Final Reflection P4 - Dwelling Gradutation Studio Design for Care and Health

Jan Philipp Dormann 4882849
Supervisors
Leo Oorschot
Kobe Macco
Maria Meizoso
Birgit Jürgenhake

1 Relation Master studio to Education Track

Starting during my bachelors at TUe, many of the projects have been focused around the design of dwellings as well as the interaction with existing elements of the built environment. Therefore the challenge of this design to create a housing unit for people with elevated needs within the given context of Delft is very attractive and near to me. Due to the combination of health oriented principles and the element of dwelling design, this studio offers the right opportunity to combine the knowledge gained from previous dwelling design studios, such as in MSC1, with the knowledge and interest in humans health and the specific senior target group.

A new angle this studio brings to me personally is the very close interaction with the target group, an element of "realism" often missed in other projects in University. Especially during the on-site user research, not only valuable data was gained but the personal interaction also sharpened my personal awareness for the importance of adequate housing for each generation and their own needs. Additionally, from a personal standpoint this specific topic is of high importance as it currently also is a large topic in my personal life due to family members, which further highlights the importance of the issue and the need for new solutions.

2 Interaction between design and research

In this project, the main focus of the research phase was the user based research, culminating in the fieldwork week during the early stages of the process. The Design decisions throughout the project were based on the data gained throughout this research, acting as a common thread. In the first step of the project, the decision was taken to focus the design on elderly users, as this not only has personal relevance for me but also is one of the major current challenges in the housing sector in the Netherlands. Based on this „design" decision, the research was started into the main problems this target group faces at the moment, which then shaped the design approach for the ongoing process, namely clustered housing for seniors, as it can alleviate the loneliness crisis for seniors. Then, the actual user research for the fieldwork was shaped based on insights from existing literature, which proofed to be an even better tool throughout the design process then expected. Especially the results of the workshop were a great resource to go back to throughout the design process, as it continuously provided guidance regarding the users wishes and preferences.

In summary, it is almost impossible to view the design and the research process as separate elements of the project, as both informed and shaped each other throughout the time of development. While generally the research shapes the base of the design, the interaction of the two parts proved to be symbiotic through the entire course of the project.

3 Reflection research process / planning

As the early research process of this studio followed a fairly strict structure it allowed for the researchers to precisely set up the tools needed to gain the desired insights into the topic. Looking back, this proved to be very helpful for my process, as the laid out plan could also be looked back on to find guidance. On the research itself, the set up process proofed to work fairly well, as the approach of starting with literature research to then use the insights for the user research worked very well. While the User research was well prepared from a scientific angle, this is one part where with the experience of today I would have made some changes to the methodology for this week. During the preparation, the fieldwork week was planned out in great detail and with very specific plans in mind, which on location turned out to be not ideal for the users, requiring a change of angle on the spot. Further, I would have liked to fall back on the fieldwork audience once more later during the process to gain further insights into design process and how a potential participatory design process could go with users of the target group. Due to privacy and time constraints the decision was taken to not do that for this specific project, although for a real life project that would be promising.

3.5 Project and Process reflection

Regarding the process during this studio, In my opinion looking back most of the process went fairly well and according to plan. The research phase yielded well usable results and especially the fieldwork week and the data gathered during this week really helped to act as a guideline for the entire process, especially with the outcomes of the workshop presenting a good prioritization for what real world users want. From this data, the beginning of the design phase is the one area where I feel the process got stuck for a while, leading to a slight delay in the production of the building plans. In retrospect, the main cause for this delay was not taking strong enough decisions at first in the urban design causing many iterations to slowly reach a stronger concept. After these delays were resolved, the same issue slightly applies to the building design, which also iteratively developed from more regular building types to the final, More fit for purpose design developed in the later phases. Generally, the time needed for the urban planning and the actual building design of this project was underestimated a little and felt short compared to the time spent on research in the early stages. Yet, by the final stages of the project, I feel like these challenge were overcome and the design developed to have a strong concept and follow through with it in its design.

4 Scientific and societal relevance

As the housing and healthcare for senior citizens currently is a major topic of discussion in the built environment, this research can contribute direct user data for the specific field. By getting insights directly from current and potential user of such facilities, past experiences as well as future wishes can the integrated into the design. By exploring different ownership angels, such as for example a cooperative financing structure not popular in the Netherlands in this sector, new opportunities for future developments can be explored. Further, combining the experience of real world users of clustered senior housing with insights from the field of health promoting design can offer the potential to show a was froward to not only combat the growing loneliness crisis but also maintain users health for longer. This is a another crucial factor in the movement towards aging at home, fostered by the 2015 care reform in the Netherlands. Thus, the paper and project can contribute new angles as well as data to the existing pool of evidence as well as offer potential for future designs to be more tailored to the target group.

Regarding the project designed, it combines the data gained from user as well as literature research in a way that looking forward, it can act as lighthouse project showing users that shared housing can be a promising solution and thus entice users to leave their existing homes earlier in their life, resulting in more preparedness for health changes as well as better suited housing. For this, the design contains three different levels of shared living, lowering the threshold of entry to people more skeptical to the concept as well as people that are willing to share everything but their private bedroom. By being specifically designed for this type of housing, compared to existing projects attracting lots of attention which often are simple transitions of existing senior homes by adding common spaces, it enables the full potential of the concept and can help spread the awareness and interest to other future projects or residents.

5 Transferability of results

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In order to transfer the results to more mass applicable housing schemes, the different types can be scaled in larger clusters in different locations, providing housing for a greater number of users. Especially the medium sharing housing form could be very promising for senior housing projects, as its sizes and spatial makeup falls within the framework of current developers for such housing projects. While the specific design falls within the category of new-built housing, many of the concepts and guidelines can be adapted to also allow transitions of existing dwellings into such a structure. Further, the angle of shared ownership is one that could be transferred from this. Research into the dutch housing market, as collaboratively owned housing currently isn't much of a focus within the Netherlands.

6 Challenges throughout the design process

Looking back at the process during this graduation project, a couple challenges were encountered that required adaption of the planned research process as well as the design development. During the research, the main challenge forcing adaptions of the plan was doing he fieldwork, as users had more reservations against being interviewed and giving up their data then I accounted for previous to getting to the location. As users were not open to sit down interviews, which were further complicated by the language barrier between me and the users, the decision had to be taken to switch to a more informal style of interview, basically following the users that were open to it through parts of their day and having informal conversations in the meantime. In retrospect, this proved to provide possible even better insights, as we got to learn more about the users interests and problems as it allowed them to shape the conversation and build trust with the researchers. During the design, the major challenge that was underestimated in my process was the choice of the site, which provides great quality to the project set also introduced a host of challenges to the design process, for example regarding building orientation and accessibility for the public. While this delayed some parts of the planned design timeline, these challenges were overcome during the project and now the site can provide its quality to the design.

7 Additional Angles for design

To look on from the scope of this research and design to possible futures angles, for me it would be most promising to investigate the implications of including a more intensive care capacity additionally to the independent housing clusters. As it exceeded the scope of this research to also create a facility that can adequately house people with a 24 hour care demand, for example dementia patients, this design project excluded their care. As it would be beneficial for the users to have the security that they can stay within their home, or at least only move within the project. As the care for these patients requires a lot of additional attention, this could be a promising further enhancement for the design concept. Further, for real world application, a future design process should be more oriented on the real world stipulations that come with designing for this target group, thus basing the design more on the precise regulations for subsidies and classification of the homes, for example regarding social rent terms.