

Narratives of the Interactive Body

Re-activating the historical legacy of swimming in the Danube through a spatial study of architecture - as a *verb*



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Fig 3.

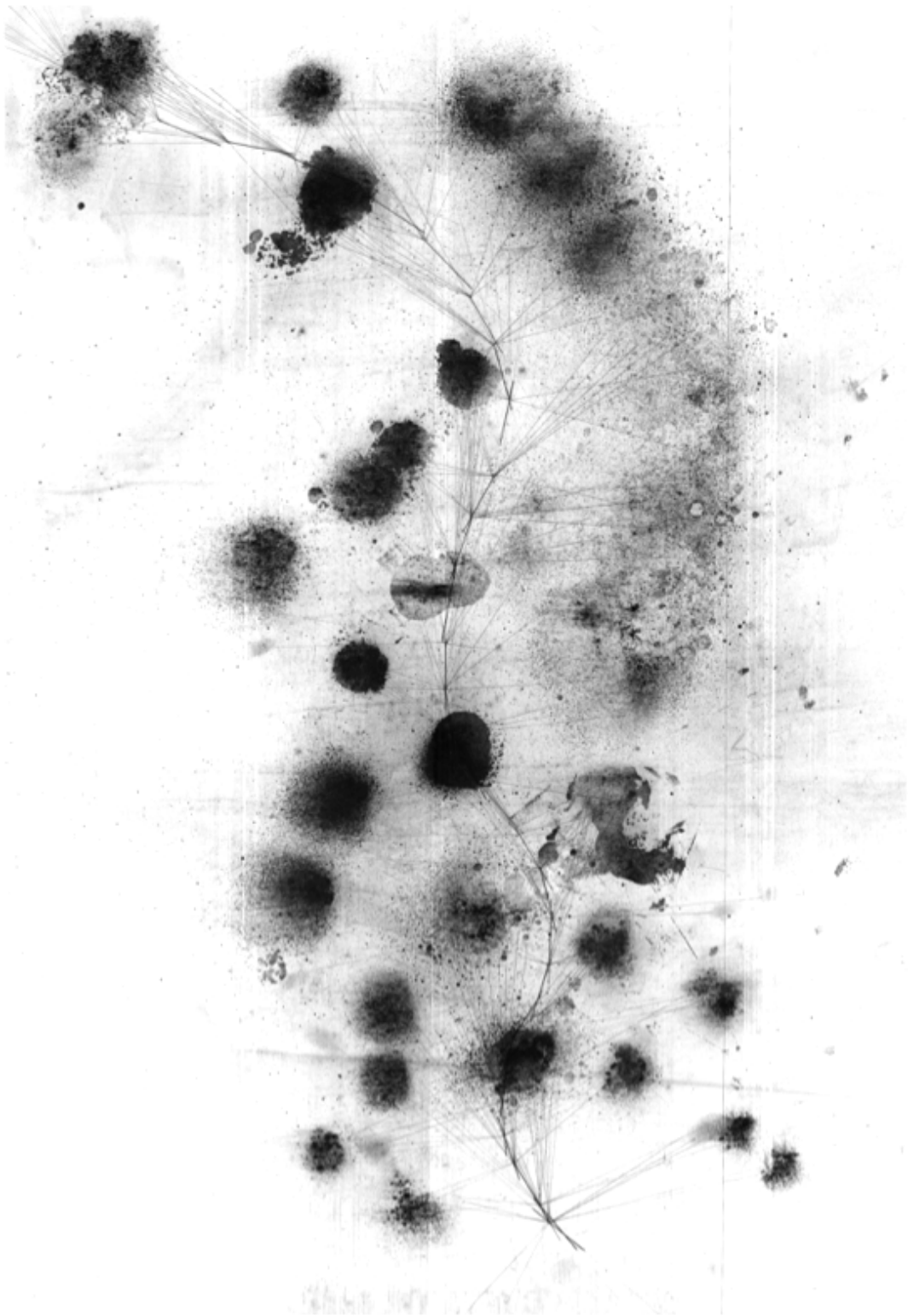


Fig. 2

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"You are where you are." (Robinson, 2021)



