

Forget
me
not

“Dwelling in the past, designing for the future”



Student: Jeffrey Bryan Blokker (Jeff)
Studentnumber: 4437152

Tutors: T. Kupers
F. Adema
P. vd. Putt

Course: AR3AD131
Chair: Dwelling
Name: Dutch Housing Studio "Stronghold Amsterdam"

Hand in date: 28-05-2018

Target group - Site: Dementia, Gillis van Ledenberchstraat-Zaagmolenstraat



In one off the sessions with Pierijn there was a discussion about the reflection and if there is a “type” of architect which one would describe you the best. I am not sure if it can be boxed but there are definitely some elements that I have repeated throughout the year and previous projects.

Every project starts with research at the urban scale on historical, social and environmental context. Followed by a site analysis and a target group. In this stage it’s a combination of desk research and a gut feeling for me. For the target group I was free to choose as long as it was relevant for the year 2040.

When I started my search I remembered a slogan that Amsterdam is for everybody. I interpreted that for myself as a target group with a disadvantage and that there should be also a place in Amsterdam for that target group. Examples that I searched were elderly, blind people and people with a mental illness. I found a lot of information about elderly and loneliness and side tracked from lonely elderly onto the subject of dementia. While searching more information about the subject of dementia I came to realize that this target group had all the criteria I searched for. Not only facts as a too expensive healthcare system but also social aspects such as separation of couples by the disease, overstressed caregivers and social isolation for both the person with dementia and maybe eventually the partner.

I made a storyboard of what a life as a couple can look like and if I think that it’s what I would want if I was that couple. Supported with the research I came to the conclusion that for most couples a disease as dementia means; while being together your whole life you need to live separately because the person with dementia is put away in a nursing home or you stay together and the care becomes too much mentally and psychically for the partner causing problems as well. Both outcomes mean a significant decrease in quality of life while I think this is not necessary if there is a design that can provide a home where the stress of the care is decreased and the couples can life together.

I am aware that this is not the case for every couple. But the facts such as numbers about loneliness, stressed caregivers, mental illness rates and a too expensive health care system suggest that these scenarios happen in most of the cases. Therefore I think that my design works well for most people because my storyboard is a scenario that would happen in most cases. And if you’re financially independent or have a big support system the design can still provide you with the qualities to life a comfortable life.

I work from emphasizing with the target group and creating a story. I use this story not only to do research but also as a guideline for my presentation. The risk can be that the created story is wrong but I based the story on the research so I think it is a good interpretation of the reality of most couples where a partner has dementia.



Aspect 01

The relationship between research and design

The research consisted of two main aspects which were combined in the design to answer the brief. One answered the question of densifying the city of Amsterdam through adding a volume to an existing building, while the other question answered a relevant target group for 2040 which was in my case people with dementia and their partners.

To answer these questions the researched consisted of several aspects containing scientific papers about dementia, historical and construction analysis of the existing building and typological research through case studies on dwellings for people with dementia and co-housing schemes. (the examples will be explained more thoroughly within the 30 page document).

The starting points for the design were a combination of the aspects found within the research. These could be technical aspect of the existing building, social statements read on internet of support groups or movies about the disease, facts about dementia and how the disease progressed and result from case studies such as circulation, wayfinding, outside elements and the configuration of space.

The starting points were combined with the research of the site and created on a big scale the circulation of the building and the configuration of outside inside space and collective versus private. When the progress continued this was done for the smaller scale of the dwelling as well. (During the progress the steps were repeated and done on different scales with different tools such as modelling, facade, floorplan drawings (2D) and 3D eyesight impressions).



Throughout the design process research was added mostly architectural and on different ways such as facade studies, materialization and facts such as wheelchair friendly spaces.

I will describe the main elements found in the researched stage and show with two examples how they are integrated in the design and which methods are used to do the research. I describe different subjects such as the façade research and the dementia dwelling.



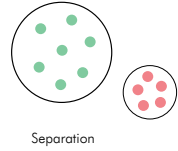
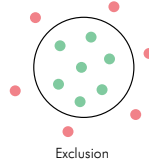
The desk research was mostly done before P2 but there was information added throughout the process of the design for example on the subject of wheelchair accessibility. The selection of diagrams show some of the elements that were integrated into the design. The research is done on different scales such as the urban context and building and into the different target groups.

The research consisted of three types of research; target group related, architecture & technical related and a mixture of both.

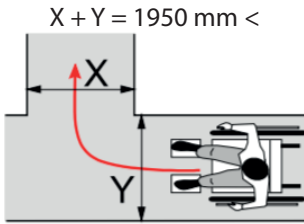
Target group related consisted for example of research into the deterioration process of people with dementia and the care system and consequences on the couples. While more architectural and technical research was done into the existing building and site such as historical and structural research, available resources and accessibility with a wheelchair.



