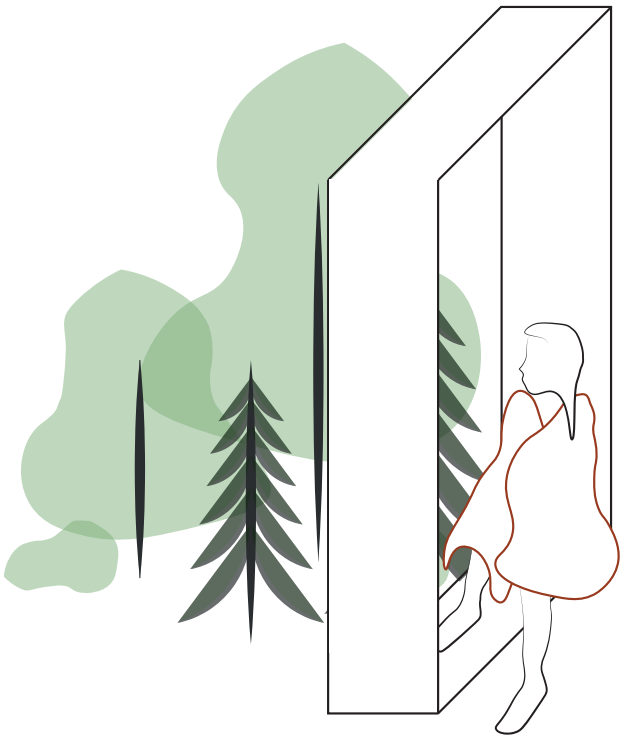
Healing spaces

How can architecture help in the recovery from eating disorders?



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DEPARTMENT OF ARCHITECTURE & CIVIL ENGINEERING,
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Architecture and Urban Design

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Thank you

To Lin for assurance and support

To friends and family for cheering me on

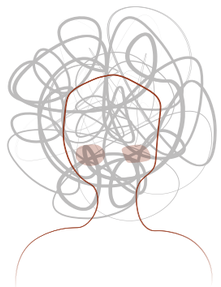
To Adam for keeping me fed and forcing me outside

To Stina and the people online for answering my questions

And finaly to Brita for being my spare tutor

Couldn't have done it without you!

Abstract



How can the architecture of care facilities aid in recovery from eating disorders?

The environment in which we spend our time while sick has been proven to have an effect on how fast we recover. Since our surroundings affect us, the spaces in which we heal deserves extra attention. Yet hospital-environments are very rarely seen as something positive or nice. Function and hygiene is prioritized, and the result often is sterile, unwelcoming spaces. This is true even when the need for sterility is lower, for example while treating mental health issues.

This study investigates how architecture could support recovery for people struggling with eating disorders. The study is conducted through literature studies and an interview with Stina Claesson, responsible for the eating disorder unit in Borås. The result of these theoretic parts are then implemented on a design proposal for a new, external ward, where the activities currently taking place in hospital-environments can take place instead. New elements are also proposed to remove some of the stigma surrounding eating disorders, and to invite and educate the public.

During the Corona-epidemic, mental health has become an issue for many people. Worst of are the people already struggling with mental health issues, who risk a worsening of their condition due to factors such as isolation, or stress. This is why it's more important than ever to put an emphasis on the environments where we tend to our mental health. The lessons learned in this thesis can hopefully be implemented outside of this study's focus.

Keywords: Healing architecture, Eating disorders, Mental health, Biophilic design, Healthcare architecture

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Student background

Bachelor's degree in Architecture
from Chalmers University of technology | 180hp

Architecture and Urban Design, Msc Program

HT 2019
Erasmus Exchange - University of Strathclyde | 30hp

VT 2020
Managing design projects | 4.5 hp

Public buildings | 22.5 hp

History, theory and method 6 | 3.0 hp

Masters thesis preparation course 1 | 4.5 hp

HT 2020
Masters thesis preparation course 2 | 3 hp

Future visions for healthcare, housing and work 1: Residential healthcare - housing for seniors | 22.5 hp

Currently;

VT 2021
Masters thesis | 30 hp

A reflection on professional skills

The professional skills which have been gained through the last studio – residential healthcare – will hopefully, even likely, prove to be useful during this process. The focus on the users perspective which dominates the process in the RH studio will continue in this project, and the method of analyzing a user group with very specific needs, both physical and psychological, will also be of use. Balancing safety and privacy, boundaries and freedom, will most certainly be a challenge in this project as well.

The most important skill to bring into a project like this however, is empathy. An understanding of the people residing in the facility, their needs, their threats, what might trigger them and how that can be avoided will be crucial for a successful project.

Introduction

This master thesis is an exploration of how the built environment can support the recovery of those struggling with eating disorders. The thesis begins with investigating what it means to have an eating disorder, and then attempts mapping out the specific needs of those people. It is then investigated how those needs can be accommodated through architecture.

”Anorexia nervosa has the highest mortality rate of any mental illness. Other eating disorders also have elevated rates than other mental illnesses. This is partially because of the high rates of suicide.”

(Bulik, 2017)

Purpose

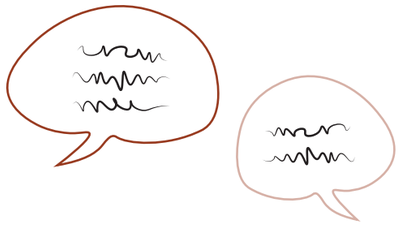
The purpose of this thesis is to contribute to the discussion about how our environment, especially the man-made environment, affects us subconsciously and how we can use that effect to our benefit in the treatment of people suffering from eating disorders.

Main questions and objectives

The main aim of this thesis is to investigate the built environments effect on its dwellers, identify the specific needs of those who suffer, and are recovering from eating disorders, and accommodate these needs as far as possible through architecture. This while keeping the facility safe, and a good work environment for the staff.

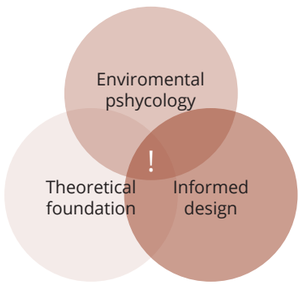
Method

The design method has mainly been research for design, though some model studies have also been made, providing some research by design.
I have conducted a literature study focused on architecture and psychology, as well as a separate one on eating disorders. In addition to text, I have consumed different types of media, through podd-format and video, to get a broader sense of the subjects. To enrich the theory behind the design, an interview was conducted. A question was also posted in a closed facebook-group about safe spaces. The insights which were provided had an important impact on the design.



Theory

In the theoretical part, sources of high credibility have been chosen, and the references for that part are therefore largely made up of scientific articles from medical journals, or written by well-renowned architects. Inspiration for the design has been taken partly from Maggies centres, which are cancer-patient and family support spaces. The CVAs reports about health care spaces have also had a large impact on the design.



Delimitations

I have chosen to work with eating disorders in a general sense, instead of choosing a specific diagnosis, which likely would have led to a more specific design, but which might have been less applicable to other designs. This choice was also made due to the fact that the majority of diagnoses are either UNS or BED (Riksät, 2019), both of which are pretty “vague” diagnoses and can look very different from person to person. I have also chosen not to dive into the diagnosis ortorexia, though it is a very serious illness in its own right, as I perceived the rest of the diseases treated in this thesis as a heterogeneous group already, and did not want to broaden the target group even more.

Reading instructions

The first part of this thesis, the Introduction, includes the frames of the work. The research question, methos, theory, and other background information about the task itself.

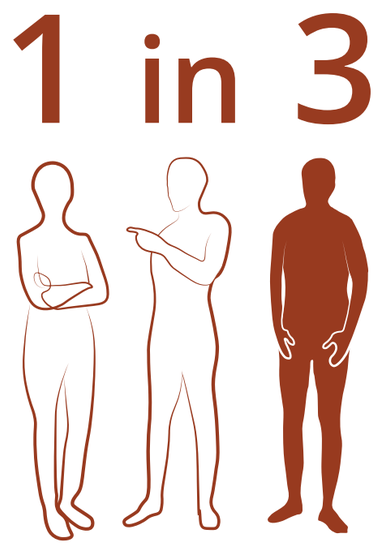
The second part, Theory, contains the project’s theoretical framework, and aims to explain the non-physical context of the thesis, as well as present the tools to find a solution.

The third chapter Context & site, presents the physical context for the project.

The fourth chapter, Concept, introduces the concepts which have been derived from the theory.

The final chapter is the Proposal, which contains the proposed building.

These are then followed by the Conclusion, Discussion, and references.



Women qualify for an EDNOS-diagnosis

(Mando, 2020)

Background

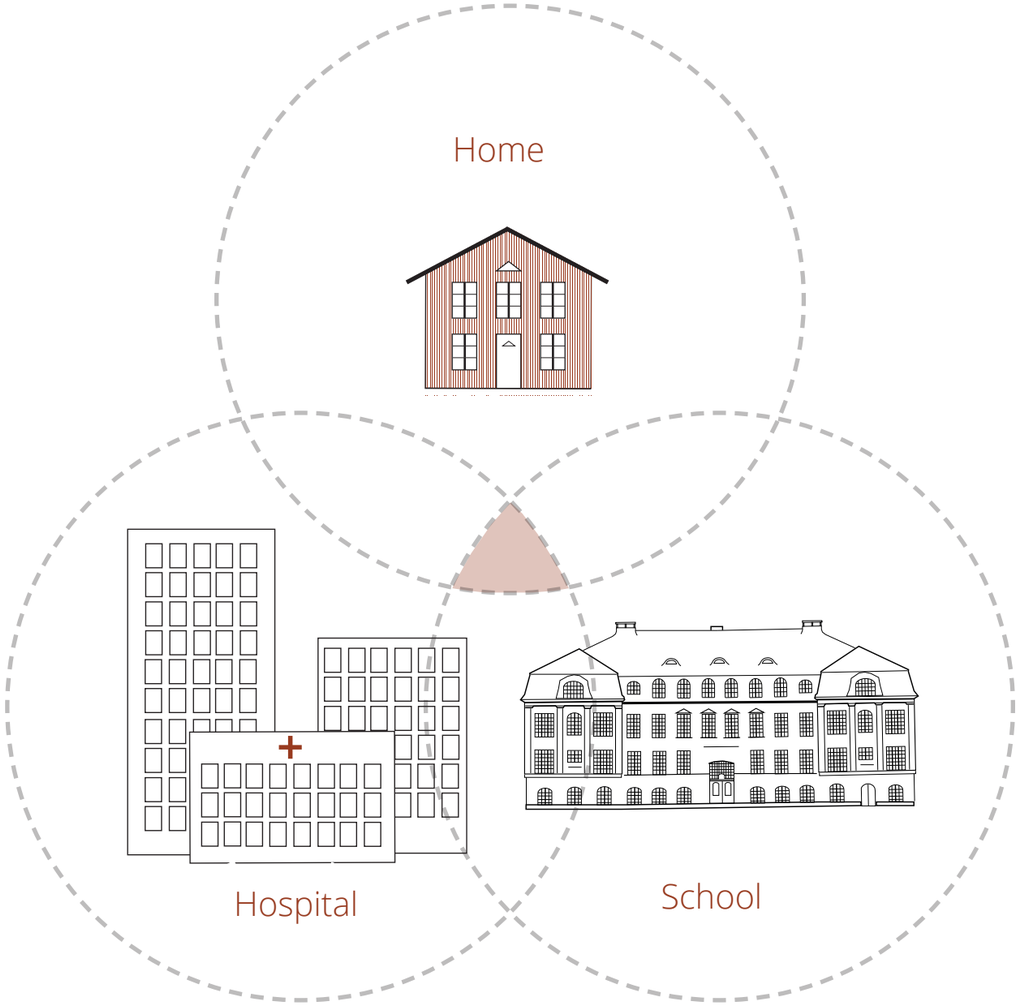
Folkhälsomyndigheten (2018) have since the 80s seen a decrease in mental health and well-beeing among children and youths. This decline is in part explained by schools not playing the societal part they used to as support, and the proposed centre could help bridge that gap and fill in with education about mental health in general, and eating disorders especially. This could also help normalise the conversations about mental health and wellness. Moving some of this responsibility from the school to other municipal functions could help standardize the knowledge, ensuring all children have equal access to education about mental health.

Another relevant issue which the pandemic has made clear is the strain on our healthcare-system. Relieving some of that strain is another benefit of having these mental health centers.

This proposal seeks to bridge the gap between home, school, and healthcare, while destigmatizing mental health issues. By creating a welcoming space where you can get support when you need it, taking the first step towards recovery by seeking help becomes a smaller task. Lectures and information meetings can be held here, spreading information about mental health in general and about eating disorders in particular. By educating in a space built for that sole purpose, a signal is sent that this is an important and prioritized issue, further removing stigma from the illness.

The centre is about making mental healthcare accessible, but also about prioritizing sufferers of a terrible mental illness. Eating disorders affect mostly young girls and women, a group of people who, generally speaking, are not top priority among decision makers in any way. These mental illnesses are also glamorized and romanticized in a way unmatched by any other disease. Nobody wishes for diabetes, or depression, yet “looking anorexic” is a compliment and a goal among young girls. The societal pressure on women and girls to be thin is practically inescapable, and without a dialogue and the toolset to understand how and why this is the case, young girls, and others, risk developing a unhealthy, crooked relationship to themselves, their bodies, and health in general.

