

STRESS MEETS NATURE

- a therapeutic center -

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Architecture and Urban Design 2020*

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ABSTRACT

- a therapeutic center -

Health problems related to stress is a significant problem for our society. Research shows that people in an urban context have a higher risk of developing mental problems related to stress. Stress makes us less aware and de-connects us from the present moment. To be able to prevent stress we need to address it early on and create support that is integrated into our everyday life. This thesis is an investigation of how wellbeing and stress are related to space and architecture.

This thesis is a result of seeing a gap between today's mental institutions and our everyday life. By creating a new mental healthcare typology, support will be more accessible to the local community. A holistic programme aims to remove the stigma around mental illness and create a platform for conversations and meeting people in a similar situation.

Research in the field of healthy environments shows that our mind and body relax when being exposed to nature. By using nature as an inspiration and as a design element, studies will help to understand how atmospheres and sequences can evoke relaxation and wellness. To create a center that addresses wellness, knowledge and research from a holistic approach to health is implemented in the programme.

Investigation about how atmospheres and sequences can evoke relaxation and wellness will be investigated through theory connected to Biophilic Design. Findings during the process were translated into design elements with the help of sketching, analog and digital modeling and renderings to create the right atmosphere.

“

How can a new typology be made using design elements that contribute to wellbeing and de-stress?

- thesis research question

The investigations resulted in a therapeutic center that contains functions for both the body and mind, with contemplative spaces aimed to make you reflect, recharge, and relax. The design and programme creates a place to visit when one is feeling stressed. The center hosts public functions that will create a platform for spreading information and knowledge around mental health and stress. The aim is to contribute to the discussion about how we can de-stigmatize the way we look at mental health using design.

Keywords: *Architecture, stress, wellbeing, nature, biophilic design*

BACKGROUND

Work

Liljewall Arkitekter, Gothenburg (internship 2017-2018)

Liljewall Arkitekter, Gothenburg (2020)

Bachelor

Chalmers University of Technology (2014-2017)

Master

Chalmers University of Technology (2018-2020)

Sustainable development and the design professions - 7,5 credits

Studio: Future visions for healthcare, housing and work:

Healthcare architecture - 22,5 credits

Architectural competition - 3 credits

Studio: Future visions for healthcare, housing and work:

Housing inventions - 22,5 credits

History, theory and method: Light & Color - 3,5 credits

Studio: Planning and design for sustainable

development in a local context - 22,5 credits

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Design proposal

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RESEARCH QUESTION

How can a new typology be made using design elements that contribute to wellbeing and de-stress?

AIM

Rethink the way we look at mental healthcare facilities

investigate how a new healthcare typology can be formed to raise awareness and remove the stigma around mental health illness related to stress

Design spaces that encourage wellbeing and decreases stress

investigate how atmospheres and elements can evoke reflection and relaxation to reduce stress

01.

INTRODUCTION

This chapter contains the foundation of the thesis, why I have chosen the subject and the problem statement. The chapter explains the purpose of the thesis and the methodology and delimitations.

PURPOSE

- remove the stigma -

The purpose of this thesis is to rethink the way we look at mental healthcare facilities. It is also to raise awareness about the current problem of stress-related illnesses and how a society problem can be managed through architectural design.

The thesis will investigate how a new mental healthcare facility could be formed, and argue for the need of creating a holistic center to decrease the gap between home and our current healthcare facilities.

METHOD

- during my process -

The thesis is mainly built-up from research for design. Throughout the process, the knowledge found is presented in the background and theory chapter. Research is done through literature, articles, and built references combined with sketching. The design proposal has resulted in conceptual investigations based on findings, then further was used in the design proposal. The thesis is based on research connected to a holistic view of wellness, healthy environments, and nature. These topics have been proven to have positive health effects, both physically and mentally, when it comes to stress. There is much research to find about health connected to nature, from different approaches, so I have mainly worked with Biophilic Design.



DELIMITATIONS

- focal points -

To keep the thesis narrow, I have mainly chosen to work with one mental health-related problem, stress. I have chosen not to work with investigating psychiatry best suited for treatment but focused on the built environment connected to increased mental wellbeing.

The research part of the thesis is framed by wellbeing and focused on mental health, in combination with nature through Biophilic Design.

The architectural delimitation is framed by working with sequences and atmospheres. The findings will result in a design proposal.

READING INSTRUCTIONS

- from beginning to end -

The booklet is divided into eight chapters. To the right, there is an illustration of the steps during the process.

The first chapter *introduction* explains the aim & purpose and why I have chosen this subject. Here is also the methodology introduced together with the thesis delimitations.

The second chapter *background* gives an introduction to the problem and the context around mental healthcare.

The third chapter *foundation* provides the theoretical framework for the thesis, which the design proposal is based upon. The theory chapter is concluded with design strategies.

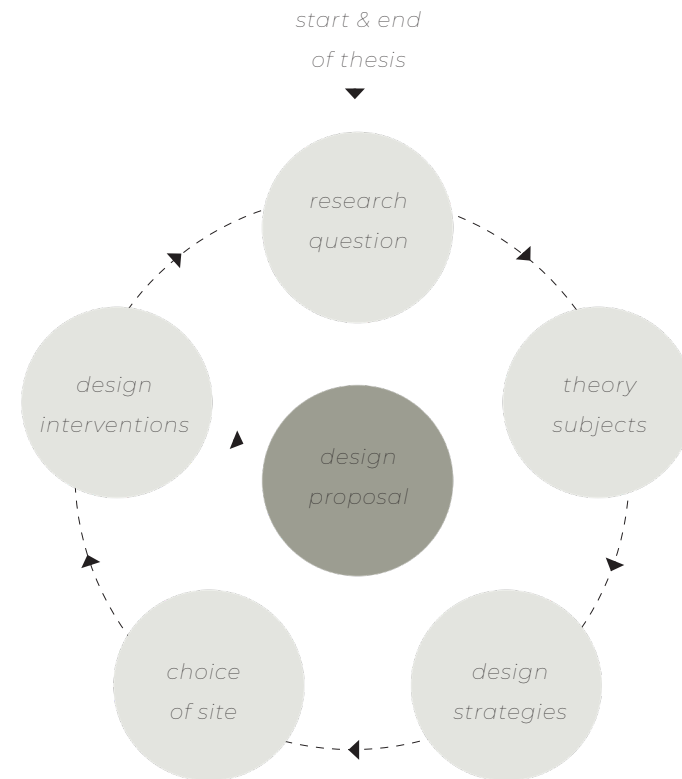
The fourth chapter *site & context* introduces the site and analysis. The choice of site is based upon the design strategies.

The fifth chapter *design interventions* translates the research to design. The design interventions are based upon the design strategies from the theory chapter.

The sixth chapter *programme* explains the functions and spatial connections of the design proposal.

The seventh chapter *design proposal* will present the design proposal that is based on previous chapters. The interventions are translated into a design that is explained through text, drawings and illustrations.

The eight chapter *summary* will conclude the design proposal and contain reflection and discussion about the thesis.





MY RELATION TO THE SUBJECT

- why I have chosen this theme -

I have chosen this theme because I, like many others, have dealt with negative stress in different periods of my life. Always with the pressure of making the best choice. At several points, I felt that it was a big step to get tools and help to manage my stress in the best way.

The theme of this thesis is a result of seeing a gap between the mental institutions and everyday life. I want to create an environment where the step from our home and getting help is not that big. During my years, as an architect student, I have reflected a lot over places that make me happy and calm. So if space can make you calm, can it also make you well?

WHY DO I WANT TO ADDRESS THIS SUBJECT?

- a society issue -

1/4 will sometime in their life experience mental illness related to stress. In the ages 16-29, 35% of the women and 18% of the men are experiencing stress in their everyday life (Folkhälsomyndigheten, 2019). Research also shows that people in an urban context have a higher risk of developing mental problems related to stress (SVT, 2019).

With my thesis, I want to communicate that this is a relevant topic in our society, and I want to openly talk about the subject and take a step towards removing the stigma about mental health problems related to stress.

02.

BACKGROUND

*This chapter contains the background to problems related to stress.
The chapter explains why the subject is essential in today's context.*

“

"36 % of the Swedish population states that they have experience anxiety."

(Folkhälsomyndigheten, 2019)

STRESS AS A SOCIETY PROBLEM

- and the challenges -

Stress in the right amount can be useful for us; it helps us to keep challenging ourselves (Hjärnfonden, 2017a). However, when does it turn into unsustainable stress? Stress can affect us both positively and negatively and make us experience both physical and mental symptoms. Today's society has a high pace, and now we can see the actual effect of long-term stress in our bodies and minds. Stress is today one of the most significant social difficulties we are facing.

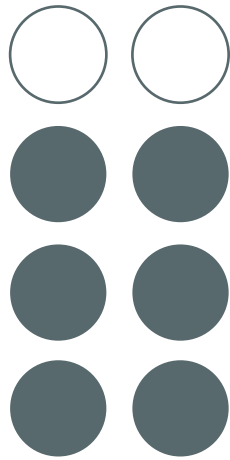
Mental illness is a term that is often being used when talking about stress. It is a term that contains many different illnesses, from stress to depression. Mental illnesses are considered as a contemporary state of mind (Folkhälsomyndigheten, 2019).

36 % of the Swedish population states that they have experience anxiety. The most common diagnosis when it comes to mental health problems is depression, which 19 % of Sweden's population experience during a lifetime (Folkhälsomyndigheten, 2019). The high number can be explained by the experiencing gap to get help. One of the most effective measurement when it comes to preventing mental illnesses is early treatment (WHO, 2004).

WHAT IS STRESS?

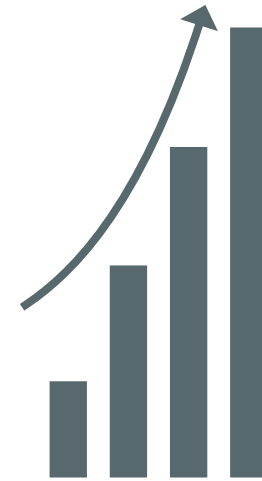
- it affects our immune system -

When our body is experiencing stress, the body responds by sending signals to the nerve system. The nerve system controls, among other things, our heart rate, breathing, and blood pressure. Hormones are being sent out to manage the stress and lowering the hormone called cortisol (Hjärnfonden, 2017a). There are different stress hormones as cortisol, noradrenalin, and adrenalin that are being sent out to help the body to cope with the fears it faces. The most frequent hormone, cortisol, can work both ways. Short-term stress can help support our immune system, while long-term stress lowers our immune system. And then we can experience different symptoms, both mentally and physically (Hjärnfonden, 2017a).



80 %

Since 2010, long-term sick leave has increased by 80 percent. Mental illness accounts for nearly 60 percent of this increase (Hjärnfonden, 2017b).



70 BILLIONS

OECD claims that issues related to mental health cost Sweden 70 billion in socio-economic losses (annually), which represents 2.8 percent of GDP, through lost productivity and expenses for care and care (OECD, 2013).

- mental symptoms -

*anxiety
depression
concentration difficulties
isolation
decreased social life
feeling overwhelmed*

(Västra Götalandsregionen, 2019)

- physical symptoms -

*fatigue
sleep disorders
decreased immune system
headache
stomach problems
high blood pressure*

(Västra Götalandsregionen, 2019)

SYMPTOMS OF STRESS

- we all react different to stress -

We are all different, and with this thesis, I want to highlight the need for individual-centred care. One of the essential aspects when it comes to mental health is the importance of being in control over your situation. It is of great importance that we are aware of the symptoms and that it can affect us both mentally and physically. If we notice them early, there is a good chance to take control of the situation and learn how to prevent stress before it negatively affects us. By raising the subject of mental illness related to stress, more people will be aware of the problem and reflect on their situation.

WHAT CAN HELP TO REDUCE STRESS?

- physical and mental stimulation -

The road back from stress-related illness can be steep, and it can take a long time to get back to normal. It is important to create strategies to reduce stress. Several activities are proven to help you; both mental and physical activity is proven to reduce cortisol (Hjärnfonden, 2017a). Activities that help manage and prevent stress can be implemented in different mindfulness techniques or relaxation.

A stress-free environment is best created when a balance is generated between under-stimulation and stimulation. If one is faced with an under-stimulated or too stimulating environment, it can cause anxiety (Janssens & Laike, 2006).

CONVENTIONAL HEALTHCARE FACILITIES

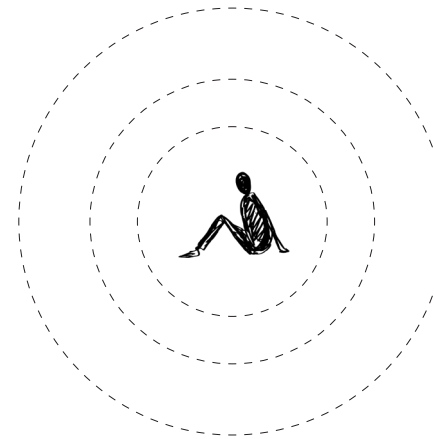
- in a Swedish context -

Sweden has, compared to the rest of the world, a good healthcare system. We live longer, and our quality of life has improved (Meidema, 2017). However, one illness that is increasing over time is stress. Research shows that people living in cities are in more danger of suffering from stress than people living in rural parts (SVT, 2019). Mental health problems are increasing and are today a big problem for our society.

To put the design proposal into a context, it is essential to understand today's context. What are the main challenges? There is a need for a holistic approach to the discussion concerning the current mental healthcare model. Psychiatric care is today mostly connected to other major healthcare facilities. This often creates a more sterile environment with an institutional atmosphere where the built environment does not promote health.

Psychiatry is treated equally to regular healthcare when it comes to applying for help. So even if the treatment plans look entirely different, the psychiatric care will mostly be located on existing hospital sites or primary care facilities (Högström, 2012).

There is a guaranty that help will be provided within 90 days from the application at specialized care (Sveriges Kommuner och Regioner, 2019a). Looking at the numbers for Västra Götaland in 2019, 80-85 % of the people applying for help within the psychiatric care got help within 90 days (Sveriges Kommuner och Regioner, 2019b). This number tells us that not everyone gets help in time. This indicates a gap between the home and the current healthcare system.



NEARBY CARE

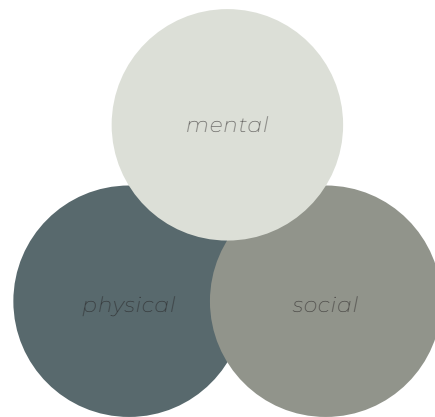
- integrated in the built environment -

Many of the mental healthcare facilities are located on hospital sites or connected to other healthcare facilities. The concept of decentralized care (nearby care) is something that is encouraged by the local community (Högström, 2012). Studies that have involved psychiatric patients show that the majority of the patients would like to have nearby access to psychiatry facilities. The study also revealed that patients preferred if the facility was anonymous to create privacy (Högström, 2012). This could be done through architectural design, a design that lets the visitor enter on his or her terms without being exposed. This could also be achieved by combining public and private functions.

