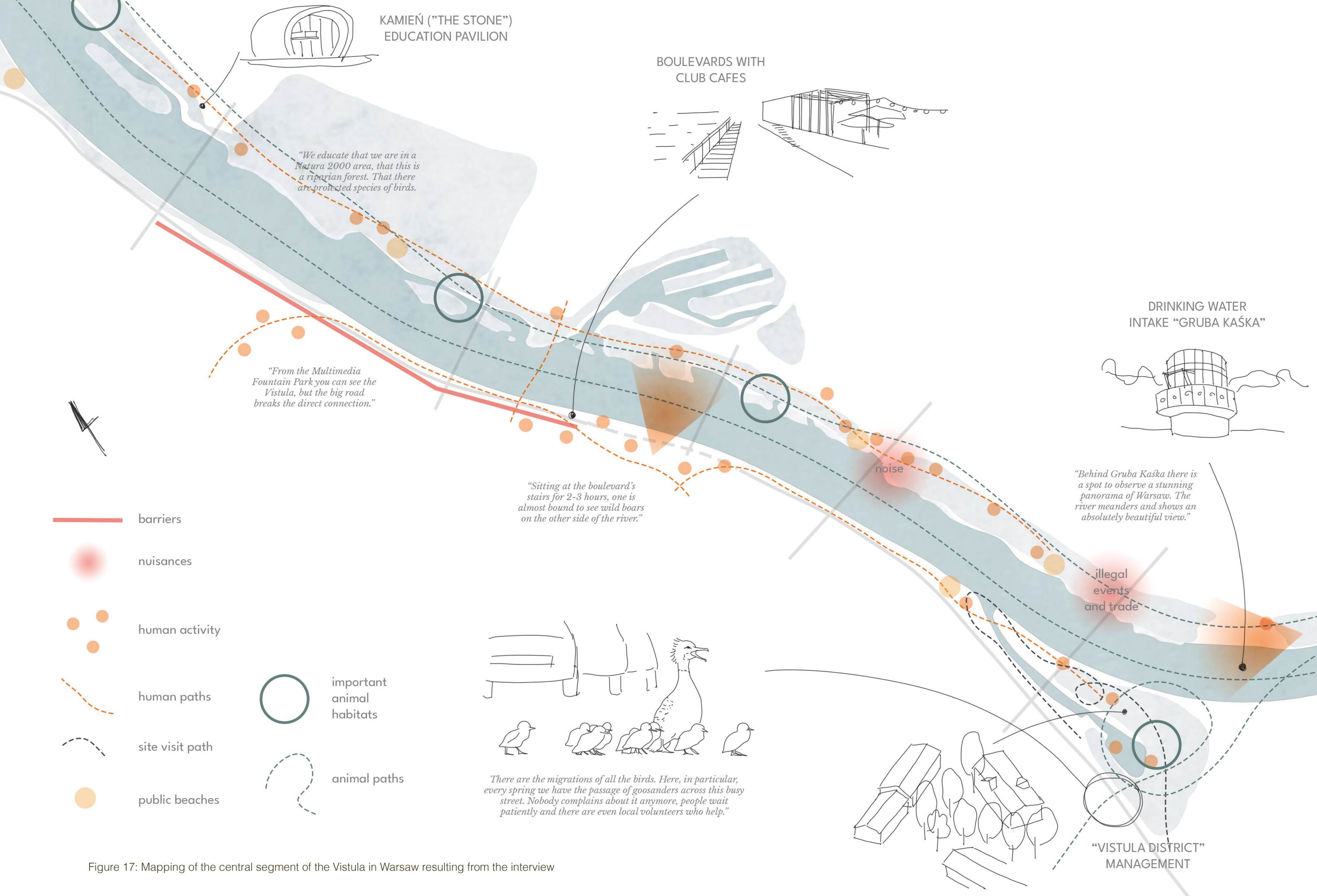


Figure 17: Mapping of the central segment of the Vistula in Warsaw resulting from the interview

Maciej Kaufman



Architect from Warsaw, one of the designers of the park currently being constructed in Port Żerański. In his work he focuses on integrating the natural processes of the river into design.

We know Vistula

Where we meet her

Because it is impossible to know her whole

Vistula is surprising and it is dangerous

Different every time

A bit like the Warsaw Mermaid

Vistula is created by people

They keep her in invisible checks

"Amphibians are losing habitat in our developed world. [...] Coastal vegetation allows amphibians that need to breed on land to walk across that concrete and come out. [...] This connection is often missing because of the regulation of rivers."

"This is the Polish pride a bit - manufacturing. So this kind of manufacturing function could still take place there, because there are fewer and fewer of those areas in cities, and it's not a nuisance."

"People don't think about how much creation is involved. Basically, people think that infrastructure is something that creates itself. That no one invented or designed it, especially blue and green infrastructure"

"There is a connection, in my opinion, between the coat of arms of Warsaw, the mermaid, and the Vistula River. Maybe the danger of the mythological water is embodied in this."

"Vistula seems wild, but in reality it isn't. It's largely regulated, but it still gets her way. It absorbs this form of regulation and transforms it in its own wild flows."

It always starts with a bang. Shoots spring up, buds bloom, insects buzz, amphibians awaken from hibernation, and the increasingly blue sky is every now and then crossed by the flutter of wings of returning birds. Suddenly we are much closer - I stretch upward filled with energy, my edges fill with the quivering of the young, people emerge from their cramped apartments with unprecedented enthusiasm, as if this parade of colors and concert of new life were happening for the first time. And I know that next year it will be exactly the same. Then everything will slowly calm down, mature into a slow coexistence in the warm sunshine of early summer. My shores will be filled with beachgoers, walkers, weekend sportsmen and wildlife enthusiasts. And I will hover for a while again, waving to you as if to say goodbye and thank you for another summer together. The birds will fly away, the amphibians will disappear into their burrows, and the people into cramped apartment blocks. A handful of the more persistent will remain, who will sail through the winter lethargy with me and wait until things start again, as always, with a bang.

Seemingly as always, and yet you are surprised every time. Maybe it's a matter of our different perspectives and scales, or maybe it's how strenuously you sometimes refuse to understand and adjust to the natural rhythm. When you act against it, I am forced to show you your place. Sometimes I feel that you know so little yet. But you are getting used to the mystery, just as you got used to the mermaid in the Warsaw coat of arms. She is no longer so scary, yet still shows strength and inspires awe. I believe that this is how you see me too, after all, where else than in the Vistula to find a mermaid in Warsaw? I won't deny it, I can be mysterious, sometimes threatening, but not as wild as you may think. People think I've always been like this, because they've never met me any other way. But your predecessors cut my sides with spurs, covered me with rubble, patched me up with artificial islands. There's a lot of water under the bridge now, and I don't blame you. I was able to heal my own wounds, which became my ornaments, like tattoos of Warsaw memories and willow. What I do hold against you, like my other sister rivers, is the garbage that still flows in us. Is asking for clean water too much, with all that you get from me? Don't take my life, because I want to continue to give you yours. And every year, as always, start with a bang.

