



Mind

in the

External:

A Rehabilitation Facility
for the Clinically Depressed

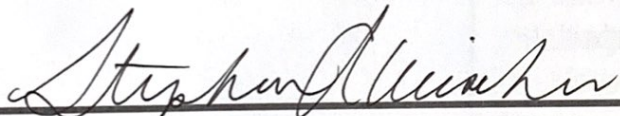
Signature Page

A Design Thesis Submitted to the
Department of Architecture and Landscape Architecture
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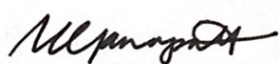
by

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Abstract

Recent studies in neuroscience suggest that our minds are actually projected into the outside world and the outside into our minds. By mixing this new knowledge with philosophy, research has shown that our built environment deeply effects our mental health. Rehabilitation facilities today are either extremely isolated or very under designed and closed off from the city around.

My architecture acts as a solution to bring patients back into the city while remaining an open campus to facilitate a transition back into their own homes. The treatment center is focused on patients with depression and provides an environment that changes their perspective by carving into the earth and providing pathways that connect users to the larger world and the cosmos.

Inspired by Orpheus' journey from darkness into light the building acts as a filter for storytelling and a cathartic experience of healing. The design respects both public interaction and patient privacy by nesting the individual within the design and the design within downtown Chicago.

The interlacing of public and private allows the visitor to become a participant in the architectural fragments that encase the project.



Narrative

"A body is the entire material or physical structure of an individual organism; it is also an entity composed of numerous members..."

-Sarah Robinson

We see the world through stories. Through stories we find understanding. We communicate through stories. You get to know someone by understanding their story. The story of this project began with a very personal journey and grew into something that makes sense in a larger cultural context. By going back and forth between stories in history, science and architecture, I have found a solution to the problem of architecture for mental health.

Mental health facilities have never really been, but especially now are not fit for the type of healing that needs to happen inside their walls. We have come so far in the understanding of mental health that we must redefine what good design is relating to the medical field and more particularly, the field of the treatment, or lack thereof, for depression. I'm challenging not what is happening inside of these places, because I understand that the remedies and medical studies are much more advanced than ever before, but the importance of space and where these things are happening needs to develop just as strongly as the fields of study inhabiting them.

Hans-Georg Gadamer discusses the importance of space in his book, *The Enigma of Health* where he critiques the specialist as a doctor, not of their medical practice, but the environment in which it happens. The remedies given, in theory, are all correct, but in practical use they may not be the right fit for this particular situation. This is because we have removed the overlapping of studies. We have removed the doctor from the environment in which the illness was developed. Here, the doctor better understood the nature of the whole, the whole that is the patient and their environment. An example from nature, the goldfish grows to the size of its tank. This is a natural physical phenomenon of the effect of space.

Through philosophy, neurosciences, and psychology I am trying to change the way we look at our facilities for depression. By bringing them together. Because things happening during depression occur on such a molecular level, I want to start with understanding how our brains actually work. Our bodies themselves are composed of numerous groups. The body parts: head, torso, limbs; the body functions: nervous system, muscles, bones, etc. These parts create the whole of the body. There is no distinct line between them. We can separate them by each system, but in doing so, we break it. It no longer works. To be whole, they need to function together. Our brains are a part of that system. They are a part of the nervous system. The brain is the head of the nervous system which causes our bodies to move, to feel, to taste, while these same processes, called neurons, are what causes us to perceive. This perception is our consciousness. What we see, hear, smell, taste and feel is our entire world inside the organ we call our brain.

"Just as we do not draw an impermeable boundary around the brain, we will not draw such a boundary around the individual organism itself. The environment of the organism will include not only the physical environment, but... the cultural habitat of the organism."

- Alva Noe





Our clinically depressed are put in a building, no phone, no TV, and no leaving. No connection to the people, city, or nature around them. This acts as a metaphor for their minds.

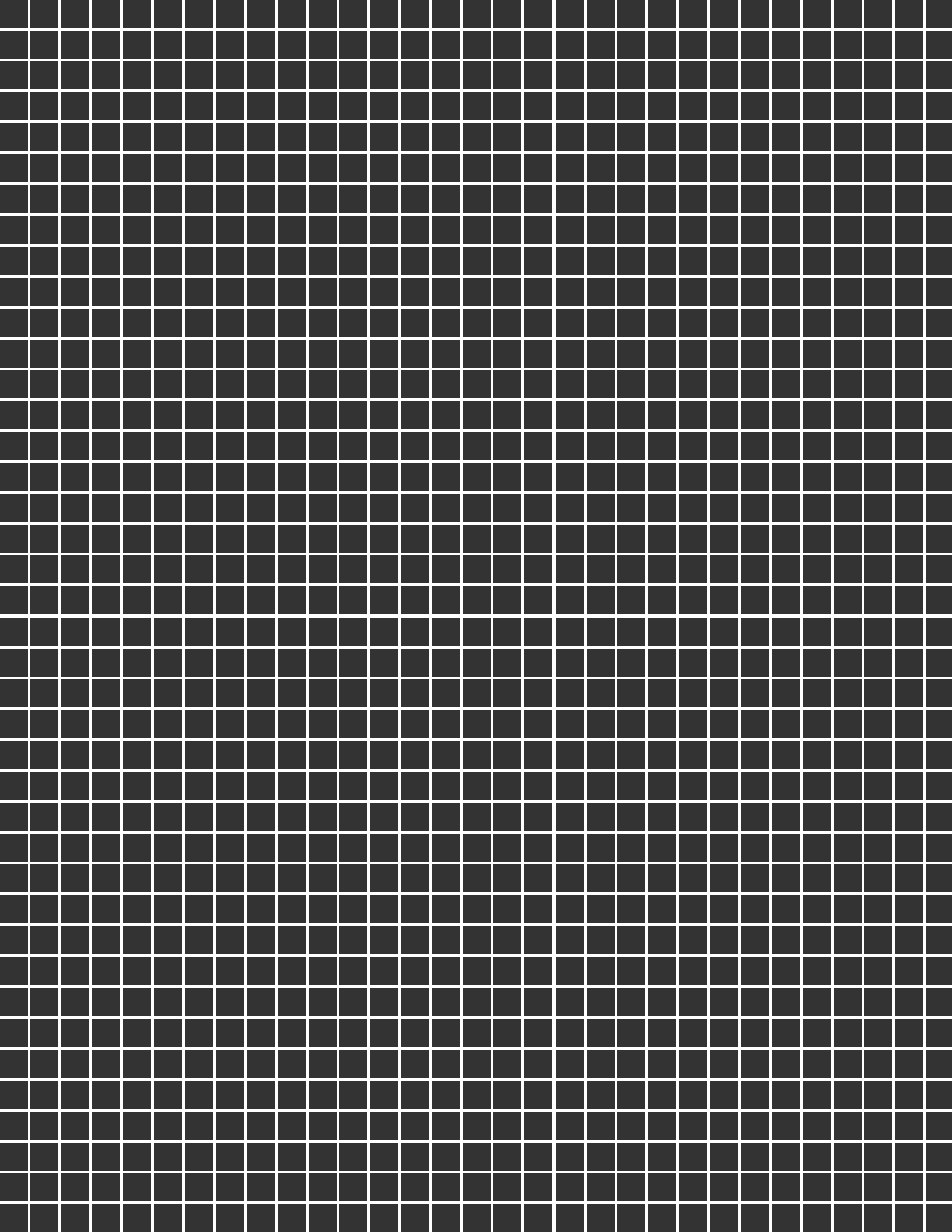


They build walls up around their thoughts to protect themselves because that's the only way they've been taught. They might open up inside this "safe space" but once they get back into the real world, there's no real transition. Creating an atmosphere, or *Stimmung*, in design may help this transition, but doing it in a way that is not controlling, that leaves the individual believing that it is of their own doing. Giving them ownership of their own actions, of their own lives. These overlaps are where connections happen. Passing through a doorway, the blurred line between outside and inside. Walking along a sidewalk, the connection of the public and private. I want to create and utilize these transitions. I want it to be woven into the fabric of the city, woven into the fabric of our being. In my project I want to move the treatment back into the heart of the city. I want it to be intertwined, or overlapped, with "normal" life.

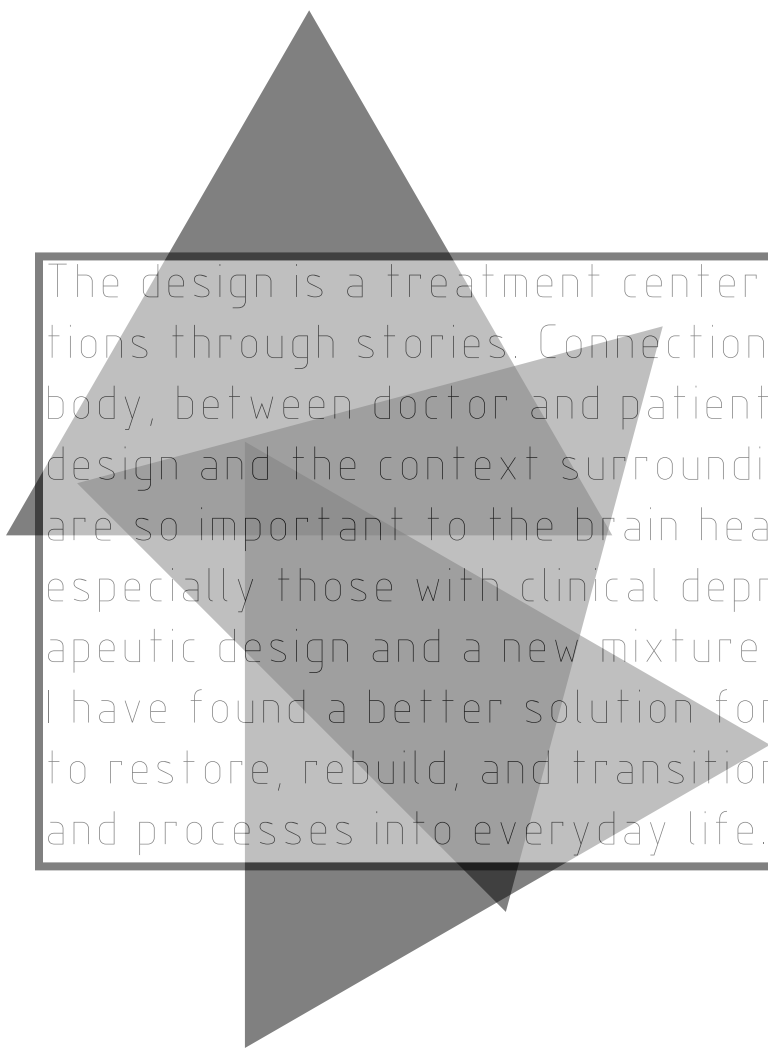


“Thus even the dark misfortune of mental illness provides confirmation that a person is not an intelligent animal, but rather a human being.”

- Hans-Georg Gadamer



Typology



The design is a treatment center that creates connections through stories. Connections between mind and body, between doctor and patient, and between the design and the context surrounding it. These overlaps are so important to the brain health of all individuals, especially those with clinical depression. Through therapeutic design and a new mixture of healing processes, I have found a better solution for our healing centers to restore, rebuild, and transition individuals, thoughts, and processes into everyday life.

Programmatic Elements

Spaces

Therapy

- Group
- Psychoanalysis
- Cognitive
- Humanistic
- Existential
- Meditative
- Outdoor
- Physical

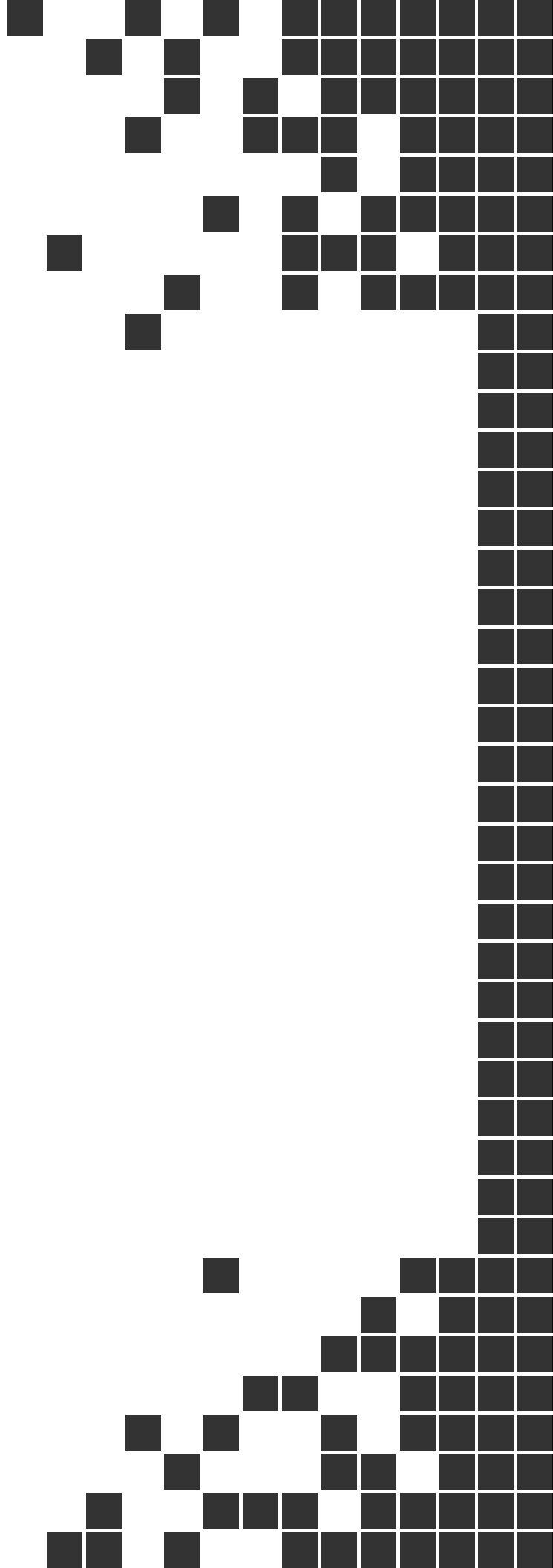
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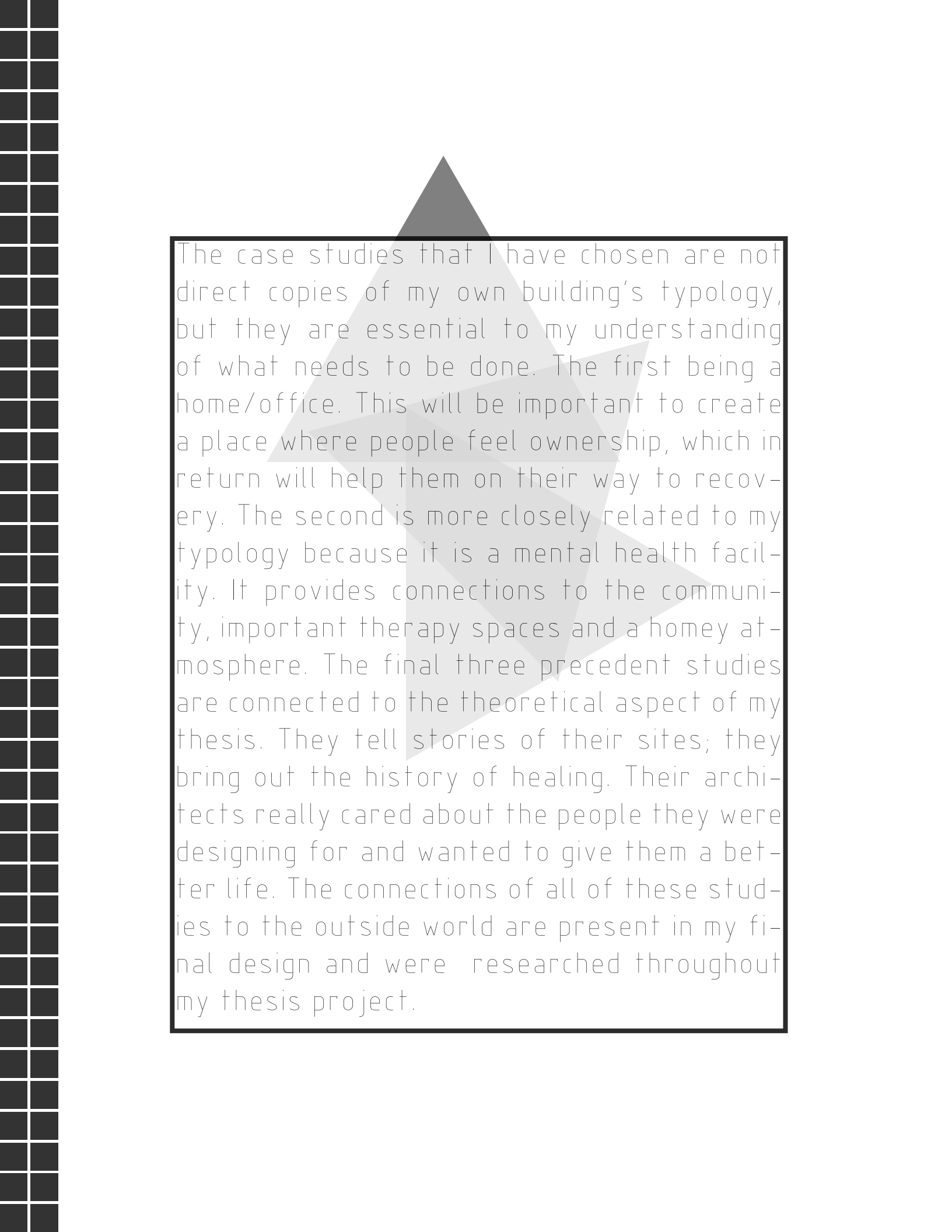
- Long Term Housing
- Short Term Housing
- Bathrooms
- Doctor's Offices
- Medical Examination
- Kitchen
- Dining
- Circulation
- Mechanical

Exchangeable

- Recreational
- Public Space
- Visitor Rooms

Precedents





The case studies that I have chosen are not direct copies of my own building's typology, but they are essential to my understanding of what needs to be done. The first being a home/office. This will be important to create a place where people feel ownership, which in return will help them on their way to recovery. The second is more closely related to my typology because it is a mental health facility. It provides connections to the community, important therapy spaces and a homey atmosphere. The final three precedent studies are connected to the theoretical aspect of my thesis. They tell stories of their sites; they bring out the history of healing. Their architects really cared about the people they were designing for and wanted to give them a better life. The connections of all of these studies to the outside world are present in my final design and were researched throughout my thesis project.