There are no existing examples in Sweden of this exact kind of facility. Inspiration has been taken from existing mental health promoting facilities as well as Maggies centres.



THEORY

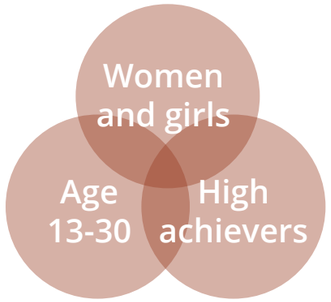
This chapter contains the theoretical foundation on which this thesis is built.

About Eating Disorders

Who is the design for?

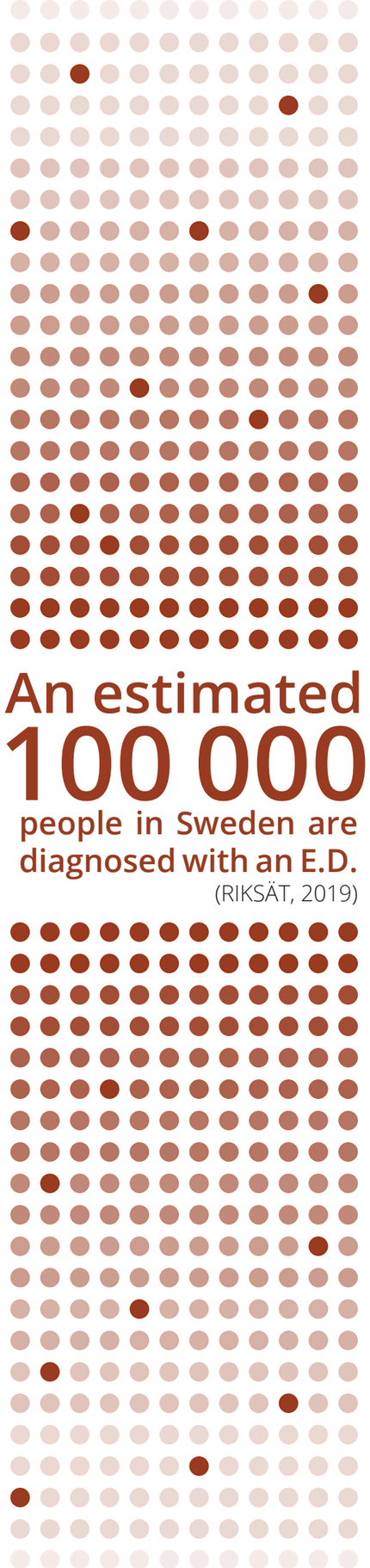
As has been stated throughout the earlier pages, this design is meant for people suffering from eating disorders. But who is that? Unfortunately, anyone can develop an eating disorder, however, some people are more prone than others to do so. The book "Ibland finns det inga enkla svar" (2013) contains interviews with people who, in one way or another, have been affected by eating disorders. It highlights the issue that you can't really know why someone has developed an eating disorder. Though different types of trauma have been proven a factor, it is not necessary to have lived through trauma to fall ill (APA, 2006), and although it is most common among young girls (Riksät, 2019), anyone at any age can get sick.

Cynthia Bulik, a researcher at Karolinska Institutet, talks about the genetic factor in developing eating disorders (2017). In twin studies done about Anorexia nervosa, the genetic proneness seemed to be around 40-60% in developing that specific eating disorder, if you had the genes for it. This means that, to an extent, eating disorders are hereditary. This also means that the environment, not necessarily the physical but rather the context, in which we grow up has an impact on the potential development of an eating disorder. When the nurture is the same, nature must be what differs. This also shows the importance of continued research on the effect of our environment on our mental health, and how important it is that we, as architects, are aware of said impact. Apart from the fact that anyone can get sick, having an eating disorder can mean many different kinds of mental problems for the sufferers.



Some of the riskfactors in developing an E.D.

How can we then design for such a diverse collection of people? Focusing on common traits, rather than what makes them unique, we can see a pattern form. Connected to EDs are a range of negative feelings, such as anxiety, shame, and depression. Trying to soothe these issues will lead to a calming environment for the residents.



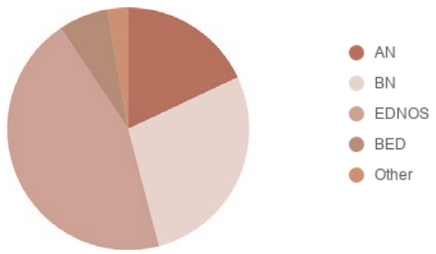
Diagnoses

Having an “eating disorder” is not a diagnosis in itself; there are several types of eating disorders. The most known ones are probably Anorexia nervosa and Bulimia nervosa, but the most common diagnosis is EDNOS - eating disorder not otherwise specified (Riksät, 2019). There is also BED - binge eating disorder. These all have different characteristics, briefly summarised to your right. Note that these are complex psychiatric illnesses, which do not look the same from person to person; the diagram is a simplification and meant to give an idea of the disease.

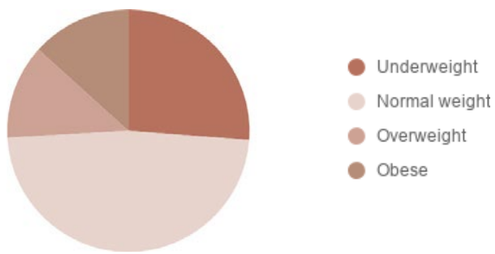
Exterior - interior, who gets sick?

It’s a tired old myth that you can tell who has an eating disorder. About half of the people suffering from eating disorders have a healthy BMI, as you can read in the diagram to the right. However some factors put you at larger risk. Apart from the genetic factor, which have been previously mentioned, being a girl or woman, and between the ages of 13-30 are factors in developing an eating disorder. Personality-wise, being a high achiever or under high amounts of pressure can also play a part. Culture can also have an impact, with western culture as the context for this project, the western ideal of thinness has an impact as well. Here an emphasis should be made that anyone, at any age, with any background can develop an eating disorder. Falling into the categories mentioned before only increases the risk.

The fact that media, social or otherwise, has an impact on the self-image and confidence of young people is a commonly accepted statement, and these days it is also supported by science. According to Smink et al (2003) the standards of western beauty ideals have been increasingly present in eastern societies, and can be connected to an increase in eating disorders as well.



Distribution of diagnoses in adults with eating disorders (RIKSÄT, 2019)



Distribution of BMI in adults with eating disorders (RIKSÄT, 2019)

Anorexia Nervosa

A person suffering from anorexia nervosa has a low body weight, which is not necessarily a requirement for the other diagnoses. People suffering from AN are motivated by a massive fear of gaining weight to diet to, and beyond, the point of starvation. Their view of their own body is disturbed, its not unusual that they think they are bigger than they are. (KÄTS, 2017)

Bulimia Nervosa

A person suffering from bulimia nervosa will “binge” - meaning consuming larger than usual amounts of food, often “forbidden” food (fat food, sweets, carbs etc.), during a short amount of time. This causes feelings of loss of control, shame and anxiety, and the sufferer will attempt to “compensate” for the behaviour by for example purging, starving or using laxatives. (KÄTS, 2017)

BED

BED - Binge eating disorder, is similar to bulimia nervosa, but with the distinction that there is no “compensation” after bingeing. The feelings of shame, loss of control and anxiety are however the same. (KÄTS, 2017)

EDNOS

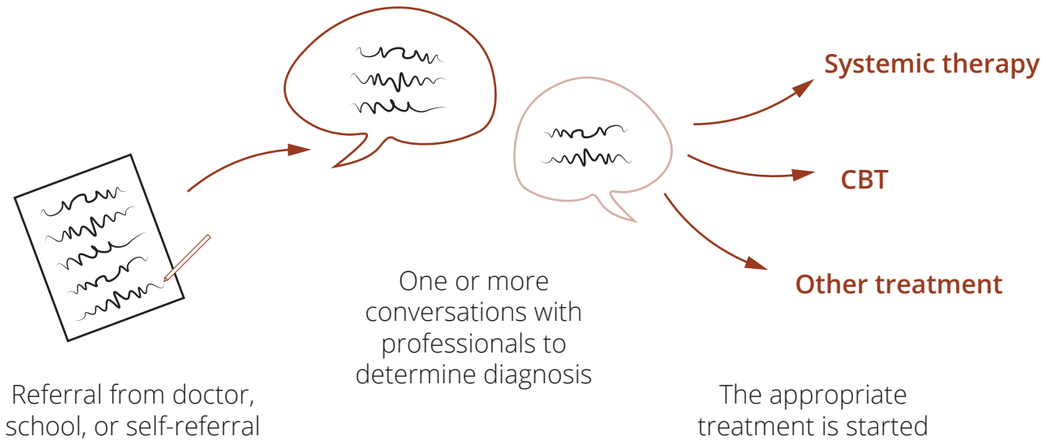
EDNOS is an umbrella term for illnesses where the sufferer is having a disordered relationship to their bodies and/or food, but doesnt fit in to the diagnoses Anorexia or Bulimia. This is the most common eating disorder, making up almost half of the sufferers. (Yager, 2006)

Swedish healthcare

To get treated at the E.D facilities in Gothenburg, or anywhere else in Sweden, you need a referral from a doctor, from your school, or you have the option of making contact yourself directly with the E.D-ward, through a "self-referral" (Västra götalandsregionen, 2016). To get the correct diagnosis, you first have to talk to one or several psychiatrists, who then decides what treatment will be the best choice. Most common for eating disorders are CBT and, if the patient is underage, systemic therapy (RIKSAT, 2019), but it all depends on the level of sickness and willingness to get better; see the diagram on the right page, which explains how the decision on which care is needed is made.

Other diagnoses

Both anxiety and OCD are more common in people with eating disorders than the rest of the population (APA, 2006). While this could surely be linked to a need for control in different ways, it is its own issue and requires its own solutions. The anxiety is connected, but not limited to, food, and is likely to affect larger parts of the sufferers lives.



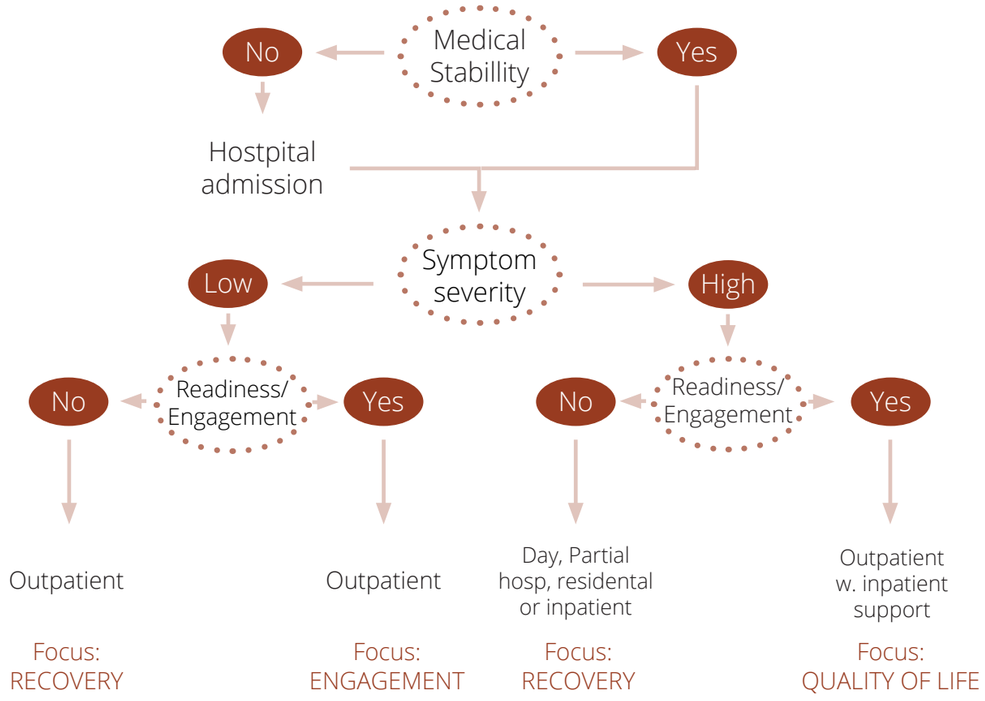
CBT

Cognitive behavioural therapy, is a form of therapy which makes you practise changing behaviour, thought patterns and attitudes through conversation with a therapist, to find effective strategies to handle emotions and thoughts.

Systemic Therapy

Systemic therapy involves the entire family, and is most often used when the sufferer is underage. The family attends therapy together and works towards common goals. In this type of therapy it is important that the youth get support from the rest of the family.

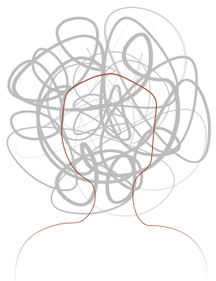
Gellers decision-making tree



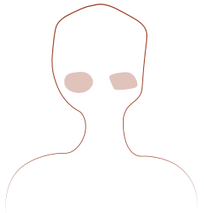
Source: Geller et. al. (2016)

The rocky road to recovery

Seeking help is a huge step, and while motivation and spirits might be high in the beginning, the road to recovery is very hard for a lot of patients. The first step is always to help the sufferer reach a weight which is preferably healthy, or at least safe, for the patient. From there on the work starts with changing behaviors and patterns which might have existed for years, which is no cakewalk either. Annika Jonasson, a therapist at an ED-ward says about this time in treatment: “The hardest part is not when in starvation, but when you begin to break it... Then is the toughest time, both physically and emotionally...” (Translated to english by author, Allaskog, 2013) She also mentions that this is a time where the patient needs a lot more support than their surrounding might think, as they see progress and assumes they are now on the path to recovery, while the sufferer might be struggling with the changes and feel like everyone is letting them go before they are ready.