Katarzyna Prokopiuk

It was very difficult for me to find a place today. I guess the river is not so easy to get in touch with after all, even though we have been trying to talk for some time.

High concrete wharf, no bench.

It struck me that there is almost always a medium between me and the river.

a pier

a kayak seat

a step

rushes

an inflatable mattress

And it's even hard to sit down, because the pants will be wet.

And what do you have to say about this? What are you so defensive about?

Only when we expose our weaknesses and see our true selves in the mirror of the waters - only then can we truly meet.

I feel like we are dating. You look phenomenal every time, yet with each meeting a little different. You show me what you want to show. And I, fascinated, try to get to know you better.

Isn't it fascinating how we get to know each other? Or rather - we try to get to know each other. We want to meet, but somehow we find it difficult. We build walls and bridges, just to avoid touching each other. It's as if we deliberately keep each other at a distance. Although if I'm honest, I think distance sometimes does us good.

Where is the river?

And where is land?

We meet in the same place, yet each of us is completely different. I remembered you differently from years ago.

I look at the map and see myself walking on water on the screen. I dip my foot deeper. But I plunge it into the soft, loose sand. And again I ask myself - where is the river? Is it possible to draw its boundary?

I put on wellingtons and enter the water. I will not hide - I am afraid to enter barefoot. My feet slowly sink into the muddy bottom, as if I were putting down roots. I can feel the river flowing around my feet. I can see myself forcing it to change its route.

After a while, I begin to feel the water skimming my feet through the socks. However, it turns out that it's just the cold, oozing through the leaky wellingtons.

Water somehow always finds its own path. It flows in puddles that seem to have neither inflow nor outflow. And yet it keeps flowing.

I, meanwhile, am moving away across vast stretches of sand. Or maybe of the river?

I noticed that with time, I naturally switched from referring to the Vistula as "it", one of many rivers, to using the word "her". Something that in our native language, Polish, comes naturally, in English marked my own recognition of the personhood of the Vistula, joining the conversation from the same level.

The voice of the Vistula



The conversations I've had with representatives of the Vistula, and my attempts to come in closer contact with the river itself, uncovered the myriads of nuances embodied in the waters flowing through Warsaw. An ephemeral sparkle of sun on an even more ephemeral wave left behind by a duck flying away to its next destination. A sentence said at the right place and time, to express the intimacy of interacting with the river. It undeniably brings joy to pick up those details and be confronted with yet another new perspective, when you think that you already know it all. The Vistula, like mentioned in one of the interviews, does teach us humility. I learned to stay humble towards her, and humble within my understanding of her voice. A voice in constant flux, changing together with its owner – surprisingly dynamic for

a symbol that's been present in Polish hearts and minds for millennia. This volatility can be seen and embraced as part of Vistula's identity. However, there are also other, more stable, aspects of the river that contribute to its voice.

The Vistula speaks and presents demands through people who coexist with her in many ways. They come from various backgrounds and represent sometimes contrasting groups of interest. If one of them becomes stronger, and louder, they can tune the Vistula to their personal needs. In my conversations, I talked with people who engage with the river in Warsaw in not necessarily contradictory, but definitely diverse ways. Each of them, as shown through the narratives, could become a voice of Vistula on its own, potentially

a beautiful and relevant one. However, it was through bringing those perspectives together that I could attempt to formulate the essence of the voice. Looking at all the conversations and narratives at once, it was easier to sift out individual experiences, needs and frames of reference from universally present elements of a bigger picture. Independent voices of the interviewees and myself could come together to form the voice of the Vistula River in Warsaw.

Or maybe a voice of the Vistula River in Warsaw? Even though it comprises several perspectives, it's impossible to incorporate all the other ones. Changing the group of people I talked with or the path I took during my walk could lead to a different final result, a different voice. However, I don't

think it would differ a lot. In fact, I wouldn't consider it a completely separate voice, but a complimentary understanding of the same one. The representation I chose echoes the conversations that I've had and the personal relationship with the river that I've developed over the past few months. It would be impossible to understand the river's voice without this personal engagement, which is intrinsically present in the collective narrative. It is also an invitation to keep an open mind and sensitivity to all other nuances that could potentially happen within the narrative. And with an open mind, to personally engage with the following voice of the Vistula River in Warsaw.



Figure 18: Where water and land meet

Note: Photographs from site visits, combined together, show varied and difficult to define is the line (?) where water meets land. Where should the border of the river be drawn?

The voice of the Vistula River

You call me the queen of Polish rivers. I am flattered, but I don't think I should get all the credit. As siblings, we share responsibilities and cherish every smallest stream. It is true, however, that I have witnessed Poland grow and shrink, fight battles, celebrate victories, sometimes mourn losses. Never give up. I've heard love songs sung at my riverbanks and the laughter of little ones playing in my waters. I do see you as my children – sometimes stubborn and rebellious, growing up so fast, but always loved. I have faith in your maturity to eventually come for my advice in troubled times. I am not going anywhere, ready to stay by your side and face what's coming. I remember back in the day when you would visit me more often. Am I growing old? I was already old when you were born, I barely remember the times when I was your age. Then it must be the ups and downs of our relationship, they say it's inevitable. Just bring back the memories of the summers your grandparents and I spent together, and I'm sure we can make it work. I love seeing smiles on your faces and feeling that you get to know me a bit better. With a tear of tenderness, I recall the days when new capitals and new generations grew along my banks. When your great-great-grandparents joined forces to build wooden boats and labored hard to carry goods across the country. Those were times of toil, yes, but they carried with them a joy and a deep sense of freedom.

In the turbulent current of Polish history, I was always a common point of reference and a symbol of unconquerable freedom. And I want to continue to carry the message of freedom until the end of times. There's no point in trying to fit me inside any frame. I leak out of boundaries, ever-changing, crossing the lines you try to draw around me. I flow and precipitate, softening the hard edges of human worldviews. Carving my own paths, I

belong to no one, yet I am here for everyone. The athletes, the sunbathers, the weekend joggers, the children and the elderly, the kayakers, dog walkers and social dancers, the locals and the tourists. Within the boundaries of respect, everyone can find their space. At the riverbank, we are all the same. It is I who give life – to all, equally. I connect you all through my water, the same water you drink. Do you ever stop to think how close you are to me when you take a sip from your glass? Eventually, we all become interdependent bodies of water – part of the same cycle, drawn from and returning to the same source.

By becoming one with me, you also become one with the entirety of riverine life. I am delighted, and honored, that I can create a home for so many beautiful beings. Just imagine the little tippy taps of a beaver proudly carrying his log, the soft touch of an otter's paw and the barely noticeable pinching of a crayfish. Being woken up from daydreams by the singing of thousands of birds. I will never cease to be amazed. You miss out on so much when you look away – just as the temperature dips slightly below your cozy comfort zone, and the kayak is no longer a place to sunbathe. The crowds retreat, making way for an extraordinary spectacle of animal life, witnessed only by a handful of nature lovers. Maybe that's exactly what makes it so beautiful. I already told you that by the river everyone is equal. Should then humans be prioritized just because their horizon is too high and their vision too broad to notice anyone else? On the contrary, I would say. You've had your time, and you couldn't make the best use of it. It saddens me to see animals forced to act according to your human needs.