03.

FOUNDATION

The theory is based on three main pillars, defining wellness, healthy environments, and Biophilic Design. The chapter ends with three chosen design strategies from each topic that will be further investigated and translated into design interventions.



WHAT IS HEALTH?

- wellbeing -

For us to achieve wellbeing, we need to have a right balance between physical, mental, and social aspects. The terms together form health and a symbiosis for wellbeing (WHO, 2001). This shows that mental health is a big part of our wellbeing and is necessary to cope with the everyday stress of our society. The thesis will mainly focus on mental and physical health, but since they are all connected, it is essential to create a symbiosis between these three.

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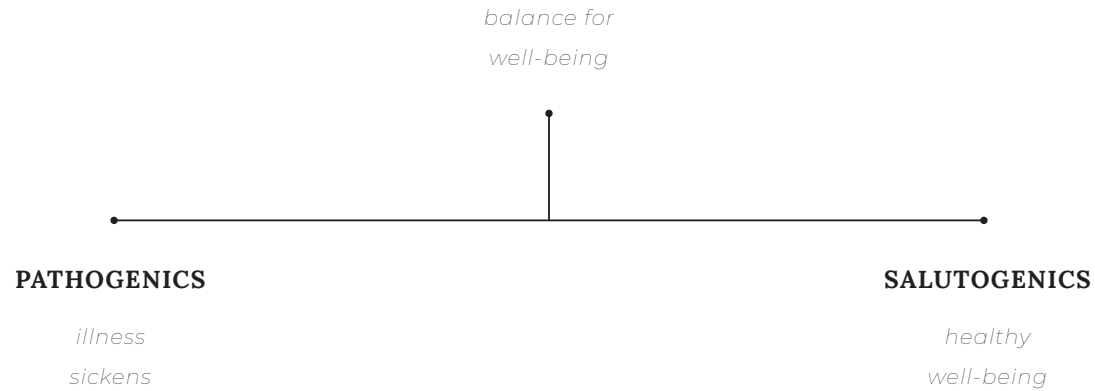
“ ... a state of complete *physical, mental and social well-being* and not merely the absence of disease or infirmity “

The World Health Organization (WHO) definition of health (WHO 2001, p.3)

Mental health refers to the psychological state of the individual, how well you manage different situations, and your comprehensibility

Physical health is often related to physical activities and exercise habits.

Social health implies having social support, the ability to communicate, being involved with the community, or having the presence of family.

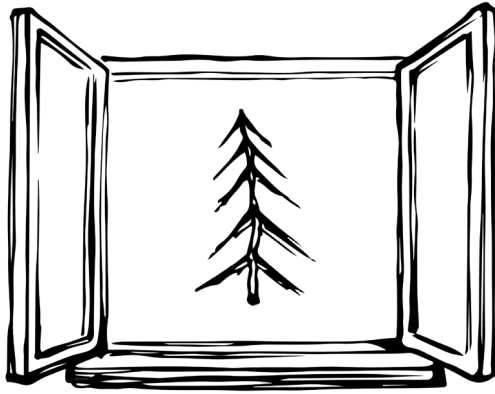


SALUTOGENIC DESIGN

- designing for wellness -

When designing healing spaces there is a need to understand the holistic view on health. Salutogenic perspective focus on design for wellness, and how the built environment can promote health. By working from a salutogenic view instead of a pathogenic approach, where the focus is placed on why we get sick, the focus is put on health and wellbeing to achieve good environments (Meidema, 2017). The aim is to maintain a healthy lifestyle with a balance between mental, physical, and social health.

When designing for wellness it is important not to forget the mental and social aspect, since larger hospital areas and healthcare facilities often prioritize the physical environment connected to economy and efficiency. Sometimes factors as the connection to nature, light, healing atmospheres are forgotten, the factors that cause health. So this is why this thesis is working from a salutogenic perspective. And leaving the users feeling that they have gained a positive impression, instead of getting rid of a problem.



HEALTHY ENVIRONMENTS

- promote a healthy behavior -

Research shows that we are now, more than ever, affected by our built environment. Positive outcomes are now possible to measure, and are used in the field of architecture that is called Evidence-Based Design (EBD). This thesis will not go into the field of EBD, but it is important to understand we can see how the result of design is effecting people's behavior and wellbeing (Ulrich, 2012). Nature has been proven to lower stress and create a calmer environment. Nature can be used as a catalyst to improve one's wellbeing. Studies has been done on people recovering from surgery, that showed that people having a view over nature recovered faster than people looking out over a brick wall (Ulrich, 2012).

“

“ Healthcare Architecture is the first field of Architecture that uses the knowledge of good and healthy reactions towards the built environment. “

(Sarah Williams Goldhagen , 2017)

POSITIVE DISTRACTIONS

- promote a healthy behavior -

Restorative environments will help with the recovery from both mental and physical illnesses, and these environments can be designed with the help of atmospheres, light, nature, and positive distractions (Ulrich, 2012).

By using positive distractions, a health promotion environment is created. A positive distraction activates the mind and makes you de-stress (Williams Goldhagen, 2017). Positive distractions will activate all our senses and create a multi-sensory experience. As mentioned earlier, we need a setting that will stimulate our minds without being to under stimulating. And positive distractions can do this through for example views, activities or nature (Williams Goldhagen, 2017).

“

“ Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment.”

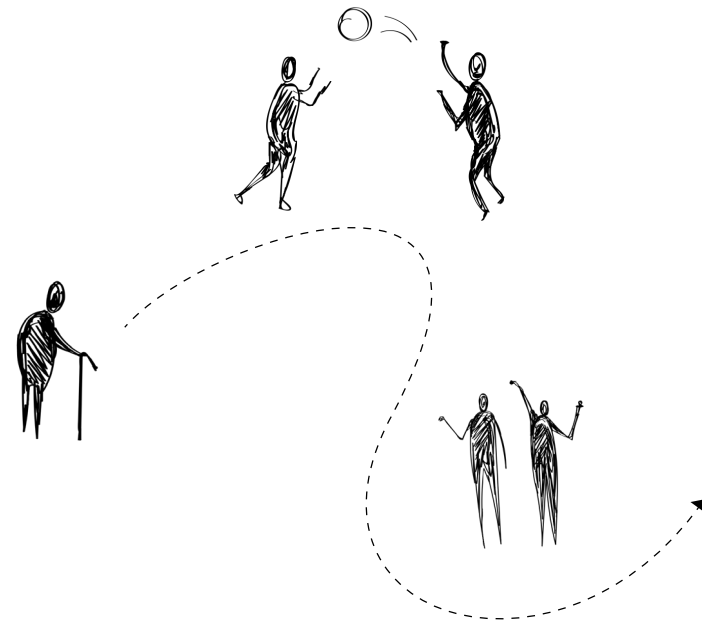
(WHO, 2005)

HEALTH PROMOTION

- designing for wellness -

To improve wellbeing, there is a need to have a holistic approach and implement health promotion in the design proposal. By working with our built environment from the perspective that it should promote wellbeing, we can increase wellness. Health promotion is when encouraging people to activate themselves and take control of their wellbeing and health. To create a health promotive setting, there is a need to let the patient have control over their setting and being a part of changing the environment (Meidema, 2020).

Elke is pointing out the importance of understanding that health promotion has many definitions and that it is important to be aware of what and who you are designing for. The different



aspects of health promotion will affect the built environment and its users in different ways. This thesis will address health promotion in the way of increasing awareness and encourage taking control over one's wellbeing and quality of life.

Physical movement helps create a health-promoting environment. By promoting physical health, mental health will be promoted as well. One way to incorporate movement in the design proposal can be to let the design create a continuous movement and adding functions that promote and support the physical movement. The choice of the site will also play a significant role from a health promotive perspective.



“ Every touching experience of architecture is multi-sensory; qualities of space, matter and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscle. ”

(Juhani Pallasmaa, 2012, p. 45)

NATURE CONNECTED TO WELLBEING

- in relation to wellbeing -

We as humans have evolved and existed in nature since the beginning of times. In the documentary *Frisk av naturen*, they explain that there is now a way to measure what happens in our bodies when we are exposed to nature. The scientist Yoshifumi Miyazaki, from Chiba-university in Tokyo, explains that nature and the forest are positively affecting our immune system and helping us to regulate the physiological parameters in our bodies that control our relaxation and calmness. By exposing us to nature our immune system is reducing and preventing stress (SVT, 2019).

In an urban setting, our brains are activated all the time. That is why it is important to let the greenery be a big part of our

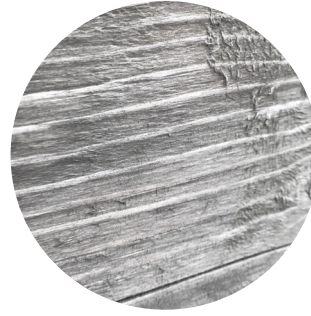
planning for sustainable cities. Nature helps us resist mental fatigue (SVT, 2019). It is described by Terry Hartig, a professor in environmental psychology, that the greenery is creating a buffer towards mental health problems (SVT, 2019). They explain that our nerve system that is connected to calm and relaxation is activated with more than 50% in relation to being exposed to an urban environment.

Nature can be used as a catalyst to improve one's healing, and that can be done in different types of connections (Ulrich et al., 1991). Some will be described when talking about Biophilic Design.



- *nature in space* -

(photo from project site)



- *natural analogues* -

(photo from project site)



- *nature of space* -

(photo from project site)

BIOPHILIC DESIGN

- *reducing stress with nature* -

Biophilic Design is presenting the great impact nature has on our bodies and minds. The links between the natural environment, human biology, and the built environment creates synergy (Browning, 2014). By using Biophilic Design, we can design environments that promotes wellness and reduces stress. Biophilic design is founded on evidence-based design, which reports the positive effects on the cognitive, physiological, and psychological. The paper 14 Patterns of Biophilic Design emphasizes the importance of nature as a design element. Nature can be implemented in several ways, as movements, tactility, atmospheres, and visual connection (Browning, 2014). Biophilic Design is divided into three categories, *nature in space*, *nature analogues*, and *nature of space*.

Nature in space refers to letting physical nature be a part of the design and the built environment. This includes smaller organisms, sound, smell, and natural elements.

Natural Analogues refer to the non-living aspect of nature, such as form and pattern. It talks about how things change over time and how things persist in nature.

The nature of space refers to the spatial connections concerning nature. These strategies can evoke different atmospheres and experiences that will lead to a positive reaction (Browning, 2014).



Figure 1. Therme Vals, Switzerland

THERME VALS

- Peter Zumthor -

Therme Vals is a combined spa and hotel, by Peter Zumthor. The spa creates a sensory experience by using materials, lights, and shadows. The architecture focuses on the natural setting and elements. The tactile walls are inspired by the surrounding landscape. The aim is to create a restorative experience, where the bathing ritual is in focus. By working with directed and specific views he is controlling the visitors' experience through the design.



Figure 3. Maggie Center, Glasgow

MAGGIE CENTER

- OMA -

Maggie center is a system, spread out over the UK for those affected by cancer. Here you can come and meet people who are in a similar situation. This is a community of support, that with the use of professional help guides people. Here the architecture plays a big role in the healing experience. This is an addition to the current healthcare system in the UK. Different methods are being used for creating self-awareness and reflection by contemplative spaces.

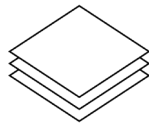


Figure 2. Centre For Cancer And Health, Copenhagen

CENTRE FOR CANCER AND HEALTH

- Nord Architects -

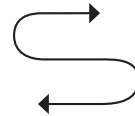
The center for cancer and health is a place where visitors can get help and support and learn about treatment methods. The center works with a health promotive setting, to encourage the visitor to put their physical and mental health in focus. Nord Architects have created an environment where people can feel at ease, in a home-like environment. Factors that increase our wellbeing as light, greenery, and natural elements are integrated into the design.



HOLISTIC APPROACH

- as a design strategy -

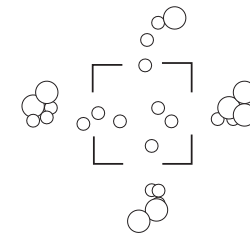
A combination of public and private functions will help decrease the stigma around mental health. By implementing a programme for both physical and mental therapy, stress can be prevented.



HEALTHY ENVIRONMENTS

- as a design strategy -

By implementing health promotion, an activating environment learns the mind and body how to cope with stress. By enhancing the journey towards wellness visitors can slow down and reflect on one's wellbeing.



BIOPHILIC DESIGN

- as a design strategy -

By using strategies from Biophilic Design, nature will help to de-stress and relax. This will influence the choice of site and how to work with the surroundings. Nature will be a part of the design and programme.

04.

SITE & CONTEXT

This chapter contains an introduction and analysis of the site and its surroundings. The investigation results in a vision for the site that will be used in the next step when forming the design interventions.



- urban + nature -

(holistic approach)



- a place for movement -

(healthy environments)



- nature setting -

(Biophilic Design)

URBAN LIVING ROOM

- for everyone -

Values like closeness to services, movement, and nature were guiding principles when choosing the site. The center will attract people closer to nature and encourage them to slow down and move at their own pace. When choosing the location for the center, it was necessary to find a place in connection to nature, still within the boundaries of the central city. By having good connections to the city, accessibility will be increased, and also be visible in the city structure. That is why the chosen site is located in Slottsskogen, a well-used park in the heart of Gothenburg.

ACTIVITIES

- a place for movement -

Slottsskogen is located in a central part of Gothenburg with good connections to nature and infrastructure. The site is well used all year round with its high recreational value. The area is well used for movement and different sports. The park is a hub for many different happenings and events; it is strongly connected to the people of Gothenburg. The park host events as Göteborgsvarvet, Way out West, and other celebrations.



