

Healing architecture

Exploration of mental well-being in an urban context

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Abstract

This thesis seeks to explore an architectural typology that can enhance mental healing qualities in the urban structure. Our modern fast-paced lifestyle has a big impact on our mental well-being and our stress levels are constantly high, while our feelings are continuously exposed to different external factors. This minimizes our ability to understand and process them and to finally get through a stressful time. This recurrent phenomenon can lead to the formation of mental illness. Knowing this, we can observe the psychological mechanisms of a person with this experience, and get to the root of the idea behind the healing architecture typology. Through this study of already existing typologies with a healing purpose, the project will search for architectural solutions in a city environment. The spatial intervention will be introduced on the edge of a green and urban context, and will be available for anyone who would like to participate in it. The proposal is designed as such, so it could be a regularly visited location, where you can go to get a mental pressure release. The outcome of my research is the design of three structures, placed on the edge of an easily accessible park and residential area of Copenhagen. Each structure will be an exploration of different healing approaches for mental well-being, while the architecture will work as a framework for peaceful and purposeful activities. The first typology will focus on the idea of healing through tranquility, stillness, sensory stimulation, and different levels of privacy. The second typology aims to work with ideas around the soothing walk, its velocity, and the iteration of the spatial experience. The last typology will explore the therapeutic features of sunbathing. This thesis is not supposed to find a perfect solution to mental pressure, but rather, aim to explore the various outcomes. By understanding the importance of mental well-being in modern society, this thesis will propose methods of mind relaxation for the majority of people.

“First we shape our buildings and then the buildings shape us.”
Churchill

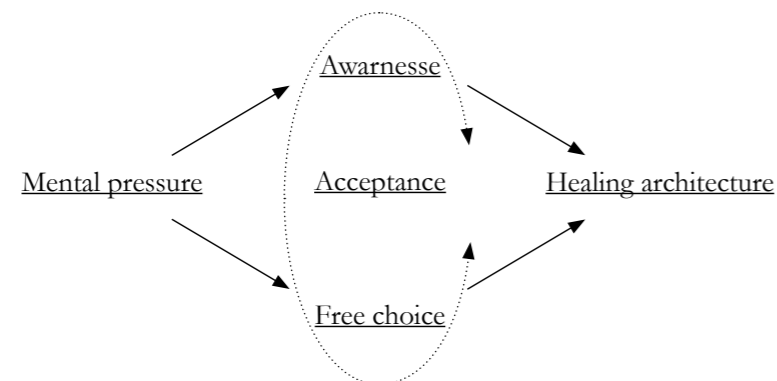
Preface

I am genuinely interested in the matter of psychology and architecture. Growing up and starting my architecture education, psychology was a topic I liked to explore as a hobby and educate myself from time to time. I found that the relationship between people and the built environment has an enormous correlation, something which I hoped to explore on different levels. The subject for my thesis came from my background: Moving out from my home country to Denmark, starting my master's degree, and having continuous worries with life obstacles I encountered at the time living in Copenhagen, made me very cautious and aware of my psychological and mental being. Throughout my years, I faced different reactions from my body to psychological stress. At some point, I started to recognize some patterns and found a way to deal with them on my own. However, it was a long process and sometimes a struggle, which we all need to experience on our own, and I believe that we are learning it throughout our lifespan. Starting my master studies at Lund University, I worked on my first subject connected with social psychology in the city. The subject worked with urban loneliness and the creation of architectural typology for tackling the issue. For my thesis, I wished to come back to this way of thinking, though this time I decided to work on the stress in the society created by life events, which can become too much at times. At this point, the pressure might make our lives very blurry, and as humans, we know that something is not right, and we might even experience pain or different physical reactions to stress. Life goes on, we might keep working too much, we might worry too much, but we are still trying our best to make everything work. The limit of our mental capacity is difficult to define and we don't know if or when we might have passed it. We feel like we can't find a way to relax and to let go of things that are very important for us. I know that the subject is serious, and I wanted to explore it and give it an architectural answer. I believe that the architectural experience has a strong power to affect and potentially improve the way we are living, which is why I decided to investigate and propose a designed space in the urban context, which can heal our thoughts.

Thesis statement

This thesis seeks to explore the design of architectural typologies that can enhance healing qualities in the urban context. Commonly available studies show that mental illness is much more prevalent in the urban population than in the rural. Nowadays, the fast and hectic way of living has a big impact on our mental being, making high-stress levels consistent and dominant in everyday scenarios. Our feelings are continuously exposed to different external factors, and we are unable to feel them in the heat of the moment, which leads to minimizing the ability to understand and process them. Processing our feelings is a natural defense system of our organisms, and this recurrent phenomenon can lead to the formation of mental illness. In this thesis, I mainly wish to address stress, anxiety disorders, and burnout syndrome, although I believe that the healing outcome will be helpful for all. Getting to know these disorders, we can go through the cycle of a person with this experience, and get to the root of the idea behind healing architectural typology. In the hypothesis, the ordinary person is overwhelmed by his or her everyday life. The pressure that this person feels becomes unbearable, but at the same time, this person doesn't want to or is unable to leave the way of living they currently experience. As the context we live in is packed with an immense amount of information, it makes it hard to find release and it potentially creates a very dangerous situation for the individual's mental health. The individual decides to get some advice from their doctor, and here typically find a few paths: One of them is that the doctor will decide to examine the patient, which typically shows that the patient is in a more or less stable physical condition. Nevertheless, the person still feels bad and needs help, which is because the root of the problem is in the mental state, something which is more difficult to measure with a typical doctor's examination. After another consultation, the patient is referred to a therapist or directly advised to make changes in his or her life, to minimize the stressors that create the issue. On one hand, therapy is the proper way to go, and it will help the person to understand their feelings and find the proper healing tools. However, it's a long process that can be financially expensive, mentally disappointing, and potentially bring more pressure to the individual. Furthermore, when it comes to stress, anxiety, depression, burnout syndrome, and so forth, the healing process can be connected with medications which usually postpone the personal healing process that must finally be fulfilled to find the ultimate release. Lastly, another option is to try to minimize the stressors, which can be a difficult task, since our lives are built up from so many different factors.

All things considered; the process of finding help and mental healing is a very bumpy path that can end up in different directions. I believe that this process can be improved by architectural interventions in the urban context. The interventions will be introduced at a time when the individual has decided to get help and is reaching out for it. The choice of improving mental being should be encouraged and promoted, as it's considered that the individual decision for a change is the most accurate way to actual and consistent alteration. The design proposals will work as a referral from the doctor, as well as an object integrated into the urban context, which by the intention of its form will act as a regularly visited place for mental pressure release. It can work as a separate healing tool and as an additional tool to therapy in the healing process of an individual. In this way, the visitor is meant to perceive the architectural object as an alternative medical procedure.

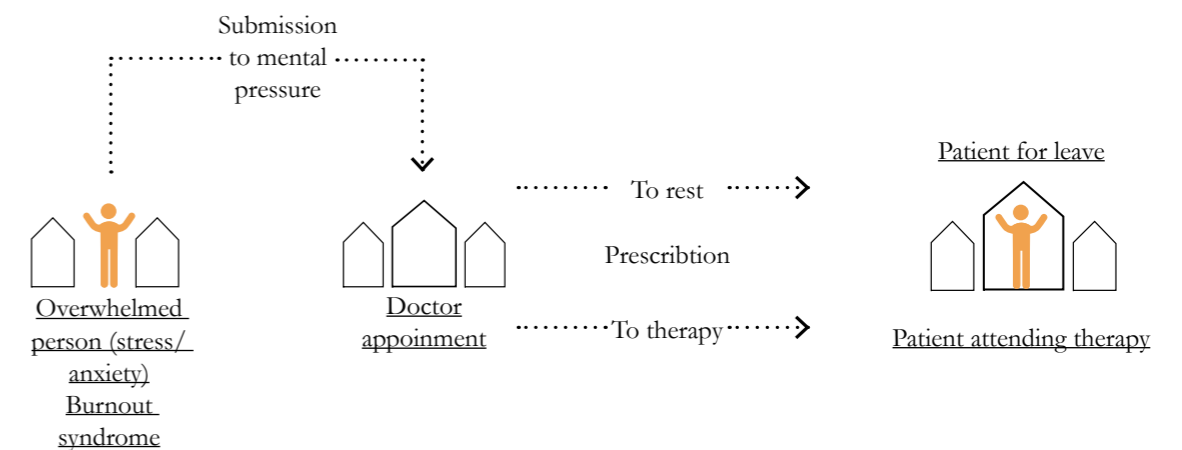


Architecture to combat urban anxiety.

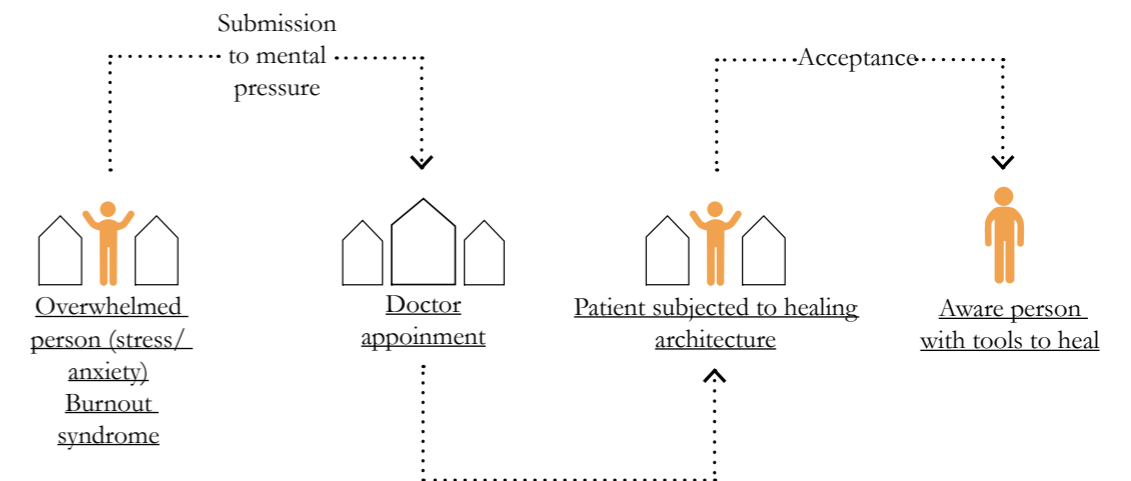
Thesis questions

- How can the architecture intervention serve as a healing facility?
- How can a site in the urban context be a place of different dimensions of privacy for the various levels of mental pressure immunity (issue/ release/ emancipation)?
- How can architecture shape tools for mental pressure release and establish a healing measure for all?