Interestingly enough, there might be a genetic factor at play here as well. C. Bulik talks in her public speech (2017) about how the body after dieting, strives to get back to the weight it was before, a phenomena known to anyone who ever tried a diet. She states that recent research shows a similar behaviour in the body of someone suffering from anorexia, suggesting that the body itself also strives to get back to that low weight from a healthy one.



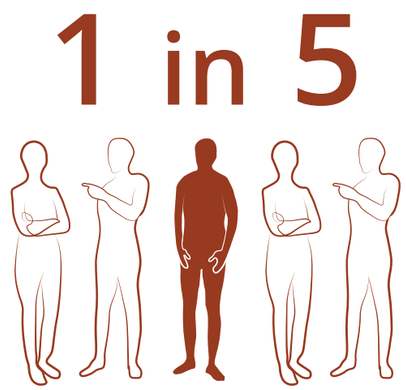
A few things appear over and over again when reading about eating disorders. Some common issues are repeated in different sources, and different contexts, and they are all issues which I believe will be necessary to soothe in order to create a healing space for the sufferers.

A common denominator in many cases seems to be control. Either this feeling of lack of control is related to life in general, and attempting to take full control over yourself and your diet becomes a coping mechanism. In other cases, you feel a lack of it, and as a result overeats, binges, or purges. Either way, a fear of losing control rules your life and prevents you from getting better. Giving the residents control over their surroundings and making them responsible for something outside themselves might satisfy some of the need for control, as well as serve a therapeutic role.

Blame and shame

Another recurring topic when reading about eating disorders is the shame and guilt which often accompanies it. Depending on the diagnosis, and also shifting from person to person, the patient's relationship to their illness varies greatly. When dealing with bingeing for example, this behaviour is connected to a great deal of shame, the sufferer knows that their behaviour isn't healthy or “normal”, and they are ashamed of losing control. The situation can look very different dealing with anorexia, in that the patient does not think that they are sick at all, or that they simply don’t care.

In any case, the disease can be hard to understand both for the sufferers and their surroundings. The people around the sick one can see that something is wrong, and question why the sick person doesn't just simply eat, or stop bingeing, or just don't compensate. The lack of understanding from both sides can lead to friction, creating a divide between the sick person and the people meant to support them. Families and friends questioning willingness to get well, getting frustrated, scared, and angry can cause the sufferer to get defensive, sneaky, and feel abandoned and alone in the fight. Especially with young patients living with their families, getting the entire support system on one page is important for the treatment to be as effective as possible.



girls states that they have had an E.D in the last year

(Ung Röst, 2014)

Healing architecture

Natural connection

NATURE
A recurring feature when reading about healing architecture is the importance of connection with nature. A well-cited example is R. S. Ulrichs' "View through a window..." (1984) where the positive effects of having a view towards nature versus a view towards a brick wall is described. The patients with the nature view both had a shorter recovery period, and also used less medication for their pain. Our longing for nature goes so far, that ever potted plants, or paintings of nature gives us a greater ability for restoration. Other things which have a positive impact are fireplaces, fountains, aquariums, and animals (Evans, 2003).

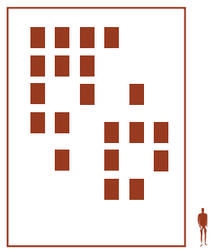
"Human beings spend more than 90% of their lives indoors, yet we know much more about ambient environmental conditions and health than we do about the built environment and health."

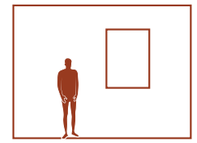
(Evans, 2003)

LIGHT
Though the connection to nature is important, there are other factors which also affect the impact of our environment on our mental health. Another important factor is daylight, which helps us maintain our circadian rhythm, helping the body wake and sleep as it should (Evans, 2003) .Lack of daylight have also been linked to depressive symptoms. There is a strong connection between levels of light and mental health, though counter to popular belief, the wavelength of the light seems to have no impact, only the quantity (Evans, 2003). This means the colour of the light doesn't matter, but the amount does. People who are deprived of the necessary daylight for a longer period of time, can experience sadness, fatigue, and even clinical depression However, the same is true for the opposite, and people recovering from depression recover faster in a room exposed to sunlight vs one which is not (Evans, 2003).

Biological preferences

SPACE
Humans are what we call a "wall-hugging species". This means that we tend to stay close to the walls in new environments, and don't like to cross big open spaces where we don't feel protected; this is especially true for people with anxiety (Sussman & Hollander, 2015). Examples could be crossing a courtyard or a square, which might make you feel uncomfortable and watched. This tendency to stick to the walls doesn't just apply to walking. When we sit down at restaurants, we also tend to choose tables close to the walls, rather than in the middle, and preferably with our backs against the wall (Sussman & Hollander 2015). On the flip side of the coin, we like to have an overview over the room we enter. It makes us feel in control and safe (Evans, 2003).





EMPTINESS
Studies have shown that people residing in specifically psychiatric facilities show a few factors which impact mental health. One factor is to be able to have an impact on their stay, by regulating their social interaction, as well as their surroundings. In the physical environment, things like having a weather-protected entrance and decorated hallways has also been related to higher levels of wellness (Evans, 2003). Another way to impact the residents by architecture is to avoid the use of long corridors, which creates a feeling of helplessness, and add small spaces where meetings can happen spontaneously and over which you feel ownership (Evans, 2003) .

SCALE
Buildings without reference to our human scale makes us uncomfortable as well. Large structures feel intimidating, makes us feel small, and watched from the windows above, not unlike how we feel in an open space. From the other side, living higher up in a building makes you feel disconnected with the outside and grants you a lesser feeling of ownership over any common areas in your building (Evans, 2003).

An interview

I had the pleasure of interviewing Stina Claesson, department manager at the eating disorder facility in Borås. She is responsible for the day care, as well as the open care. The two spaces share staff, and the team consists of a wide range of professions from therapists, nurses, and dietitians to doctors, psychotherapists and physiotherapists. This text is a brief summary of my take-aways from our conversation.

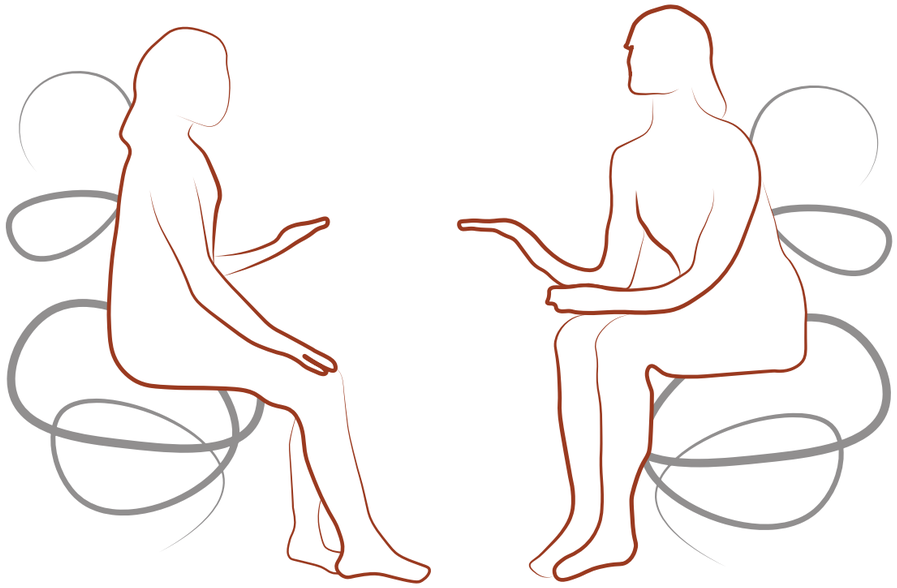
I started by asking her about practical aspects; what spaces exist and how are they used? Half the facility in Borås is for adult patients, half for youths and their family. Usually in the day care there are 6-8 patients in a group treatment for the adults. Kids always have their legal guardian with them as systemic therapy is the treatment with the best evidence. Who else joins the child's sessions depends on family situations. Families and spouses are also offered support here. In the treatment of adults, it is up to the person receiving care if someone else joins their session.

We also touched on the subject of COVID-19, and how the pandemic has changed their practise. A lot of the discussions and therapy could move online to video-based conversations, which has worked pretty well for a lot of patients, especially the younger ones. Not having to travel the distance to the facility, finding a sitter and missing as much work has been some of the positive effects of moving online for the patients. However not everyone feels comfortable with the format, and having a screen between you and your conversation-partner is not for everyone. In the future, video-therapy might be an additional extra. The weigh-ins and physical examinations still need to happen on site.

Another negative from the pandemic is that the staff can't meet anymore, something they miss. Usually, the rooms are shared between 2 or 3 staff, and have the sessions in a neutral room. Since the pandemic, they've had to use all rooms as offices, to keep distance. The sessions now take place in that same room, which is not as nice.

I am curious about the kitchen, and its role in therapy. Two snacks and lunch are served each day, by staff, the patients then get to practise portion-sizes and serve themselves. No other activities take place in the kitchen, it is sealed off to not cause stress. Sometimes it is used to cook by patients, who practise shopping for and cooking a meal.

I ask what she thinks about the needs of the patients in terms of calm and stimulation from their environment. Do they need to be distracted from their discomfort or do they need to be in a calm environment to reflect? To this Stina seems pretty certain; a calm environment is what's best when you have a bit of chaos on the inside. Should a distraction be needed then that can be provided in other ways.

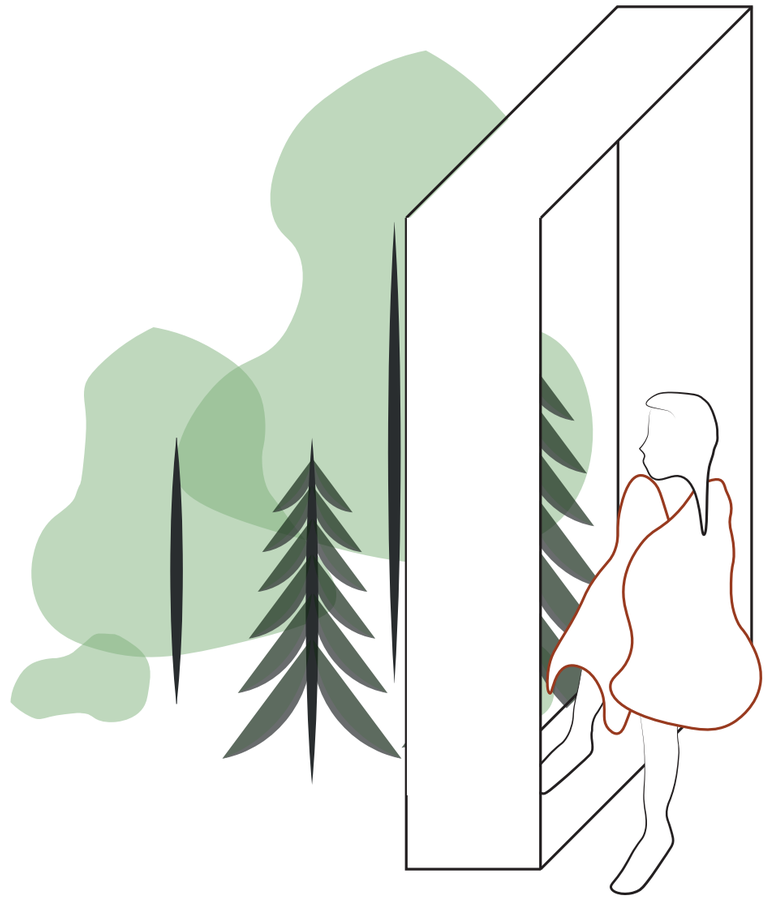


Specific design

Designing for people with eating disorders is no simple task. Despite my best efforts, I have found very little documented research about how to create the best environments for this specific patient group. It seems like a lot of the knowledge around design for people with eating disorders is coming from the experience of those who work with these patients, and the patients themselves, and is therefore almost intuitional, rather than supported by research.

There is however plenty of research on how to design for mental illness (or rather, how to promote mental health). The design proposal is an attempt at combining the intuitive design with research. Apart from the interview held with Stina Claesson, I also posted the question in a support group for people with eating disorders and their loved ones online about what spaces makes them feel safe or better in any way. The result was just shy of twenty replies where of several mentions places in nature, at the stables or walking your dog. Some mentions being alone in the car, or at the back of the bus, soothed by the vibrations from the engine. These answers seem to point in the same direction as the literature study, that a connection to nature is very important. Animals having a calming effect is also a well-documented occurrence. The bus and the car are interesting, the interpretation made in this case is that there is a sense of safety in being in a confined space, unseen, protected from the world around you. The vibrations, as well as sound and visual stimuli also demands focus, which then cannot be directed inwards, effectively distracting from your eating disorder.

