Own your Treatment Space

A study about the feeling of autonomy in psychiatric clinics.

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Abstract

Psychiatric clinics where patients live are only used when the patient cannot live on their own anymore. Stays are kept as short as possible and patients are stimulated to reintegrate and live on their own again (GGZ Noord-Holland-Noord, n.d.). For patients with the prospect of moving out again, this now often fails, because the difference between living in a clinic and living in your own home is too big. The architecture does not fully support aspects of giving and taking autonomy, which can result in patients feeling helpless (Evans, 2003). This research aims to make it easier for patients admitted to psychiatric clinics to reintegrate into out-patient care and their own home, by finding ways in which architecture can increase the autonomy that patients in clinics have.

For this research, the subject of feeling at home is taken from J. Habraken (1961), who says that a place can only feel like a home when you are able to build, to change it to your preferences. The paper by Golembiewski (2010) is used as it directly posed architectural guidelines. There is no research yet that combines elements of architecture and the built environment into guidelines to increase the feeling of autonomy for patients admitted to psychiatric clinics.

Part of the research is done by a case study analysis, in which 5 psychiatric clinics in The Netherlands will be ranked points in five different categories, with a maximum of five points. The categories are: **Room for activity within**, **Activities in surroundings**, **Possibility to choose your whereabouts**, **Possibility to personalize and Stigmatization**. Another part of the research is done by by interviews and observations in a Field Work. Three interviews were done with members of staff and there have also been observations directed to finding out people's needs, wishes and relationship with the building.

The research resulted in 17 architectural guidelines that architects can use in order to design psychiatric clinics and increase the amount of autonomy patients have. Within the guidelines, there is a clash between those that make sure safety and privacy is provided within the building and thosethat stimulate social contact and activities. It is both important to comfort patients as well as prepare them to live on their own.

Key words: Autonomy, personalization, temporary co-living, psychiatric clinics, inpatient healthcare facilities, patient-centred healthcare.

1. Introduction

Preamble

Visiting a friend who had been admitted to a facility treating people with eating disorders, I was taken aback by the architecture in which the facility was housed. Personally, I am interested in the topic of homeliness and finding out the role architecture can play in making people feel at home, also for temporary homes. As a one-time visitor, I could not imagine this building could possibly feel like somebody's home.

Validating personality and making people feel comfortable plays a big role in the treatment of eating disorders (Maine et al., 2016). This is also the case for other parts of the healthcare system, like psychiatric clinics, as patient-centred healthcare is becoming more and more wide-spread (Cano et al., 2018). Having autonomy over your healing process is an important factor in the treatment of any health related disorder (Beauchamp & Childress, 1994) (Ells, 2001) (Lowndes et al., 2017) (Morgan et al., 1993).

Dutch psychiatric care

This research will focus on temporary care typologies for people with psychiatric disorders. In The Netherlands, psychiatric care is organized by the GGZ. They maintain multiple types of locations that treat people with psychiatric problems. One of these is the polyclinic, which is a location where people can go to have one-on-one therapy, group therapy or do exercises with a therapist. These are locations where you go for a treatment and then leave again afterwards (ggz delfland, n.d.). The GGZ also has daycare facilities. In these locations, activities are organized for patients who would otherwise struggle with day-planning or to have enough social contact, for example on a walk-in basis. People do not live here (GGZ inGeest, 2022).

Sometimes it's not possible to live in your own home anymore. For these situations, there are other locations available, like a crisis clinic. This is a location that admits people who need 24/7 help as soon as possible, when they can't take care of themselves anymore. For example when they endanger their own lives. Admission can be done within a day and people can only stay there for a period of a few months (Yulius, 2022). When there is no immediate crisis, but the patient cannot take care of themselves, they can be admitted to a longer term psychiatric clinic. These can be called 'klinisch wonen' in Dutch. Care is available 24/7 and without appointments (GGZ Noord-Holland-Noord, n.d.). These clinics offer people treatment for a longer period of time, which can even become permanent with the 'Wet Langdurige Zorg' (Ministerie van Volksgezondheid, Welzijn en Sport, 2022b). Another type of admission is Protected Living. For this type of location, multiple independent apartments are often located within the neighbourhood. Care is given as needed, but often on appointment or with a video screen. Coaches are not always available (GGZ Noord-Holland-Noord, n.d.). The Dutch prison system also has specific locations for prisoners with psychiatric problems. These locations are called penitentiary centres and the psychiatric care is given by the prison system, not by GGZ organizations (Dienst Justitiële Inrichtingen, 2021).

Admission to clinics where people are admitted and also live are minimized as much as possible as care is preferably given by the polyclinics, when people live independently from care. Admissions are done as short as possible but as long as needed (GGZ Noord-Holland-Noord, n.d.). Because of this, people can

maintain their independence as long as possible and are not restricted more than they need to be. When needed, psychiatric treatment can be mandatory, when people are a serious danger to themselves or others. Care in all types of locations can be mandatory and admissions to live somewhere are kept at a minimum. Mandatory psychiatric care is given through the 'Wet verplichte geestelijke gezondheidszorg' (Ministerie van Volksgezondheid, Welzijn en Sport, 2022a).

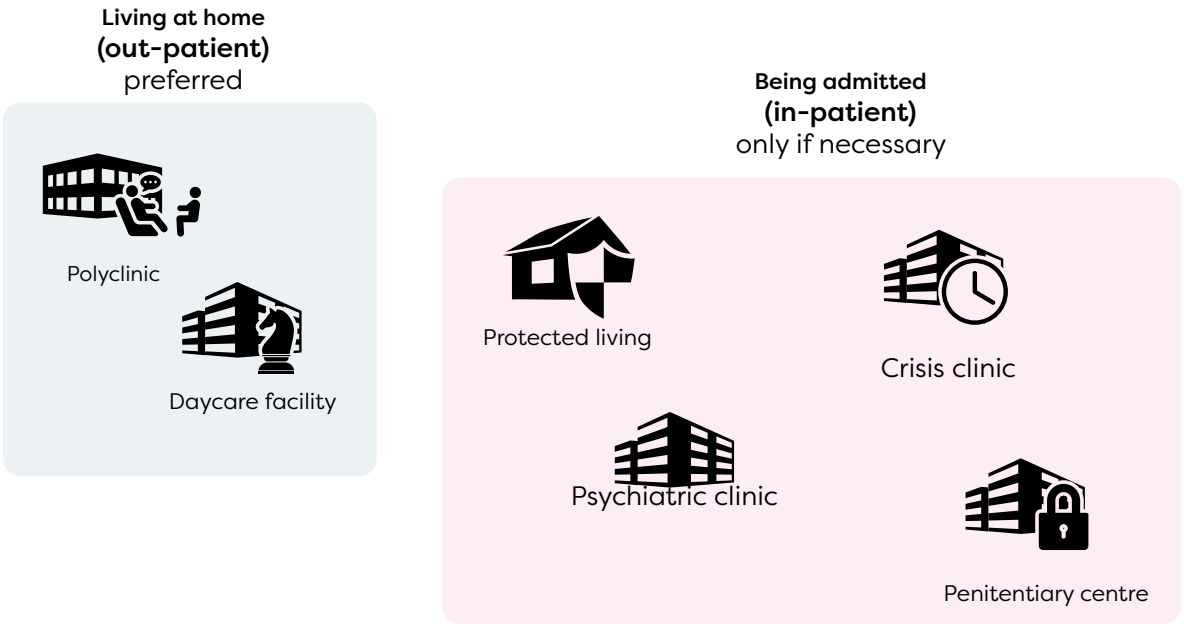


Figure 1.1: *Psychiatric care facilities.* Own diagram.

Problem statement and aims

Psychiatric clinics where patients live are only used when the patient cannot live on their own anymore. Stays are kept as short as possible and patients are stimulated to reintegrate and live on their own again (GGZ Noord-Holland-Noord, n.d.). For patients with the prospect of moving out again, this now often fails. The difference between living in a clinic and living in your own home can too big, as the architecture of many psychiatric clinics does not fully support aspects of giving and taking autonomy, which can result in patients feeling helpless (Evans, 2003). Part of the treatment process is to let people gradually take control over as much as possible, during the course of their stay (Anthony & Farkas, 2019).

This research aims to make it easier for patients admitted to psychiatric clinics to reintegrate into out-patient care and their own home, by finding ways in which architecture can increase the feeling of autonomy that patients clinics can have. This is one of the ways to reduce the differences people experience between living in a clinic and living at home.

Theoretical Framework

This research falls into an existing framework of research, on psychiatric clinics, other types of healthcare services or different feelings people can experience. This chapter briefly mentions some of them.

Feeling at home

Unrelated to the healthcare system, John Habraken (1961) wrote a book discussing that the act of building is directly tied to living. He stresses that people must have an influence over their dwelling in order to feel at home. To me personally, this is an important topic, as I am constantly building,

changing and reshuffling my apartment and room myself and would feel restricted were I not able to do so. Being able to personalize the space really makes the difference between residing somewhere and sleeping somewhere. This importance to me personally is the reason why I chose to read Habraken in the light of this research. Combining the focus on personalization with the idea that people should feel comfortable in order to heal, helps in establishing the importance of autonomy in healthcare. This will be discussed later in this framework

Salutogenesis
The term Salutogenesis was coined by A. Antonovsky in his book *Health, Stress and Coping* (1980). Salutogenesis is the study of health that focuses on elements that make you feel healthy, rather than on elements that cause sickness. Looking at psychiatry through the lens of salutogenesis accepts that the basis, having a psychiatric disease, is unhealthy. Becoming healthy, or experiencing health, takes work. This is the reason why people get psychiatric help. Becoming more healthy; improving your health is seen as more important than focusing on minimizing sickness, which is more important in traditional health studies. Golembiewski discusses how to design buildings for psychiatric care in a salutogenic way in his paper (2010). As many findings within Golembiewski's paper have an influence on autonomy, this was influential for this thesis. In the Literature research on page 11, this is explained in more detail.

Autonomy or independence?
Ells (2001) argues that autonomy should not be confused with independence, as independence rejects seeking help while autonomy also means that patients can seek help when they realize they need to. This difference is important to keep in mind when reading about autonomy, as creating locations where people have more autonomy does not have to mean that any care is taken away.

Healing spaces
There is also a lot of research about the influence architecture and your environment can have on the healing process. This started with Ulrich's research into the view of a hospital window and is discussed in the book *Healing Spaces* by Sternberg, which gives a very detailed and biological overview of how your different senses can have an impact on your process of healing (2010). The concept of Healing Gardens, which was researched by Bengtsson and Grahn is also part of the concept of Healing Spaces (2010). This is explained in more detail in the Literature Research.

In-patient and out-patient
As already mentioned in the explanation of Dutch Psychiatric care, there are generally two types of psychiatric care given in The Netherlands. This is divisable into in-patient and out-patient care. For in-patient care, patients also live at the facilty for a certain period of time, while for out-patient care, patients only come to the facility to receive help, coaching or care but they live elsewhere. As being admitted and living somewhere is seen as a severe step, this is only used when absolutely necessary (ggz delfland, n.d.) (GGZ Noord-Holland-Noord, n.d.).

Theoretical framework

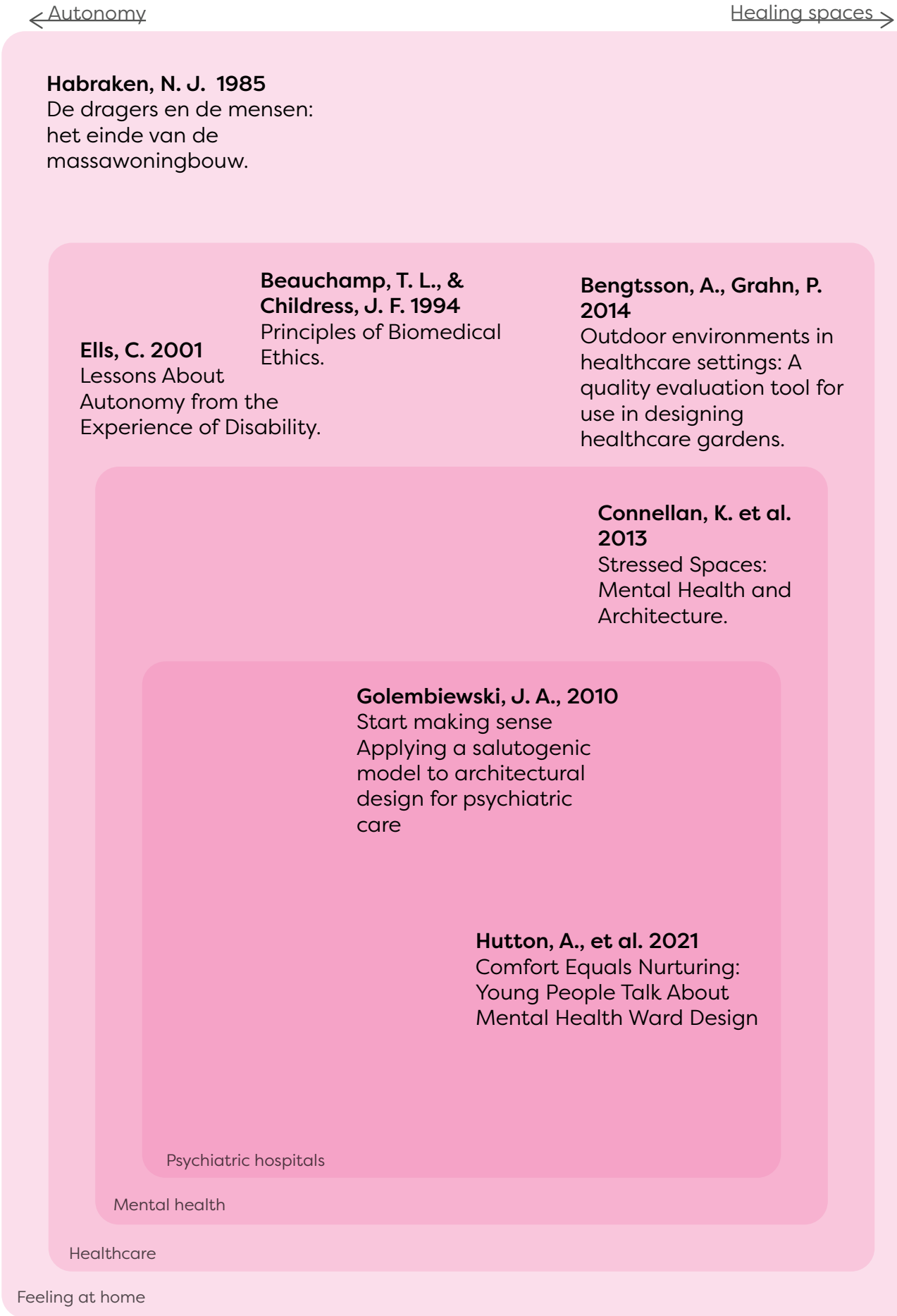


Figure 1.2: *Theoretical framework.* Own diagram.

Hypothesis

I expect that architecture can have a substancial influence on the autonomy patients have in psychiatric clinics. As different rooms that are available and the configuration of these rooms change the way people use the building, this will also make patients feel stimulated or restricted to make their own choices. Architecture is a complex system with many different aspects, like materials, dimensions, connections, privacy and the way outdoor space is used, so I expect there to be many different things within architecture that influence autonomy. Choices made by staff and the care philosophy will also have a large influence on this, so architecture is not a final tool to increase autonomy.

Research question

Which elements of architecture and the built environment can support the reintegration of a patient from a safe and controlled psychiatric clinic to their own home by increasing the autonomy of living?

1. In which ways is it possible for architecture to influence the autonomy patients have?
2. What role play architectural types of psychiatric clinics that are or were already in use in the Netherlands in influencing autonomy?
3. What is the role of the specific urban context and direct environment around psychiatric clinics?

