

the river keeps the score

Religiously Relinking to Budapest's Danube River

Reflection P5

Olivia Meng 4572777

20 June 2023

MSc Architecture, Urbanism and Building Sciences (Architecture)

Delft University of Technology (TU Delft)

Chair of Methods of Analysis and Imagination: MSc3/4 Positions in Practice

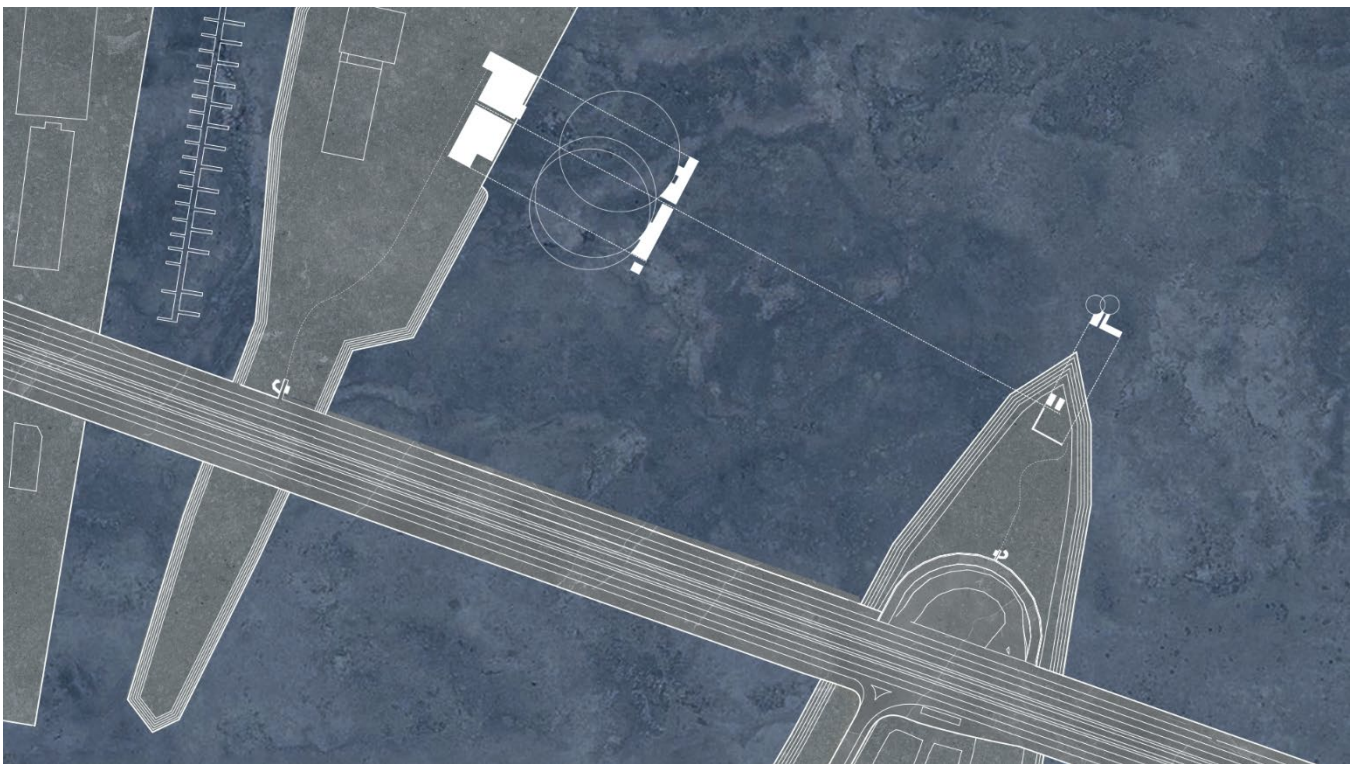
Mentors

Jorge Mejía Hernández

Willemijn Wilms Floet

Pierre Jennen

Klaske Havik



two islands in the Danube river

a museum and a chapel

linked by a bridge

Project synopsis

For millennia, humans have lived, constructed, and cultivated along the banks of rivers. Rivers are the *genius loci* of these riverside cities, carrying the spirit of the place and its people. Rivers have been the source of life upon which civilization was built: providing water, power, and transport, but are also spiritually deeply meaningful for many cultures and religions around the world. My graduation project focuses on the urban landscape of the river Danube in Budapest and its spiritual significance.