This is why I sometimes have to fight for the rights of those too weak to stand their ground. I hope they can find stability and comfort in the flow of water. Until my last breath and my final drop of water, I will fight for those to whom I've given life. For the sake of plants and animals, I will be capable of taking back what was never truly yours to begin with. And then, once again, I'll have to listen to accusations – how unpredictable, how unruly a force of nature I am. But it's not my fault that your tightly shut eyelids keep you from seeing the red light of the warnings I send. You

close your eyes even harder, trying to wall yourselves off, to brace for the worst. What you don't understand is that the more you try to contain my freedom, the harder it will strike back at you. And once more, I will have to tend to the mindless wounds you've inflicted, absorb the weight of what you try to force upon me. And in the flowing water, I'll have to hide the tears for the freedom I've lost. Yet we could live in the same rhythm as nature. Just stop acting against it, and I won't have to show you where your place on this Earth truly lies.

It's hard to deny that I've earned the title of a wild river in the city. I wear it with pride, because it speaks to a time when your ancestors knew how to benefit from my gifts while honoring my nature. And the fact that you didn't keep up with Western Europe's idea of "progress" now allows me to breathe and to shelter life. Still, I'd say I'm not just a wild river in the city. I carry within me a harmony of contrasts. The lively, bustling boulevards on the left bank, and the haven of wildlife pulsing quietly on the right. The slow-moving waters of summer, and the swift spring current, sliced by bridge pillars. My openness to all living beings, and the way some still say I divide your city in two. It always weighs on me to hear that. I dream of a time when not a single person thinks of me that way. I never divide - I always connect. I connect parts of Warsaw, its residents, and people with nature. For me, it's never "us and them," but always just us - together.

I like it when you come by, it's always a pleasure to have a chat or sit in silence and contemplate. You bring me a sense of novelty with the activities you come up with. And a sense of nostalgia with the ones that have barely changed since centuries ago. I hope that being here with me helps you to understand me better. From your perspective, I might seem eternal. And I hope I can stay with you for millennia, carrying the memory of your time on Earth. But I am never the same, it's never

an identical constellation of atoms and flows. Sometimes I change drastically. Sometimes you follow me along my banks, and you meet a different river. But there are times as well, when a simple branch alters my direction. A different bird sings, marking a unique point in spacetime for that ephemeral moment. I think to some people beauty has to be grandiose. Big gestures, breathtaking views. Don't get me wrong, I can also give you that. But I prefer to find beauty in the little things. In patterns I carve and in textures on my skin. In the mesmerizing kaleidoscope of colors. In the details which combined make our world bigger.

I rarely ask anything from you, so I beg you to listen this one time. You might think that I take what's mine by force, but I truly would prefer not to. We could work together towards the same goal. To preserve the resources and the joy that I want to give you. And above all to protect nature to whom I give life. The past has taught me not to hold grudges for too long. But some things stay with me, like a weight in the current. I give you so much, and yet, there are moments when you still respond with bags of waste tossed into my waters as if I were nothing at all. And still, I want to keep giving. I want to keep offering you life, but I need space to breathe.

So much depends on your choices. But there's one thing I ask to keep for myself: the freedom to decide how and where I flow. I want to be what I've always been - a natural river running through your city. I hope you'll continue spending time with me, getting to know me and the life I carry. And I need you to advocate for me where I can't do it myself. My well-being, and my future, lie in your hands. Show your children what I have to offer. Teach them to be sensitive - to nature, and to one another. And maybe one day, I'll meet them as I meet you now, sharing with them the beauty of this city seen from my waters.

A plea for recognition

The central message of the Vistula's voice is a plea for recognition, respect and coexistence between humans and the natural world. The river is not only a geographical landmark, but a witness to, participant in and active creator of Poland's history, tradition and ecological life. The Vistula has a timeless, nurturing presence, almost like a parental figure to consecutive generations of people living in her proximity. Aware of the changing world and human progress prone to error and neglect, she continues to offer beauty, life and connection. She challenges the human-centric view of the world by emphasizing her role as a unifier and life-giver to all beings, not just humans.

The Vistula expresses nostalgia for a time when people engaged with it more thoughtfully and adjusted their practices to the dynamic currents. The river was also perceived more directly as a source of life, wellbeing and prosperity. In the voice of the Vistula, there is a hint of sorrow for how this connection and personal relationship with the river has deteriorated. It also highlights what is often forgotten in the public debate – that the main inhabitants and users of the river space are animals. Any threat to the water and its availability is also a threat to the natural environment and in result – a risk for humans as well.

There is a lot of faith in the possibility of respectful coexistence that can be heard in the river's voice. It appreciates its mostly natural character and warns against the mistakes of overly commercialized rivers of Western Europe. The Vistula enjoys the company of Warsaw's residents and hopes that spending more time with the river can increase their sensitivity towards nature. The river also functions as a metaphorical bridge - connecting generations, social groups, and urban spaces - countering the perception of division. It asks humans to advocate for her, respect her autonomy, and pass on the love for nature to future generations.

The Vistula's voice invites reflection on how profit-driven activities impact nature, criticizing anthropocentric attitudes that prioritize human needs at the expense of other life forms. It stresses that true progress lies not in reshaping nature to fit human designs but in learning to harmonize with it. The river's voice is both a love declaration and a warning - full of admiration for humanity's potential, but painfully aware of its destructive tendencies. It calls for a new relationship, rooted in mutual respect, humility, and care.

Discussion

This project set out to explore how creative narrative forms can serve as tools for raising environmental awareness and engagement, cultural reflection, and participatory knowledge production. Its aim was to reframe the relationship between Warsaw's residents and their natural riverine environment by giving voice to the Vistula River in a form of a poetic monologue, rooted in historical context and expanding it onto current socio-ecological conditions. The discussion that follows examines the limitations and implications of this approach, reflecting on potential use cases in the future.

As stated previously in this paper, it could be argued that the narratives, together with the final one, represent a relatively personal perspective, with the outcome being dependent on the specific people that were interviewed. They are also dependent on the author who personally engaged in the interviews and experiencing the river. This personal engagement was needed to gain a deeper understanding of the Vistula River and the topic of research. However, although intrinsically presented through the lens of personal interpre-

tation, the text is still based on universal findings. The interviewees were chosen to represent bigger groups and their interests, acting as spokespeople for various ways of interacting with the river. The poetic interpretations and narratives resulting from the conversations were developed alongside a thorough analysis of all the answers, identifying recurring topics across the interviews. The cross-analysis was also one of the ways to address the challenge of distinguishing between the individual intentions of the interviewees and the input informing the final voice of the river. The questions were designed to lead the discussion into the river's point of view. Collecting multiple perspectives on the same topics allowed for filtering out individual interests and focusing on more universal patterns. It also led to a significant conclusion – while using the presented research methods, one must accept that some views and opinions will be contradictory, yet they still influence the identity of the river. The point is not to exclude the perspectives that don't fit into the main narrative, but to find a balance and a possibly accurate proportion between different outlooks.