Under blankets or in big soft clothing are other replies, showing that feeling “held”, or wrapped in something is another feature which is appreciated. One person brings relevant critique about the everyday environment, and how its poorly adapted to those suffering from eating disorders. Cold indoor temperatures, hard sitting surfaces and no places to rest are part of the critique. Another answer is from a mother, talking about her observation regarding her daughter's preference for darker colours, a neat and tidy environment, and some daylight.



Reflections

A lot of the literature on healing architecture talks about how nature is the best tool for making humans feel calm and comfortable. There are also some aspects of biology at work when we experience a space, which results in behaviours such as sticking to the walls and liking having an overview. These are factors which can be easily met with architecture, and in that way create a more comfortable space for its dwellers.

Designing for people with eating disorders is very much designing a space that has a clear connection to nature, allows for easy orientation and wayfinding, but still allows you to "hide" and claim smaller spaces as your own. A decorated space gives the feeling that the space, and by extension its dwellers, is a priority and important, boosting confidence and feelings of self-worth. Elements such as fireplaces, aquariums, and fountains act as calming and enriching installations, further allowing relaxation in an uncomfortable situation.

"...It is also likely that some individuals may be more vulnerable to mental health impacts of the built environment. Individuals already facing psychosocial stressors are more psychologically vulnerable to suboptimal environmental conditions."

(Evans, 2003)

Though originally thought to be the core of the complex, after the discussion with Stina, the kitchen became less of a focus point. The kitchen is mainly a source of stress in this context, and while this is an issue which needs to be addressed, that stress will not disappear because it is designed in a certain way. The kitchen will be made as calm a space as possible, adding connections to the outside, but making it look like a regular kitchen is probably the best move, since there is comfort in familiarity.

Summary: Theory

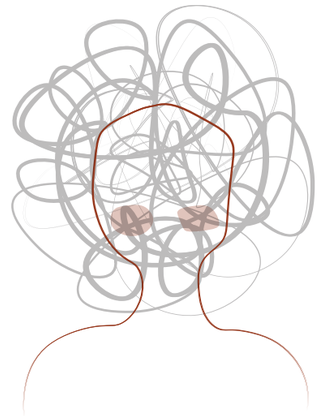
The mapping of the most common eating disorders tells us that there are about 200 000 people suffering from eating disorders today in Sweden. During the pandemic the situation has become worse for many of these people, with isolation, stress, breakage of routines and a large focus in social media on "getting fit" during lockdown, as potential triggers.

To get treatment in Sweden today, you have to get a referral, to then talk to a therapist, to get diagnosed. It will then be decided what treatment is right for you; the two most common options being CBT and Systemic therapy. The level of urgency - and thereby what careform you receive - is determined by your physical and mental state, and treatment ranges from 24/7 care in a ward, to regular meetings with a therapist. Recovery is very hard from this type of disease.

Healing architecture, with an emphasis on the connection to nature and biophilic design will be used to create a space ideal for healing from eating disorders.

"The hardest part is not when in starvation, but when you begin to break it... Then is the toughest time, both physically and emotionally..."

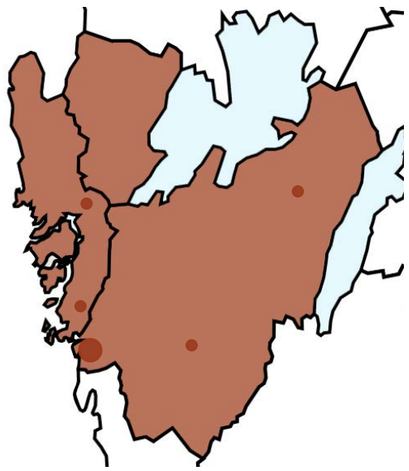
- Annika Jonasson, therapist



CONTEXT & SITE

This chapter contains an analysis of the chosen site for the design proposal.

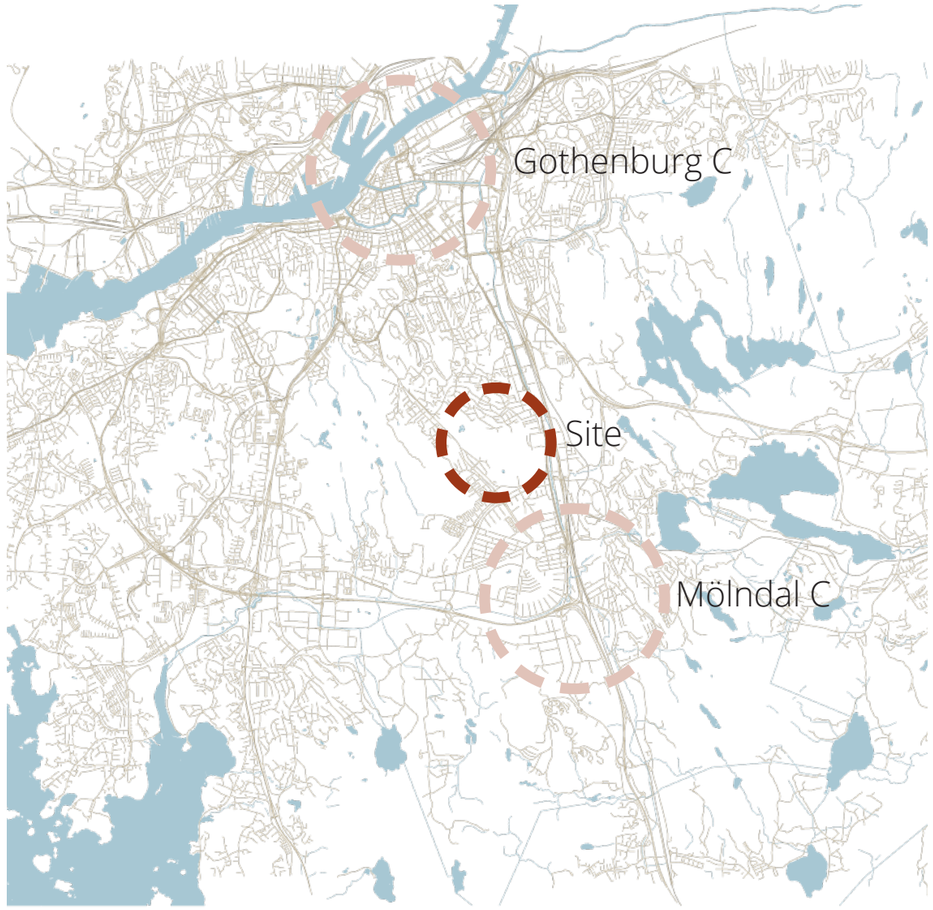
Context



In Sweden today there are no centres like the one I am proposing. Traditional E.D facilities can be found in some places around Värsta Götaland, marked on the map, but they all require referrals, a diagnosis, or both, as metioned earlier.

The purpose of this centre is to educate, de-stigmatize, heal, as well as be a more accessible and positive first contact for people with mental health centres. Knowing where to turn when you feel like you need support, and having been there before, is hopefully contributing to making taking that first step a little easier and a little earlier, contributing to a better mental health in the long run.

The site was chosen from the criteria that it needed to be easily accessible from the Gothenburg city centre; not be too remote. It also needed a good connection to nature, hence Safjället being of interest. A third criteria was for the area to feel calm and safe. The last wish was for the site not to be too close to a hospital, to avoid that association. These criteria made clear that Safjället and the area around it was a good candidate, meeting the criteria. Therefore that place became a target for a site visit, looking for a good spot.



Gothenburg - Mölndal
Map 1:100 000

The site is situated just across the border to Mölndal municipality. It is easily accessible by tram or bus.

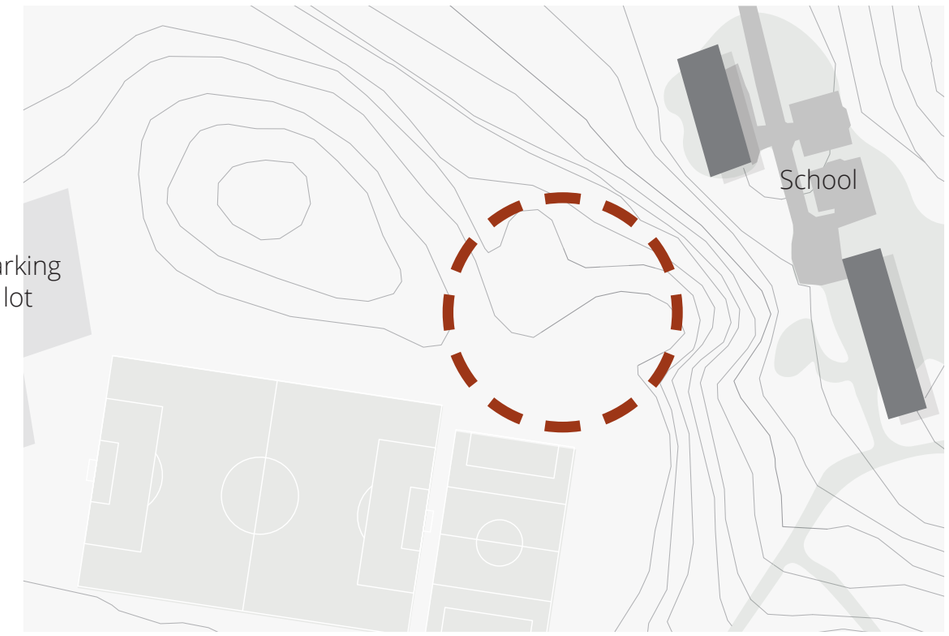
The site was, as previously mentioned, chosen in part due to its relative proximity to both central Gothenburg and central Mölndal, making it accessible from both municipalities, as well as the immediate connection to the nature reserve.

Placing it between the city centres is also a statement that the facility plays an important societal role.


Bus stops
School F-5
Site
Church
Sports field
Nature reserve
Lit walkways
Tram line
N
Safjället
Map 1:12 500

Site analysis

The area



The site is located in Krokslätt. It borders what was defined as three “different character” areas. In the north, the majority of surrounding buildings are two- or three story single family houses, mainly with vertical wooden facade or brick walls. The colour scale ranges from white, to pastelles to red, grey and black.

The school nearby is from the early 1900s, an impressive yellow four-story building with a plastered facade.

To the east of the site is an old industrial type area, with residential block buildings in two to three stories, with facades mostly in brick, but also some “landshövdingehus” (bottom floor stone and two stories wood on top of that).

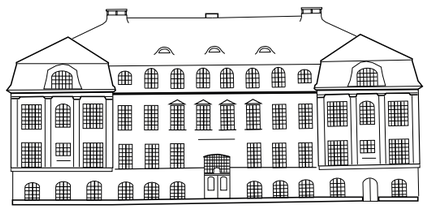
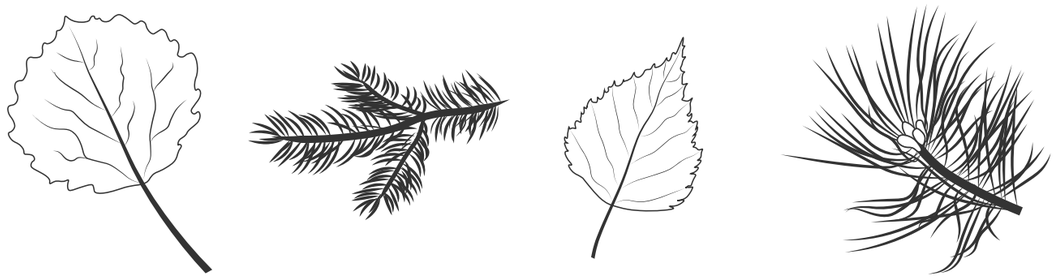


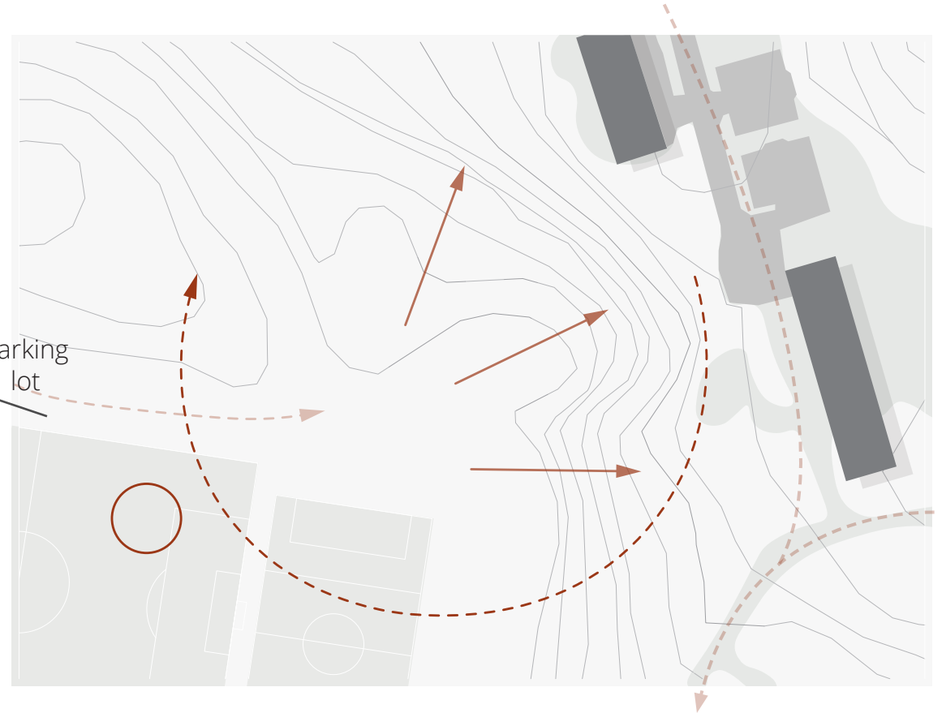
Illustration of the neighbourhood school

This site is unique in that it is bordering the nature reserve but not a part of it, meaning it can be developed without taking space from the nature reserve. It also has parking and a paved way leading to it already, minimizing necessary development of the area.

