A monochromatic photograph of a river landscape. The foreground is filled with dense, tall reeds. A river flows through the middle ground, with several large, smooth rocks scattered in it. In the background, a dense forest of trees lines the riverbank. Several white birds, possibly herons or egrets, are visible in the water and on the reeds. The overall tone is serene and naturalistic.

Katarzyna Prokopiuk | Research Plan
Research tutor: Claudiu Forgaci
Design tutor: Geert Coumans

IN CONVERSATION WITH THE RIVER

giving voice to one of the most important natural resources

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.¹ 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. 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.

This research aims to give voice to the river and notice its agency and influence. It will focus on the main research question - how can understanding the voice of the river help to better connect it with the urban landscape?

The voice of the river entails its identity, natural processes, and socio-environmental influences. The research, through a set of sub-questions, will try to deconstruct the complexity of the river and formulate a new narrative that will allow the inclusion of the river's voice in future debates.

¹ Crow-Miller, B.; Webber, M. and Molle, F. 2017. The (re)turn to infrastructure for water management? *Water Alternatives* 10(2): 195-207



Sub-questions:

Does the river have an identity? If so, what makes it?

How to represent the complexity of a river?

How to give voice to the water? Or maybe, how can we learn to hear it?

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

Although this research can be applied to many rivers around the world, it will be focused on the specific context of Warsaw to ensure sufficient accuracy. The Warsaw's segment of the Vistula River offers a unique duality of man-made and natural landscapes. Analyzing them thoroughly will give valuable insights into both the social and natural characteristics of the river. 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.

Relevance

As a society, we've been educated to see the river as a meandering line on the map or a terrain between two lines. In urban and architectural design, it is common to follow this representation and see land and water as two separate beings, demarcated by an imposed border. 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 mysterious 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.

Theoretical framework

Questioning the status quo of rivers in the design process led naturally to the work of Dilip Da Cunha, in particular his book "The Invention of Rivers. Alexander's Eye and Ganga's Descent". It challenges defining the river as a line on the

map and encourages the reader to see it as a constantly changing moment in the hydrologic cycle.² Through adopting this new perspective, we put aside the prevalent division between land and water, seen as completely opposite. We are invited to look at them as elements in flux, complemented by social practices and natural phenomena. This research will explore the Vistula River in a similar way, defining it through the dynamic ecosystems it creates, rather than a static line on a map.

This main theoretical axis will be strengthened by 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.³ 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.⁴ 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 1974, 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".⁵ Since then, several rivers have obtained legal rights and their needs can be represented in court.⁶ 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



2 Da Cunha, Dilip. 2018. *The Invention of Rivers: Alexander's Eye and Ganga's Descent*. Penn Studies in Landscape Arch.

3 Shiva, Vandana, and Maria Mies. 2014. *Ecofeminism*. Zed Books Ltd.

4 Neimanis, Astrida. 2017. *Bodies of Water: Posthuman Feminist Phenomenology*. Bloomsbury Publishing.

5 Stone, Christopher D. 1974. "Should Trees Have Standing? Toward Legal Rights for Natural Objects." *Stanford Law Review* 26 (6): 1488. <https://doi.org/10.2307/1228012>.

6 TU Delft OpenCourseWare. 2024. "3.2.1 Case Study: Whanganui River Legal Status - TU Delft OCW." TU Delft OCW. February 8, 2024. <https://ocw.tudelft.nl/course-lectures/3-2-1-case-study-whanganui-river-legal-status/#:~:text=The%20New%20Zealand%20government%20granted,and%20liabilities%E2%80%9D%20of%20an%20individual>.

biggest one, Sisters Rivers, unites women who fight for wild and unregulated rivers, and bring public awareness to the topic of rivers' rights.⁷ All of these actions undertaken globally and in the local context constitute a starting point for this research and a reflection on how the river's voice can be represented and heard.

This research's aim, through answering the main question and the sub-questions, is to take a step towards giving voice to the river in the public debate. It strives to include the river as one, if not the main, group of interest in the conversations arising about the future of river-based landscapes. As giving voice to the river can't be executed directly, the research aims to propose other means that could lead to the same goal. It explores the complexity of the river to deeply understand the social and natural processes forming its perspective.