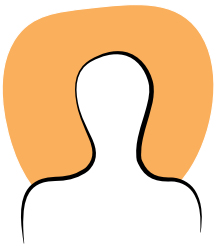
Definitions

Architectural elements: For this research, architectural elements are defined as all elements related to a building design, for example daylight, spatial relations, location, the relation of the garden with the building and programme.
Autonomy: The condition of self-government (Dictionary.com, n.d.-a). Having the possibility to influence something by your own ideas and preferences. For this research, autonomy will be restricted to possibilities within admission into hroughout an episode of care, beginning at admission and concluding with hospital discharge (Definitive Healthcare, n.d.).
Pre patient journey: The pre patient journey defines the experiences patients can have before admission to a care organization.
Post patient journey: The post patient journey defines the experiences patients can have after being discharged form a care organization.
Autonomy: Having the possibility to influence something by your own ideas and preferences (Dictionary.com, n.d.-a). Choices about being admitted are left out as this is not part of the architectural discourse.
Feeling of autonomy: Feeling like you have the possibility to influence something by your own ideas and preferences. A person can feel like they have more influence than they actually have because they're being treated with respect.
Personalization: The act or process of tailoring something to meet an individual's specifications, needs, or preferences (Dictionary.com, n.d.-b). For this research, personalization is mainly done by the patient themselves. Personalization is seen as an element of autonomy.
Psychiatric clinics: Locations that offer 24/7 psychiatric help while the patient lives within the building for a certain period of time. This can be temporal, but also pemanent (GGZ Noord-Holland-Noord, n.d.).
Patient journey: Patient journey is a term referring to a patient's experience.

Target Group (inclusions and exclusions)

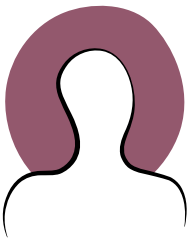
This research focuses on psychiatric clinics that admit people without immediate crisis and for longer periods of time. People who are admitted to the facility cannot take care of their own at the moment they are admitted and they need help 24/7. According to coach 2, whether their stay will be temporal or permanent will be decided during their stay by a psychiatrist, guided by the way the patients feel and act during their admission. As the research is focused on making it easier to reintegrate into out-patient care and patient's own homes, patients without the prospect of moving out are disregarded. For this research, patients with strong aggressive behaviour are also disregarded, as this will negatively impact other patient's possibilities. Additionally, patients who have to be restricted in their freedom to go outside will also be disregarded as for other patients, it's important that the facility is openly accessible. Other locations that are less focused on reintegration are available for patients who need more restrictions. Finally, patients who need specialized geriatric or physical care will not be taken into account.

Following, in figure 1.3, are three personas that help form an image about the patients included in the research and following design. These are based off of the group of patients that were admitted in the location of the Field Work. They do not resemble individual people.



Finley (27)

- Family has moved away from the Netherlands. Because of this, they couldn't take Finley in when they had a bad psychosis 4 months ago.
- Could not take care of themselves anymore. Often woke up with nightmares not knowing what was going on, thus needed 24/7 help
- Been admitted for 3 months
- Is advancing well, preparing to move back to their own apartment
- Often goes into the city to visit friends and has recently started their office job at Coolblue again



Alex (46)

- Alex lived with his father until 42. After he died, he got help from his neighbour. This worked well for some time, until the neighbour couldn't help enough anymore
- He has been admitted for 8 months and was diagnosed with schizophrenia as a child.
- Alex stayed more to himself in the beginning, but now notices he actually looks forward to the activities
- Recently started working at a wood working shop and really enjoys the contact with colleagues

Mary (55)

- Mary had a particularly bad depressed period after a divorce four years ago. After this, she was admitted.
- She moved out of the building one year ago after having lived there for two years
- Had always struggled with bipolar disorder
- She learned to appreciate the activities that were held at the location, particularly the board games. She made many friends, some of which still live there.
- Now visits the building two times per week during the day as she is only able to works for two days.

Figure 1.3: *Personas.* Own diagram.

Methods

1. **In which ways is it possible for architecture to influence the autonomy patients have?** This question will be answered by interviews and observations in a Field Work in which the researcher will participate

together with two other students in a psychiatric clinic for five consecutive days. There will be three interviews with members of the staff and there will also be observations. As the interviews will be done by three people with their own research, only part of the interview has questions directly related to the topic of this research. These questions will be directed to finding out patients' and staff's needs, wishes and relationship with the building, as well as the things the patients could and should control themselves.

2. **What architectural types of psychiatric clinics are or were already in use in the Netherlands?**
3. **What is the role of the specific urban context and direct environment around psychiatric clinics?**

   Both questions 1 and 2 will be researched by doing a case study analysis, in which 5 psychiatric clinics in The Netherlands will be ranked a certain amount of points in five different categories, with a maximum of five points. The categories are: **Room for activity within**, **Activities in surroundings**, **Possibility to choose your whereabouts**, **Possibility to personalize and Stigmatization**. These categories were chosen because they influence the feeling of autonomy and can be influenced by architecture, supported by different sources from the literature. Giving points will be done by one person by reading about the projects in books and online, and by looking at architectural drawings of the projects. Points will be given in two rounds to minimize a difference between the first project ranked and the last.

Thesis continues on the next page.

2. Literature research

This chapter discusses ways that architecture can influence autonomy in psychiatric clinics, as discussed in previous literature. Many writers of books or researchers have already mentioned or researched the architecture of psychiatric clinics. The text is organized by topic, sometimes bundling multiple sources into one topic.

Social functions in surroundings

In the Primer on the psychiatric rehabilitation process, there is much emphasis on helping people become more successful in the social environment of their choice (Anthony & Farkas, 2019). This means that there should be social environments accessible to patients admitted, making it important that there is a wide range of social functions in the surroundings.

Nature in surroundings

In the book by Sternberg (2010), the calming and healing effect of nature is mentioned as an essential part of the concept of Healing Spaces. Because of this, nature should be accessible and in the surroundings.

Different outdoor areas

Bengtsson and Grahn (2014) mention in their research that for people with a low well-being, the garden should support refuge in nature and contemplation, both ways of passive engagement. People with a higher well-being will more likely use the garden for more active engagement, like social or cultural activities. They can also often take more challenge inspiring design. The difference between high and low wellbeing should be seen as a range. As people with all well-beings are present in psychiatric clinics, the garden should support all types of activities.

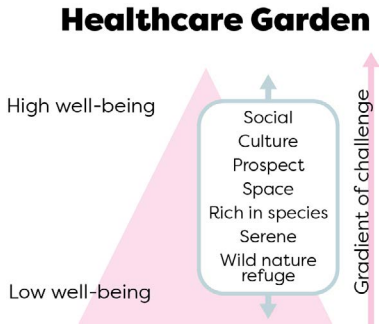


Figure 2.1: *Healing Gardens.* Bengtsson and Grahn (visual style edited)

Minimize stigmatization

Experiencing stigma makes it difficult to engage in social contacts with others and negatively influences self-esteem (Link et al., 2001) (Link & Phelan, 2001). Both limit people in their possibilities to make their own choices and thus limit the amount of autonomy patients can have. Becoming more successful in social environments of patient's choice is seen as one of the outcomes of the psychiatric reintegration process (Anthony & Farkas, 2019).

Making activities possibe

Undertaking activities helps against feeling bored. According to Hutton, boredom is a feeling many patients experience in psychiatric clinics (2003). Boredom can have a negative effect on patients and increase the feeling of sickness (Hayes et al., 2019). Spatial configuration and architecture has an influence on which activities can be done and which can be done at the same time.

Sports and cooking

Doing sports and being physically active is often mentioned as one of the important elements of Healing Architecture. Sports can be meditative, it can improve the image of yourself, during sports your body releases serotonins which make you feel good and it's healthy to work out (Sternberg, 2010).
Also in the article by Hutton et al. (2021), some of the interviewed patients mention that group activities like cooking or baking can help really well to distract people; make them feel less bored. On top of that, it can be meditative, make you proud of something you've accomplished and also work well to connect to other people in the group.

Cosy and Safe
It's important for spaces to be comprehensible (Anthony & Farkas, 2019). Because of this, the feeling of familiarity should be evoked, as comprehension is managed through memory. The building should thus be designed to feel cosy and safe, rather than institutional (Golembiewski, 2010). Institutional spaces are also more likely to increase stress levels and evoke hallucinations for people with psychotic disorders (Osmond, 1957) (Elliott, 1972).

Privacy
In the article by Hutton et al. (2021), privacy is multiple times mentioned as lacking in psychiatric clinics. Patients mentioned they were not allowed to use the bathroom with the door closed, be on the phone in private or meet family in a separate room.

Designed to personalize
Following J. Habraken's thoughts (1985), living somewhere and the act of building; changing the dwelling in order to make it a better fit for you, are directly intertwined. Without having the possibility to change your dwelling, it will never feel like a home and will make you feel less comfortable.

Being able to retreat
As mentioned in Different outdoor areas, the research by Bengtsson and Grahn (2014) mentions that people with a lower well-being are more likely to use a garden for refuge in nature or contemplation, that the design should be serene. As people with a low well-being are present in psychiatric clinics, a part of the garden should be designed in order to retreat.

Feeling in control
Golembiewski (2010) uses the word 'fortifying' for the feeling of being in control and the word 'disempowering' for the feeling of being completely out of control. As it's important for somebody to feel empowered in order to be able to make their own decisions, this is essential for autonomy.

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3. Influence of architecture

When researching autonomy from an architectural point of view, it's important to distinguish how much architecture can actually influence the feeling of autonomy that people have in psychiatric clinics. This chapter discusses different ways that architecture can influence this and it disccusses the relation that users of psychiatric clinics have with the building and architecture.

The research is done by own observations and interviews in the Field Work weeks, sometimes supported by literature research. During the Field Work, I went to a psychiatric clinic in Hendrik Ido Ambacht together with two other students. We went there for five days and did not sleep there. We joined activities they organized and also organized a drawing workshop. We did three interviews with members of the staff and observed everything that happened fduring our stay. The location is Yulius Volgerlanden in the Case Study Analysis. As the Field Work was done in only one specific location, the research pool is limited. Stories are mainly personal and should be read as such rather than widespread consensus. *Cursive* text are specific stories from the Field Work, regular text are more general observations.

Social functions in surroundings

Some sports and walks can only be done outside or in sports halls. Having space for these easily accessible in the surroundings can take the threshold away to join in and possibly also meet people from the neighbourhood.
Once a year, during NLDoet, people from the neighbourhood come to help and do voluntary work that would otherwise not be possible. The previous year, they built a green house together with the volunteers, as visible in figure 2.4. At Yulius, here are also volunteers that help with certain activities, like the walk-in. This is two mornings every week, open for everybody to walk in and join the activities they're doing, like playing board games or painting plant pots. Because it's open, also people from the neighbourhood who are also known to Yulius but live on their own can join. We saw multiple people for whom this was a very worthy addition. This system of connecting people with others from the neighbourhood and also implementing voluntary work is only possible if there are people living around. As visible in Case studies **Meerenberg** and **Maasoord**, this is not always the case.

There are multiple places that offer work to people with psychiatric problems. These are valuable functions to have around a facility as having a job can give patients a purpose, create social connections with people from the outside and also prepare people for a life outside of the facility with a working schedule. *In the Field work, we talked to coach 1 who had contacts with a place that did for example wood working, metal working, bike repairs and municipal gardening. They also had contact with a care farm, where patient 1, who will be mentioned later, worked.*

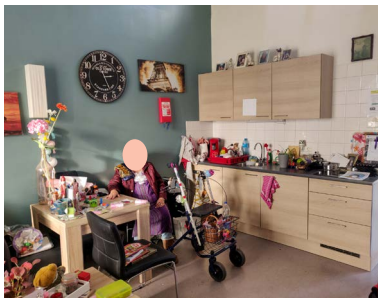


Figure 2.2: Patient 2's apartment. Own image.

Coaches sometimes went to get groceries together with patients. They did this both one-on-one and with groups. Many people went to the small shopping mall alone to get cigarettes, food or other things. Patient 2 really liked to go to the Zeeman to get room decorations. Their room is visible in figure 2.2 and 2.3. Having these shopping functions around is important for making this possible and letting people start to live on their own.

Figure 2.3: Patient 2's bedroom. Own image.

Nature in surroundings

The Fitness Coach organized walks in nature with some patients once every week. This was seen as particularly

calming and meditative. The fitness coach would like to have more nature around the location than was around there. The surroundings can be seen in Case Study **Yulius Volgerlanden**, on page 27.

Figure 2.4: Green house. Own image.

Vegetable garden

In the Field Work, one of the activities we did was work in the vegetable garden. This is a way for patients to work outside in a safe space on the clinic site. It gave patient 3 a structure during the week and they really enjoyed it.

Feeling in control

In the Field Work, patients all had their own thermostat, light switches and could lock their own doors and windows. In the interviews it was mentioned that the organization doesn't really experience important problems with this. For this patient group, these are small things that make patients feel in control.

Making activities possible

Indoor sports activities can not be done in the same room as arts and crafts, as mainly sports needs equipment and space, while for arts and crafts you would need tables. Drama and watching movies could possibly be done in the same room, but cannot be done at the same time. In this case, the architecture and spatial configuration dictate which activities can be done at all and which can be done at the same time. *Coach 2 mentioned during one of the interviews in our Field Work that they actively try to get people out of their apartments and into the communal areas with activities. This stimulates meeting others and tries to minimize a feeling of boredom.*

Sports and cooking

In the Field Work location, there was an indoor fitness where we spent some time looking at the architectural requirements and also spoke to the fitness coach. They said that it can be very rewarding to see your personal improvements. One of the patients was really good at sports and helped the two coaches in training other patients. Doing this gave them a clear sense of purpose. One of the problems they encountered was that the room wasn't high enough. This was a problem for instance during jumping rope. For some exercises and people you would want to have a large mirror, other people don't like looking at themselves while doing sports. According to the fitness coach, it's important to both have space with a mirror and space where you can do exercises without seeing yourself. Another thing mentioned as important for indoor sports is good ventilation, preferably an openable door or window. When asking people, both staff in the interviews and patients in talks mentioned that having a gym within the building is a good addition; that it helps making sports available to as many patients as possible.

Figure 2.5: The activity kitchen. Own image.

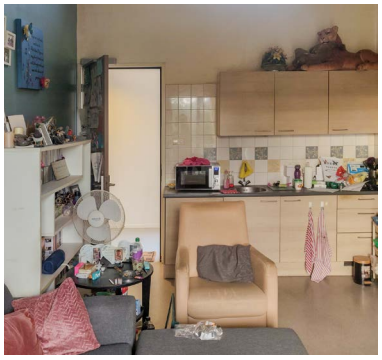


Figure 2.6: Kitchens in apartments. Own image.

In the Field work, we joined in on one of the cooking activities that were done at the Yulius location. The room is visible in figure 2.5. We spent a lot of time talking to the Cook. They thought doing the cooking activity is very important and tries to make it as accessible as possible, so that the threshold to join is as low as possible. They also

mentioned the fact that teaching people to cook is an important step in the rehabilitation process. By showing the process and also sometimes doing the groceries together, they want the patients to realize that eating healthy does not have to be expensive and difficult. Cooking has specific demands of a room, of course there needs to be a kitchen. For an activity such as this preferably a homely kitchen rather than an industrial one, so that people might recognize their own kitchen and also enjoy being in it. There also needs to be a space to eat the meal you cooked together.

In the Yulius location, every apartment also had their own kitchen, as visible in figure 2.6. This way, people can also cook for themselves if they'd want to. I believe this to be an important aspect as it can work together with the cooking trainings. People can try out things they learned in the training and discuss this next time.

Designed to personalize

In the Field Work, there was a big difference between the apartments. Some were very personalized or decorated, as visible in figure 2.3. Others were not. Some had a lot of paintings, drawings or posters on the walls, but another one that I saw was completely empty with three wicker chairs standing next to each other facing a television. A floor plan of this room is visible in figure 2.7. This difference was interesting, as it reflects what people need. Some people simply needed more space and had more stuff than others.