Building: The Mental Health House
Architect: Austin Maynard Architects
Location: Australia
Area: 167 m²



This home was created for the architect by the architect. He recently went to his psychologist and was feeling unfulfilled. He was struggling with his mental health. Winter blues are a real medical condition that happens all around the world. It is said to spring from the fact that we are getting less sunlight and therefore, less vitamin D. The architect was told that his dark home may have an effect on his mental health. The ground floor occupies the architect's firm, while he and his family live upstairs.





LIGHTING

The house lets in a ton of natural light. This increases work productivity by making people happier. When people feel good, they do good. There's a definitive correlation between our surroundings and our mental health. Where we are affects a lot more than we think. If we are in a dark, gloomy space, our minds will go elsewhere. Maynard attacked this problem with large open spaces that contain an amazing amount of natural light. There is no spot in this building where, during the day, an artificial light would be needed.



SPACING

The open floor plan of the office allows the natural light to flow through. It also helps air flow and lets the space become what it wants to become. The employees make it their own. They are not confined to the six by six box that is a cubicle, but to this larger, more open creative space. This allows their minds to flow outside and into their work.



SECTION 1-1



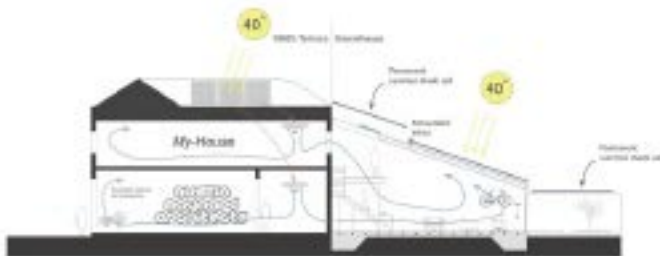
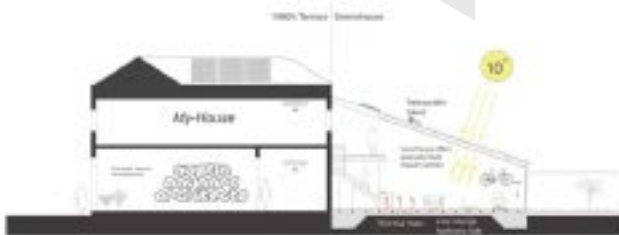
SECTION 2-2



SECTION 3-3



SECTION 4-4



Maynard wanted to create a better space to live and work. He cares about the mental health of himself, his family, and his employees. More architects need to think like this on a larger scale. These practices need to become a part of our everyday lives. We no longer need to live, work and play in dark, un-stimulating spaces. We can create a better world, and that starts with us.



Building: Nepean Mental Health Centre
Architect: Woods Bagot
Location: Kingswood, Australia
Area: 7278 m²



This case is a mental health facility as an addition to an existing hospital. It creates more space for these patients in the ever growing field. It includes inpatient housing and an outpatient day program. The building is connected to the old hospital through an over the street link.

The exterior healing spaces is a step in the direction of new healing that I would also like to implement. This promotes healing through natural light, air, and greenery. Which have all been proven to be an effective way of speeding up the healing process.



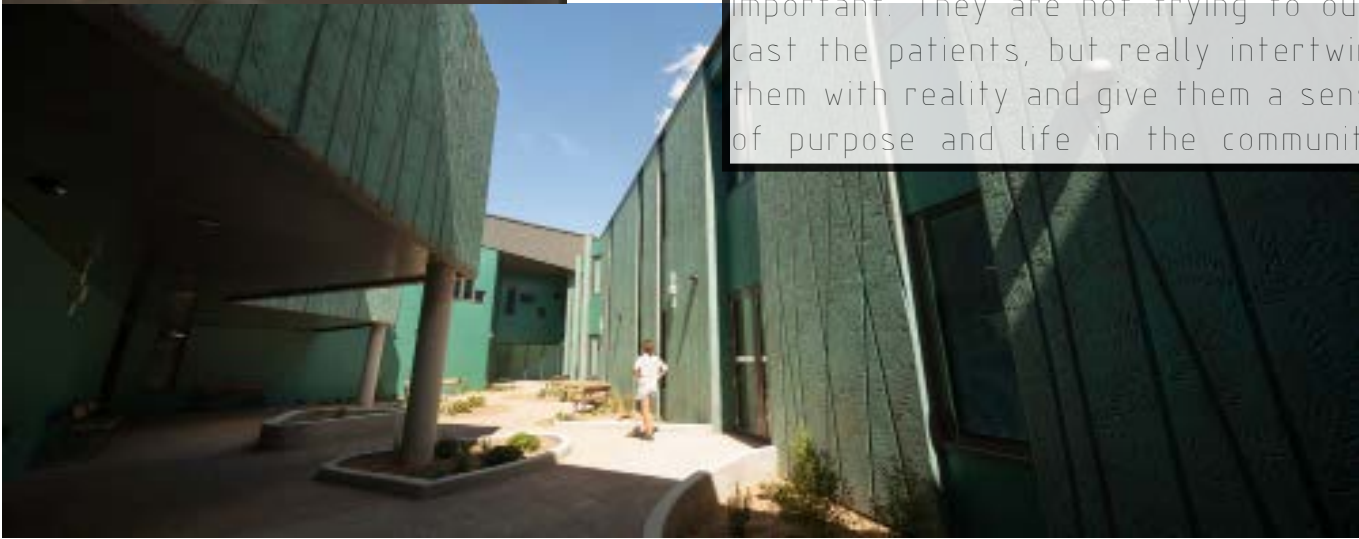
The color and materials of the building give it a non-institutional feel. The links between each precinct create interior courtyards for patrons and families. The firm states that, the focus is on healing by design and creating a sense of humanity and ownership.



The natural light given to the patients for healing shows them the passage of time and allows their healing (regeneration) to become visible.



All of these points will be implemented in my own project. The design team really cares about the patrons and wants them to heal and get better. The attention to detail in every aspect is obvious, while remaining true on the grander scale. The connection to the local community is what strikes me as most important. They are not trying to out-cast the patients, but really intertwine them with reality and give them a sense of purpose and life in the community.





Building: Therme Vals
Architect: Peter Zumthor
Location: Graubünden, Switzerland
Area: 5,000 m²

Zumthor created a healing spa by taking inspiration from the surrounding context. He created this building that juts out of the landscape but is cut into the hills. The movement of the building from darkness into light creates a healing experience that I would like to mirror in my design. The natural elements of this building are what make it so useful. While bathing you are staring into the beautiful landscape of Switzerland, almost feeling like you are outside and one with the land.



The natural, local materials used really connect the building more to its surroundings. It feels like you are in the mountain, in the quarry with the stone surrounding you inside and outside the design. The history that was studied and applied to this design is inspiring.

These more private rooms create a better healing space for individuals. The connection to the outdoors is scientifically proven to promote faster healing.



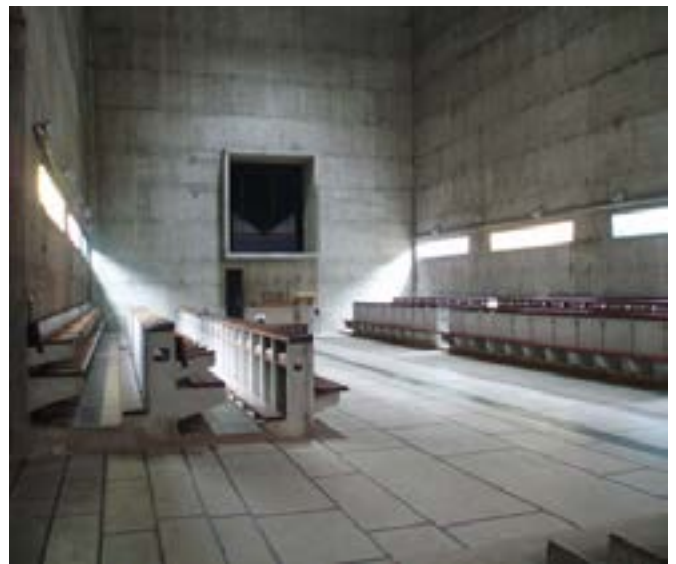
Zumthor paid attention to what he was doing in every aspect. The lighting and shadows of the baths mirror that of ancient healing methods. The baths themselves are of ancient descent, and are meant to be rediscovered here.



Building: La Tourette
Architect: Le Corbusier
Location: L'Arbresle, France
Area: 5,330 m²



The building is arranged as an upside down city. He did this because of the irregularity of the terrain, designing for and with the site. The circulation begins on the outside with the private rooms, becoming more public as you move inside the campus.



The exterior of this building may not be welcoming or showing-off, but it is what's on the inside that counts. Le Corbusier didn't want the building to be flashy, or showy, he wanted life to come from within. The monks that inhabit the building are what give it life, rather than only the architecture.



The building is raised from the ground to allow it to breathe with the wind.



The use of voids in the thick concrete creates a beautiful display of light within the residences as well as giving all residents great views of the landscape that surrounds them.



Building: Kolumba Museum
Architect: Peter Zumthor
Location: Cologne, Germany
Area: 5,000 m²

This museum was built on the ruins of WW2 in Cologne, Germany. It makes use of the space while also keeping it in line with history. It showcases the ruins inside with daylight peeking through the missing bricks. This creates an eerie feeling inside. The mix of the new and old bricks show us how much attention to detail Zumthor paid.



The connection this building has with the exterior is inspiring. It does this through the empty spaces where the bricks are missing. This gives the exterior a beautiful aesthetic while creating natural light wells for the interior. The outdoor spaces to observe the old architecture of the city are beautiful because they remain untouched by the architect. The natural light that extends to the lobby and the inside by the glass facade leading into the courtyard creates a wonderful ambiance.





This building really tells a story. The story of Germany in the war. It is not trying to remove this history, but portray it in a new light. Most of the architecture of Cologne was destroyed during the war and the few remains were demolished and built over. Only a few of the buildings remained, one being the Cologne Cathedral, and instead of removing these ruins, Zumthor decided to intertwine them into his story.

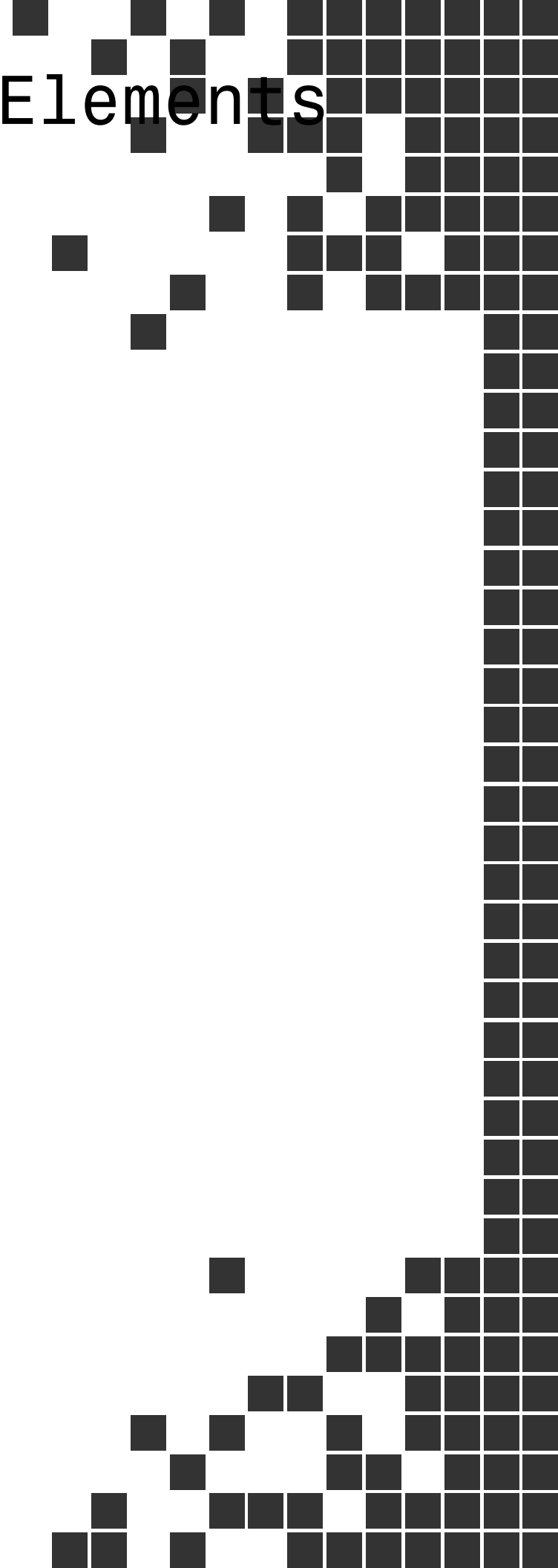


I want to intertwine the story of mental health in America in my building. I want to create a story and show people a new way of thinking about mental health.





Major Project Elements



Public Connection

My solution includes public access to a river-walk. The facility is intertwined into the heart of the city and I believe this will aid in removing the stigma of mental health.

Multi-Therapy

There will be many different kinds of therapy in my project. This is what makes it different from other mental health facilities around the world. One problem with the treatment, or lack there-of, for depression is patients believing there is only one solution. There is not one cookie-cutter solution for everyone and if the initial therapy doesn't work, one may get discouraged. Here, many different therapies are found under the same roof to help with this problem.

Well Design

Well design standards will be implemented throughout the design of my project. This will ensure measurable standards. These standards are a professional measuring tool that include elements of mental health design. Integrating this into my project will not only help the patrons of the design, but help me in my professional career to further my knowledge for future designs.

User Groups

the Patient

The patient is the main user of this design. Here, they will find a place for healing, staying and recovering. The inpatient housing units will create a home for the patient, but hopefully will provide a transition back into their own home.

Occupancy: 10

Spaces: Housing units, therapy spaces, recreation, dining

Considerations: Natural light, openness, home-like, safe

the Doctor

The doctor works with all patients. They get them checked in through the medical examination room to ensure the patient is getting the proper treatment through proper diagnosis.

Occupancy: 5

Spaces: Med Exam Rooms, offices, parking

Considerations: Natural light, productive work space design

the Visitor

The family of the patient becomes the visitor when they come to understand better what is happening with their loved one. Rooms will be provided to create spaces for friends and loved ones to be able to come in and see the place and process of healing that is happening with them.

Occupancy: 25

Spaces: gathering area, private rooms, extended parking

Considerations: Natural light, comforting spaces, safety

the Psychotherapist

The therapist finds themselves wrapped around all stories of the individuals. They create different moods with their different practices and create a connection with the patients and visitors. They become an integral part of the operation happening in my design. .

Occupancy: 3

Spaces: therapy rooms, offices, parking

Considerations: Natural light, privacy, safety

the Chef

The chef finds themselves recreating the meals their mom cooked them at home. They try to create as much of a comforting palette as they can. They become a part of the therapy when providing cooking classes for the patients.

Occupancy: 2

Spaces: kitchen, dining, break room

Considerations: openness, productive work environment

the Pedestrian

The pedestrian walks to the building upon happenstance. They find themselves wondering what is happening inside of these walls. Upon further investigation they understand what it is, and hopefully become more aware of their own mental health as well as the removing the stigma that comes along with it. .

