

Architecture as a worldview

From graduation to the profession

The first motivation that led me to enrol in Explore Lab studio was the academic freedom to translate deep ontological concerns into an architectural project. Indeed, the initial intention starting this graduation year was to investigate the relation between architecture and cosmology, or the capacity for architects to design a building and simultaneously, a worldview, to delimit a place in an endless cosmos to create meaning. If the first discussions with mentors around BK remained vague and undefined, my encounter with Stavros Kousoulas and Jorge Mejia as research and design tutors helped me a lot to bring this ambitious fascination into a concrete and meaningful architectural project.

Their supervision was a precious asset in the development of the thesis and the design, nonetheless, explore lab remained one of the most challenging academic programs I have done in my degree. Indeed, to bring an abstract personal fascination towards the level of a TU Delft academic diploma implied the constant justification and adjustment of the methodology and the objectives. In a pedagogical framework that erase the boundaries of a traditional design exercise (no predefined site, functions, programs, scale etc.) the limits must be imposed by a self-reflection. Like many other graduating students, I learned a lot about my working attitude. I do not know how far the covid situation affected me but from what I had experienced, I was

sometimes overwhelmed by my curiosity and found myself lost due to the amount of information I was collecting without really processing it. Many weeks happens without really going forward either in the research or the design but in the end, I consider this period of “reflective latency” important in the final development of the design.

In this way, I acknowledge TU Delft as a school that prepares students very well to enter the profession with convictions, autonomy and maturity.

Explorative methods from research to design

The openness of Explore Lab studio combined with an initial ambitious trajectory of finding an ontological purpose to architecture had encouraged me to experiment with a wide range of methodologies and approaches. The architectural investigation was therefore informed by concepts and principles found in philosophy, science, or theology. While the project mainly came from a theoretical approach, small artistic and design experiments conducted in the background had helped me to target the objectives of the project in relation to those theoretical inquiries.

Science, ontology, and the implication of French philosophy

My initial interest in astrophysics, quantum physics and the material instruments use in those scientific fields was an occasion to start reading about the philosophy of science and understand the questions at stake in contemporary physics and our mechanical approach to the outside world, among them, Karen Barad, Alfred Whitehead, Isabelle Stengers, Raymond Ruyer or Werner Heisenberg. But quickly, I realised that Gilles Deleuze and Gilbert Simondon, two main figures of the French philosophy of the 20th century, were dealing with two interesting concepts that later, inspired me to develop the project. The discussions with Stavros Kousoulas led me to focus on certain aspects of their

literature, respectively the definition of the point of view and the idea of magical unity prevailing technics. Those were particularly relevant to understand the fundamental purpose of architecture and the relation of the self within the world. Their concepts reached the sphere of contemporary architecture thanks partly to Bernard Cache that explained clearly how every architectural element, wall, window, floor, roof participate in the mediation of the self with the outside.

Architecture, relativity and abstraction, the study of Dutch architectural heritage of the 20th century

Parallel to this theoretical investigation, discussing with my design tutor Jorge Mejia every week since P1 motivates me to come up with a strong architectural position on the question. Through the reading of Padovan mainly, the dutch artistic and architectural sphere of the 20th century became my principal source of inspiration. Mondrian, Van Der Laan, Van Doesburg, and Van Eyck were faced with the same concerns that I was coming up with in the theoretical research: where to land in an infinite, purposeless universe? How to find orientation? With the rise of the relativity theory and the loss of a universal centre, how to craft culture and spirituality without certainty? Those designers turned out to have a solid theosophic position on those questions and came up with concrete architectural, mathematical and pictural proposals that became design tools: the plastic number, the understanding of abstraction, the definition of frame etc. What I appreciated in the study of this Dutch heritage through the reading of Padovan, is the confrontation of those answers with opposed world view such as the empathic position of Le Corbusier and the

Modulor for example. The emergence of abstraction was making sense to me as soon as I was able to identify empathy as its opposite: one considering mathematic as a mental invention, the other as the fundamental structure of our reality. The project, afterwards, was developed following an abstracted worldview.

Preliminary design experiments

As a combination of reading and writing the attempts to confront those findings with small design experiments, before the final design project, offered me inspiration to bring to the graduation project a site and a design.

Stones on a hill

I started with a sculptural intervention on a nearby hill composed of concrete aggregate, bricks and other construction material. Sitting at the angle of a road and a highway, nobody ever paid attention to it. Inspired by the Neolithic observatories punctuating the Celtic regions of Europe I decided to climb on top and lift a couple of bricks and concrete blocks vertically following the line of the peak. If the intervention was purely intuitive, I managed to relate this banal act of lifting stones with the idea of landmark that Simondon was explaining in his magical unity theory. The vertical elements that disturb the horizontality of the landscape – a stone, a tree, a mountain... - are key points that allow the cognitive distinction between a figure and a ground, as a “primitive mode of structuration” of the universe. If the ambition of this intervention does not go as far as “structuring the universe” it nonetheless provided me with a deeper comprehension of the idea behind verticality, which was explicitly translated in the design project afterwards. Just as the lifted bricks suggested to look differently at

the mountain, the turrets sitting around the refuge are the vertical elements that give the possibility to the hiker to look out at specific landscape singularities but also look within the self once sitting inside the turrets.