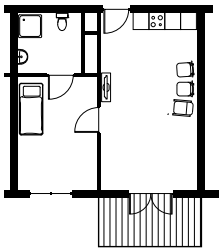


Figure 2.7: *Sober apartment.* Own diagram

As can be seen in figures 2.2, 2.3 and 2.6, the apartments had a green wall. This was the case in every apartment. When asked about the wall, everybody hated it. After a longer conversation, most people did not actually mind the specific green colour, but the fact that they were not able to change the colour, to personalize it. People were also not allowed to drill holes in the walls. From the point of view of the care organization, this is a very understandable rule, as the care organization rents the building instead of owns it and it is supposed to be a temporary home. This results in a high turn-over rate, meaning a fast degradation of the walls if drilling and painting would be allowed. This shows that other architectural elements should be designed to make personalization possible. One example is visible in the case study **Vierhoven** *in chapter 1.*

Being able to retreat

One of the ways for patients to have more autonomy is if they can choose themselves in what kind of space they want to be. Do they want to be in an active environment? Do they want to be in a private and safe environment? Or perhaps a cozy living room but with some privacy in order to talk with friends or family from outside the clinic?

Coach 3 mentioned that they purposefully made the hall and communal living rooms, contrary to the apartments as open as possible, so that it would be as easy as possible to find the coaches when you need them. Coach 1 mentioned that there are less annoyances between patients than they've seen in other locations. They suspect that is because patients have a true own apartment here, instead of just a bedroom. The increased quality and size of the apartments makes it easier to retreat, to move away when you feel annoyed.

.

When asked, both patients and staff really liked the openness, spaciousness and brightness of the building, but we also heard in two interviews that this openness has a drawback. Many people actually get too many stimuli and don't always notice themselves that that's happening. As will also be

mentioned in 'Privacy', many people had their curtains closed during the day. Next to an increasing the amount of privacy, this also decreases the amount of stimuli. There used to be a living room that was darker and softer, with less stimuli. This room is discussed more in 'Different living rooms'.

Privacy
I observed myself that patients often have their curtains closed, also during the day. As daylight and the view outside are both seen as important elements of healing architecture, this should be seen as undesirable (Connellan et al., 2013) (Evans, 2003) (Ulrich, 1984). Asking staff and patients, many patients said they wanted to have more privacy and staff added that they did not want to see cars driving by. Coach 2 said that some patients think they will be taken away by cars that arrive. This is also why there are some apartments that look into the courtyard instead of the outside. Simply giving patients their own lockable apartment does not immediately make it private enough. For many, the view outside and from the outside inwards should also be taken into account to be as private as possible.

Patient's committee
There was a patient's committee in the organization where the Field Work was done. This was a committee that advices the organization about things they find important. At the time, patient 4 was trying to convince Yulius it was a good idea that everybody should have their own laundry machine. The committee is a meaningful way to involve patients into the decision making process, but it does not have a big influence on architecture.

Individual apartments
In the Field Work, everybody had their own apartment. This was often mentioned as a good thing, as everybody has their own space and also has to clean their own apartment with the kitchen and bathroom. Patients appreciated not sharing bathrooms and it is also a way to create a smaller gap between the clinic and separate apartments. As mentioned in 'Being able to retreat', this probably decreased annoyances between patients.

Showing progress
In the Field Work, the clinic had a more permanent environment than was initially intended. Some patients did not seem to feel motivated enough to move out of the clinic, as the apartments were comfortable and the step to move out was considered too big. This had the effect that patients were not stimulated to take more autonomy and make their own choices. In Case Study **Psychiatrisch Centrum Amsterdam**, there also were apartments with their own front door on the site. This way, people might feel more direct motivation to try and move out of the main building, as this intermediate apartment is more obtainable and being able to move into these feels like an achievement.

Multiple living rooms
During our talk to patient 4, they mentioned that they really liked the fact that there were multiple living rooms. This way, you can easily see who is in which room and choose who you (don't) want to be with. At the time of our visit, there were three activity spaces, of which one was mainly used for breakfast and lunch, one for creative activities like drama and cooking and one was used as a living room with a television and board games. There was also a restaurant, that felt quite large and dark and had a view to the hall, which is an atrium with a glass roof. In the atrium, there are chairs, a table tennis table and some trees. The activity rooms were used frequently, but only when there were activities, when something was organized by the coaches. Lunch was served in two different spaces. Simple lunch was served in one of the activity rooms and a better lunch with more options could be bought in the restaurant. The restaurant was not often used outside of lunch and dinner, possibly because it was quite dark. The atrium, which architecturally was the

most interesting space with a high glass ceiling and a gallery around it was used most often. There were basically always patients sitting. This space was also the most noisy, active and bright. One of the activity rooms, the living room, had a cloud wall paper on the walls. This one was also often in use, possibly because activities here were held most frequently or the most low key.

As already mentioned in 'Being able to retreat', there used to be a living room that was darker and softer, with less stimuli. This wasn't used often enough so it is now changed into an extra activity room or conference room. It's possible that there were too many rooms to choose from, or perhaps people who notice themselves they want a more safe space with few stimuli would rather be in their private apartment. This room was enclosed, so did not allow for watching activities from a more quiet corner.

Spaces to meet
While sitting outside, we got into our first talk with patient 4. They showed us their room, but coming back they saw that their friend had already come back from work. The friend (patient 2) works at a farm and patient 4 always waits for them around the time patient 2 comes home. That is what they were doing when we got into a talk with them. This situation shows the friend bonds and relationships people in psychiatric clinics can have. These bonds can only grow if there are communal areas where people find the space to meet each other.

Stigmatization should be minimized
The building was seen as quite big with many patients by some. Coach 2 thought it was too institutional.

The following paragraphs will be conclusions drawn from the previous chapter. Architecture has the possibility to include or exclude activities, as some can fit within the same room, others have special needs, even others can be done at the same time, or should be done at the same time. The building, mainly which rooms are available, have a large impact on the possibilities. Having more activities possible results in a larger possible autonomy for patients. Within the building, it is especially important to have space for cooking, doing sports and to meet people.

In the surroundings of the location, there should be space for outdoor sports or team sports, there should also be shops for people to do groceries and shopping. For many patients, there should be work locations that offer jobs to psychiatric patients. This can help give people a sense of purpose and prepare them for living on their own.

To make sure that people can avoid one another, it would be better to design multiple living rooms, instead of one big one. There should also be a variety of environments both indoor and outdoor. Psychiatric patients need to be able to retreat themselves, to have more privacy, to feel safe and also to limit stimuli. People with a high well-being use gardens differently from people with a low well-being. Because of this, also outside there should be a variety of environments available.

Being able to control your environment is fortifying, following this, personalization can be used as a tool to let people start making their own choices. As it does not make sense to allow drilling and painting from the

organization's perspective, other design solutions should be used to make personalization possible.

When asked about architecture, people generally answer with something they find annoying, like windowframes that can't easily be opened only a little. As mentioned before, it's important to have multiple living rooms, but it also important to not add too many, as they will not always be used.

Thesis continues on the next page.

4. Case study analysis

In most architectural researches it is valuable to include precedents, buildings of the specific use that were built beforehand. This can show ideas that worked well in the past, as well as ideas that failed.

The difference case studies are distinguished into 5 types. The reason for this is readable in the discussion.
Courtyard: The courtyard type is an architectural type that is widely used for all sorts of different buildings. For psychiatric clinics, it can act as a shield between inside and outside, either to contain people while giving them the ability to go outside into the courtyard, or to create a safe garden that is inaccessible to the outside world.
Pavillion: The pavillion style was used a lot in the past and had several benefits over one large building. It consists of multiple smaller pavillions in a campus-style area which gives a better overview. It can also be easier to connect the buildings with nature and it's easier to divide patients over different buildings.
Sprawling: The Sprawling type is a type that is generally one floor, sprawls outwards to enclose enough space and that often focuses on an indoor-outdoor connection. This building type often has a lot of natural light.
Institutional: Institutional buildings often have multiple floors, are impersonal in design and usually feel like a clinic. The institutional case study is not added to the study because it shows no clear architectural features that should be included for the patient.
Integrated: Integrated buildings purposefully try to match the neighbourhood around them in order to minimize stigmatization.

While these types all have their own concepts, they do not exclude each other. Especially after renovations and time, it is perfectly possible to have a sprawling building as part of a pavillion campus, or to have an integrated building with a courtyard.

These types were distinguishes by looking at 23 psychiatric clinic buildings in the book *Architectuur voor de gezondheidszorg in Nederland*, and placing them into categories. The purpose of this is to show a wider range of typologies and buildings, as it was deemed more important to show all different ideas that were built, rather than show a balanced view of the Dutch psychiatric facility scape. The reason for this is that there have been some periods in which many new facilities were built according to the visions at the time, resulting in a large amount of buildings in a certain type. This was the case in the beginning of the 20th century, when many **Pavillion** types were built to create a national system for psychiatric patients. In the 80s, in the peek of the Dutch welfare state, many new facilities were built or facilities were updated to **Sprawling** and **Institutional** buildings because there was more money available (Mens & Wagenaar, 2010). While showing facilities true to the numbers might give a more objective overview, with the purpose of changing and renewing the ideas within the architecture it makes more sense in my opinion to show a broad range.

Next to the five different types, the buildings will be given a certain amount of points out of five in order to rank them on five different categories. These categories are **Room for activity within**, **Activities in the surroundings**, **Possibility to choose your whereabouts**, **Possibility to personalize** and **Stigmatization**. These themes all have a strong relation to autonomy and can be influenced by architecture. **Room for activity within** stems from the research by Hutton et al. (2021) For this research, patients admitted to psychiatric clinics or previously admitted were asked about their experiences and wishes for their stay. Multiple people mentioned boredom as an important problem, which can be solved by creating enough space and spaces for activities. Room for activity within shows which and how many activities are available

within the confines of the clinic. **Activities in the surroundings** is mentioned in the *Primer on the Psychiatric Rehabilitation Process*, by Anthony & Farkas (2019). They say that teaching people to have better experiences in the social environment is one of the important elements of the rehabilitation process. In order for this to be successful, there should be social environments around the clinic. Activities in the surroundings discusses what people can do in the direct environment of the clinic. **Possibility to choose your whereabouts** stems from the Field Work, in which multiple patients mentioned that they appreciated the fact that there were multiple living spaces open for use. It ranks how many spaces people can choose to be in within the confines of the clinic. In the diagrams, private spaces are shown with a ●, shared spaces with a ● and public spaces with a ●. **Possibility to personalize** is mentioned by J. Habraken (1961), who claims that people should be able to build and change their home, in order to feel at home. Points are given for the amount of space that patients can personalize themselves. **Stigmatization** was mostly added to the research because of the case studies that were analysed. Multiple precedents had a strong focus on either making the building fit into the environment, or specifically distancing the building from the urban environment. On top of this, stigma makes it difficult to engage in social contacts with others and negatively influences self-esteem (Link et al., 2001) (Link & Phelan, 2001). Both limit people in their possibilities to make their own choices and thus limit the amount of autonomy patients can have.. Stigmatization is the only inverted scale; a small amount of stigmatization would be seen as good, but gets 1 point.

It's a difficult task to objectively judge whether buildings are perceived as stigmatizing. Talking to architects, architecture students and other people around me, I've come to the following markers that can induce a feeling of stigmatization to users of a building: **Scale**; as institutions are generally larger than typical Dutch houses. This effect can be reduced by designing the building like an apartment complex. **Spatial differentiation**; especially long corridors with doors on both sides are easily seen as stigmatizing. **Direct environment**; the direct environment around healthcare buildings is often less accessible than regular houses, with car parks, signs and elements that shield it from view. **Impersonality**; many healthcare buildings show no sign of personality in the facades or apartments. The monotony can contribute to the feeling of stigmatization. **Surrounding buildings**; a building can more easily feel stigmatizing when either all buildings in the surroundings have a different function than dwelling, or when the building clearly does not integrate with the surrounding dwellings.

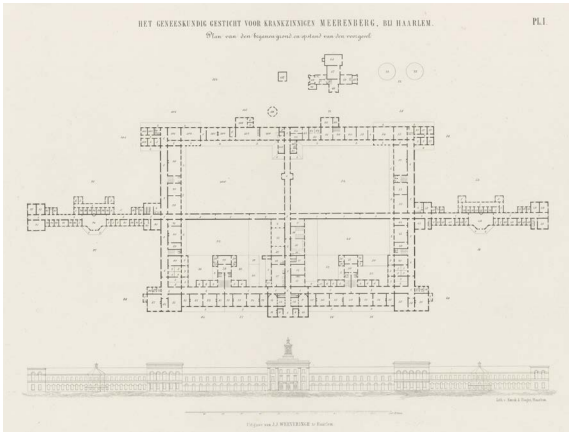
By looking at them purely from an architectural point of view, it is possible to distinguish the building from its users and the psychiatric clinic as a building from the care philosophy that was in use at the time. By doing this, one can see qualities that would be possible in the architecture, but may have never been used. In other words, for this Case Study Analysis buildings were judged for their possibilities and not how care organizations used them. This is best explained with an example: Maasoord in Poortugaal was built as a pavillion style facility. Multiple buildings were placed on a campus, far from the city and with a strong border around it as visible in figure 2. This campus-style site would make a very safe interior environment. On top of this it was quite large with a lot of outdoor space that in theory could freely be used by all patients. While this might not have been the case because of the general idea on how to treat psychiatric patients at the time, the location still got 5 out of 5 points for **Room for activity within**, as the architecture supports a lot of space to do activities.

Points were given in two rounds. Every location was given a rating for every element one after the other, after which these points were revised and tweaked with the other facilities in mind. While this system of ranking does not eliminate subjectivity, as all points were given by the same person, it does give a more honest and balanced result than if the point would have been given in one round.

Courtyard

Meerenberg (Bloemendaal) | J.D. Zocher | 1894

4.1



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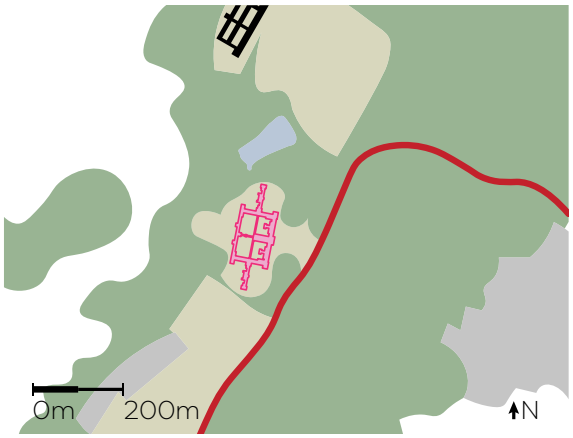

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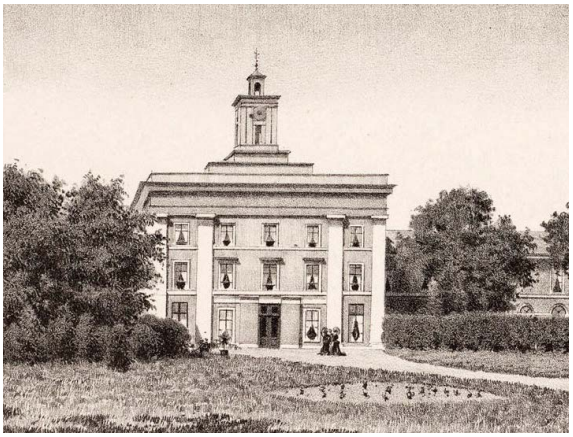

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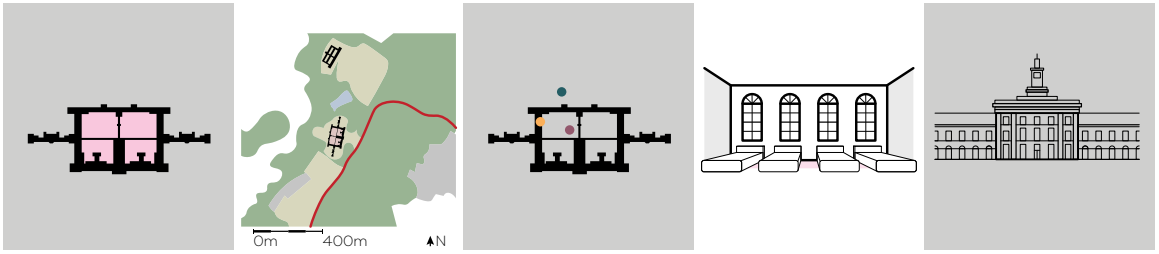


Room for activity within | **Activities in the surroundings** | **Choosing your whereabouts** | **Being able to personalize** | **Facade**

Figure 4.5: *Diagrams Meerenberg.* Own work.