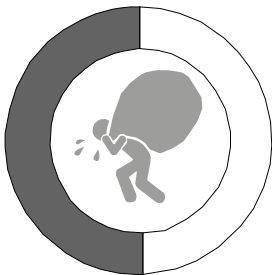
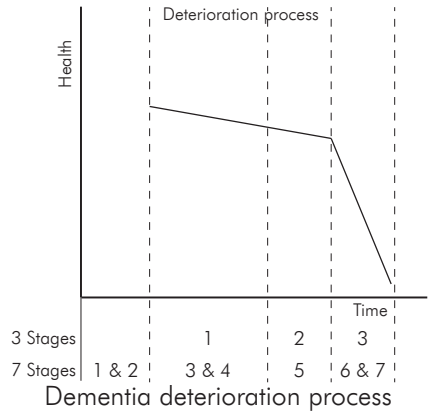
Walkability elderly with walker 300 m



How elderly live in society

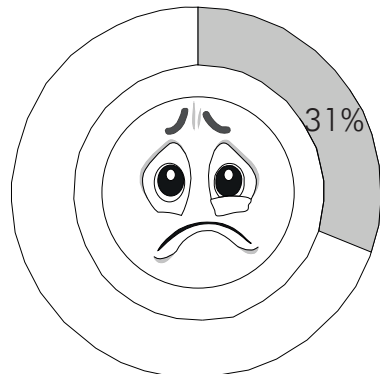


Accessibility



54%
Caregivers at home
Overloaded

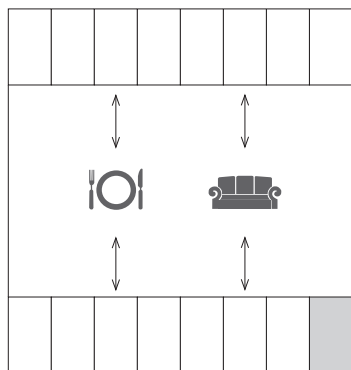
Workload dementia caregiving



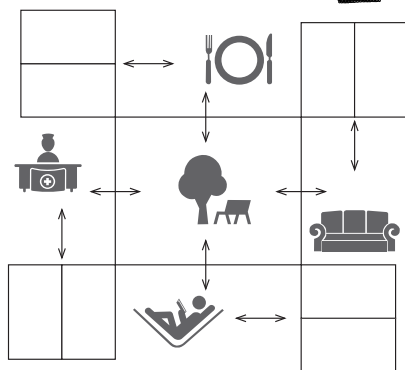
Age 65+ feeling loneliness



Research into the target group and existing building and site where needed to be done separately mostly for own personal development and knowledge to do a good analysis on case studies and to build a framework for the design. The case studies chosen brought both individual subject (dementia and architecture) together. It showed me how (and how not) a design can contribute to the quality of life of a person with dementia. Analyzing different elements such as composition, wayfinding, outside space and sightlines completed my framework and created a starting point for my design.



Circulation composition I



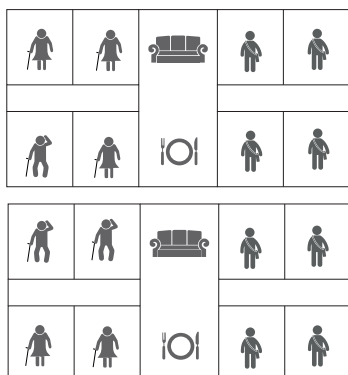
Circulation composition II



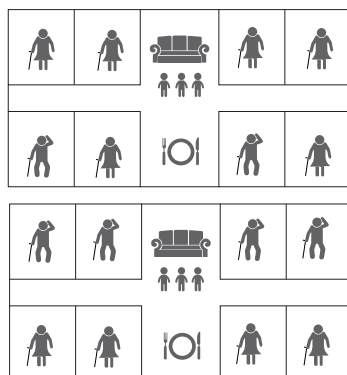
Access to nature I



Access to nature II



Innovative nursing homes I

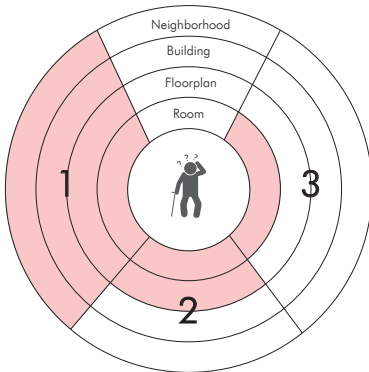


Innovative nursing homes II



All the conclusion led to the target groups and three main aspects I will use for my storyline. The design will be presented through the scales of deterioration of a person with dementia and how the most important factors such as nature, social interaction and accessibility are integrated in the design. The research provided me not only with a framework for the design but also a storyline to use as an explanation during my presentation.

I prefer to emphasize with the target group and be creating the storyline I can tell my design in a confident way with hopefully as a result that when the audience hears my story about the design believes in it and would like to live in it if the unfortunate event of having dementia happens.