Art at CERN proposal.

When reading philosophy of science, I became even more fascinated by the strangeness of the quantum world. If I was aware of the existence of the CERN before starting this project, I never really paid attention to its territorial and architectural configuration. I started to consider the scientific city and its surrounding as a potential site to land the project when I heard about a call for an artistic residency launch by the CERN art

foundation. The selected artist had to come on-site and develop a project that brings the issues faced by quantum physicist into a pictural, sculptural or digital performance. This is how I came up with a first abstract proposal to reconfigure the urban space of the biggest quantum laboratory in the world, appearing now as any other peripheral zone. If the project did not convince the jury, it nonetheless convinced me to develop this interest for the CERN in the design project. Indeed, the city and the research led there, perfectly illustrated the endless mechanisation of knowledge and as a result, of the territory. The intervention, rather than competing with this gigantic infrastructure would propose a modest alternative.

The Camera obscura and the city.

Finally, as part of the workshop organised by students in the Explore Lab studio, I associated my research topic on architecture as a device to read the world with one of my studio mates, concerned on his side with the right to the city by Lefebvre, to design a human-size camera obscura. This workshop managed to foster our respective interest into a collective architectural intervention. The tiny movable darkroom that we design and built back in December allowed the explore lab group to experience the effect of seeing an image of the city that was projected upside down in the box through a tiny little hole. Then we asked each student to individually underline the contour of this flipped image onto a white piece of paper. If the optical image corresponds exactly to the outside world, the individual drawing of the student is the physical translation of a personal experience inside the box, sitting alone and contemplating a mirrored projection of the outside world, like the myth of the cave by Plato. This intervention is the

literal materialisation of the idea that architecture gives the possibility to re-read and re-interpret the outside world.



To summarise I would find it difficult to qualify this methodology under one guiding axis but when I started to actively design the project, I managed to re-combine those fragmented experiments into a unitary design that, similarly, is also made of different components and scales. This is how I envisioned my diploma when enrolling into Explore Lab studio and I'm very thankful to all

the people that contributed and encouraged me to constantly deepen my primary concerns towards a tangible project, including my tutors but also all the academic staff I met at Delft during msc1 and 2 as well as my Dutch flatmate, sharing lots of interesting discussions and references.

The graduation project beyond architecture

The research and the project are highlighting the fundamental capacity for architects to design and craft the intermediate layer that filter, catalyse the interactions existing between humans and the world. As such, the reflection emerged from the intersection of architecture with two other disciplines: religion and science. The common particularity of those relies on the establishment of order and symmetry on the unintelligible nature of the universe either theoretically or spatially. From Stonehenge megaliths to the physics standard model, our perception of reality is framed by a series of measurements projected onto the immeasurable.

To build a house, to explain a physical phenomenon or to believe in a divine entity, is to establish an ordered point of view on reality crafted either by the skill of the mason/architect, the ingenuity of the scientist or the faith of the religious. The craft of human ontologies and cultures relies on the combination of those three systems, allowing the materialisation of referential point within the immensity. Those are positions or objects that can be dismantled or demolished just as they were artificially constructed.

As such, architecture is equally the spatial product of a worldview on one side and the spatial interval to define this worldview on the other side, offering spaces for thoughts, speculation, and storytelling. In the case of Van der Laan, the proportional system of the plastic number is developed following a spiritual conviction inherited from a religious worldview that he managed to translate

into buildings, mainly monasteries and churches. If the research and the design were not meant to deliver a complete analysis and re-interpretation of the work of Van der Laan, his philosophy, his architecture, and his spirituality had a major influence during the development of the project: assuming the small condition of humankind within a universe that is way too vast to comprehend. Thus, architecture is an “abstraction imposed on nature: a frame projected on the natural continuum in order to make it measurable and intelligible”¹. Since the site of the project was found following preliminary studies of the scientific city of the CERN, the parallel between the theology of Van der Laan and the abstract world of quantum physics was relevant. In both cases, delimitation and measurement of an artificial environment allow introspections into either the self or the matter within which one can find orientation and meaning.

Through the development of the project, I rediscovered the beauty of proportional systems, geometry, and articulation of scales. To build a microcosm is to delimit, count and measure. In the exercise of the project, the simplest architecture such as a mountain refuge becomes the fundamental act to develop a spatial system that offers a privileged position for hikers to introspect and contemplate, to observe simultaneously within and outside.

¹ Padovan, *Proportion : science, philosophy, architecture*, 33.

Worldviews and environmental ethic

Looking back at a year of investigating the definition of meaning and order in architecture, this graduation was driven by an honest intention to question the fundamental ethic of our understanding of the external world. Why do we measure objects and spaces? Why do we delimit, discretise, frame, select and classify fragments of our reality? How did we end up distinguishing the human self from an external world? If technology certainly helped humanity to shift the anthropocentric condition, how could we hope to reach one day an absolute objective truth?

If the project and the research are not explicitly referring to sustainability or ecology in the built environment, which I feel is the central concern of many academics around TU Delft, it provides an understanding of how humankind deals with the external world. Instead of coming up with solutions to the problem, the thesis is an invitation to reflect upon the origin of the problem itself, how did we detach ourselves from a continuous reality towards a mechanical understanding of phenomena that became incompatible with non-human agents.