The nature reserve hosts a great variety of materials and textures, ranging from smooth and shiny surfaces to rougher, more tactile materials. This gradient has served as an inspiration for the material choices in the project.

The trees surrounding the site are mainly aspen, pine, spruce and birch.





The site has, thanks to its steep decline in the north, a natural entry point from the parking lot that belongs to the soccer fields. This path is already paved, and creating a road here will have minimal impact on the surroundings.

The view towards the north is the best one, again thanks to the steep hill. The southern side has an opportunity for an outdoor serving area thanks to the long sun hours.

The site was decided to be a flat, slightly lower part of the hill, still very high and with clear views, but protected from any disturbing sounds from the playground of the school and soccer fields. The flatness, and the proximity to the soccer fields, allows for as little impact to the environment as possible, in terms of blasting and paving.

Strengths
Closeness to nature
High up - good views
A calm area

Weaknesses
Hard to access
A bit of a walk from the closests stations

Opportunities
Proximity to school - reach kids
Proximity to sports space - reach more kids
Right by well-visited nature reserve

Threats
Can be perceived as remote
Loud noise from soccer fields and school

Pictured are some of the spots the nature reserve has to offer.

In the nature reserve there is a variation of vegetation and water in the form of wetlands and creeks. There are also lit pathways through the entire reserve, and both fireplaces and shelter from the wind.

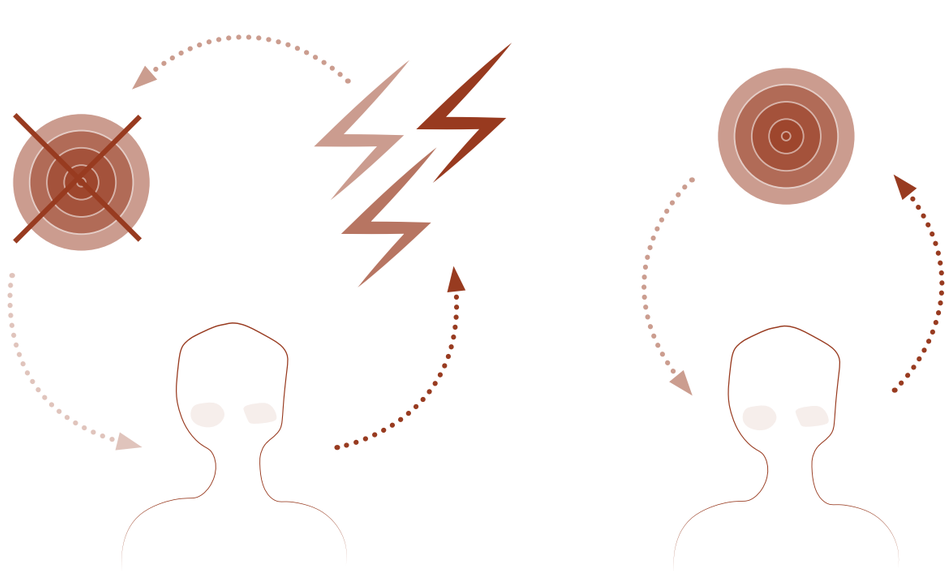
CONCEPT

This chapter explains the design concepts developed based on the theory.

Concept

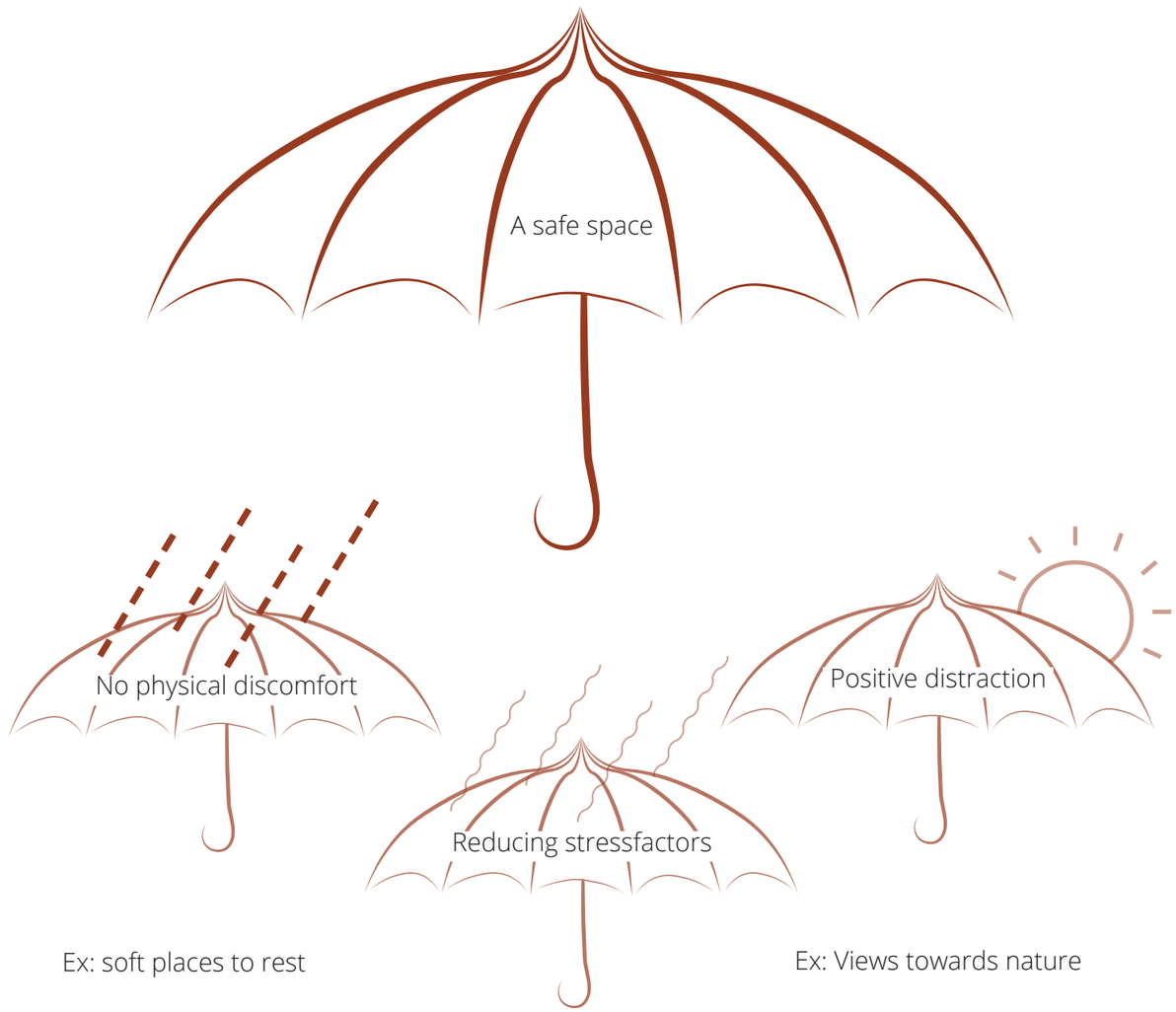
Purpose

Overall, the concept is to create a calming and healing atmosphere for the centre's visitors. By creating a space in which they feel comfortable and safe, their energy and focus can be put into their treatment, resulting in a faster healing process and less time spent unwell.



Not having to deal with surrounding stimuli all the time allows for inward work.

Concept overview

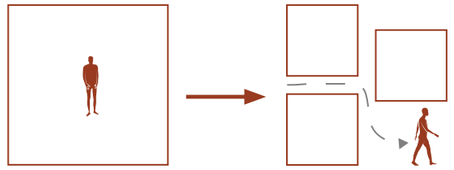


Concept - large scale

Rules for design

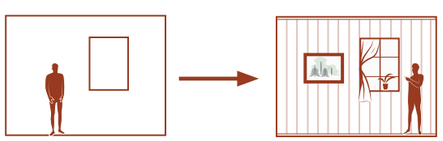
Studying eating disorders makes it clear that feelings of anxiety and depression are two issues in patients with E.Ds. Fortunately, those symptoms are things which can be soothed by the environment, which in turn can make the healing process less painful and more efficient. The sum became these DOs and DON'Ts, which are explained here.

Since we feel uncomfortable in open spaces, an effort will be made to minimize them in plan, allowing places to "hide" in the building.



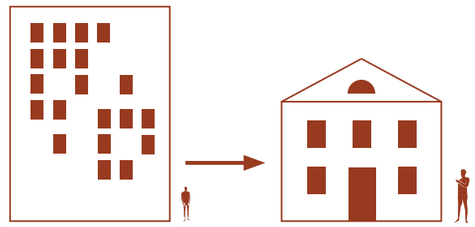
No threatening open space

Making the environment feel prioritized and taken care of sends the message that you too, who the building is for, is prioritized and taken care of. Therefore attention to detail and high quality materials should be used.



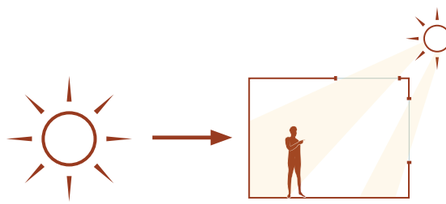
Decorate spaces - make them feel attended to

To make the building as inviting and non-threatening as possible, it will be kept low and relate to the human scale in the facade.



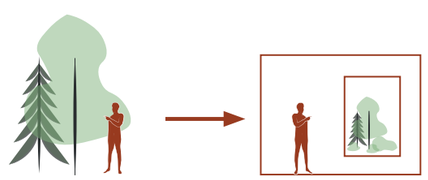
Keep a human scale throughout

Daylight conditions are important, especially in living quarters. Where the checked in patients reside should therefore be angeled in such a way that it makes the most of the daylight.



Natural light makes us feel good

The connection to nature is the most repeated throughout the texts, and arguably the most important feature to incorporate in the design. Working with views and sightlines, as well as bringing nature inside, will be crucial.



Views towards nature brings peace of mind

Concept - small scale

Designing for the senses

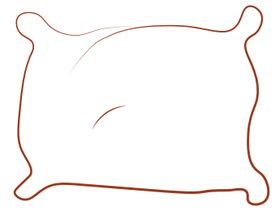
When designing for people with eating disorders, you must try and keep in mind the very special relationship they have to their body and their surroundings. Windows that offer nice views turn into mirrors when darkness falls outside. A visually nice wooden bench hurts to sit on, and a fresh breath of air can send chills through your entire body. A sudden need to rest sends you on the search for a chair, and so on.

Making a space for people with eating disorders means taking these things into consideration, and these are the strategies used in doing so.

Overall, fabric will be ever present in the building in seating, rugs and curtains, as a tool to create a nice, calm acoustic atmosphere, add some softness to the wooden structure, as well as cover glazed surfaces as night falls.

Soften with fabric

Having plenty of soft seating will ensure that there is always a place to rest, and the rest will be a comfortable one.



Offer spaces for rest

Using the fact that one sense can enhance the experience of another, warm colours will dominate the buildings interior, enhancing the heightened indoor temperature, all for the patient's comfort.

Create a warm environment

Putting attention to detail and having things like door handles which you have to touch made in wood, to create a positive tactile experience rather than a cold piece of metal.

A pleasant tactile experience

THE PROPOSAL

This chapter shows the final design proposal for the eating disorder facility.

Program

The program is based on relevant existing buildings, the discussion with Stina, CVAs reports, as well as some guestimating by the author. The key spaces have their own brief presentations on the next page. A goal has been to keep this facility compact, and the program reflects that - there are spaces which could be added and work in the context, but have been excluded. This is to keep the building easily overviewed, small-scale, and non-resembling a hospital.

GF

Pcs.	*Sqm.*	*Room type*
3	8 m²	Therapy room S
3	11 m²	Therapy room M
1	20 m²	Kitchen/Dining space
1	30 m²	Workshop
1	60 m²	Group therapy/Lecture
2	30 m²	Day room
1	40 m²	Staff break room
1	60 m²	Office space
2	20 m²	Changing room
1	8 m²	Staff entrance
2	11 m²	Examination room
1	120 m²	Outdoor space
1	25 m²	Entrance
2	~25 m²	Waiting room
1	15 m²	Reception
1	70 m²	Cafe
		WC + HWC

+1

5	8 m²	Private accommodation
1	25 m²	Day room
1	25 m²	Outdoor space

-1

1	8 m²	Storage
1	25 m²	Laundry
1	55 m²	Technical spaces

Tot area: 1050 m²
Footprint: 908 m²

Cafe

Having a cafe in a building for people with eating disorders might seem strange, but it gives the residents an opportunity to practise ordering and eating out in a safe, controlled environment. No warm food is served, and nothing is baked on site to avoid disturbing smells for the visitors. The cafe is also there to welcome people inside without an errand.

