

Aspect 1 the relationship between research and design.

The research done relates to a specific target group; families. These families move out of the city of Amsterdam due to a lack of space, affordability, and greenery. Yet for social diversity these families are important to have within a city. Research about the families and their needs state that there needs to be a separation between sleeping and living areas. Where the sleeping area is being subdivided again into spaces for the parents and for the children. This has resulted in a distribution model that divides the dwellings into separated spaces and distributes them according to a view and solar analysis. Part of building more compact is a shared space strategy. This too has been included in this model. The distribution model works fine as an overall strategy for the distributing of spaces, but it still requires quite some manual input to correct and avoid collisions between volumes. For a studio so heavily leaning onto a computational strategy there is still a strong need for manually adjusting a lot of parts. Finding the right balancing point between this seems to be crucial for creating architecture and doing things in a 'timely' manner. The end result is therefore a combination between manual and computational architecture. If this reaches the full potential of what non-standard architecture can be is debatable, but during the process this offered a solution for making design choices.

Aspect 2 the relationship between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS).

My graduation project is about creating non-standard family homes. The creation of dwellings relates strongly to the master track of Architecture, while the non-standard part of it relates to the studio topic. Using a robotic strategy towards creating architecture gives an opportunity to create highly customized architecture, addressing issues and needs in a more specific manner.

Aspect 3 Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work.

Up until the P2 the majority of the research was being done by literature research. Afterwards this switched over to research by design. The research methods and approach chosen seems to be in line with that of the graduation studio; doing research by and through design. The scientific relevance of the design lies in the exploration of what robotic production and assembly can mean for architecture.

Aspect 4 Elaboration on the relationship between the graduation project and the wider social, professional, and scientific framework, touching upon the transferability of the project results.

This graduation project uses the opportunity of the plan of Amsterdam-Haven-Stad to address the problem of the gradual decline of social diversity. Specifically focusing on families leaving the city. By designing for families and using a robotic strategy to create dwellings that fit their needs now and in the future.

Aspect 5 Discuss the ethical issues and dilemmas you may have encountered in (i) doing the research, (ii, if applicable) elaborating the design and (iii) potential applications of the results in practice.

-One of an ethical issue I have encountered is that our society keeps continuing towards automation. Embracing a robotic production and assembly strategy strengthens this. Creating a need for higher educated people and thereby reducing the need for those who are not.

-A second issue I have come across is the degree of customization. At some point the architecture created become so specific for one need or person that it cannot be anything else. Like a tailored suit it becomes almost impossible to be suitable for anything else. This negatively impacting its lifetime and thereby our environment.

-From an economic perspective the reduction of labor by robotic production seems to be its biggest potential. It is up to us how to apply this into architecture.