Present situation



Future situation



Theoretical framework

Therapy and psychological space

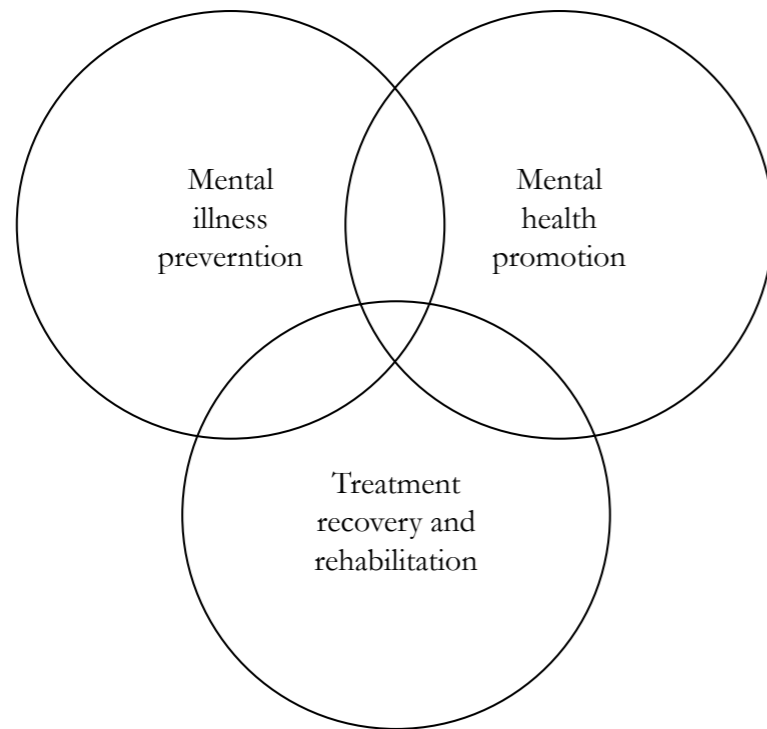
Behavioural typology

Healing architecture toolkit

Besides the fact that I wish I could address most of the mental illnesses which are connected with stress, anxiety, and the pressures of everyday life, this thesis will focus on the general feeling of burnout in society, and investigate the already existing spaces working with mental healing. From a psychological point of view, there are different techniques and ways of therapy aiming to treat stress and anxiety. I will give a description of a few main therapy techniques, to understand their possible connection with architecture and describe psychological space. Besides therapy, I will also look into the spiritual way of treatment, in particular the idea of mindfulness and its tools. I will also write an elaboration on two books that had an influence on my interest in this thesis. The first is *X-Ray Architecture* by Beatriz Colomina, which I will come back to in the following chapter about behavioral typology. The second is *The Hidden Dimension* by Edward T. Hall, which I will write about in the current chapter. Lastly, I will write about some of the most interesting knowledge I came along with while researching commonly available articles and lectures around that matter. The intention is that this research will help me find architectural strategies for designing spaces that will enhance the healing program.

The four major therapy techniques consist of psychodynamic therapy, behavioral therapy, cognitive-behavioral therapy, and humanistic therapy. The first one focuses on identifying ways of thinking and behavioral patterns that may lead to distress. Typically, it includes discussing your life history and childhood, as well as any recurrent dreams or fantasies you might have. It is important to investigate the connection between your subconscious and your actions, and examining your feelings, relationships, and thinking patterns are all part of this process. The second technique, behavioral therapy, is focused and action-oriented, and based on the theory that behavior emerges from past events. Some of these habits can have a harmful impact on your life and can cause you anxiety. The process will assist you in adjusting your actions, and you won't waste any time worrying about the triggers behind your decisions that aren't obvious to you or working on personal conflicts. Rather, you'll concentrate on how to improve upsetting behavioral responses and habits. The third technique is a short-term approach to mental health treatment. As distress may be caused by any thoughts or opinions you have about yourself or about events in your life, it focuses on finding thinking traps and understanding more about how they can harm you. It also looks at how to swap unhelpful or intrusive thinking processes or actions, with more helpful and constructive thinking patterns. It doesn't consume a lot of time talking about the past, instead, it aims to treat and change symptoms. The final technique, humanistic therapy, depends on how your worldview shapes your decisions, especially those that put you under stress. It's focused on the idea that you're the most qualified person to consider your own needs and interests, and it assists you to appreciate what you're going through by providing feedback and encouragement without analyzing the emotions for you. Its aim is for you to live the most rewarding life possible, allowing you to be your true self. The technique is exploring and sharing ways to grow and raise self-acceptance, as well as the problems you're struggling with.

However, knowledge of different kinds of therapy might not seem to be straightforward for spatial interpretation. It again shows that healing is an individual process that might work differently for all. It's important to stay open-minded and allow ourselves for a moment of stillness and reflection, or on the contrary, engage ourselves in activities that can bring us happiness and let us move forward in a more healthy, thoughtful way. Whatever path is right for us, space should allow the participant to experience different possibilities and to have the freedom to decide what's the most comforting place at the time.



Mindfulness is a relaxation technique that simply involves staying in the present moment, rather than thinking about the future or the past. It consists of many subtypes which vary in terms of the level of activity, from stillness to repetitive action. Breath attention focuses on the feelings and thoughts you experience in your body, as well as where you sense them in your body. Instead of focusing on why you feel them, the focus is on feeling them as sensations. Progressive relaxation, also known as body scan meditation, is a form of meditation in which participants scan their bodies for places of tension. The aim is to become aware of stress and encourage it to dissolve. Secondly, sitting meditation entails being in a relaxed posture while focusing on breathing. If the recipient's mind wanders or is overwhelmed by other emotions, he or she should softly turn attention back to breathing. The next visualization/concentration approach is to focus on something of intent without thinking about it. This way works by centering your attention towards something visual, like a statue; something auditory, constant, like your own breathing; or a simple concept, like "unconditional compassion." It's changing the place of awareness from conscious to subconscious. Furthermore, there are mindful approaches that require more movement. Mantra and walking meditation are two examples of activity-based meditation. Activity-oriented meditation blends meditation with already fun experiences or fresh activities that help you concentrate on the present moment. This method of meditation involves engaging in a repetitive exercise or one that allows you to experience flow. This, once again, calms the mind and helps the brain to rest. Mantra meditation is a form of meditation that involves quietly repeating a sound to help calm the mind. What matters most is the desire to maintain attention to the sound of the mantra to get disruptive ideas or feelings under control. There are explicit programs for these kinds of relaxation and it demands to start slowly and get into the rhythm. Mindfulness should be a regular practice, which eventually becomes a daily routine. It requires proper mindset and engagement, as well as space that can let the body concentrate.

After studying commonly available articles on the topic, my attention was brought to the correlation between outdoor and indoor space and mental wellbeing. Generally, the indoor space might seem more private and comfortable for the mind, however, it is revealed that the outdoors, especially green areas, are the healthiest for our minds in the long run. It is due to several factors, one of them being the need to experience a proper amount of light and fresh air for most of the daytime, which is quite challenging in the current way of living. Thorbjörn Laike, LTH Professor in environmental psychology, focuses on the research around how lightning affects us and its importance in our daily life. He argues that being outside as much as possible is the best for our health, as the infrastructure we live and work in, usually has an insufficient number of openings to let the needed sunlight in. Also, depending on where in the world we live and the seasons, there might be a great shortage of natural light. The option is artificial light, but spending time outside is generally still the best alternative for our mental wellbeing throughout the year, which is why staying and moving in the fresh air should be greatly promoted. Light, plants, materials, construction methods, temperature, and air conditions also play a role, as our senses affect our thoughts, emotions, and behavior, and therefore on our whole body. When our senses are positively activated, we can feel energized or calmed. As a consequence, spaces will affect our thought and behavior habits, promoting inspiration, preparation to act, and strengthening performance or focus. That's why a properly designed outdoor environment can make us choose to be outside to a greater extent, even on a grey, cloudy day or when it becomes dark. This makes a difference to how we feel and the spaces will help us recover and have a better mood.

Behavioural typology

The following works have been useful in guiding the approach to the thesis project, as well as inspiring the design process. The term healing architecture is not a defined title, however, if searching for a meaning of the healing architecture term as a healthcare facility, it refers to a physical environment. That space helps patients and families cope with the difficulties that come with the disease, hospitalization, medical visits, the healing process, or grief. An example of such a typology is the:

Paimio Sanatorium by Alvar Aalto is one of the examples of an object designed with a healing purpose, being a former place of treatment for tuberculosis. In X-ray architecture, Beatriz Colomina writes about the qualities that the architect designed for that purpose. Some of the healing qualities she describes are:

-Difference in approach to the room design from ordinary (for a “vertical person”) positioned to the room at the facility (for “horizontal person”).

-” Architecture was not part of treatment, it had to address the patient’s way of life. Living in a sanatorium for long periods makes it home. The hospital had to be taught as a new kind of house.”

-” The main purpose of the building is to function as a medical instrument... The room design is determined by the depleted strength of the patient, reclining in his bed. The color of the ceiling is chosen for quietness, the light sources are outside of the patient’s field of vision, the heating is oriented towards the patient’s feet, and the water runs soundlessly from the taps to make sure that no patient disturbs his neighbor.”

-” The bodily and psychological sense of the sick person was used to recalibrate architecture”

-” The outside wall is no longer the first impression one gets of a building. It is the interior, the spaces in-depth and the structural frame which delineates them, that one begins to notice through the glass wall. This wall is barely visible, and can only be seen when there are reflected lights, distortions, or mirror effects... Glass is noticeable yet not quite visible. It is the great membrane, full of misery, delicate yet tough.”

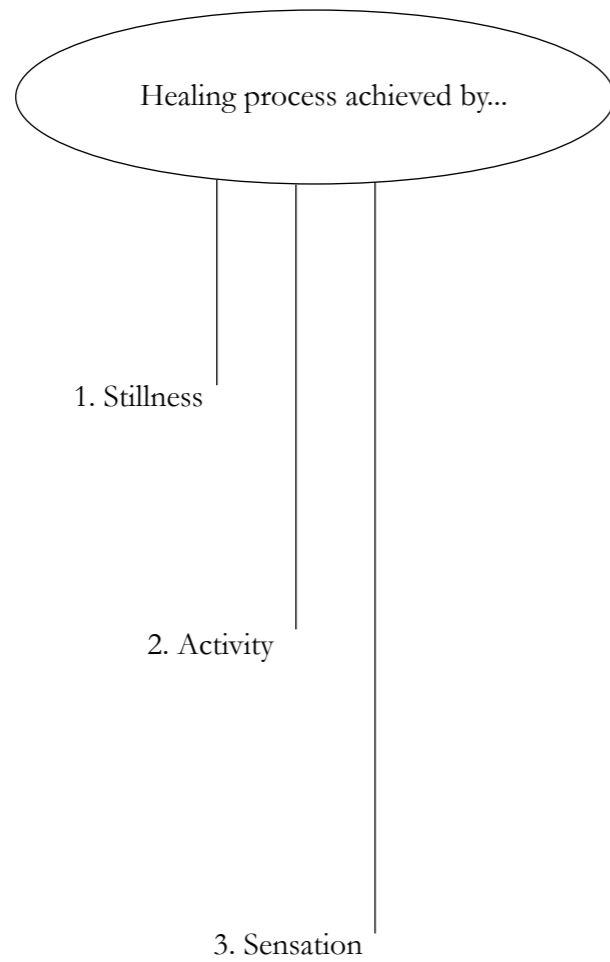


Fig. 1 Tranquil oval shapes of the Paimos sanatorium building volume.