Design level and dementia



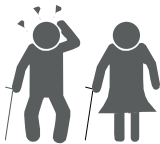
Accessibility



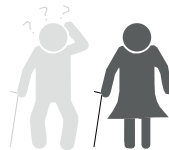
Connection to nature



Social interaction



Couple with partner dementia



Single elderly



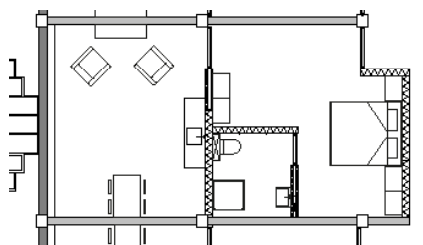
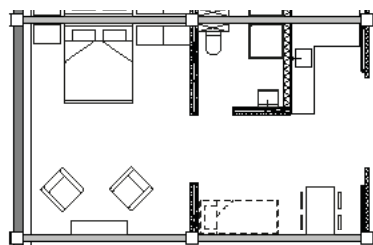
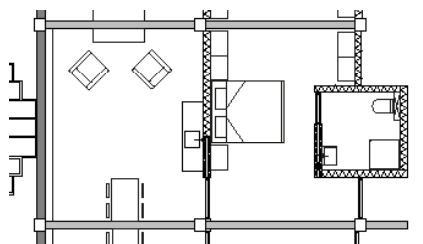
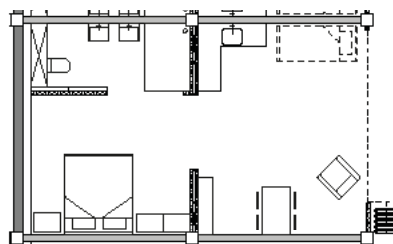
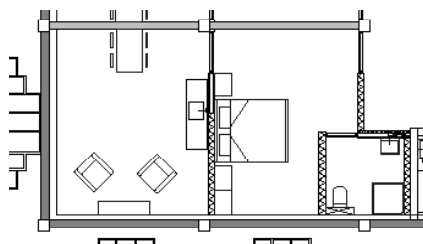
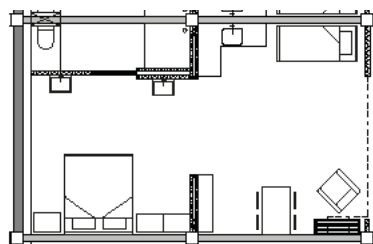
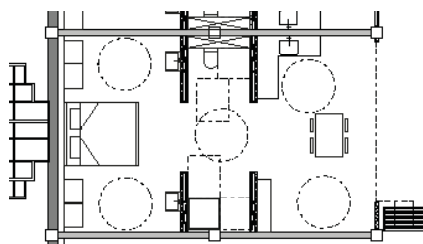
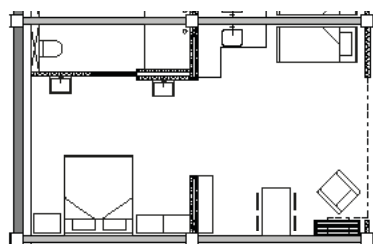
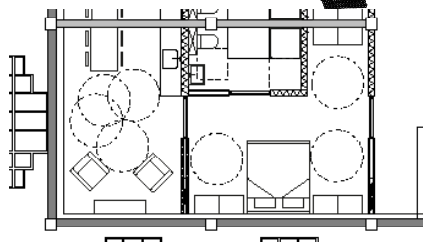
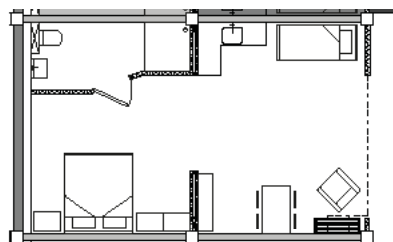
Music Student