Kitchen

The kitchen is located between the two dayrooms, and is used by one group at a time. It is a regular kitchen, where all food which is served is prepared, and eaten. The patients get to practise cooking, serving regular portions, and even shopping and stocking the refrigerator here. No other activities than eating or cooking takes place in the kitchen.

Lecture hall

The lecture hall hosts a school class without problem and is meant as a educational space, both for outside visitors, classes, parents, but also for patients who can learn about their disorders.

Therapy rooms

The therapy rooms are designed with a skylight, letting in a lot of natural light and allowing the sky to be visible. The roof is slanted to create a safe welcoming space, and is decorated in warm, earthy colours.

Workshop

The workshop is meant as a creative outlet for patients, being creative and working with your hands can be therapeutic. This space can also host workshops for visitors to teach them about their bodies and food in a creative way.

The outside

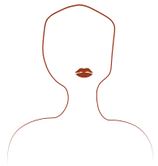
The dayrooms are connected to terraces, which in turn are connected to a garden space. The garden space have a focus on edible plants, has a few apple and pear trees, as well as a spice garden.

Personas

Six examples of people who can make use of the centre and it's services.

Jonas, 46

Jonas is a parent of two girls and a boy in ages 10-15. He takes an evening class at the centre on how to talk with your youths about body image and mental health, and takes them on a weekend visit to the centre, just so they'll know where to turn if they feel he's not enough.



Class 5B

Class 5B is on a study visit to learn about mental health and body image, as part of their health education. Apart from lectures and workshops, they all leave with the knowledge of where to turn for help, and where to find an adult you can trust.

Dina, 15

Dina comes in for systemic therapy with her mother and "bonus-dad" once a week. During the pandemic, they've had to move the therapy online, which works well for Dina who is used to video-meetings by now, but she still has to come in once in a while for her physical check-up.

Ida, 23

Ida has been very sick for a long period of time. She felt like she needed a kickstart to get better once and for all, and checked in to the facility. She will stay on-site for a few weeks, get a meal plan, therapy, and the support she needs until she feels ready to go back home.

Anna, 28

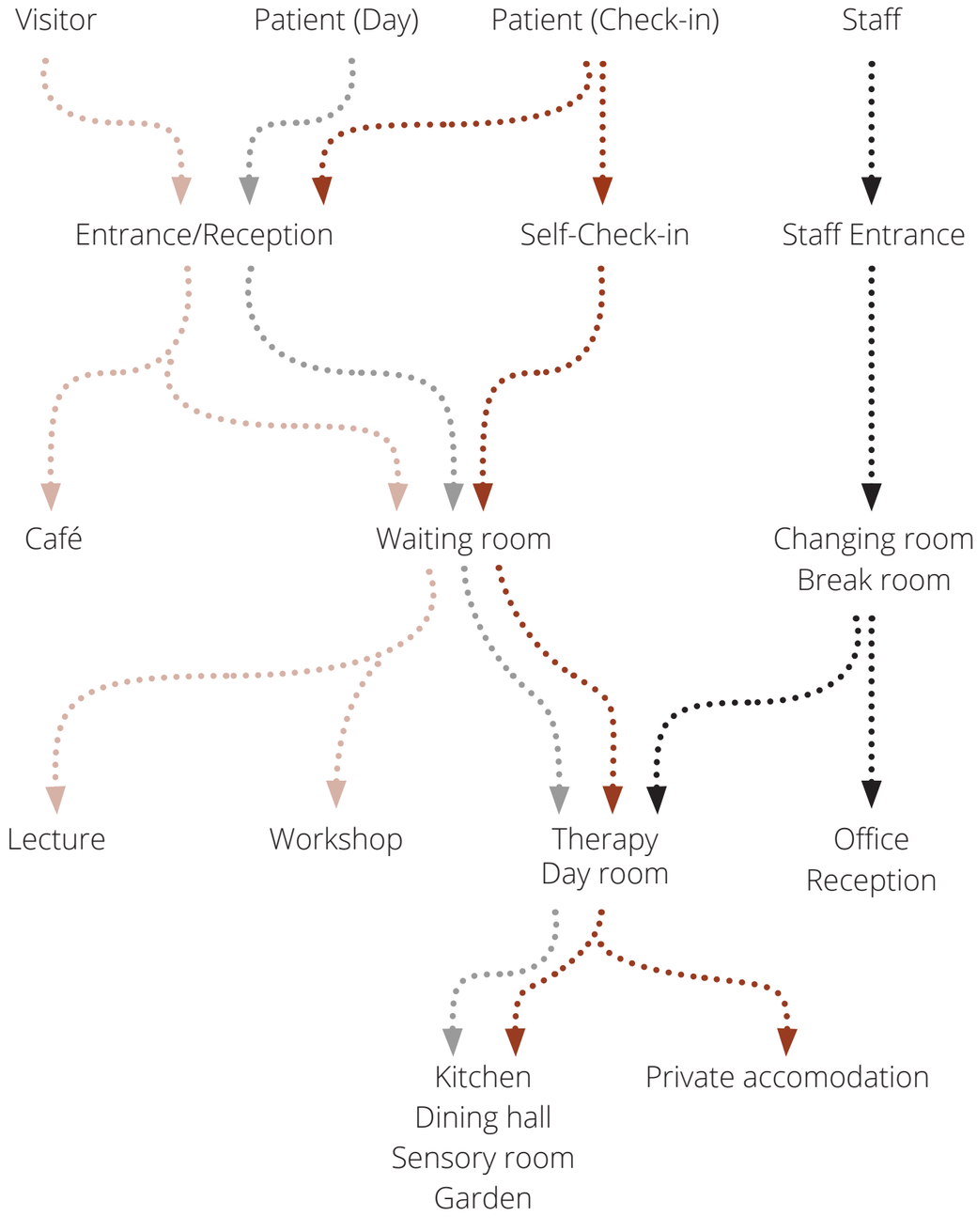
Anna usually visits the centre once, or sometimes twice a week. She has grown up anorexic, and has gradually turned to bulimia instead as she got older. Her condition got even worse when she got pregnant, and that's why she finally sought help.

The Andersson family

The Andersson family doesn't really have a relationship to the centre, other than that they frequent the nature reserve and stop by the café to buy sandwiches on their outings. They do however feel good in knowing where they can turn for support, should they ever need it.

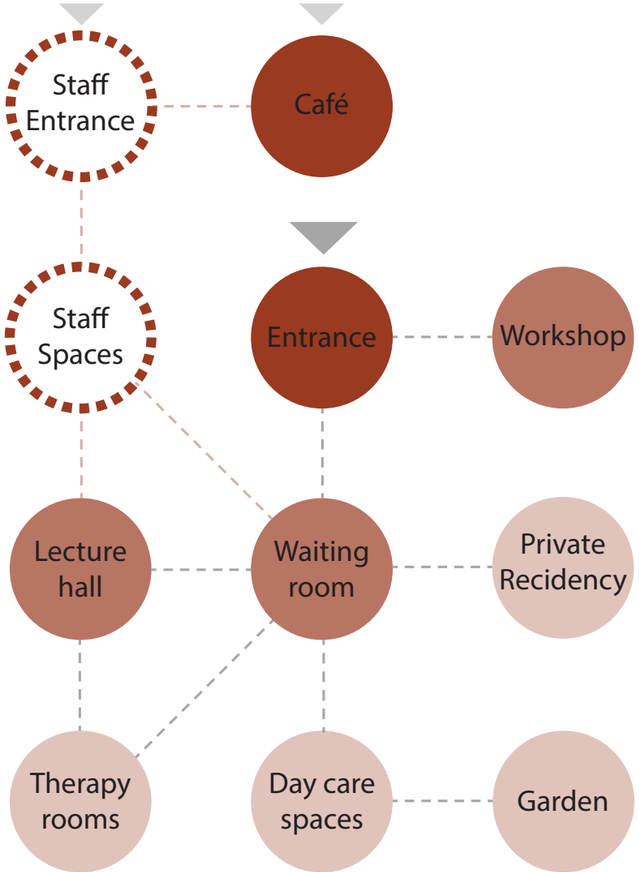
Flows & organisation

This is mapping of the flows anticipated inside the building which aided in the organization of spaces in plan.



Organisational chart

This is the resulting organisation of spaces, which, as you can tell, is heavily affected by the flows.



Who works here?

Multi-competence

The idea is that this facility is municipally funded and run, and is able to collaborate with neighbouring schools and existing health care facilities. Preferably, this would be a collaboration between Mölndal and Gothenburg municipality, or even better, they could each have a facility.

The facility wouldn't function without its staff. The competences have been inspired by the eating disorder facility in Borås.

Chef

Preparing nutritious meals for all the patients

Dietitian

creating a meal plan and educating patients about nutrition and healthy habits.

Therapists

Therapists specialising in eating disorders, using both CBT and Systemic therapy.

Physiotherapists

They can help you by working with body knowledge and practising sensing what your body is feeling, such as hunger.

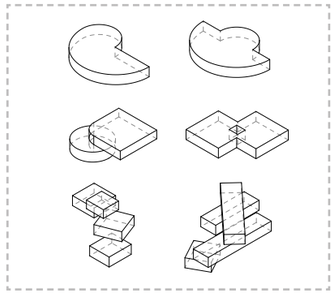
Nurses and doctors

The backbone of any facility with medical competence, nurses are needed here for medical evaluations, as well as being there in case of emergency. Doctors also frequently visit for examinations and prescriptions.

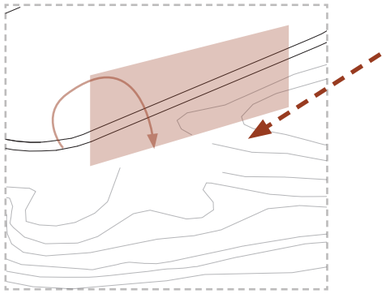
Café staff

The cafe serves coffee and sandwiches, and those are prepared and served by the cafe staff.

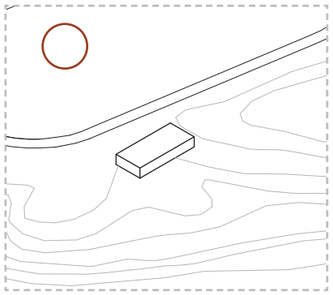
Shape development



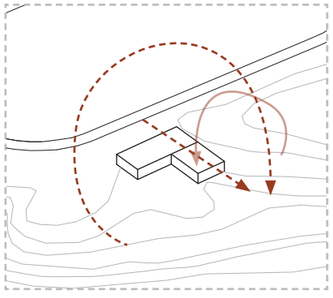
To create the shape, a mini-workshop in the form of spit models was made. The spit models were evaluated and the ones with preferable qualities are chosen and analyzed to figure out the qualities and the drawbacks. They are made with an estimate of the program area in mind, and roughly the necessary size for the program.



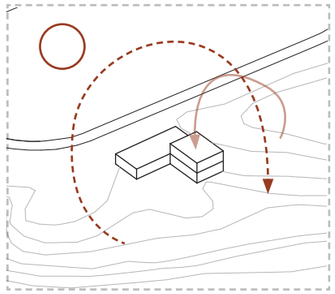
From the site's prerequisites a natural entry point occurs, as well as the need for a barrier of some kind towards the soccer fields. The solution to this becomes the first part of the building.



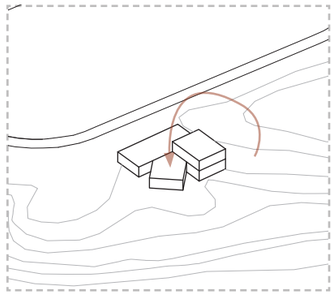
A building is placed parallel to the soccer field, greeting those who approach with a gavel, and creating a more private side away from the field and path.



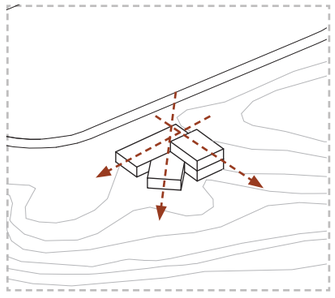
In a north-south-direction, another pavilion is added. The angle is chosen to give the best possible sun conditions, as well as put an emphasis on the view to the north.



A story is added on top for the residential part, granting it privacy. The direction of the windows is either west or east, and the common terrace faces south.

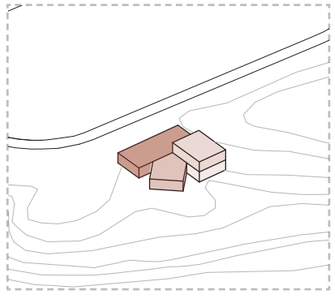


As a lot of the program benefits from views towards nature, the building is developed to add another body, which cantilevers out, once again putting an emphasis on the view while staying connected to the rest of the complex.



This creates an easy overview and allows easy circulation. An atrium is added in the core to let in light and further help orientation

The cantilivers are placed on stilts. Raising the bodies from the ground increases privacy.



The pavilions host different parts of the program, allowing visitors privacy from each other. This division also further helps orientation.

N

Site plan
1:400

The entry point is located towards the road leading to the facility. This road is meant only for deliveries, personel, and for accessibility, visitors are referred to the parking lot 150 meters to the west.