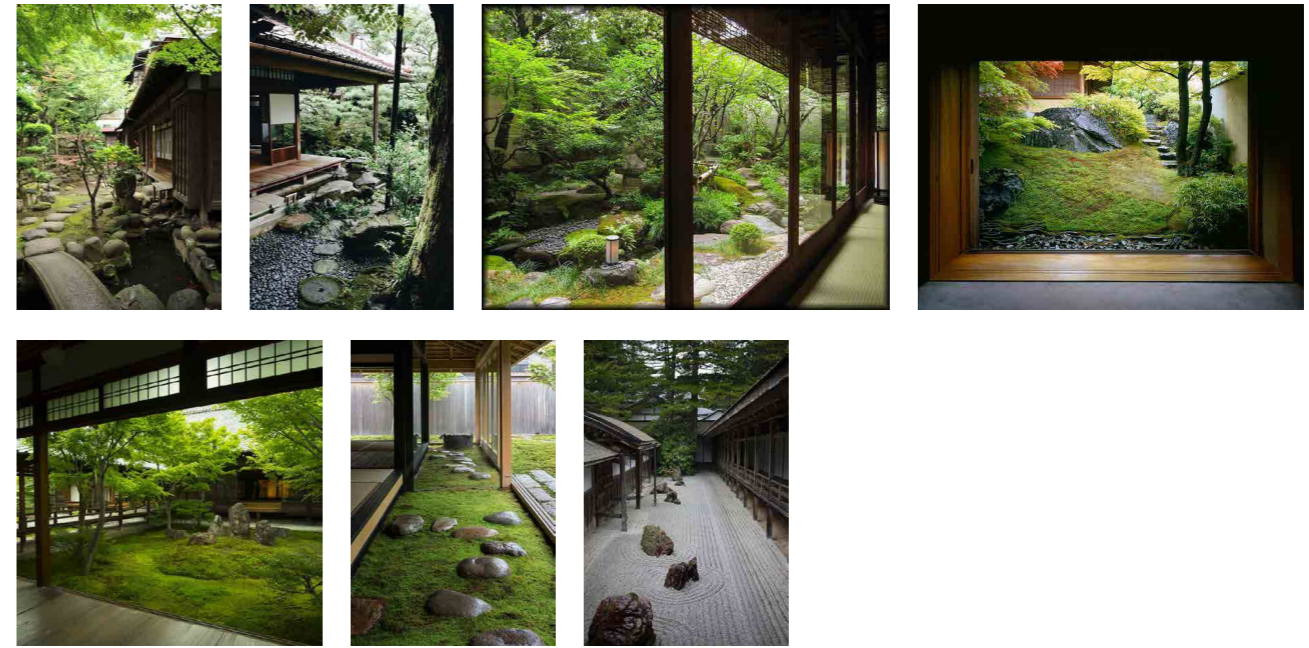


Fig 2,3 One of the healing spaces works with healing with sunlight and fresh air exposure. The structures design focus on smooth lines and repetitive structure which bring patient comfort.

Conclusion from the research and focus areas for the design proposal.



1. Asian traditional architecture's approach to the cultivation of the view. Relation of experience between inside and outside medium. Aim to achieve variation of levels of privacy and feeling of safety. Fig. 4,5,6,7,8,9,10



2. Experience of sequence of spaces. Activity based healing. Focused on walking meditation. Fig. 11, 12, 13, 14, 15, 16, 17, 18



3. Reference images for intervention that aims for achieving soothing exposure to sunlight. The secondary focus is view connection, noise, and tactile sensation. Fig. 19, 20, 21



There is currently no design for this sort of therapeutic typology that links the urban environment and landscape. The thesis project allows studying what such a typology may imply. The project's purpose is to examine the possibility of merging the healing process with public space, visualizing the soothing process to introduce new perspectives on dealing with mental discomfort in society.

Frequent visits to the site were an important component of the study to comprehend the real intent. Additionally, the results of an assessment of numerous publicly available sources related to mental healthcare and its link with architectural space were combined in a healing architectural framework which I called a toolkit. The toolkit illustrates an assessment of the issue beginning with stressful situations that cause distress and discovers architectural solutions through a variety of treatment strategies.

The interventions are based on real-life scenarios, and respond to the formal requirements of the site and program, while it also tries to challenge the scale by creating places for individuals, as well as the community. By proposing different architectural components, the design attempts to call the concept of mental health in the city structure into question.

Healing architecture toolkit

- Stressful factors	-Feeling/ Illness	- Healing process (strategies/ tools to avoid illness or recover)	-Architectural strategy
Context Crowding Work pressure Density Noise Darkness (season) Family pressure Existence pressure	Burnout syndrome Stress Anxiety Fear SAD (seasonal depression) Continuous tiredness Pain Chronic pain Exhaustion Self doubt Headaches Depersonalization Social phobia Ptsd (trauma) Anxiety disorder Depression Psychosomatic disorder	Therapy techniques: -Psychodynamic therapy -Behavioral therapy -Mantra walking -Humanistic therapy Meditation / Mindfulness -Sitting meditation -Visualization, focus -Cognitive behavioral therapy -Mindfulness Avoid stressors Relaxation (take a break) Reflection Assimilation Writing, Journaling, Education (routine, creativity hobbies, focus, organize) Awareness Protection of time Acceptance, gratitude Self care, being alone Connect with people Exercise -shot of endorfines Breathing techniques Sense of safety, excitement, exploration, discovery, space Animal company	Expose to view (horizon) Expose to distances Expose to greenery, water Expose to senses Color management Reflective space (meditative) Movement / Stagnation Noise /Music Consider changing seasons / time Lighting too much too little? Ventilation Social Isolation / Expousure Elements of scales Materiality, tectonics (soft/hard) Texture Sunbathing Public/ Private Levels/ Heights of privacy

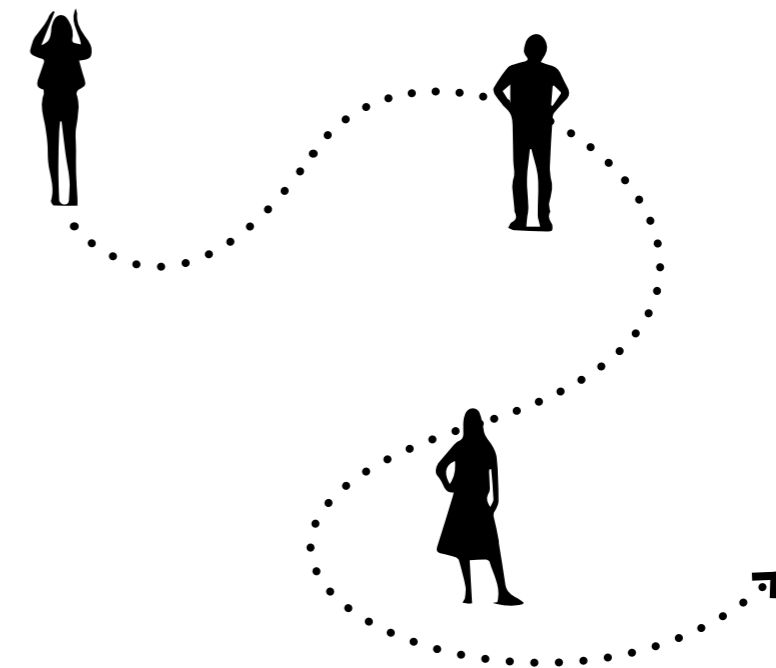
Working with a variety of designs, the project aims to develop solutions for people with diverse experiences and backgrounds. Even though mental illness is a broad issue, the intervention is intended to investigate treatment solutions on general grounds. The toolkit is meant to serve as a guideline for architectural work, while also providing an overview of the topic's complexity. As a method for this report, the toolkit will inspire the aesthetics, as the program will set up strategies to follow for the type of respective typology with healing qualities.

The project aims to propose an innovative design that acts as a medium between the infrastructure and the landscape. The user groups are divided into categories of varying mental stress levels:

A person with the highest level of stress: Prescribed to go to healing architecture. This user needs the privacy and intimacy of the space. He or she found out about the place from a family doctor or therapist. The architecture will bring this user safety and comfort.

Medium level of stress: Heard of the place with healing qualities and wants to experience it. A visitor who is interested in working with overcoming mental pressure discomfort.

Low level of stress: passers-by and residents experiencing the architecture on their way. The local citizens are interested in the infrastructure and want to find out how it works.



Areas of interest
 Urban approach and analysis
 Site strategy

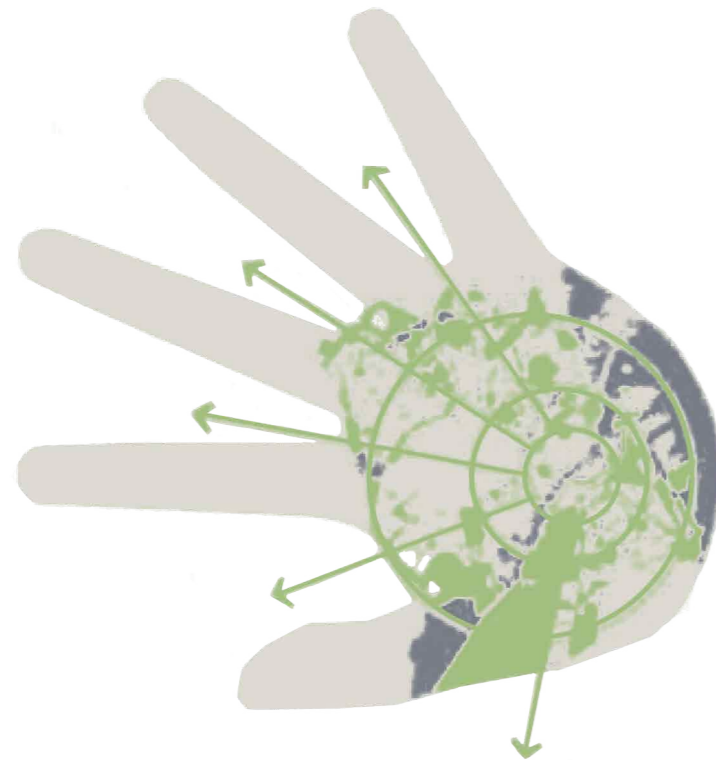


Fig. 22 Copenhagen finger plan:
 Urban idea for placement of green zones.

I chose Copenhagen as the city of my investigation, mainly because I can visit it the most during my thesis semester. I believe that the possibility of frequent visits to the site is an important factor in this project. Furthermore, I began to search for a site by reflecting on already collected knowledge around healing typology. Firstly, I want to design the structure in the city where it can be easily accessible for most of the inhabitants. So the proximity to the ways of communication, as well as popular landscape trails, is a major advantage. Another aspect is closeness to greenery. Proximity to nature was observed to have the greatest advantage for relieving mental stress. Most of the sanatoriums are placed outside the city for a reason. On the other hand, dense urban environments as places of greater discomfort are places that should be examined and improved. These fragile areas passed by on the way back from running errands or work are important assets and should not be neglected for the sake of mental treatment. Learning from that, I believe that the healing architecture should be placed on the edge of both mediums. This allows us to reap the benefits from the soothing green qualities as well as create a framework for mental healing in an everyday urban environment. I end up working with the Sydhavn cemetery area. It's a beautiful green complex used as a cemetery, but also there are already municipal plans for changing part of the park into a therapeutic garden. I drew up the edge zone of the area and that helped me find 3 sites with different but also coherent conditions.