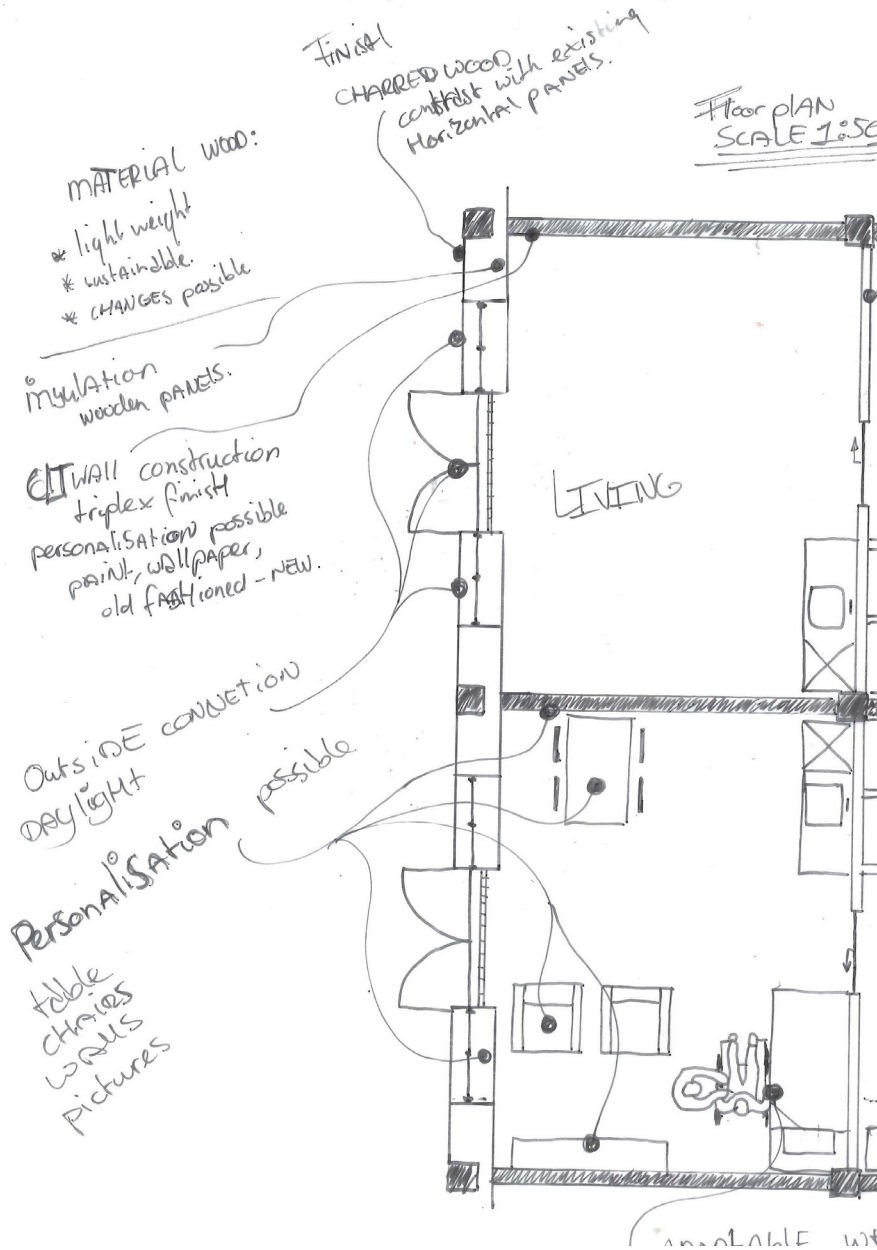


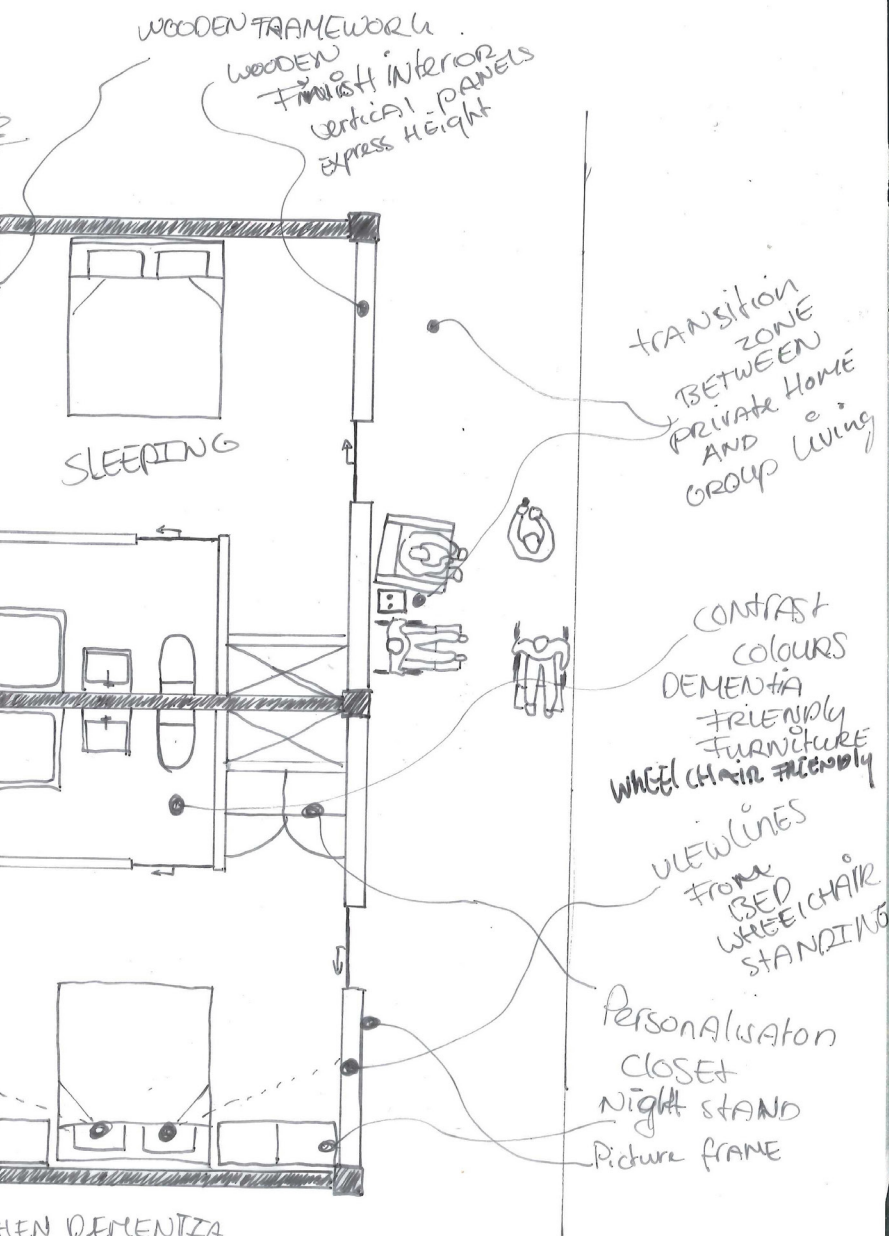
In the design the dwelling for the couples on the dementia floor explains well how the framework is used for the design. The elements accessibility, nature and social interaction were tested in a model 1to200 scale on the composition of dwellings and circulation were the 1to50 scale was used for the dwelling and the circulation within the dwelling. The dwelling is tested in multiple ways resulting in several options. With the P3 was a hand drawing made showing all the elements incorporate into the design (14 -15).