Figure 19: Sunrise at the Wyspy Swiderskie nature reserve

The scope of this research, resulting in a graduation thesis, was naturally limited and could be developed further in the future. This applies mostly to the scope of field research – interviewing more people and groups of users would lead to a broader database to observe recurring patterns, and in result more universal and reliable conclusions. Groups suggested for further development of the research include those with potentially radical standpoints – shipowners and industry representatives on one side of the spectrum, and hydrobiologists on the other. The study showed that another big user group are school teachers and school children.

The case study chosen for this research was the Vistula River in Warsaw, one to which the author could relate the most, which was important for the chosen methodology. In the past fifteen years, the city has been carrying out multiple initiatives and investments under the name Vistula District to increase the quality of the riverine urban space and attract residents. Those efforts resulted in redefining the relationship between the river and the city. However, the research showed that some groups still perceive the Vistula as a dividing element in the city and wouldn't choose to spend time there. The paper also addresses the risk of

increasing anthropogenic pressure and giving priority to human comfort and financial profit. Highlighting the river's perspective can be a means to educate and bring attention to environmental needs.

This work was primarily meant as an example for urban, landscape and architectural designers, as design education often lacks this kind of sensitivity. It is also a call for a sustainable approach in policy making and thinking twice before treating river purely as a commodity. Both designers and policymakers can apply conclusions from this research to responsibly bring people closer to the river to build in them a relationship with the natural environment. Finally, the presented method can be used by educators to teach children and workshop participants to find their own voice of the river and to feel more responsible for its well-being. The methodology can also be applied by other researchers to different cases in similar socio-geographic contexts. The approach can be used in discussions about legal personhood of rivers and other initiatives related to their protection. After adjusting the interview questions, it can even be expanded to other natural elements of the urban environment.

Potential for design

The insights gathered through this research not only deepen the understanding of human-river relationships but also offer fertile ground for design interventions that support ecological awareness, inclusive public space, and the coexistence of human and non-human species. The attempt to translate the voice of the Vistula River to a commonly understood format – narrative writing - generates a sensibility that can lead to a broader perspective in designing urban river spaces. Considering the river's perspective, or the river's voice, can inspire urban and landscape design strategies that move beyond anthropocentric paradigms. This new understanding opens the potential for design to serve as a medium of dialogue between human and non-human stakeholders, and to educate the former about the multidimensionality of riverine spaces.

The research argues that when designers cultivate a relationship with the river, which can be achieved by reading and constructing narratives and personally engaging in water-based activities, they are better positioned to create meaningful, context-sensitive interventions. Understanding the voice of the river can help them in choosing responsible design solutions and predicting the implications that those will have on the river's natural and social environment. If designers go through the process of building a relationship with the river themselves, it will be easier for them to propose projects that encourage a similar process in others. Both the literature review and the interviews led to a conclusion that bringing people closer to the river, through design interventions or education campaigns, cultivates emotional bonds and a sense of stewardship. Such relationships can be more impactful for long-term ecological protection than legal mechanisms like granting personhood to rivers. Both can contribute to the protection of the natural environment, but undeniably designers play a major role and their decisions should be well-informed. Urban and architectural strategies should therefore enable observation, reflection, and interaction, but with attention not to disrupt the river's and its inhabitants' natural rhythms. The goal is to design for a respectful proximity and coexistence of different user groups and the river itself.

An approach that arises from the paper is to rather design with the river than against it, in order to accommodate its voice and future-proof the projects. Recognizing the river's power and unpredictability invites design strategies that consider its cycles - seasonal changes, flooding, and migration patterns - rather than resisting them. Throughout the history of Poland, this kind of approach was predominant due to the lack of engineering resources and techniques. Today, we can learn from traditional knowledge and practices, such as those of the Olęder settlers, and reintroduce models of adaptive coexistence to the urban landscape.

Conclusion

Understanding the river has long meant being able to control it and use it to generate profit. This historically prevalent approach has led to rivers being caught between conflicting urban pressures and, at times, disregarded as crucial elements of the natural environment. In design, this control is still often expressed in reducing the river to a shape on a map and a source of financial gain divided among various actors in urban planning debates. These approaches risk disintegrating urban rivers from their socio-ecological context and are less likely to stand the test of time. To design projects that are sustainable, respectful of the natural environment, and capable of building and maintaining a relationship between city residents and their river, we need a new paradigm in planning – one that listens to, and includes in the debate, the voice of the river.

Such a shift in perspective requires a deeper understanding of both the river and the various user groups that interact with it. This can be achieved through narrative tools that - supported by data collection and analysis - position the river as an entity with agency. An actor with its own rhythms, needs, and forms of communication - demanding respect, space, and freedom. The message that emerges through the voice of the Vistula in Warsaw is a longing to be acknowledged as a source of life – both literally and in a deeper, relational sense. It is both a warning light and a plea for coexistence between the human and the more-than-human.

Attuning to the river's perspective, conveying its sentient and autonomous presence, enables a more empathetic and reciprocal relationship between urban society and the natural environment. The approach presented in this paper is an invitation for planners to move beyond utilitarian views and recognize the river's needs, rhythms and agency – crucial for designing urban spaces that both respect the river's ecological integrity while allowing for meaningful human activity. By centering the river's voice, urban design can shift from restraining or enclosing the river toward creating spaces that observe, adapt to, and coexist with its dynamic nature. The lessons and methods of engaging with the Vistula are widely applicable, offering a framework for more sensitive, inclusive,

and sustainable design strategies for other urban rivers as well. Above all, this project is an invitation to an ongoing commitment to listening – to the river and to other more-than-human voices that have too often been overlooked. In a world facing the threat of ecological degradation, the continuous and unfinished practice of openness and sensitivity becomes an ethical imperative - and a necessary element of designing sustainable, responsible and well-connected urban river spaces. So that for generations to come, we can soak in the beauty of a city seen through the lens of its river. The same – or even better.

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Appendix - interviews answers