Religion is understood not only as the institutionalized systems of beliefs that operate in the world today, but also with the origin of the word. Derived from the Latin *religare*, it means 'to put together what has previously been separated'. This reveals two ways of looking at the relationship between the people and the river: the established systems of faith and their belonging architecture as methods of investigation, and the river as a natural body of water existing alongside human processes where the spiritual connection is fragmented.

The river keeps the score of the city of Budapest as a collective memory of its lengthy history. Times of war, industry, infrastructure have affected the riverbanks. Despite being a daily presence for the city's inhabitants, the river's spiritual significance has been lost over time. This project aims to reconnect the people of Budapest to the river Danube by focusing on the divinity of the natural environment, drawing inspiration from the existing landscape - the earthy hills and flowing river - and reinterpreting the typologies of religious spaces, the museum and the chapel, to curate a spiritual procession. This route reveals the river and brings a renewed awareness of the natural landscape from which the contemporary city originated.

Like a pilgrimage, the visitor travels from one side of the river to the other, passing by two nodes that provide access to each island. The route filters the views of the river through spaces that cover, filter, and reveal, using sharp and subtle contrasts. The museum, situated perpendicular on the riverbank of Óbudai Island, reveals the horizontal quality of the river flowing alongside the city. The chapel, located on the tip of Margaret Island, reveals the river as part of the horizon and the verticality of the human scale. The bridge, as the connecting element, reveals the human crossing of the river. Drawing from the rich lineage of beautiful bridges in Budapest that cross the river, this intervention not only makes the Árpád bridge more accessible and functional but also brings the allure of the other Budapest bridges to it. Altogether, the project aims to relink the people of Budapest to the landscape of the city.

Introduction

I have always struggled with making decisions. Even before starting the graduation year, I was overwhelmed by the numerous options of studios offered by the faculty. I asked myself: what did I want to learn? What kind of architect (if at all) did I want to be? Who did I want to become? I spoke with the current students of various studios, the tutors, and even the career mentor I had at the time. During the brief conversation I had with Jorge, who would become my main tutor, which became decisive in my choice, what struck me most was that I was corrected on my use of the word 'freedom' in 'freedom of choice' on the graduation topic. Instead, it was proposed that it was a responsibility of choice: the responsibility as a designer to make decisions, to justify them, and to believe in them, independently – altogether forming my *position in practice*. Looking back, it now seems obvious that the most fitting choice was the Methods of Analysis & Imagination studio. This particular studio challenges everything I thought I knew and even pushes the boundaries of what I didn't realize I was unaware of.

The studio asks students to define an individual position with regards to social and environmental challenges of contemporary cities in the European context, which are dealing with important spatial, political, and spiritual questions in the urban landscape. This year that city was Budapest, Hungary. Based on the level of independence the studio asked, I expected it to offer me a fertile testing ground for a variety of methods and instruments in order to develop my personal position as a future architect and to imagine possibilities offered by the particularities of the site. Because there was no particular design brief, program, or site, this particular challenge allowed me to address the fundamental questions I have always had throughout my time spent in the field of architecture – of why we design, build, and how to make and communicate. This was very enjoyable and inspiring, as it set me on an architectural journey through space and time. At the same time, it was deeply confronting and formative, touching upon the depths of my values, beliefs, and experiences, and how they shape my position in the field.

Reflection on research

The topic I chose to address in my graduation project began with an environmental concern. As an architect, I questioned how I could appropriately respond to the current climate crisis; as a person, I wondered how I could bring myself and others a deeper and more profound understanding of the time and place we live in. Previously, I worked in the field of sustainable operations and policy, experiencing firsthand how small gestures and changes in the day-to-day can have great impacts. In this project, I wanted to explore a more elemental definition of what it meant to be 'green' or 'sustainable'. Engaging within the scientific frameworks of ecology, posthumanism, environmental philosophy, and psychology, and considering all these topics as relational to architecture, offered me an interdisciplinary lens through which to view this challenge. I believe this approach can offer a new, progressive perspective for the contemporary social and professional challenges of our discipline.