NEIGHBORHOOD

- nearby connections -

- Facilities -

1. Sahlgrenska University hospital
2. Botaniska garden
3. Nature history Museum
4. Healthcare facility Slottsskogen
5. Psykologiska institute

- Attractions -

6. Stora dammen (the big pond)
7. Sälldammen (zoo)
8. Community gardens
9. Sport arena

2,6 km to Chalmers

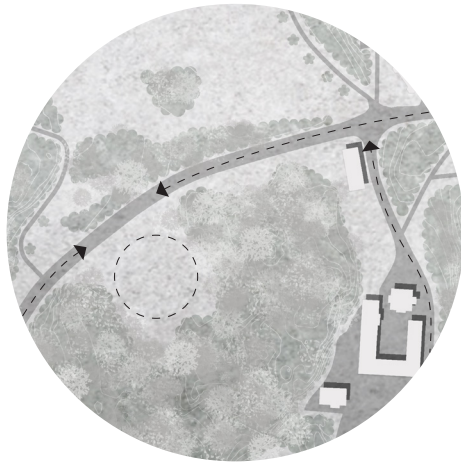
- Infrastructure -

10. Linnéplatsen
11. Dag hammarskjöldsleden

- Tramstops -

12. Botaniska garden
13. Högsbogatan
14. Klintens väg
15. Ekdal
16. Majvallen
17. Fjällgatan

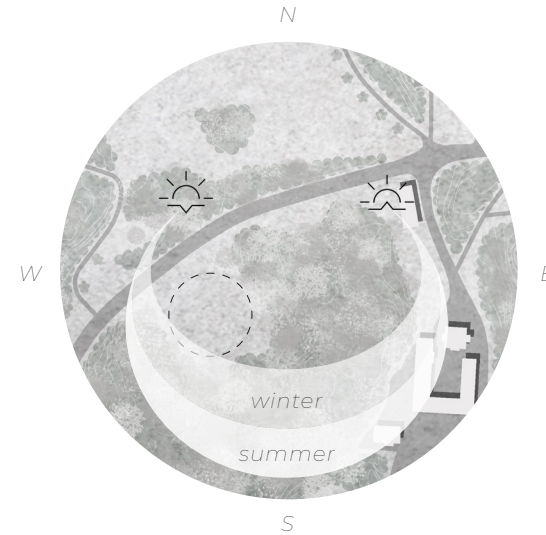




APPROACHING THE SITE

- access points -

The chosen site is located in the western parts of Slottsskogen. A place for recreation that is used by all ages all year round. With closeness to nature, the site promotes movement and activities hosted by the park. On the site, you can find both formal and informal paths that are used daily. The site is accessed from two directions that bridging the community life from the west together with the park. There is a lack of cars in the area since the area is mostly categorized by bike and walking paths. When approaching the site you are moving in an alley of trees and greenery. The site opens up like a glade with an enclosing forest surrounding it.



LANDSCAPE

- sun projection -

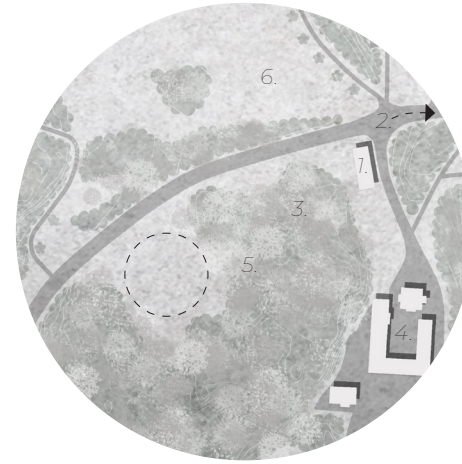
The site contains different kinds of greenery that strengthen the presence of free nature. The site opens up like a glade. Some places are more defined as a park-space due to the programme of the landscape. Around the site, a hilly landscape is creating a diverse atmosphere where the presence of the urban life of Gothenburg is forgotten. The site offers sun during the day; towards the evening, it disappears behind the treetops, still lighting up the open park in front of the other side of the road.



CHARACTER OF SITE

- views -

The identity of the place is about sequences and reflectiveness. Even though there is a closeness to public transport the site is experienced as a place where everybody can enjoy a quiet experience in closeness to nature. It is a place to reflect and slow down. By identifying different views, the site can be divided into two parts. The different characters of views can be applied in the programme of the design. The first view opens up to the public urban park. This view frames the access points of the site. The second view is directed towards the forest where free nature meets the glade. Towards the forest, a safe space is created with a calm view of nature.



A PLACE FOR RECREATION

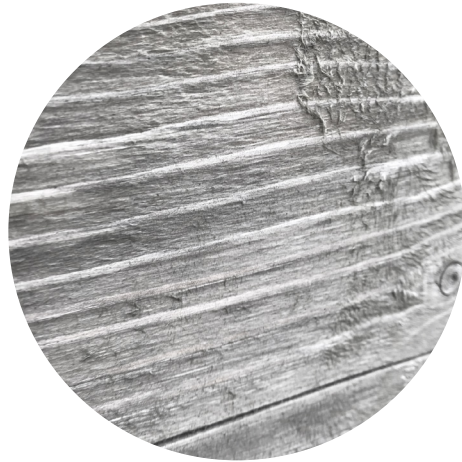
- functions -

Right next to the site, a sensory walk is to be found. The walk is about experiencing the forest through your senses. By using your senses, the aim is to create a place for relaxation. The walk offers a variety of sequences, depending on the season and weather. The walk is referring to the Japanese forest-walks that helps you recharge and reflect on your wellbeing. Forest bath is proven to increase wellbeing (SVT, 2019)

- | | |
|----------------------|-----------------|
| 1. café | 4. farm |
| 2. zoo | 5. sensory walk |
| 3. forest playground | 6. park |



- glade -



- tactility -



- surrounding forest -



- light and shadows -



- access point -



- choice of path -



- conceptual section -
urban park to forest (N-S)

TRANSITION

- vision for the site -

One of the great qualities of the site is its close connection to the city, but still being utterly surrounded by free nature. By bringing together the urban park and nature, a transition is made. A transition between the programmed park and the un-programmed nature. A transition from stressed and relaxed. The transition experience can be enhanced by creating a contrast between spaces



- conceptual section -
forest to forest (E-W)

FILL THE GAP

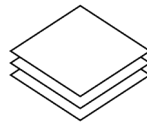
- vision for the site -

The site is surrounded by nature, an asset that the center will embrace and let into the structure. By bridging the different sides of nature, sightlines are created through the site, and orientation is made. This will enhance the presence of nature on the site.

05.

DESIGN INTERVENTIONS

The three previous design strategies are based upon the theoretical framework. The strategies are then translated into design interventions that will be applied in the design proposal.



FROM BODY TO MIND

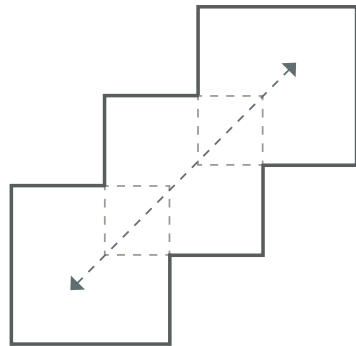
- design strategy for an holistic approach -

The definition of wellness is about creating a balance between mental, physical and social factors. To work with wellness the thesis needs to have a holistic approach for working towards de-stress and remove the stigma around mental health problems.

To create a center with a holistic approach there needs to be a balance between the local community and individualism. That can be created by having a gradient from the public to private. The focus will be on creating a place where the user experience is in focus, combined with a healing environment.

Healing is not the same as curing, and the center is focusing on spaces designed for health. By creating a place for wellness, a place that is designing for health and not sickness, the center will not be experienced as an institution.

A symbiosis is needed between the body, mind, and soul. The center should provide spaces where the visitor can feel relaxed, recharged, and safe. By combining functions that serve both the local community and people that suffer from stress-related issues, knowledge of the problem and providing tools to manage stress will help to prevent stress.



PUBLIC TO PRIVATE

- design intervention -

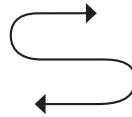
To create a place where one can be alone but also together, the plan layout will support different degrees of participation. A sequence of rooms from the public to private is designed to offer a variety of spaces with different levels of privacy. The public zone will be more transparent and have a more continuous flow. The private spaces will be more enclosed and intimate. Transition spaces are created in-between where one can pause and slow down and reflect on the previous and upcoming steps in their journey.



HOLISTIC PROGRAMME

- design intervention -

By designing a center with a programme that supports a holistic view of health, everyone is invited. The first step is the most public functions where the problems with mental health is raised. Continuing, the programme shifts in focus and directs towards the body and movement. This offers the possibility to relax and de-stress. The last step in the programme is focused on the mind, where one can reflect alone. The journey through the programme will provide the visitor with an insight into the importance of both taking care of the body and mind.



CREATE A JOURNEY

- design strategy for healthy environments -

The thesis is mainly focused on movement through different sequences to promote health. The structure should promote health, both physically and mentally. If the environment reflects the user's need, that would result in an atmosphere where the user feels in control over their environment (Meidema, 2017). Every therapy room will be equally prioritized, daylight, views, and materiality are essential factors when designing the spaces. The concept of senses will not be the focus of the thesis, but sensory incorporation is highlighting feelings like relaxation, focus, and so on.

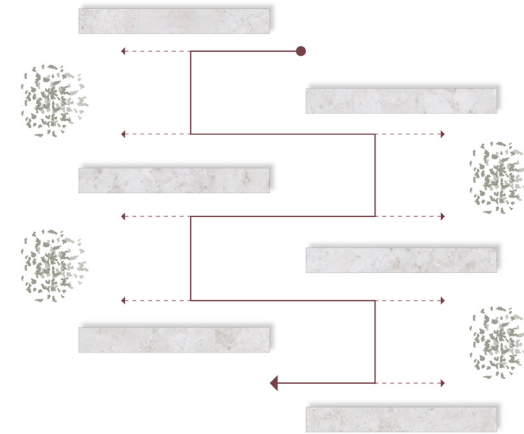
To create a design that reduces stress, positive distractions can be used as a method (Ulrich, 2012). It is not only about producing positive distractions but also remove negative distractions as noise and over-stimulation. Positive distractions refer to an element that increases our restoration from stress, preferable in combination with nature (Ulrich, 2012). So I have chosen to work with the primary element of a wall. But by adding factors as different height, different width to add a positive dimension. The vertical element will also help with the transition between from public to private.



POSITIVE DISTRACTION

- design intervention -

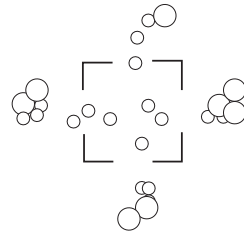
To continue on previous design intervention, a transition from public to private can be done with the room defining element of a wall. A thick wall will create a transition between spaces, making you aware that when you leave one space and entering another one. To create a positive distraction, the element can be used in different heights and tactility for a stimulating experience. The vertical elements will create a clear direction, which could be used when thinking of the site and the vision of connecting the different sides of nature, a transition from stressed to relaxed.



MOVEMENT

- design intervention -

With the help of room defining elements, there is a possibility to direct a play, a journey. The walls are creating a direction and movement which is health promotive. The journey will slow down your pace. By slowing down, there is a possibility to take control of your own situation and de-stress. By enhancing the path, a symbolic journey is created through the movement towards a calmer and stress-free everyday life.



DESIGN WITH NATURE

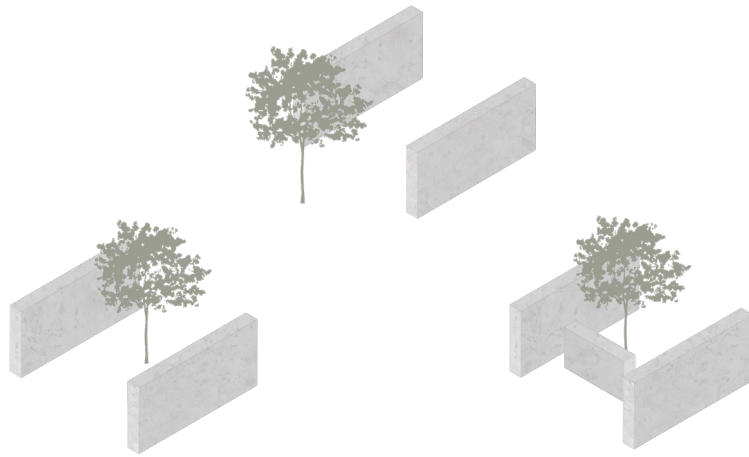
- design strategy for Biophilic Design -

The paper 14 patterns of Biophilic Design explains in 14 steps how nature can be implemented in architectural design. By using Biophilic Design as a strategy to improve mental wellbeing the possibility to reduce stress increases. This thesis originates in an urban context where the problem of stress-related illness is increasing. The presence of a natural setting becomes then more vital for creating a healthier lifestyle.

The patterns that were chosen to influence the design and layout are *visual connection with nature* and *mystery*. As mentioned, the site is chosen because of its closeness to

nature. The pattern visual connection with nature is proven to lower our blood pressure and improve happiness (Browning, 2014). For this thesis, I have combined visual connection with the possibility for vistas outside in nature as well.

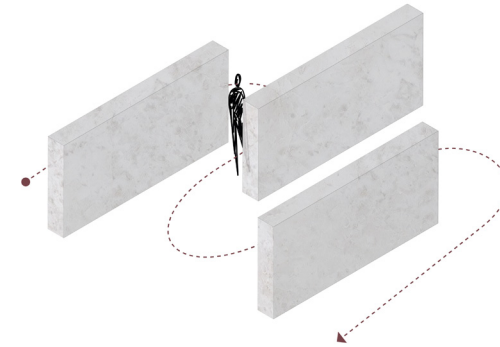
The second pattern I have chosen to work with is the strategy of *mystery*. This will encourage an exploration of spaces, and a continuation. This is proven to reduce stress and cognitive restoration (Browning, 2014). The use of mystery is proven to induce a strong pleasure response when discovering what's on the other side, and create a journey through movement.



FRAME OF MIND

- design intervention -

By framing nature between elements, more focused contact is created. The focus is put on the border between inside and outside. Directed views of nature will be used as a tool to enhance movement and flows. Together with spaces where longer vistas will take place, a physical connection between inside and outside is designed. Furthermore, for communication areas, nature is used as a motif, letting the light guide the visitor through the center. By bringing in nature, the site qualities are enhanced, and a sense of privacy is created.



MYSTERY

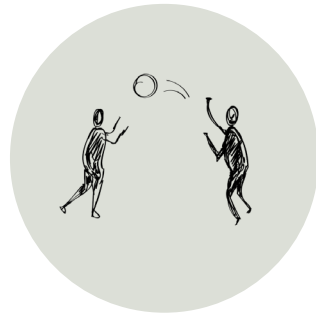
- design intervention -

Designing spaces for mystery creates a layering of sequences where the next step is hidden. This will create a mystery of what the next step of the journey is. The pattern of mystery, together with views of nature, can be combined with the help of thick layering walls. The mystery also strengthens the concept of health promotion and movement in a positive way. The layering of the elements can be implied in plan layout, flow structure, and smaller design interventions.

06.

PROGRAMME

This chapter contains explanation of the programme and a description of characters between different zones. The programme is based on research that promotes wellbeing. Spatial connections lays a foundation for plan layout in the design proposal.



- drop in -

(visitors of the park)



- revisiting user -

(booked sessions)



- extended user -

(longer stay)

USE & OCCUPANCY

- during days, evenings and weekends -

The center is for those seeking a pause in the hectic everyday life and wants to experience nature in combination with therapeutic functions. The intention is that the center will provide visitors with information and knowledge about how to handle mental health problems related to stress. The center offers different activities with different levels of social interaction, leaving the visitor feeling relaxed and with a reconnection between body and mind.