THE RIVER	
people/question	What makes up the identity of the Vistula?
Mateusz Senko	<ul style="list-style-type: none">naturemeeting place and a symbol in the social consciousness of Warsaw's residentssymbolic border between the left and right side of the city, but at the same time a symbol of openness
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">Vistula's identity rooted in Poland's history and cultureeach town that Vistula flows through, including the former and current capital, builds the river's identityin the last decades, the identity, interpreted as people's relationship with Vistula, was visibly weakened; what rebuilt a completely new identity of Vistula for residents was the Vistula District initiativenot just one identity of Vistula - it's different for each group of its users
Piotr Gaweł	<ul style="list-style-type: none">a place in the consciousness of Warsaw's residents - some parts build the identity of the city while others are more important locallystrong presence in the lives of young peopleinfluence of former beliefs about the river (barrier in the city, poor water quality) on older residentsnatural character, distinguishing it from other rivers; a unique characteristic for a capital cityidentity building elements: natural habitats, pedestrian and bike path with beachestraditions and remaining settlements of Urzeczcie region
Jakub Sitkowski	<ul style="list-style-type: none">wild river in the city, and because of that dangerousgreat for recreation, in terms of sports Vistula still to be discoveredVistula's identity made up by the boulevard and people who use that spacetwo opposing characters of the river meeting - the calm flow of people on the boulevards, and the dynamic flow of the water
Jan Piotrowski	<ul style="list-style-type: none">a symbol of freedom, which you have to know how to use; a combination of freedom and communityUrzeczcie, the region of Olęder culture, with its traditional clothes and mixing nationalitiestraditional rafting and sailing techniquesa very dangerous, barely regulated, natural rivereveryone has their own Vistulanature surprisingly close to the city and to the residents, a river that's close to everyoneVistula connects - people, and both sides of the citya Polish element that already children hold dear; something that makes people feel at home in Warsawopenness to everyone and equality
Maciej Kaufman	<ul style="list-style-type: none">Vistula is unpredictable, dangerousthere is a connection between Warsaw's coat of arms [the mermaid] and Vistula - it maybe embodies the mythological danger of the riverVistula is not completely wild, like it might seem at first sight; It's largely regulated, but it still gets her waythe river absorbs regulation and transforms it in its own wild flows
CONCLUSION	<ul style="list-style-type: none">identity rooted in history, culture and traditionunique natural element in the city centergradually changing from being a border to a symbol of openness and connectionVistula's identity differs for each group of usersstrong presence in the consciousness of young peoplecoexistence of opposing characters: man-made and natural, calm and dynamicbarely regulated, dangerous and powerful

THE RIVER	
people/question	There is a movement of giving legal personhood to rivers. If Vistula was recognized as a legal person and had its representatives, what do you think would it want to say?
Mateusz Senko	<ul style="list-style-type: none">Vistula District initiative as a representation of the river, its identity and partially its voicea movement to give Vistula legal personhood could work in Warsaw, where there is a high level of awareness and engagement in the topicit would positively influence the situation of other rivers in Polandpostulates: stronger protection against careless regulation
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">several groups and organizations who would want to be Vistula's representatives and each of them would say something different in the name of the riverjust being a river and simply flowing in its own rhythmopposition to dams and dikes that squeeze her on the sidesshe would say that she feels intoxicated by sewage and trash dumped into hershe would tell people to... leave her bebeing a national park along its entire length
Piotr Gaweł	<ul style="list-style-type: none">many legal challenges and consequences of a river having its own personhoodin an abstract way - Vistula is an independent, binding element
Jakub Sitkowski	<ul style="list-style-type: none">Vistula speaks through the voices of all the people that come in contact with it, that want to cooperatethe voice that is the strongest will winsport should be stronger, a more visible accent on Vistulawe have to cooperate with the river and make sure it is safe for everyone who uses it
Jan Piotrowski	<ul style="list-style-type: none">the cleanliness of its water is necessary for our wellbeingteaches us humility through the dangerousness, doesn't want to be approached irresponsiblycan show its power when climate and nature changeunlike what we might think, it can't be tamed, it's capable of doing things that we would never expectits role is to show us our place on the planet, to make the red warning light in our heads light upshould Vistula disappear, we will become less natural, and in result less human
Maciej Kaufman	<ul style="list-style-type: none">Vistula's claims would be similar to those of other Polish rivers; Vistula and Oder have sources relatively close to each other, they flow through the same countryVistula, like other Polish rivers, should fight for the constant improvement of the cleanliness of its water
CONCLUSION	<ul style="list-style-type: none">stronger protection against profit-driven regulationability to flow naturallyimproving water quality and cleanlinessincreasing the safety of the Vistula and its userssetting a good example for other riverswe would become less natural and less human without the Vistulathere are many groups that would want to represent the river, the stronger voice would win

THE RIVER	
people/question	In what situations does the river show its own ways of living and flowing?
Mateusz Senko	<ul style="list-style-type: none">• plant succession; nature takes back for itself the terrains near Vistula river• kayaking or SUPing on Vistula river is a fight for your life• low water level in summer, high level in autumn; high water levels show how much of an area the river can occupy
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• extreme states of Vistula - either very high water level or completely dry• during droughts, being able to stand in the middle of the riverbed; during floods, water taking trees with it and changing contours of the land• landscape changes even within days, especially around sandbars, where a small water level difference shows completely new patterns
Piotr Gaweł	<ul style="list-style-type: none">• moisture and riverine plant species in an old streambed of a dried-out stream• if the river is forced to move out (because of climate change or human actions), it takes biological richness away with it• changing flow, despite a very restricted area available in the city, changing the sandbank landscape• the water level falls and areas that were previously underwater are now taken over by plants and animals• during droughts the river uncovers what it has taken from people• showing its presence through the fauna and flocks of birds for which it is a migration corridor
Jakub Sitkowski	<ul style="list-style-type: none">• some parts of Vistula are inaccessible by a motorboat, because of changing riverbed and water levels• Vistula is dangerous and sometimes very dynamic; it's visible next to bridge pillars, where water swells form
Jan Piotrowski	<ul style="list-style-type: none">• human activities by Vistula are dependent on the weather and on the water level• some yearly events have to be rescheduled because of the long-term changes in water level cycles• there are still several people every year who lose their lives in Vistula, the river has an underrated power• the water level can change very drastically in a very short period of time• constantly changing riverbed form
Maciej Kaufman	<ul style="list-style-type: none">• Vistula can sweep away large plots of land - destruction of allotment gardens during the flood of 2010• even stronger when it is restrained by fences• it is unpredictable and it shows its superiority where there is no civilization, no suitable place to step on the shore• dynamic riverbed, level shifts and diverse subsoils• very dynamic water level, also locally - bikes left on the shore can already be in the water when you come back a moment later
CONCLUSION	<ul style="list-style-type: none">• nature taking back undeveloped terrains• big and dynamic changes in water level and the riverbed• the challenge of swimming and sailing on the Vistula• floods taking with them objects and land• droughts uncovering the river's secrets• daily landscape changes• if the river disappears, so will the biological richness and our source of life