Research aims

In order to construct an objective perspective of the river, the research collects and analyzes a variety of points of view. The data collected in the process will include interviews with different people having various relationships with the river in Warsaw. The



interviews will be accompanied by visual elements depicting the river in different ways. Together they will form a catalogue of complimentary, but

⁷ Fop, Marcin. 2023. "Siostry Rzeki." Skład Solny. December 21, 2023. <https://skladsolny.pl/siostry-rzeki/>.



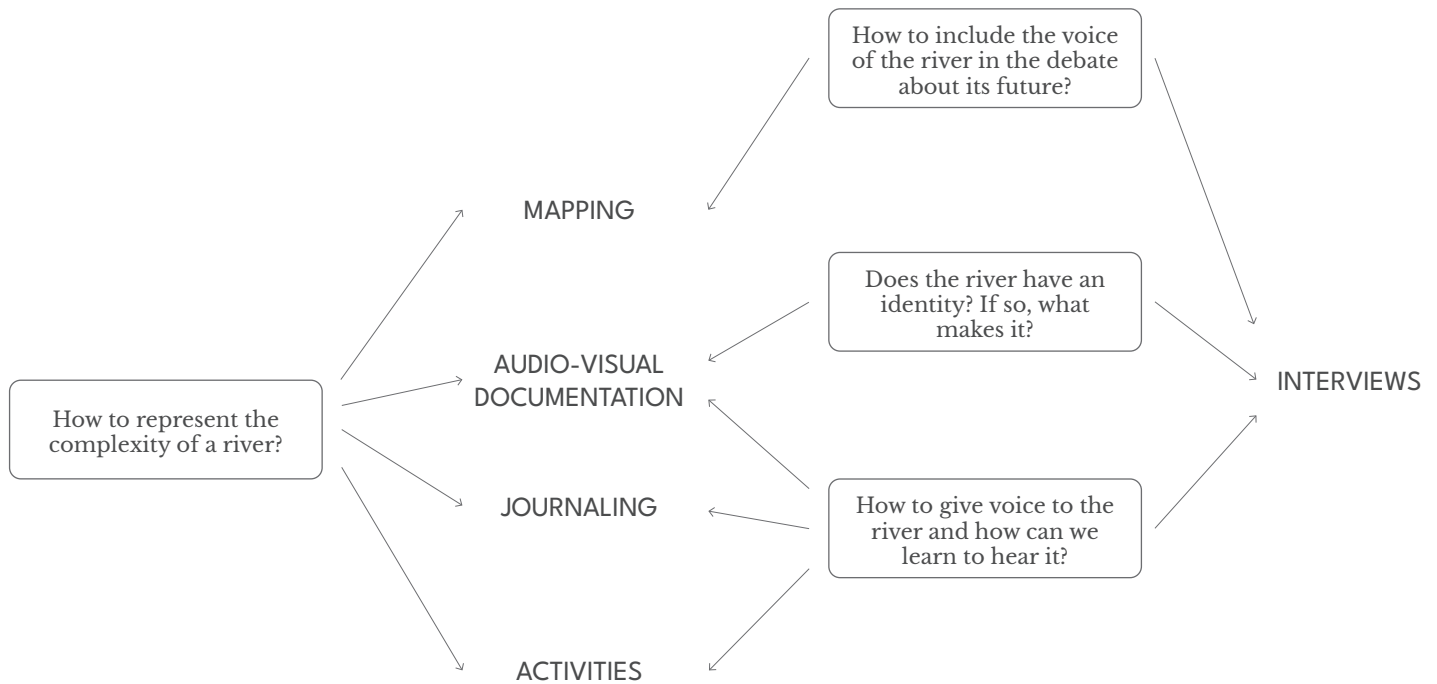
Rivers are usually represented and read as (blue) lines

sometimes also contrasting, representations of the river. Collecting and comparing interviews, images and mappings will lead to building well-informed and multi-dimensional narratives of the river.

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 will be conducted in Warsaw and will include data collection through interviews, sketching, journaling, photography, and audio-visual recordings. The activities will be mapped and compared with other mappings developed in the research process. The off-site part of the research consists of a literature review and archival mapping collection, as well as analyzing the data acquired on-site.

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. It is through a thorough analysis of the collected material that the questions will be fully answered. Together, the methodology will lead to an organized catalog of representations of the river and narratives describing its perspective.