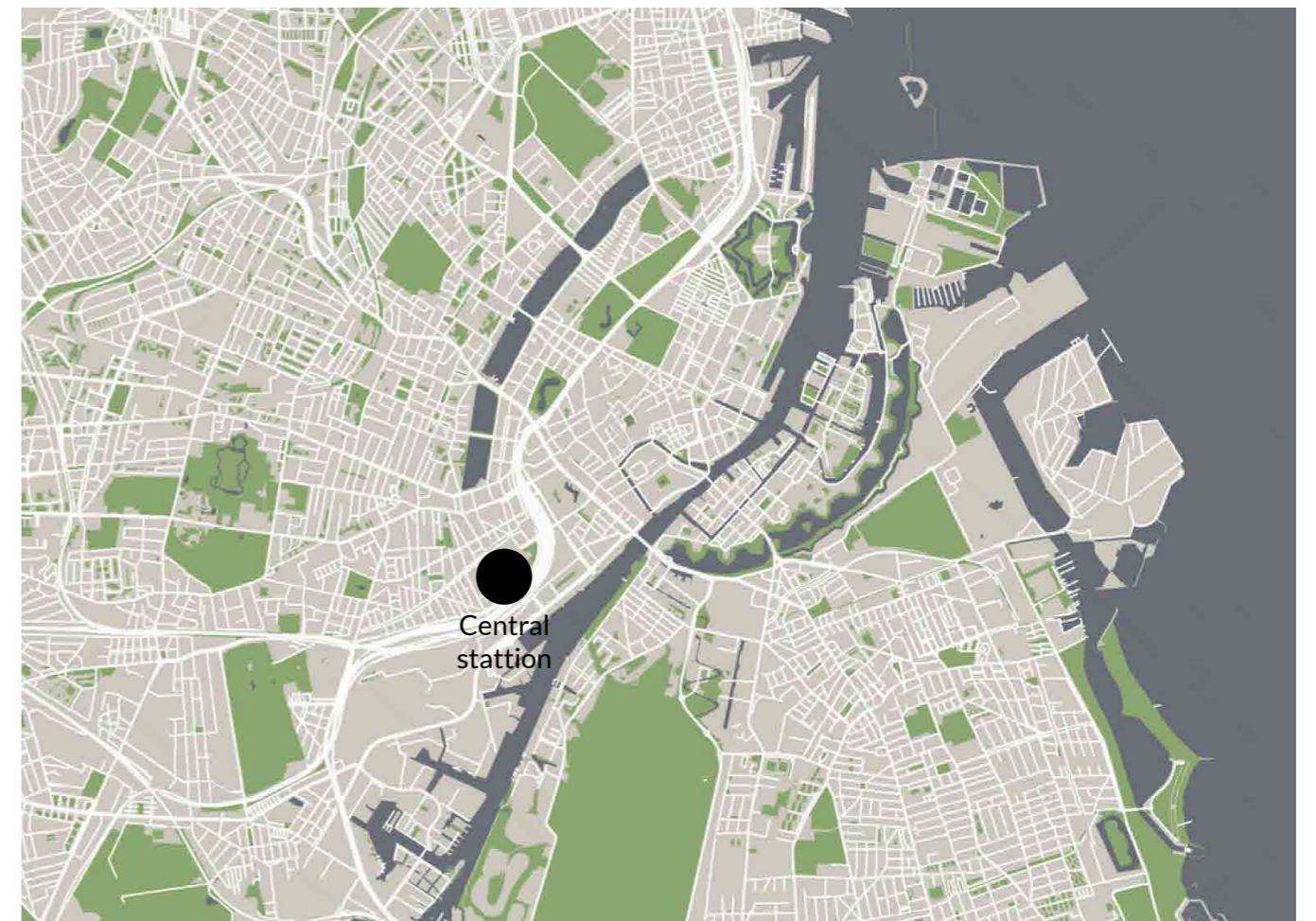


Fig. 23 Location of green areas in Copenhagen, potential placement of objects on the intersection of urbanity and green/blue mediums to enrich qualities. Healing architecture should be well accessible.

Urban approach and analysis

To address a place for architectural interventions serving mental pressure release, I found two categories:

- A potential place -

A place with existing healing qualities: nature, green/blue space, calmness, design-driven by embracing healing qualities of the environment

- A challenging place -

A place with a lot of urbanity and infrastructure: urban area, concrete, chaos, alienation, design-driven by the creation of healing space in a mentally overwhelming setting

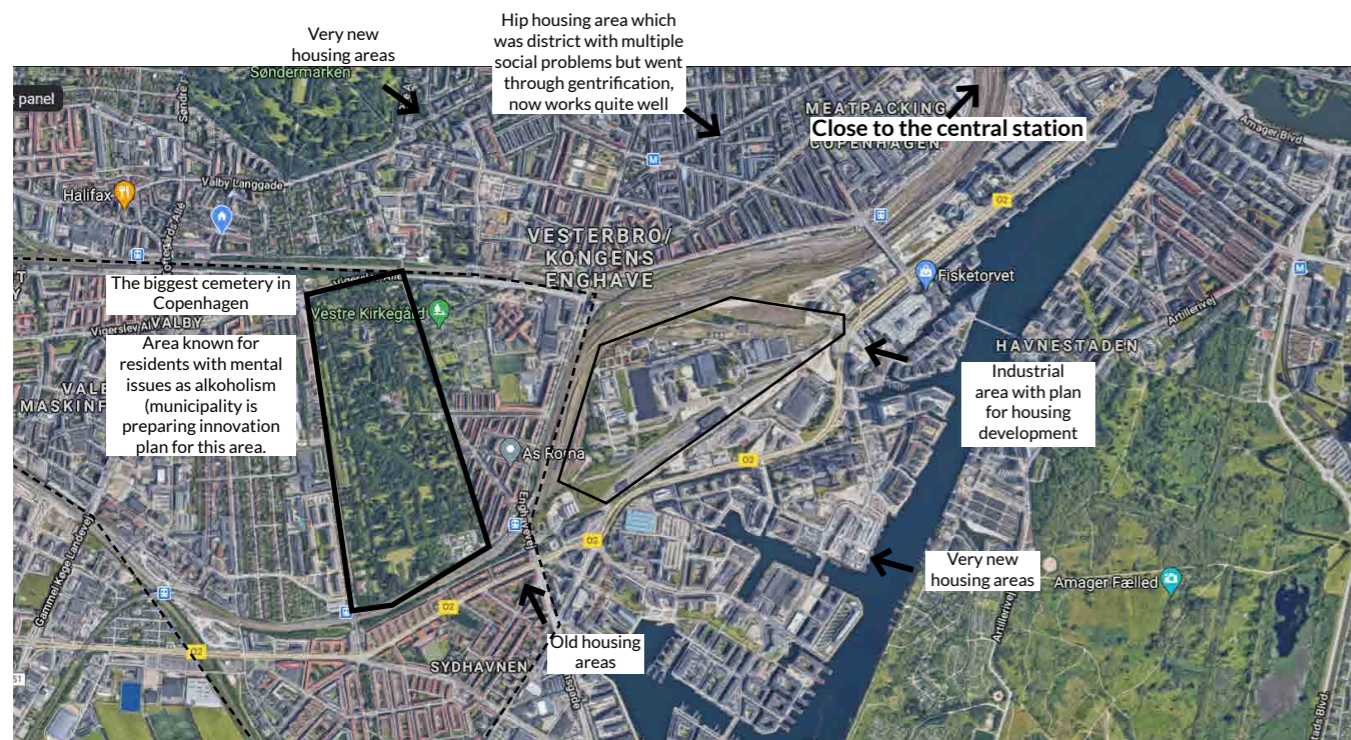
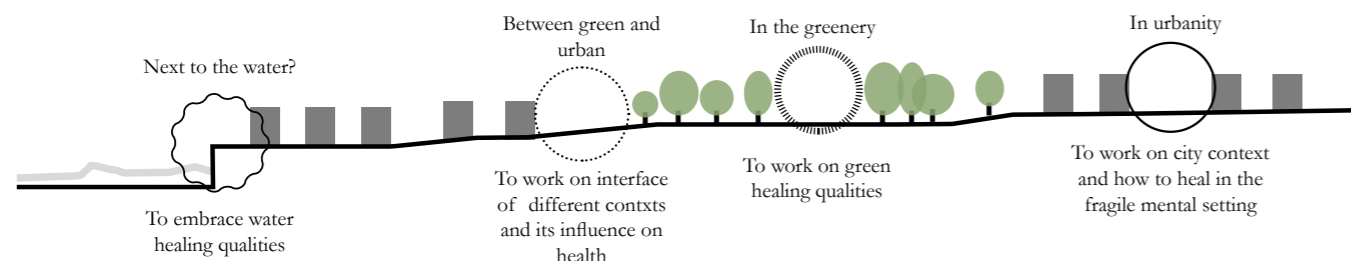
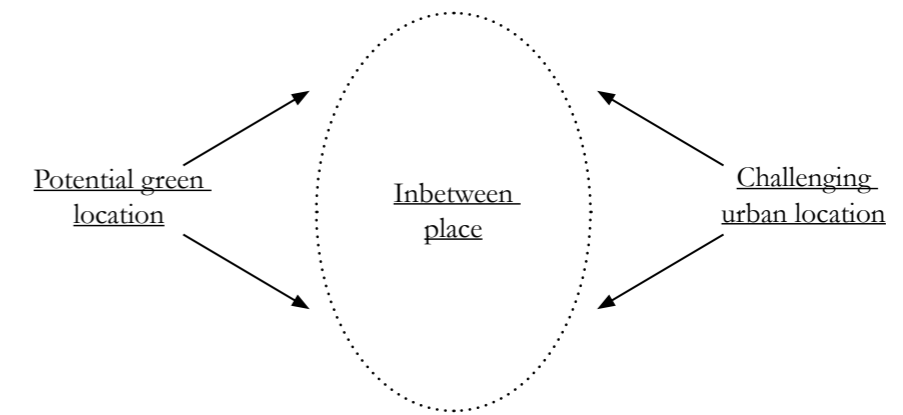


Fig. 24 Area's analysis.

Where to place healing architecture?



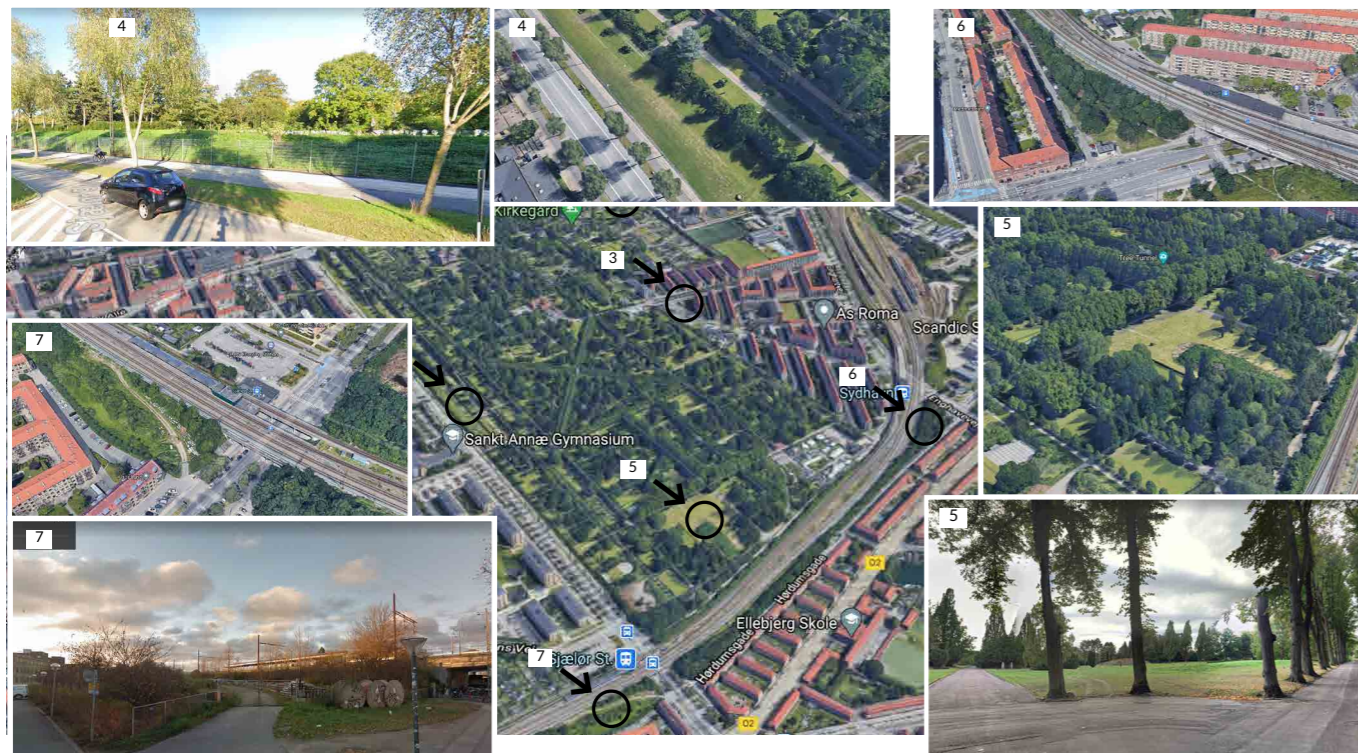
Design focused on investigation of phenomena placed on intersection between different urban settings and its influence on mental health.