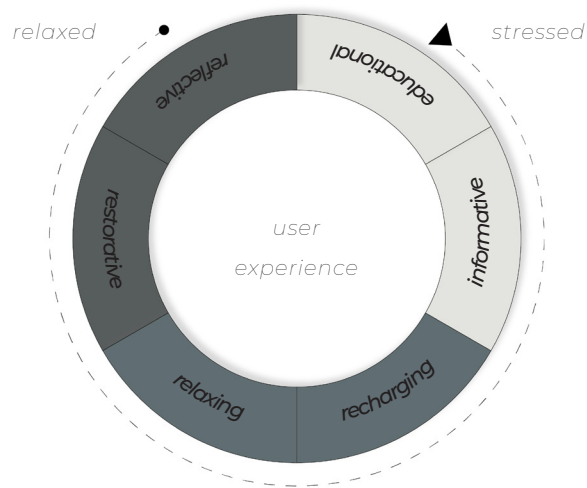
The center is driven by people with knowledge & skills about mental health. Both professionals and organizations can use the facilities. The central location in Gothenburg provides the possibility for collaboration with nearby healthcare centers.

The primary user will be individuals seeking a healthier lifestyle and wants to address their inner stress. Before the programme and functions were set, the user experience was developed (diagram on next page). The diagram represents a transitional experience where the visitor moves through different spacial atmospheres.

The center provides activities for *drop-in users* that wants to explore the center after passing by in the park. *Revisiting users* are there for their booked session, actively visiting for gaining better mental health. The last user group is visitors experience the center and site during more *extended periods*, often in more significant need to relax and reduce their stress level.

- CHARACTER -	- FOCAL POINT -	- USERS -	- AIM -	- FUNCTION -
<i>public</i>	<i>social</i>	<i>community</i>	<i>learn</i>	<i>exhibition therapy workshops</i>
▼	▼	▼	▼	▼
<i>semi-public</i>	<i>body</i>	<i>groups</i>	<i>relax</i>	<i>yoga movement classes</i>
▼	▼	▼	▼	▼
<i>private</i>	<i>mind</i>	<i>individual</i>	<i>reflex</i>	<i>counseling therapy meditation</i>

FUNCTION		NUMBER	M ²	M ² (NET)	
<i>public</i>	<i>information vestibule</i>	1	5	5	
	<i>lobby</i>	1	63	63	
	<i>reception & staff</i>	1	39	39	
	<i>exhibition space</i>	1	118	118	
	<i>lecture room</i>	1	25	25	
	<i>workshop area</i>	1	25	25	
	<i>therapy kitchen</i>	1	28	28	
	<i>storage</i>	1	4	4	
	<i>technical space</i>	1	4	4	
	<i>cloak room</i>	1	10	10	
	<i>WC</i>	3	3,5-5	13	~ 334 m ²
<i>semi-public</i>	<i>therapy rooms</i>	4	18-54	127	
	<i>waiting area</i>	2	17+48	65	
	<i>changing room</i>	2	20	40	
	<i>WC</i>	3	4	12	
	<i>storage</i>	1	6	6	~ 250 m ²
<i>private</i>	<i>therapy rooms</i>	5	12	60	
	<i>office</i>	1	12	12	
	<i>waiting area</i>	2	26	26	~ 98 m ²
<i>other</i>	<i>transition space</i>	2	100+47	147	
	<i>communication space</i>	-	129	129	~ 276 m ²
					total ~ 968 m ²



PUBLIC ZONE

- raise awareness -

The public functions are placed at the beginning of the journey. A place that provides guidance through the center with an inviting and open atmosphere. The public zone serves as initial personal contact with the visitor, where one will feel seen and heard. The public zone contains spaces for workshops, lectures, and exhibitions. The center work as an external hand to the park of Slotsskogen, where exhibition spaces can combine functions of the park with nature and wellbeing. Workshops as cooking classes can be held in the therapy kitchen and the lecture space can be booked by local companies and associations that want to incorporate mental wellbeing.

SEMI-PUBLIC ZONE

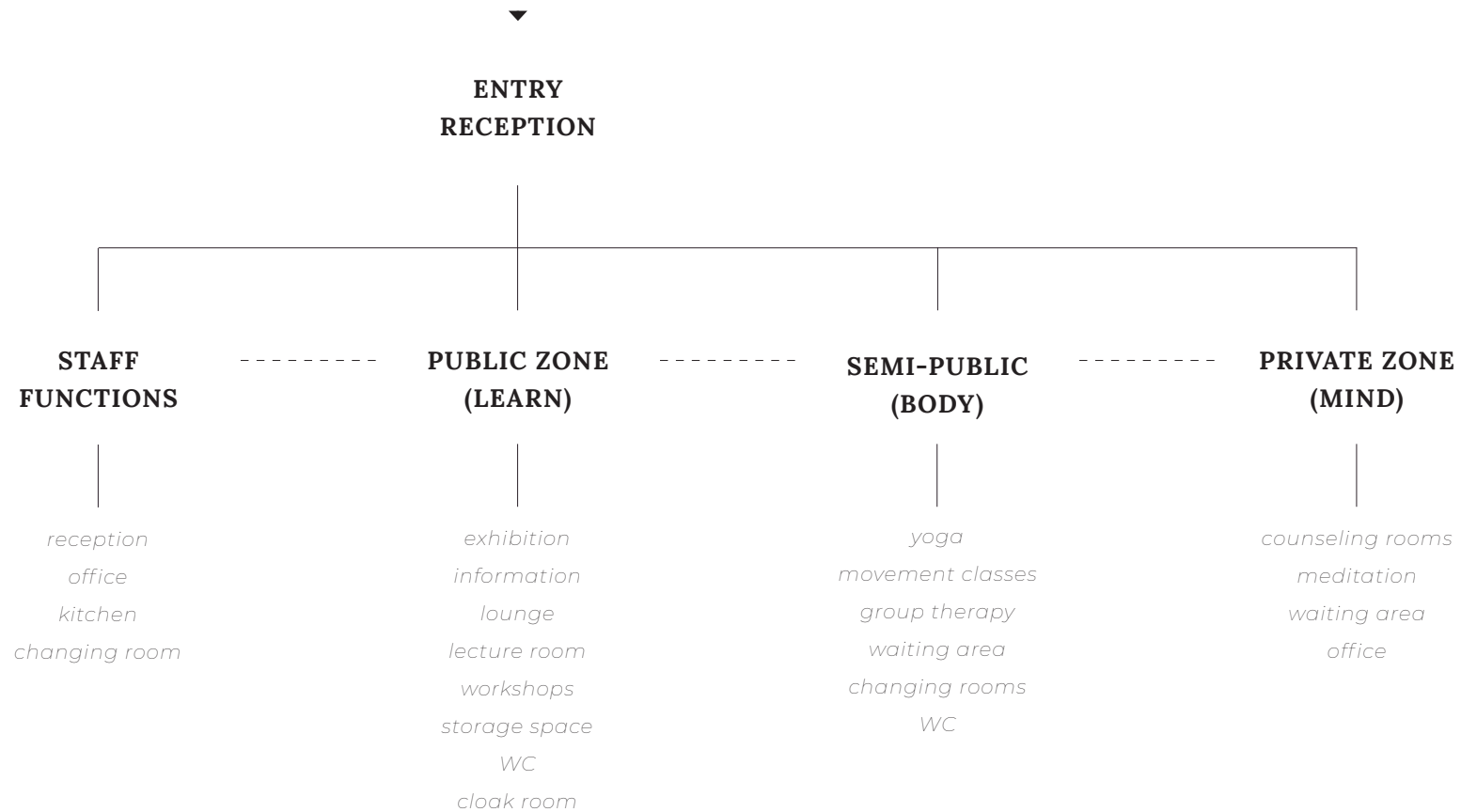
- relax with your body -

The semi-public zone focuses on the body, and how to relax. The rooms offer different characters and sizes. Here different classes can be held, depending on request. Classes like yoga, breathing classes, different types of meditation, and group therapy can be held here. The rooms are free to use during the time classes are not held here. When visiting the center for the first time, the visitor is always offered a session with a therapist for counselling and guidance about the use of the center and advice on how to pursue better health and what tools to use when one is feeling stressed.

PRIVATE ZONE

-reflect with your mind -

The private zone is characterized by intimacy, a place to be alone. A place where the visitor can reflect on one's wellbeing to gain better health. The rooms can be used for both meditation or therapy. All rooms have a direct connection to the outside, where one can sit in a safe environment together with nature. Every therapy room has a niche where one can sit and wait for their appointment. Every room is provided with a booking screen, showing when and if the room is available, making it accessible for visitors during all the opening hours of the center, without having an appointment with a therapist.



07.

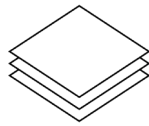
DESIGN PROPOSAL

This chapter contains this master's thesis final design proposal, a center where public and private functions are combined with the aim to remove the stigma and create a safe place to de-stress. The proposal is explained through diagrams, drawings and illustrations.



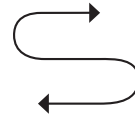
- masterplan 1:2000 -





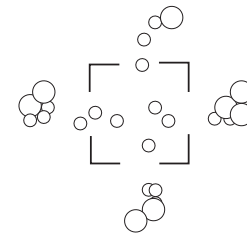
A NEW TYPOLOGY

*a combination of public and private
functions create a center with the aim to
remove the stigma and have a holistic
approach to wellness*



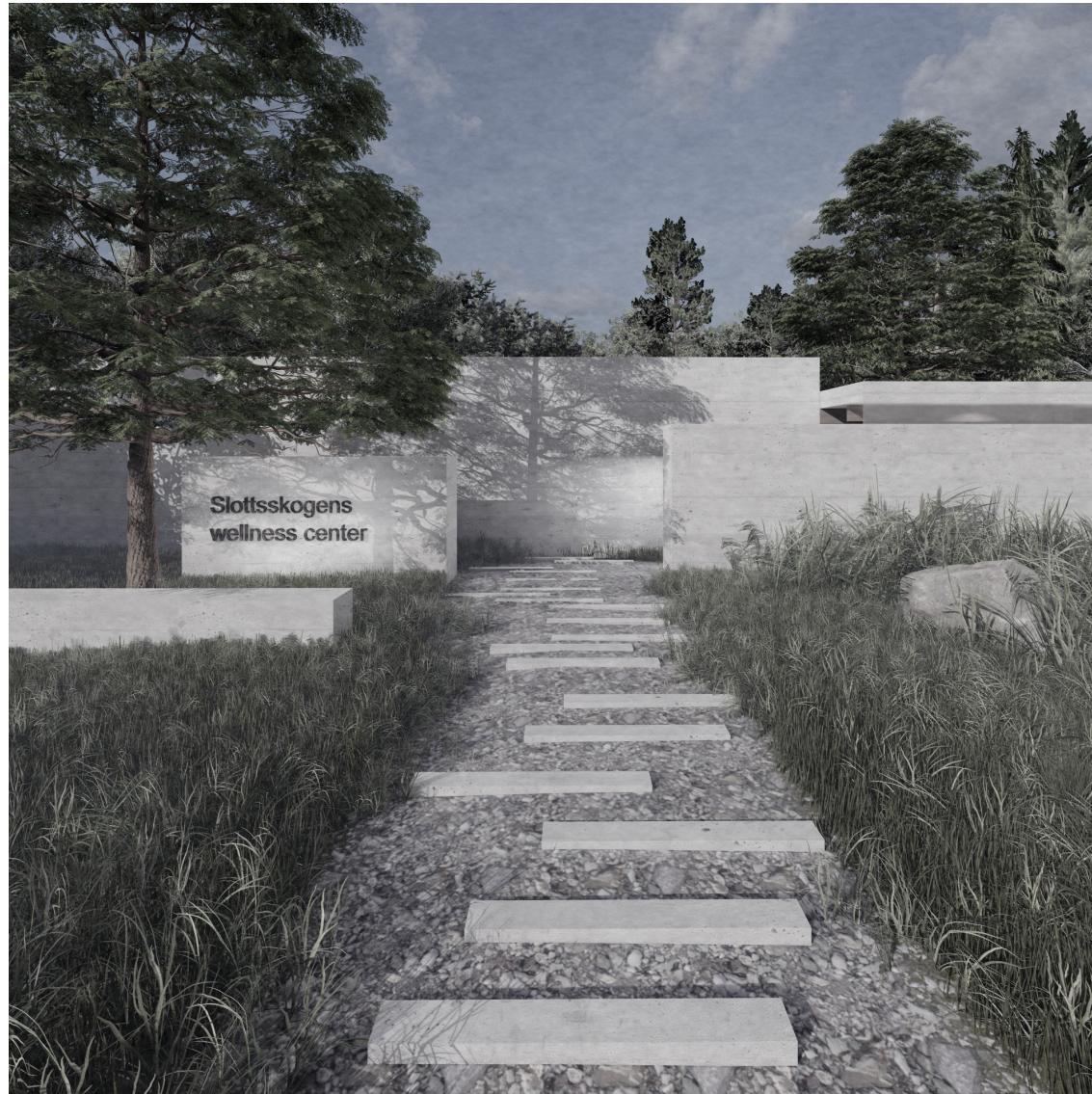
CREATE A JOURNEY

*the center creates a journey that takes
the visitor through a spatial sequence to
get from stressed to relaxed*

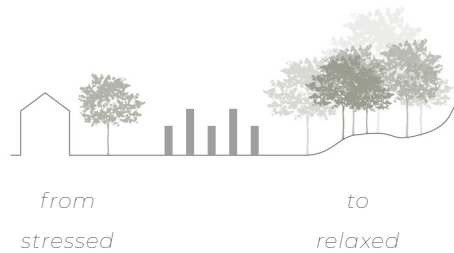


BRING IN NATURE

*the surrounding nature is brought into
the structure and used as a catalyst to
increase one's wellbeing*