ECOSYSTEMS	
people/question	Who are the users of spaces in or around the river (human and non-human)?
Mateusz Senko	<ul style="list-style-type: none">• animals: multiple species of birds (including swans), beavers, otters, wild boars, birds that live on or around artificial nesting islands• sports clubs, water sports olympians, children• nearby residents, campers, people who set up tents on the banks; fishermen• cyclists and joggers - around Port Żerański, but also along Vistula river• winterbathers• city boats docked in the port during winter, local fire brigades
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• birds: herons, peregrine falcons, white-tailed eagle, different species of ducks, swans (200 species of birds by Vistula, compared to only 50 further from the river), amphibians, beavers, wild boars• nearby residents• people observing nature, campers, fishermen• people relaxing, sunbathing, barbecues• cyclists, water sports, SUP, canoeing, water scooters• regional water management office with technical facilities and wintering of boats
Piotr Gaweł	<ul style="list-style-type: none">• residents of nearby apartment complexes• industries and commerce (not directly by the water)• animals: beavers, swan mussels, otters, swans, goosanders, birds for whom Vistula is almost like a highway• a mosaic of public and private land owners that make the developments more difficult• the Management of Greenery and its boats• sports people (especially water sports), recreational users of the natural embankment• (especially young) people at the boulevards
Jakub Sitkowski	<ul style="list-style-type: none">• Port Żerański: retired people early in the morning, professional sportspeople, olympians, children and amateurs groups, recreational users from outside the association, birds: ducks, swans, other animals: beavers, otters, two turtles, crayfish, fishermen, nearby residents, on weekends up to 300 people on the water• Vistula: (on water) people with previous experience in swimming and water sports, rowers and their clubs
Jan Piotrowski	<ul style="list-style-type: none">• birds (almost 30 species): herons, goosanders, black stork, eagle, white-tailed eagle, cormorants, seagulls, mammals: wild boars, moose, otters, beavers, roe deers, rabbits, bats• beachgoers from the city, “warsaw beach guardians”, nearby residents, recreational users• active senior groups, “silver tsunami” generation• tourists, people attending events on Vistula, club-cafes of different profiles and their visitors, popular culture: music videos, movies• around 100 thousand people on a long, warm weekend• public safety services, volunteers and socially engaged people• school groups• different boats and their users
Maciej Kaufman	<ul style="list-style-type: none">• nearby residents naturally drawn to water• amphibians who often lose their habitats in the developed world, frogs, hedgehogs etc. hiding in coastline crevices• educational pavilion Kamień (the Stone)• users of allotment gardens
CONCLUSION	<ul style="list-style-type: none">• animals: many species of birds, beavers, otters, wild boars, amphibians• sports clubs and amateur sportspeople• nearby residents• cyclists, joggers, people going on walks (also with dogs and children)• fishermen, nature observers, campers• municipal and private boats, water public transport• people using the river as a recreational area, beachgoers• children and school groups• tourists• public services

ECOSYSTEMS	
people/question	How does the river and its use change throughout the day, week and year?
Mateusz Senko	<ul style="list-style-type: none">• higher intensity of use during weekends, caused by lack of time during working days• remote jobs allow for walks during the day• a lot more activity in the summer than in winter• a few years ago Żerański Canal was undeveloped and perceived as a dangerous area, which has changed in recent years• bigger sense of community, more engagement in local activities to preserve the river• nature adjusts to human changes - animals moved from the site where the park and apartments are being built to the completely wild one
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• fishermen and birds observers arrive in the morning• along Vistula on weekdays more busy in the mornings and evenings (people going to work by bike), especially busy on weekends• autumn: birds' migrations, lower intensity of water sports (canoeing); boats and navigation signs are moved from main routes to wintering spaces, in spring the opposite• camping (even for several days) from late spring to early autumn• canoeing all year round, higher intensity in summer• something happening on the Vistula all year round
Piotr Gaweł	<ul style="list-style-type: none">• animals change places, superseded by human activity• the construction of Żerański Canal caused smaller streams to dry out• until 15 years ago Vistula was seen as a barrier in Warsaw, and a synonym of sewage• since the construction of the sewage treatment plant, Warsaw has been turning back towards the river, the water quality is better and more people choose Vistula as the place to spend their free time
Jakub Sitkowski	<ul style="list-style-type: none">• Port Żerański: lower intensity of activities in winter, only professional sportspeople continue training on water all year round, 15-20 years ago focus strictly on competitive sport, now some space for recreation, new generation of coaches finding a symbiosis between competitive and amateur sport, cyclicity of regular groups in sport• Vistula: animals adapt to the expansion of human activity; some flee to remaining natural areas, others become more confident in contact with people (eg. wild (?) boars), Warsaw has turned back towards Vistula
Jan Piotrowski	<ul style="list-style-type: none">• public infrastructure on the Vistula built in the last 15 years• first tasks of Vistula District investment-based, now more educational and promotional• milder winters, sailing on Vistula possible almost all year long• recent renewal of interest in traditional rafting and sailing techniques, more boats on the river, people have become more sensitive to the natural and cultural heritage of Vistula• one generation ago, Vistula as the only free and accessible alternative to expensive clubs• most cafes close in winter, highest intensity of events and visitors in June, summer is the most busy at club cafes• there isn't a time when there are no people by Vistula, but in winter there are visibly fewer• people spend time by the river mostly from Thursday evening to late Sunday
Maciej Kaufman	<ul style="list-style-type: none">• there is a yearly cycle of Vistula's overflows, users can adjust to it, at least to some extent• higher water level in spring and autumn, winter droughts• biggest anthropogenic impact from May to July, especially the first peak in May, when it's already warm• nature also functions in cycles, animals migrate
CONCLUSION	<ul style="list-style-type: none">• activities happening on the Vistula all year round, but their intensity varies• a lot more activity during the weekends and in the summer• highest anthropogenic pressure in May and June• on weekdays busy during commute hours• nature adjusting to human changes and absorbing regulation• yearly animal migrations• yearly cycles of water levels and overflows• changes in the perception of the Vistula in the last 15 years: from sewage to meeting spot, from only competitive sport to riverine recreation• more sensitivity and engagement in residents

ECOSYSTEMS	
people/question	We don't always see the animals that live in or near the river. It seems to me that it follows the principle "out of sight, out of mind". How can we bring more attention to those non-human users and protect them?
Mateusz Senko	<ul style="list-style-type: none">• legal regulation• initiatives for nature preservation - establishing ecological areas (or other legal forms of protection)• raising awareness by educating about the biological richness of the area, also through water sports• nature walks and exhibitions• learn from past mistakes and not repeat them
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• building social acceptance for spending money on nature preservation - infrastructure protecting the environment should also serve people• nature walks (there is an increasing interest in them)• zoning, showing people where they can walk and where they shouldn't• promotional and educational activities, especially those by nature organizations
Piotr Gaweł	<ul style="list-style-type: none">• keep the shoreline possibly natural• the closer to the main course of Vistula, the easier it is to protect natural riverine areas in the city• educational and promotional activities, teaching people to appreciate and care for the natural environment of the river• low potential of impact through urban planning - it is impossible, or very difficult, to create something man-made that will benefit nature• guide to Vistula District
Jakub Sitkowski	<ul style="list-style-type: none">• info boards with only dry information are not enough• videos from the area (also those taken by visitors), displayed in media boxes• not sharing specific locations of animal habitats as a way to raise interest, but also protect them• providing sports coaches with information about the area that they can share during training sessions with amateurs and recreational users
Jan Piotrowski	<ul style="list-style-type: none">• increasing the amount of education in line with the growing popularity of urban beaches• engaging volunteers and residents in activities meant to protect wildlife• sharing information in the news, responding to misinformation in the media• events where residents can come in contact with nature or participate in river-based activities• "beach guardians" - encouraging to engage with the river in different ways• including social responsibility elements in all events - eg. cleaning the riverbanks• a set of rules on how to behave by Vistula• not showing Vistula inappropriately in the media• nature and ornithological walks, canoe trips• creating opportunities to see animals - early morning trips and swimming• a network of ambassadors• education pavilion, outdoor classes for school groups• going by the river more often and for longer periods of time
Maciej Kaufman	<ul style="list-style-type: none">• educational trail, teaching that what is not commonly perceived as "beautiful" is often a lot better for nature• attractive design of educational materials• separating animals' habitats, restricting people's access and explaining it to users
CONCLUSION	<ul style="list-style-type: none">• various legal forms of nature protection• learn from past mistakes (also of other rivers) to not repeat them• nature and ornithological walks, canoe trips• engaging exhibitions, not only dry information• restricting access to sensitive areas, zoning• possibly natural shoreline• promotional and educational activities and events• creating opportunities to spend more time by the river and see animals that live there• creating a network of ambassadors• educating the younger generation