Fig. 25 Location of sites in different environments and main sites on the edge zone of the chosen green area.



Fig. 26 top 27 bottom. Search for a site on the edge of a green area.



To conclude, the healing architectural typologies will be placed on the edge of the green and urban mediums. The experience of the various features (potentials and challenges) of each environment will become a guide through therapeutic sessions in an architectural space. Participation in this environment is supposed to enhance the soothing quality of mediums by assimilation to everyday life scenarios. The observer will establish its tools for resistance to mental pressure in an alternative space. One of the main factors is its positioning in proximity to public trails.



Fig. 28 top 29 bottom.



Site strategy

I chose three sites for my investigation. These sites have different, but also coherent conditions: Firstly, they are placed next to landscape trails and are positioned quite close to the public transport stations. Secondly, they are well accessible to most inhabitants of the area and are open for visitors from different parts of Copenhagen. Finally, they are placed in an urban condition, but with a big amount of greenery.

1st site: Courtyard house intervention

The site is placed at the end of the central pedestrian path of the cemetery, which is supposed to emphasize the exit of a park.

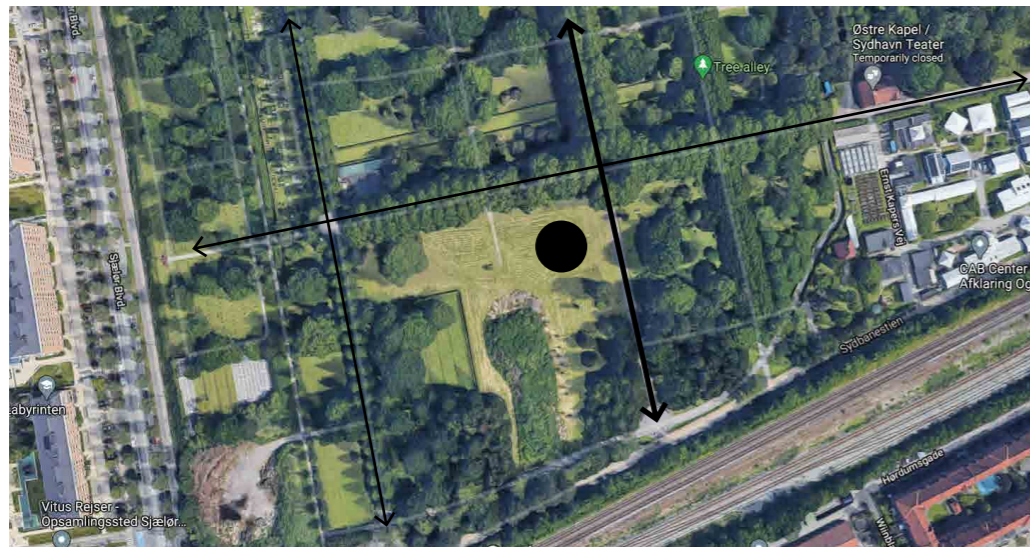


Fig. 30

On the intersection of main paths. Close up.



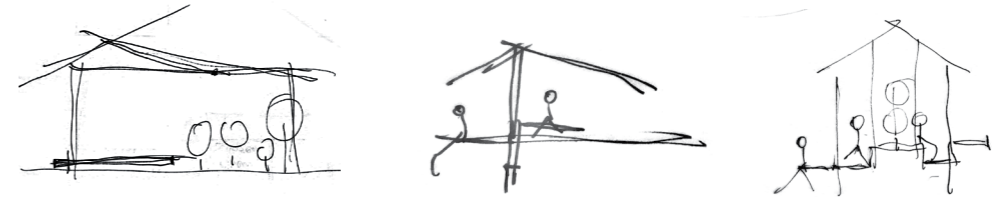
Fig. 31

Inspirational images from the Vestre Kirkegård graveyard area.



Fig. 32, 33, 34

Initial sketches made after the site visit, by the author of the report.



Views from the site. Empty still grass area surrounded by guiding paths.

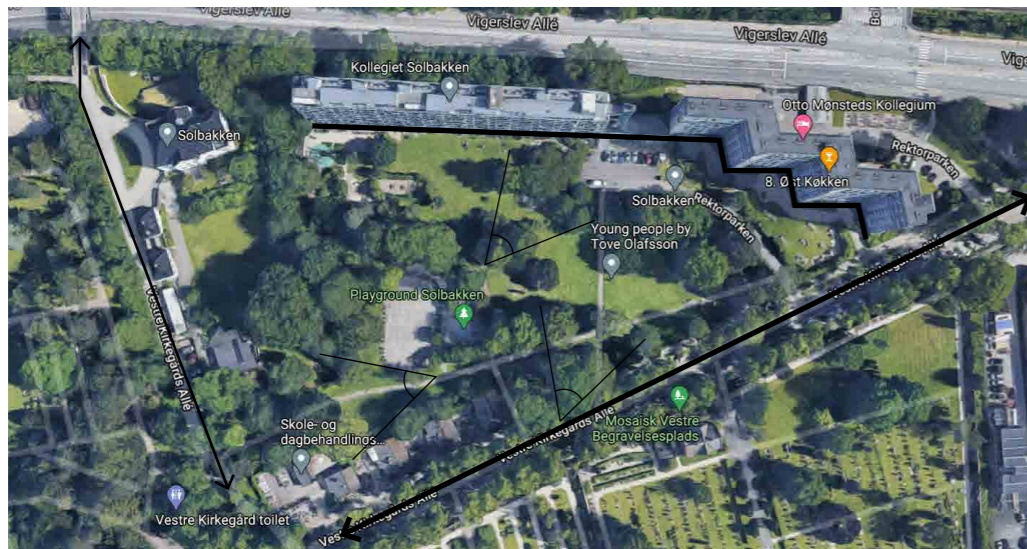


Photos taken by author of the report.

2nd site: Promenade typology exploration

The second location is situated on the other edge of the investigated area, just before the entrance to the park. The area works as an entry zone to the housing complex which defines its border.

The site consists of multiple housing activities: from a playground to a medium-sized basketball field to a community garden and a chicken cage.



Multiple views on the site. There are a lot of tall trees and the grass area seems undefined.

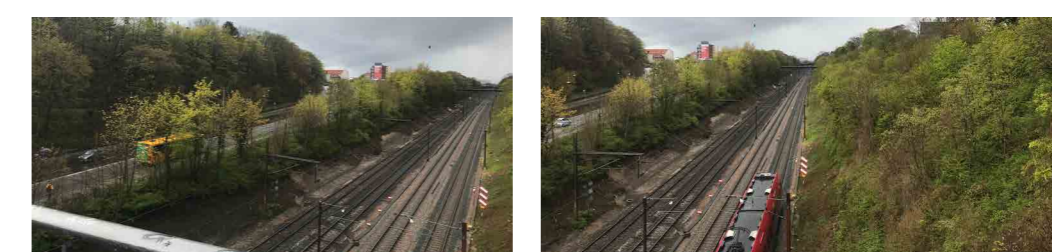
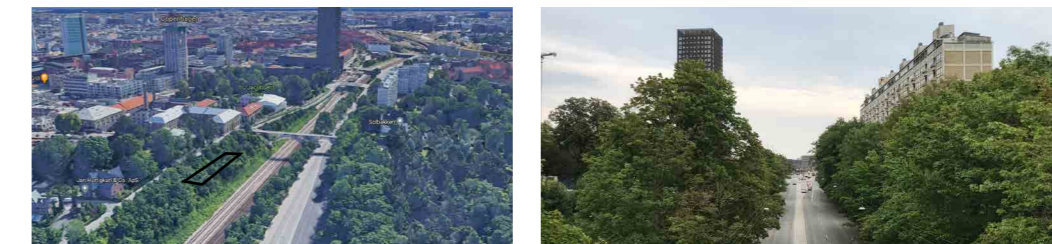
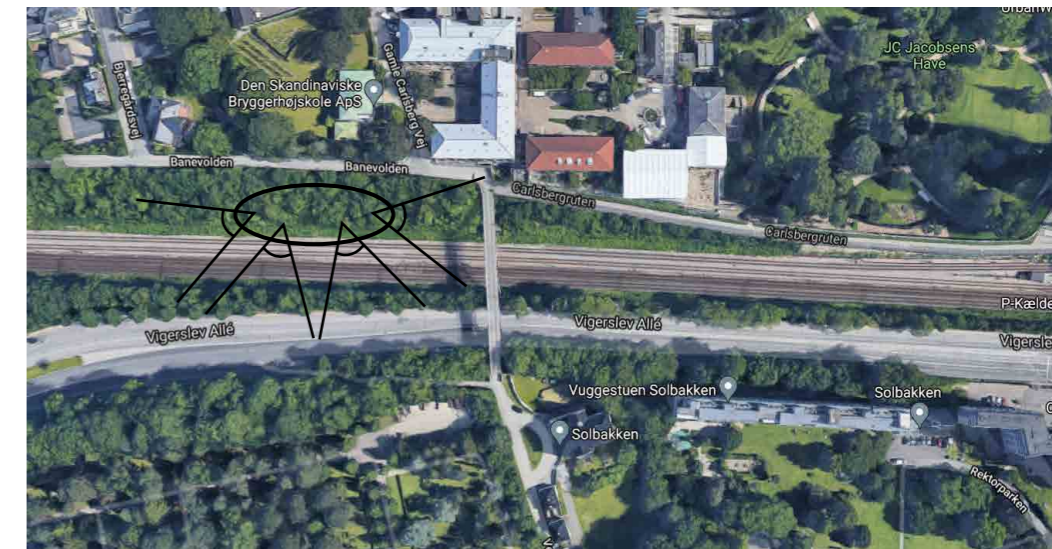


Fig. 35 map, photos taken on the site visit by the author of the report.

3rd site: Terrace typology

The last site is located quite close to the second one. The location has steep topography, being placed on a very green downhill edge, which finishes with a train line. The site faces rail tracks to the south and a popular pedestrian path on the north side.

The site consists of multiple viewing points and is highly accessible. Locals are using this path as a landscape walking route, with the greenery being very lush and consists of a variation of bushes and shrubs to medium trees.



The entry to the site is blocked by greenery and the steep edge.



Fig. 36 map, google view print screen, photos taken on the site visit by the author.

Design proposal

- Introduction of typologies
- Courtyard typology
- Promenade typology
- Terrace typology

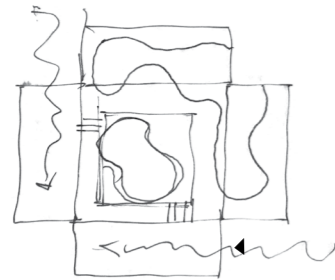
Introduction of architectural interventions

The healing typology exploration consists of a courtyard, a promenade, and a terrace structure. Each typology is positioned on various sites and works with different ways of healing. The participant is becoming a patient of the healing architecture. The main objective of the architectural intervention is that the patient will gradually work on their awareness, and be equipped with the knowledge of soothing tools which they will continue to use in their daily life.



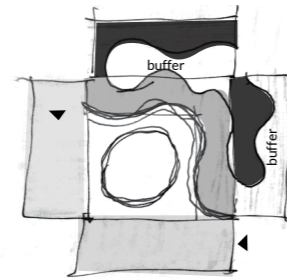
Courtyard house intervention - design principles

The design focus lies on a number of described strategies. The first typology will focus on the idea of healing through tranquillity, stillness, sensory stimulation and different levels of privacy. The following principles will repeat accordingly in the second and third typology.