Model 1:50 study dementia dwelling

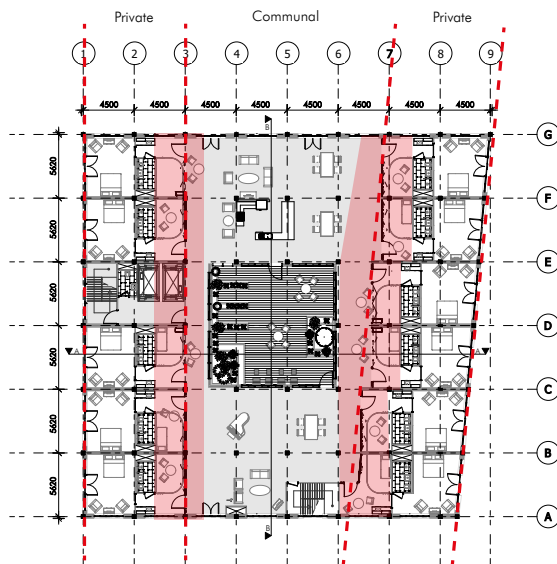




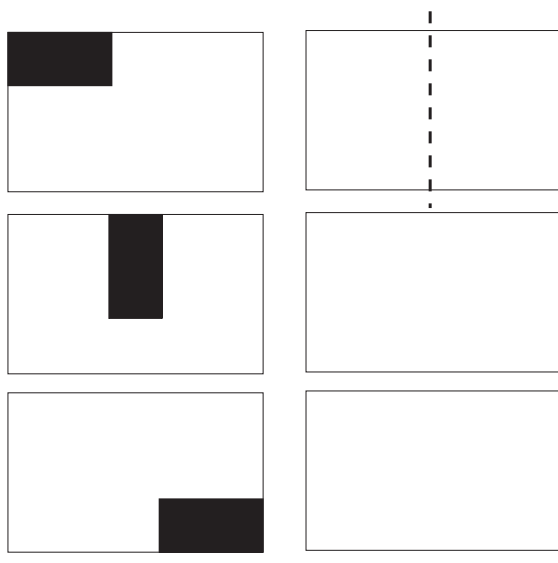




After P3 several conclusion were made that the composition of the dwelling was to closed off by designing the most private part in the front resulting in a not natural composition of space in the floor plan. The floor plan had no transition zone between the communal space and the dwelling resulting in a missed opportunity for social interaction. While looking back at the several option made in the earlier process (page 13) replacing the core in the dwelling and using this as a boundary between bedroom and living space the private line was determent. The living space now had the opportunity to be the transition zone with a moveable wall creating a better connection between the communal and private space. Even with the changes all the other aspect of the design in P3 remain making the design stronger (page 18 -19).



Private - Communal - Transition zone



Wetcore - Line of privacy

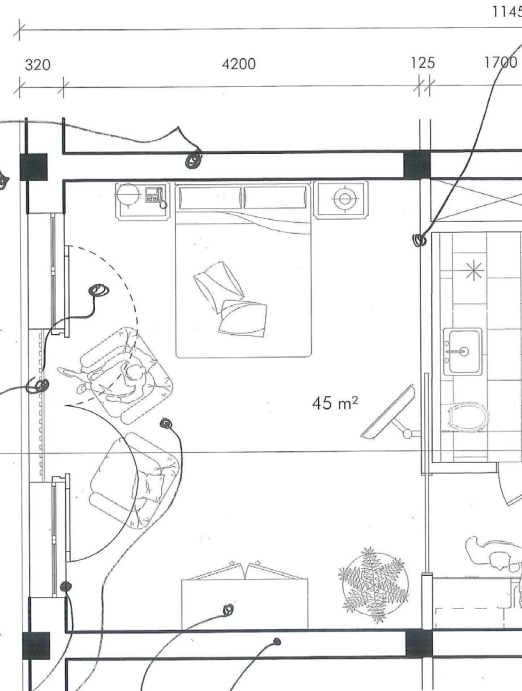


Finish CHARRERS WOOD
contrast with
EXISTING
sustainable
MAINTENANCE
Free

Floorplan
SCALE 1:850

CLT construction
light weight
PERSONALISATION
Paint possible
wallpaper
del fashioned - new
MAXIMUM daylight
outside connection