ECOSYSTEMS	
people/question	What is the biggest threat for the river?
Mateusz Senko	<ul style="list-style-type: none">• execution of real estate plans motivated solely by economic profit• destruction of natural animal habitats, forcing animals to relocate• long construction process, constant strain on natural environment and residents (noise, heavy vehicles, cutting down trees)
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• in Warsaw drought is way more dangerous than flood; it threatens the accessibility of drinking water• climate change as one of the biggest threats• high intensity residential areas in close proximity to invaluable ecological sites• not channelling people flows correctly can lead to stamping out of meadows by the river
Piotr Gaweł	<ul style="list-style-type: none">• Port Żerański: even a water sports center can generate negative impact on the natural environment (and nearby residents), it has become a nature enclave that can now be destroyed, fragility of ecosystems separated from the main course of Vistula by infrastructures• Vistula: floods are more tangible and immediate, but in the long run hydrological drought can have a worse impact, the big road along Vistula in the center is a nuisance for birds because of the noise and pollution
Jakub Sitkowski	<ul style="list-style-type: none">• discharge of polluted waste water• lack of control over what's happening on the water and who's using it• difficult access to funding for sports clubs, especially with less popular sports; poor quality of facilities• Port Żerański - lack of necessary emergency services
Jan Piotrowski	<ul style="list-style-type: none">• pollution, people leaving trash behind after using recreational spaces• unregulated legal status of infrastructure resulting in the inability to revitalize it• lack of balance in using the river• high-intensity unsustainable use (eg. building a petrol station for boats)• prioritizing, giving privileges to one group of users• commercialization, irresponsible marketing - sampling generating trash, promoting alcohol consumption• hydrological drought• impoundments leading to disruptions in natural corridors
Maciej Kaufman	<ul style="list-style-type: none">• uncontrolled flow of people in areas sensitive to anthropogenic pressure, stamping out natural meadows• ignorance about what is best left untouched and what needs human impact to maintain the optimal plant succession stage• floods and rapid flows are a more immediate threat and more destructive for infrastructures
CONCLUSION	<ul style="list-style-type: none">• materialistic approach, initiatives and infrastructures motivated only by profit• destruction of natural animal habitats• hydrological drought, a threat to drinking water accessibility and biodiversity• lack of planning in regulating people's access to natural areas• lack of control over what's happening on the water, safety threats• pollution• prioritizing one group of users, lack of balance

PEOPLE	
people/question	What is your best or strongest memory with the river? How would you describe your personal relationship with the river?
Mateusz Senko	<ul style="list-style-type: none">• best memory: getting married in Port Czerniakowski, a branch of the Vistula River, and sailing on the Vistula as part of the celebrations• settling down by Żerański Canal and near the Vistula as a life-changing factor• Żerański Canal as the starting point for social activity - local engagement, including nature preservation, initiatives for water sports equipment rental etc.• activities related to the river - winterbathing, walks (with dogs), jogging, cycling• organizing clean-up events along the river
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• morning raft down Vistula river, starting at 6am, with a group of nature enthusiasts• rafting by boats, canoes, traditional boats• a few days' raft down Vistula is an unforgettable experience, especially outside the city, where there are no signs of human settlements in sight• both are members of the Polish Society for the Protection of Birds, so Vistula, reachable on foot in 15 minutes, is a perfect spot for walks
Piotr Gaweł	<ul style="list-style-type: none">• memories of floods and flood defences being built from bags filled with sand in the center of Warsaw• individual relationship with the river changing in parallel with the general public opinion - from negative associations and perceiving the river as a polluted barrier to appreciating the river as an integral and attractive element of the city
Jakub Sitkowski	<ul style="list-style-type: none">• being on or near water as a full time job, the port as the place where the whole family spends time• memory: transporting a friend's corner sofa on a boat, because there wasn't a van available• personal relationship with the river based on sport, which is at the same time the job• best/most recent memory: watching a military parade on a public holiday from the perspective of Vistula
Jan Piotrowski	<ul style="list-style-type: none">• “my place on Earth, the place where I feel the best, where I take my kids, where I do sports, where I take my dog for walks”• “first place that comes to mind when I want to rest, relax, have fun”• “Vistula offers everything that I need in the city”• best memory: moving to Warsaw in 2002 and meeting new friends from university; one of them offered a walk and the first place that he showed was Vistula, completely different from what it is like now, seemingly unattractive; “yet, it made me fall in love with it and the views of the city it offers”
Maciej Kaufman	<ul style="list-style-type: none">• memory of the flood wave in 2010: boulevards all under water, only road signs rising above the water; Copernicus Science Center, then under construction, was partially standing in water; then Vistula showed its power
CONCLUSION	<ul style="list-style-type: none">• being in proximity to the Vistula and a personal relationship with the river as a catalyst for social activity• sports and activities by the river, winterbathing• a source of unforgettable experiences and building a relationship with nature• the most beautiful perspective of Warsaw and the countryside from the river• memories of flood waves and the Vistula showing its power


PEOPLE	
people/question	What activities are the most popular by the water in Warsaw?
Mateusz Senko	<ul style="list-style-type: none">• jogging, cycling• walks and dog walking• nature observations• water sports• sports classes for children from underprivileged families• summer equipment rental and free classes• camping, even for several days• occasionally rafting events to commemorate historical events• summer boat rental for social events in the city center• maintenance of boats
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• kayaking/canoeing, water scooters• other water sports• walks and observations• camping, fishing, relaxing in nature• rafting• barbecues and picnics• throwing away trash• commuting to work
Piotr Gaweł	<ul style="list-style-type: none">• walks and cycling on the natural side• meeting other people on the boulevards• sunbathing and swimming at the beaches
Jakub Sitkowski	<ul style="list-style-type: none">• Port Żerański: sports events and competitions, five main water sports: SUP, canoe, water skis, rowing, dragon boats - multiple practice sessions every week, camping and additional activities - barbecues, swimming, SUP, reading, fishing, rowing
Jan Piotrowski	<ul style="list-style-type: none">• events organized by the city• going to the beaches, beach activities• being in nature, walking, observing and listening, cycling• sports: street football, frisbee, chess, fishing calisthenics and other outdoors exercises, boules, badminton, ball games• water sports, winter swimming• ornithological walks• free activities and events offered by club cafes: concerts, yoga, workouts, open air cinema etc.• sailing and rafting, municipal and private• meetings with friends, parties and barbecues• legal drinking of alcohol at the boulevards• water abstraction, using and drinking tap water in Warsaw• mass events: fan zones, parades, art festivals• (often illegal) rave and techno parties• illegal trade
Maciej Kaufman	<ul style="list-style-type: none">• walks with dogs or little kids• cycling, rollerblading• kayaking• nature observation• movement along or towards the river• using the riverspace as a recreational area
CONCLUSION	<ul style="list-style-type: none">• walks: individual, with kids, with dogs• jogging, cycling, other sports on land• water sports and recreational canoeing• nature walks and observations• camping, fishing, relaxing in nature• barbecues and picnics• meeting with other people on the boulevards• events organized by the city and club cafes• going to the beach• sailing and rafting, municipal and private• water abstraction for drinking water• boat maintenance