Each method answers more than one question and each question is answered by more than one method

Field research

One of the main research methods used is field research conducted along the Vistula River and on the specific project site of Port Żerański. Observations and interviews on-site are key elements to understanding the volatility of the river and its social significance. While graphic documents represent a fixed state of the river, engaging with the Vistula itself and its users will bring a new, multi-dimensional perspective, leading to a better understanding of dynamic social and environmental processes.

The field research focuses on the main study trip in October, but also includes 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 will also be accompanied by a mapping of the research process itself and the image of the life of the river and its users that develops 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 sometimes also journaling. The route was documented in a fitness tracking application.

The two primary axes of qualitative research (interviews and documenting the river) will be analyzed separately, but also as an attempted entirety of the river's image. In the final results, interviews will be accompanied by mappings and photographs, they will also be used in producing the video material. On the other hand, visual documentation will be looked at with the background of knowledge gained from the interviews, trying to illustrate the emerging narratives and recurring patterns.

Theoretical framework

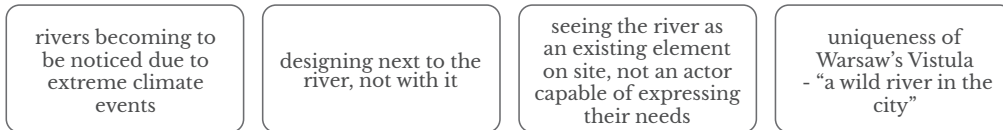
Dilip Da Cunha
hydrofeminism
global rights of nature
rivers' legal personhood

IN CONVERSATION WITH THE RIVER

Context

Vistula River in
Warsaw

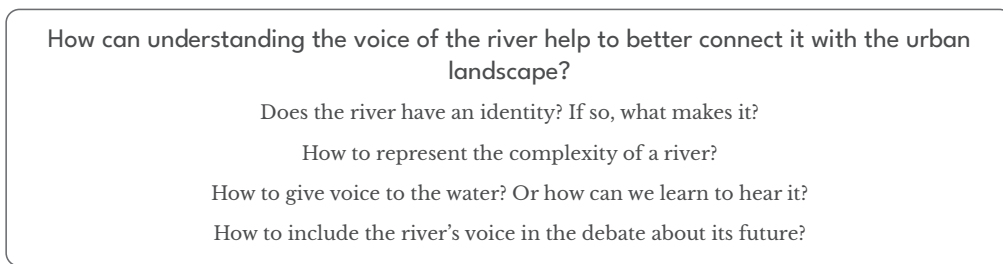
Problem statement



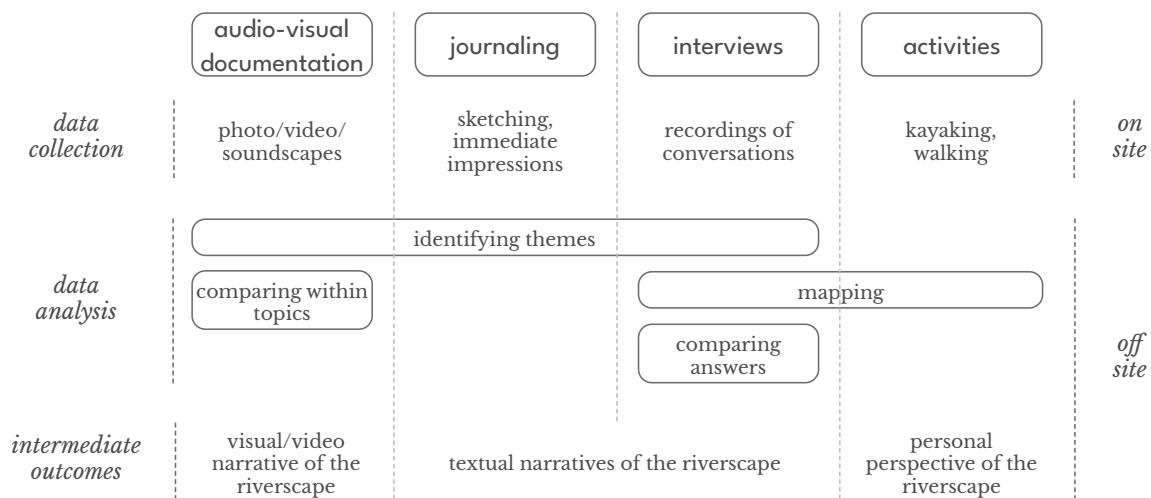
Site

Port Żerański in
Warsaw

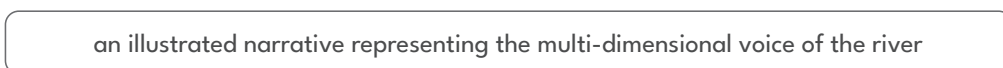
Research question



Methodology



Outcome



Relation to design



urban and architectural design taking into account the voice of Vistula River in Warsaw