- approaching the center -



PART OF A LONGER JOURNEY

- vision for site -

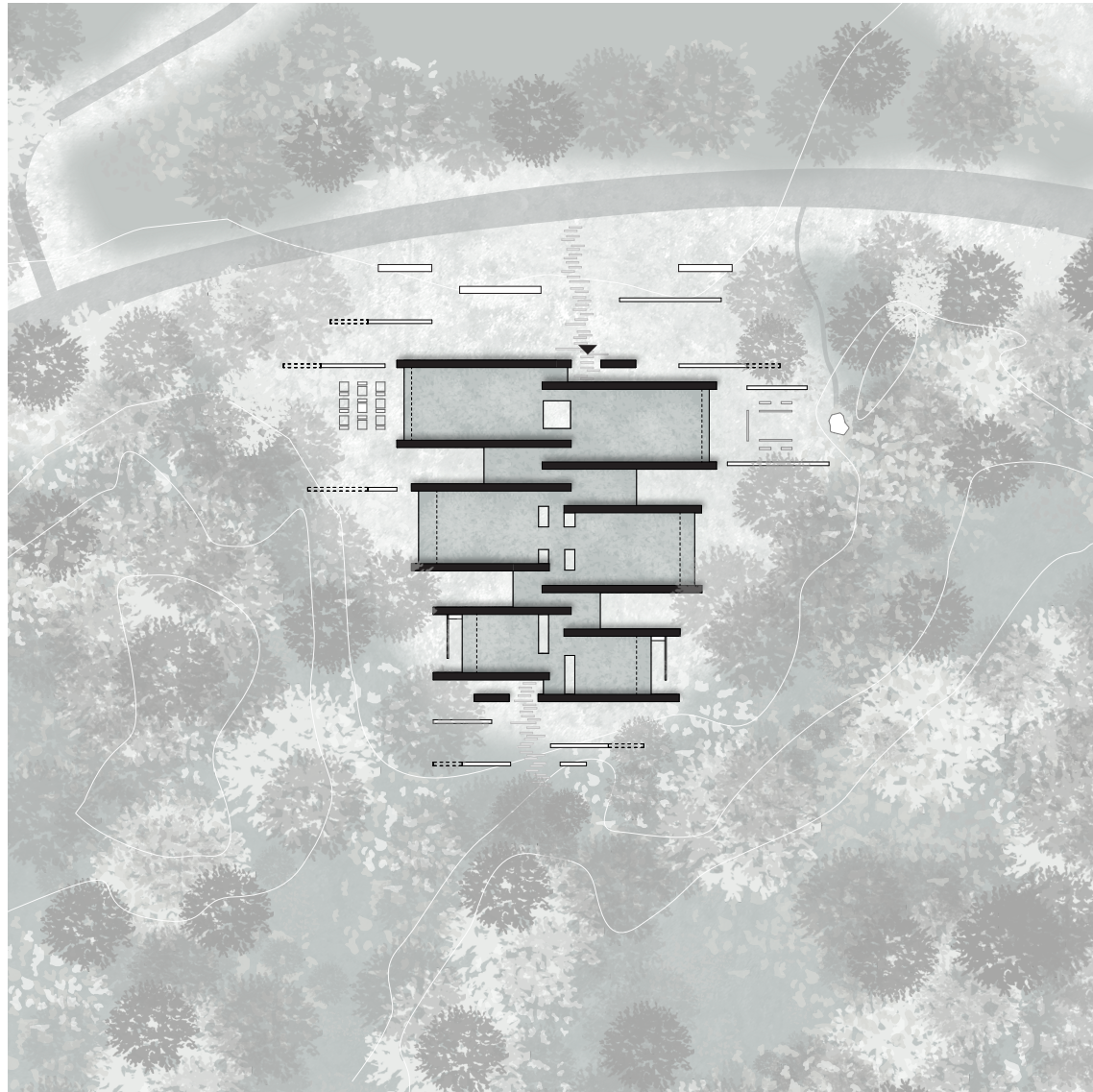
The center aims to fill the gap between the home and the current healthcare system. A place to go to when one is feeling stressed or overwhelmed by the hectic everyday life. The center acts as a transition zone towards better health and wellness. The center embraces the identity of the site, combining the raw ground materials from the surrounding forest. The structure is well integrated on site, and have the feeling of being raised up from the ground. The walls create a mysterious layering that invites the visitor to explore without giving away the functions on the inside.



APPROACHING THE BUILDING

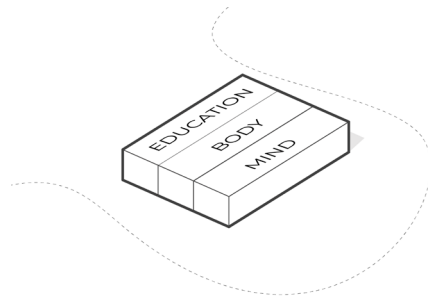
- vision for site -

The center aims to remove the stigma by inviting the public life of the park into the structure. The thick tactile concrete walls create a curiosity for people walking by, inviting people to approach the structure. The tactility of wood that is imprinted in the in-suite concrete create a curiosity for the visitor. The exterior aims to contribute to a playful experience and be a contribution to the park. The structure is being used in the transition zone in various heights and lengths to create a place to sit, play or hide. The exterior transition zone guides the visitor to the entrance, hinting about the upcoming journey.



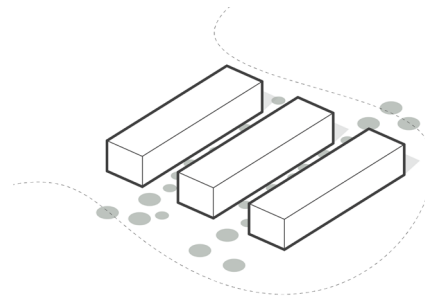
- siteplan 1:1000 -





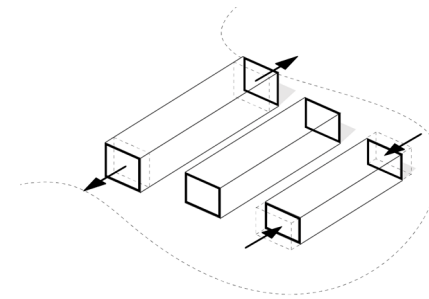
PROGRAMME

- public to private -



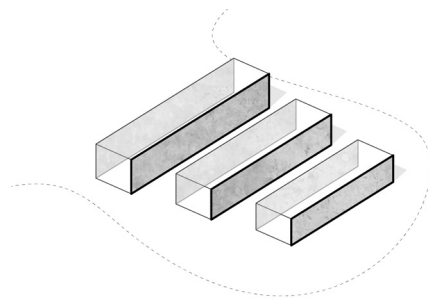
NATURE

- bring in nature -



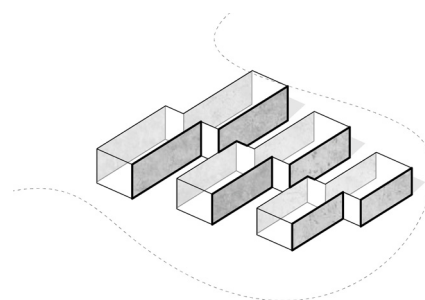
SITE DEFINITION

- site boundaries -



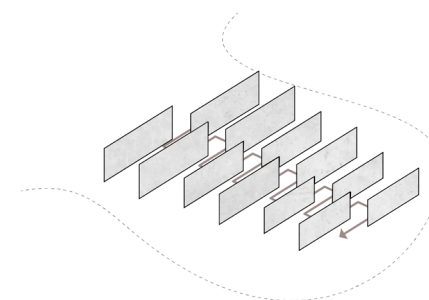
TRANSITION

- wall element -



SHIFT

- layering of mystery-



JOURNEY

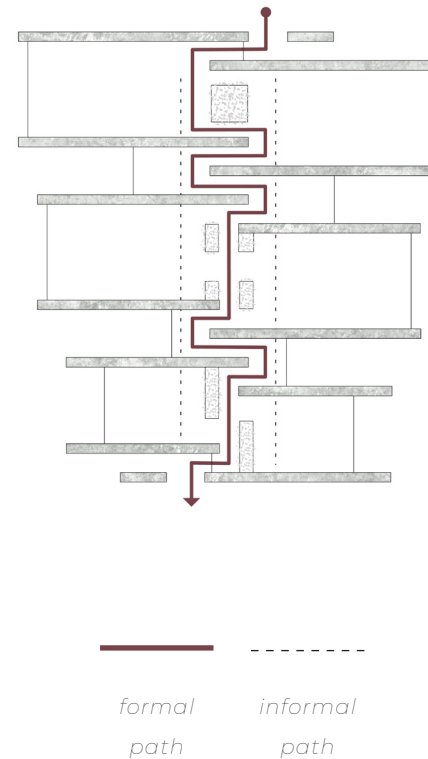
- transition from stressed to relaxed -



PROGRAMME

- holistic approach -

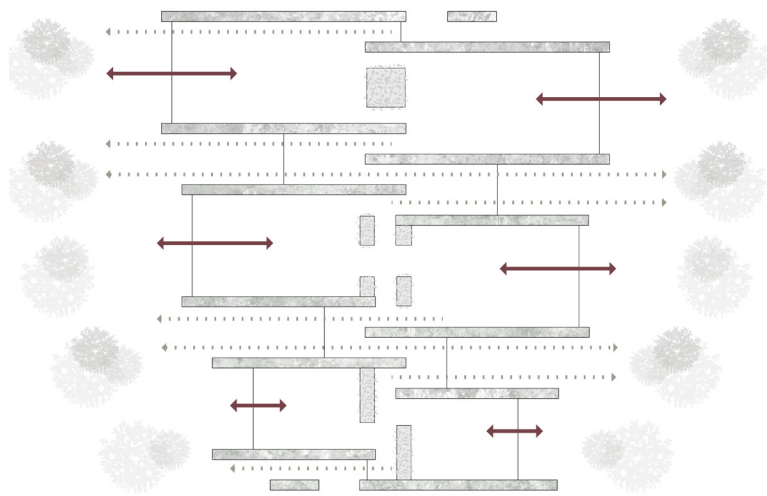
The programme consist of three separate zones that are connected through transition zones, that reminds you of the site and the presence of nature. The shift between the zones offers different levels of privacy between the zones, still keeping them connected through movement and sightlines. The shift offers the visitor a sens of control over their situation.



MOVEMENT

- health promotion -

The main flow is directed by thick concrete walls that creates a mysterious flow, directed by views to nature. The formal path starts in the public zone, continuing towards the private zone and the forest in the south. Inner gardens help to create different levels of privacy. The informal path offers staff and revisiting visitors an alternate route. The openings are narrow and slightly shifted to be separated from the main path.



inside/
outside motif of
nature

VIEWS & VISTAS

- Biophilic Design -

All three zones are turned towards the surroundings with a great view of nature, with the possibility to open up and step outside. The programme allows the function to cross the border between inside and outside and strengthen the connection to nature. The transition zones, always have the motif of the surrounding nature. The flow is then always drawn towards nature and daylight.

“

“Healing with the clean, pure, beautiful agents of nature is surely the one method of all, which appeals to most of us”

(Dr Edward Bach)



- plan 1:400 -



DESCRIPTION OF PLAN

- a place for those feeling stressed -

The zones are placed from public to private along the main axis that connects the public park to the forest. The different zones are reached from the main path, passing through transition zones. The transition zones are a place to stop for a minute, take a pause, and enjoying the directed view towards nature. The transition zones are to be used in different ways, here parts of the exhibition can be for display. Private seating spots are found inside the walls, where one can enjoy a book or some alone time, looking out over the seasonal changes of nature.

All the zones are opening up towards nature, where the design is blurring the line between inside and outside. The semi-private and private zone is protected by

walls in different heights to provide a sense of privacy. Windows are placed between the public and semi-public zone, leaving the visitor curious about the activity happening on the other side of the wall.

The inner gardens along the path provide light further into the structure and give the visitor a visual shelter for people passing by. Both the formal and informal path is guided towards the forest, where a meditation park is dissolved between the tree trunks. The journey ends either the same way you entered or by exiting in the south, walking at a slow pace through the meditation park that is connected to the existing sensory walk that will guide you back to the park.

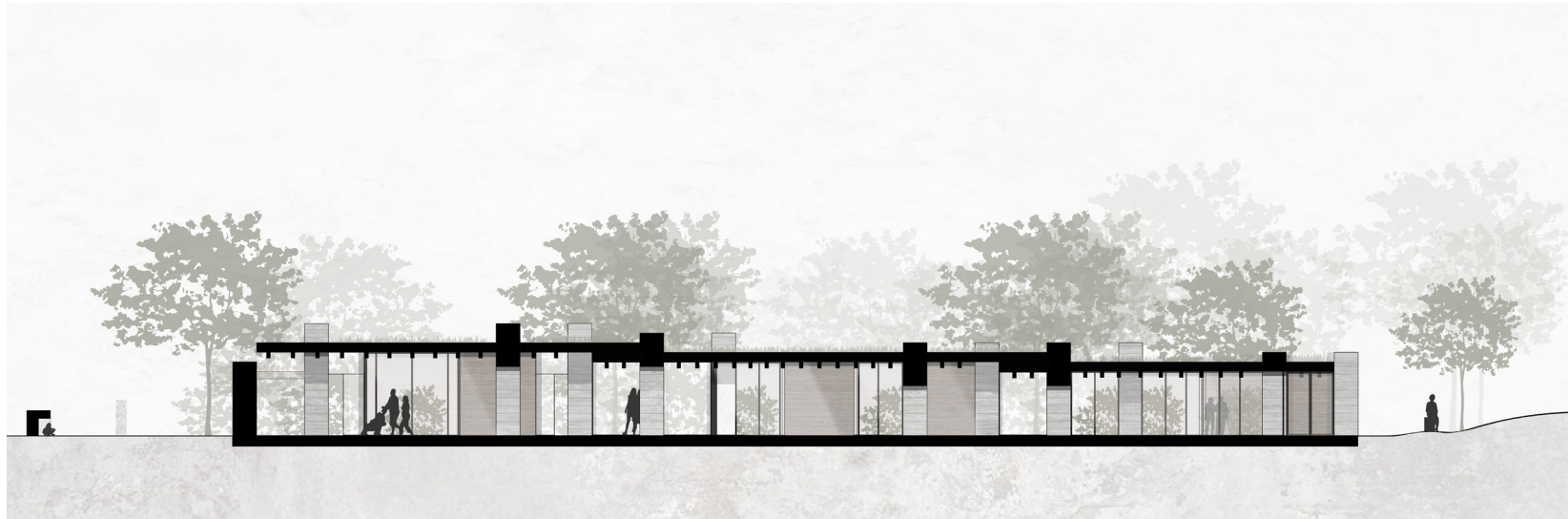
A TRANSITION THROUGH SPACE AND NATURE

- from stressed to relaxed -

The structure is inviting the movement from the park towards the entry. The different height of the walls is building up towards the forest in the south. Without giving away the functions on the inside, the center provides a welcoming feeling. The transition zone from the park to the center is playful and mysterious. Here the transition walls can be used as benches, bicycle parking, or a place to hide and play.

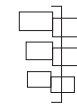
The thickness from the element is to be experienced first on the inside when moving from public to private. Spacious ceiling height is creating a generous and welcoming atmosphere in the exhibition. Towards the semi-public and private zone, the height adjusts and becomes more enclosed and intimate. An atmosphere that creates a more safe environment.

There is a straight sightline towards the forest in the south that is only experienced if moving through the narrow openings of the informal path. The narrow openings adjust in height to be more enclosed further reached into the center. The sightline ends up in the meditation park in the south, a contemplative park that dissolves into the structure of the forest. A place to sit and reflect in silence. The movement from the public to private is always connected to nature in some way, either through the transition zones or the inner gardens. This will provide the sense of moving through a green corridor. The inner gardens proved different levels of privacy depending on the functions behind.



A TRANSITION THROUGH SPACE AND NATURE

- section 1:300 -



MATERIALITY & STRUCTURE

- that changes with the light and season -

The material focus shifts after entering the first transition wall. A contrast is created between the in-suite concrete and the warm wood, the texture of the wood in the concrete creates a relationship between the materials. The interior wood is elements of CLT wood, that is treated with a warmer oil to create a homelike and enclosed feeling.

The flooring consists of terrazzo, a living texture that can be experienced differently depending on the colors on the exterior ground and where you are located, depending on the amount of light. It picks up the colors from the raw concrete, the warm wood, and reminding of the variety of the ground outside.