Meerenberg was one of the first large scale psychiatric institutes in the Netherlands. It was designed as a symmetrical ring around a large courtyard, that was divided into four smaller parts. The symmetry made it possible to divide the building in a strict male and female part(Mens & Wagenaar, 2010).

Room for activity within 4/5

The building encloses the large courtyards, which could easily be used for many different activities with multiple people from within the institute. The building is large and judging from the floor plan, there are many rooms that could be used for meeting other patients.

Activities in surroundings 2/5

The building is located in a forest area. While being in nature can be seen as beneficial for psychiatric patients because of the tranquility, this is also isolating, making it difficult for people to build a social network outside of the institute (Sternberg, 2010).

Possibility to choose your whereabouts 3/5
Even though the care philosophy at the time might not have made this possible, the building has a multitude of rooms where people could choose themselves where they would want to stay.

Possibility to personalize 1/5
According to Rijksmonumenten, many patients slept in shared sleeping rooms (2020). Because these rooms were shared, people were limited in the possibility to personalize their own area.

Stigmatization 5/5
The large scale and isolated location both stigmatize the patients. In the design of the building, there are no aspects that try to minimize these effects. There are long and monotonous hallways.

Figure 4.1: *Floor plan Meerenburg*, 1861. Noord-Hollands Archief.
Figure 4.2: Based on *Map Meerenburg*, n.d.. Topotijdreis.
Figure 4.3: *Overleden in Bloemendaal*, 2014. Hesselink, G., & Tonen, M. V. P.
Figure 4.4: *Te gek om los te lopen Santpoort*, n.d.. Wandelzoekpagina.nl

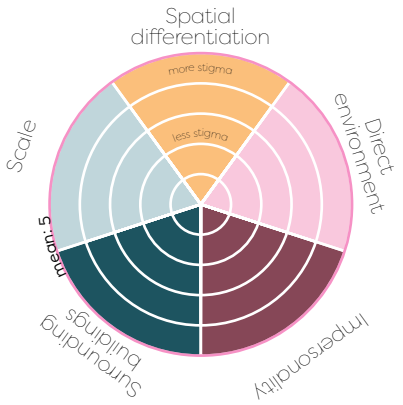


Figure 4.6: *Stigmatization Meerenberg.* Own work.

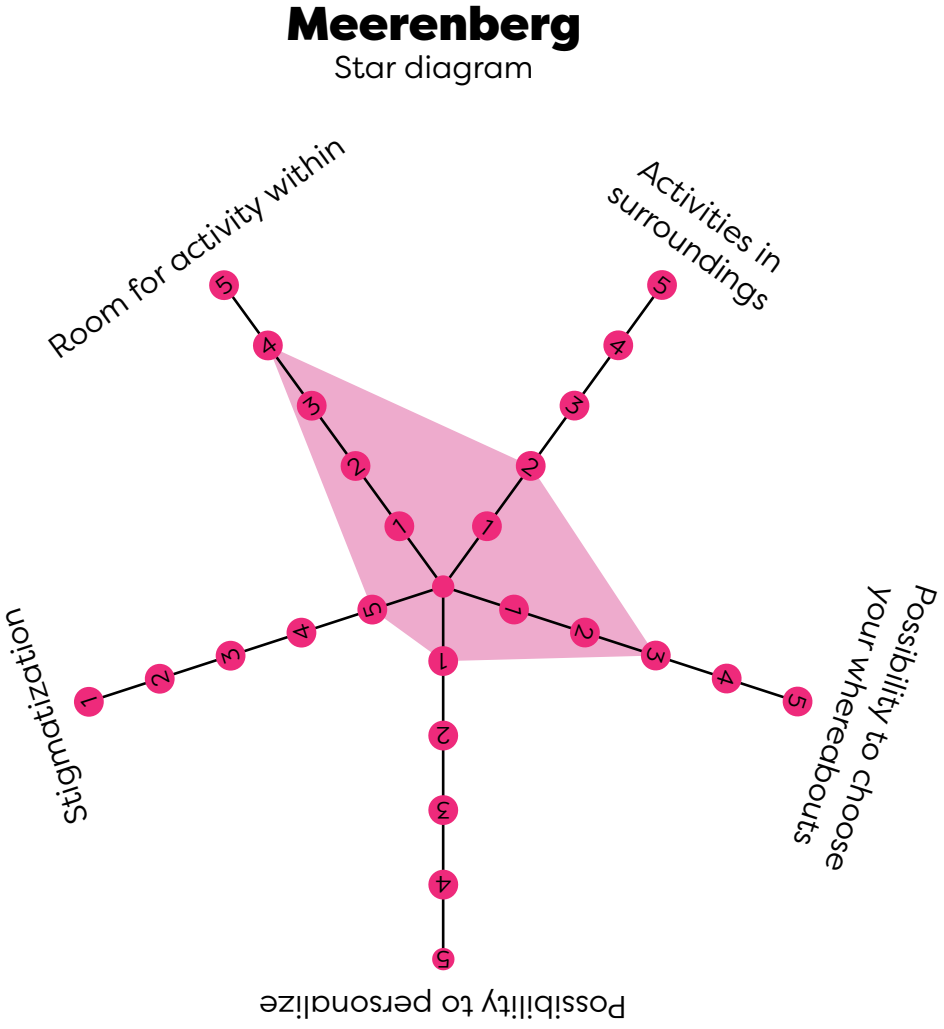


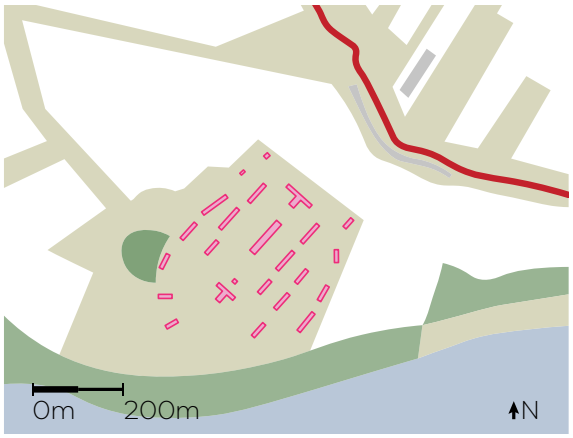
Figure 4.7: *Stardiagram Meerenberg.* Own work.

Pavillion

Maasoord (Poortugaal) | G.J. de Jongh | 1922

4.8

4.9



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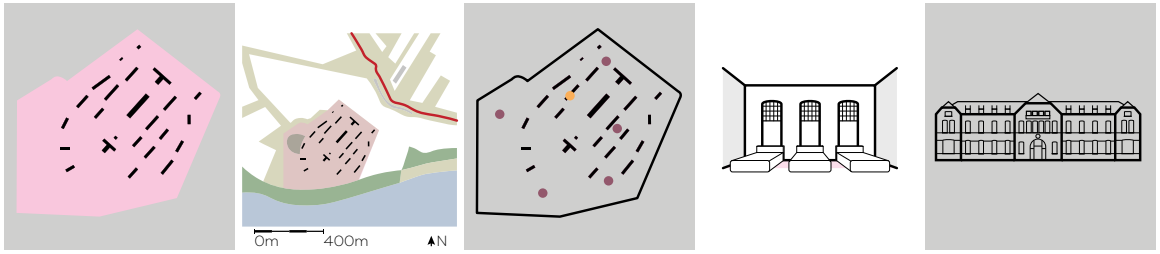


Room for activity within | **Activities in the surroundings** | **Choosing your whereabouts** | **Being able to personalize** | **Facade**

Figure 4.12: *Diagrams Maasoord.* Own work.

Maasoord was a psychiatric facility built for the city of Rotterdam. It was built in 1922 as a series of buildings on a campus area. Using multiple buildings, it was easier to divide different patient groups and have a more clear structure within the building complex.

Room for activity within 5/5

The buildings and the area around them are large. This could support multiple different activities. Having a larger campus can create a ‘safe space’ in which patients can be given more freedom than if it were one building with a public garden.

Activities in surroundings 1/5

The campus is located in a polder area. There were no centres which would include public functions that can mix users or make people establish social connections with people in the surroundings of the facility. On photograph 4.11, it’s visible that large gates surround the area, so it is probably difficult to walk around the location.

Possibility to choose your whereabouts 4/5
Even though the care philosophy at the time might not have made this possible, the location has a multitude of buildings in which where people could theoretically choose themselves where they would want to stay and which activity they could choose to do.

Possibility to personalize 1/5
Having found no direct source about this, it's impossible to say for sure that rooms were shared, but according to N. Mens and C. Wagenaar, this was generally the case at the time (2010). Shared rooms are more difficult to personalize.

Stigmatization 4,6/5
The large scale and isolated location both stigmatize the patients. In the design of the building, there are no aspects that try to minimize these effects. Buildings are impersonal, but hallways aren't long.

Figure 4.8: *Facade Maasoord*, 1920. @StadsarchiefRotterdam.
Figure 4.9: Based on *Map Maasoord*, 1922. Topotijdreis.
Figure 4.10: *PSYCHIATRISCHE INRICHTING "MAASOORD"*, 1924. @ StadsarchiefRotterdam.
Figure 4.11: *Luchtopname van het Krankzinnigengesticht Maasoord*, 1909. @StadsarchiefRotterdam.

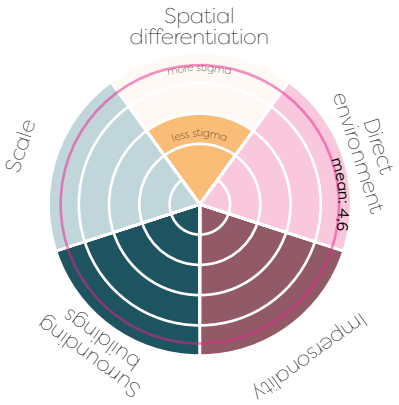


Figure 4.13: *Stigmatization Maasoord*. Own work.

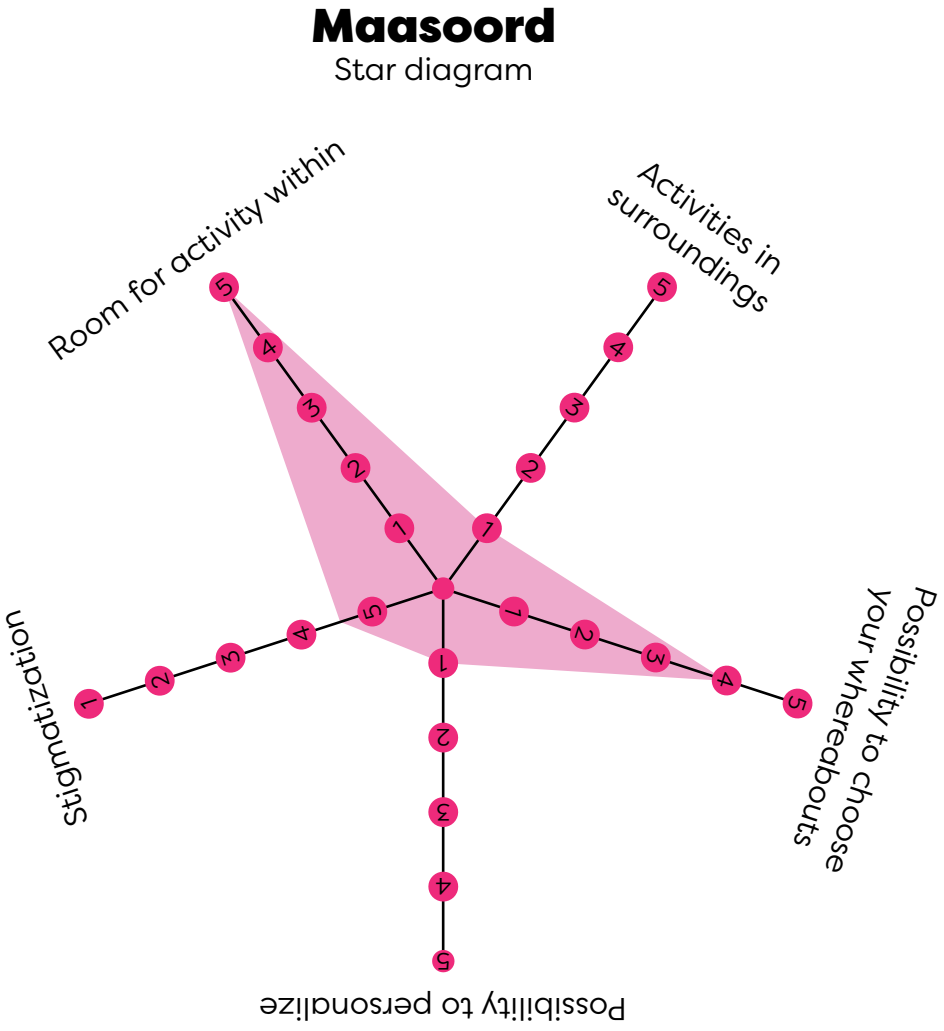
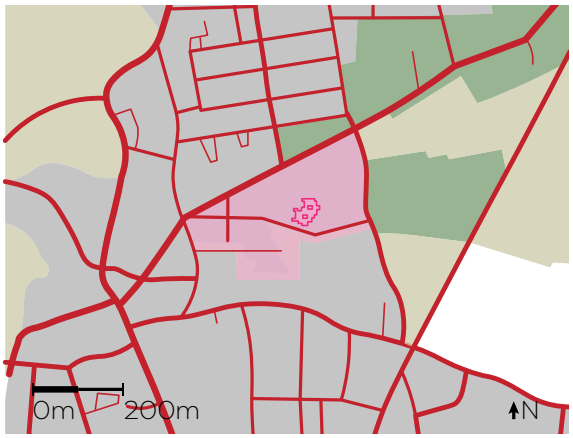


Figure 4.14: *Stardiagram Maasoord*. Own work.