Fig. 3

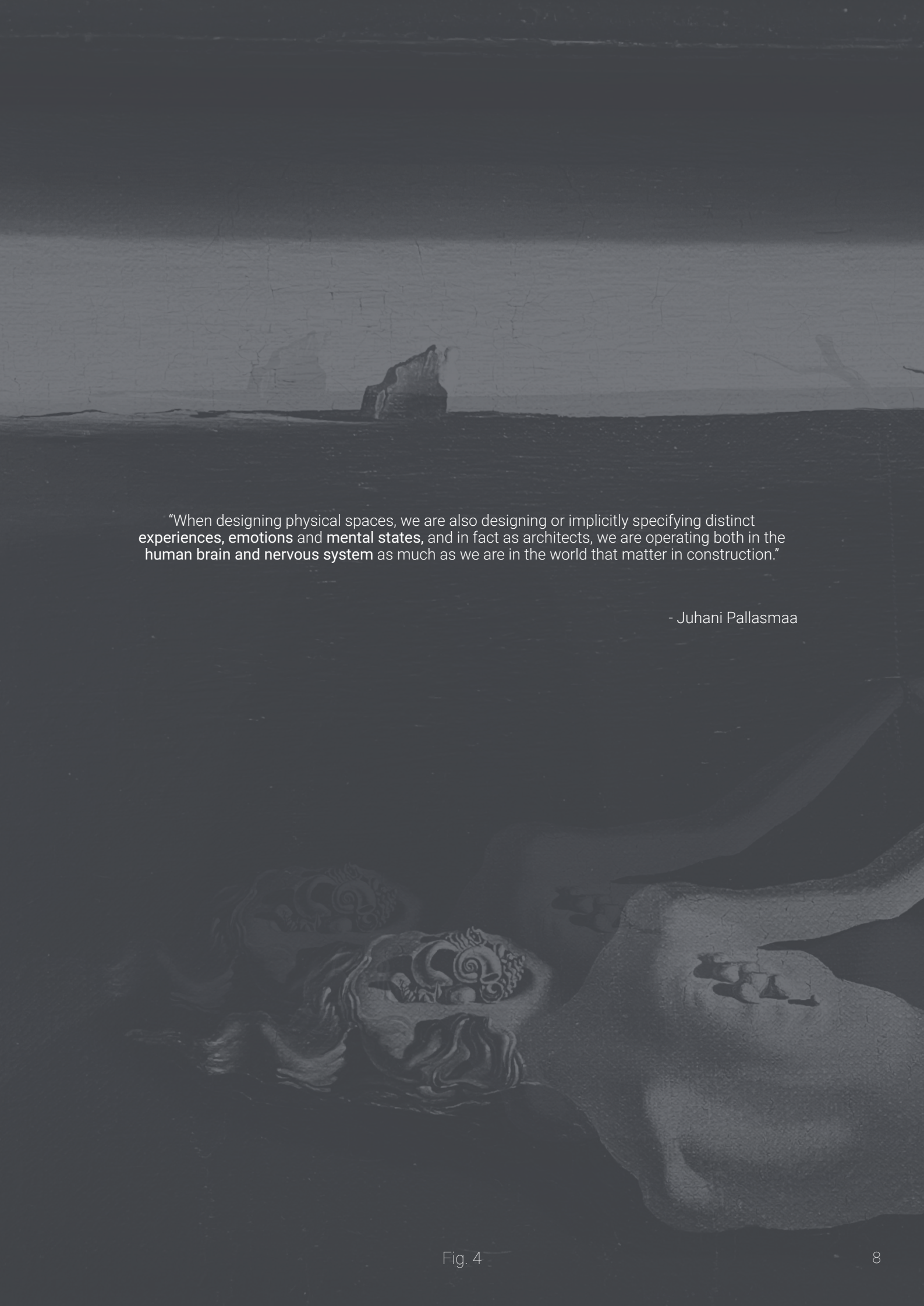
INTRODUCTION

We are undeniably “visually dominant creatures” (Hutmacher, 2019). Thus traditional architectural practice has been dominated by the sight. During the Renaissance, the five senses were understood to form a hierarchical system from the highest sense of vision down to touch. “The concept of hierarchisation was a crucial sphere of the Middle Ages. Hierarchies were applied to all aspects of social, religious, and artistic nature. The senses are arranged in the conventional hierarchical order, starting with Sight and ending with Touch.” (Oppermann, 2016, 17). This system of the senses was related to the image of the cosmic body. According to Louise Vinge, and stated in her book *The Five Senses*, “vision was correlated to fire and light, hearing to air, smell to vapour, taste to water and touch to earth”. From a general point of view, it is legitimate to affirm that the technological culture of our time has indeed separated the senses even more distinctly. To date, considering our everyday activities, vision and hearing are the privileged sociable senses. Juhani Pallasmaa, in his book *The eyes of the skin*, argues that this “suppression of the other sensory realms has led to an impoverishment of our environment, causing a feeling of detachment and alienation” (1996).

In recent decades nonetheless, architects or practitioners from other design-related fields, demonstrated an upsurging recognition of the importance of the other senses, namely touch (including kinesthesia, proprioception, and the vestibular sense), smell, sound, and occasionally even taste is present in some of their works. However, not much attention has been given to the multisensory nature of the human brain itself. For many years “the human brain has been seen as a black box” (Baumgartner, 2021), a box in which at best one came to understand that certain stimuli have a series of consequences in it. Only recently, through technology and employing imagery, there is a better comprehension of the mechanisms the brain uses to respond to those stimuli, bewitchingly explained by the field of cognitive neuroscience research.

Possibly one of the most interesting and important discoveries in neuroscience was the idea of where the limit exists, our limit, primarily the limit of our mind and the limit of our brain. Up until very recently, we assumed that the limit of our brain was our brain. A few years ago, a new theory was discovered, which is called Embodied Cognition. Its intellectual roots date back to early 20th-century philosophers such as Martin Heidegger, Maurice Merleau-Ponty, and John Dewey. However, this theory has only been studied empirically and proven recently, and essentially means that we think not only with our brain but we also think with our body. From this theory, a second one named Extended Cognition was proposed by Andy Clark and David Chalmers in the paper *The Extended Mind* (1998), which explains that if we think with our brain and our body, we therefore also think with the space which surrounds us and with the tools we create. The consequence of this theory is that the limits of our brain are not in our body, but rather in the environment and the surroundings in which we inhabit. The first conclusion is that architecture and space are therefore in cognition, and from this concept of understanding how space has a cognitive impact on us, a new discipline unfolded - Neuroarchitecture.