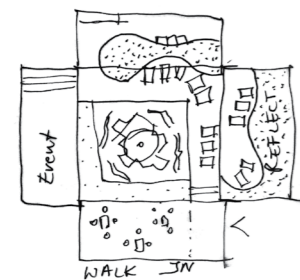
Accessibility

- unobstructed, divided, - guided -positioned next to popular pedestrian paths



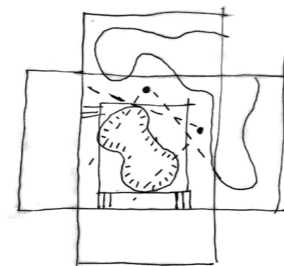
Levels of privacy

- entry -buffer -gradation of the private zone -the enhanced feeling of safety



Program

- meditation -observation
-yoga, exercise -reading
-small event zone



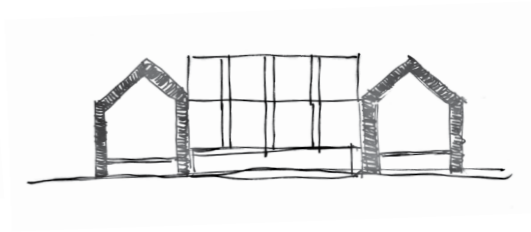
View plan, sensations

-focus points
-choice of the healing position



Materialities

-sensations connected with the tactility of the material
-contrast of heavy and soft materials
-sustainability



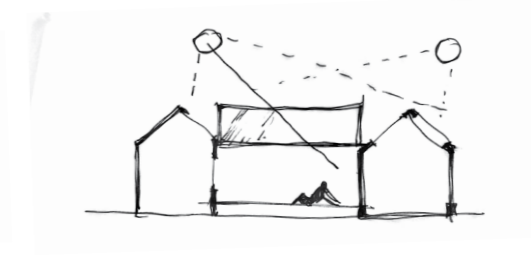
Main constructive grid

-structural system -column and beam structure



Nature importance

-at the center of the attention -dividing space-changing seasons considered for design



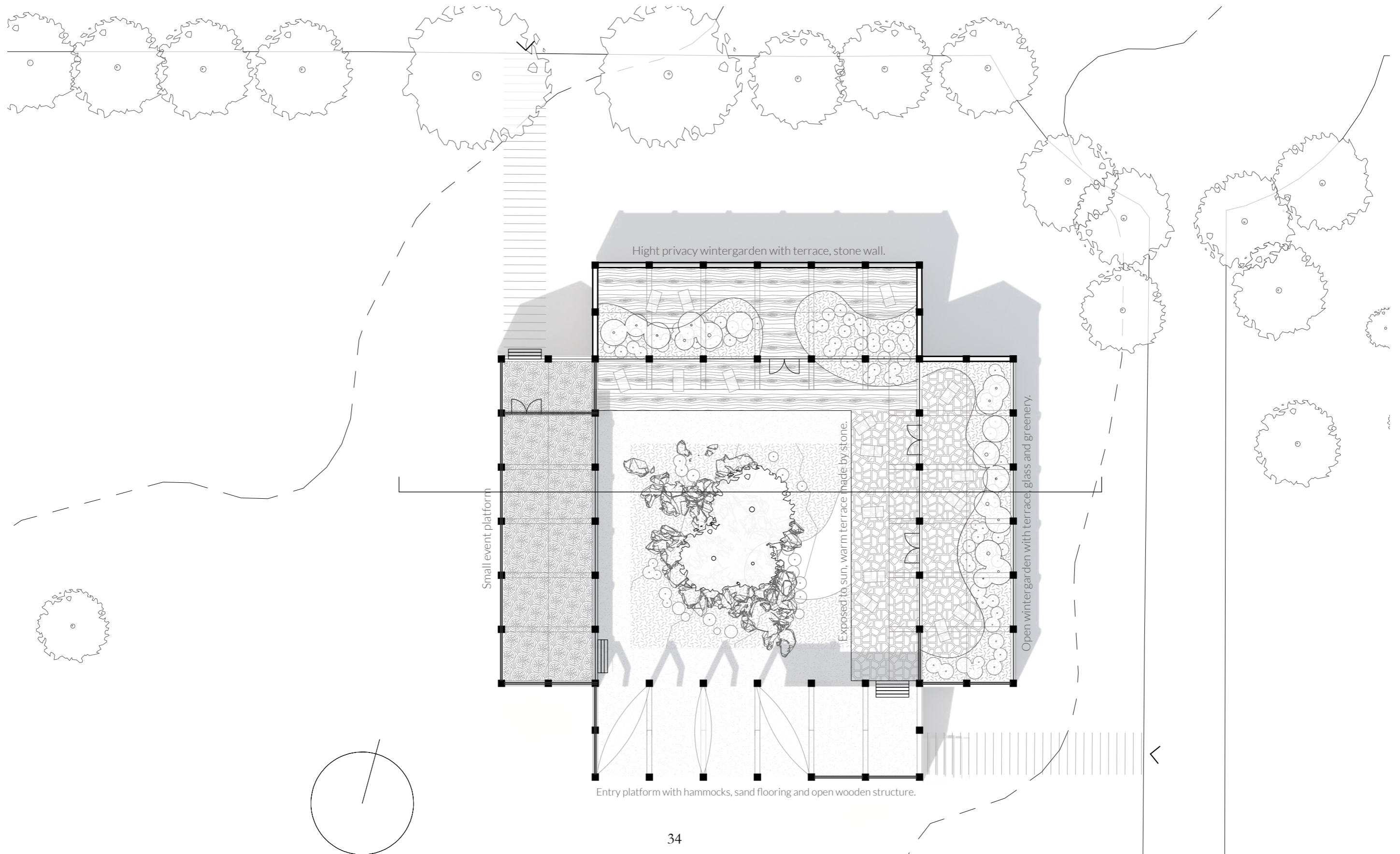
Sun orientation

-possibility of experiencing sunlight all day round
-skylights

Courtyard house typology exploration - plan drawing

Through the experience of different materialities and multiple levels of privacy, the typology aims to propose a space for the visitor with the highest levels of stress, although it doesn't exclude other previously mentioned target groups. The plan consists of four secluded volumes, emphasizing the division of experiences.

The plan is by the presentation of various textures showing the journey throughout the structure: Starting at the two entrance volumes, which are characterized by an open lighter facade, with wood and sand flooring, and finishing at the volume which is secured by stone cladding.



Courtyard house typology exploration - isometric drawing

The isometric drawing demonstrates the relation of four volumes and the importance of a centrally located courtyard. The building's construction follows a structural grid, while the cladding is changing according to the program. There is a terrace next to the more private zone, suggesting a visual connection as well as exposing the visitor to sunlight.

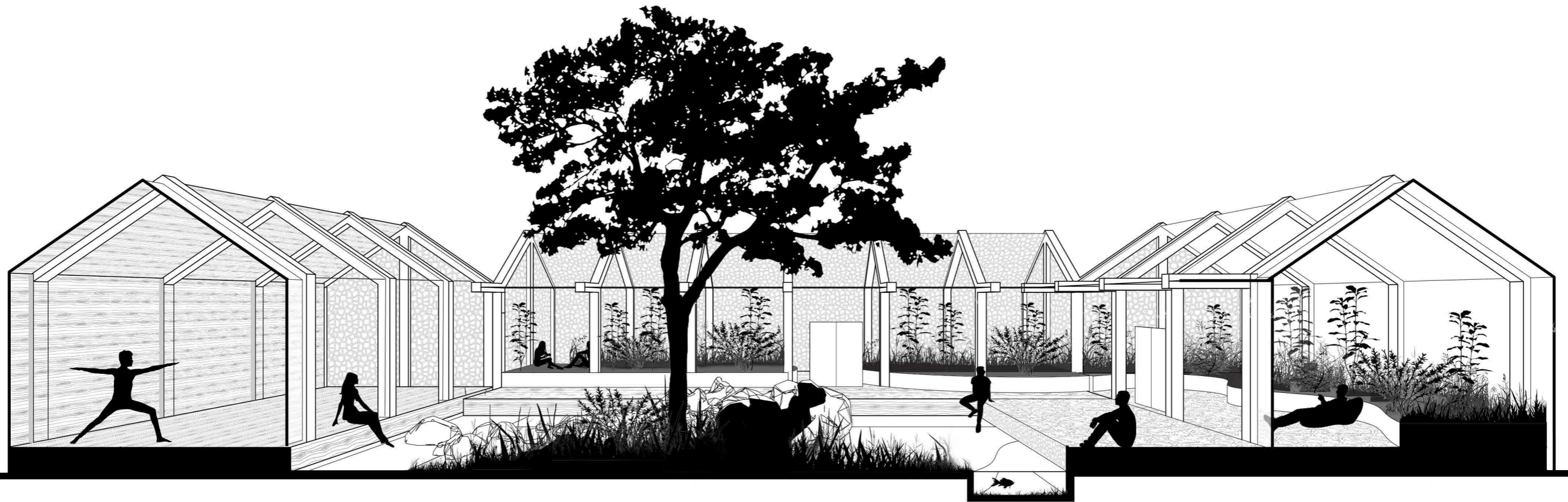
The roof is partially closed and see-through, which is working as a provider of sunlight and shade. The more closed volumes are working as winter gardens. The terrace from one volume is built from wood and the other from stone, so that the tactility changes accordingly.



Courtyard house typology exploration - section drawing

The outdoor and indoor greenery will allow participants to experience a different sort of nature, as well as a change of seasons. The greenery works as a noise and a view buffer, as well as a central piece of the composition. The middle garden is designed with the use of traditional zen components such as stone, gravel, and a pond. All of these elements are supposed to initiate a feeling of stillness and security.

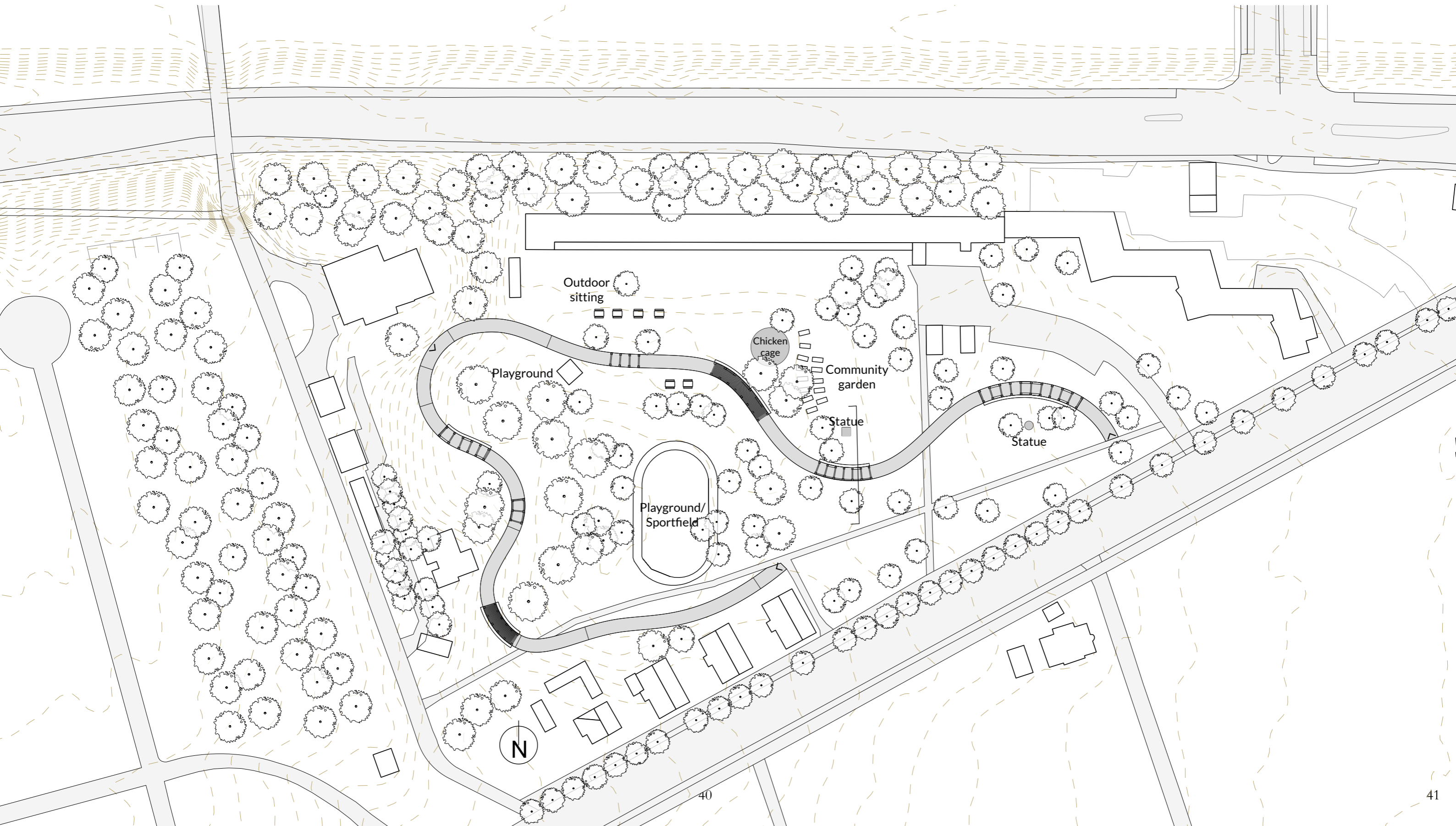
The healing program is composed of an entrance volume with a terrace for small events such as calm concerts, lectures, as well as yoga and meditation classes. With its sand flooring, the other entrance volume allows guests to feel different textures to slow down, stop to lie down in a hammock or have a glance to the courtyard. From the terrace the person will enter a private zone where they can feel comfort to stay and practise healing treatment like resting, observing, reading, writing or a calm talk.