The structure is standing on a 400 mm concrete slab, that is reinforced with steel rebar. The primary load bearing beams are running across from the transition walls, where they are attached. The secondary timber load bearing beams are connected to the primary load bearing beams by steel joist hangers. Between the beams, installations and ventilation are placed. It is the secondary load bearing beams that are visible from the interior. This creates depth and nice shadows. The direction of the beams is enhancing the focus towards the surrounding nature. An exterior sedum roof is changing with the seasons, letting the structure blend into the environment and manage day water.

“

*“Healing with the clean, pure, beautiful agents
of nature is surely the one method of all, which
appeals to most of us”*

(Dr. Edward Bach)



MATERIAL PALETTE

- in-suite concrete, terracotta flooring, treated CLT wood -

EXTERIOR EXPRESSION

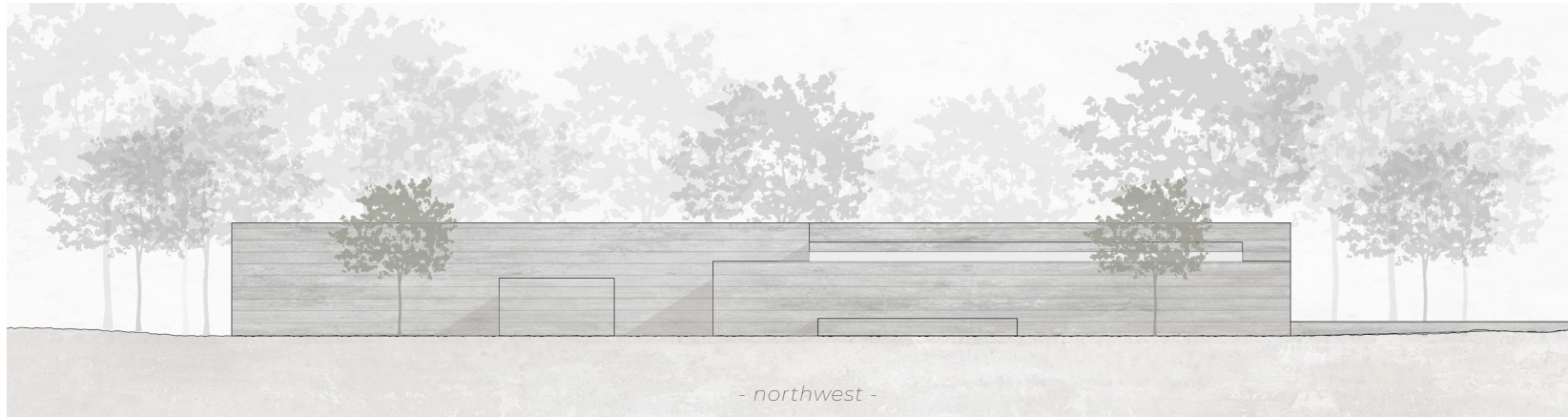
- solid vs transparency -

The overlapping walls create a sense of mystery. When entering the first thick concrete wall, the mystery is replaced with a sense of calm, here you can leave the outside world behind you. The center aims to de-institutionalize the feeling of a healthcare center, that is why everyone is entering on the same terms. The horizontal direction of the pattern in the concrete walls is guiding the visitor to the entrance. A drop is made in the first wall to create a narrow window that highlights the entrance.

The atmosphere of the center is categorized by raw materials in the exterior and warmer more living materials on the inside. The in-suite white concrete provides a raw slight imperfect finish. The concrete is a mix of grey and white pigment so the experience of it will change between cold and warm feeling depending on weather, season, and light. When casting the

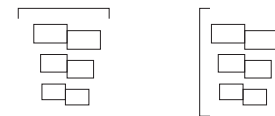
concrete, 40 cm of horizontal wooden panels were used to create the tactility and imperfection. It gives the facade a more living expression and creates a dialogue with its surroundings. The walls are well suited on the site, strengthening the feeling that they are grown up from the ground.

The different heights of the walls hint about the transitional experience the visitor is about to take. The walls mimic surrounding nature by creating different depths and heights. Viewing the building from different angles the perception of the structure will change. Approaching from the side, the structure reveals its transparency, letting light from the south into the building. From the side the center is all about transparency, opening up to the surrounding forest, with only the element of the wall bridging out.



THE DOOR IS ALWAYS OPEN

- elevations 1:300 -



PUBLIC ZONE

- a place to learn -

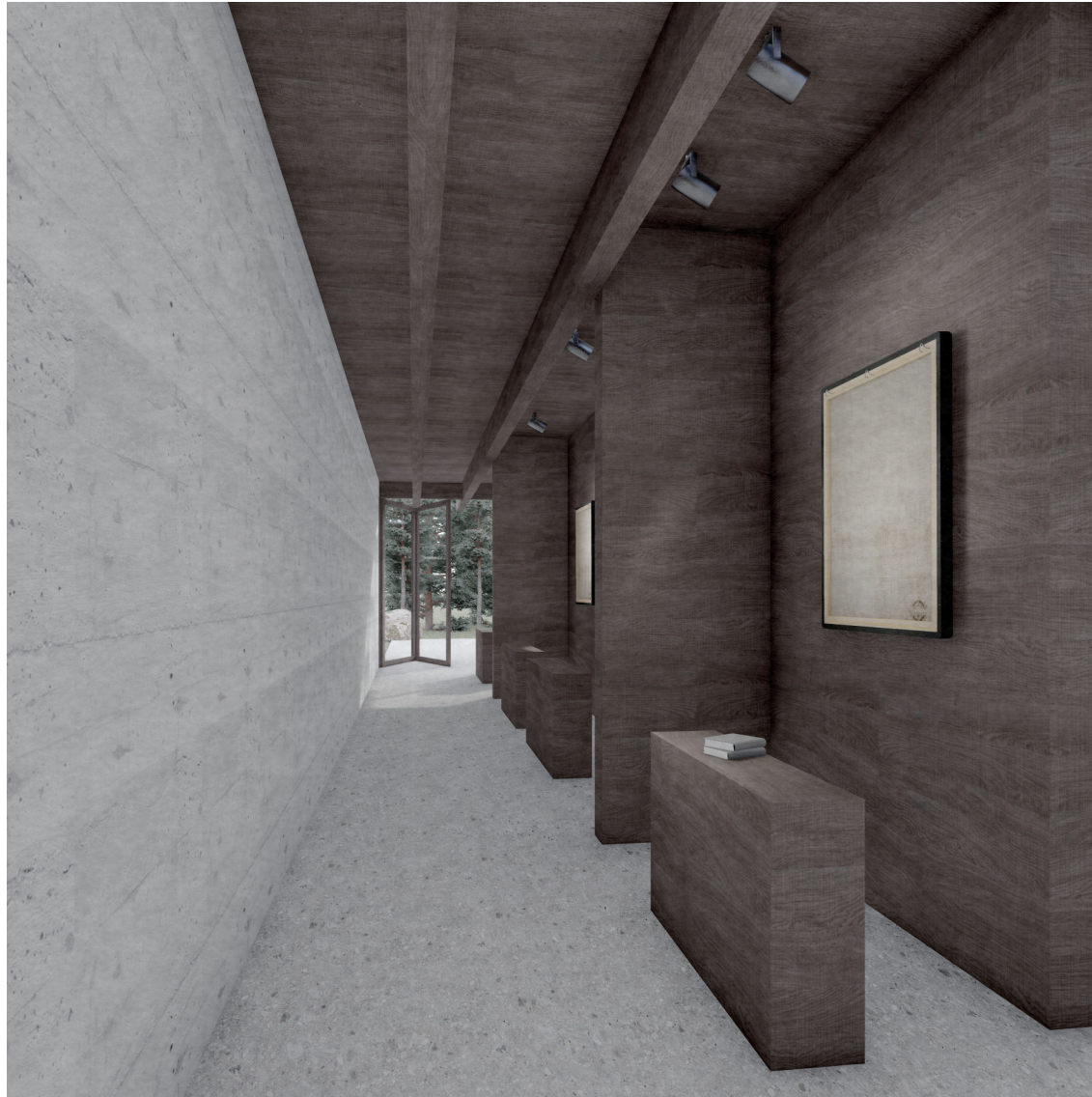
The public zone is a place for learning and to get information about mental health problems. Everyone, both visitors and staff, enters the center at the same terms to decrease the hierarchy between professionals and the visitor. By not separate the flows of visitors and staff informal meetings can take place throughout the center. The public zone is a place to raise awareness about mental health problems related to stress, with the aim to remove the stigma. The first thing the visitor meets after entering is the reception, where one can get information about the center or make a booking. The lobby is connected to the interior garden that provides light and greenery into the structure.

The public zone host functions as workshop & lecture spaces. Classes about food and nutrition can be held in the therapy kitchen, which is connected to the exterior therapy garden, a place to learn about local farming.

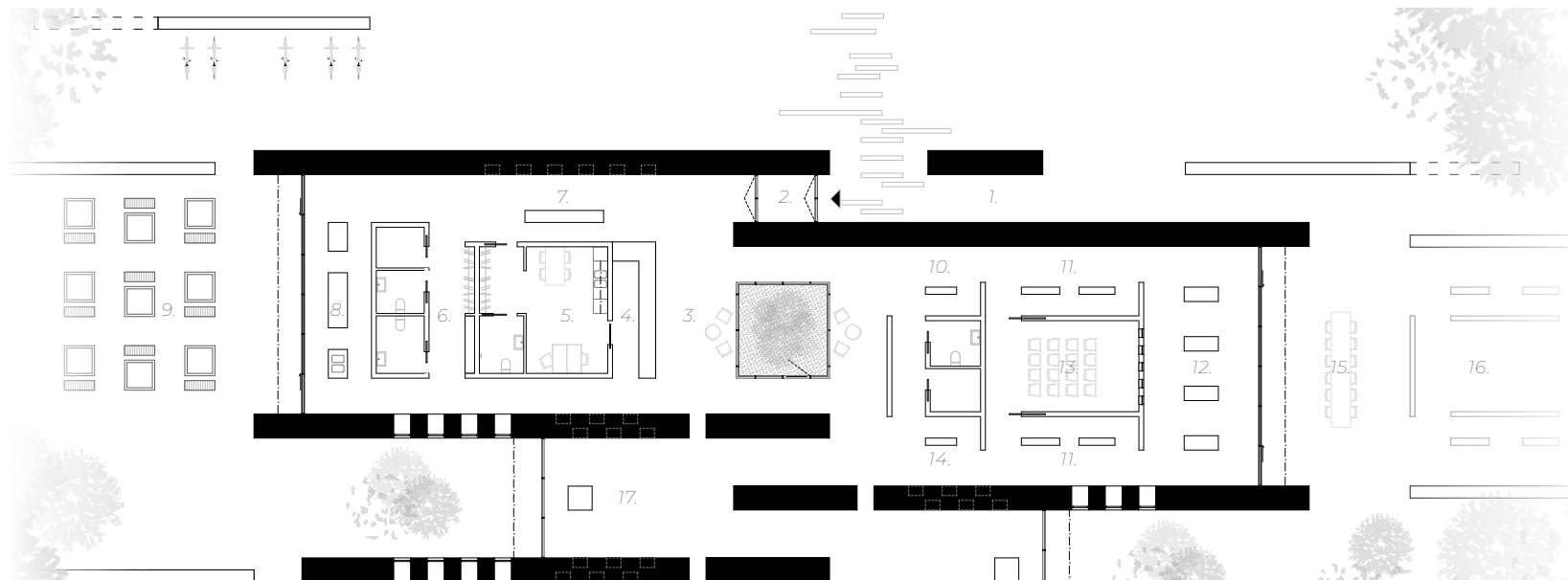
The exhibition space can be used by the park, or a local artist, the municipality, or school classes for example. It is a place to explore the concept of wellbeing, and preferably in connection to nature. The exhibition starts with an introduction space, informing about the current problem connected to mental health problems. The light will then lead the visitor further to the small exhibition space. These spaces will lead up to the large exhibition hall, that with an great with towards nature opens up to an exterior learning space and exhibition. The exhibition will, after opening hours, be visible from the outside to create curiosity. The exhibition journey ends in a final exhibition, reminding the visitor about the importance of taking care of your mental health.



- a place for support -



- a place to learn -



1. information vestibule

2. entry

3. lobby

4. reception

5. staff

6. coat room & restroom

7. workshop space

8. therapy kitchen

9. therapy garden

10. introduction hall

11. small exhibition hall

12. large exhibition hall

13. lecture room

14. final exhibition hall

15. outdoor learning area

16. outdoor exhibition

17. transition space

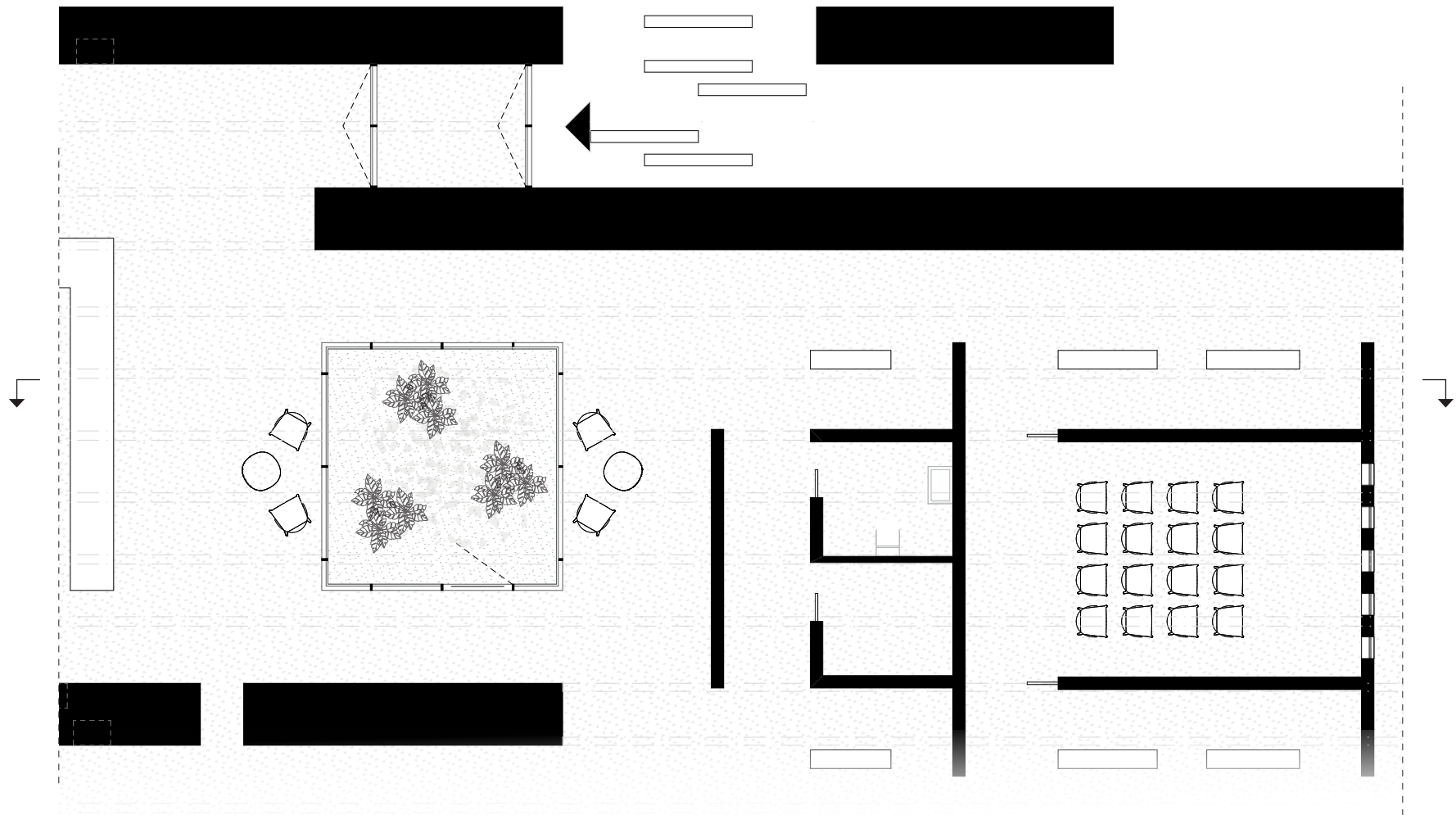
Total ~ 334 m²

PUBLIC ZONE

- with the aim to remove stigma -

plan 1:300





THE GREETING ROOM

- the door is always open -

plan 1:100





THE GREETING ROOM

- the door is always open -
section 1:100



THE THRESHOLD

- a place to slow down -

The transition space is focusing on enhancing the journey and making the visitor stop, turn, and slow down. The layering walls are directing the movement towards the next zone. The shift in volume creates long sightlines, both between zones, transition space and throughout the structure from east to west. The transition zones help with orientation and let you be reminded of the surrounding site.