Occupancy: 30

Spaces: public space

Considerations: safety, walk-ability, aesthetically pleasing

Site



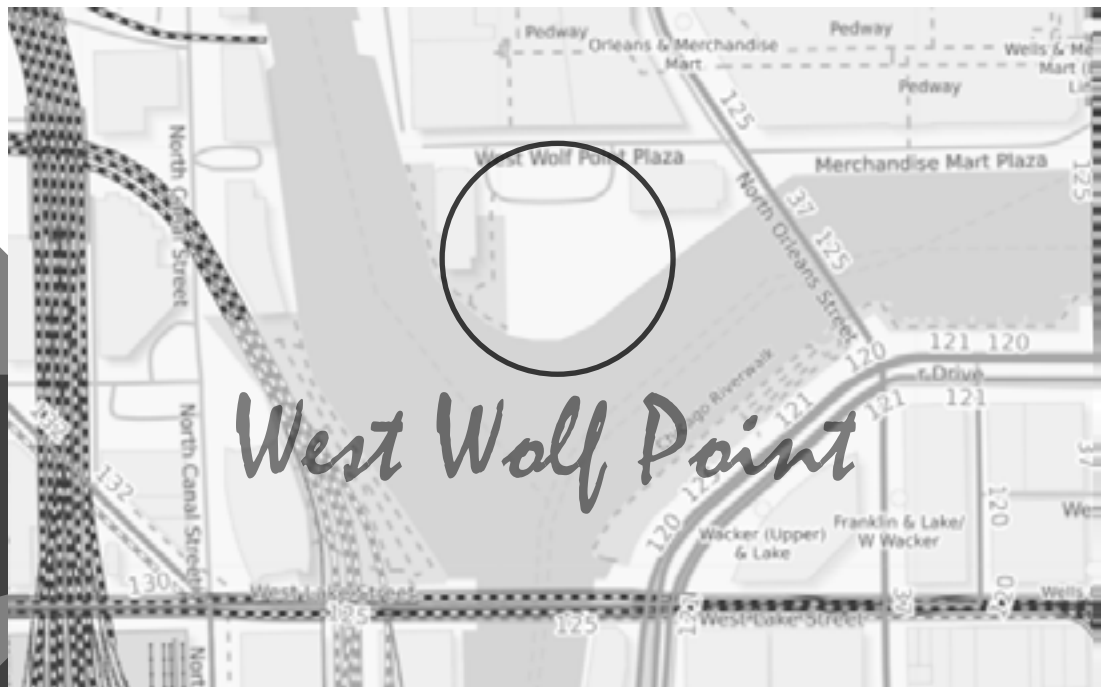
Over 43 million Americans experience a mental illness in a given year. That is one in seven people. Around 12,000 facilities are located in the USA to accommodate these people. There will always be a need for places to improve mental health.



Chicago has a history of trying to build mental health facilities correctly. For many years there were hospitals and facilities built and re-built. The city of Chicago really wants its citizens to be mentally healthy. They have shown this by opening mental health clinics in areas with public housing projects. Further research into the individual health institutes in the downtown Chicago area I have found less than adequate results. The many reviews on the facilities show that people are not at all happy with them. This shows me that there is a need for a well-designed, integrated mental health institute.



My specific site, on the corner of the merging river and canal creates a sort of nesting space for my project. The merging of the two waters marks a time in Chicago's history when they were ready to give their citizens new life. It creates a place for the convergence of mind and body, of doctor and patient, of private and public.



Being along the river is important to show my design as a cleansing filter. The river acts as a metaphor for the flowing of stories happening inside the building, while the site is nested between the two waters, it is nested within the downtown sector, which is nested within the city. These become transitions for patients to become intertwined with the outside world.

Project Emphasis

Improve

The project will improve the mental health of its users.

Remove

The project will help remove the stigma of mental health in our society.

Lead

The project will lead as an example of designing better for mental health.

Find

The project will find innovative ways to create safe spaces within everyday lives.

Goals

The overlying goal of this project are to create a space that inspires others to want to design better for mental health. I hope to do this through academic studies, professional production and personal connections.

Project

To complete this goal I hope to answer the question how does architecture affect your mental health. I have started this research and it has come to be that our consciousness not only exists inside of ourselves but also outside. Everything around us affects us in ways that I will come to understand and research further. This question creates another; what can architecture do to improve your mental health? I hope to answer this with my design and inspire others to do the same. The final goal I hope to accomplish with my thesis is to remove mental health's stigma.

My personal goals of this project are to understand why I actually got into architecture and improve my love for doing it. I want to create a space that has meaning and could be used by ones that I love.

Personal

Some professional goals of my thesis include: gaining knowledge that will change my way of thinking to be a critical thinking employee/employer, meeting new and improving old connections with other academics, professors and colleagues, and finally to advance the skills of research and production to come up with an adequate professional submission.

Professional

Plan for Proceeding

I will begin to frame a research plan for proceeding. The following will be thoroughly dissected and explored further than already done: the theoretical premise, project typology, historical context, site analysis and programmatic requirements.

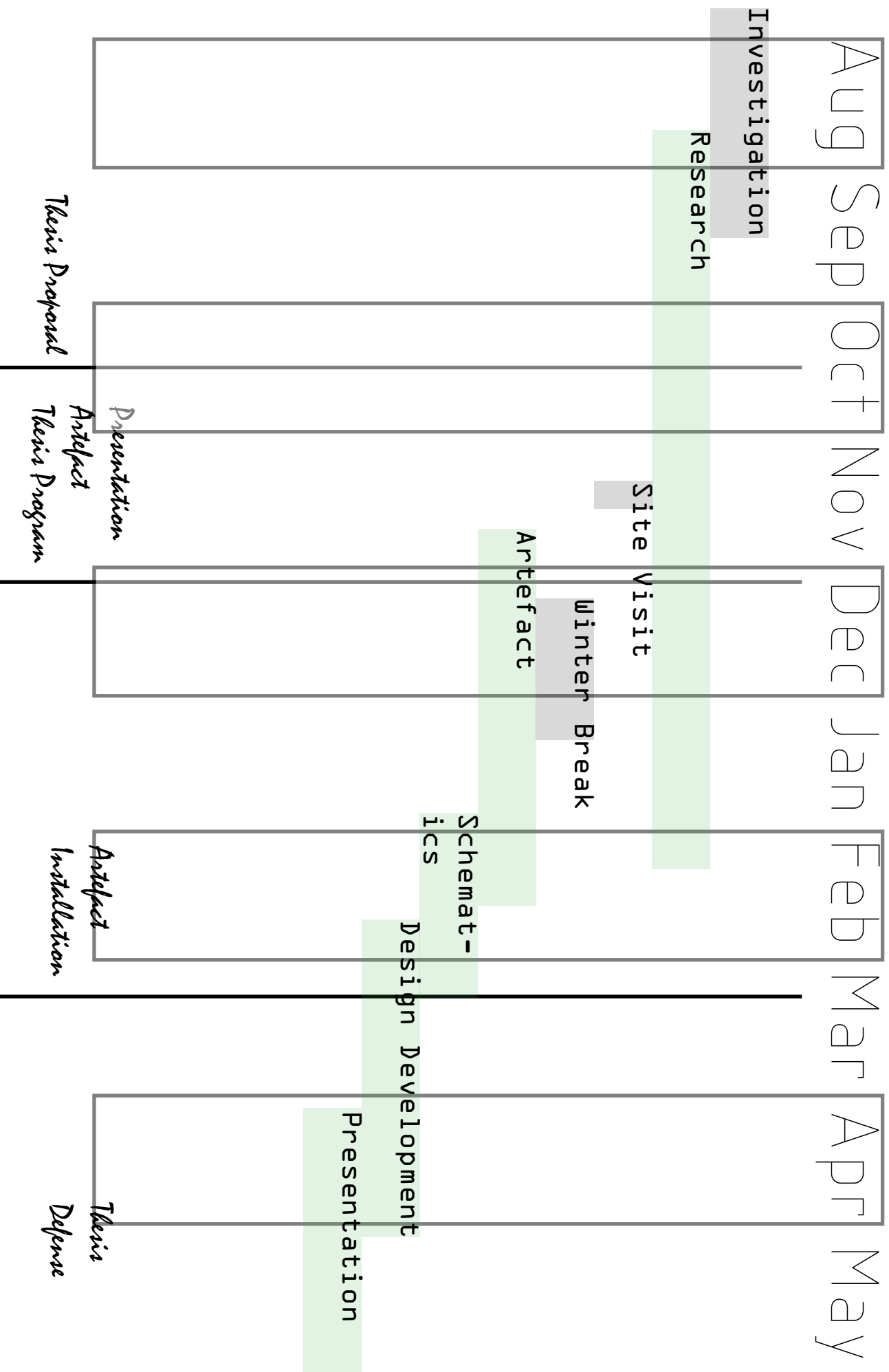
The use of quantitative and qualitative data will be implemented into my thesis through personal interviews and testimonies, scientific data on neurosciences, local data gathered of the site, along with other methodologies.

The history of healing, specifically in mental health, will be researched all the way back to the ancient Greek theater. The site will be studied first hand and the program will be developed to improve the lives of the patients as best it can.

I intend to compile my research through a series of presentations. The story of how I develop my thesis will be shown in these presentations. It will be preserved through physical print, in the cloud, and in the NDSU repository. This repository is available to other scholars, and I believe is posted online. I wish to present my findings through a professional presentation and documentation in front of professors, professional critics, colleagues, family members, and other members of the community.

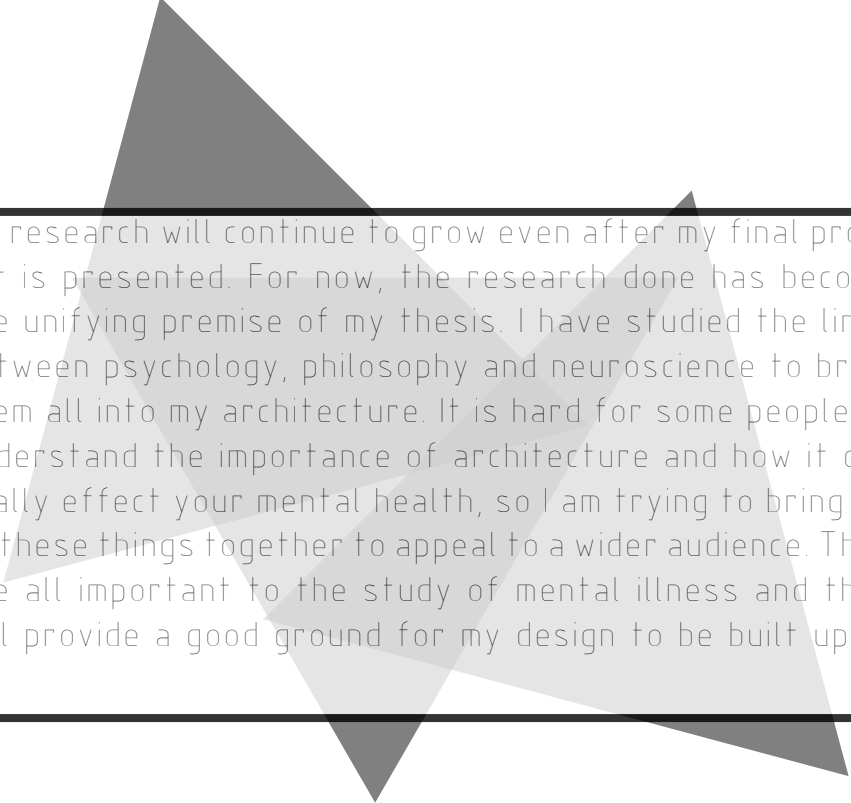



Schedule



Research



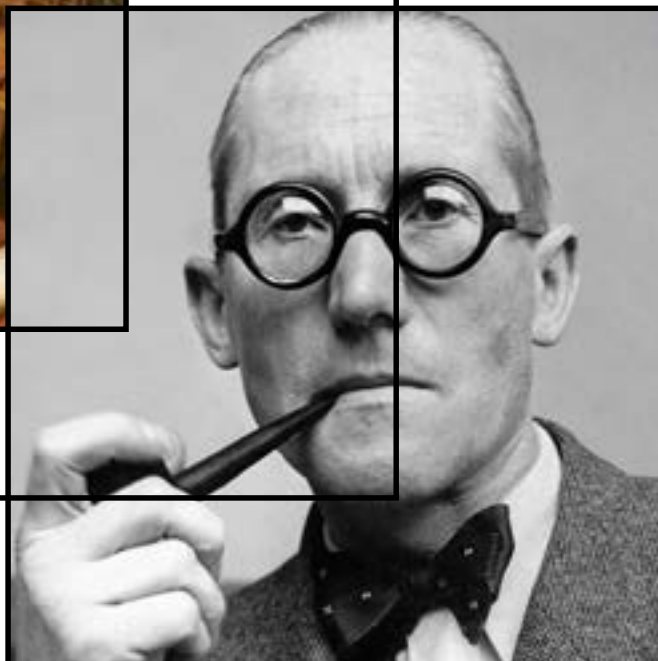


My research will continue to grow even after my final project is presented. For now, the research done has become the unifying premise of my thesis. I have studied the links between psychology, philosophy and neuroscience to bring them all into my architecture. It is hard for some people to understand the importance of architecture and how it can really effect your mental health, so I am trying to bring all of these things together to appeal to a wider audience. They are all important to the study of mental illness and they will provide a good ground for my design to be built upon.

Unifying Idea

My unifying idea, or metaphor for the project will be Orpheus's Journey of coming into the light. Much like depression, he found himself in darkness, but was able to return to the light. Stories are how therapy works and this story is one I will be studying and using for my design.

A famous architect inspired me to be inspired by Orpheus's Journey. This forces our stories to be interwoven, much like my site and the stories that will happen within it. Le Corbusier's journey with Orphism is seen throughout many of his designs. Orphism is the belief that the cosmos are held together by numbers, much like Plato said, and that geometry and proportion could be used to achieve harmony with nature. Corbusier uses this in his work to provide a balance between the sun and sea, between the masculine and feminine. Where, one cannot exist without the other. He believes this balance is "a highly charged and erotic interplay intended to awaken echoes deep within its inhabitants."



Orpheus' Journey

Orpheus was the son of Apollo, the god of poetry, healing, music and the sun. He had a divinely gifted voice that could charm even the hardest of hearts.

Orpheus was in love with a wood nymph named Eurydice. Their love rang across all of the realms.

On the journey home after their wedding day a man who desired Eurydice for himself began to chase them in hopes of killing Orpheus. The chase was long, with the man showing no sign of giving up, on and on they ran when suddenly, Orpheus felt Eurydice stumble and fall. Her hand slipping from his grasp. Orpheus stopped short and knelt down to her. A deathly pallor suffused her cheeks.

She was dead

Orpheus tried to live without Eurydice, but his life seemed endless. He devised a plan to go to the underworld and convince Hades to free her soul.

He began his journey and was met by Cerberus, the gigantic three-headed hound that guards the entry into the underworld, but by his music the hound was put to sleep. Next, Orpheus approached the river Styx, the boarder between the living and the dead. Here, Charon, the ferryman of Hades who accepts souls as payment for entering, heard his song and granted Orpheus free entry.

He finally got to Hades and Persephone and played his lyre and sang out a song of his love for Eurydice. The entire underworld stood still. Sisyphus no longer rolled his rock up the hill, Tantalus did not reach for the water he would never be allowed to drink, even the furies wept. Hades and Persephone granted Orpheus's plea, but on one condition. That he could not look back to see if Eurydice was following him. If he did, she would return to the land of the dead forever.

Orpheus began to climb.

As he approached the exit, his heart was beating faster and faster. The moment he stepped into the world of the living, he turned back to hug his wife, but only got a glimpse of her before she was drawn back into the underworld. She had not seen the sun.

Separated from Eurydice, Orpheus sat in a grove of trees and sang songs of lovers. He sang of Ganymede, the beautiful boy who Zeus made drink-bearer to the gods. There was Myrrah, who loved her father and was punished for it, and Pygmalion, who sculpted his ideal woman out of ivory and prayed to Aphrodite until she came to life. Only by loving Eurydice and losing her, Orpheus became a vessel in which all stories of love and loss could be told.

Literary Review

The introduction introduces us to Merleau-Ponty and his thoughts on hermeneutics and how this can only be interpreted through the embodied subject. Merleau-Ponty never stated his views on the subject explicitly but through interpretation of his texts the authors gained insight on how he challenged previous reduction of hermeneutics as intellectualism and empiricism. Interpretation is not something just found within the mind that needs to be pulled out but rather, is always there. Being-in-truth is not separate from being-in-the-world. Through Merleau-Ponty's thoughts on perspectives, we are able to understand his thoughts on the ambiguity of hermeneutics. He focuses on the notion that we must be able to create a connection between different perspectives to better understand what is true, while understanding that what we find out to be true is just as ambiguous as the question at hand. The truth is not to be found but rather brought into being. Through dissecting the possibility of ascending from a singular perspective, and discussing the ambiguous temporality of perspectives, the authors find new meaning in old literature where they can amplify Merleau-Ponty's subtle thoughts on Hermeneutics and Post-Modernism.

Gail Weiss discusses the confusion with Merleau-Ponty's views on perceptual experience. On one hand he says that he can and must only have one at once, but in another says that we do not have one perspective but many that overlap and merge together to form our perception. This division of thought helps us to understand that if we must have one perspective but are unaware of the line where past perspectives have ended then all past perspectives may come into being through our perspective of now. The past perspectives aren't removed from our memory; therefore, serve as a background for all future and current perspectives, where they influence how we may see this thing.

The context in which the perspective is brought about is of utmost importance to the outcome of the perspective of the perceiver.

The past perspectives were brought about in a certain context and only through that similar context are they brought back to present perspectives. These perspectives are influenced by the context. An example given by the text is the perspective of a driver versus a pedestrian. We have all been in both of these situations where we are crossing the street and a driver speeds ahead to get past us, so they don't have to wait. As the pedestrian we get angry, because the driver has a two-ton piece of machinery behind them and we are just a mere human. We think they could have killed us. While being in the perspective of a driver, we may get upset when we see pedestrians crossing the street because they slow us down. We don't want to miss the next light; therefore, we might speed up to try to get in front of them. Although we have been in both perspectives, back and forth, we still find ourselves in the same mindset of the pedestrian as pedestrian and of the driver as driver. We can't seem to put ourselves in our own shoes on the other side. This is how much context effects our perspectives. If we want to better understand another perspective, we must first understand how much context plays a role in these perspectives.

Next, they discuss how we cannot understand that we are in a certain perspective without the realization changing the perspective completely. The only way this can be accomplished is through language. And through dialogue, we only talk about them as opposites. We can only discuss what is no longer there, because by understanding that it is there, it becomes absent.