Sprawling

De Viersprong (Halsteren) | O. Greiner | 1971

4.15



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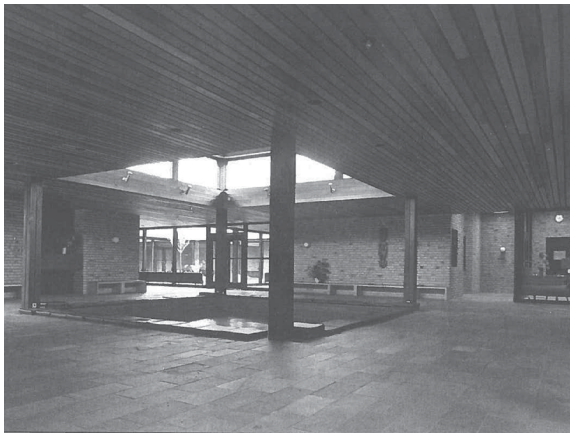

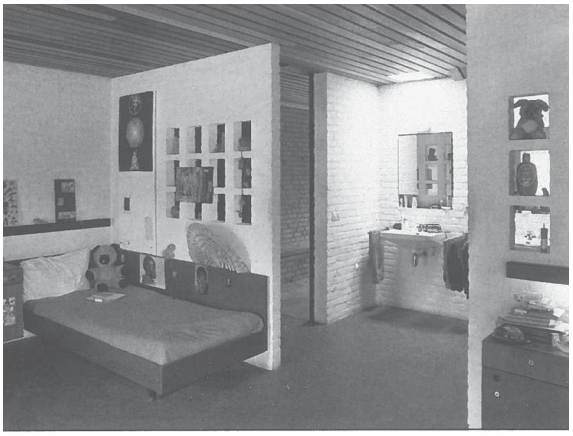

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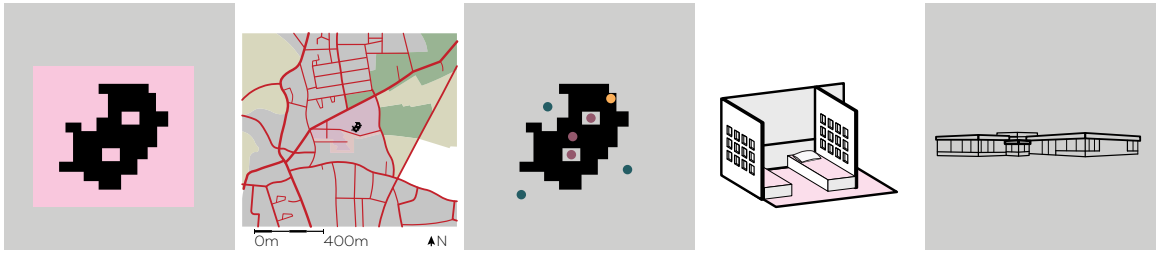


Room for activity within | **Activities in the surroundings** | **Choosing your whereabouts** | **Being able to personalize** | **Facade**

Figure 4.19: *Diagrams De Viersprong.* Own work.

De Viersprong was built as a psychotherapeutic institute, in which one on one talks with a therapist were an essential part of therapy. The location is placed on a pavillion type campus, but is entirely built up of one layer. The building has a lot of corners and a large footprint. This makes that most rooms have daylight.

Room for activity within 4/5

The building has a designated room for creative therapy like music and arts and crafts (Mens & Wagenaar, 2010). Judging from photos and the site, within and around the building on the campus are multiple spaces that can be used by patients and therapists.

Activities in surroundings 5/5

This campus is located close to the old town centre of Halsteren. There were multiple churches and shops in close proximity. This gives people the opportunity to meet people from outside the facility and do their own shopping.

Possibility to choose your whereabouts 3/5
There are multiple courtyards in the building. The outside garden was designed as a park and everybody had a shared bedroom. There is no room that is always available for you to enjoy privately, because bedrooms were shared. This is visible on photo 4.18

Possibility to personalize 3/5
The bedrooms are shared with three other patients. In photo 4.18, you can see that there are holes in the wall for people to display their own things. This shows that the architects did think about adding an element of personalization, even though the walls and furniture are not to be personalized.

Stigmatization 3,4/5
The large scale of the location and the institutional pavillion park increase stigmatization of patients. The central location within the town decreases it. The building does not match dwellings in the area, but there is space to show personalisation.

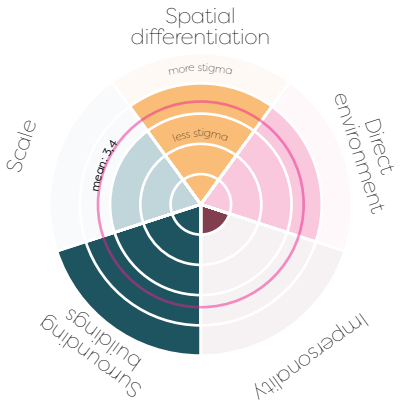


Figure 4.20: *Stigmatization De Viersprong.* Own work.

Figure 4.15: *The creation of room for people*, 2010. Netherlands Architecture Institute
Figure 4.16: Based on *Map De Viersprong*, 1980. Topotijdreis.
Figure 4.17: *Architectuur voor de gezondheidszorg in Nederland*, 2010. Mens, N., & Wagenaar, C.
Figure 4.18: *Architectuur voor de gezondheidszorg in Nederland*, 2010. Mens, N., & Wagenaar, C.

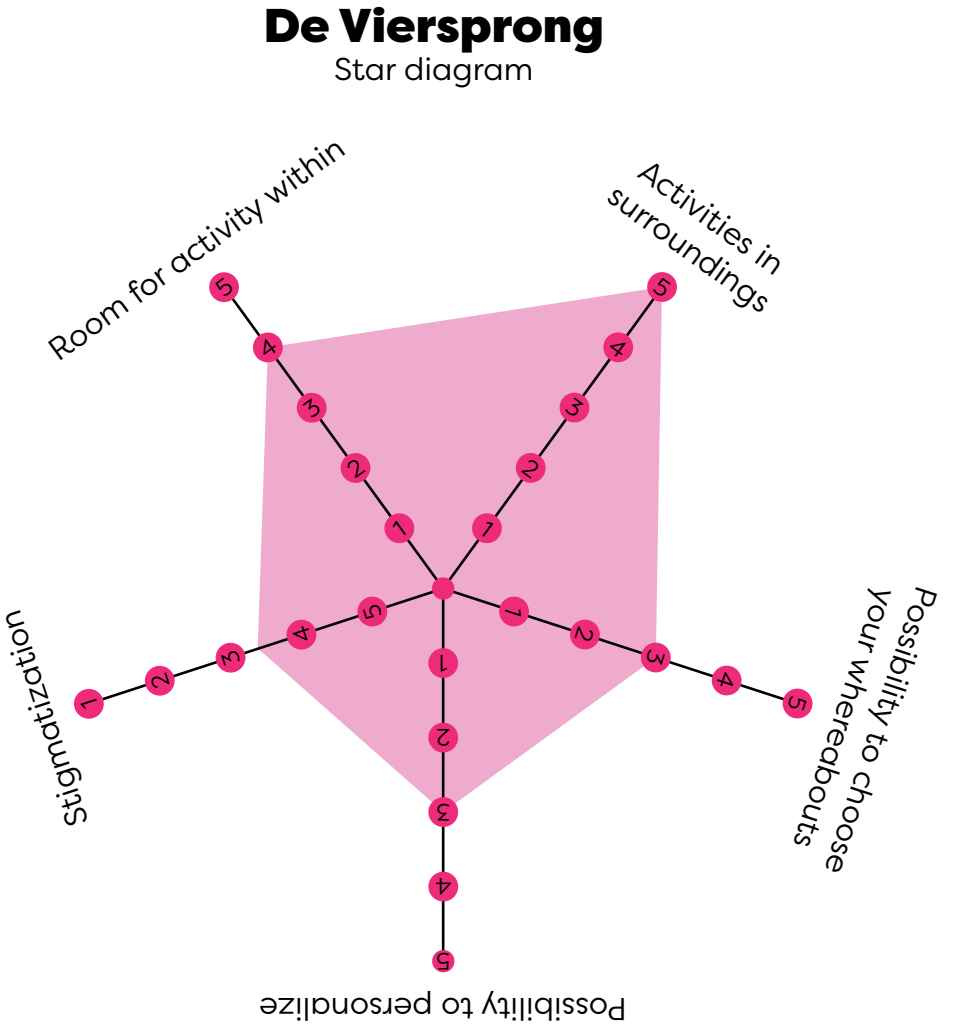


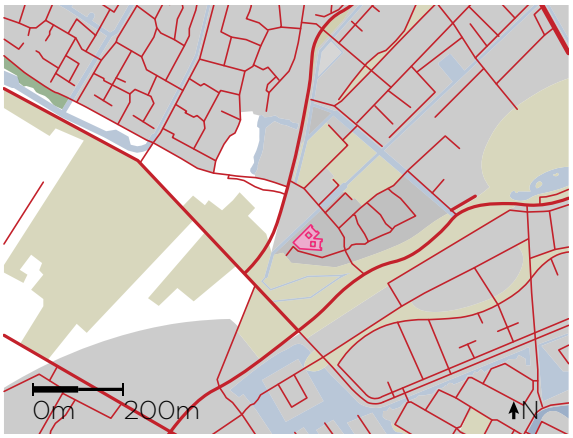
Figure 4.21: *Stardiagram De Viersprong.* Own work.

Courtyard/Sprawling

Yulius Volgerlanden (Hendrik Ido Ambacht) | Gortemaker Algra Feenstra | 2012

4.22

4.23



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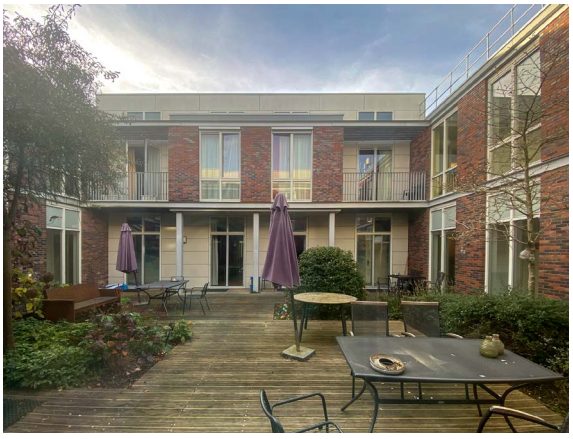

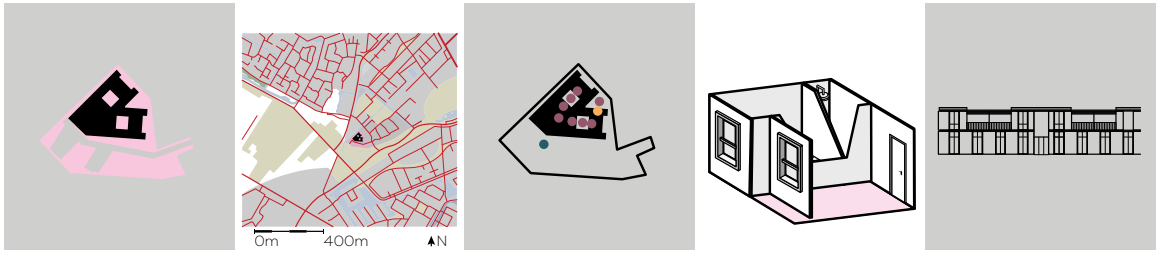

Room for activity within | **Activities in the surroundings** | **Choosing your whereabouts** | **Being able to personalize** | **Facade**

Figure 4.26: *Diagrams Yulius Volgerlanden.* Own work.

Built up as a structure of fingers, the advantages of the sprawling type have been combined with two courtyards. This makes a large amount of natural light possible, together with the safe athmosphere of the courtyard type and the strong connection with the outside, typical of the sprawling type. This is the location where the Field Work took place.

Room for activity within 4,5/5
The building has four large living/activity rooms, a large atrium and two courtyards. On top of this, there is a fitness room and a small garden around it.

Activities in surroundings 4/5
The building is located in a residential area. There is a shopping centre at 15 minutes walking distance with most shops people want. It's on the edge of a park, but this is designed more as a playground park for children with a lot of grass, rather than a natural area.

Possibility to choose your whereabouts 5/5
People all have their own apartment with a bedroom and a living room. There

are four living/activity rooms so that people can also choose who they want to be with and there are mainly three outside areas: the outer garden, the courtyard and people's balconies.

Possibility to personalize 4/5

As patients all have their own apartment, they can personalize it a lot. From an architectural point of view, there are no designated areas that are easy to personalize in a limited period of time, like in **De Viersprong**.

Stigmatization 3,6/5

The building is quite large and does not match surrounding dwellings. It is located behind houses and there is a driveway in order to get there. There are some hallways with apartments on both sides, but these are short.

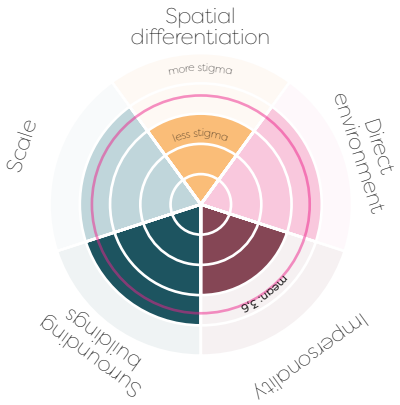

Figure 4.27: *Stigmatization Yulius Volgerlanden.* Own work.

Figure 4.22: *Floor plan ground floor*, 2011. Gortemaker Algra Feenstra
Figure 4.23: Based on *Map Yulius Volgerlanden*, 2012. Topotijdreis.
Figure 4.24: Photograph *Atrium*, 2022. Own work.
Figure 4.25: Photograph *Outside view*, 2022. Own work.

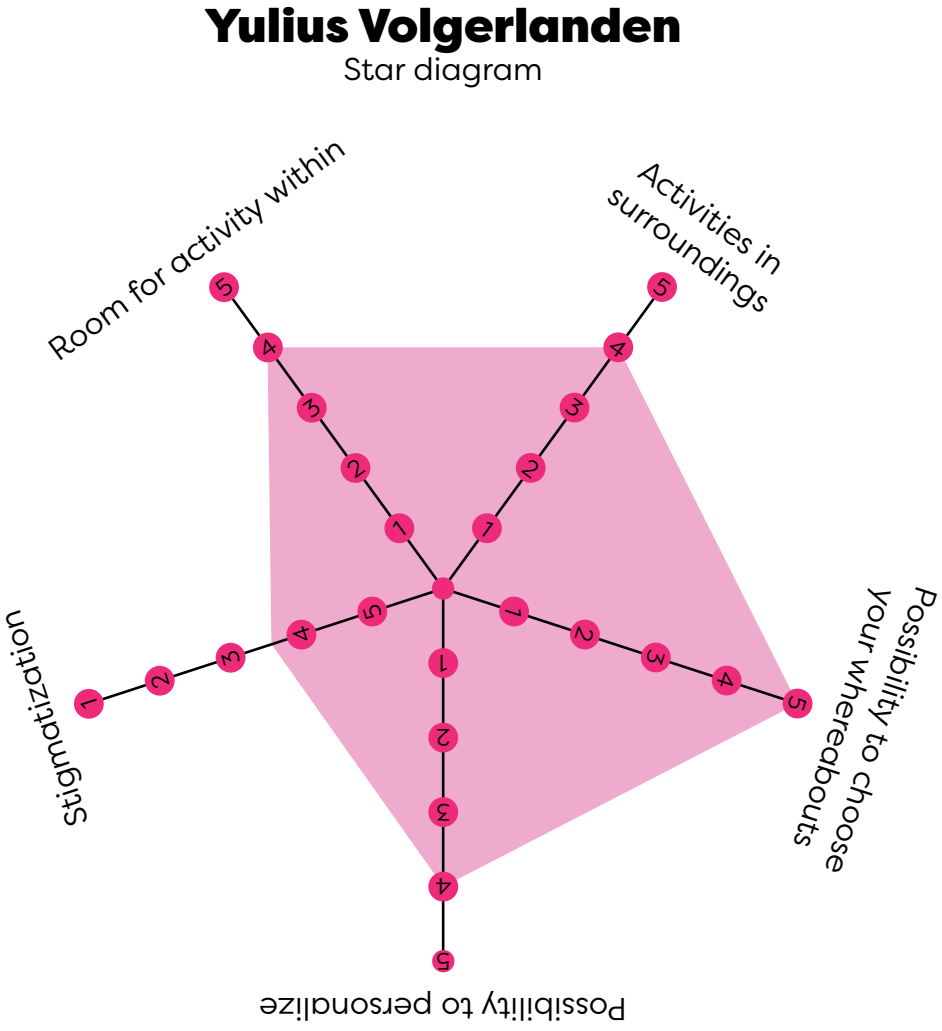

Figure 4.28: *Stardiagram Yulius Volgerlanden.* Own work.