Promenade typology exploration - plan drawing

The second typology will work with ideas relating to the soothing walk, its velocity, and the iteration of the spatial experience, as its focus lies on healing through repetitive, mindful activity. The structure has three entrances: The first one is an entrance zone from the main road and starts with a promenade slightly elevated from the ground. Furthermore, the slope changes and the structure invites the participant to a walk between the trees.

The plan surrounds the activities of an area, which are a community garden with a chicken nest/cage, a playground, a barbecue spot (with benches for the inhabitants of a nearby housing complex), and a small basketball field. The distance to the activity zones allows separation of the soothing walk and the everyday life scenarios of the park.



Promenade intervention - isometric drawing

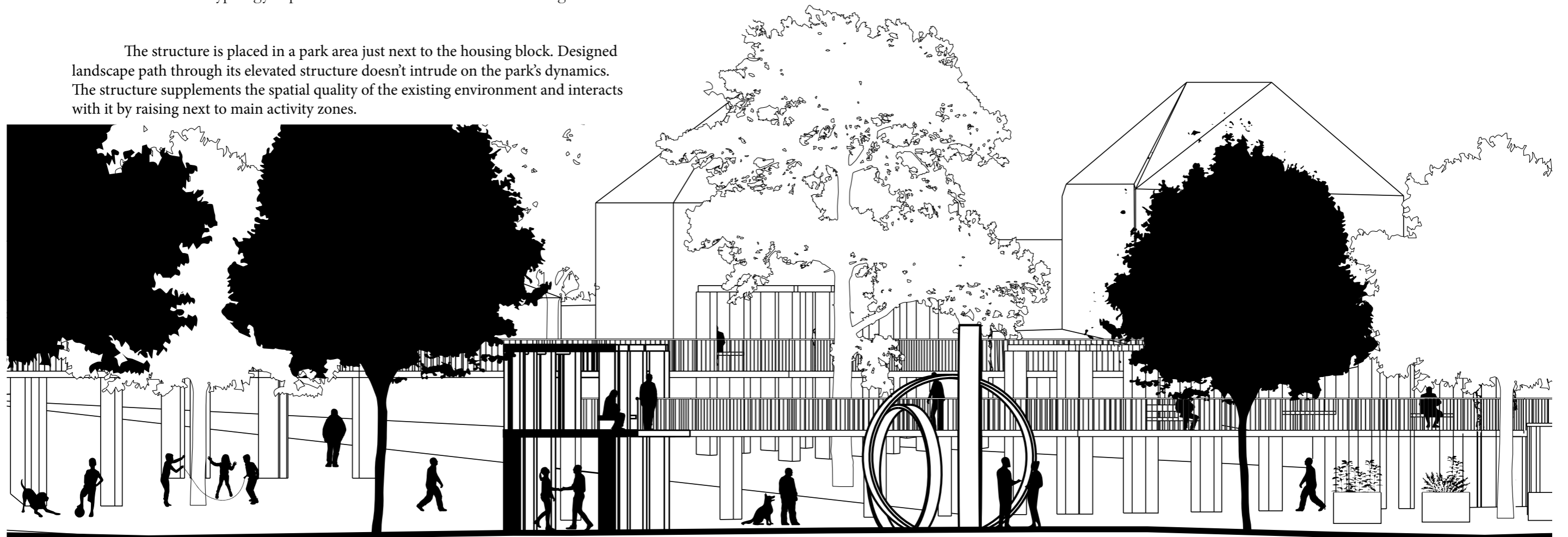
The walk is supposed to be a smooth passage with round, but not rapid turns for the experience of continuity and comfort. The walk is constructed from a wooden deck and the structural column grid from brick, which is separated with wooden stud walls. The structure is alternately closed by walls, columns, and ceilings.

The structure beside the walking path is also support for various greenery, which climbs, hangs, or leans on it. The different greenery consists of green leaf plants, as well as multiple types of flowering plants and tall grass. It is supposed to create atmospheres for the changing seasons.



Promenade typology exploration - section and isometric drawings

The structure is placed in a park area just next to the housing block. Designed landscape path through its elevated structure doesn't intrude on the park's dynamics. The structure supplements the spatial quality of the existing environment and interacts with it by raising next to main activity zones.



Repetitive grid structural concept, to calm through walking.



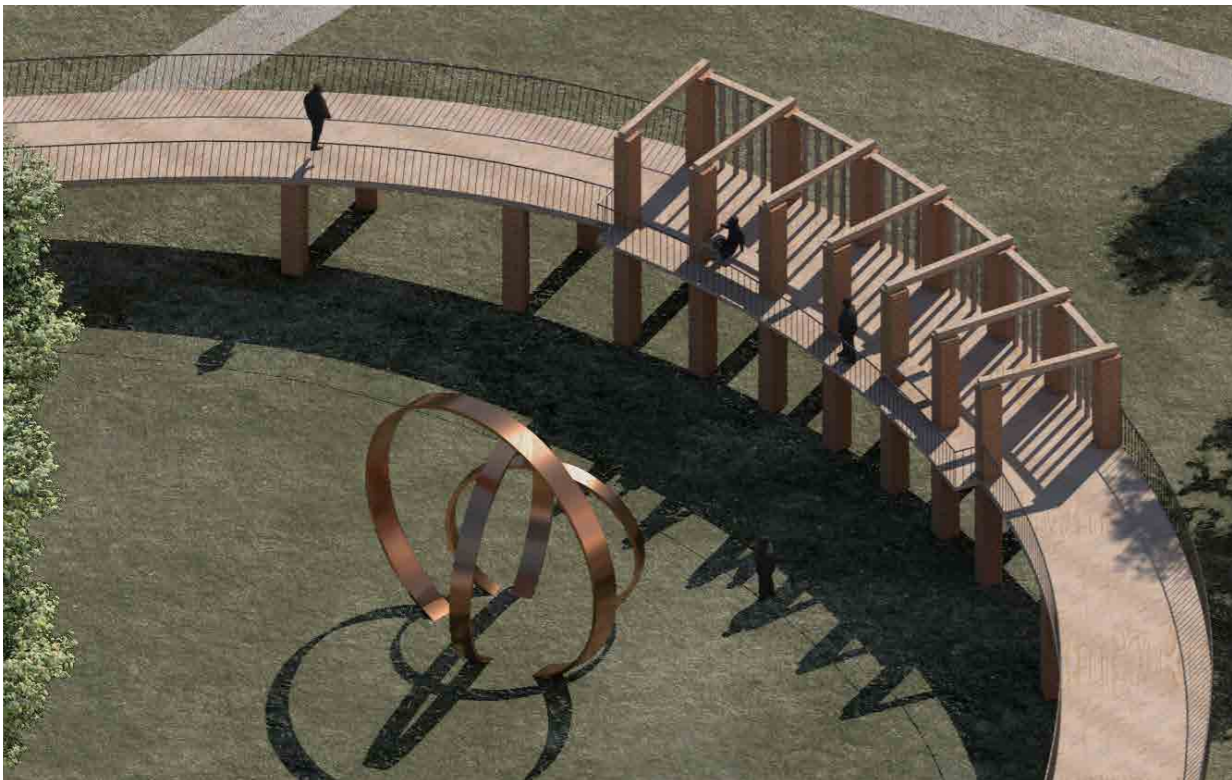
Walking in between trees set back from reality to the world of reflection.



Promenade intervention - close up isometric drawings

The program changes from focus-oriented at the start of a walk, to more open and experience-oriented on the go. The repetitive structure of the walk changes how open and closed it is to the outside, and proposes a step out from the walk, to sit and hide next to the brick column while feeling safe and calm observing the outside elements.

Healing focused on visual experience on designed reflective composition.



The healing process is achieved by the experience of a calm walk, as well as a choice of a break and rest. The sitting is designed to be outside of the walking path for a short reflection on the go, designed to give space for one or two people on each bench. They are spread along the grid with a dividing gap to ensure privacy.

Healing by assimilation to society, sneak peek on community activities outside the walk.



Promenade typology exploration - walking views

The greenery yet again works as a buffer, while in this typology it also blends with structural elements and the grid, supplementing it and controlling the closeness and openness of the path. The atmosphere changes with the seasons and weather conditions, so besides the repetitive construction, the landscape changes and evolves in time.

Descent from the path to private sitting zone.