Neuroarchitecture is a field that fuses neuroscience with architecture but also intertwines different disciplines such as aesthetics, phenomenology, and anthropology. It is essentially how we build bridges between the scientists that conceptualize how the brain and memory work or how we perceive the world we live in, and those who create architecture. In other words, it looks at the built environment and how this either supports or detracts from a person's experience. By seducing our movements and delineating our perceptions and thus experience, buildings frame our consciousness, impacting our thinking and conditioning our moods. Sarah Robinson, in her book *Architecture is a verb*, exceptionally argues that “where we are is how we are”. (Robinson, 2021)



"When designing physical spaces, we are also designing or implicitly specifying distinct experiences, emotions and mental states, and in fact as architects, we are operating both in the human brain and nervous system as much as we are in the world that matter in construction."

- Juhani Pallasmaa



PROBLEM STATEMENT

During the development of the graduation project we systematically question ourselves: where do we stand as architects? What are the theories and thematics that drive me, and how can they also drive my investigations into a thesis project?

In the book *Mind in Architecture*, Juhani Pallasmaa argued that “besides its traditional reliance on the tacit knowledge of timeless practices of construction, architecture relies largely on theories and findings of other areas of research and knowledge, instead of possessing an independent theoretical foundation of its own. During the past decades, architecture has been viewed from various theoretical perspectives, provided by, for instance, psychology, psychoanalysis, structural linguistics and anthropology as well as deconstructionist and phenomenological philosophies, just to name a few” (Pallasmaa, 2017).

Learning from neuroscience, I believe that mental health and wellbeing are both topics which can be addressed by the architect, through finding knowledge about how we experience a city and how we feel and behave in certain places within it. Budapest is used as a laboratory to test these fascinations. After living in the heart of Ujlipotvaros (District 13) for a week, and visiting three different baths that offered me three utterly “distinct experiences, emotions and mental states” (Pallasmaa, 2017) I realised I wanted to focus my research on how architectural spaces really influence one’s brain, thus emotion and mood. How does architecture play a role in this mental and physical wellbeing topic? Our whole built environment has an impact on how we find ourselves in the world. We have a responsibility as architects to think about it, so why not bring it as a key question?

Regarding the site, an hypothesis developed before the trip to Budapest was confirmed afterward. Despite long history with water and rich bathing traditions, Ujlipotvaros and Vizafogo residents are spatially and emotionally disconnected from the Danube river due to the non-humanized riverbanks, which are lined with heavy traffic. Thus the road create a borderline between the residential area and the river. After some conducted interviews with locals on site, one can argue that their bond with the water is strong, but the connection with the river “is only in spirit”. (Elizabeth, 2022)

This riverfront’s borderline was subordinated to numerous man-made transformations throughout the years, such as the construction of roads and parking lots, which altered and contributed to the current weakened relationship between the citizens and the river. This territory embodies an absence of qualified public spaces, poor accessibility or stimulating pedestrian circulation, resulting in its detachment from its restraining mesh. Thus it is crucial to redesign the space making use of the public space as the link between various urban elements. This repurposed riverside front will then aim to create a reconnection of the community with the river, in search for a better interaction with the water element.

METHODS

Interviews
Photos of users
Neighbourhood mapping

HYPOTHESIS

DISCONNECTION (Physical boundaries)

Despite long history with water and rich bathing traditions, Ujlipotvaros and Vizafogo residents are spatially and emotionally disconnected from the river Danube due to the non-humanized riverbanks, which are lined with heavy traffic.

EPISTEMES

Typology /Morphology
Praxeology



Fig. 5

METHODS

Interviews
Photos of users
Creative Writing

HYPOTHESIS

RECONNECTION (A spiritual presence)


After some conducted interviews with locals of Budapest, one can argue that their bond with the water is strong, but the connection with the river "is only in spirit". However, recordings from site say the opposite: people do try to get closer, to connect.