URBANISM	
people/question	What should be the city’s long-distance plan for the river?
Mateusz Senko	<ul style="list-style-type: none">• all plans should be established in dialogue with residents, users, and different groups of interest - it’s impossible to satisfy everyone, but it’s possible to develop a compromise that works for most• Plans for Port Żerański:• there is a spectrum of interests, from paved boulevards to leaving everything untouched• in 5 years: limited (hopefully none) real estate developments, making the area more accessible, proper water sports center• 50 years (or less): huge public natural park
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none">• Plans for Port Żerański:• maintaining the division into three parts; first (closest to Vistula) as a nature reserve, second as an industrial site, spatially separated from others, third as a water sports and social activities area with a big natural park• in natural areas: elevated walkways, observation platforms and info boards, keeping a distance between people and nature• a place for sports, culture and recreation, with an educational mission• proper pathways, potentially a beach, open swimming pool, camping spots etc.• well developed water sports infrastructure
Piotr Gaweł	<ul style="list-style-type: none">• Port Żerański: according to the workshop - a combination of residential buildings, services and a natural park, a park in the middle part• accessible shoreline, at the same time a safe space for animals that live there• responsible developments that will continue bringing the city closer to the river without destroying it• maintaining the boulevards as a social space and the natural embankment as a space for coexistence of people and nature• hiding the big road along Vistula in a tunnel to reconnect the city center with the river• new developments that also serve people
Jakub Sitkowski	<ul style="list-style-type: none">• using Vistula and its main course for water-based workouts - combining running and SUP boards• finding a symbiosis between the new wave of river recreation and the existing sport that shouldn’t be degraded• having a space in Warsaw for organizing Europe and world championships on the river• emphasis on using the river for water sports• Regulating the Warsaw segment of Vistula to make it possible to use it• increasing the safety of the river• Port Żerański: developments that will bring more interest to water sports (possibly also housing that will attract more people)
Jan Piotrowski	<ul style="list-style-type: none">• water sports center in Port Żerański• allow for every school student to sail on Vistula at least once• consult infrastructural ideas with environmental specialists and NGOs, always look for more sustainable alternatives• do not make the same mistakes that the West made; we don’t have to renature the river, because we didn’t restrain it in the past• leave the river for future generations at least in the same state in which it is now, possibly better• moderation in investments• a future in 40-50 years where we can meet by Vistula in the same way we do now
Maciej Kaufman	<ul style="list-style-type: none">• recreational functions and direct contact with the water, while preserving natural habitats and protecting the environment• a well informed balance between keeping nature intact and intentionally using human activity as a regulating element• possibility of reintroducing manufacturing in port areas, keeping this Polish pride alive
CONCLUSION	<ul style="list-style-type: none">• interdisciplinary dialogues before establishing any plans• accessible shoreline, at the same time a safe space for animals that live there• maintaining the boulevards as a social space and the natural embankment as a space for coexistence of people and nature• responsible developments that will bring residents closer to the river and build acceptance for nature preservation• increasing the safety of the river to make it more accessible

KEY TAKEAWAYS	
people	Main ideas and topics from the interview
Mateusz Senko	<ul style="list-style-type: none"> identity of the river built by nature a paradox: Vistula divides, but is also a symbol of openness plant succession, dynamic waters, nature in constant movement there is a high level of residents' engagement in Warsaw, and the Vistula should be used as an example for other cities through nature preservation and responsible management
Waldemar Kamiński and Renata Brząkała	<ul style="list-style-type: none"> multiple identities of the Vistula, depending on the user group roots in Polish history, geography and culture the beauty of looking at the surroundings from the perspective of the river protecting nature by keeping a safe distance infrastructure that protects the environment should also serve people to help build awareness
Piotr Gawęł	<ul style="list-style-type: none"> Vistula is present in the consciousness of Warsaw's residents, especially young people gradual shift in the perception of Vistula in recent decades duality and coexistence - social space at the boulevards and nature on the opposite side the river takes over undeveloped areas, brings life legal difficulties in management of riverine spaces migration corridor for birds
Jakub Sitkowski	<ul style="list-style-type: none"> Vistula is a wild, and therefore dangerous, river in the city the river needs more regulation for safety reasons, to make it more usable stronger emphasis on water sports in Warsaw a clash of two opposing characters - calm social boulevards and dynamic water showing animals on videos, but not giving away precise locations there should be control over what's happening on the water
Jan Piotrowski	<ul style="list-style-type: none"> symbol of community and freedom, which you have to know how to use rooted in the history and culture of Poland and Urzeczcie microregion a recent (15 years) rebirth of engagement with Vistula and riverine traditions Vistula is for everyone, and animals are its primary residents very powerful and potentially dangerous, unlike what we think sometimes, it can't be tamed the more time you spend by the river, the more you understand it and care for it; more "practice" in using the river is needed we don't have to renature the river, because we've never industrialized it Vistula gives us life and teaches us humility
Maciej Kaufman	<ul style="list-style-type: none"> Vistula is not as wild as it seems, it absorbs regulation and makes it its own the mermaid in Warsaw's coat of arms embodies the mythological danger of the river Vistula, like other rivers, would constantly fight for the cleanliness of its water the more you try to restrain the river, the more powerful it becomes very dynamic and unpredictable the river functions in cycles, like the nature around it
CONCLUSION	<ul style="list-style-type: none"> the identity of the Vistula River differs for different user groups, however it is mostly defined by unique nature; it is also rooted in history and culture wild, and therefore dangerous, river in the city the riverine landscape changes daily and shows its beauty in many different ways; it also shows power through floods and droughts multiple dualities: is a symbol of openness, but for some it divides; social boulevards and wild nature; calm flow of people and dynamic flow of water animals are the main users of the river and are the only group that can and should be given priority the river gives life and biological richness; a threat to the river is a threat to natural environment in general, and human wellbeing nature can be protected by keeping a safe distance from sensitive areas, but bringing people close enough to observe it and care about protecting it the more time you spend by the river, the more you understand it and care for it; more "practice" in using the river is needed Vistula would fight for the right to flow naturally and for constantly improving the quality of water, it would oppose profit-driven regulations



Figure 20: One of Warsaw's bridges seen from the natural riverbank



I carry within me a harmony of contrasts. The lively, bustling boulevards on the left bank, and the haven of wildlife pulsing quietly on the right. The slow-moving waters of summer, and the swift spring current, sliced by bridge pillars. My openness to all living beings, and the way some still say I divide your city in two. It always weighs on me to hear that. I dream of a time when not a single person thinks of me that way. I never divide - I always connect. I connect parts of Warsaw, its residents, and people with nature. For me, it's never "us and them," but always just us - together.