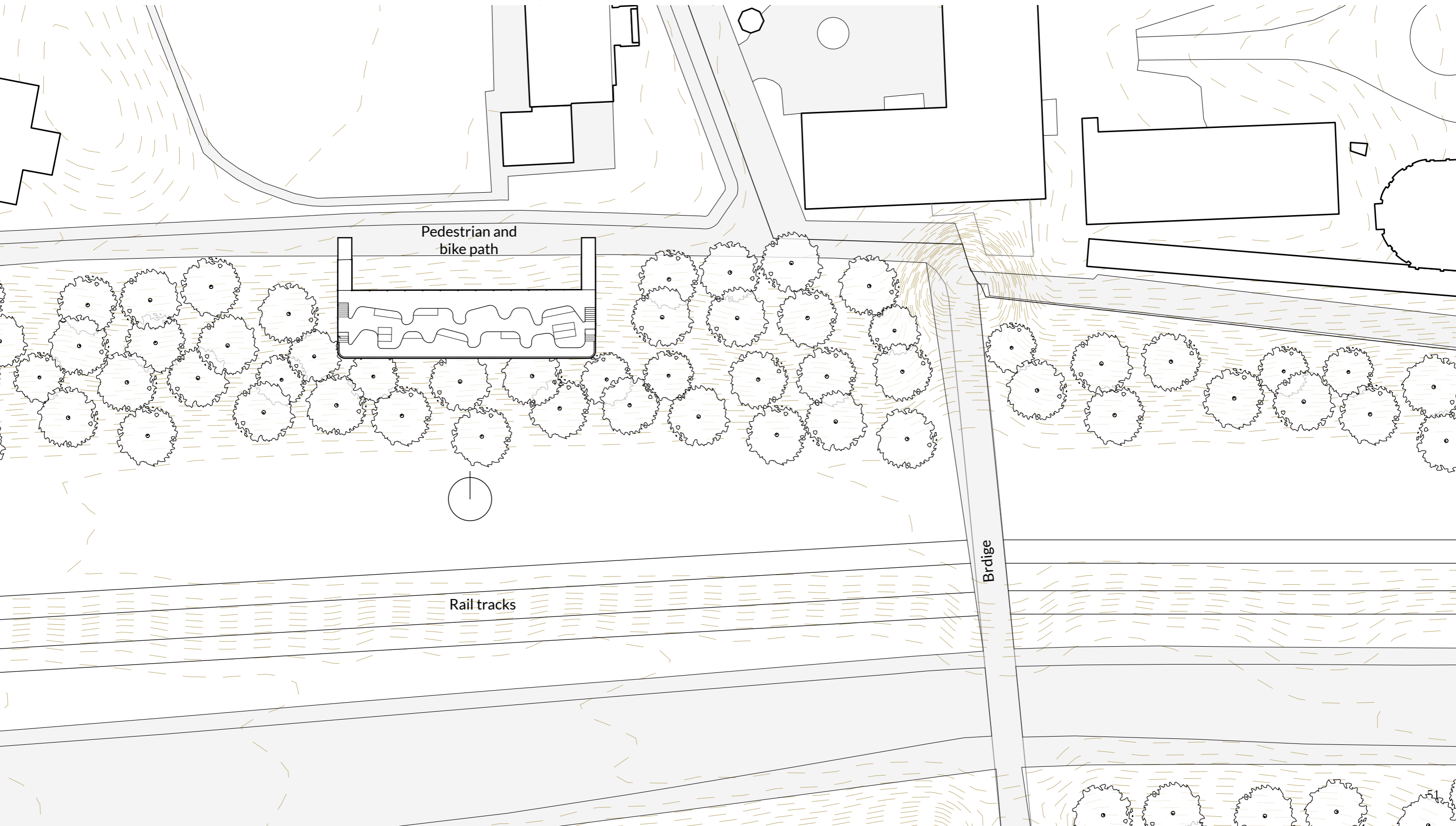
Promenade walking experience visualizations.



Terrace typology exploration - plan drawing

The last intervention will explore the therapeutic features of sunbathing, and is positioned next to a popular landscape path in a single house neighborhood. The terrace is hanging on a sloping terrain that belongs to the side area of a rail track. There is sufficient distance to the rail tracks so that the passing by train is experienced as a cyclical noise rather than an obstacle.

The structure focuses on the gradation of levels to make visitors feel safe while sunbathing so that when someone enters the terrace divisions achieved by height difference, they ensure privacy. The sitting areas are designed to face multiple directions, so the participants can't see each other and will always have an unobstructed view of the healing feature of looking at the horizon.



Terrace intervention - isometric drawing

The structure is made from wood, supported with internal concrete elements and foundations. The lush greenery of the slope surrounds the objects, which makes them blend in with the landscape of the terrain and creates a feeling of almost flying in the greenery.

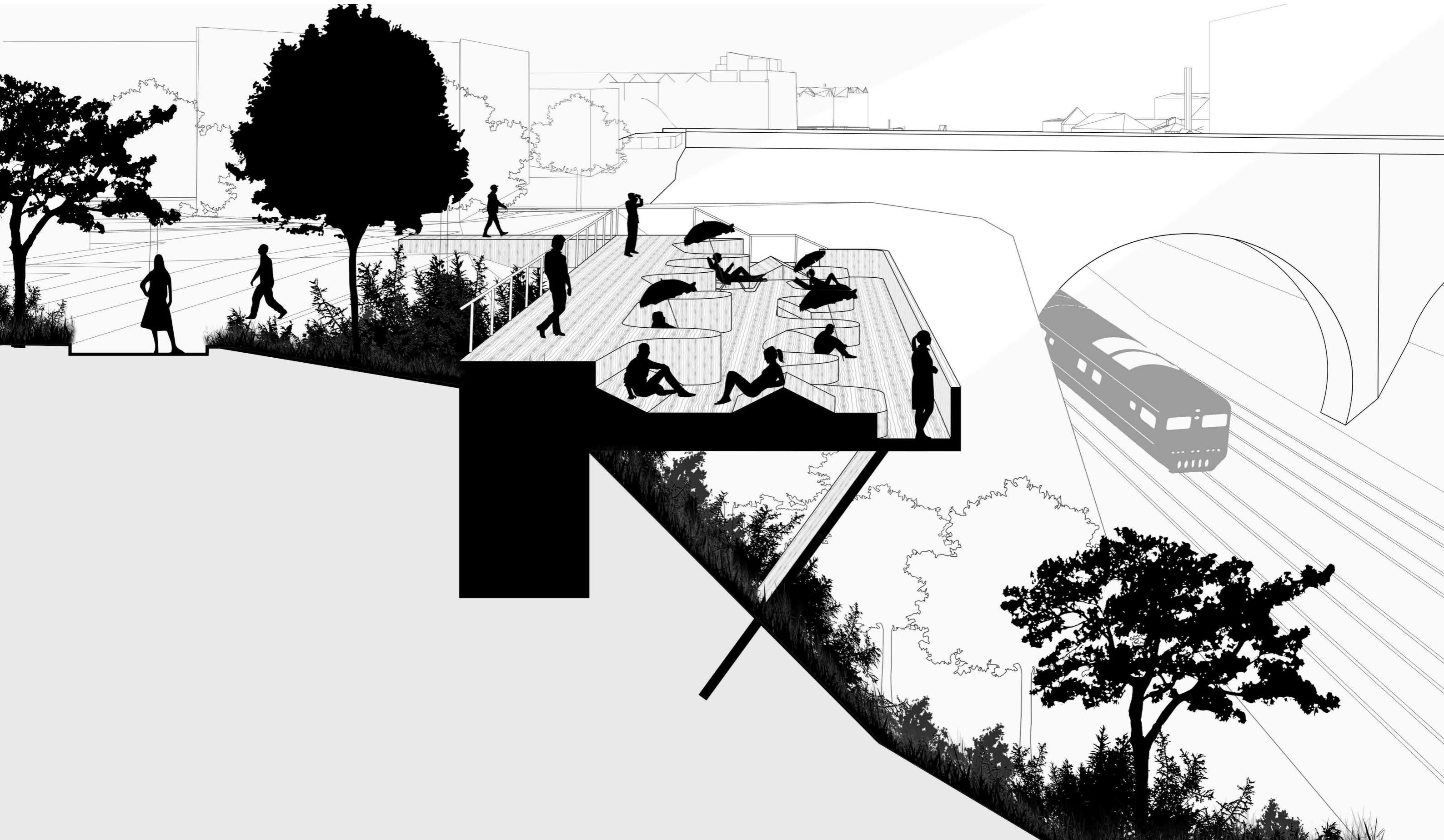
The architecture of the object is divided by its levels, as well as walls between each place of relaxation. In addition, the lounge areas vary in size, view direction and can be used by individuals or for groups from two to four people.



Terrace typology exploration - section drawing

The terrace is placed with a setback to the public path, with its entry via a wooden platform. The greenery between the pedestrian zone and the terrace creates a barrier protecting the secure impression of the healing space.

The sitting experience is improved by the design of ergonomic slopes, so the visitor can have a bigger possibility for choosing which position is the most comfortable at the time. The view from the terrace gives a great opportunity to relax and focus on a mindful moment.



Conclusion

The thesis project leads an investigation of a psychological field and aims to rethink architecture that could supplement the mental healing process of our times. The architects were found to be interested in the matter of health for decades, however, I feel that the theme of mental healing should be continuously revised and improved, following the changes in the society we live in. The issue addressed by the thesis comes from my background, as well as multiple conversations with other people, which made me reassured about the importance of following up on the initial idea with architecture. Researching the psychological subject created a framework for the design, and I surprisingly managed to find many architectural answers in a psychological source, which made the process consistent and correlated with the analysis during the whole process.

Firstly, the project proposes an urban strategy in Copenhagen. The scales shift from urban to architectural and finally suggest a design with an exact size and function leading to a better understanding of an investigated intervention. The exploration of the typologies is enriched by the proposal of three objects and various ways of soothing to make an emphasis on people's individual experience of emotional pressure. By the thesis' shifts between scales and multiple structures, it's supposed to start an elaboration around the subject of healing and hopefully a discussion with the reader. The architecture proposes healing measures that will focus on therapeutic programs, as well as their aesthetics. Frequent visits to the sites helped to establish spatial challenges and potentials, as the project works with different correlations with the landscape. Finally, it answers for various soothing needs of the target groups, working with multiple levels of intimacy and activities. I believe that the found spatial interventions full-field the aim of recommending architectural solutions in the urban structure for mental health care for most people.

The urban analysis brought me to decide on a strategy which then leads me to the choice of 3 pilot attempts for healing typology exploration. These locations' goal is to host an architectural intervention that will be highly accessible for the previously described target groups. The chosen sites have different but quite coherent qualities, they are all placed next to the popular bike and pedestrian paths as well as consist of greenery and needed space for the proposed structures. Thus, that is supposed to help the already troubling neighborhood to deal with the mental pressure of the habitats but also invite people from other areas of Copenhagen. However, it might seem that the choice of the location for the exploration of healing typologies could have its place in a more challenging urban scenario. I believe that the chosen sites helped me to achieve the focus on the investigation on various ways for mental stress relief. Based on this thesis, I reckon that my research can be followed up by the design of further urban interventions in different environments especially in a modern denser urban setting which can bring knowledge of more healing spatial outcomes. Saying that I managed to obtain my aim in studying and implementing my research into architecture. The planned interventions can create a destination and potential for the region and the general idea of spatial healing. Through that, I hope that this dissertation can reconnect the matter of psychological treatment with the way the architecture is planned and established during current times. Nevertheless, due to the recent Covid situation, our society is becoming more and more aware of our physical and mental state. I hope that this thesis will bring spatial answers and relief for challenging times and will correspond with my future design work.

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And more commonly available sources about mental healing which I read throughout the whole semester and based my whole knowledge on.

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Fig. 21 Claude parent oblique function sketch, Retrieved March 20, 2021 from <https://www.core77.com/posts/47856/Claude-Parents-Vision-for-a-Tilted-World>

Fig. 22 Redrawn diagram from article, Retrieved March 20, 2021 from https://ec.europa.eu/environment/europeangreencapital/wp-content/uploads/2012/07/Section-3-green-urban-areas_Copenhagen.pdf

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Fig. 26, 27, 28, 29, 30, 31 Screenshot map from google maps of Bavnehøj area with street views, Retrieved March 20, 2021 from <https://www.google.com/maps/@55.6580236,12.5318002,15.74z>

Fig. 32 Vestre kirkegård crematorium, Retrieved March 20, 2021 from https://en.wikipedia.org/wiki/File:Vestre_Kirkegaard_Copenhagen_soendre_kapel.jpg

Fig. 33 Vestre kirkegård church view, Retrieved March 20, 2021 from <https://www.kk.dk/artikel/vestre-kirkeg%C3%A5rd-mellem-sydhavnen-valby-og-vesterbro>

Fig. 34 Own photo taken on a walk around Vestre kirkegård in April 2021, by Justyna Krokowska

Fig. 35, 36 Screenshot map from google maps of Frederiksberg, Valby and Bavnehøj area, Retrieved March 20, 2021 from <https://www.google.com/maps/@55.6580236,12.5318002,15.74z>