EPISTEMES

Typology /Morphology
Praxeology



Fig. 6



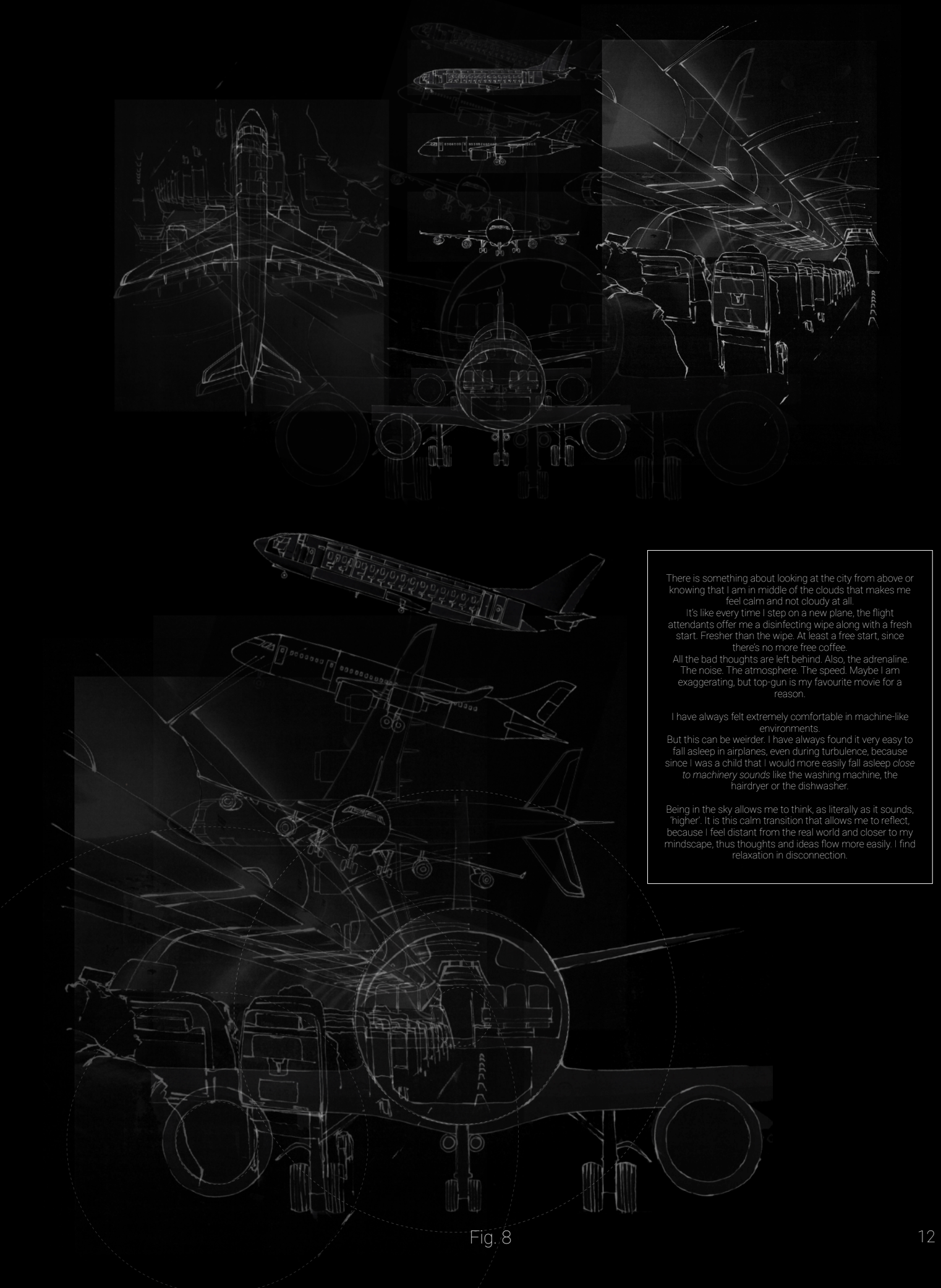
RESEARCH QUESTION(s)

In which ways does architecture affect the human brain and influences how we feel?

Does everyone have a specific place/ environment where they feel more creative, calm, recharged, anxious or spiritual?

Are these spaces a mirror effect of our lived experience or an expression of our childhood memories, considering that was the time where we first learned how to interact with the world and where we started to define the first traces of our personality (hypothesis). Can personalities say something about how a user will be impacted by a specific architectural environment?

Do you have a place where you feel creative, inspired, where do your ideas flow?



There is something about looking at the city from above or knowing that I am in middle of the clouds that makes me feel calm and not cloudy at all.

It's like every time I step on a new plane, the flight attendants offer me a disinfecting wipe along with a fresh start. Fresher than the wipe. At least a free start, since there's no more free coffee.

All the bad thoughts are left behind. Also, the adrenaline.

The noise. The atmosphere. The speed. Maybe I am exaggerating, but top-gun is my favourite movie for a reason.

I have always felt extremely comfortable in machine-like environments.

But this can be weirder. I have always found it very easy to fall asleep in airplanes, even during turbulence, because since I was a child that I would more easily fall asleep close to *machinery sounds* like the washing machine, the hairdryer or the dishwasher.

Being in the sky allows me to think, as literally as it sounds, "higher". It is this calm transition that allows me to reflect, because I feel distant from the real world and closer to my mindscape, thus thoughts and ideas flow more easily. I find relaxation in disconnection.

Fig. 8

"What is the city today for us? I believe that I have written something like a last love poem addressed to the city, at a time when it's becoming increasingly difficult to live there."

- Italo Calvino

PROPOSED RESEARCH METHODOLOGY

DEFINITIONS

In the first part of the thesis, a series of definitions of the city will be scrutinised. For instance, the city as a “structured arena for action” (Mearleau-Ponty, 2017, 24), or from a zoomed-out perspective, “the one art nobody can escape” (Hughes, 1991).