Interviews

When looking for and contacting potential candidates for interviews, the common denominator was their engagement with the river in Warsaw. The aim 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 the 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 representative 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 will allow 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.

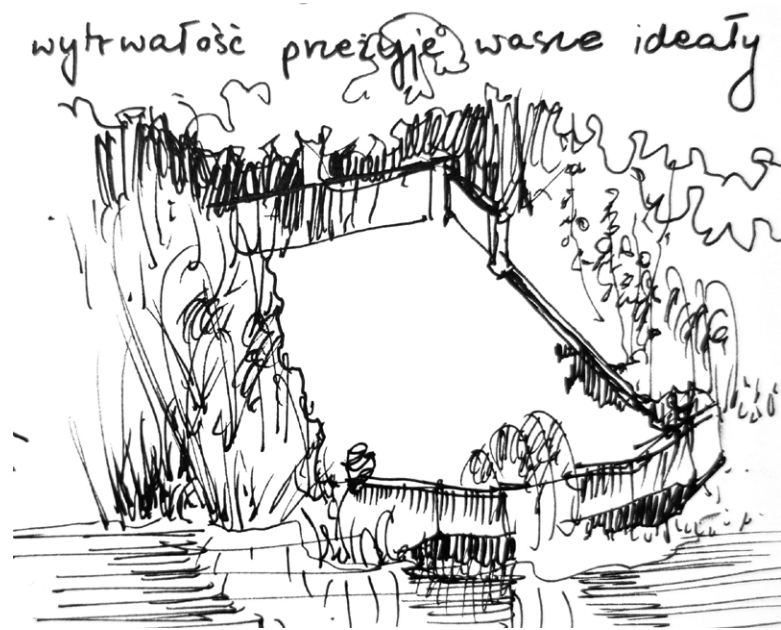
Data analysis

The data collected in the ethnographic field research will be analyzed mostly qualitatively, leading to building narratives of the riverscape and of the river itself. The chosen methodology plays a substantial role in answering the research questions focused on the river's identity and finding its voice in urban conversations. An extensive and diversified dataset allows for integrating multiple perspectives in the final results. Different backgrounds of the interviewees and comparing

their stories with visual documentation will help to minimize bias.

From the interviews

The aim of the methodology for analyzing the interviews conducted on-site is to identify themes that are common throughout all of the conversations. This will help 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. Those impressions will be 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 will shortly describe the context and possible preconceptions it might lead to, choose key quotes that represent the general message(s) of the conversation, and identify keywords.

The next step will look 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 will be organized in a spreadsheet in order to more easily see the relationships between them. This will also help with identifying the main themes recurring throughout all of the conversations, as well as potentially existing patterns.

Lastly, the individual narratives derived from each interview, together with the systematic analysis, will lead to formulating one predominant narrative of the voice of the river in Warsaw.

From the images

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

The research will also collect and compare images concerning specific thematic groups, including:

relationship between water and land, users of the riverscape, different actors of the river