During the research phase and site visit to Budapest, I found myself continuously captivated by the majestic presence of the river Danube as it flowed through the city. Exploring its banks, I not only enjoyed leisurely strolls along the river's edge but also discovered traces of the river intertwined everywhere within the urban fabric. Memorials commemorating historic events linked to the river, flood markings etched onto various buildings, grand facades facing the water, and lineage of beautiful bridges crossing the river all bore testament to its significance. I also saw how water was profoundly present within Hungarian culture and day-to-day life, flowing in its hills and rivers, providing drinking water, and rich bathing traditions. But in contemporary Budapest, despite being a daily presence for its inhabitants, the spiritual significance of the Danube has been lost over time. Throughout history, the river has been stained with traumatic times of war, industry, infrastructure, and urbanization. The river's historical significance is no longer felt as deeply as it once was.

Subsequently, I investigated the Danube River. In the contextual analysis, I analysed its history, ecology, etymology, and symbolism, and conducted ethnographic fieldwork on site. I engaged with the epistemes, such as ecology, praxeology, and semiology to answer my research questions. As part of the disciplinary analysis, I analysed two precedents in Budapest: the Margaret Bridge and Gellért Bath. The first being a bridge crossing the river, and the second a thermal bath showcasing one of the city's cultural traditions related to water, these analyses allow for a representative perspective on the subject of the river Danube and its relation to the city's landscape, architecture and infrastructure.

I also looked to the significance of rivers in the world as sources of inspiration. In classical Greek and Roman mythology, the river Styx is the border between the Earth and the Underworld. In Hinduism, the river Ganges takes the form of the goddess Ganga as the mother of humanity, where water becomes a body. Water and the human body also share an important relationship, for example in ritual purification. These beliefs, of sacred rivers, water, flows, play elemental roles in many cultures and religions, and therefore became central to my question of spirituality in relation to the urban landscape. Could *religion* offer me another dimension towards my understanding of nature?

I learned that religion can be understood not only as the institutionalized systems of beliefs such as Christianity, Islam, etc. that operate in the world today, but also with the origin of the word. Derived from the Latin word of *religare*, it means 'to bind' or 'to put together what has previously been separated'. I discovered a new perspective: in this context, reconnecting the intricate relationship between humans and nature is inherently religious. As my project unfolded, I have found that

architecture performs a similar role: reconnecting us not only with each other but also with our surroundings, cities, landscapes, and higher beings. Religion is all-encompassing and can be found within the greater urban context, to as the smallest building detail.

Dealing with a profound subject like religion has been the most rewarding journey, as it really touched upon my own deeply rooted beliefs. This topic allowed me to contemplate the very questions I posed at the beginning of the studio. Who am I? What is *my* religion? What is my understanding of the world and how can I design my project to embody it? I became prompted to explore how I wanted to express these values in my architectural design. With this, the graduation project became not just a problem-solving exercise for a building, but a personal, in-depth investigation of my position and identity as an architect in this world, with my design as the experiment.

With regards to the project, the choice of topic has consistently guided me through the entire year. Establishing the subject and scope so clearly and so grounded from the beginning has rewarded me with a firm foundation to always fall back on and provided me with an extremely rich library of reference projects, literature, and source of inspiration and knowledge.

Reflection on design

The design process began with consolidating the contextual, conceptual, and disciplinary analyses. Based on the results of this research, we moved towards the heuristics of architecture in which decisions had to be made: form, technique, use/purpose, and communication. According to these principles, I will describe and simultaneously reflect upon the design process thus far, up to the P4.