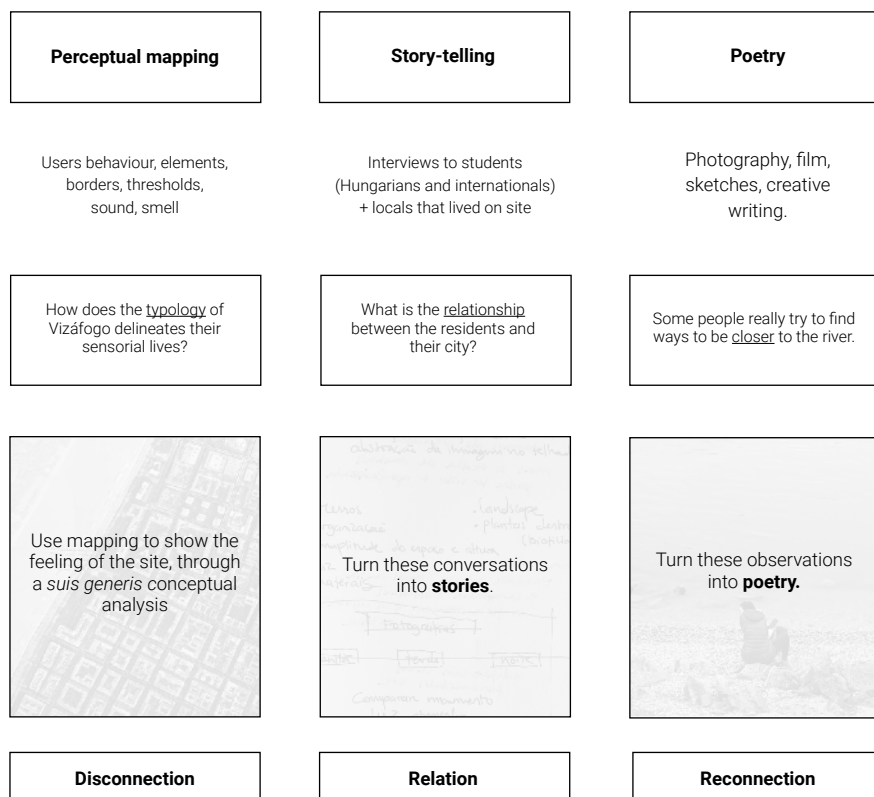
‘SPATIALIZING NARRATIVE’

Our physical bodies are the most haptic layers of our consciousness, performing as a three-dimensional portrait of our ‘Self’. Thus it is through corporal interactions that one can begin to uncover these layers and scrutinise the unconscious. I am curious about how we can shape architecture by permeating these territories and eventually how they could manifest in a spatial construct. Therefore, my main method is to spatialize the narratives of the interactive body.

This is essentially a perceptual analysis of the site, through a process of auto-ethnography - A form of qualitative research in which the author (me, Mariana) uses self-reflection and writing to explore anecdotal and personal experiences.

This exercise intends to offer spatial valuable ways to become aware of how people feel, experience, and use the site. It allows the reader to understand Vizafógo in a more haptic way.

This concept proposes a triad of interrelated methods: perceptual mapping, story-telling, and poetry. Together they supply a framework to develop tools for spatial analysis.



PROPOSED RESEARCH METHODOLOGY

1. Perceptual mapping (Disconnection)

(a) City mesh (Morphology)

Some initial maps will show how the built environment is structured, organised, and designed. Potentially, this will raise some questions about the disconnection between the people that use the neighbourhood and the river, considering the urban plan. Is it possible to create a stronger bond between these people and the water? Would this proximity to the river improve their life quality? How can these boundaries be readjusted or molded to the people, or why should they be?

(b) Interactions (Praxeology)

Secondly, I will map how locals, residents, and tourists interact with these same surroundings and how they move around the site during a regular day.

(c) Sensual Experience (Phenomenology)

Lastly, I will allocate the previously written stories of the neighbourhood in a map and record my own sensorial/perceptual journey from when I stayed on site, by using a sui generis annotation method I have created some years ago.

2. Story-telling (Relation)

Stories about the site and its life will be constructed from the knowledge gathered in responses from conducted interviews on-site with Hungarians, residents, and international students. This will generate a collection of subjective depictions of daily aspects of the life in Budapest's District 13. Consequently, it will be easier to analyse the interactions and deep relations between people and their experience in the already existing architectural spaces on site.

3. Poetry (Reconnection)

After, there will be a zoom-in to Újlipótváros and Vizafogó regions which will be the targets of a creative writing exercise, inspired by videos, photos, and sketches made on site, which aims to depict parts of the site the same mythic, unreal and ethereal way that Italo Calvino, for instance, describes his *Invisible Cities* (1978). I will have to get to conclusions about what are parts of Budapest worth writing about. How was the site perceived by me, as a tourist? How is the site perceived by a local as a completely different "city"? How can Újlipótváros and Vizafogó be defined as small cities within the city? The creativity, the dreams, the imagination without limits. How do people relate to the spaces described? What is the architecture behind imagination and perception?

Why Narrative as a method?

I believe there is a line of thought when imagining and designing an architectural place, just as there is when writing a book. What is initially an idea - imaginary, intangible - becomes later a palpable reality. In architecture, this palpable reality is also inhabitable. When reading a book, the reader inhabits the mental space constructed through words and the story is subsequently guided through internally created visualisations. With poetry, I would like to transform these places into something haptic.