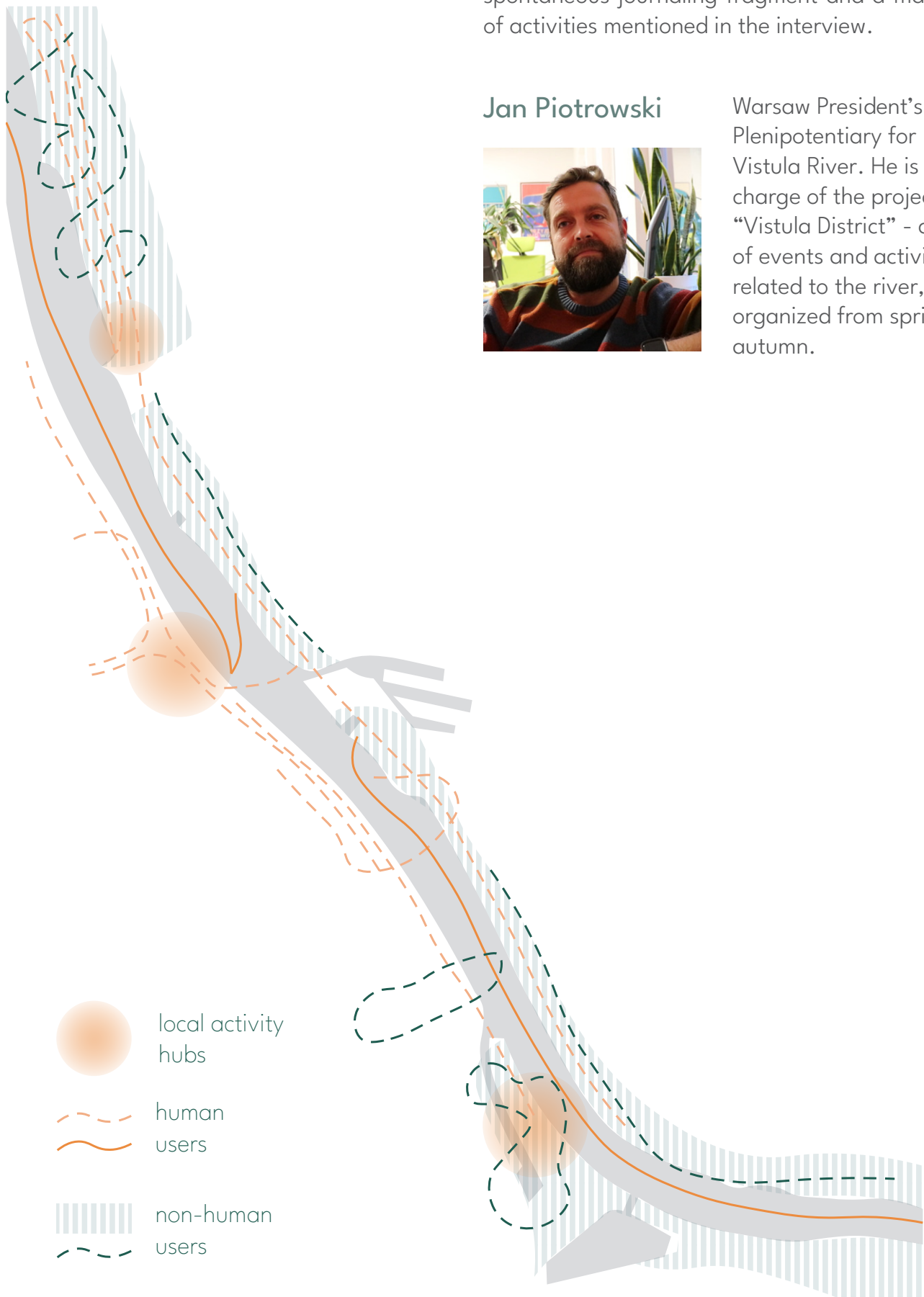
Interview example

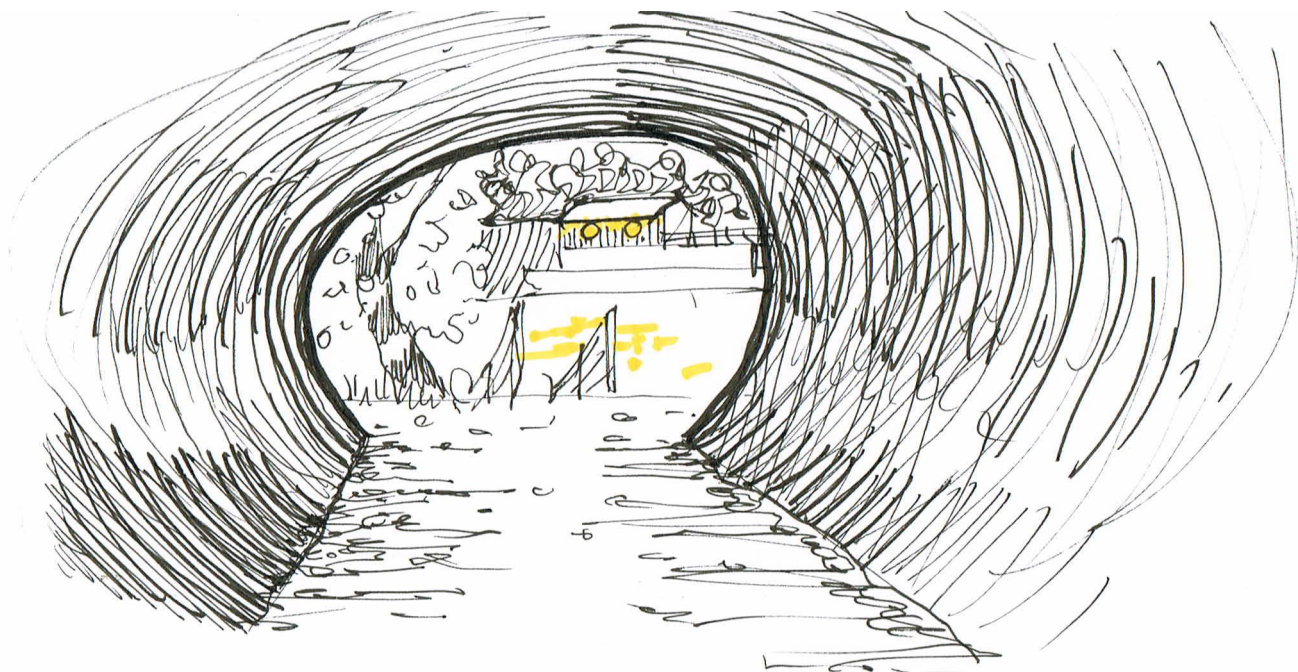
Each interview, after a preliminary analysis, will lead to a corresponding set of data and images - information about the interviewee, photographs and sketches from the site where the conversation took place (or from a site that was mentioned), a spontaneous journaling fragment and a mapping of activities mentioned in the interview.

Jan Piotrowski