possible
PERSONALISATION
rdbie
CHAIRS
wall
pictures

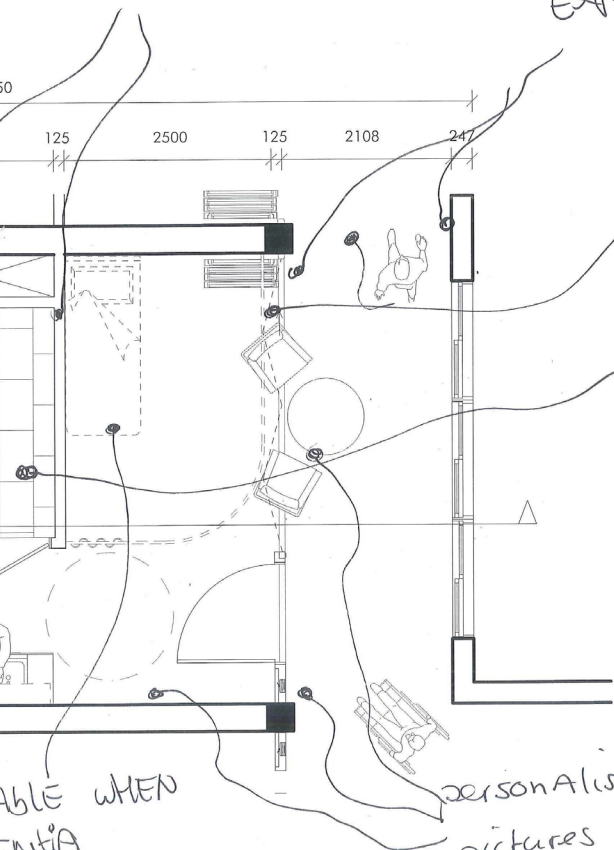


Adapt A
DEMO
ENTER



wooden FRAMEwork
with insulation
Acoustic

wooden finish interior
vertical panels
Express Height



OPEN
- CLOSED
transition
zone
privacy

- contrast colours
- DEMENTIA friendly furniture
- WHEELCHAIR friendly

ABLE WHEN
ENTIA
S STAGE 3

personalisation
pictures
table chairs
wall



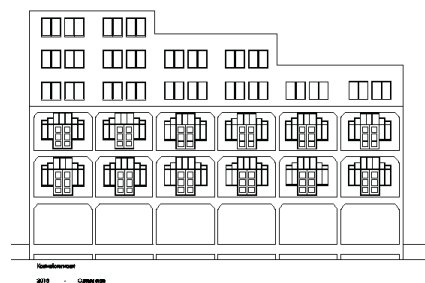
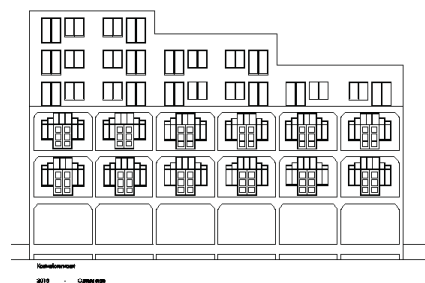
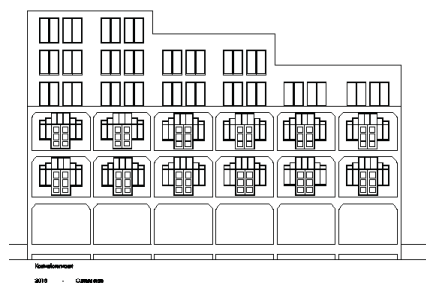
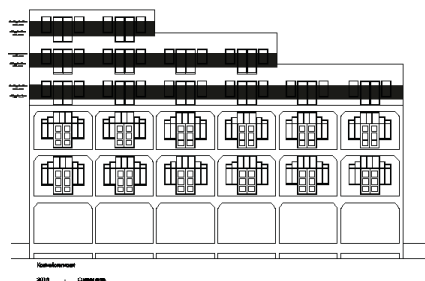
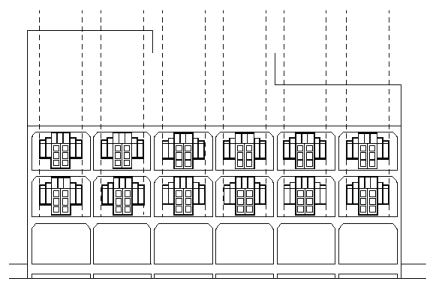
With the design of the façade all the used tools came together.

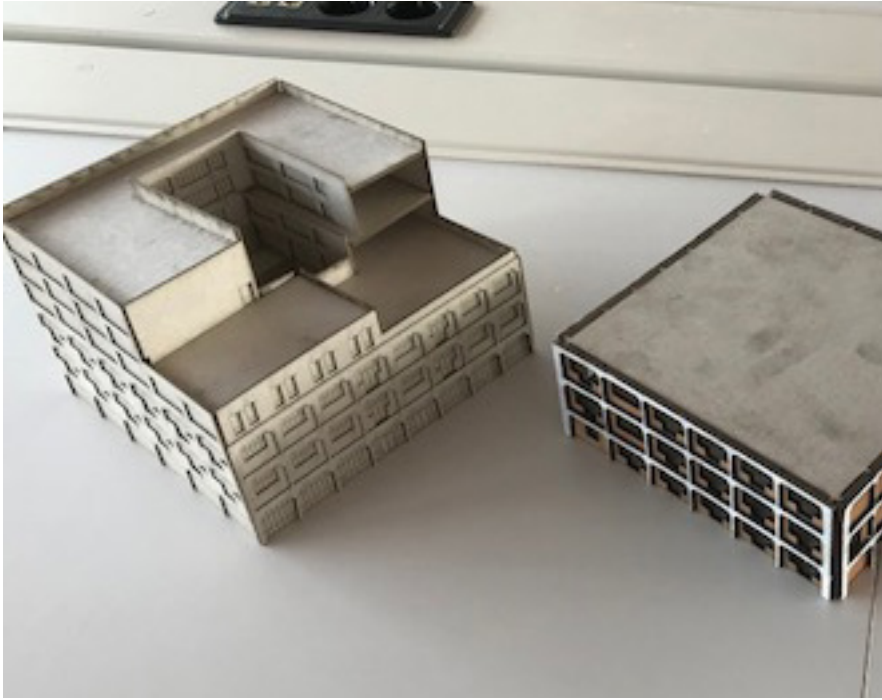
I tested through scales (1:1000, 1:200, 1:50) and with different methods such as 3D-models, building models and drawings.