The structure is also about experiencing the center without having a booked session, so the flow is allowing people to investigate the center without having an appointment. The path is always directed towards nature, to strengthen the flow and movement.

The spaces can be used for different purposes, showcasing art from the exhibition, or a place to increase interaction between staff and visitors. The integrated seating spots in the walls is creating protected small niches where one can sit and read a book or looking out over the seasonal changes of nature. The roof is extended further out to decrease the feeling of a border between inside and outside. The informal passage is slightly offset from the main path to separate them.



- a place to pause -

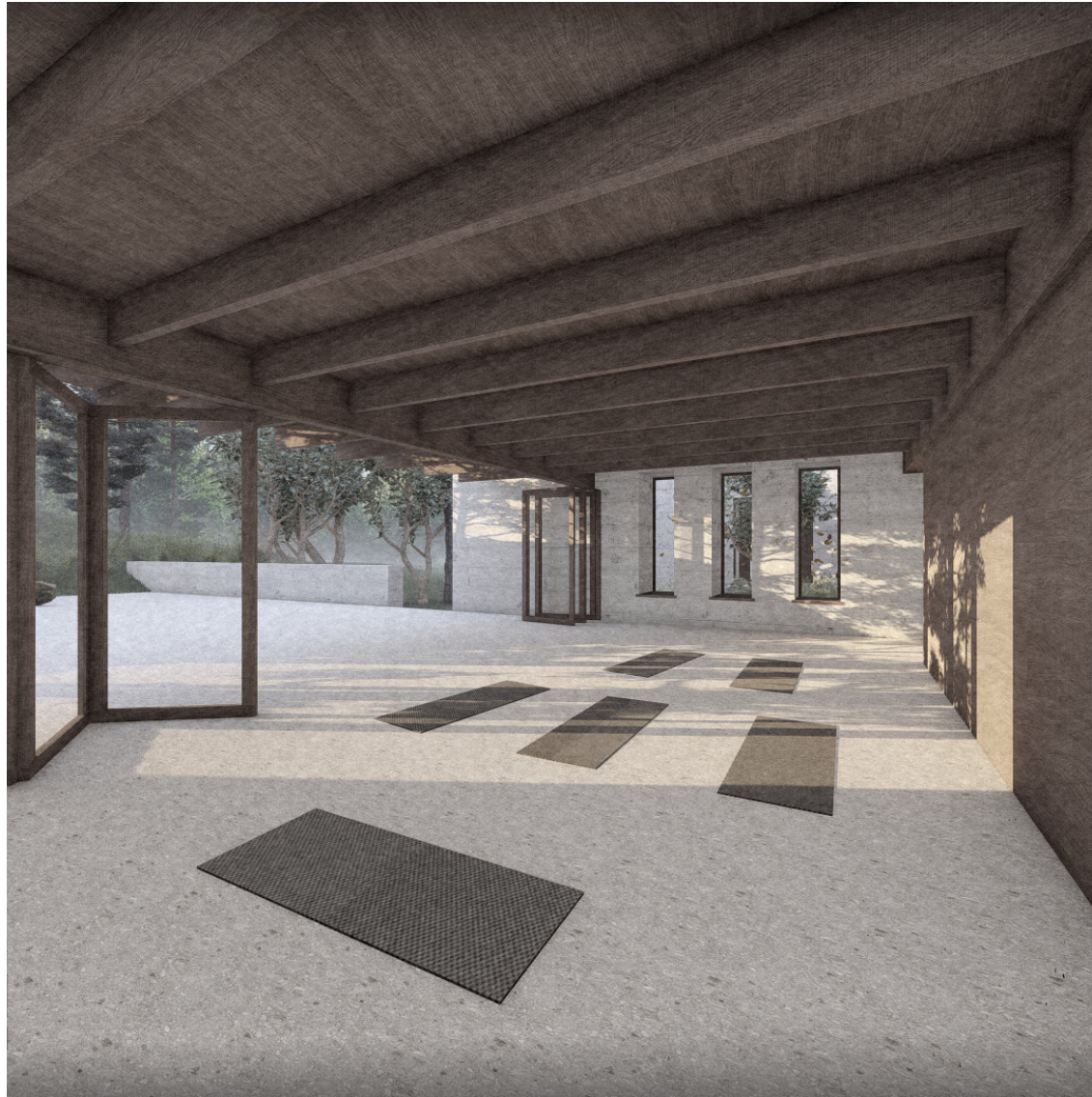
SEMI-PUBLIC ZONE

- a place for movement -

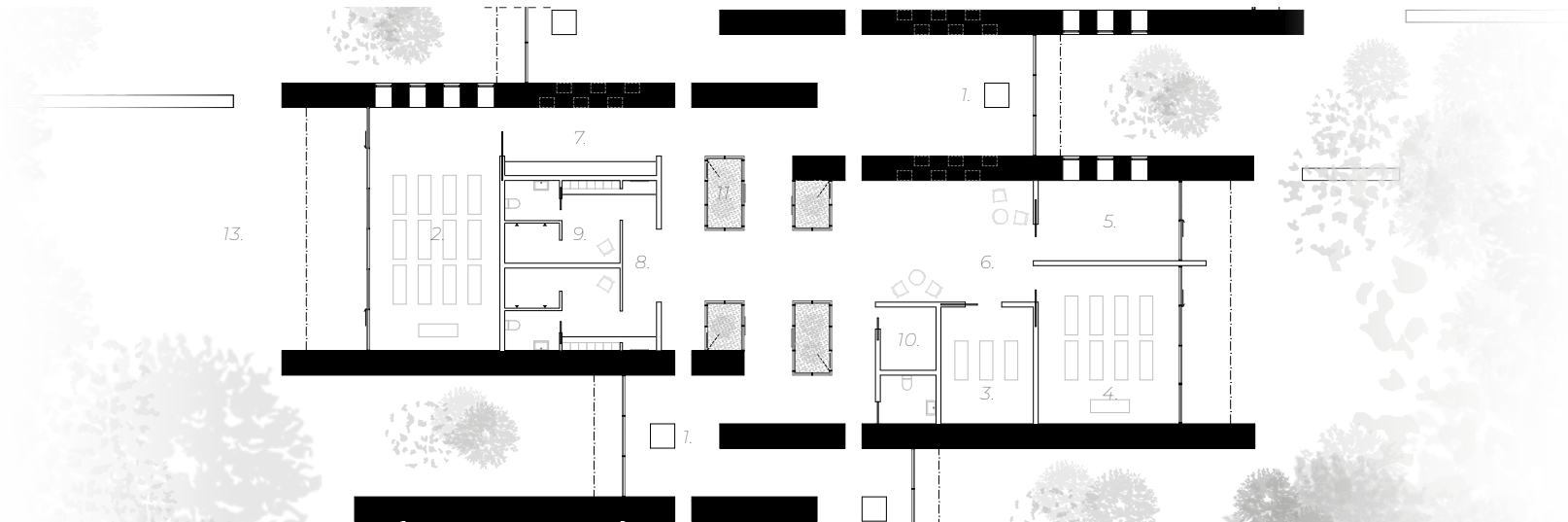
This is a place for your body, a place to relax and let your body move and activate to endure endorphins. The main flow is concentrated around the interior gardens, which represent the four different treatment rooms. Here you can learn about physical activity when passing by or waiting for your class. It lets you know about the connection between body and nature for increased wellbeing.

The waiting areas are more spacious to hold larger groups when classes are scheduled. A few seating areas are located inside the transition walls to create sheltered spaces to provide some privacy. When the rooms are not booked for classes, the rooms can be booked individually on the booking screen.

The rooms have different characters depending on where they are situated. The lightroom highlights the importance of daylight, and the focus is on following the seasonal changes outside the exterior wall. The dark room is a place for focus, letting your mind and body be as one, with no distractions from the outside world. The slow room is about breathing and relaxation. The energy room is about observation when the room is capturing the first light of the day sipping through the treetops. All treatment rooms facing the facade opens up to the surrounding nature with folding doors, letting classes be held outside if the weather allows it.