Through language, or speech, the notion of perception becomes ambiguous. Only through talking can we discuss what is there. If we did not speak, there would be no discussion of perception, but only perception itself. We could not ask what, why, or how it exists, it would just exist. We would not have a sense of self because we would no longer be able to relate our perception to that of others. Through the relationships with others is the only way to know ourselves. This is explained in the text through the development of a child. The child can only use the word I when he understands that everyone he thinks of as you considers themselves an I. This can only be done by the child when he has become conscious of the distinction between I and you. Thus, proving that to understand that you exist, you must understand that others exist. Distance is not the contrary of proximity, it is deeply consonant with it. Time belongs to Being. We only understand it because we can ground it to finitude. We ground it to the rising and setting of the sun, to the wrinkles our face begins to obtain. This transgression through time is the only way we can know it to be. If we were not here to experience it, time would not be of discussion. We do not see it second by second, or wrinkle by wrinkle, but find it suddenly, and without question. Only through that which is missing, youthfulness or what may feel like months of time passed, do we realize what has happened. Next, they discuss Merleau-Ponty's thoughts of the Other. Only through the other are we able to recognize ourselves and only by ourselves are we able to characterize the Other. When you speak of the perception of the other, this other does not even exist, according to you, except in relation to us and in his relations with us. (p 39) This is described to deepen the notion that everything is a progression or changing of the past. This connection creates an understanding of the language we use and how it is not new but transformed in different ways to become new. Such as a child's first words, or a philosopher's revelation. The words used are old but used in new ways. There can be nothing new without there first being old, and we could not understand old, without new. Everything is perceived through its opposite.

This is also discussed through the backward flow of time. Where the past keeps coming through the present and transforms itself into something new. This folding of time is what creates this notion of Merleau-Ponty's backward flow of time. In this way, the past becomes the present. The present not only transforms, but the past enters the circle of becoming. (p 67) Although this is the way time is seen through this perspective there is also a temporality of reversibility. Time is not spread out for us but just happens to us. We may feel a connection to something for a brief second but are not able to retrieve that feeling until something else comes about and creates it for us again. Time burns itself up in the phoenix fire of renewal and becoming. (p 67)

G.B. Madison uses this notion of Merleau-Ponty's description of the other being in and of itself a part of you to argue that he in fact did not have a theory of perception. If something is described through metaphor, of that which it is not, is describing something by not actually meaning that thing. To be able to understand a metaphor you must realize that the describer does not literally mean the thunder is a lion's roar, it uses this description to bring things closer together. He describes that a theory of perception does not relate to phenomenology because it is understood in a traditional sense as a mirroring process. What is outside is duplicated inside. (p 93) Yet, as Merleau-Ponty understands it, it is linguistic in structure and language is never the mere representation of anything.

Post-modernism is described as a frame to modernism. It opposes the thinking of the modernist through the subject that gives meaning to material, which becomes the object. In modernism, the subject becomes the centralized figure in which all things are seen. In post-modernism there is a dualistic notion that describes how the world is seen and perceived.

Postmodernity is described as not being a philosophy, or a position, but a cultural and historical description. It tells us that modern times have come to an end and we are living in the post-modern, whether we would like to admit it or not. Here, in postmodernity we can look back on modern times to understand and study.

Postmodernistic is a term used to describe all that new theoretical stuff that he rejects, while at the same time holding on to the idea of postmodernity which is good in the present age. It has nothing to do with postmodernism, and actually is described as being the opposite. It is used to describe what he does not like in postmodernism.

Posthermeneutic is used in a similar way as postmodernistic. It is used to describe the opposite. Posthermeneutic skepticism relates to postmodernism because it is groundless or foundationless philosophy. Through this skepticism, one tries to find his grounding but is unable to do so.

Postmodernism operates with many voices and these voices all call out in the spaces of difference, in the margins, in the between (p 146) The visible and the invisible are not separate entities, they are known to be inseparable and interwoven. The place of difference that separates them also brings them together. The ambiguity is the space in between.



Project Justification

My thesis began by asking myself if our built environment affected our mental health in any type of way. We can start to understand this on the simplest of levels, when you walk through a park, you feel like you can breathe. You can start to notice the noises of the wind blowing through the leaves that are falling around you, you begin to see the brightness of the green grass that covers the ground beneath your feet, you can hear laughter in the distance from the children on the playground. These moments give us feelings. Sometimes unexplainable. Sometimes, we are not able to create those feelings on our own, we can only do it through the context in which we are inhabiting.

I am designing a treatment center that creates these feelings through stories. The feelings of being connected. Connections between mind and body, between doctor and patient, and between the design and the context surrounding it. These overlaps are so important to the brain health of all individuals, especially those with chronic depression. Through therapeutic design and a new mixture of healing processes, I hope to find a better solution for our healing centers to restore, rebuild, and transition individuals, thoughts, and processes into everyday life.

This is important to me, personally, because I have had family members effected by mental illnesses. One of which, was checked-in to a rehabilitation facility without contact to family, friends, or the outside world. The lack of connection to society around created an atmosphere that reflected the mind of the individual where they were closed off from society and closed off from communication of their thoughts. It is important for me to research this subject in a way that my other family members can understand. They are of an older generation where mental illnesses were not seen as a real disease, but something that can just be pushed down. Research into the illnesses as a brain disorder has become a way of creating a bridge between scientific reasoning and philosophical thought. By completing this project at the height of my education it will justify more clearly the goals I'm trying to reach. I will better understand how to relay my thoughts and research to a larger audience. The philosophical and architectural theory research will be better understood by my audience if I am able to understand and portray it myself, through my project.

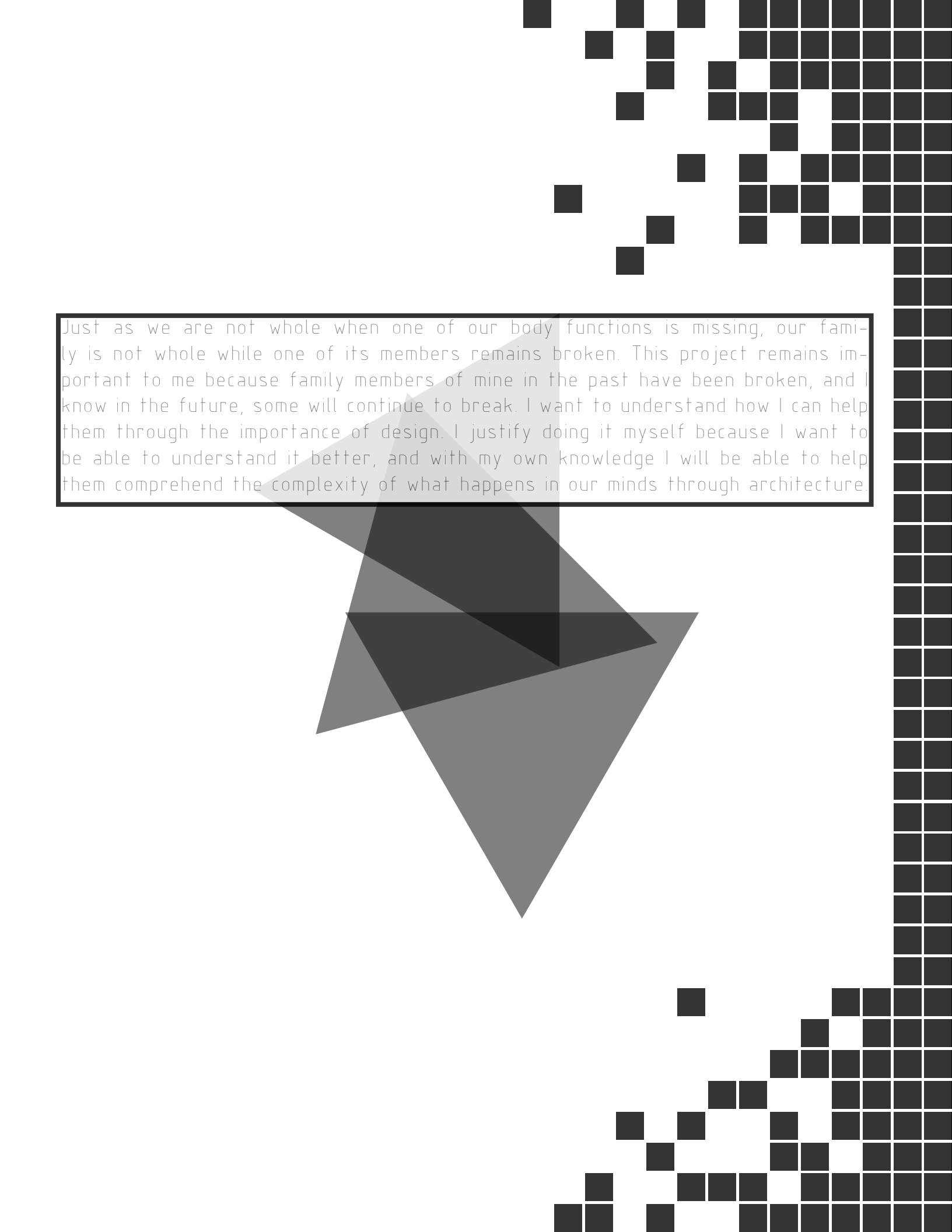
The knowledge base I have acquired over the past four years of undergraduate school has been of technical architectural abilities. My graduate year, thesis, is more about connecting what I have learned to the more meaningful side of architecture, which is in this case, how it affects our mental health. The research I have been doing as broaden my knowledge base of what architecture can really do. It has helped me to better understand the power and importance of our profession. This type of thinking can only ensure a future in architecture for myself and fellow colleagues.

My project, specifically, will better help architects understand how important our designs are. They can affect people on a molecular level that translates to their everyday lives. Understanding that our architecture contributes mental health of all our citizens will change the way we see ourselves as a member of society. The research I complete will prove the complex understanding of what architecture can do to improve our health overall.

I believe that humans are good, and private investors as well as government entities will contribute to important designs that are our mental health facilities. The patients will have to pay for their time in the facility, with most insurance companies helping with the costs. The staff requirements will bring in jobs for the community as well as housing units for the downtown area. Many urban areas refuse to use downtown, high priced, plots to not make money on. The project will not be a money maker for the city, per se, but it will improve the lives of the patients and average citizens, which brings more people into the city and overall, brings more money in.

The environmental impacts of my project will be kept to a minimum. With the help of LEED, Well Institute and other organizations I will try to create the highest quality design possible. Impacts might include air quality, where I will use clean air products to counteract as well as shrubbery. Other resources will be researched and will continue to be a front-runner in further design of my project.

The project is important in the social context because we need to understand how much our surrounding affect what is going on inside our head. This is because what surrounds us, becomes what we are. This is further proven in my philosophical and psychological research into the subject. The design will provide a better transition for patients back into the real world. Our clinically depressed are put in a building, no phone, no TV, and no leaving. No connection to the people, city, or nature around them. This acts as a metaphor for their minds. They build walls up around their thoughts to protect themselves because that's the only way they've been taught. They might open up inside this safe space but once they get back into the real world, there's no real transition. Creating an atmosphere, or Stimmung, in design may help this transition, but doing it in a way that is not controlling, that leaves the individual believing that it is of their own doing. Giving them ownership of their own actions, of their own lives. Connections happen between the overlaps. Passing through a doorway, the blurred line between outside and inside. Walking along a sidewalk, the connection of the public and private. I want to create and utilize these transitions. I want it to be woven into the fabric of the city, woven into the fabric of our being.

The image features a complex abstract composition. In the center, there is a text box with a black border containing a paragraph of text. The background is white, overlaid with several overlapping triangles in various shades of gray, creating a layered, geometric effect. On the right side, a vertical grid of black squares extends from the top to the bottom, with some squares missing, creating a fragmented, staircase-like appearance. The overall aesthetic is minimalist and architectural.

Just as we are not whole when one of our body functions is missing, our family is not whole while one of its members remains broken. This project remains important to me because family members of mine in the past have been broken, and I know in the future, some will continue to break. I want to understand how I can help them through the importance of design. I justify doing it myself because I want to be able to understand it better, and with my own knowledge I will be able to help them comprehend the complexity of what happens in our minds through architecture.



Historical

The history of healing is a long, long road. The history of mental health seems to be a shorter one, but once it's actually looked into, it becomes one with the history of healing. Before we became enamored with the sciences and the things they can tell us, humans did not see a difference between their body and mind. We, as the human race, believed that if we were to be healthy, both our bodies and minds needed to be healthy. This even dates back to the philosophies of Plato, where he understood that in order to be balanced, we must exercise both our minds and bodies. The history of healing through stories dates back to that of Greek Theater. Thousands of ancient Greeks would gather to the Sanctuary of Asklepeios at Epidaurus to become healed through the tragedies portrayed on stage. The effectiveness of the tragedy is described through catharsis. It is seen by the audience through terror and pity. When they see this on stage, they can begin to see it in themselves. Through experiencing this fear in a controlled atmosphere, such as the theater, their own anxieties are pulled out of themselves and placed upon the character. Through catharsis, these excess emotions that are maintained are turned into feelings of moral capacity. They create a connection between the onlooker and the presenter.



Social

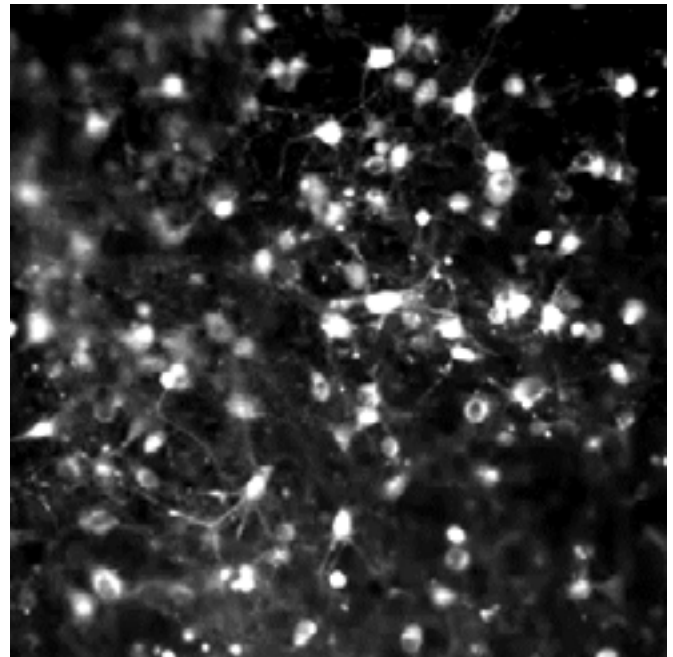
The whole idea behind this thesis is to remove the stigma of mental health. The social context is just that. How mental health is seen in our society today. Its connotations are unacceptable and need to be changed. This is why my treatment center will be moved back into the city. To confront the social front head-on. This is also helpful on an individual level, where patients can feel connected to the city they call home. It is easier for their families to visit as well as pedestrians to come about it with a new view. The connections to the outside world are so important so why are we casting away our mentally ill to treatment centers in the middle of nowhere. I understand that these places are good and work for some people, but there is not one solution to every problem, just like there is not one therapy that works for every individual. Here, I am aiming to find a new solution.

Cultural

The cultural context of the project is similar to the social. I am here to change the stigma of mental health that our society has to inappropriately put on it. Being such a cultural issue, especially in western society, it is hard for people to understand mental illness. We are so fixated on their being a pill we can take to make us feel better, but mental illness is a whole different world. Yes, there are certain kinds that react well to western medicine and actual pills that do help individuals, but there are so many other types of treatment that we don't even consider because it might be 'weird.' The program will include a multitude of therapies because when one kind doesn't work, patients with depression tend to give up. Here, the different therapies will be introduced so they do not get discouraged and will hopefully find a better way to cope.

Neuroscience

Depression happens on such a molecular level. Understanding how our brain actually interacts with the environment will better our abilities to design for this. Our bodies are composed of groups that overlap. Without one of these groups, we are not whole. To produce even the smallest movement, our neurons must interact with our muscles, which moves our bones along with tendons to pick up a cup of coffee in the morning. This muscle memory is how we can do these things without feeling like we are even thinking about it. Our neurons are a fascinating thing that has just begun to be understood by top scientists. Neurons are one thing that we know move over multiple realms. They are present in the physical realm, through movement, as well as the emotional and perceptual. They become the emotional realm because they are what causes us to feel, while infiltrating the perceptual realm by allowing us to actually have the entirety of the external world inside our brain.

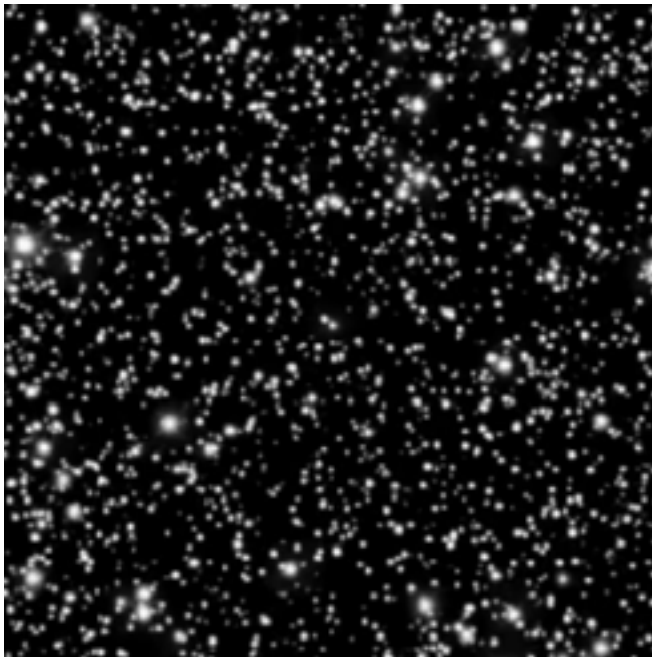


Neurons firing inside a brain
Georgia Tech

"Just as we do not draw an impermeable boundary around the brain, we will not draw such a boundary around the individual organism itself. The environment of the organism will include not only the physical environment, but the cultural habitat of the organism."