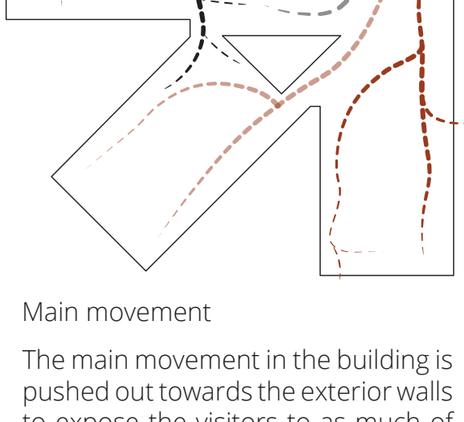
Main entrance

The scale is kept low, with only one story greeting the visitor. The sitting niche and the entry nische in the facade gives the entry point a more humane scale.

The materiality of the brick building is repeated on the hard surface marking the entry point of the building. You can also make out the café just round the corner.

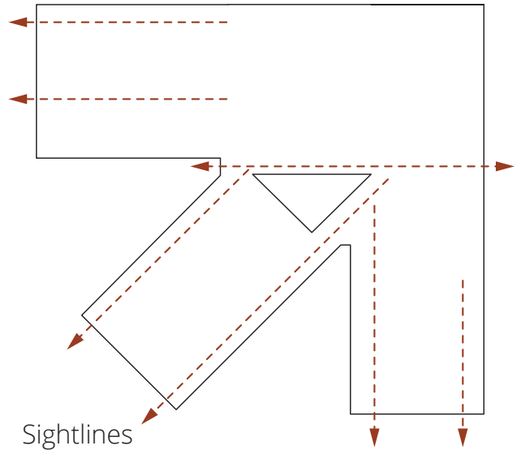
Plan GF 1:250

1. Entry hall
2. Reception
3. Workshop
4. Cafe
5. Lecture Stairs
6. Atrium
7. Staff spaces
8. Therapy spaces
9. Dayroom
10. Kitchen
11. Terrace
12. Lift/Stairs



Basement plan 1:500

In the basement, lies technical spaces for ventilation, sprinklers, and electricity, as well as storage and a laundry.

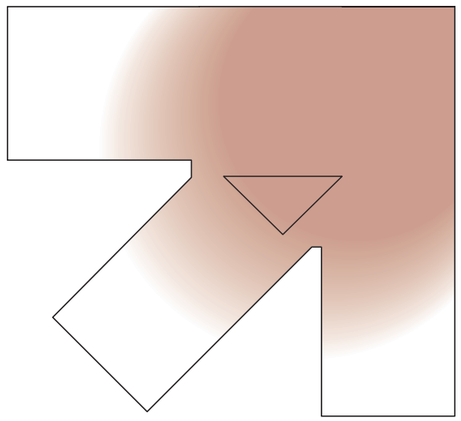


Sightlines

Sightlines pierce the building, increasing orientability and constantly offering a target which is not a wall. At the end of most sightlines there is a way to a terrace.

Main movement

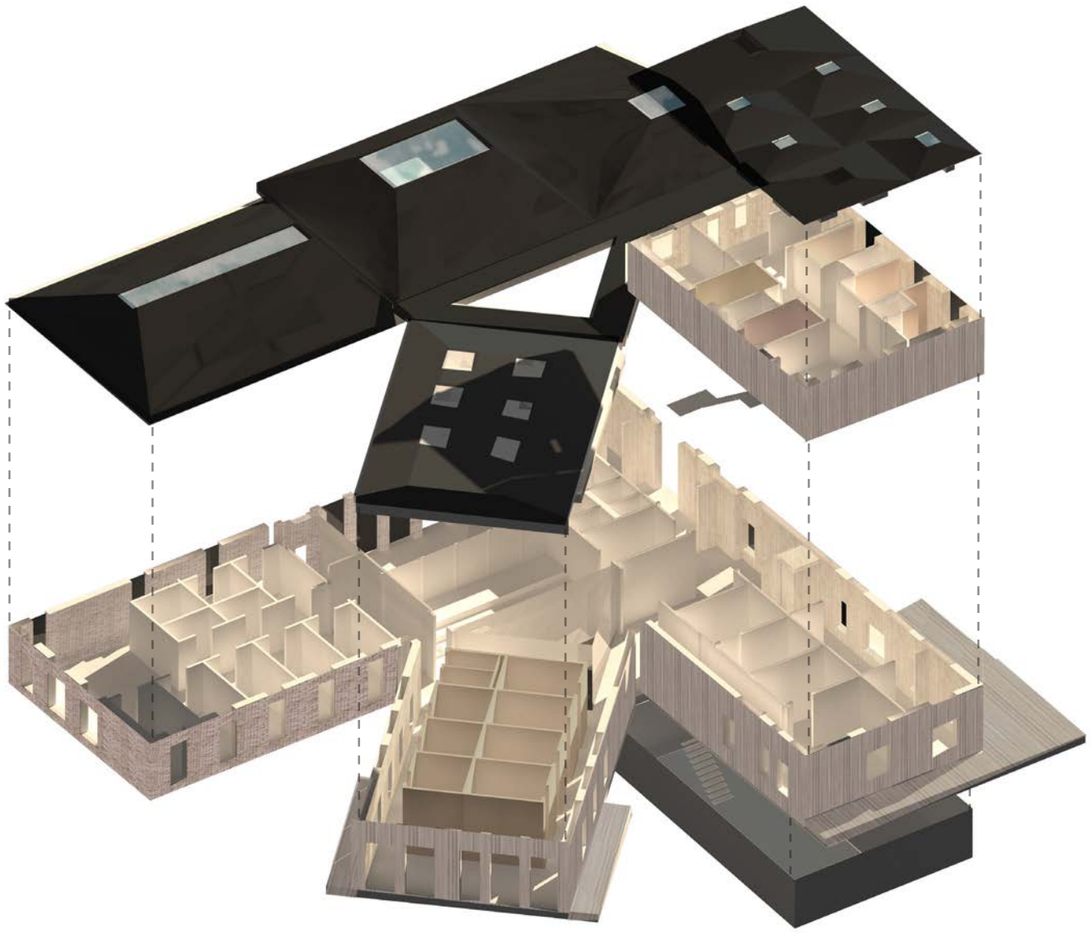
The main movement in the building is pushed out towards the exterior walls to expose the visitors to as much of the outside as possible.



Public-private gradient

The public-private gradient is quite clear; the further into the building, the more private. The entrance, cafe, workshop and lecture space are available to the public, even if the latter two does require a booking. The waiting room acts as a kind of hallway, being available for either those who have business there or who are simply waiting for someone. The “outer ends” of the branches are meant only for those who actually need them.

Materiality



In preparation for choosing materials and designing the interior, “Atmospheres” by Peter Zumthor was read. This book served as an inspiration and highlighted the importance of the sensing, or the experience, of the spaces. With this approach in mind, the designing could begin.

An overall concept for the materiality inside and out is to constantly offer a tactile experience, whether be it wood, brick or fabric. The part of the building hosting the entrance is made in brick, a material which is quickly warmed by the sun, and warm to the touch. It also lacks the cold moist sensation that wood can convey on cold damp days. This building sits heavily on the ground, a stable entry point, tying back to the surrounding brick houses.

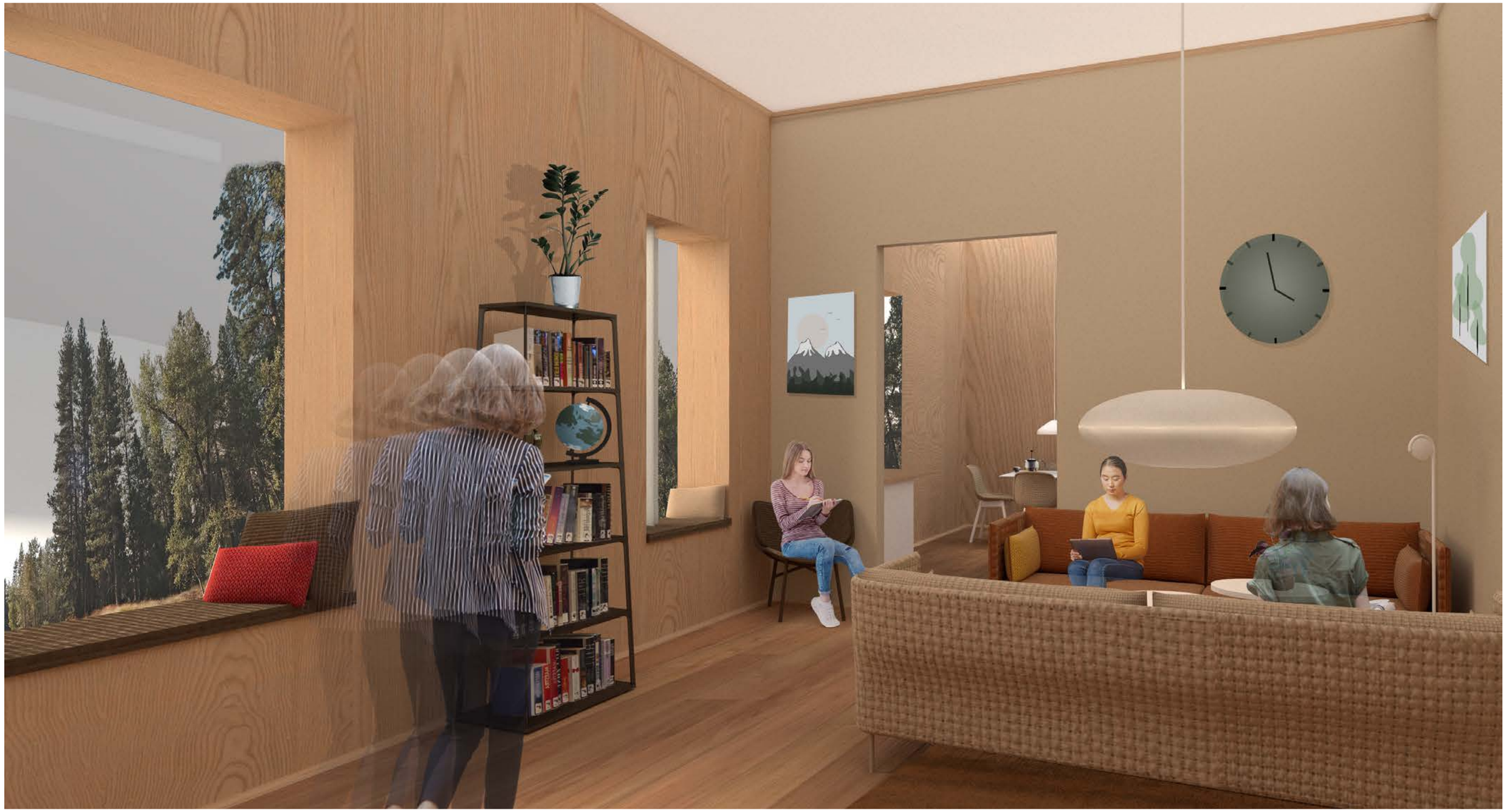
The two cantilevering bodies are in wood, melting out into the forest. They balance on stilts, standing idly on the mountain side. To harmonize with the surrounding, the exterior wood is pine, coated with pine tar vitriol.

The material and colour choices in the interior are meant to give a warm feeling, and are all on the warmer side. The exterior walls are in wood, to give the sense of solidness, and stability. These walls also contribute with a tactillity, feeling warm to the touch and giving a grounding feeling. Details, such as window sills, door handles and skirting are all in wood as well. The therapy rooms are a darker colour to differentiate them from their surrounding, and enhance the transition from the corridor into the room.

Fabric, in the shape of rugs and curtains, also play an important role in softening the atmosphere within the project. It’s also used to literally soften the window sills, inviting sitting by the window, and the benches in the waiting room.

Glass is also quite present, offering views, but also ensuring privacy. The atrium wall towards the lecture space and the dividing wall in the therapy waiting room are opaque, letting through light but little else.

View towards the kitchen and garden



This is a view of the adult day room, beyond we glimpse the kitchen, and outside the window the garden spaces. The wooden exterior walls and floor, as well as the colour palette, creates a warm, calm atmosphere.

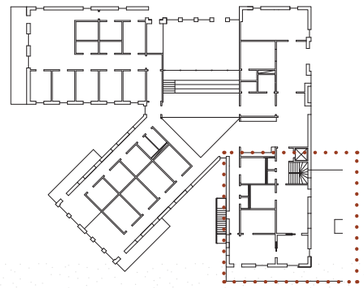
The material choices and the views strengthen the connection to nature, and contributes a healing effect.