To conclude, I will be using traditional sketching tools like drawing and writing on paper, instead of merely digital tools such as the computer/iPad, since the other senses are not as activated as when using "real" mediums.

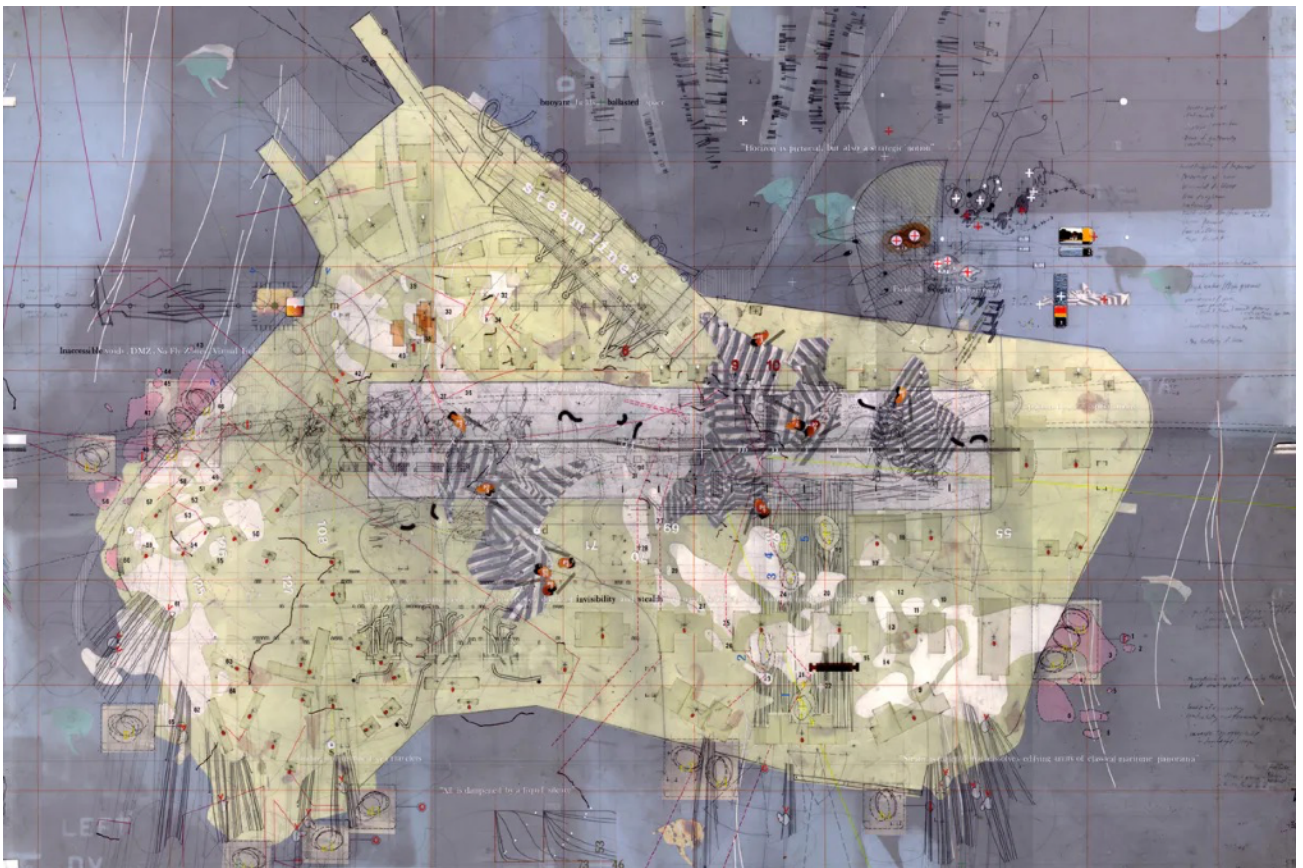


Fig. 9 Reference | Drawing Architecture, by Perry Kulper

THEORETICAL FRAMEWORK

Phenomenology

Since I am interested in recent studies about the cognitive aspects of architecture, the main voice of my research is the work of Sarah Robinson, and her approach approach, which is a practice she calls situated poetics. At the centre of this theory is not just the human body but rather “the body in dynamic engagement with its environment: the knowing, resonating, and interacting body that thinks, feels, and knows *with* and *through* what surrounds it.” (Roniger, 2022) The title *Architecture is a Verb* comes from this emphasis on action, and asks what architecture does. “Why is it that architects do not architect architecture? This detail reveals the hidden presence and absence of the body, its presumed level of engagement and its level of prestige. The builder builds with his body, while the architect projects her 'vision' from her disembodied mind.” (Robinson, 2021)

Narrative

Calvino was also a phenomenologist. The depictions made in his book *Invisible Cities* truly reminds us that architecture must be inventive and alluring - it should have the ability to activate all senses, instead of being purely aesthetic, it should be able to be experienced, touched, felt, lived. From a general point of view, it is legitimate to affirm that the technological culture of our time has separated the senses even more distinctly. Merleau-Ponty explains that, more than visually, “we are, as human beings, inescapably embodied entities [since] the body serves as our first means of access to the world” (Merleau-Ponty, 2017, 23).