Integrated

Psychiatrisch Centrum (Amsterdam) | Greiner van Goor architecten | 1994

4.29

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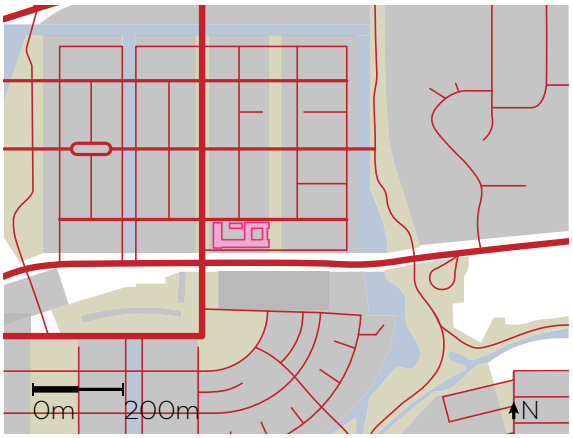

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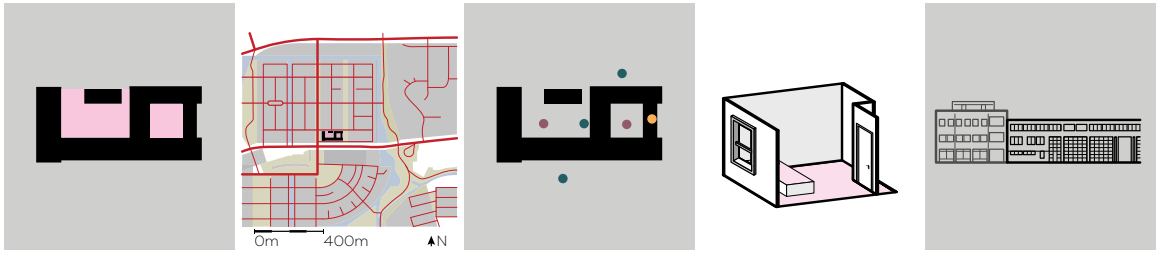


Room for activity within | **Activities in the surroundings** | **Choosing your whereabouts** | **Being able to personalize** | **Facade**

Figure 4.33: *Diagrams Psychiatrisch Centrum Amsterdam.* Own work.

Psychiatric Centre Amsterdam was built as a successor when Meerenberg closed in the 1990's. It was built with the idea that psychiatric living facilities should completely blend into the surrounding neighbourhood. There are multiple different dwellings; shared closed apartments, open single apartments and also apartments that people could live in together (Mens & Wagenaar, 2010).

Room for activity within 4/5

The complex has a sports room and there are multiple shared living rooms for the shared dwellings. The building also encircles two courtyards that increase meeting each other. There are four duplex rooms for creative therapy (Mens & Wagenaar, 2010).

Activities in surroundings 4/5

The building is located directly in the neighbourhood Nieuw-Sloten in Amsterdam. There is a small shopping centre nearby, a tram stop directly next to the building and a train stop at biking distance. There are several small parks, but there isn't much nature around.

Possibility to choose your whereabouts 4/5
The location has multiple different dwellings. The shared dwellings have a communal living room, but the individual apartments don't, judging from the floor plan in Mens & Wagenaar (2010). While it's easy to go outside into the city, these individual apartments might miss a shared living room.

Possibility to personalize 4/5
Many or perhaps all bedrooms are individual. These are free to personalize. Some apartments also have an exterior deck.

Stigmatization 2/5
The location fits completely in the neighbourhood, both in scale and design. The design could easily be a regular apartment building in this area. There is also an often-used public path through the location that connects neighbours to the tram. This creates meetings with people from outside the building. There are some corridors, but everybody has their own apartment which is easier for showing your personality.

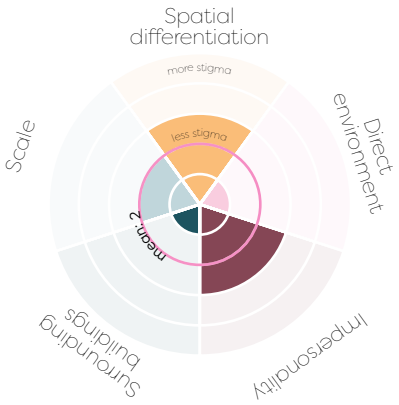


Figure 4.29: *Photograph Outside view*, n.d.. GGH Architecten.
Figure 4.30: Based on *Map Psychiatrisch Centrum Amsterdam*, 1999. Topotijdreis.
Figure 4.31: Photograph gallery, n.d.. GGH Architecten.
Figure 4.32: Photograph walkway, n.d.. GGH Architecten.
Figure 4.34: *Stigmatization Psych. Centrum Amsterdam.* Own work.

Psychiatrisch Centrum Amsterdam

Star diagram

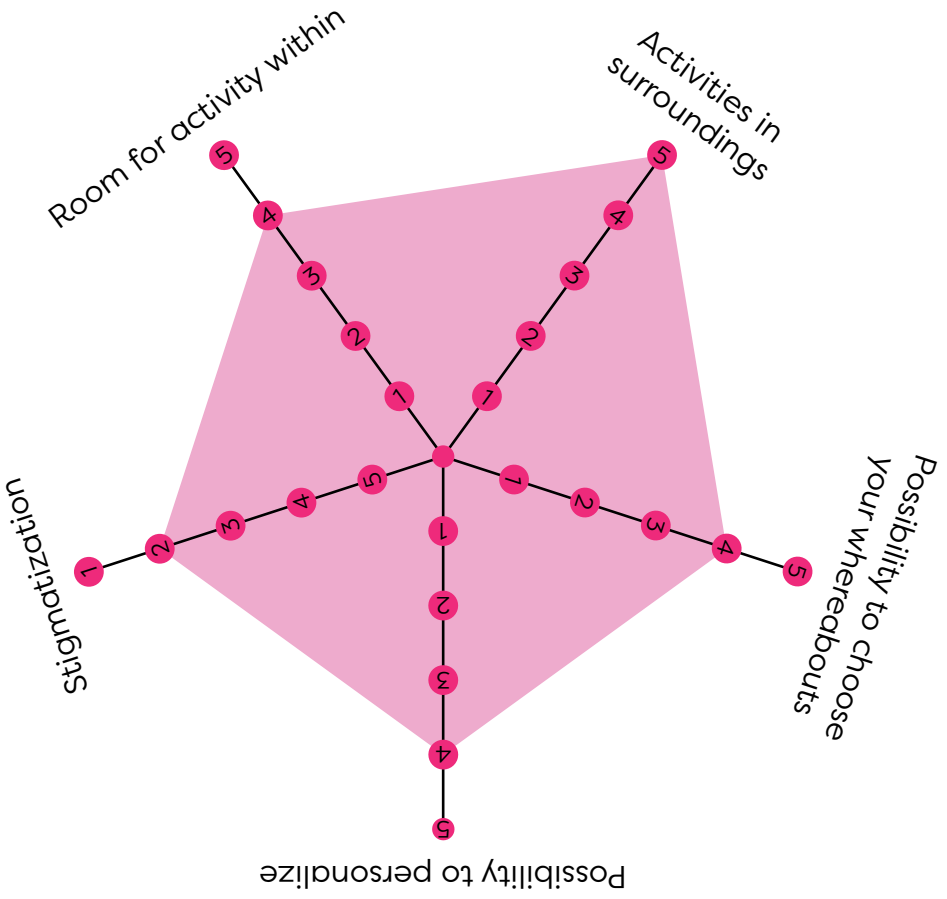


Figure 4.35: *Stardiagram Psychiatrisch Centrum Amsterdam.* Own work.

Room for activity within stems from the research by Hutton et al. (2021) For this research, patients admitted to psychiatric clinics or previously admitted were asked about their experiences and wishes for their stay. Multiple people mentioned boredom as an important problem, which can be solved by creating enough space and spaces for activities. Room for activity within shows which and how many activities are available within the confines of the clinic.

Activities in the surroundings is mentioned in the *Primer on the Psychiatric Rehabilitation Process*, by Anthony & Farkas. (2019) They say that teaching people to have better experiences in the social environment is one of the important elements of the rehabilitation process. In order for this to be successful, there should be social environments around the clinic. Activities in the surroundings discusses what people can do in the direct environment of the clinic.

Possibility to choose your whereabouts stems from the Field Work, in which multiple patients mentioned that they appreciated the fact that there were multiple living spaces open for use. It ranks how many spaces people can choose to be in within the confines of the clinic. In the diagrams, private spaces are shown with a ●, shared spaces with a ● and public spaces with a ●.

Possibility to personalize is mentioned by J. Habraken (1961), who claims that people should be able to build and change their home, in order to feel at home. Points are given for the amount of space that patients can personalize themselves.

Stigmatization is related to autonomy, because stigma makes it difficult to engage in social contacts with others and negatively influences self-esteem. (Link et al., 2001) (Link & Phelan, 2001) Both limit people in their possibilities to make their own choices and thus limit the amount of autonomy patients can have. It was also added with the case studies in mind.

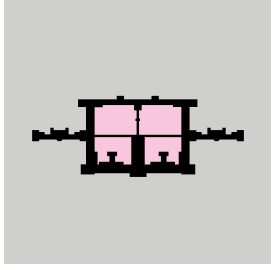
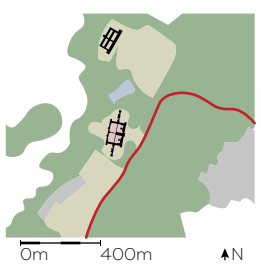
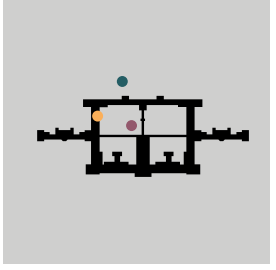
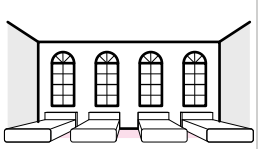
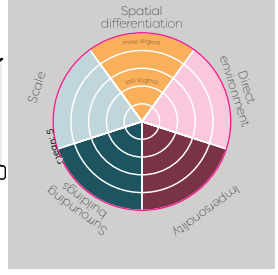
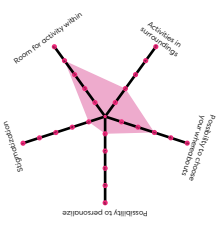
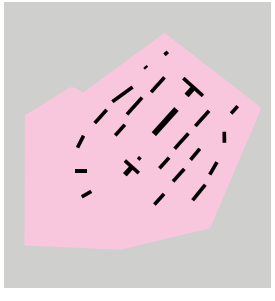
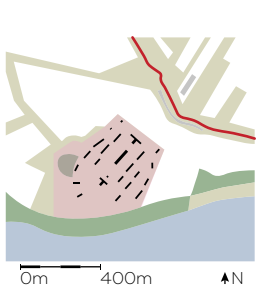
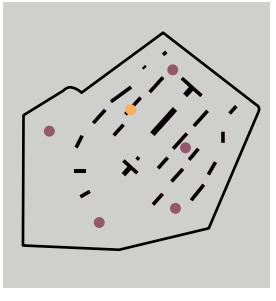
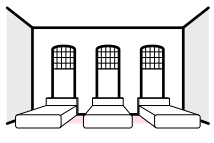
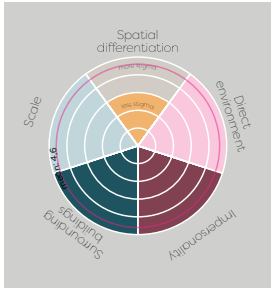
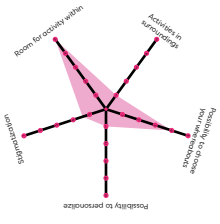
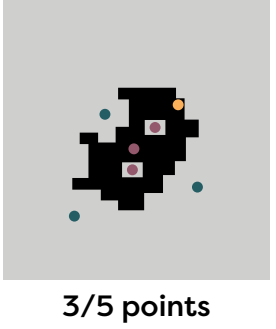
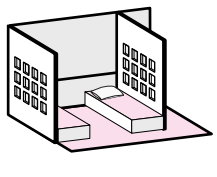
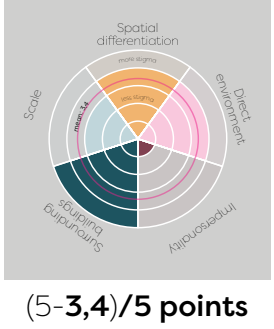
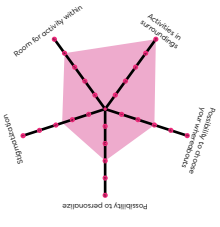
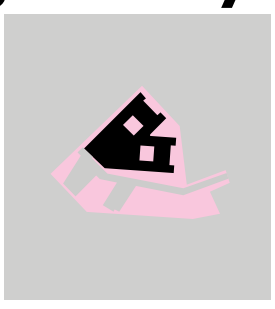
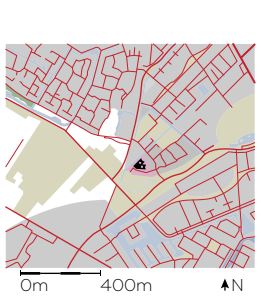
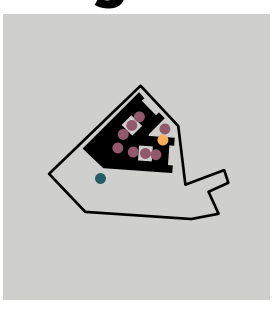
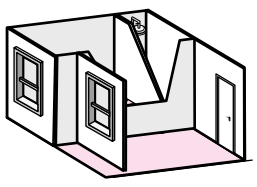
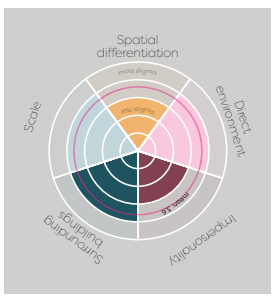
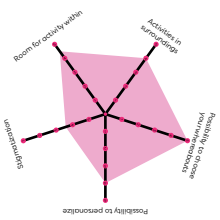
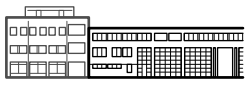
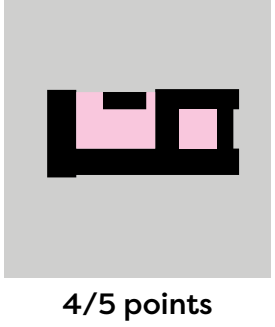
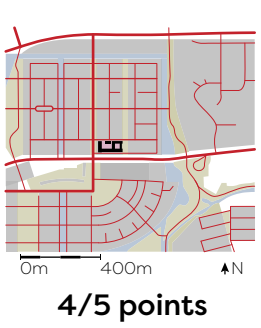
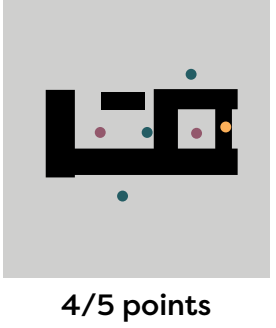
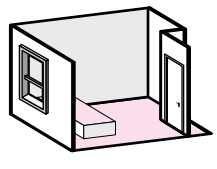
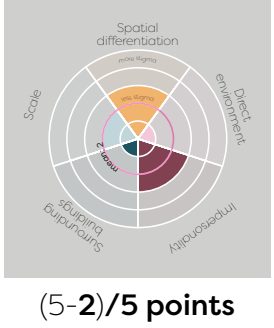
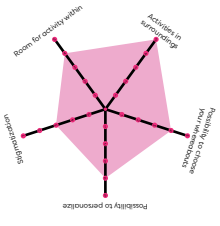
	Facade	Room for activity within	Activities in the surroundings	Choosing your whereabouts	Being able to personalize	Stigmatization	Overall
Courtyard: Meerenberg		 4/5 points	 2/5 points	 3/5 points	 1/5 points	 (5-**0**)/5 points	 2/5 points
Pavillion: Maasoord		 5/5 points	 1/5 points	 4/5 points	 1/5 points	 (5-**4,6**)/5 points	 2,3/5 points
Sprawling: De Viersprong		 4/5 points	 5/5 points	 3/5 points	 3/5 points	 (5-**3,4**)/5 points	 3,3/5 points
Sprawling + Courtyard: Yulius Volgerlanden		 4,5/5 points	 4/5 points	 5/5 points	 4/5 points	 (5-**3,6**)/5 points	 3,8/5 points
Integrated: Psychiatrisch centrum Amsterdam		 4/5 points	 4/5 points	 4/5 points	 4/5 points	 (5-**2**)/5 points	 3,8/5 points

Figure 4.36: *Conclusion Chapter 4.* Own work.