- Alva Noe

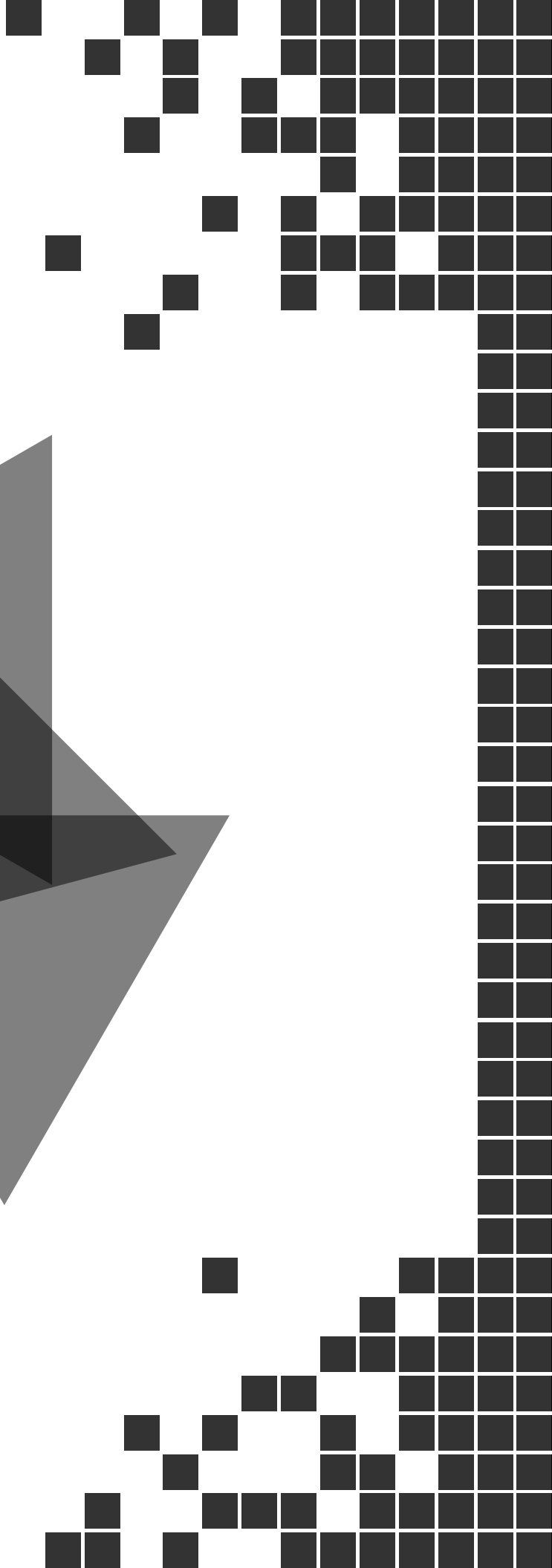
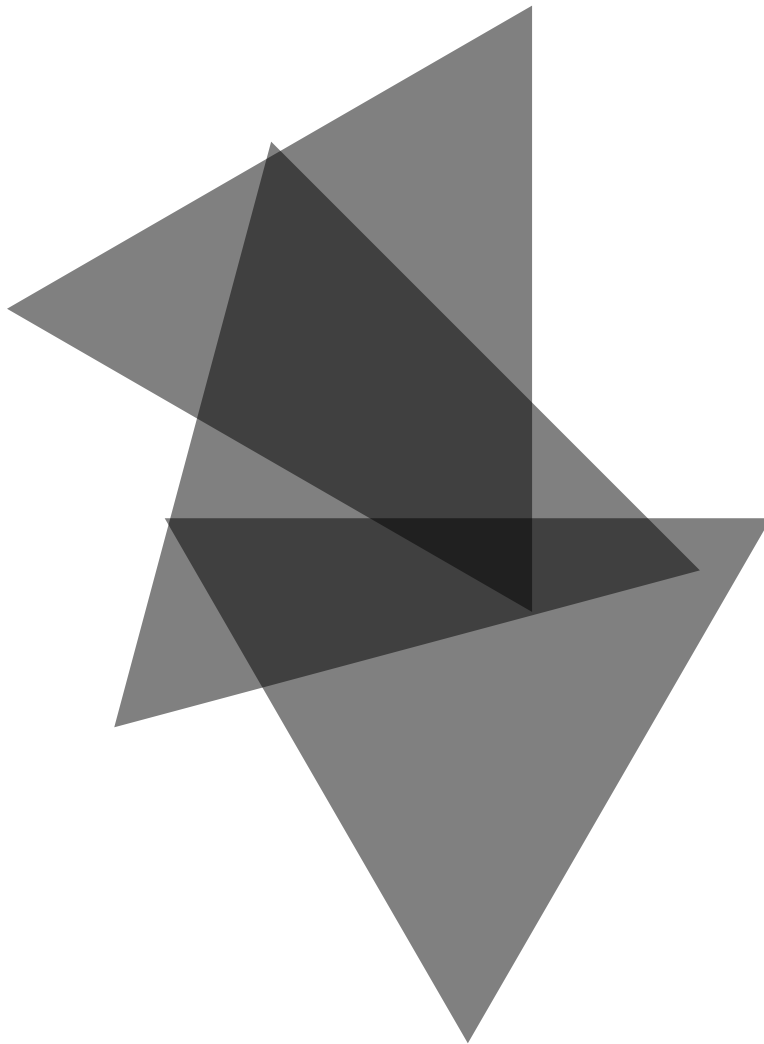
This is described by neuroscientists through the body schema. The space that surrounds our bodies; which becomes separated into peripersonal and extrapersonal space. The peripersonal being that which our fingers touch, our eyes see, our ears hear. The extrapersonal just being described as the beyond. There is no clear distinction between the two, because we cannot say specifically where one ends and the other begins. They overlap. Our mind, our senses, overlap with our immediate surroundings which overlap with the beyond.

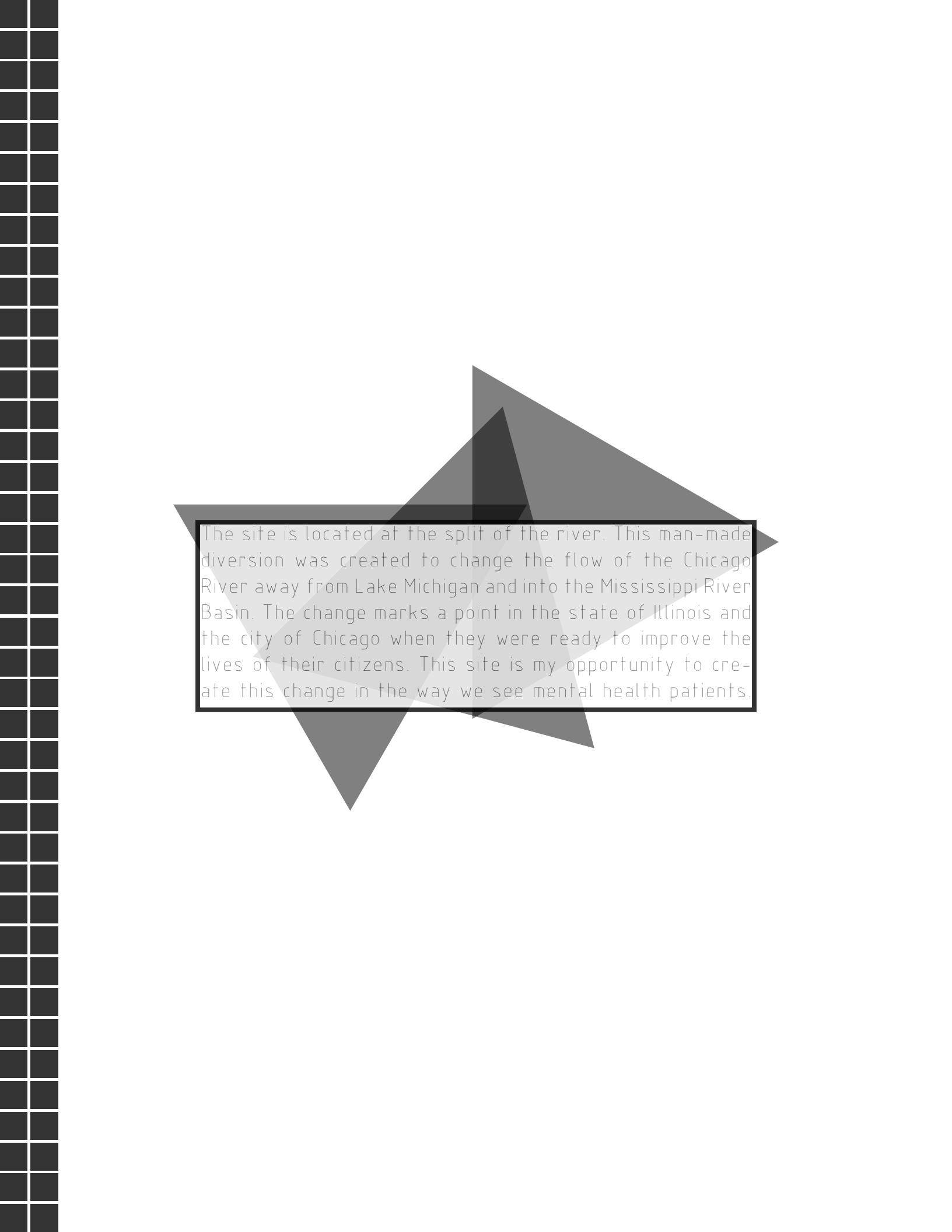


A time lapse of star paths
NASA

All of these stories are connected because something outside of us moves something within us.

Site Analysis



A decorative vertical grid of small squares is located on the left side of the page. In the center, there is a large, semi-transparent geometric shape composed of several overlapping triangles and polygons in various shades of gray. A black-bordered rectangular box is superimposed on this shape, containing the following text:

The site is located at the split of the river. This man-made diversion was created to change the flow of the Chicago River away from Lake Michigan and into the Mississippi River Basin. The change marks a point in the state of Illinois and the city of Chicago when they were ready to improve the lives of their citizens. This site is my opportunity to create this change in the way we see mental health patients.

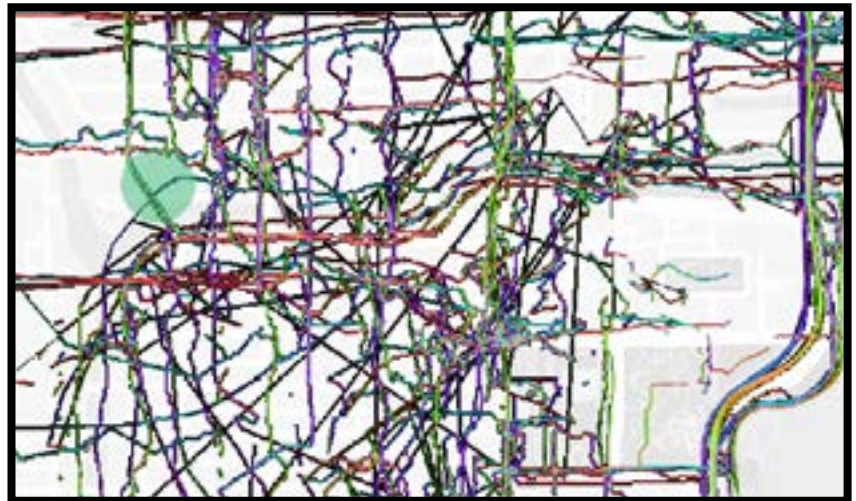
Soil

The yellow (east) portion of the map shows the sandy soils of the Lake Michigan area. The orange (west) is fine soils. This is better for building on, but the rest of Chicago's downtown is located on sandy soils and this includes some of the tallest buildings in the US and they make it work, so it shouldn't be an issue.



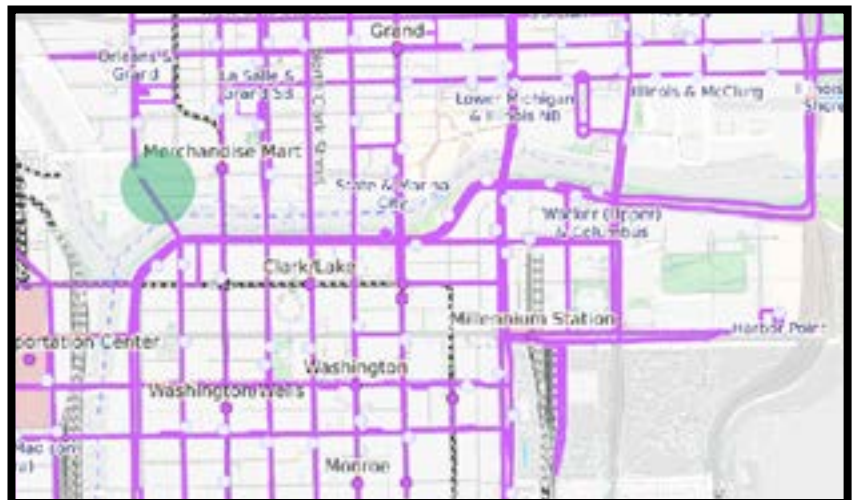
Walking Map

Chicago is a walking city. This contributes to the public aspect of my site. There will be a lot of circulation surrounding my site with pedestrians. Being along the water helps with this as well, especially during the summer, tourist months.



Transit Map

The site is surrounded by public transportation, this is good for public access to the river/walk or theater. It is also helpful for families to visit and employees to get to work.

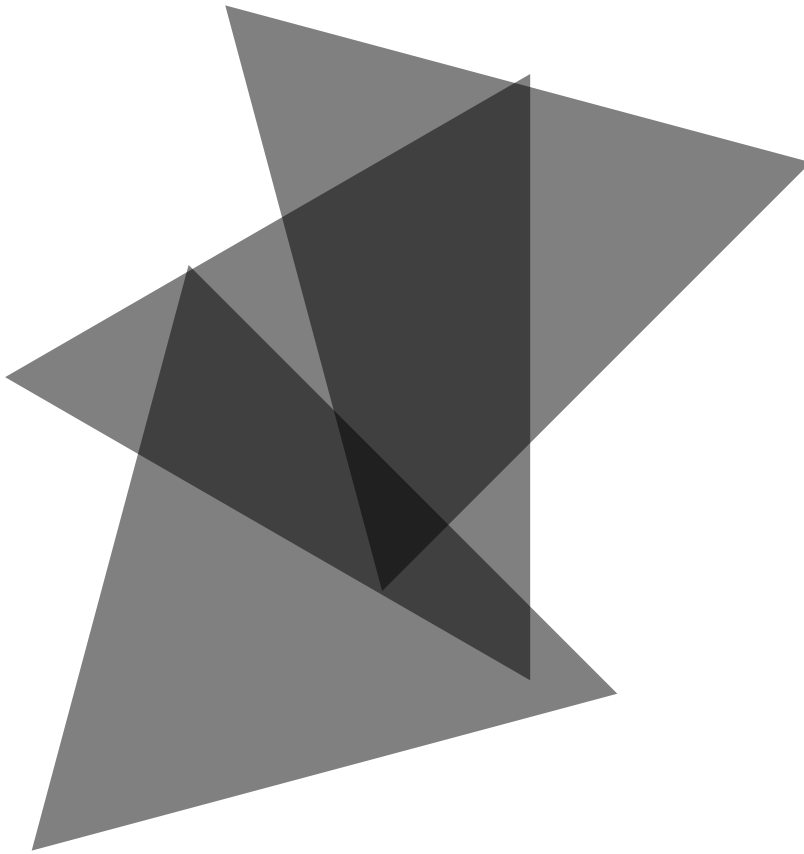



Site History



Chicago has a history of uplifting its citizens. Literally, in the raising of Chicago in the 1850's and 60's. They did this because the streets became impassable during wet weather. Water stood in stagnant pools and basements flooded with every rain. In another improvement for their citizens health, in the 1900s the Chicago river was diverted to flow south to the gulf of Mexico, instead of into the cities water supply, Lake Michigan. Both were done to improve the lives of its citizens, and both represent major impacts and changes in the life of Chicago as a city. Another big event in Chicago's history is the Great Chicago Fire of October 1871. It left over 100,000 people homeless, but they did not leave, they rebuilt. There were so many points in history where the town could have just given up, but they didn't. They kept uplifting, diverting and re-building.

Performance Criteria





The space allocation will be measured through the square footage of spaces, which will be calculated through 3D modeling software. The importance of spaces will be ranked through graphs and understanding of therapy treatments. Spaces will be placed with a space interaction matrix. The performance analysis will be measured through scale models, computer simulations and WELL institute standards.

Space Allocation

The environmental performance will be measured through sunlight consumption, energy use, and thermal bridging. The sources to measure these will be sun models along with Revit plugin software. I will hold the design up against the standards of LEED and see how well they perform.

Environmental

The behavioral performance or usage patterns will be measured through the aspects of design that people are moving towards versus what they are staying away from. The largest point of gathering will be measured as the best public space. Studies will be completed to figure out what has already been done and what they have done to create good public space.