- a place to relax -



1. transition zone

2. the light room

3. the grounded room

4. the slow room

5. the energy room

6. waiting area

7. waiting area

8. booking screen

9. changing room

10. storage

11. interior garden

13. outdoor patio for yoga

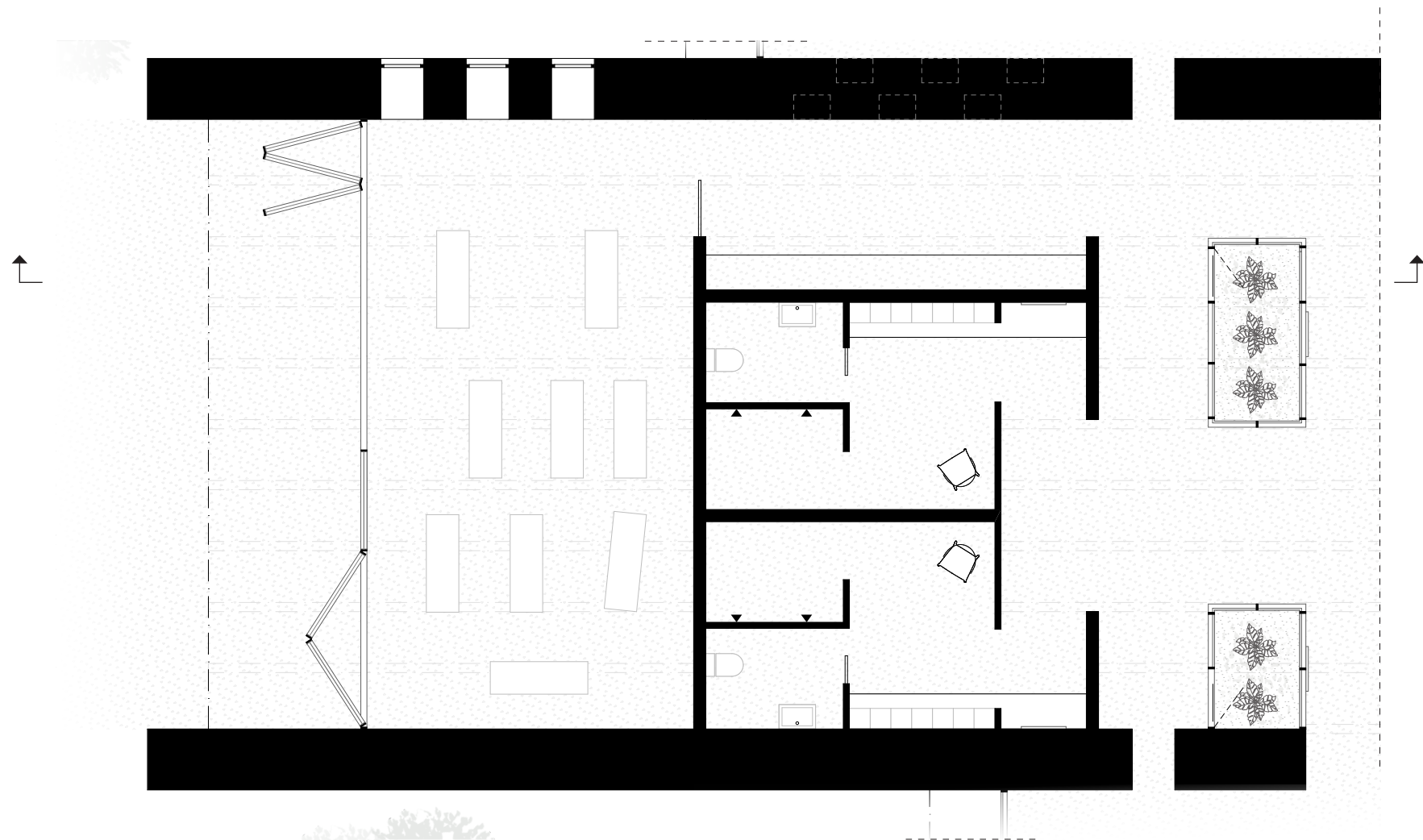
Total ~ 250 m²

SEMI-PUBLIC ZONE

- a place for movement -

plan 1:300



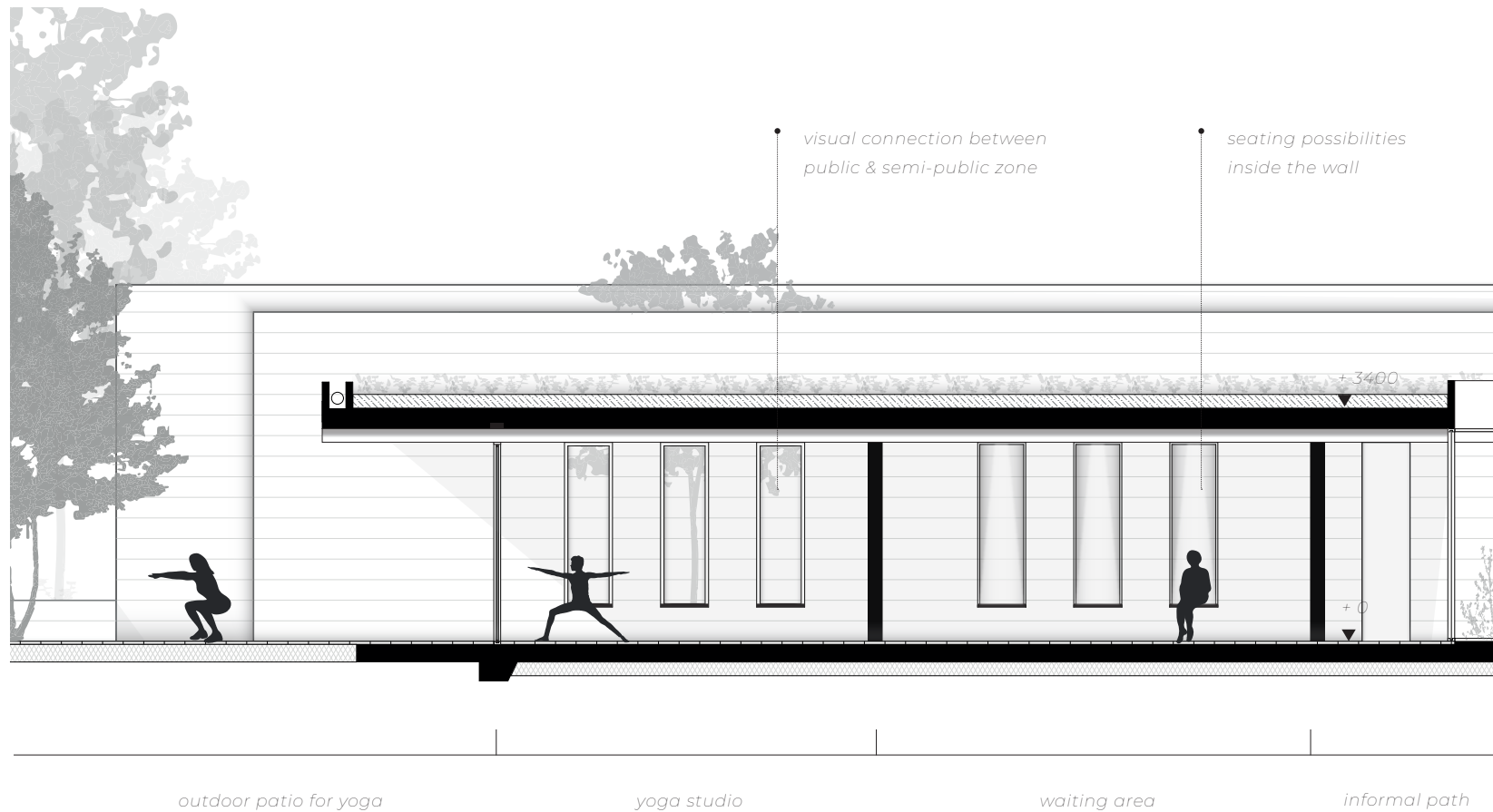


THE LIGHT ROOM

- a place for relaxation -

plan 1:100





THE LIGHT ROOM

- a place for relaxation -
section 1:100



PRIVATE ZONE

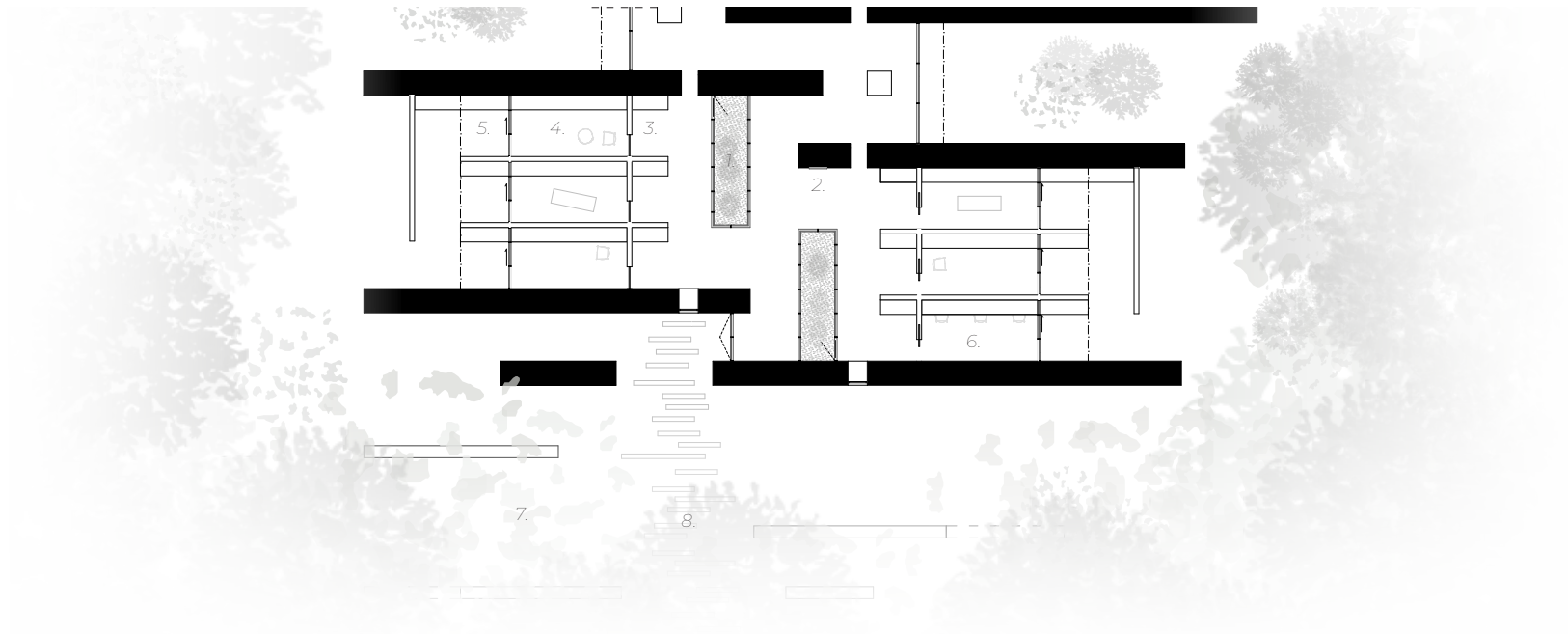
- a place to reflect -

This is a place for the mind, a place to reflect on your thoughts. The intimate rooms are to be experienced alone, together with someone or together with a professional therapist. Here you can sit and wait for your appointment with visual shelter from the interior garden. There are six rooms, which one can be turned into an office if needed. A bench follows the visitor from the waiting area, into the meditation room, out to the exterior niche.

The rooms provide a safe atmosphere, like entering a cave. A lowered wall is placed at the end of the sightline, providing privacy and directing the sight up towards the sky. Leaving your mind focusing on one thing only. When done with the session you can leave the center the same way you came, or leave through the forest in a slow place. The path will take you through the meditation park and to the sensory walk that is connected to the main road.



- a place to reflect -



1. interior garden

2. booking screen

3. waiting area.

4. the intimate room

5. outdoor meditation

6. possible office

7. meditation park

8. path to sensory walk

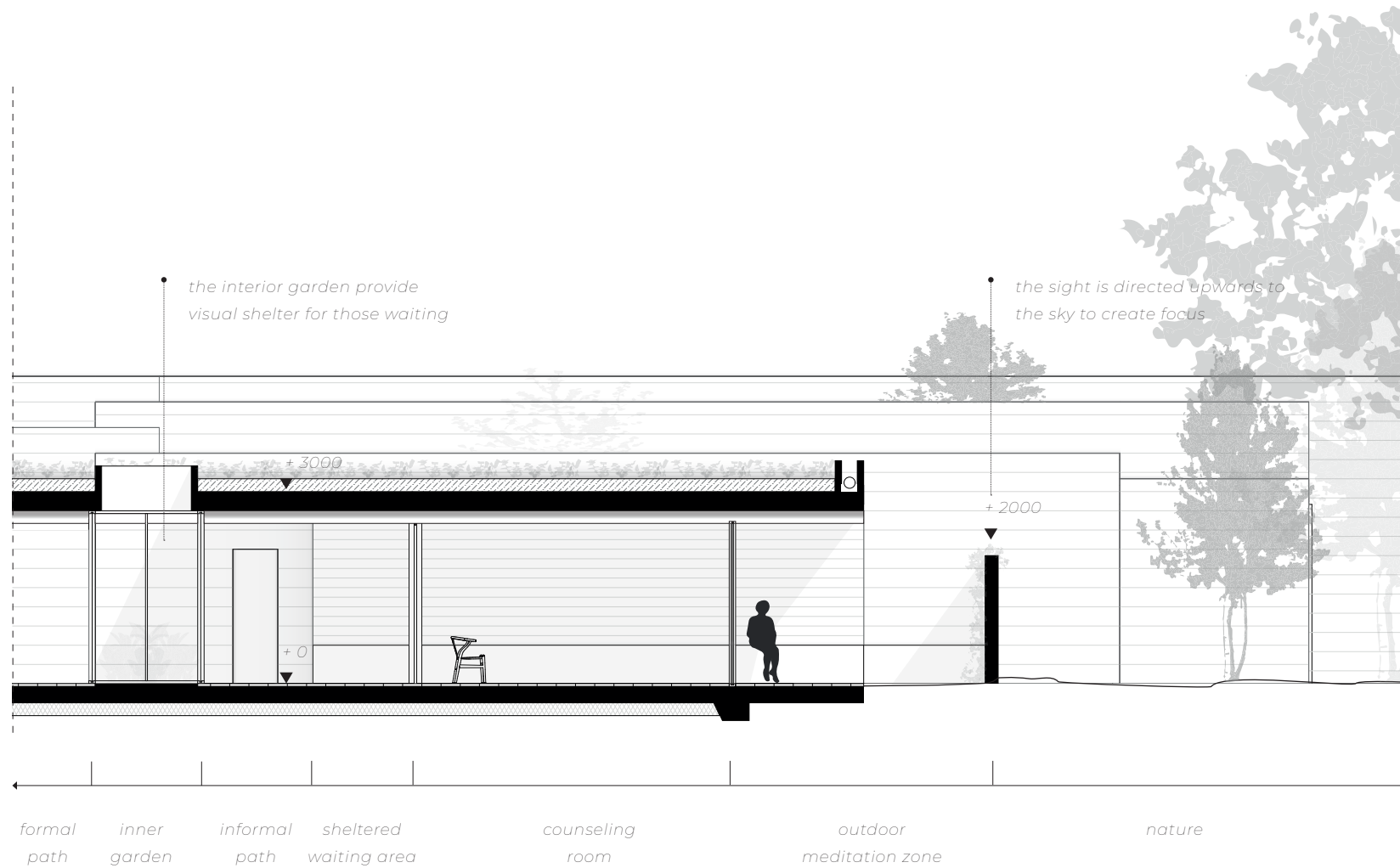
Total ~ 98 m²

PRIVATE ZONE

- a place for reflection -

plan 1:300





THE INTIMATE ROOM

- a place for reflection -
section 1:100



08.

SUMMARY

A summary has been made, to conclude the different steps from theory to result. This chapter concludes the design proposal with a discussion about the thesis and process. The reflection will lead to a conclusion that hopefully can contribute to the discussion about mental health problems. The chapter will end with listing all references being used.

THEORY SUBJECTS	DESIGN STRATEGIES	SITE DEMANDS	DESIGN IMPLEMENTATION	POSSIBLE OUTCOME
<i>holistic approach</i>	▶ <i>combination of public and private</i>	▶ <i>combination of nature and city</i>	▶ <i>different levels of privacy</i>	▶ <i>a new typology that combines public and private functions that removes the stigma</i>
<i>health promotion</i>	▶ <i>movement through a journey</i>	▶ <i>a site that offers movement</i>	▶ <i>layering walls for a continuous flow</i>	▶ <i>the winding path that goes from stressed to relaxed by forcing the visitor to slow down and relax</i>
<i>Biophilic Design</i>	▶ <i>bring in nature to improve health</i>	▶ <i>closeness to nature</i>	▶ <i>frame specific views of nature</i>	▶ <i>bringing people closer to nature, contact with nature reduces stress</i>

FROM THEORY TO RESULT

- discussion -

This thesis aimed to investigate how space can contribute to wellness and de-stress and at the same remove the stigma around mental health problems. The previous page has concluded a summary to see how the thesis has evolved from the research into a design proposal. The thesis departed in the simple statement that I saw a gap between home and the mental healthcare system. The design proposal resulted in a center that directs to those who feel that getting help is too big of a step.

By *having a holistic view*, the combination of public and private therapy created a new typology. I think there is a need for anonymity as well, to make the visitor feel at ease. This was created by combining therapy with public functions that are open for everybody.

By implementing *health promotion*, the center will activate the visitor and encourage them to take control of their situation. The choice of site will hopefully promote movement as well. Since the center is located in a park, to get there, a walk or bike ride is to be preferred. The point is to integrate therapeutically activities in everyday life. There are as well many aspects of health promotion to consider, but if to consider them all the focus of the thesis would shift.

By using *Biophilic Design* the choice of site and design was strongly influenced. The site was respectfully treated to relate to the existing conditions. I also think that you can come a long way by using smaller interventions as well. A center doesn't have to be located in a natural setting, but these patterns can and should be used in more urban settings as well.

MY FINAL THOUGHTS

- conclusion -

The result of the design proposal was strongly influenced by what I found interesting when it came to research. The *holistic aspect* was chosen because the issue around the stigma. *Health promotion* has been introduced to me before, and this is something I find very inspiring. I see how this could be implemented outside the field of healthcare settings as well. *Biophilic design* taught me that It is not only about looking at nature, but it is also about seeing, feeling, and sensing it.

There is a lack of public centers that address the problems of mental health problems related to stress. By letting a center with the aim to address the whole perspective of health, more people could get help before needing extensive therapy or medication. A center like this could be a part of the Swedish healthcare system. In the future, we will create an even more person-centered health model, that can be adjusted accordingly to one's individual needs.

The next step of the thesis could be to explore the structural elements and how this could be optimized in dimensions and from a sustainable perspective. The focus has mainly been put on creating pleasant and stimulating atmospheres. The psychology of spaces is also one thing to consider, go into a deeper understanding of how spaces affect our different senses.

I would like to conclude this thesis by saying the role of healthcare architecture has during my years at Chalmers evolved. It has made me look deeper into how we can create healing and healthy environments. We as architects have the ability with the help of using design to create environments that heal and increase wellbeing.

WEB

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FIGURES

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Figure 1 - Zumtob, P. (1996). Therme Vals, Switzerland [elektronisk bild]. Hämtad från: <https://www.archdaily.com/13358/the-therme-vals>

Figure 2 - Nord Architects (2011). Center for cancer and health [elektronisk bild]. Hämtad från: <https://www.archdaily.com/430800/centre-for-cancer-and-health-nord-architects>

Figure 3 - OMA (2011) Maggie center, Glasgow. [elektronisk bild]. Hämtad från: <https://oma.eu/projects/maggie-s-centre-gartnavel>

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STRESS MEETS NATURE

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