Warsaw President's Plenipotentiary for Vistula River. He is in charge of the project "Vistula District" - a set of events and activities related to the river, organized from spring to autumn.





Humility

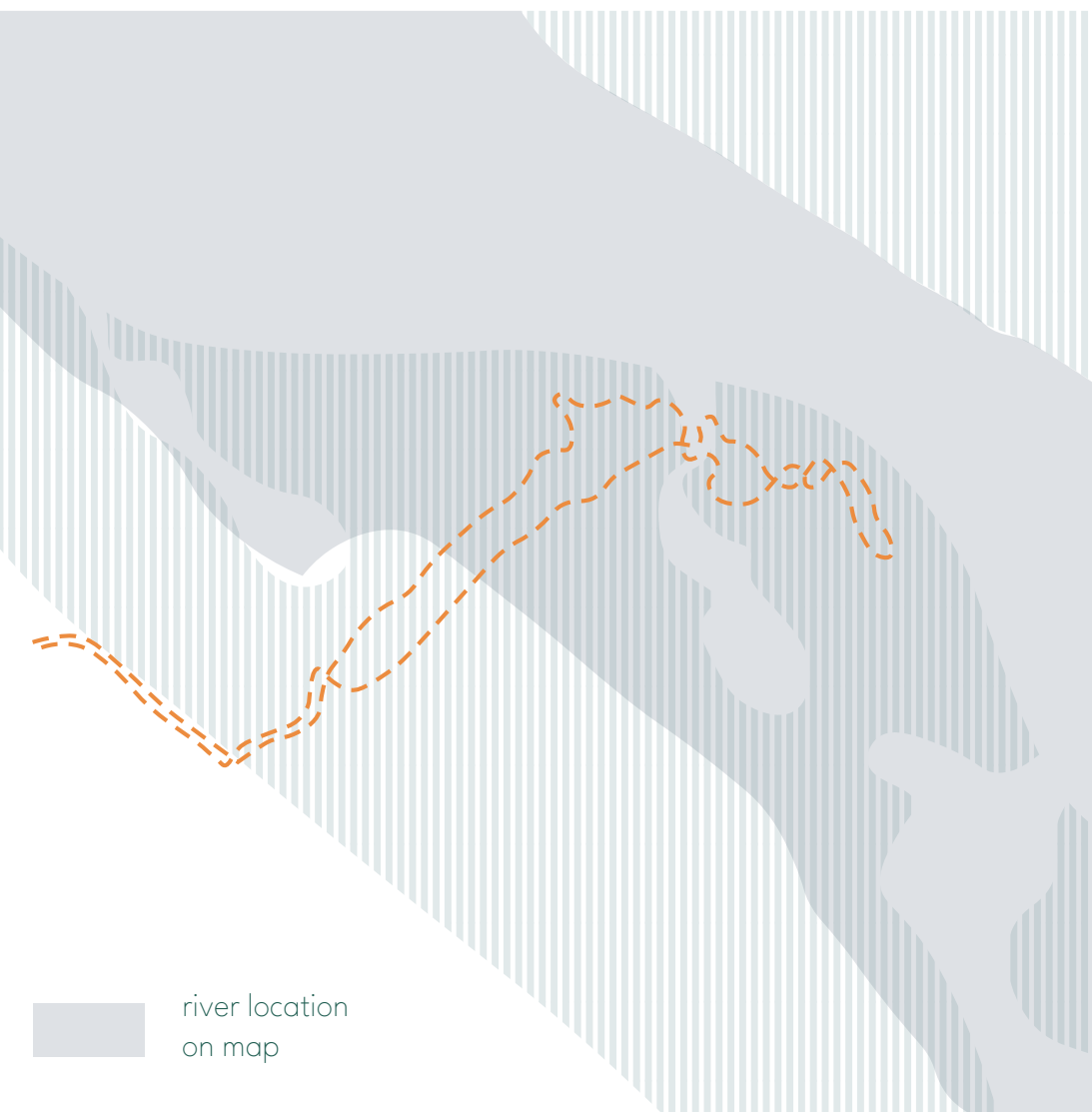
*The river teaches us humility
In the face of the unpredictability of the elements
Towards its inhabitants
The real ones
For we are only guests
The river connects
Even if we think it divides*

