

P4 Reflection

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The relationship between my graduation project and the master architecture

During my studies in Delft I have always been interested in the way we experience and perceive. The human scale has always been an important aspect in my work. Something I think is missing in a lot of contemporary iconic architecture. As I proceeded studying my opinion and critics became more strong towards this. I felt an aversion towards standardized mass architecture with little attention for the intimate details. I've always had a humble approach towards my design tasks in stead of thinking in big concepts, which is - to my dissatisfaction- sometimes really encouraged in Delft.

I grew up in a house designed by Gerard Wijnen, a student of Dom Hans van der Laan. But it was only two years ago I finally got into the theory behind it. It was a real eyeopener to read about a measuring system based on how we look, discern and perceive. It made me think about the education in Delft, and how little attention there is for this aspect of architecture. Writing my history thesis about this subject, I got a bit acquainted with the work and theory of van der Laan. I realized I wanted to learn more and experience how it would be to design using a system like this. Suddenly it seemed really random how I designed before. Because how do you choose your dimensions? It's often a sum of requirements, practical aspects and intuition. Van der Laan made me realize it's important to think about why and how you use proportions. By choosing Explorelab, you have the possibility to create your own project and subject. As I developed this fascination, it was an obvious choice to continue researching this during my graduation.

Research method and approach

The intention of my research was to make a compact and approachable introduction to the theory focused on the application in design practice, as this is missing in existing literature. So the first part of the research contains 10 lessons I think they have a value for today's architecture to learn about the theory of Dom Hans van der Laan. To get a grip on this complex theory I needed more than reading literature. I visited buildings, interviewed architects, followed workshops, and made analyses and models. Besides explaining the theoretical, I also wanted to touch upon the the sensory experience of the architecture of Dom Hans van der Laan in relation to colour, light and material. Van der Laan didn't explicitly write about that, but it's a really important part in his architecture.

The second part of the research is the translation of the lessons in a practical application manual. With concrete steps I show with the help of an example design how one can design with the Plastic Number.

During the research I made several analyses, for example from designs with the Plastic Number, so understand how it is used. But also to be able to say something about the relevance and accuracy of the theory. Can the plastic number be found back in pleasant designs? And what are the proportions of unpleasant designs? It was useful to do this kind of analyses to be able to give a critical reflection.

It must be said that trying to summarize such a complex, rich theory in a short and simple way is a bit contradictory. Therefore I must acknowledge this work is not fully comprehensive. In stead, it tries to focus on the important aspects that have a direct link with the implementation in architecture practice, so that I can give useful starting points to start with designing using the Plastic Number.

The relationship between research and design

The relation between research and design is in this case quite straightforward. The outcome of the research is sort of a design manual, which can then be applied in the design part. In a way it's experimenting with a design method that puts me in the position to be able to reflect and criticize, which in turn is part of the research again.

After finishing the biggest part of the research, I was ready to try it in practice and start designing with the system. But the choice what to design was still completely open as the theory is not dependent on a specific function. On the other hand, there are certain themes or types of buildings that suit the idea of this architecture; extra attention on proportions, material, light and detail. My choice to design a "monastery" building, brings me back to what motivated me to start this research: my first visit in the St. Benedictusberg monastery in Limburg. I was fascinated by this monastery built by van der Laan and specifically by the persuasiveness of the architecture to create a certain rest and encourage contemplation. Using this typology gives me the chance to really explore the options of the plastic number theory and use aspects like material, light and detail to express a certain experience.

The relationship between the graduation project and the wider social, professional and scientific framework

We read our environment by relating objects to each other, by comparing and by differentiating. If we want to respond to this as an architect, we have to know what proportions and which differences in size we see and perceive as important. It's not my goal to present this theory as the inevitable solution, but I think it should be part of our common knowledge to be aware of the effect of proportions and the human scale.

The theory of Dom van der Laan is known worldwide, but the book is so tough that the actual application is way too abstract and difficult to understand. My research is a first step to understand and apply it, and thus a valuable addition to the professional and scientific framework.

Concerning the design, I'm always interested by a social context. Together with the typology of a monastery comes the themes of rest and contemplation. These themes seem more and more relevant to me, as I'm experiencing my generation as rapidly moving and suffering more and more from stress and pressure, resulting in depressions or burn-outs. I want my design to become a statement against this movement, and advocate the importance of our mental health. A place amidst the ever-crowded city that can offer rest and room for contemplation. Which gave me the idea to create a contemporary "monastery" in the urban context of Rotterdam, the city where I'm living. The contemporary monastery is a figure of speech, as the religious function is eliminated. The other typical programmatic elements of the ancient monastery are translated into modern uses, which fit in the location.

Ethical issues and dilemmas during research and design

During the whole project I felt the dilemma whether I was really convinced by this system. Even after designing with it, I'm not sure what my answer would be. Without question I'm convinced about the importance of well thought-through proportions, but the consequent use of the system is questionable. In the end a good result is always dependent of the talent of the designer, and not on the tool he or she used. The nice thing about the system on the other hand, is that it's so free you can use it to your own wishes. In this way it can be a playful tool. But in the beginning of the design process it sometimes felt as a restriction, as you are not totally free.

Concerning the design, I chose the typology of the monastery, without actually wanting to use the religious aspect. This arose the dilemma if an ensemble like this would work as a whole without the main connecting function. In a classic monastery, the monks as inhabitants are of course committed to their property. In my case, I have to find a way to make the users and inhabitants connected and committed to the whole, to let it work like that.