There are some conclusions to be taken from the case study analysis. First of all, the building types all have their own advantages that can also be combined. Both **Sprawling** type buildings also had courtyards. One of them, Vierhoven, was also part of a **Pavillion** area. The types were formulated while looking at the buildings, showing clearly design ideas, like distinguishing patient groups for **Pavillion** or minimizing stigma for the **Integrated** type. This means that the building types do not strongly define autonomy for the patients, as all building types show possibilities for increasing the amount of autonomy.

The surroundings for these buildings turned out to be important, as some case studies were located far away from the city, while others were located within the city. Both have advantages and disadvantages. Far away of the city, there is a lot of space available, which can make for a more private and safe environment. On the other hand, functions are far away and patients can't start building or continue sustaining their own life with social connections outside of the clinic. Within the city, it can be easier to meet people from the outside, or maintain social connections with old friends and family. On the other hand, it's more difficult to create enough privacy and feeling of safety. With reintegration in mind, it is important that at least some functions are accessible, like a supermarket for groceries, a general practitioner for physical injuries and spaces for social interaction.

As is visible in Vierhoven, it's possible to design bedrooms with personalization in mind. Even if the bedrooms are shared with other people. Judging from Psychiatrisch Centrum Amsterdam and Yulius Volgerlanden, the floor plan, roof decks and footprint of a building can form a variety of outdoor areas, which can follow the paper by Bengtsson and Grahn (2014).

5. Conclusion

1. *In which ways is it possible for architecture to influence the autonomy patients have?*

There are many ways in which architecture can influence the autonomy patients have. In the research, the clash between creating a safe, private environment and creating an active environment that prepares patients for rehabilitation is a topic that was particularly important. It has came up in the literature research, the Case Study analysis and also in the Field Work.
In literature, it was seen in the design of the garden, which has to serve multiple uses for different amounts of well-being. In the Field Work, many people had their curtains closed, because they wanted to block the outside world and have more privacy in their own apartment. Giving people the possibility to retreat can lead to less difficulties between patients and a more comfortable feeling for patients. Also in the Field Work, it was seen as important to give patients options for choosing who to be with. This can result in making multiple smaller shared rooms rather than fewer bigger ones. In the Case Study Analysis, this clash is mostly visible in the choice for location.

Designing for personalization was only found in Case Study **De Viersprong**. This shows that it is possible, but rarely done. Literature and findings from the Field Work suggest that this can be beneficial for patients.

In the Field Work, the clinic had a more permanent environment than was initially intended. Some patients did not seem to feel motivated enough to move out of the clinic, as the apartments were comfortable and the step to move out was considered too big. This had the effect that patients were not stimulated to take more autonomy and make their own choices. In Case Study **Psychiatrisch Centrum Amsterdam**, there also were apartments with their own front door on the site. This way, people might feel more direct motivation to try and move out of the main building, as this intermediate apartment is more obtainable. All ways for architecture to influence autonomy are visible in the Architectural Guidelines on page 34.

2. *What role play architectural types of psychiatric clinics that are or were already in use in the Netherlands in influencing autonomy?*

Within existing psychiatric clinics, there were four main design concepts found that can be combined in order to create the athmosphere and building that would fit the needs of users. The concepts resulted in architectural types. These are: Creating a **Courtyard**, when strengthening the community or creating a safe zone is wanted. Combining multiple **Pavillions**, in order to create a campus-style area that gives a better overview or can divide different patient groups over different buildings. The **Sprawling** type, which generally has only one or a few floors and sprawls outwards. With this type, there can be a strong indoor-outdoor connection and this building type often offers a lot of natural light. The last type is **Integration**. Integrated buildings purposefully try to match the neighbourhood around them in order to minimize stigmatization.

3. *What is the role of the specific urban context and direct environment around psychiatric clinics?*

In the case study analysis, there were generally two environments that clinics were placed in. They were either placed away from the city, in a more natural environment or in an urban environment. Both have advantages

and disadvantages. Far away of the city, there is a lot of space available, which can make for a more private and safe athmosphere. On the other hand, functions are far away and patients can't start building their own life with social connections outside of the clinic. In a city, it can be easier to meet people from the outside or maintain social connections with old friends and family, but there is less privacy and space, which can make patients feel less safe.

I expect that architecture can have a substancial influence on the autonomy patients have in psychiatric clinics. As different rooms that are available and the configuration of these rooms change the way people use the building, this will also make patients feel stimulated or restricted to make their own choices. Architecture is a complex system with many different aspects, like materials, dimensions, connections, privacy and the way outdoor space is used, so I expect there to be many different things within architecture that influence autonomy. Choices made by staff and the care philosophy will also have a large influence on this, so architecture is not a final tool to increase autonomy.

Architectural guidelines

As part of the conclusion, architectural guidelines were formulated. These guidelines will help designing a psychiatric clinic, with an optimum autonomy of living for the patients. The following guidelines are derived from the research in the previous chapters; from the literature, the case studies and the Field Work.

The guidelines are divided into three scale levels: Surroundings, Building and Spaces. Within these divisions, the guidelines are shown in the order that is most beneficial for the design proces. Guidelines that shape the design are shown before guidelines that are more easy to implement later in the design process. Guidelines with a higher importance are shown before guidelines with a lower importance.

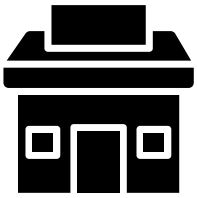


Figure 5.1: Social functions in surroundings
In the Primer on the psychiatric rehabilitation process, there is much emphasis on helping people become more successful in the social environment of their choice (Anthony & Farkas, 2019). This means that there should be social environments accessible to patients admitted, thus making it important that social functions are in the surroundings.

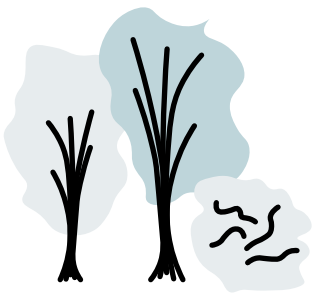


Figure 5.2: Nature in surroundings
Both in interviews during the Field Work and in the book by Sternberg (2010), the calming and healing effect of nature is mentioned. Thus, this should be accessible and in the surroundings.

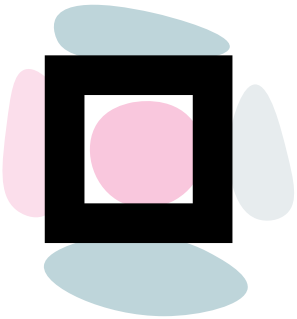


Figure 5.3: Different outdoor areas
According to research by Bengtsson and Grahn, it is important to have a range of outdoor areas with different athmospheres, as people of different well-beings require different areas, ranging from active to offering refuge (2014). This was also my experience from the Field Work and mentioned by the fitness coach. Being outside is healing (Sternberg, 2010), so the garden design should be part of the architecture.

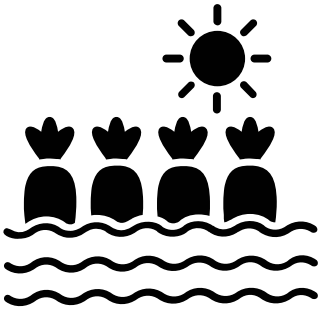


Figure 5.4: Vegetable garden
In the Field Work, one of the activities we did was work in the vegetable garden. This is a way for patients to work outside in a safe space on the clinic site. It gave patient 4 a structure during the week and they really enjoyed it.

Building

Figure 5.5: Spaces to meet
In observations during the Field Work, patients showed to have friendship connections. These can only form when there are spaces where patients can meet each other. Also, becoming more successful in social environments of patient's choice is seen as one of the outcomes of the psychiatric reintegration process (Anthony & Farkas, 2019).

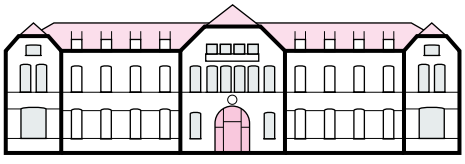


Figure 5.6: Minimize stigmatization
Stigma makes it difficult to engage in social contacts with others and negatively influences self-esteem (Link et al., 2001) (Link & Phelan, 2001). Both limit people in their possibilities to make their own choices and thus limit the amount of autonomy patients can have. Becoming more successful in social environments of patient's choice is seen as one of the outcomes of the psychiatric reintegration process (Anthony & Farkas, 2019).

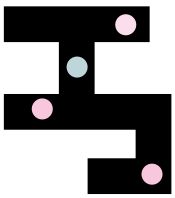


Figure 5.7: Multiple living rooms
Within the building or complex, there should be multiple living rooms that can be used by patients, rather than one big one.
In the Field Work, patient 1 mentioned that they really liked the fact that they could avoid certain people and choose who they want to be with

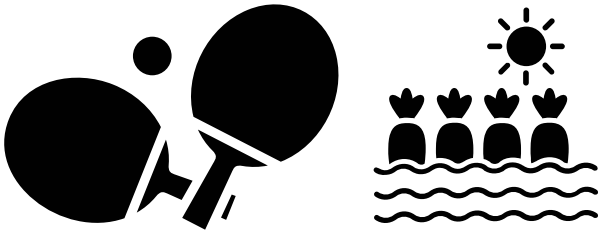


Figure 5.8: Making activities possible
Boredom is a big problem in psychiatric clinics. Having a range of activities motivates and keeps focus away from illness. On top of this, sports activities like table tennis create strong social connections (Hutton et al., 2021).

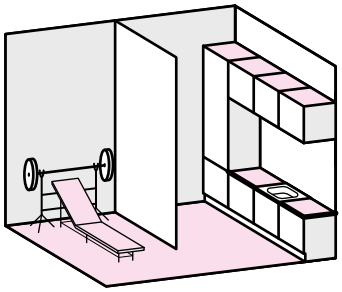


Figure 5.9: Sports and cooking
Apart from other activities, sports and cooking are extra important. Doing sports releases serotonin and can be meditative (Sternberg, 2010) (*Fitness coach*). Doing cooking activities can help to bond with others, as well as prepare for taking care of yourself (Hutton et al., 2021) (*Cooking coach*). The building should contain a fitness room and an activity kitchen and apartments should all have their own kitchen.

Figure 5.10: Cozy and Safe
The building should be well designed to feel cozy and safe, rather than institutional. The reason for this is to create an athmosphere that is comprehensible and familiar (Golembiewski, 2010). Institutional spaces are more likely to increase stress levels and evoke hallucinations (Osmond, 1957) (Elliott, 1972).

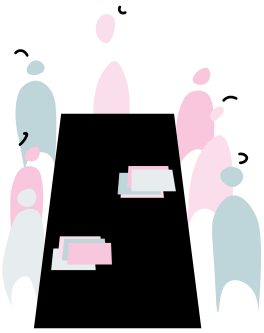


Figure 5.11: Patient's committee
While this has no direct influence on architecture, the resident's committee was an important element in the Field Work location. This gave patients who were capable of this a sense of purpose and extra autonomy. The building should be designed with the existence of such a committee in mind.

Private rooms

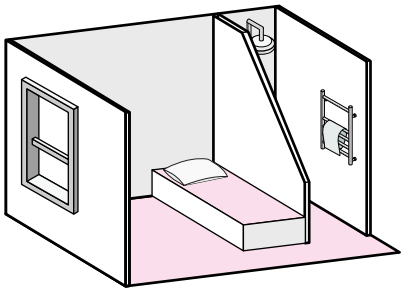


Figure 5.12: Individual apartments
People should have individual apartments with their own bathrooms. In Golembiewski's research, making experiences as familiar as possible was seen as important, which relates to creating a homelike feeling (2010). On top of this, multiple people during the Field work expressed that they really liked this. The rooms can also be used for cleaning trainings.

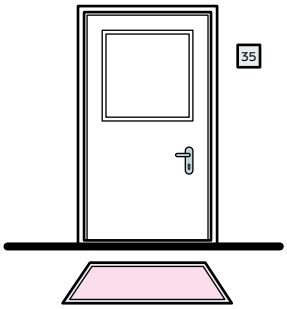


Figure 5.13: Showing progress
In the Field Work, I noticed that many patients were not stimulated to take more autonomy and make their own choices. In Case Study **Psychiatrisch Centrum Amsterdam**, there also were apartments with their own front door on the site. This way, people might feel more direct motivation to try and move out of the main building, as this intermediate apartment is more obtainable.

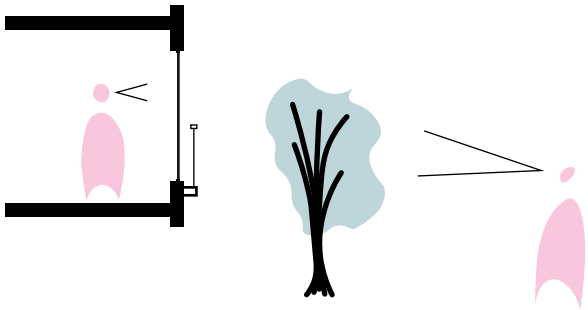


Figure 5.14: Privacy
In psychiatric clinics even more than in other apartments, privacy should be an important aspect when designing. In the Field Work, many people had their curtains closed, because they wanted to have a 'safer' environment in their private apartments. To prevent this, people should be able to partly close an element to increase the feeling of safety and privacy.

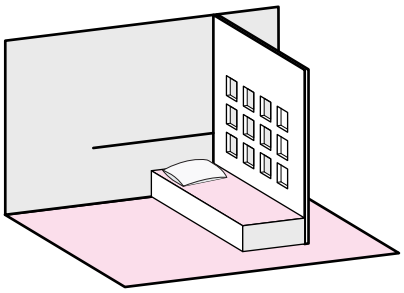


Figure 5.15: Designed to personalize
Derived from the guideline **Feeling in control**, personalization can be used as a tool to take more control during the treatment process. Case study **De Viersprong** shows an example of how it is possible to design with personalization in mind. Being able to personalize is important to feel at home (Habraken, 1985).

Figure 5.16: Being able to retreat
As patients live together with many other people in psychiatric clinics, it is important for them to be able to retreat. There are many patients who cannot handle too many stimuli. (coach 2) During the Field Work, coach 1 mentioned that the fact that people all had a spacious private apartment helped minimize annoyances. Private apartments should be spacious and of good quality.

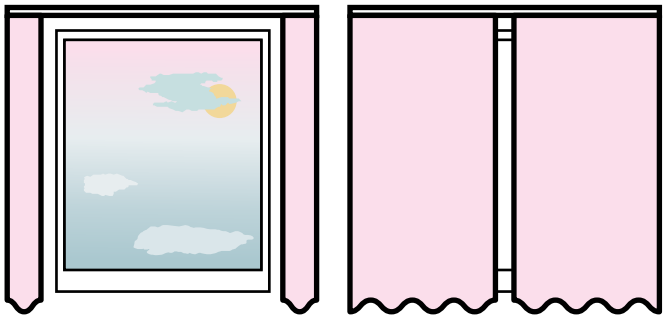


Figure 5.17: Feeling in control
Feeling in control is 'fortifying', while feeling completely out of control is 'disempowering' (Golembiewski, 2010).

In order to accomplish this, patients should be given control over as much as possible, for instance lighting, sunshades, temperature and ventilation.

Discussion

The hypothesis can generally be adopted. Many architectural elements were found that have an influence on autonomy. Because of this, it can be said that architecture does have a substancial influence on autonomy. There were architdectural guidelines formed for different architectural scales and different parts of the design process, which shows that autonomy can be seen as an integral part of designing psychiatric clinics.