The Vistula is for everyone



Site visit example

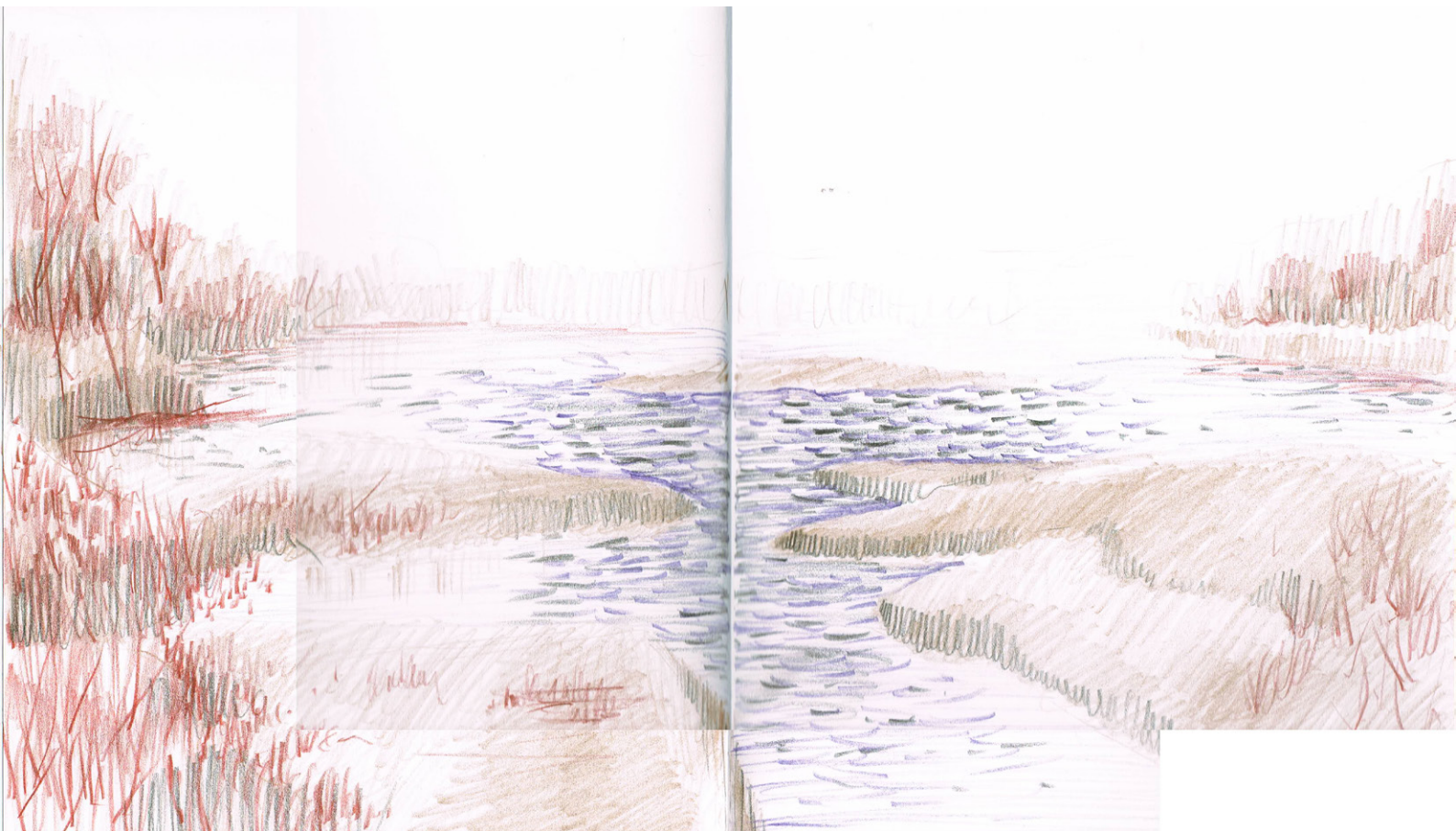
The site visits are analyzed similarly to the interviews. Each results in a collection of journaling, mapping of the visit, photography and sketches.