My testing methods were done through creating several options which meant redoing models and making several sets of drawings of for example the façade. The model making is a time consuming method in combination with the amount of options I drew.

Nonetheless the model making gave me a good feeling about the proportions of space and during the process you come in contact not only with the façade but also for example the circulation and construction. It brings a lot of elements together making my design decisions stronger because I took several points in consideration.

Testing materials made the project come more alive which helps with visualization of your ideas and confirms or not the image that I had in my mind of what the project should or could be.

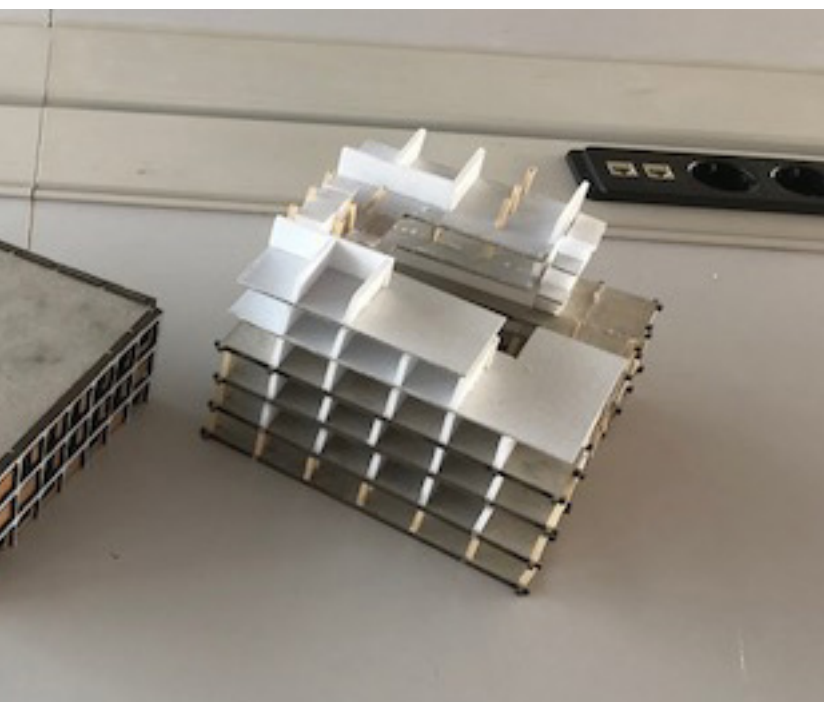




Model study 1:200 New & existing, the existing, construction and circulation

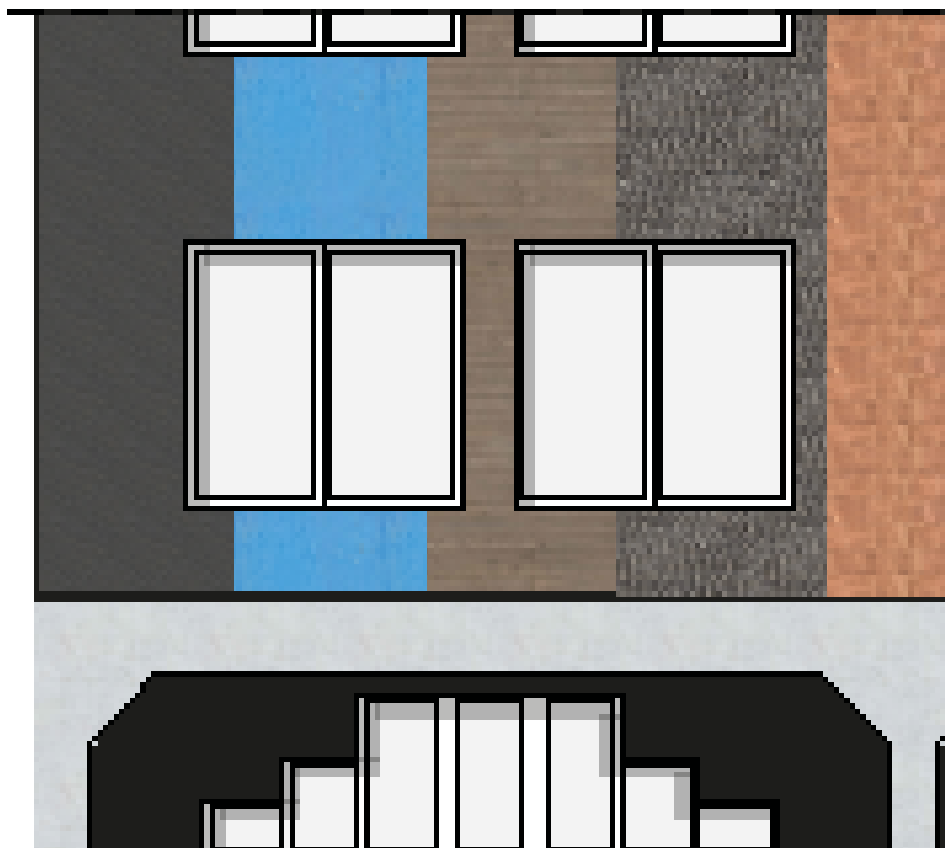


colour & environment testing



ulation





Selection of tested materials





Aspect 02

The relationship between research and design

From the studio the design brief was as followed: "The task of future architects is to provide sensible solutions in this incredibly complex force field. Proposals should not just answer to the immediate requirements of the brief, but should be future-driven. Behind the brief for an apartment building lie the bigger questions of 'how do we want to live in the future?' and 'what do our cities need?'"

This question led to the following three main aspects for the research and the design which are; city living, high density and future orientated. I have answered these questions with two main aspects in my research which were the target group (co-housing for people with dementia and partner) and adding a volume to the existing building and urban context.

Both aspects don't need to relate to each other but can be combined to answer the brief especially for a city as Amsterdam. With demolishing and building new the brief could have been answered as well but I chose to reuse and add volume to densify. Densification through reuse and added volume can be a strong strategy for a city and specially for a city as Amsterdam, having many listed buildings and lacking free plots to build on. With this strategy the questions are answered and the quality of the existing urban context can be maintained such as parks and public space.



The target group is a relevant subject for the brief. In 2040 the amount of people that have dementia will have doubled compared to the existing amount of 2018, creating a need for new dwellings. Not only the need in numbers is an aspect but also with the existing costs being too high and the quality of the care that is dropping there can be argued that there is a need for new solution and even a care system. Architecture in general and my design can contribute to these problems (medical developments are much more influential) by creating different solutions on how to provide housing for people with dementia. With my research and design I try to contribute and answer the questions asked in the design brief.



Aspect 03

Reflecting upon the scientific relevance of the work compared to the methods of the studio

Within the studio most of the research is done through typological research, mainly case studies. I used these methods to analyze existing buildings and added volume but also group homes for people with dementia. Within the starting period of the research one might also use scientific articles to understand the target group.

With my target group I had to read more scientific papers than most of the colleagues to get a understanding of the behavior of people with dementia, the disease, its effects and how architecture can contribute in positive and negative ways to a person with dementia and it's behavior.