Biophilic Design

Another key theory I work with is Biophilia, which is related to the epistemological perspective of Ecology. Biophilia hypothesis explains how the man has an innate tendency to seek connections with nature and other forms of life.

“The environment I grew up in was amongst Hokkaido's nature. To me, it's the original scenery of a place for people. And the city of Tokyo, where I studied architecture, is like a forest made of diverse artefacts – that's why I always think about a project without separating nature from architecture” (Fujimoto, 2015).



Fig. 10 The Lived Body

"No man ever steps in the same river twice, for it is not the same river and he is not the same man."

- Heraclitus of Ephesus



Fig. 11

DESIGN PROPOSAL

Swimming in the Danube

"When my sister and I were small and summer temperatures rose above 22 degrees Celsius, we went with our parents to Lido. For us it meant the river and gravel beach" (Soňa Balážová in recalling her times at Lido)

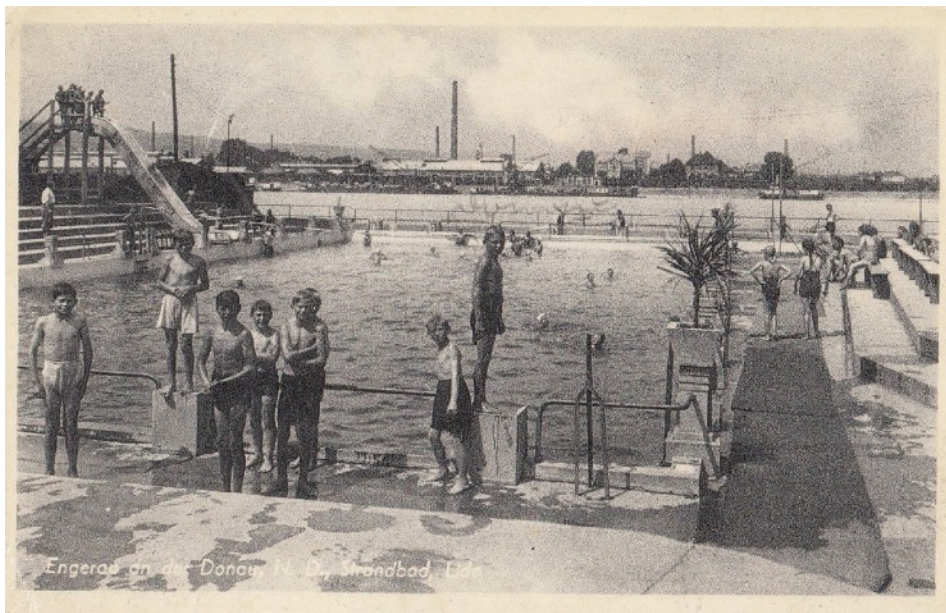


Fig. 12 Lido pontoon pools

In the past, Bratislavans used to swim in the Danube River. There used to be a legendary river beach and pool called Lido located on its Petržalka bank. Now this area is covered with dense greenery and is waiting for re-development.

The waters of the Danube continue to tempt people since a swim in a river provides a much different experience than in a regular swimming pool with chlorinated water. But those wanting to try a river swim must take into consideration the dangers such a big river brings. Moreover, there are no official river beaches in Bratislava for swimming, and doing so is now prohibited.

DESIGN CONCEPT

Re-activating the historic legacy of swimming in the Danube.



Fig. 13



Anstead Ádám Park

Mártír emlékmű (statue)

