

# *Reflection*

Appendix on the thesis: Architecture for Human Nature

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## Research Process

Sometimes, I remember the way I was perceiving the world as a small child. My eyes still felt sharp, sensitive to the light, as if they were open to a field of dramatic colors. My ears were drawn to every new sound I heard, like shells in a sea of atmospheres. And, specifically the smell of people and places would be the most decisive in calling my affinity. In these spontaneous sensations, there was no practical aim, no filter, no mental understanding, and also no judgement. Sometimes, these sensations were intensified by my imagination, whereby the smallest combination of hints could already lead to some epic stories.

What some people recognize as children in a 'dreamy' state, I like to describe as being totally in the present, receiving impressions in a very pure form. The way I processed these experiences were primarily emotional, giving a meaning to all details of my memories. As a child, the value of these rich experiences for my well-being was self-evident. But later, in the practical world of adults, it became clear to me that the focus on reading signals and giving labels to spaces, became more important than being aware of what was felt by my body. I have only started to be more attentive again to what I am sensing around me, forming a strong motive throughout my research.

Today, in architecture, I find it often challenging to have a conversation on the incredible value of these embodied sensations. It feels like something that always comes afterwards in the design process, while it is probably the first thing that attracts people to architecture. Throughout the years, the 'romantic' or 'naïve' idea is quickly overruled by many of our education methods, whereby the emphasis lies mainly on interpreting the context taxonomically, formulating the programme, and meeting the technical requirements. After having resolved this puzzle in one fit block, pushed by the help of straight-forward concept, chances are high that little inspiration is left for the poetic image. Is this the true potential of architecture?

Moved by this loss, I wrote my essay as a manifesto, trying to debate against the dominating economic logic of our time. I relied on the aid of neuroscience, as my hopes were high that when the I start from a scientific consensus, I was able to convince fellow designers and engineers on the crucial importance of architectural aesthetics for our well-being. I learned about the many layers of our biological nature, and it was empowering to find evidence-based design tools to meet intrinsic needs from a methodologically

grounded approach. This way the knowledge would also be easily replicable and transferable for to other scholars with this subject.

From the start, I have had the impression that I came well-prepared for the design process: a clear vision and an extensive kit of design tools. Paradoxically, exactly because of the scientific terminology, my findings became quite complex to explain. The list of neuro-aesthetic factors that were important to the respectable design aspects (light, space, form, materiality), was quite extensive to be summarized in a single presentation. And although I have learned to work with many of the tools over the years, it was sometimes difficult to discuss the plurality of my design decisions to my tutors. Nevertheless, although the insights from the natural sciences are not the easiest to replicate, I think the manifesto has succeeded in establishing a new approach, that I will continue to adopt in practice in the coming years. Moreover, especially because of its scientific basis, the embodied experience cannot be easily avoided any longer in the architectural debate. It might take some time, but regarding growing trends like biophilic design, I hope that in the near future, neuro-aesthetics and environmental psychology can achieve a worthy place among the other established education methods.

#### Design Process

**Area.** The first thing to decide on was the design area. My research obviously pointed towards a Modern, industrialized city. Restricted by the Covid measures, Rotterdam became therefore a natural choice. I focused on the Cool district (the area, south of Central Station, towards the Maas river), which is one of the densest areas of the Netherlands, where many different functions and demands come together. The area had been bombed during the second World War, leaving much of an empty plot on which various Modern movements found their way to establish their ideas. Apart from the rich diversity in architectural styles, a high concentration of commerce, business and culture make it a truly Modern metropolitan area. Although you would expect a lot of hecticness, the modern infrastructure makes it still an easy area to orient and many of the routes are accompanied by public green spaces, which makes the environment relatively pleasant to dwell in.

Nevertheless, the sensory experience in the streets remains under high pressure. In between the network of polluting traffic and overstimulating shopping areas, the current green (healing) spaces are only sufficient as a counterbalance. Looking at the historical maps of Rotterdam, some of the canals that connected the area to the river had been replaced by broad traffic lanes (most famously the Coolsingel), creating an opposite sensory effect of what it probably once was. Towards the Maas, the water remains territory for large vessels and industrial purposes, leaving little room for nature. The cultural image that is now visible along the Leuvehaven and Veerhaven is for sure beautiful and should be cherished, with the characteristic old ships and cranes. Still, in terms of the healing connection with nature, the water is

inaccessible for ecological systems, and misses out on an enormous healing potential towards the city.

**Strategy.** Since my research was about healing architecture, it seemed convenient to do a project whereby healing purposes are explicitly demanded, like a hospital or a therapeutic center. But then, the project would miss the whole point of the research: Nature is not just a healing tool for specific places, it is the *natural* basis to start from. Architecture should only act as an enrichment to the habitat, but never disrupt the nurturing effects of nature. This message carries enormous implications for the whole Modern city, in all its layers and scales. Consequently, it creates a strong dichotomy with some of the currently established paradigms. I found myself in this regard shifting ninety degrees from our functionalist beliefs, as the healing experience needed to become a crucial 'function' in itself, highly placed on the agenda of architecture. From here on, I could not escape a radical approach.

**Design.** I wished to graduate on a project on the architectural scale, not so much on urban planning. So, how to start from there? In line with the radical agenda, I chose to go for a statement, in the form of a public building that exhibited the five themes of my research directly. I analyzed a series of public places in the area, and evaluated them on the resonant qualities that my research indicated. Conscious of the healing power of the extensive body of water, called the Maas, I positioned the intervention in line with some of the most established icons of the city: De Rotterdam by Rem Koolhaas, representing an ultimate symbiosis of the Programme; and the Erasmus Bridge by Ben van Berkel, articulating the city with an iconic image. Next to these proponent examples of their times, there was an urge to react by establishing the new human- and nature-oriented paradigm.

I went into the design phase with a lot of passion, crystalizing the new aesthetic tools that my research promoted with modelling studies. Then, under guidance of the formulated PvE, I implemented those studies into a synthesis on the site. However, the subtle analysis of the existing site and context disappeared slowly in the background. While the design proposal was oriented towards the Maas, it was also absorbing the plot extensively. At the same time, turning the back of the building towards the polluting traffic of the road behind resulted in the statement becoming an enclosed entity. It became a landmark that was not necessarily so connected to the city it was supposed to heal. The outcome of this closed healing bubble was not in line anymore with the ecological values that I stood for in my essay.

So, I got back into the contextual analysis. I re-assessed the possibilities of forming connections with the city, from which a new idea was set in place. One of my tutors helped me to see that instead of establishing the building as a closed cell, restricted by the boundaries of the site, it could also function as a healing organ towards the whole context. My intention now

is to create a heart, whose arteries stretch deep into the fabric of the city. The most important element for this is the water, that is already there to a large extent. The routes along it, only need to be reconnected and the hard pavements are likely to become replaced by more ecological entities. The old cranes and ships can of course keep their place, as beautiful artifacts, that are also part of our human identity. On the site itself, the value of the existing elements needs to be reincorporated, whereby the intervention can cocreate with their resonant qualities (think about the Piet Oudolf's wild biodiversity and the War Memorial).

With this new approach I hope to exhibit the agenda that I believe is crucial to our well-being, but I also hope to inspire fellow designers on how the neuro-phenomenological principles can be consciously and ethically integrated into an existing context. I am looking forward to developing the rest of this plan and see how it works out. Then I will re-evaluate and can reflect again on the steps that I have made.