Behavioral

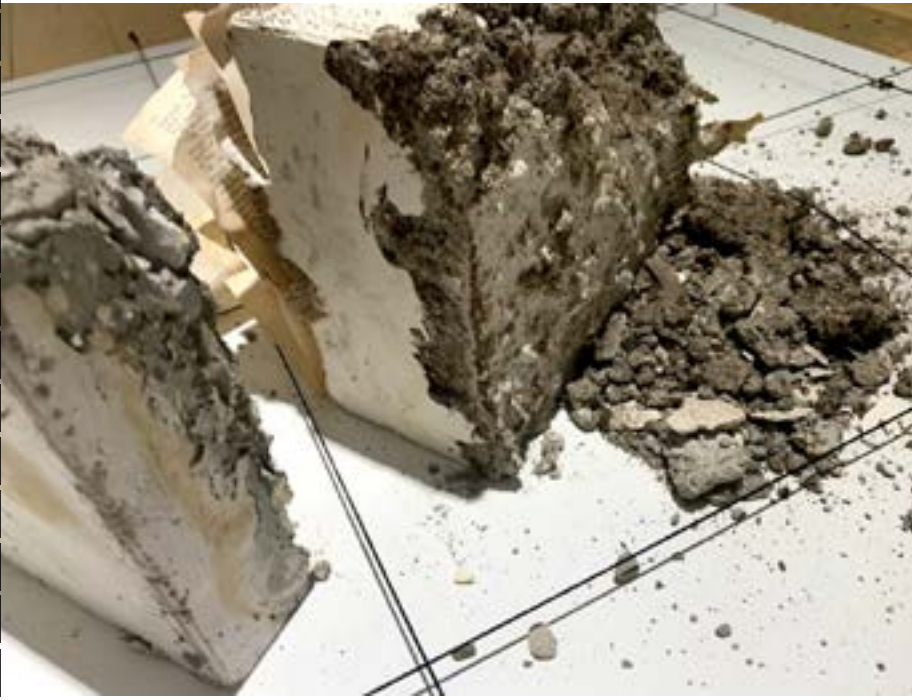
The psychological impact of my design is an importance criteria that i would like to measure. I want to measure the sensory experiences of users in my architecture as design, or the drawings. And the mental health of the user, which is important for a mental health facility. Studies will be completed to understand the importance of sensory experience and how architecture is able to drastically affect it. These studies will come into play in my design and how well they measure up to them will be the judgment on how they are performing.

Psychological Impact

Cultural Artefact

This stark white grid is allows you to become one with it. When our body is physically inhabiting the grid, the user becomes overlapped with the piece just as our minds are overlapped with the environment in which we live. My thesis is based on this idea, and the artefact becomes just another dimension in the representation of architecture. Our minds are nested within our bodies, our bodies nested within the world; just as the cubes are within the grid of the boards while the boards are within their own grid. Although these are fairly literal representations of nesting, through the process of breaking we see even those lines become blurred. As we use the tools as the different methods of therapy to dig into the cubes made of actual building materials, concrete, plaster and earth, they begin to cross the boundaries of the grids. The interlacing of objects and fragments becomes a metaphor for the way I am looking at different studies in my project. I m using philosophy, neuroscience and architecture to allow others to understand that these studies are not so separate.





What we are physically searching for is a crystal known as fluorite. I placed pieces of it inside some of the cubes, so the participant becomes aware that they are actually searching for something. Along the way, you find different stories through impressions that fold into the concrete, the pages that are woven into the plaster and all of the layers creating the pieces. Searching for the fluorite becomes lost, while it remains a driving factor for the installation. Fluorite is alchemically used to mixed with other metals to increase their flow through the melting and rediscovery of shape. In healing, it is used to ground and harmonize spiritual energy; to connect the human mind to the universal consciousness.

By forgetting what we are physically searching for we allow ourselves to find something bigger. Getting lost in the project disorients us from the world around and coming back into the world we begin to see it in a different light. We become infatuated with the shapes being created through the destruction of perfect cubes. The mess becomes beautiful and the breaking becomes a paradox in which we are able to heal. In the discovery the crystal becomes new, not by being changed, but through the participant being connected to it because they are the ones that brought it out of its confinement.



Cultural Artefact

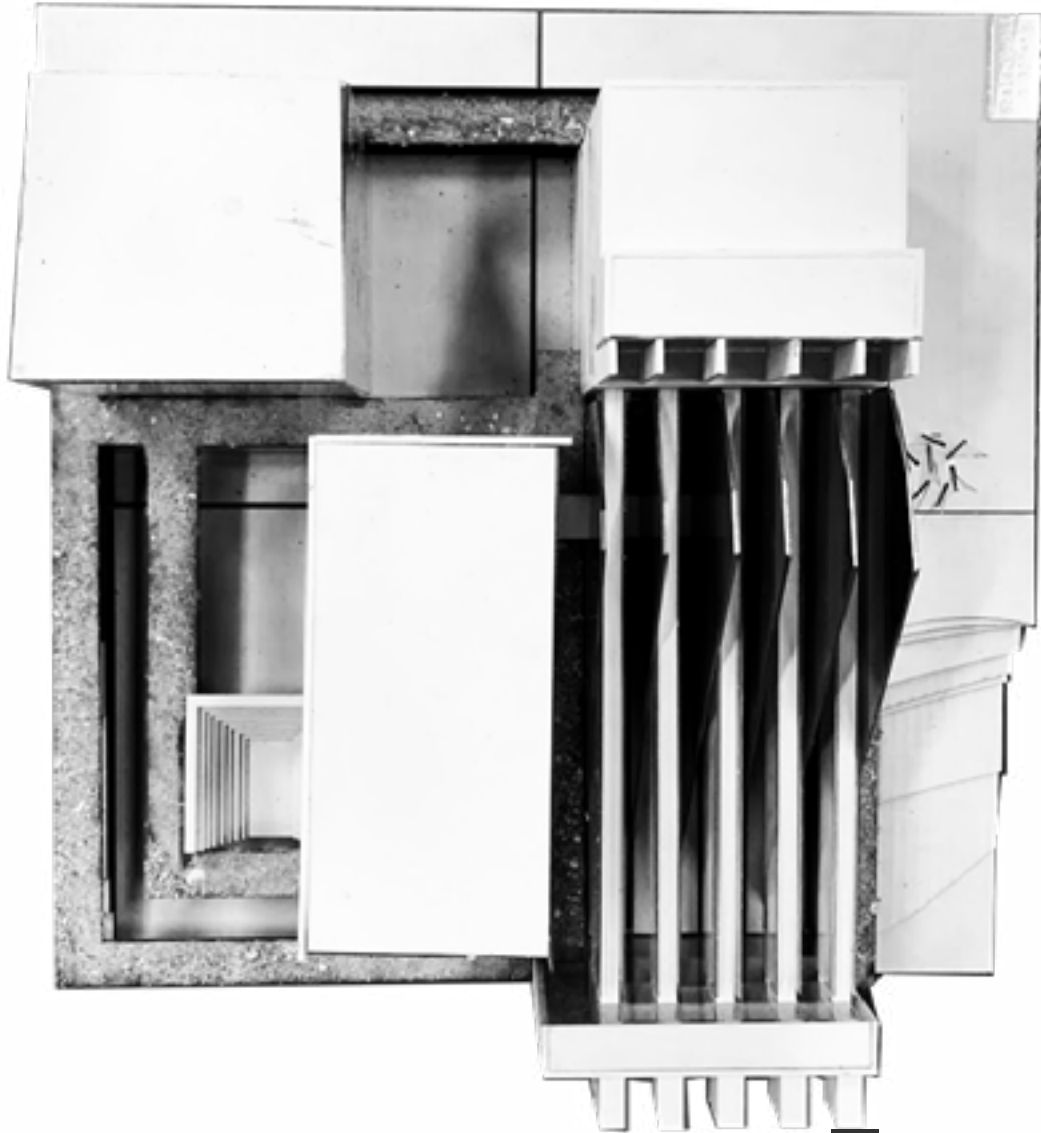
This reflects the confinement of thoughts in a person with depression. These people are the reason I'm doing this project. I want to find a better way to design for individuals with depression and find out ways that architecture can better help people to heal. The sciences have come so far in ways of coping and dealing with depression, but the architecture has not followed. I want to do my part in finding better ways to help people understand the importance of the built environment in relation to mental health. This again, is why I am using multiple studies within my project to stress the importance of overlapping knowledge and creating connections.

Many connections are portrayed throughout the instillation. The ambiguity of spaces, which impacts how one sees the world around them. The nesting which shows the transitioning back into the city. The relationship between the participant and cubes which becomes that of the doctor and patient. The participant that also becomes the inhabitant because they are healed through the breaking. The tools that are the different methods of therapy, while also relating the project back to excavation. The excavation of mind into the external world.





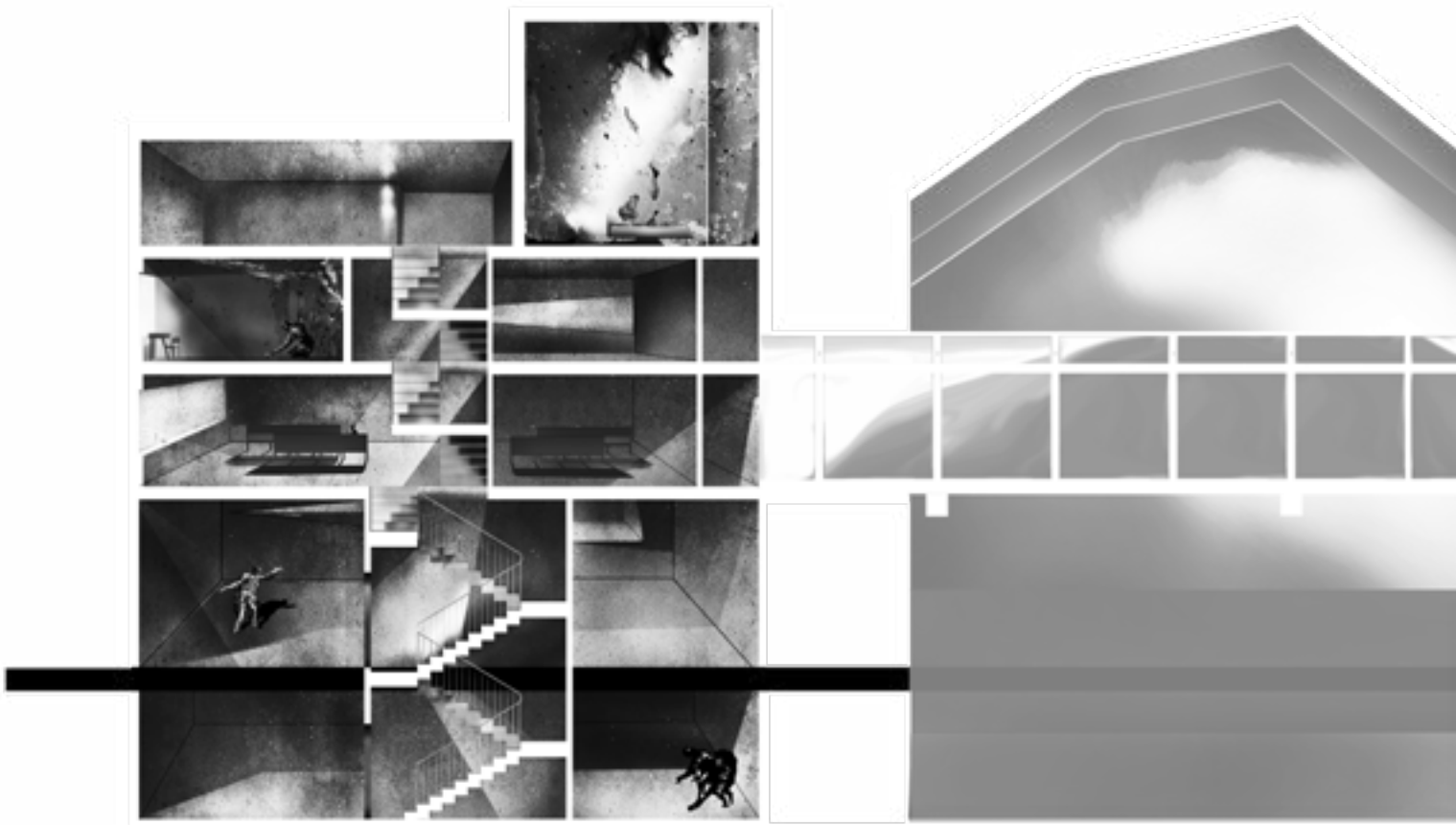
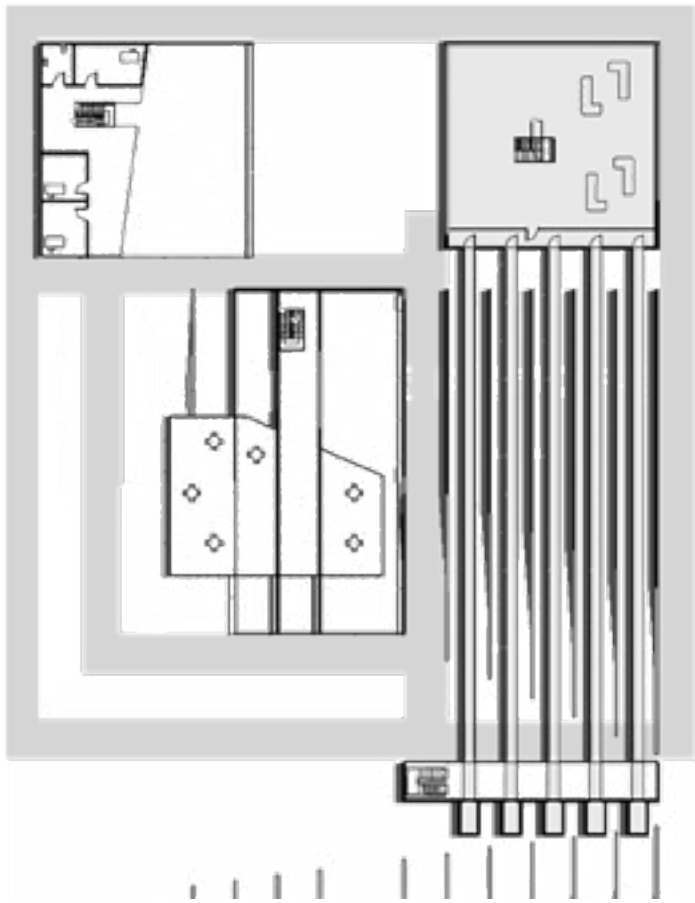
Final Design