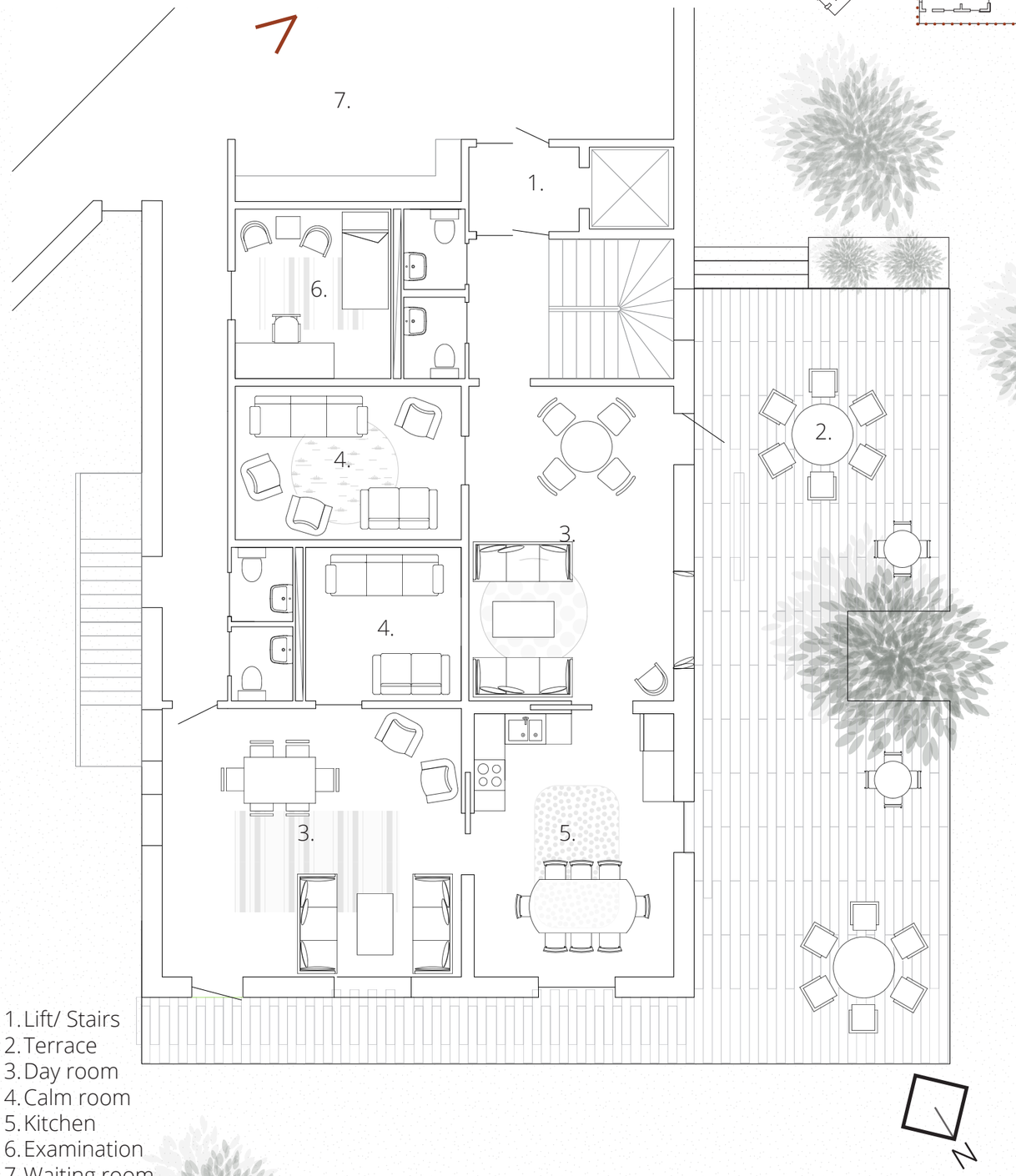
The garden space outside is accessible through a terrace, so you can step out without shoes. From the terrace you can see the fruit trees and reach the spices, which you then can cook with.

Waiting room

Big open spaces have been avoided to make moving around in the building more comfortable, while attempting to keep an open feeling.

Plan GF 1:100





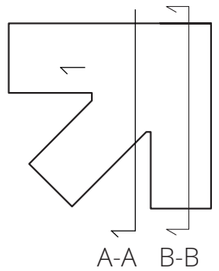
1. Lift/ Stairs
2. Terrace
3. Day room
4. Calm room
5. Kitchen
6. Examination
7. Waiting room

Facades 1:250

Facade South

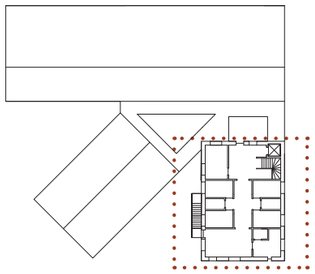
Facade West

Sections 1:250

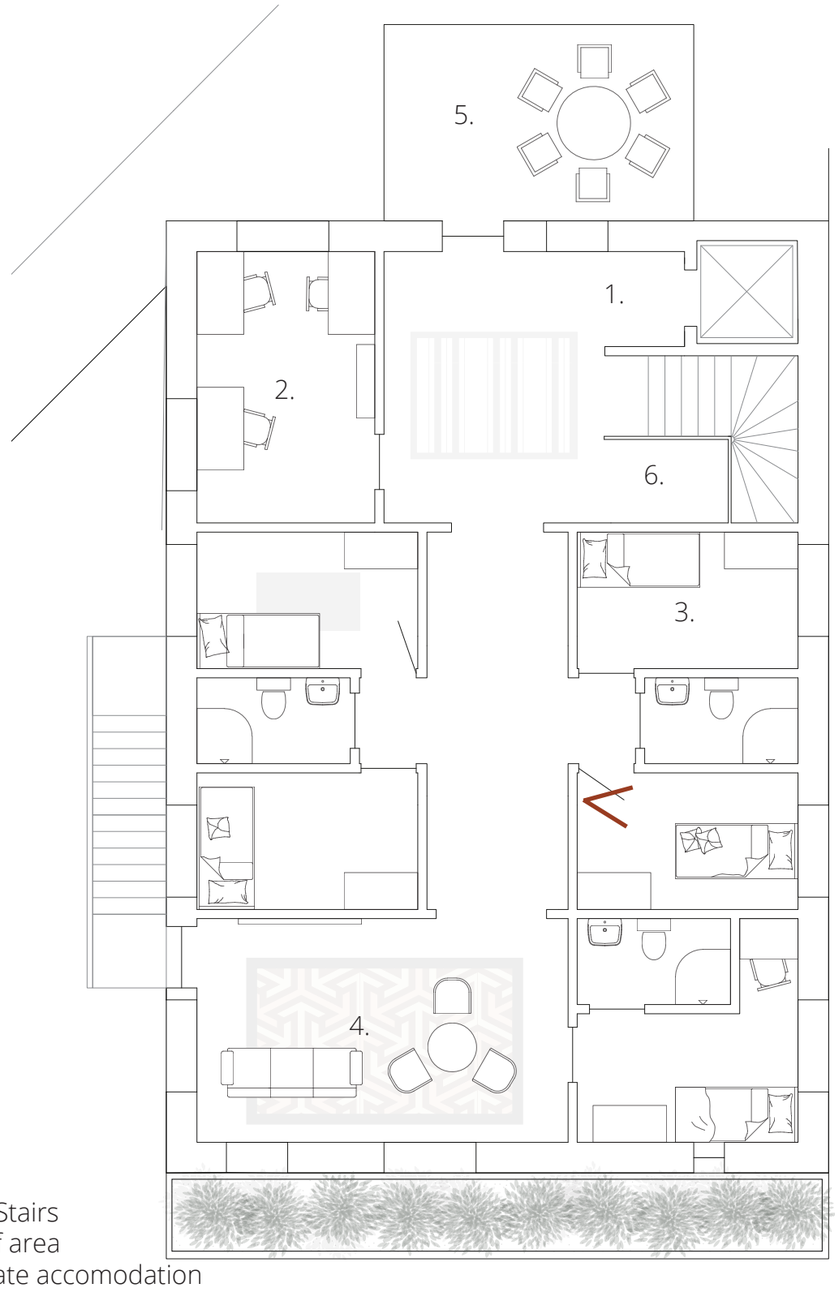


Section A-A

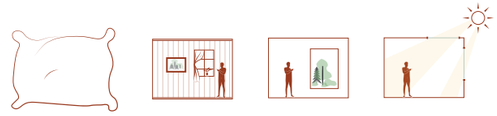
Section B-B



Plan 1 1:100



1. Lift/Stairs
2. Staff area
3. Private accomodation
4. Dayroom
5. Terrace
6. Reading corner



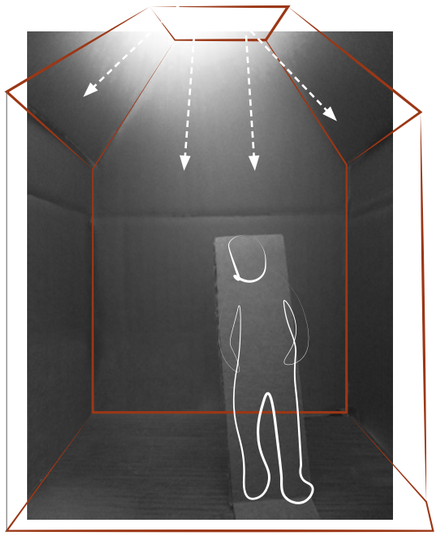
Residential Room

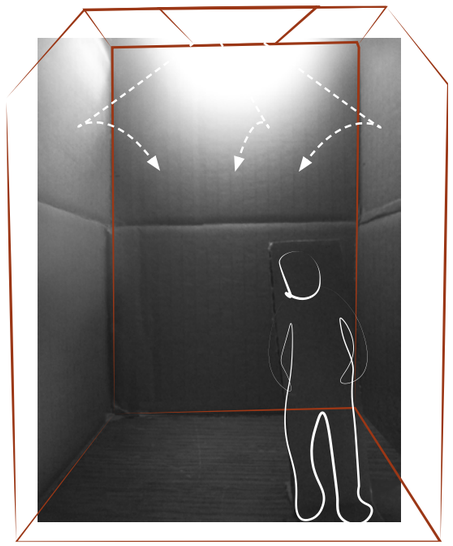
The residential part is angled to make the most of the sun. There is both a niche window for sitting, and a rooftop window for sun.

The residents are encouraged to bring things and personalise their spaces, putting things on the walls and filling the shelves to make themselves at home.

The residents get their own room, but share a bath two and two. This is partially to enforce some social control and prevent purging. The bathroom has a window above the door, and a movement sensory lamp, to inform the staff if someone is in there.
This floor is staffed around the clock for safety.

Model study - light in therapy room





As preparation for creating the therapy rooms, a simple model study was made. The rooms were built up and different ceilings were tested, as to decide quality and direction of light inside. The choice fell on a “saddle-roof” typography, resembling the inside of a small cottage. This shape allows the light to spread evenly and creates a homey atmosphere.

This model typology was also applied to the private residencies, to add the benefits there as well.

Therapy room

The goal is to create an atmosphere of caring in the building. Paying attention to details such as windowsills or tactile curtains creates a “taken-care-of” expression.

The roofscape was inspired by Tham & Videgård project Husarö House. The typogogy allows for roof windows and ties the project together. Building a project with a unique and intriguing expression makes it a conversation piece, and awakens curiosity in those who have not yet visited the centre to explore.

Conclusion

In this thesis, I have attempted to get an understanding of what it means to have an eating disorder. In doing so I have concluded that while these types of illnesses can vary greatly from person to person, it is likely that any person, ill or not, would feel comfortable in an environment made with these people as a main target group. My readings lead me to believe that accommodating physical needs, as well as provide positive distraction, would be the correct route to attempt.

The end product is an attempt to make a space which feels safe, where you can choose your level of socialisation, and always feel connected to nature.

If I were to go through this process again, I think the outcome would look quite different, firstly because I think there are several answers to this problem, and I am not saying that I have found the correct one.

Secondly, knowing what I know today, I would have put more energy into exploring the perspective of the sufferers more. At the beginning of the project I wasn't comfortable in my role as a researcher enough, and felt like my knowledge of the subject was too limited to feel that I could safely do a questionnaire or conduct research on actual people with eating disorders, while being absolutely certain I wouldn't trigger anyone. In the beginning of the project I therefore reached out to Frisk & Fri, asking for people interested in being interviewed, but there was no interest in doing so. If I were to do it all over again, I would push that research more, so the project became less of a literature study and more research based.

I think that could be a good starting point for a new master thesis, basing the project off of people with eating disorders positive associations to space, and seeing where that road could lead. If such a project was made, it would also be very interesting to compare their findings to these presented in this thesis, and look at differences and similarities.

Discussion

A question which emerged during my research is how the already existing built environment can be more accommodating to people with eating disorders. This questin could also be the base for further research.

While I am disappointed in the lack of research in this subject, or at least accessible research, I also found that, in my own very limited research, the needs of those with eating disorders align pretty well with what we know about designing for mental health in general. Therefore, an emphasis in further research should be put on the differences rather than the similarities between designing for mental health in general and those with eating disorders specifically. Another deepening of the subject would be to go into the differences in needs between the diagnoses, as eating disorders in themselves are diverse and surely have different needs.

I have previously stated that designing for people with eating disorders will result in an environment which is comfortable for everyone. While I think that this is correct in many aspects, I would like to end with a problematization of that statement. Using the example of high indoor temperature, which is nice since nobody likes to be cold, what is warm and cold is subjective and a personal preference. We can probably assume the vast majority of people doesn't want to freeze, but using these broad strokes risks making other people uncomfortable. In this case a high indoor temperature is correct, but in other mental health facilities it might not be. The point is to try and be critical of one-size-fits-all solutions, and always keep in mind who you are designing for.

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