I began with looking for a suitable site in Budapest. Guided by the waters of the river, I explored the riverbanks of the Danube based on a few criteria: enough room, proximity to the river, and a sense of meaningfulness in relation to the water. Eventually, whilst zooming out to see the entirety of Budapest, two islands within the Danube stood out as interesting locations: Óbudai Island and Margaret Island. These islands not only contained a rich history, being formed by both nature and human settlements, but also have provoking shapes, being mirrored to each other. The research methods described before, helped me sharpen such design choices throughout the process. Interviews and mapping spatial and ecological qualities about the river to determine my criteria lead to the choice of site. Furthermore, through the disciplinary analysis of relevant projects already situated in the context, the project was able to be put into relation to the existing architecture and their performances.

The studio did not offer a design brief, so the responsibility of determining the **use and purpose** was all mine. Many ideas circled my mind, ranging from a hydro-energy plant to a meditation studio. I undertook various methods of finding my purpose: studying reference projects that achieved similar ambitions, writing a manifesto on my position, and literature reviews. This process took some time, such that I decided to proceed with the sites and forms while leaving the program open-ended, learning to trust that the architecture itself would reveal its purpose to me. I was so used to always being provided a design brief that this felt a bit unsettling, but I considered it an important lesson to learn as well as a very unique opportunity to explore as my graduation project. Eventually, I decided

upon the program of a museum and a chapel based on the investigation on the history of the river as well as the formation of the design that had developed.

With regards to **form**, continuously switching across scales (from the urban to the detail) and types of communication (conceptual sketches, model making, technical drawings) has been a key method that deliberately exposed the spots where the project was still lacking. Moving back and forth between these scales and layers has been fundamental in evaluating the complete picture of the design assignment and an extremely valuable lesson that forced me to learn to do quick decision-making. Additionally, analysing carefully selected reference projects that achieved the ambitions I had, and actually drawing them to discover the techniques used, richly informed my project and was a consistent source to fall back on. Throughout, I continuously tested my project's performance against the question: if my building was a machine, what would it do to the people inside it? I concluded that I wanted my project to reveal the river to the people of Budapest – from the Latin *revelare*, *re-* (again) *velum* (veil) – show again. The design is therefore primarily a circulation, rather than a permanent space, focused on the movement of people within it – another new notion to explore.

Whilst these methods were initially very successful, after P2 they eventually lead to a point that the project began circling back and forth instead of really moving forward. A new strategy of empathy was introduced, of scanning through every layer of the project whilst imagining myself moving towards, through, and away from the building; not only as Olivia, but also the elderly visitor in a wheelchair, the child dragged along by its parent, and even the landscape itself. The religious nature of the project was something I found difficult to grasp, until I really began living inside my building and looking inward.

Here I reintroduced modelmaking as a design method. I continuously updated my working model to investigate form, light, proportion, and scale. With moving from two-dimensional to three-dimensional, I found that the physical 3D model was a great tool for seeing perspectives, experience, and material. But representing the project in 2D drawings, such as plans, sections, and elevations, really exposed the core elements of the design because its essence became much more visible.

Furthermore, the length of the project gave much time to revise the project over and over, but to an exhaustive extend, and I began questioning every aspect of the project as well as doubting myself. It was honestly quite humbling to somehow feel defeated by my own project and ambitions. An involuntary break due to illness forced me to distance myself from the project for a bit. I took a step back to see the bigger scope of the project, which actually allowed me to gain a fresh perspective and achieve a more coherent project, of which the full picture was presented at the P3.

I often received conflicting feedback from the tutors, sometimes even speaking to three different people in one single studio session. I found that drawing back on the foundation I had set at the beginning was a valuable method for making sense of what was offered. More importantly, it became evident that there are always many options to consider, and it is not about what is considered 'correct', contrary to what I had been often taught throughout my academic career. This realization set me free to choose based on my own convictions and fostered a greater sense of independence in my decision-making, a personal development that is still ongoing and will do so for the rest of my life.

Following the P3, it was time to fully develop the **technique** for the project. While I had already made initial decisions on many materials and textures early on, developing them into building technology posed to be another challenge. I learned that technical solutions are equally meaningful, if not more, for the look and feel of the building elements. Although this aspect is always particularly difficult for me to grasp, I spent a lot of time studying details and even found myself looking at building details wherever I went. For instance, when I was designing the rain pipes, I began noticing the rain pipes found in every building I encountered. This phase also made me realize that aside from the end-users in the building, there was also the unseen group of contractors, builders, and maintenance staff that experience my building. I gained a new awareness and appreciation for this essential group of humans in relation to my design. This understanding became a valuable lesson in acknowledging and considering the needs of all those involved in the lifecycle of a building.