Wyspy

Świderskie





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 my wellingtons and step into 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.

Relevance for design

Understanding the voice of the river to include in urban and architectural planning will have a direct impact on the design project in Warsaw. The chosen site of Port Żerański is an important point on the map of Warsaw's riverscape. It plays a vital role in regulating the water level and facilitating transit through the Tillinger's sluice. Additionally, it is a one-of-a-kind water sports hub for athletes ranging from complete beginners to Olympic medalists. And, above all, it is a place of rich biodiversity and natural habitats for animals. It is a clash of active industry, stunning nature and activity, which, amplified by limited existing infrastructure, makes it a challenging site to design on.

The field research in October already provided valuable insights for the design process. It proved the complexity of the site and its undeniable

ecological qualities. It also highlighted the point of view on the opposite side of the debate – that of developers making efforts to fill the port with real estate accompanied by public functions. The general design direction, supported by local activists and council members, that was made clear during the site visit and research, was keeping nature intact to the highest degree possible while developing infrastructure for practicing water sports. According to the interviewees, Port Żerański should be equipped with social spaces and potentially craftsmanship, it should also be a place for environmental education.

The research on the river's identity and processes will help with identifying which of the needs mentioned in the interviews can and should be implemented on the site of Port Żerański. Learning to listen to the voice of the river and its residents will be a crucial step for a responsible design process.





APPENDIX

interviews preparation

People interviewed



Mateusz Senko

Białołęka 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.



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.



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.



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.



Jan Piotrowski

Warsaw President's Plenipotentiary for 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 Vistula's biodiversity. He is in charge of the project "Vistula District" - a set of events and activities related to the river, organized from spring to autumn.



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.

Interview questions

All of the interviews were based on the same questions, listed below. Comparing answers to them throughout the conversations will be part of data analysis in this research. Besides the questions from the list, there were also others, depending on the interviewee and the general direction of the interview.

The river

- Does the Vistula River have an identity? If so, what makes it up?
- There is a movement of giving legal personhoods to rivers. If Vistula was recognized as a legal person and had its representatives, what do you think it would want to say?
- In what situations does the river show its own ways of living and flowing?

Ecosystems

- Who are the users of spaces in or around the river (human and non-human)?
- How does Vistula river change throughout the day, week and year?
- We don't usually 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?

People

- What is your best or strongest memory with the river? If you think about it, what comes to mind first?
- What activities are the most popular by the water in Warsaw?

Urbanism

- What should be the city's long-distance plan for the river?