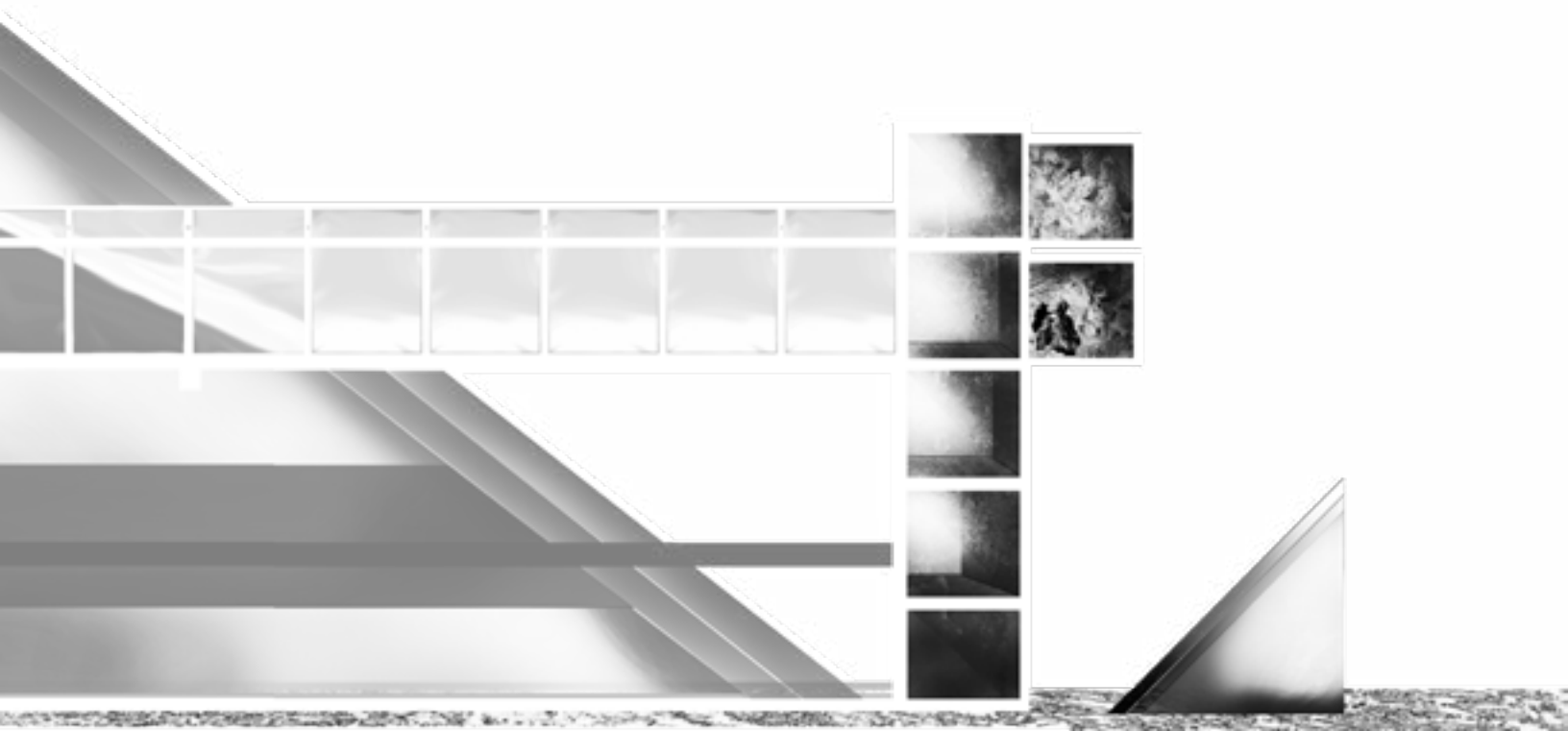
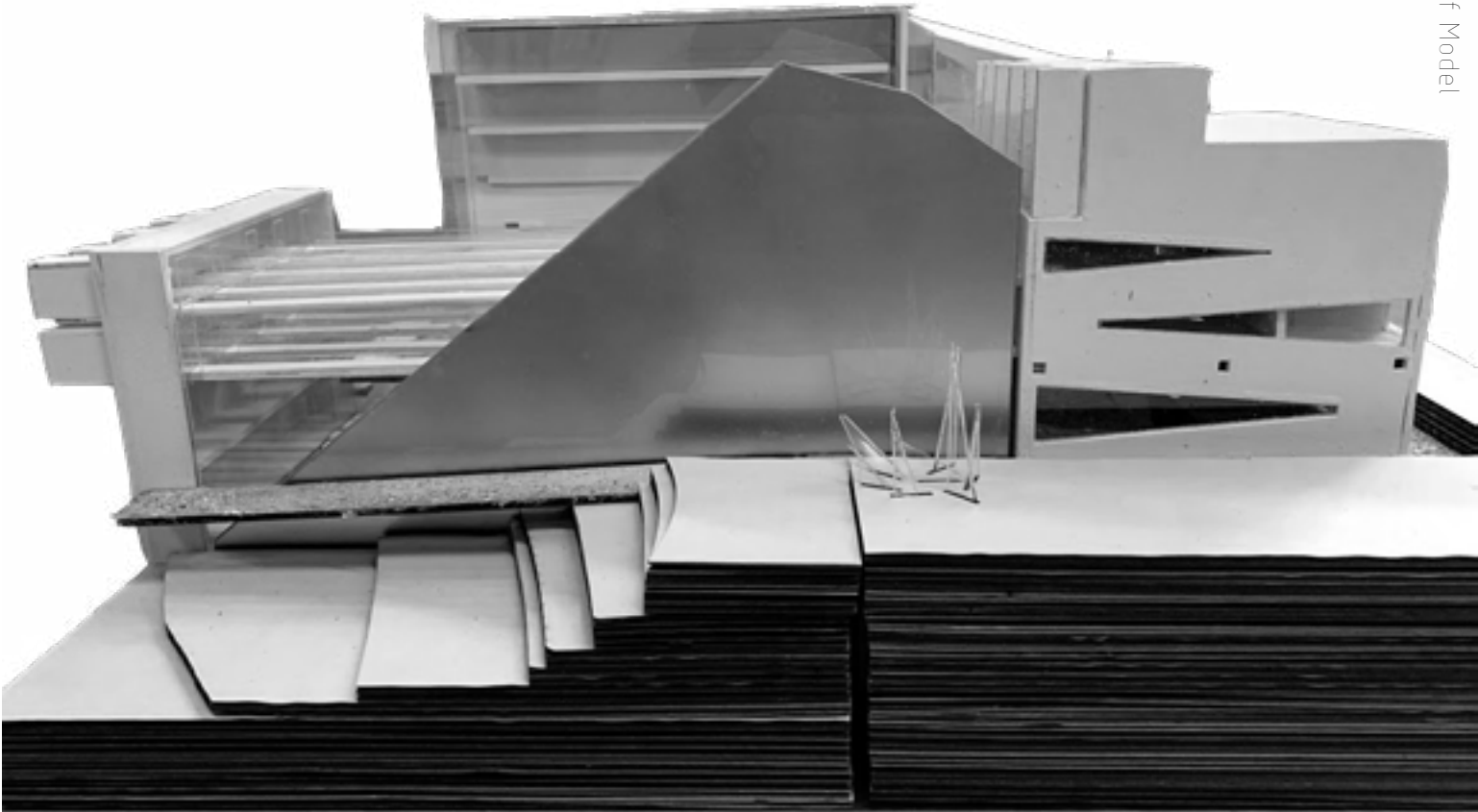




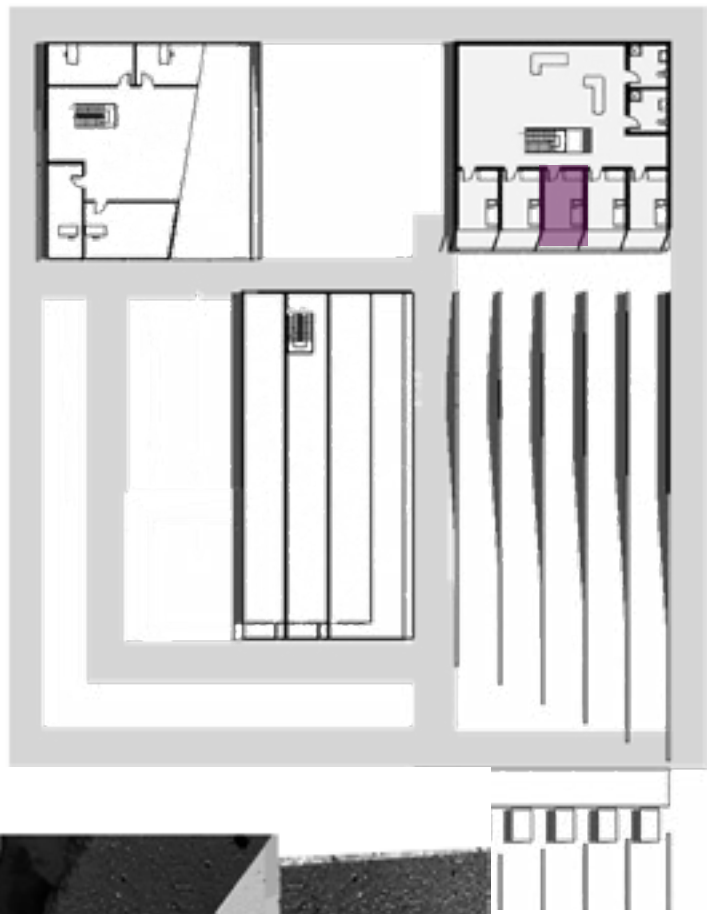
The architectural design invites users to understand that this environment is affecting their body and mind through filtering and movement of spaces. It is anything but a clean, reductive space. The design dramatizes the transition of darkness into light allowing a transformation to occur.

The user starts their day within the dormitories.

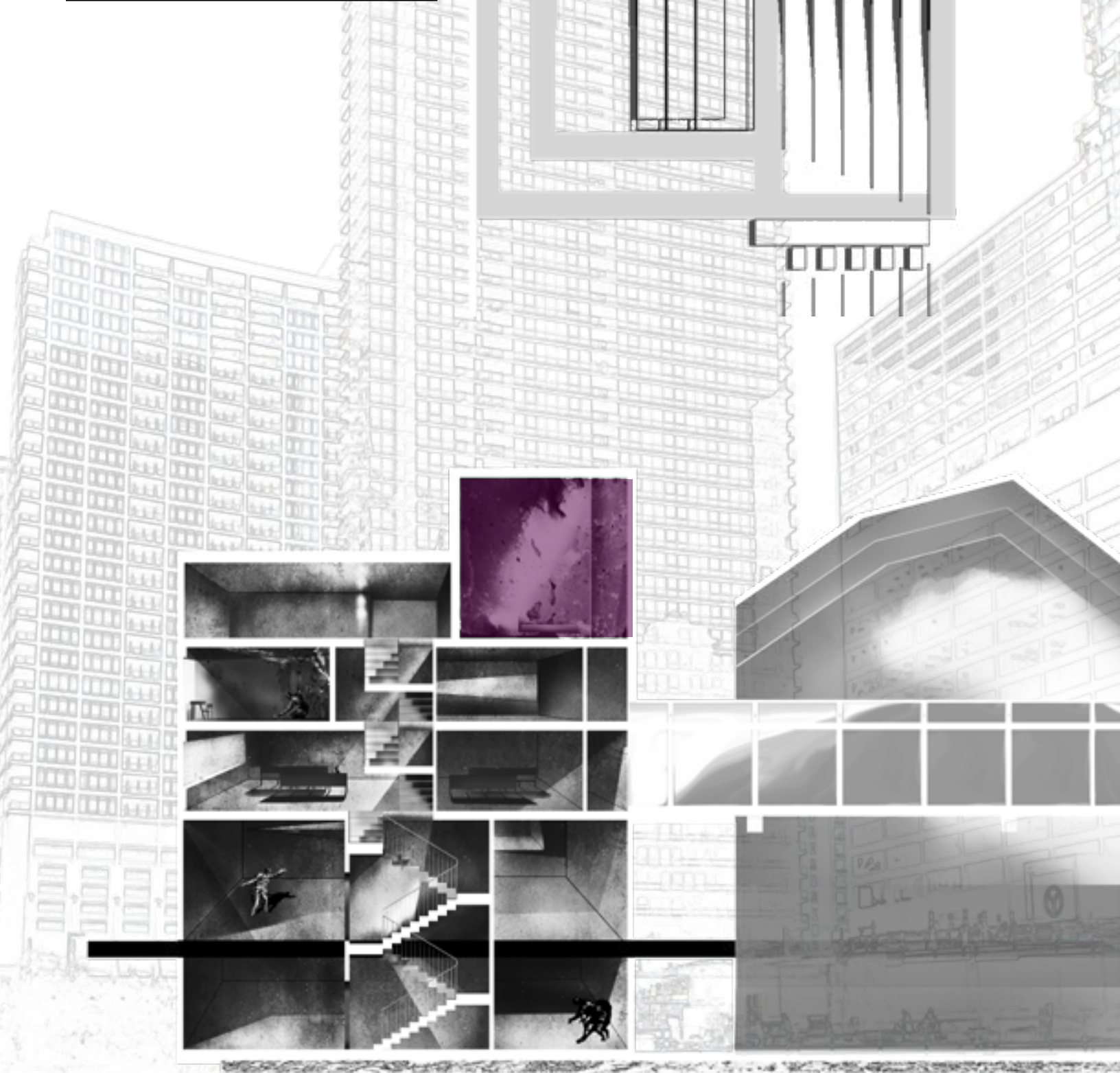
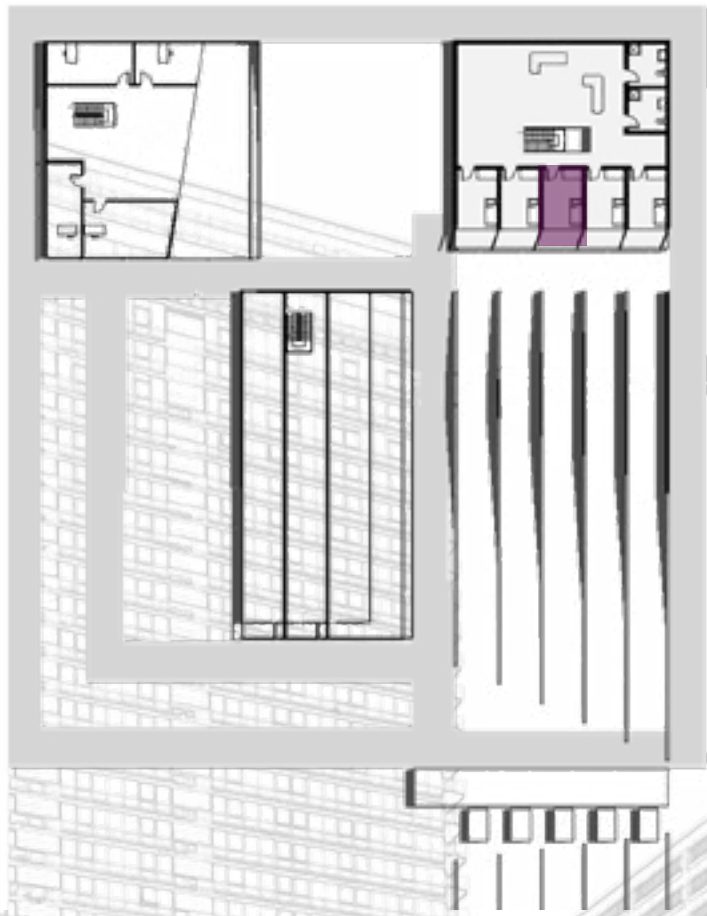




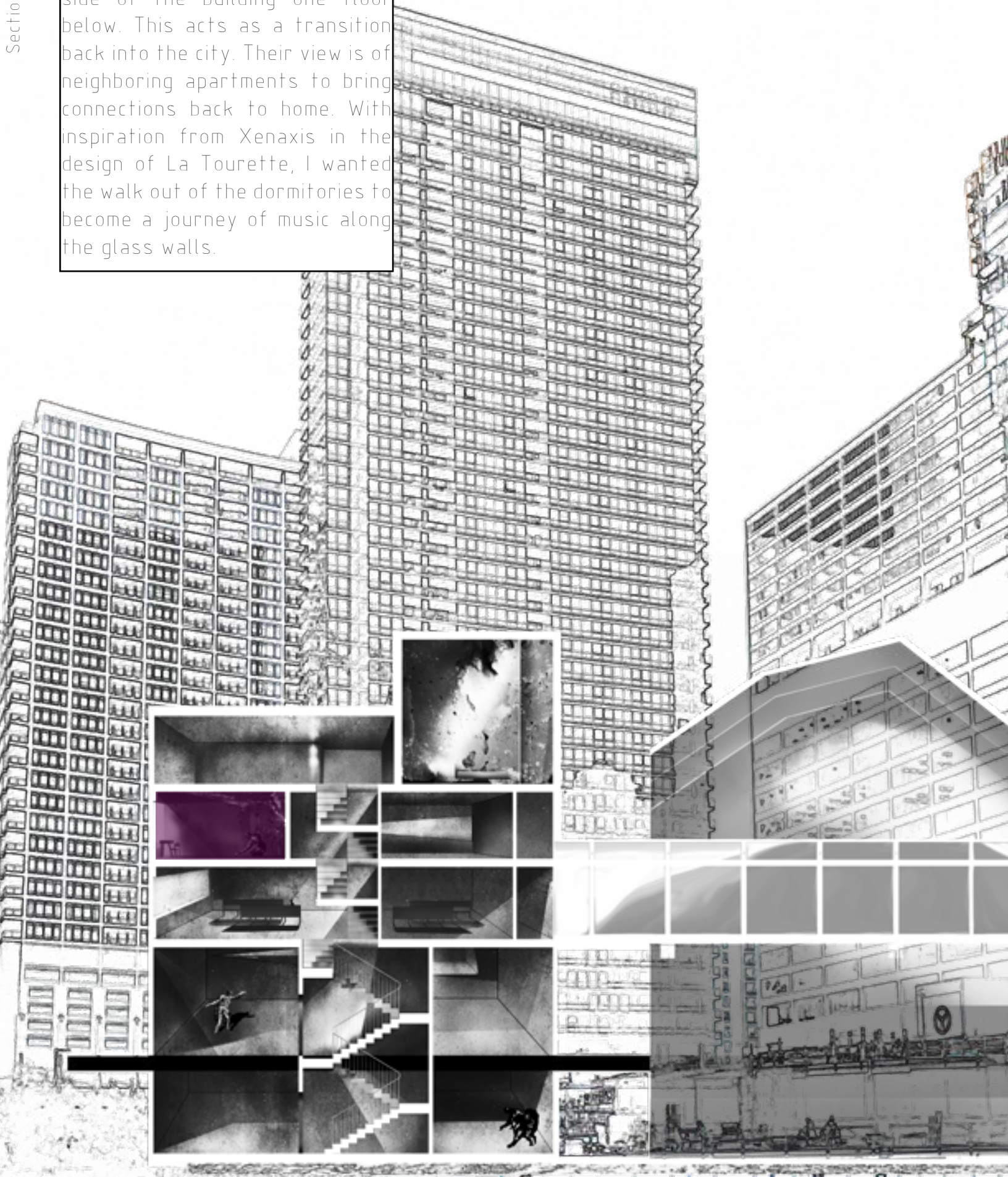
They are woken up by the soft light of the sun. In my design the patient is given a home. Their space becomes one for contemplation and for stories. Along the walls of the living quarters are remnants of past journeys. These can be found in paintings on the wall to trinkets left behind.