Rakpart sétány

Car Park

RiverRide rámpa

Moszkva sétány Duna park

Rakpart Chill Beach

Bird Rendezvényhajó

Car Park

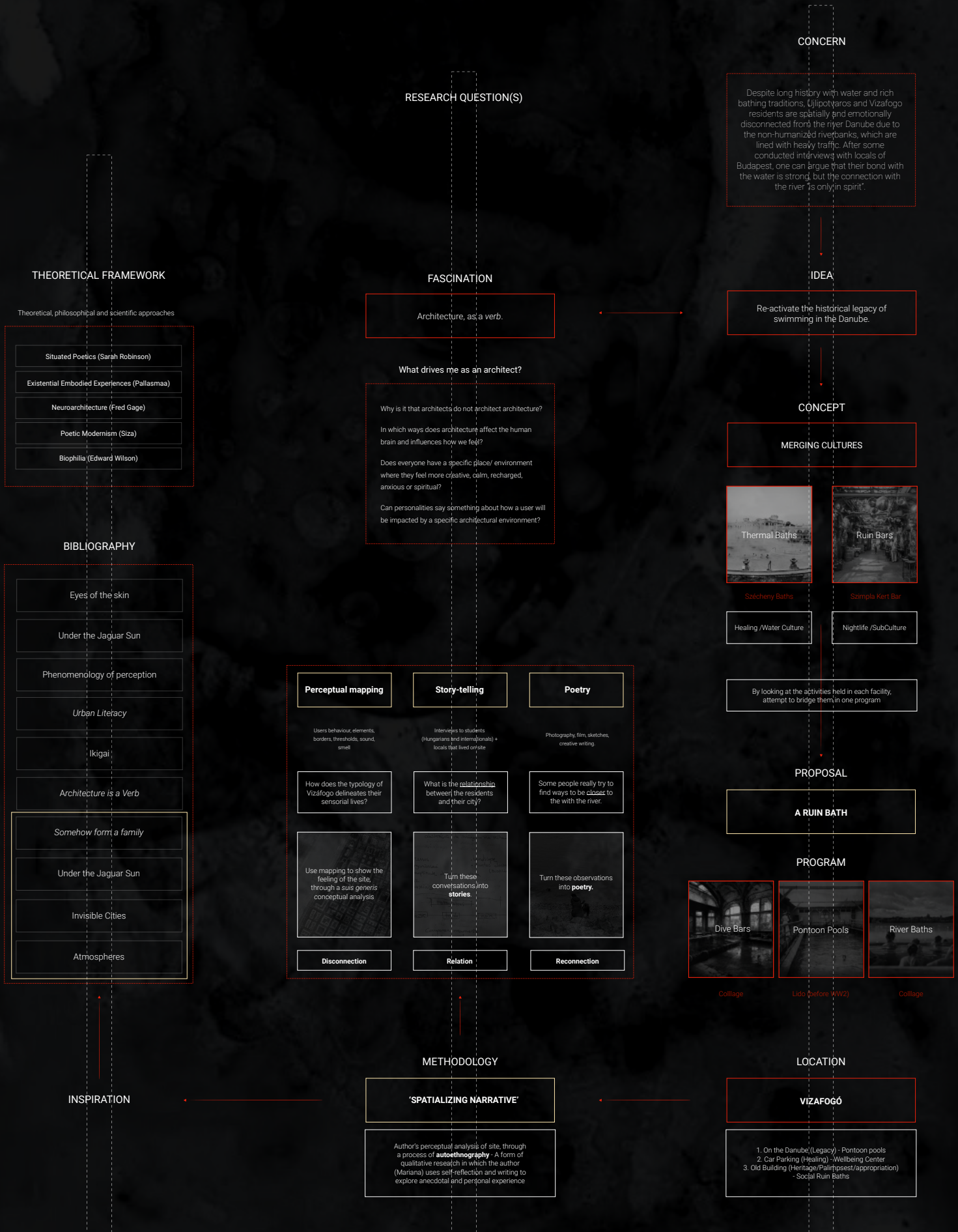


DESIGN PROPOSAL



Fig. 14 A place that connects people from the Silent Generation to Generation Alpha, in a floating pool over looking Margaret Island (Collage)

RESEARCH DIAGRAM



SIGNIFICANCE STATEMENT

Architecture exerts a profound influence on our well-being. Considering that most of the world's population living in urban areas "spend approximately 90% of their lives indoors" (Migliani, 2020), it is thus unquestionable that environments have an impact on our brain and subsequently a direct influence on our behaviour and emotions, just as "if the whole organism resonates with the qualities in which we are immersed." (Robinson, 2021) On the one hand, architecture can create meaningful spaces that activate all senses. On the other hand, "an architect who possesses little knowledge about his domain is equally capable of creating blunders" (Zohby, 2021).

As an architecture student, I believe that we must be always careful when designing to stimulate positive behaviour and emotions in the users, and never influence them negatively. Visual, auditory, or olfactory senses, when awakened, really help in the process of creating memories, thus meaning and most importantly a sense of belonging. Marcel Proust in *Swann's Way* once wrote "Thus the most significant human experiences are those that provide opportunities for such associative memories and these memories are often created distinctly outside the domain of visual reception" (Proust, 1922).

Also, Sir Winston Churchill, in his speech to the meeting in the House of Lords, said "We shape our buildings; thereafter they shape us" (1943). What I would like to untangle is that maybe design is not so much about how our buildings can shape us, but instead about giving people some control to interact freely in the environment they live in, because this adaptability will make them feel part of the architecture itself, and not just as an adjunct in the equation. In the end, as "creatures of the place we're in" (Jeffery, 2017), architects should not solely design buildings. They should anticipate and facilitate connections. The connections that we establish with places are allowed through a series of decisions - these that will determine how architecture makes us feel and the impact that has on our well-being.

Throughout this thesis research, I will therefore focus on how architectural designs, with little impact on the planet, can have a lasting impact on our cities and most importantly on the mind and bodies of the people who experience and perceive them. As mentioned previously, Vizáfgo's riverfront is used as a laboratory to test these fascinations, and the ruin bath/well-being center is the physical place/case which gives a continuation, hopefully, more developed, of what is already a present theme in Budapest.

CRITICAL REFLECTION

I am aware of the risk involved with researching a theme that can be quite scientific, and also subjective if not developed correctly, which is why I am being highly meticulous with the organisation of my research plan and selected topics. However, I am quite satisfied with the progress that I have made so far over the past two months, and the number of new insights, knowledge, and ideas digested from the books I have been reading. To conclude, I am excited to continue this journey and to start working on the design project!

So, while the findings of neuroscience and the embodied empiricism in which they are rooted may not be novel within the panorama of architectural history, they can nevertheless serve as a catalyst for reinstating the humanity that we have lost along the way."

Sarah Robinson (2021) *Architectures is a Verb*



Fig. 15

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