– The relationship between the project and the wider social context

The dwelling is probably the oldest building-type mankind is still building today. It is the most common building around the world, during every time period. But even then, there is more research on the indoor environment of hospitals, jails, or mental institutions than there is for houses. One of the reasons frequently mentioned is that the house, or home, is too personal to get reliable results when people are questioned about their homes. It is considered too private to publicly talk about, yet practically everyone has one.

There is some research on the meaning of home from psychology and sociology, which is situated opposite the minimum measurements of spaces from architecture. There is not much in between, probably because of that reason.

The shortage of housing in the Netherlands since around the second world war is still continuing today. Social housing projects and VINEX-developments are some of the larger measures to minimise the shortage, but this is not enough. One of the consequences of these mass-projects is that the designed houses are quite similar and usually only deviate when it comes to the number of rooms or the colour of the façade. When a project has just finished, this is most visible, while after a few years more changes start to appear due to the residents adding and changing the house according to their preferences.

Housing preference is usually measured by asking people what kind of house they prefer, in what neighbourhood and so on. Knowing which houses are preferred is comparable to knowing that three times seven is twenty-one in the sense that you know the answer, but you do not understand why that is the answer. This is fine as long as the preferences stay the same, but when they change, the questions about preference need to be asked again in order to design accordingly. Even more, preferences also vary between persons. If however the underlying reasons or meanings are known, different preferences between and within persons will not be a problem at all. The preferences are only the skin, while the underlying meanings are it’s body. For the mass-housing projects where all houses are the same, different types of persons have to live in the same skin which for some will not be a problem, but for others it will. Understanding the meanings attached to houses makes it possible to design more fittingly, while at the same time preventing that each household has to sit down with an architect to get a fitting house starting from scratch.

– The relationship between research and design

If there is something like a more inherent meaning of dwellings, then what would that be? The research about the meaning of home does arrive at the same type of notions (permanency, social life, personal) but these are without use for design. Something else is underlying these notions, which would have to be cross-cultural and valid across time.

There are ten values that are thought to be cross-cultural and valid across time, as follows from research from Schwartz. These are power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, conformity, tradition and security. Distinctions between cultures and between people depend on the extent to which a culture or persons adheres to these ten values. Western cultures place more emphasis on values like self-direction and achievement, while collective cultures place more importance on values like tradition and conformity. So a difference in importance per value creates a sort of value-profile per person. To what extent the house is related to these values, the original value-questionnaire was altered to find associated activities and spaces in the house. Based on these results, a design tool was developed which helps with translating the values into a spatial concept.
The plots on which to build are the result of a different approach. Here the relations between spaces are guiding as well, but with the use of a different method. This is due to the four qualities that are derived from the urban plans as developed by three design-companies. These qualities are differentiation & uniqueness, connectedness with nature, views & exploration and lastly defensible space & communal space. The main question here was how to integrate these qualities in one system; for which a combination of Voronoi-diagrams and Fractality seemed suitable. The Voronoi-diagrams made it possible to divide the area in different types of shapes to create differentiation & uniqueness and views & exploration, whereas Fractality facilitates connectedness with nature but also allows people to understand the different spaces in terms of ownership.

In the dwelling the focus is also on the relationships between spaces and not so much on shape, bringing the Voronoi-diagrams and Fractality inside the dwelling.

The four qualities mentioned above are not termed in values, but they could be. Differentiation & uniqueness relates to self-direction and stimulation, Connectedness with nature relates to universalism, Views & exploration also relates to self-direction and stimulation, and Defensible space & communal space relates to benevolence and security. When considering the importance placed on individuality in Western culture, it is interesting to see that two of the qualities are related to those values. The importance of certain values might thus also be expressed in the requests from the municipality of Delft and the solutions from the three designers.

The relationship between the methodical line of approach of the studio and the method chosen by the student in this framework

The combination of empirical research with design is one of the possibilities in explorelab. Being experienced with psychological research I am familiar with the problems that arise when trying turn results into design. The so-called gap between researcher and designer is one that is in me. Doing this project only strengthens my ideas that both fields need to adjust in order to understand each other; empirical research is not answering design problems, nor is design an answer to empirical research questions. There is something in between, of which I believe my project is a part. The difficulty was not as much in developing research questions, setting up a questionnaire or analysing the results, but to analyse the results in such a way that they are usable for the design. For the design it is not too hard to design a dwelling, but the difficulty lies in the way the research has to be implemented. Most research on the meaning of home is qualitative, while this has been quantitative, since I believe it is easier to translate numbers into design than words. Another way of research from architecture is the analysis of dwelling plans, but these do not explain how the houses are actually used nor viewed from a non-designer perspective. Therefore I arrived at these methods, which might not have been the easiest or most straightforward. Be that as it may, part of the research was how to combine both fields which led to these sometimes hard to explain methods for persons on either side of the gap. There is no quest without hardships.