Reflection on the Graduation Process

Nick van Dorp - 4140818

26-9-2017

With this reflection I aim to look back at my graduation process to understand what went good, what could have gone better, and more importantly how and why this happened. First I will address the the relationship between research, social context and design in my graduation process. Then I will discuss the theme of my graduation lab Hyperbody and relate it to my project. Also I will relate the methodical approach of Hyperbody to that of my own. Finally I both conclude and look ahead to the last phase of the graduation process.

After choosing the topic 'Refugee housing' as one of the main priorities of the project, I began researching the cultural background of my target group. I learned about Arabic and Islamic traditions, ways of living and the traditional architecture. Part of this research is documented in the position paper for 'Lecture series – Research Methods'. Here the research question was how an architect can design an environment for refugees from a different culture. To position myself within this topic of discussion, I discussed multiple different approaches towards transcultural design as well as the notion of time and change that runs parallel with the integration process of the refugees. Writing this paper helped me develop a broader perspective of the social context.

In the first half of my graduation process (P1 – P2), my main focus was determining the specifications for designing dwellings and investigating ways of making them adaptable to a certain extend. This focus resulted in a 'bottom-up' approach, from a small scale (Meso) to an eventually larger scale (Macro). Research and design into this macro scale, such as the context/location, sunlight orientation, infrastructure and transformation, were elaborated mostly after P2. However, because I had an existing building as the object, the task was to transform this object. Coming from a bottom-up approach, I struggled making sufficient steps to alter the existing building, because I was not able to think 'outside the box', the box being the office building, and had difficulties to develop an architectural vision. It therefor took time translating research results into a design. More precisely, the discussion about the realism of the transformation had a big impact on the process. I wanted to do it as realistic as possible, but this blocked me creatively and slowed down the process.

In my graduation lab, Hyperbody, non-standard-, adaptive- and performance-driven architecture are central themes. In my opinion it is also about pushing the boundaries of what architecture can be.

The first phase of my project was focused on developing an adaptive/adaptable environment which can host different functions at different times of the day, week and year. Also, the goal was to make housing units that can adapt to the different, often large, refugee family sizes. This approach fits well with the theme of Hyperbody, which also focuses on informing architecture with input from the users and their behaviour. However, for P2 I did not manage to push the boundaries and came up with a rather conventional design. It functioned according to the requirements I set, but it was not a Hyperbody project.

Looking back, I see this first phase as an intervention on a small scale that informed me how to continue developing my design on a building scale. So, in the second phase, I focused more on the performance of the building as a whole. I took into consideration the fact that outside the dwellings, people should meet and interact with other people. I focused more on integration. Therefor I included immigrants and Ex-pats as my target group besides refugees, to make a more inclusive integration center. By including facilities that both serve the inhabitants of the center, but also inhabitants from the neighborhood in Rotterdam, the integration process might be improved, since the immigrants participate and learn about Dutch culture, people and language. To make this possible, the building needs to perform well and be connective and attractive for multiple groups of people. Therefor the spatial layout of the building is informed by the flow of people and the proximity and accessibility of functions. Also daylight and sunlight are informing the shape of the building-envelope. This performance-driven approach helped me to think outside of the box, as I described before, and is more in line with the theme of the graduation lab.

Initially, the methods I used to design and evaluate the performance of the design were not the ones that are typical within Hyperbody. I think Hyperbody strives for a computational approach, where by setting certain parameters a composition of geometries can be generated. For example by doing sunlight optimization, or by defining relationships between functions that result in a spatial lay-out. My approach was not fully generative, although I wanted it to be beforehand, but more manual.

After extending my graduation date, I took time to evaluate what I did so far and continued by including a stronger computational strategy into my project. This included developing scripts that generate floors and facade with optimized lighting conditions, and shaping people flows.

To conclude and look ahead, I think writing this reflection helped me to understand my own design process better. I can see where I lost track of the themes of the studio I am graduating in, and how I returned to pursue some of the goals I set in the beginning. Right now I am satisfied with how the two phases and scales I described, being the dwelling scale and the building scale, came together, although splitting these up was not a good idea in the first place, since they are coherent.