It's important to realize the potential and limits of the research. On the one hand, it will never be possible to give people as much autonomy as they would have in their own separate home, as they will have to take other people into account and it being a clinic will always make it feel a little institutional. The purpose of the research is to increase the amount of autonomy in clinics, in order to bring it closer to the amount of autonomy people have in regular homes and make it easier for patients to take the step to move out. Therefore, it's not necessary to bring it to the same level, as visible in figure 5.18. On the other hand, a purpose-built clinic is able to take things into account regular housing can't, like dedicated safe and private spaces with less stimuli, or creating more privacy for the apartments.

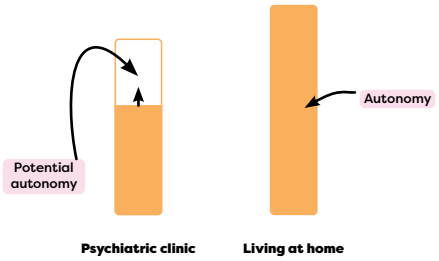


Figure 5.18: Level of autonomy in clinics and homes.

For the Case Studies, four types were set up. These were formed by dividing 21 buildings from the book *Architectuur voor de gezondheidszorg in Nederland* into categories (Mens & Wagenaar, 2010). They were made using mainly one source, but there were also some newer buildings found on the internet included, as the book is from 2010. This resulted in the four types, that do not perfectly distinguish every psychiatric clinic building, as many buildings actually were part of multiple types. This was deemed not a big problem, as the types were used to show a wide variety of buildings in this research, rather than a complete overview that has respect for the amount of buildings that were built in those types in The Netherlands. This distinction is visible in figure 5.19. It's important to realize that conclusions from these case studies serve as possibilities, there were not enough precedents studied to draw conclusions for entire type groups.

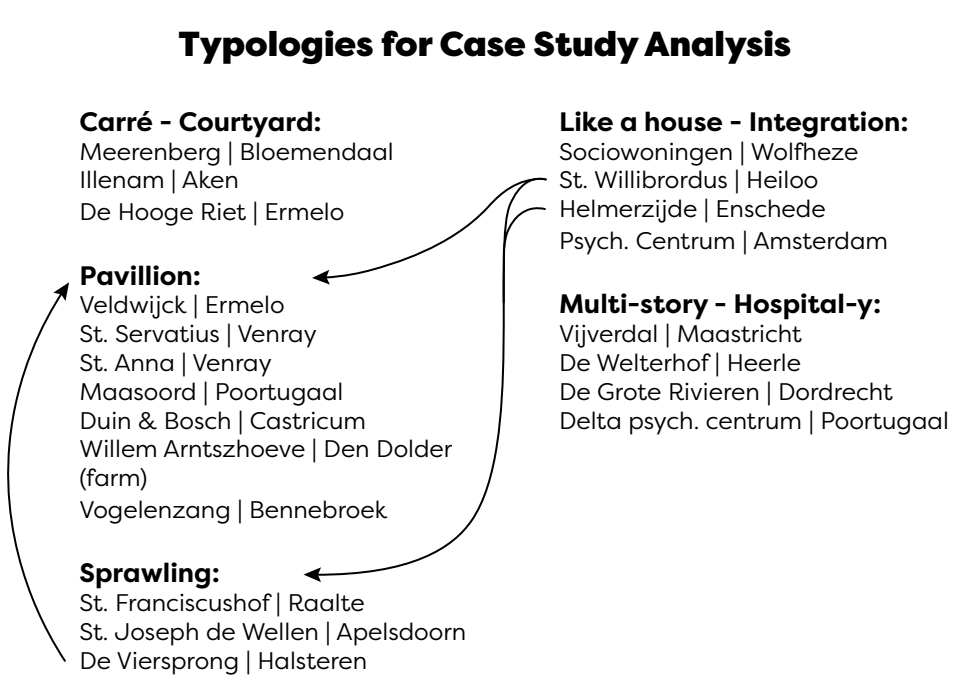


Figure 5.19: *Grouping building types.* Own diagram.

The Field Work that was done for this research was only done in one location. This limits the use of findings, as they can only be seen as possibilities, or personal, incidental truths. They cannot be seen as widespread consensus as they have not been cross-referenced in other locations.

In order to make the research more clear, a Patient Journey was formed. This shows what the main use will be of the building that will be designed in combination with this research. This was formulated with knowledge from the research, such as problems that arose in the Field Work location. It is visible in figure 5.20.

With the newfound knowledge, a programme was also formed mostly based on the Field Work location. This was combined with findings from the Case

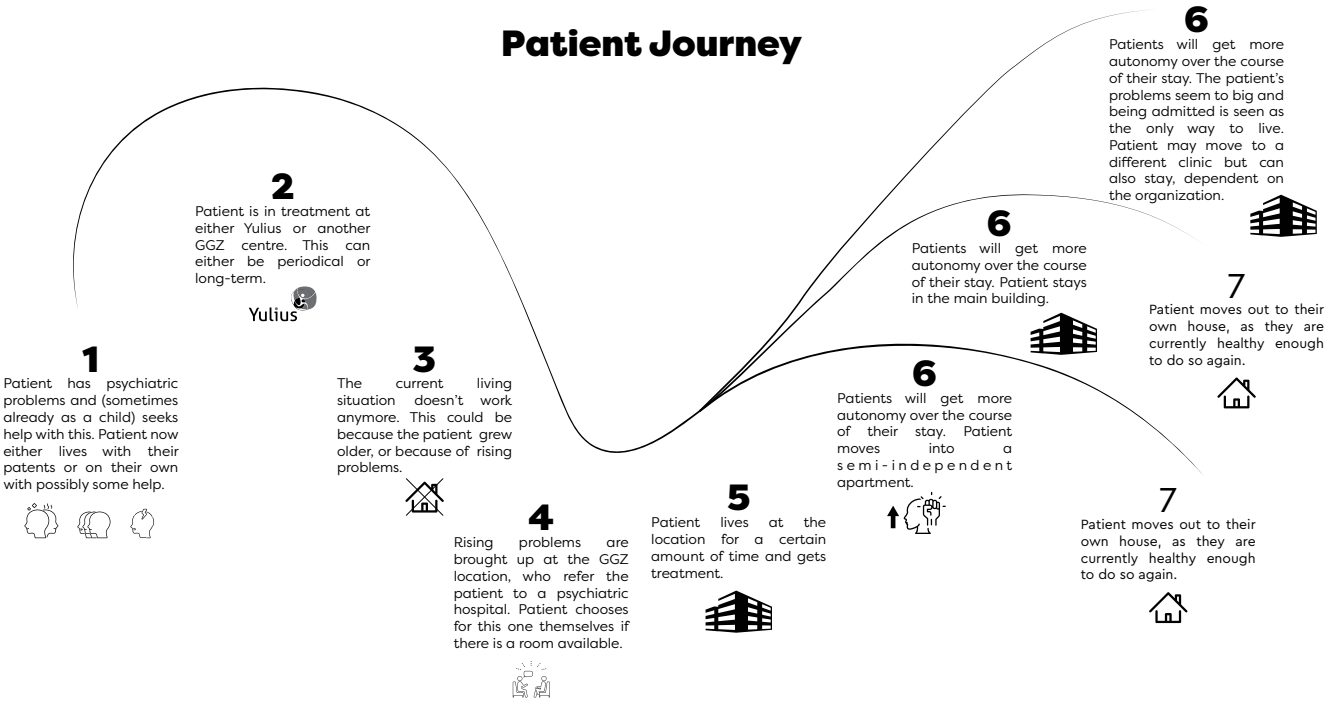


Figure 5.20: *Patient Journey.* Own diagram

Study analysis, such as the apartments that have their own front door. In the programme, I have taken into account a high and a low amount of square meters. This will be filled in later in the process. The programme is visible in figure 5.21

Programme

Room		m² per unit	m² in total
• **40 - 60 Apartments**			
10 - 15	loose apartments	30 - 40	300 - 600
9 - 14	M apartments	25 - 35	225 - 490
18 - 28	L apartments	35 - 50	630 - 1400
3	Couple's apartments	40 - 50	120 - 150
1	Staff bedroom	20	20
• **1 Restaurant**			
1	Eating room	100	100
1	Kitchen	40	40
1	Storage/cooling	20	20
• **2 - 3 Living/activity rooms**			
2 - 3	Living/activity rooms	50 - 65	100 - 150
• **1 Entry hall**			
1	Entry hall	100 - 200	100 - 200
• **1 Fitness room**			
1	Fitness room	60 - 90	60 - 90
1	Storage	10	10
• **FACT/therapy**			
1	Office	60 - 90	60 - 90
5	Therapy rooms	12 - 15	60 - 75
• **Office**			
1	General staff	55	55
1	Reception	14	14
1	Administration	17	17
1	Manager	15	15
• **Storage**			
8	General storage	4	32
2	Large general storage	18	36
4	ICT	1	4
2	Scootmobiles	12	24
• **Other**			
2	Washing rooms	15	30
1	Medicine room	10	10
3	Technical rooms	5 - 50	60
Total			**2322 - 4182**
+ 25%	Hallways		2900 - 5228

This programme was largely based on the Yulius Volgerlanden building from the Case Studies. Multiple rooms were added or changed, dependent on the Case Study Analysis, findings from literature and findings during the Field Work. This is visible in figures 5.22 and 5.23.

Figure 5.21: *Programme.* Own table

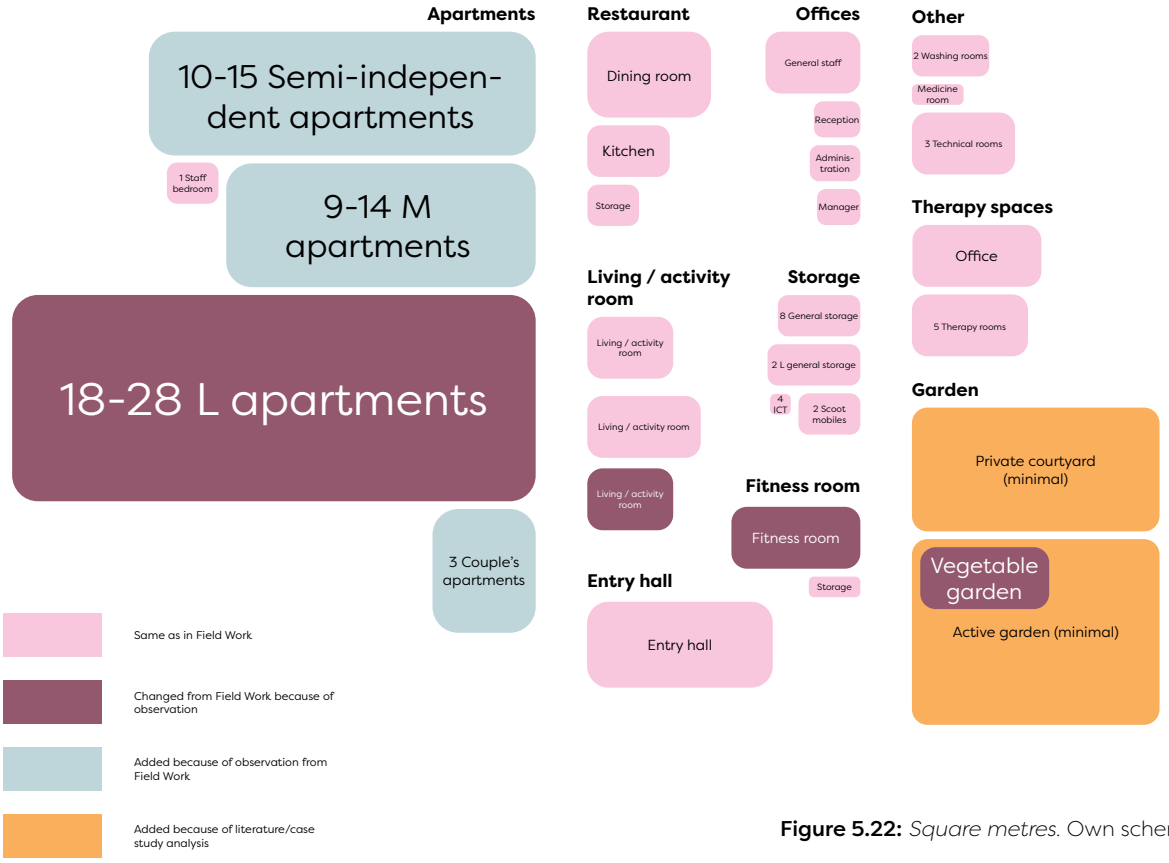


Figure 5.22: *Square metres.* Own scheme

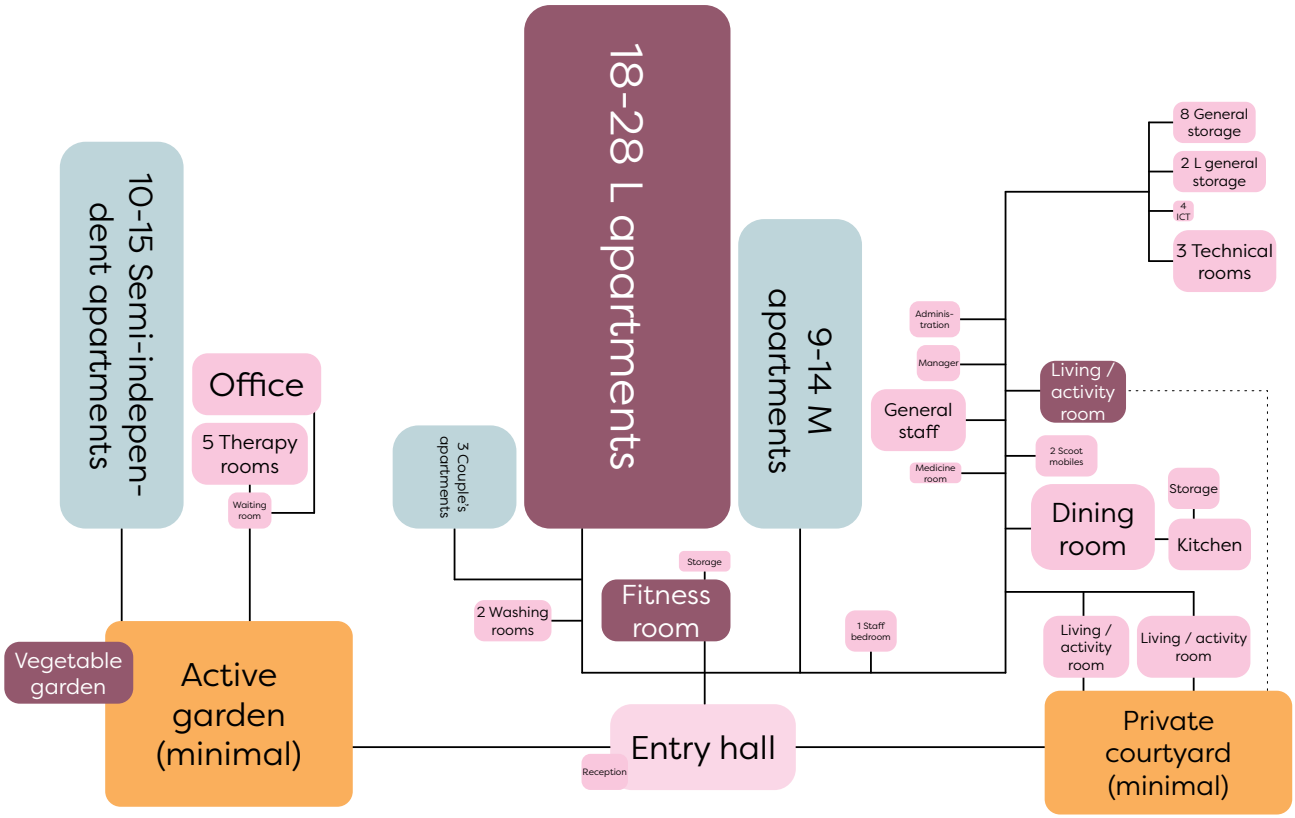


Figure 5.23: *Relations.* Own scheme

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