Lastly, having achieved the completion of many key decisions with regards to form, use/purpose, and technique, I worked on bringing the design alive through sensory **communication**. I had already taken every presentation moment as an opportunity to explore a different communicative method, providing me room for experimentation and to confidently move to the final exam. For a project that draws so heavily on engaging the different senses, I tried to express the architectural journey in a similar immersive manner. My subject has proven to be an endless source of inspiration, I looked at methods of religious communication and investigated sensory perception in both drawing and model, again drawing back to the precedents used previously – this time focusing on the way they have been presented. It is my ambition that the project as a whole clearly communicates my intentions for the city of Budapest – both inherently in its design and through its presentation.

Reflection on scientific assessment

After I finished presenting at the P2, the external examiner asked me how I could measure the scientific methods of my project and how to assess its success. Truthfully, I did not expect nor did I know how to answer this question and it has since occupied my thoughts throughout the project. It's a recurring question I have had throughout my academic career – the nature of architecture renders it a very subjective field, that sits on the intersection of aesthetics, experience, and technology, which makes it hard to objectively to measure. In the final part of this reflection, I would like to elaborate on this.

The methodology of the studio – the interwoven research and design development, literature, and existing reference projects, not merely as sources of inspiration but deliberately as sources of knowledge – has been a systematic approach. It has been a structured process, although sometimes it did not seem this way, that included formulating hypotheses, design experiments and studies, collecting knowledge, and drawing conclusions which resulted in design decisions. Following the P2, I systematically continued to conduct these methods, successfully as it has evolved into a full-fledged design proposal. I also started analysing my own project the same way I approached reference projects in the previous research. I assessed my proposal on the four heuristics – does the form work, is it functional, does the building fulfil its purpose, and does it communicate my intentions? I continuously tested every design decision against the ambitions I had set at the beginning. These ambitions allowed me to formulate concrete criteria against which I could evaluate the design functionality, such as visual connectivity, sensory perception, materiality and its properties, and circulation.

Yet, I also recognize that not every design decision can be explained rationally. The studio prompted me to always reflect on my personal decision-making processes, not only within the project but also throughout my life. For instance, I see that my preferences for a colour, style, or type of food have not necessarily been logical decisions. Therefore, alongside the systematic methodology, my most valuable method throughout the project has been learning to trust myself and my design and to have faith that it will become what it inherently needs to be.

Interestingly, the methodology of the project shares similarities to its subject – allowing for a more spiritual take in an otherwise scientific system. It acknowledges that design goes beyond objective measurements and embraces a more intuitive understanding. In the process, it invited me to gain a deeper connection with the design process, through elements of trust and personality that I usually would not have considered. The project shows the influence of individual values and experiences in shaping the result. In turn, it has shaped my identity as a designer, as part of my formative process in architecture. I have experienced the graduation studio as a continuous invitation to myself, discovering my position in practice and finding autonomy throughout the process. The project has been a process of self-discovery, shaping my ability to make independent decisions and finding contentment in them – both as an architectural designer and in my personal life. I'm excited to continue to apply the methods of analysis and imagination in my life and my further career.

For the academic and societal value of the project, it addresses the present questions of the urban environmental crisis through a 'religious' lens. This offers a different scientific method and perspective from the current popular discourse. It draws on the elemental nature of religion as a method of investigation on the relationship between humans and nature. The disciplines of ecology, environmental philosophy, and religious studies, and relating these to architecture, present an interdisciplinary and holistic position to view the current challenges in the built environment. This project reveals through the totality of architecture, using the heuristics of form, purpose, technique and communication, a sense of awareness of our place and life in this world in relation to the natural environment. The transferable results of the project are relevant in answering the pressing questions of how to operate in architecture with regards to the urban landscapes of our cities. It is my hope that this proposal, within the master at TU Delft but also the current field of architecture, contributes to this ongoing discourse and the progress of our discipline.