Besides the target group I had to do extra research into the existing site and building finding out the history of the building and its elements deciding the historic relevance. Not only the historic relevance was an added method but also a more technical approach on the calculation of the existing construction.

Looking back at the process my chose of topic was maybe too difficult and especially in combination with the existing building adding unnecessary pressure on myself. Dementia is an hard and heavy topic if you really want to understand what happens to someone having the disease. Me taking on this topic is part ambition part underestimation but nonetheless with much scientific relevance and a great development for me as a designer and a person.

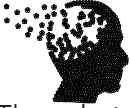


The relationship between the graduation project and the wider social, professional and scientific framework

Within my subject there are two main aspects which need to be described. The first is the reuse and adding volume which was done within my design. City are already dense and most have little vacant plots. This means that building new will result in using existing free public space such as parks or demolishing existing.

While demolishing existing buildings doesn't have to be a bad thing if the life cycle of the building is expired this is not always the case resulting in unnecessary waste of materials and energy. Also in a city as Amsterdam with a rich history and heritage resulting in a big amount of listed buildings the opportunity of new building is limited. Answering a densification assignment with adding a volume will result in new possibility for the city and maybe even a city wide strategy for densification since the city has enough existing building without added volumes.

The target group has relevance on several aspects. The design is a co-housing scheme for people with dementia and their partners. Because the design provides housing for both you don't have to separate couples that lived their whole life's together. These couples can assist each other with caregiving which will result in less stress and pressure on the spouses if compared to living at home. Also the professional care can be combined resulting in lowered costs and pressure for the professional caregiver. The co-housing scheme provide a solution to the bigger problem of expensive and rising care cost, high stress from work pressure on caregivers and emotional stress through separation of the couples.



Aspect 04

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

The design also has a solution to protect elderly from loneliness. This is done through the co-housing schemes within each floor plan making sure that couples or widowers never end up alone and always have someone to rely on within close range. The design can also be relevant for different target groups. In general it can be a way to lower the cost of health care and stress on caregivers because there is a support system through the co-housing scheme.

The design can also be used for non-related care needing target groups. Starters for example could benefit from the co-housing scheme as they can share the financing.

The basis of the design is that with lesser private space and some shared space through a co-housing scheme the target groups becomes stronger than alone.

Aspect 05



Discuss the ethical issues and dilemmas

One dilemma that I have encountered was maybe the pressure a topic such as dementia can bring. You design for a target group that has strong emotional developments and changes during the last part of their lives. Realizing this meant for me added pressure. A design is probably not the biggest influence on a person's life but done correctly can bring a positive effect making it for me of huge relevance that I do this correctly, so that even with this horrible disease someone can still get the most out of life.