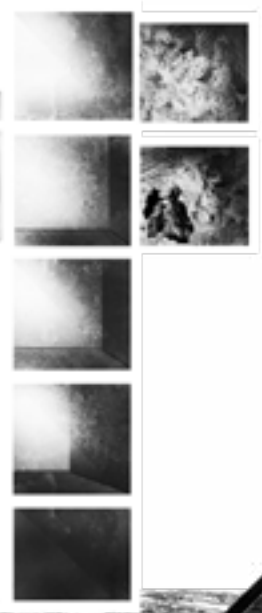
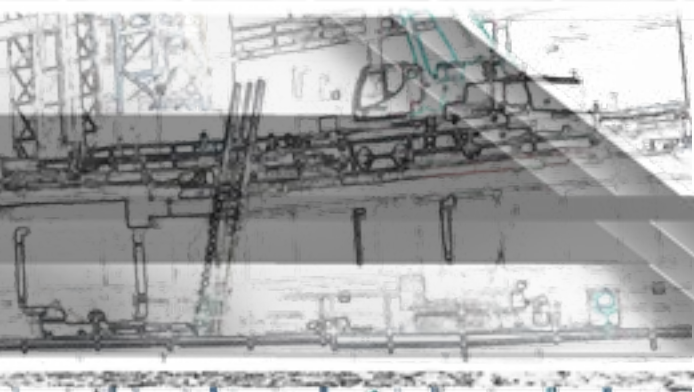
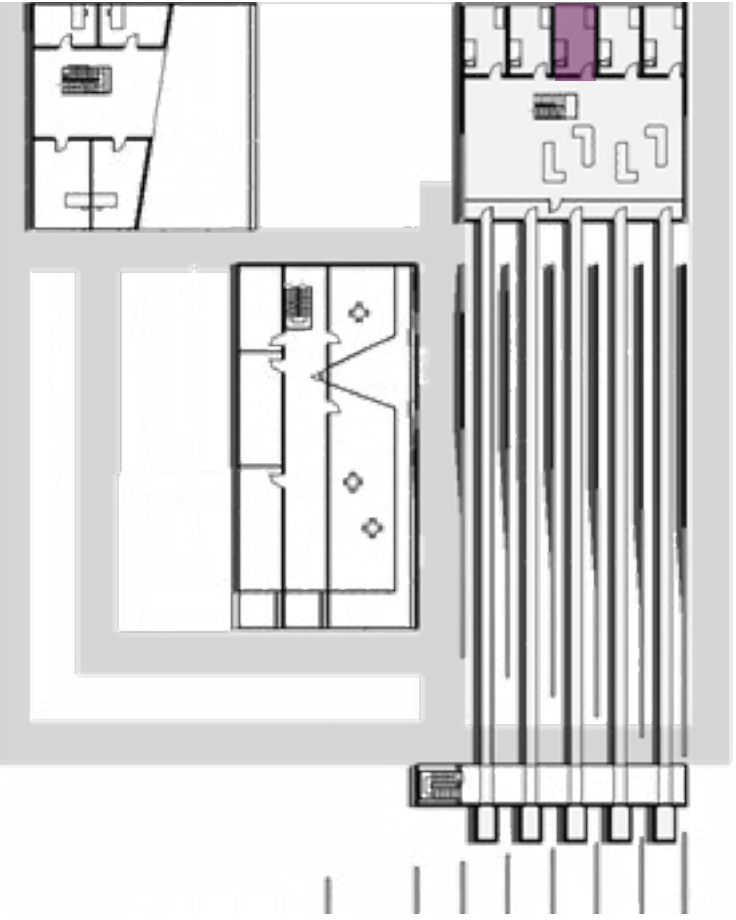
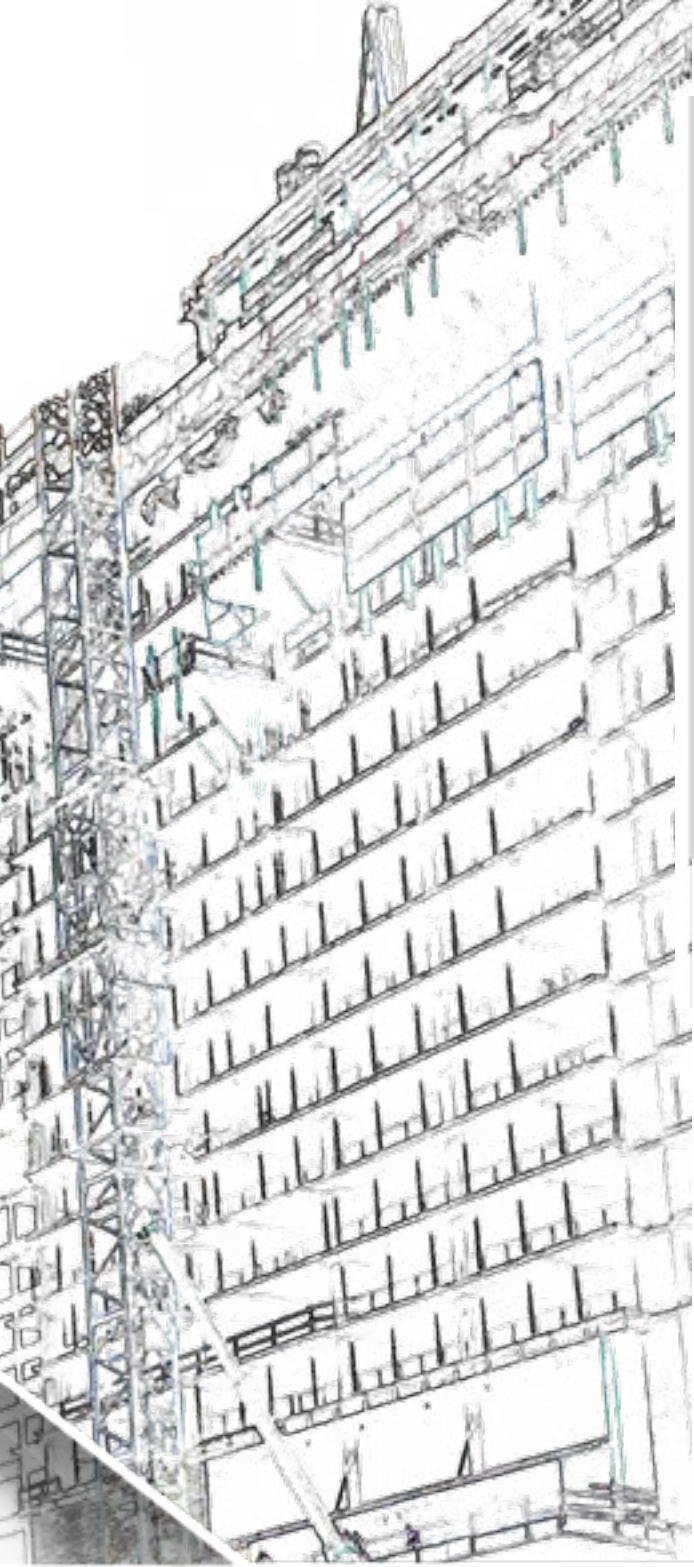


The long-term patients, or people staying for longer than 30 days are given the top floor. This becomes a physical lifting of the body to bring the mind with it. These dormitories are placed along the south side of the building into the facility and towards the water to allow long-term patients time for healing.

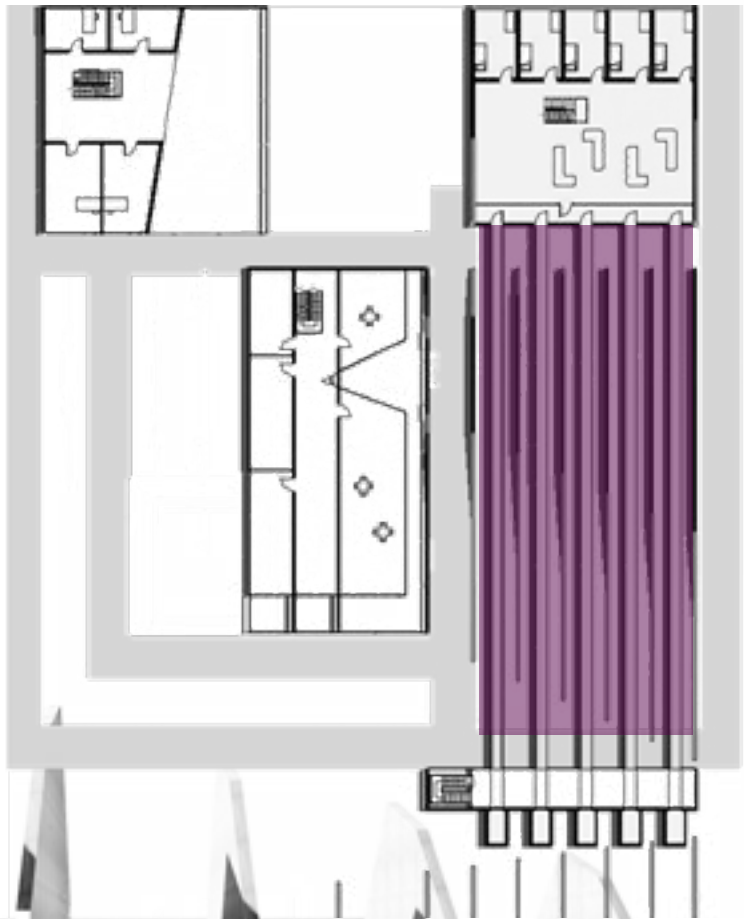


The short-term, less than 30 days, is placed along the north side of the building one floor below. This acts as a transition back into the city. Their view is of neighboring apartments to bring connections back to home. With inspiration from Xenaxis in the design of La Tourette, I wanted the walk out of the dormitories to become a journey of music along the glass walls.

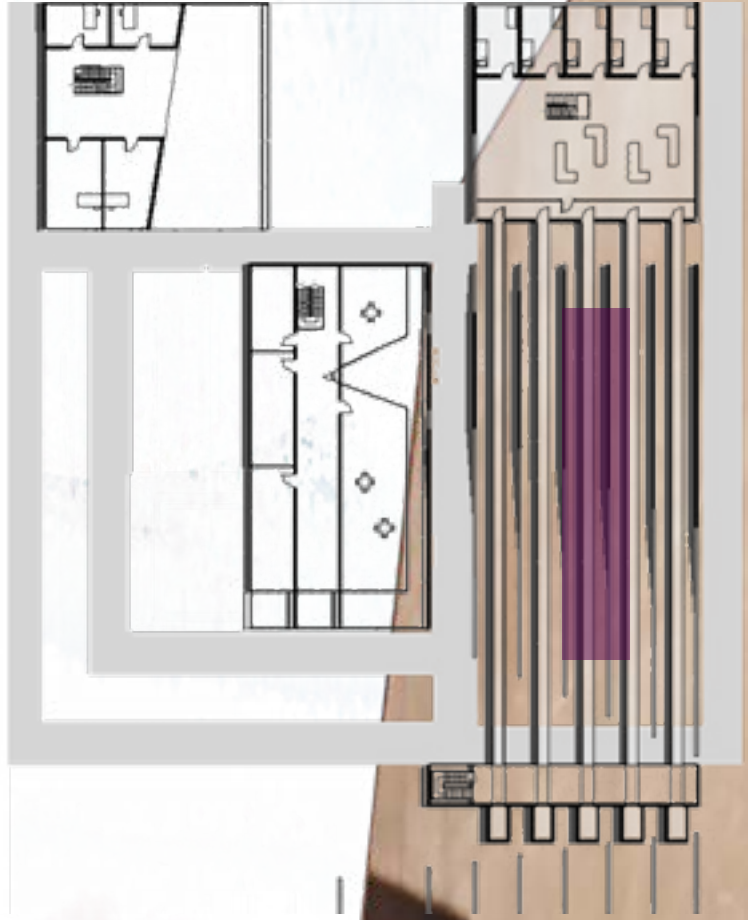


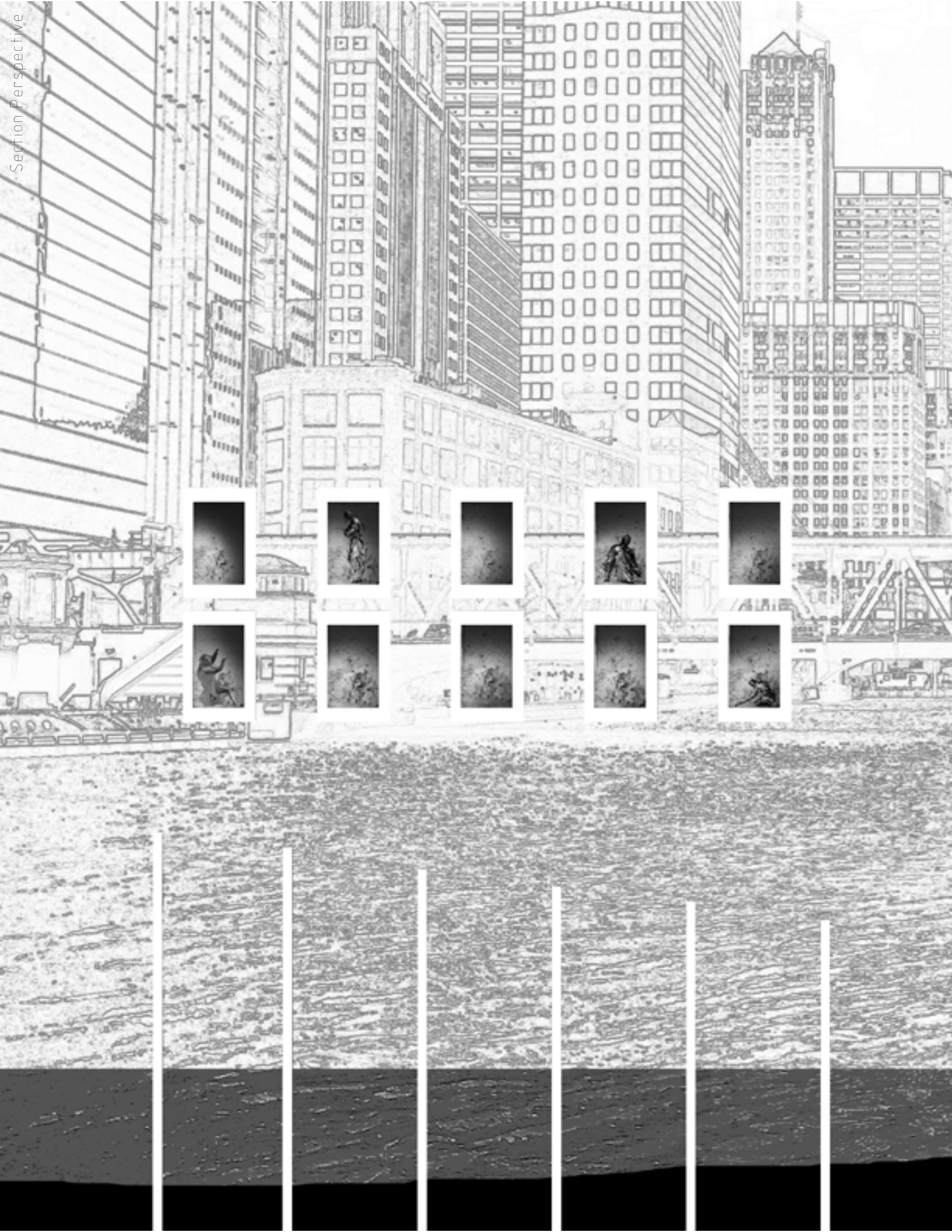


The long pathways give space for inner reflection by casting up tall mountainous walls within inches of your body that brings the sky down to you. On the journey across the paths, patients can reflect on their purpose in this life. The body is moving physically laterally but the mind is being lifted

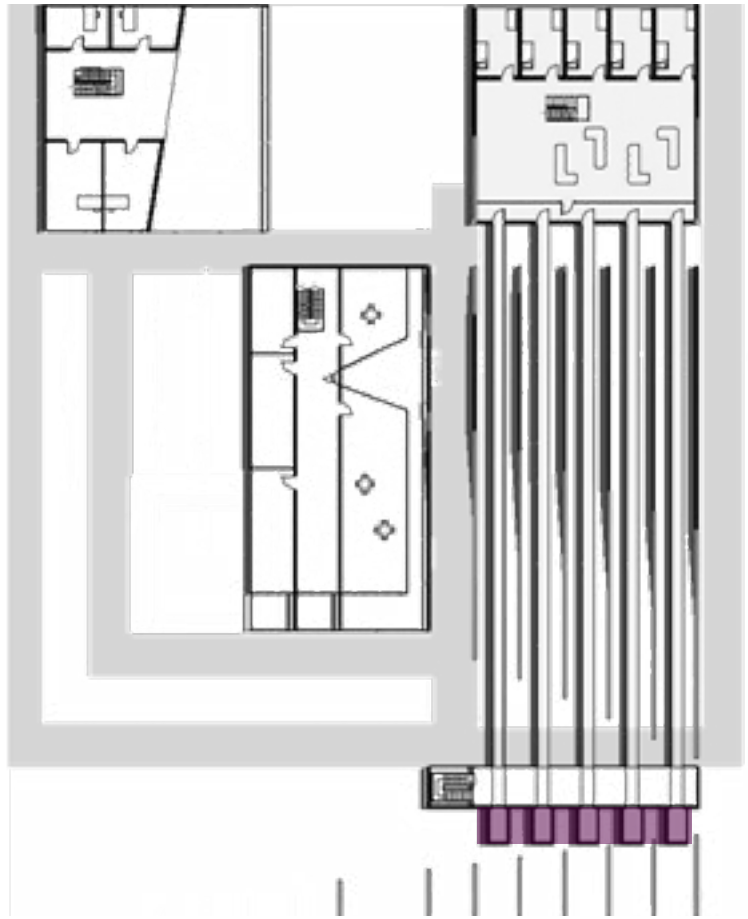


By moving people in this way, the design allows them to get lost in the rhythm of the walls to feel as if one can actually reach up and grab something from the sky. Juhanni Palasma discusses how every great wall is also a staircase, bringing what is far near. At the end of this journey is another story, a story Martin Heidegger talks about as *gellassenheit*.





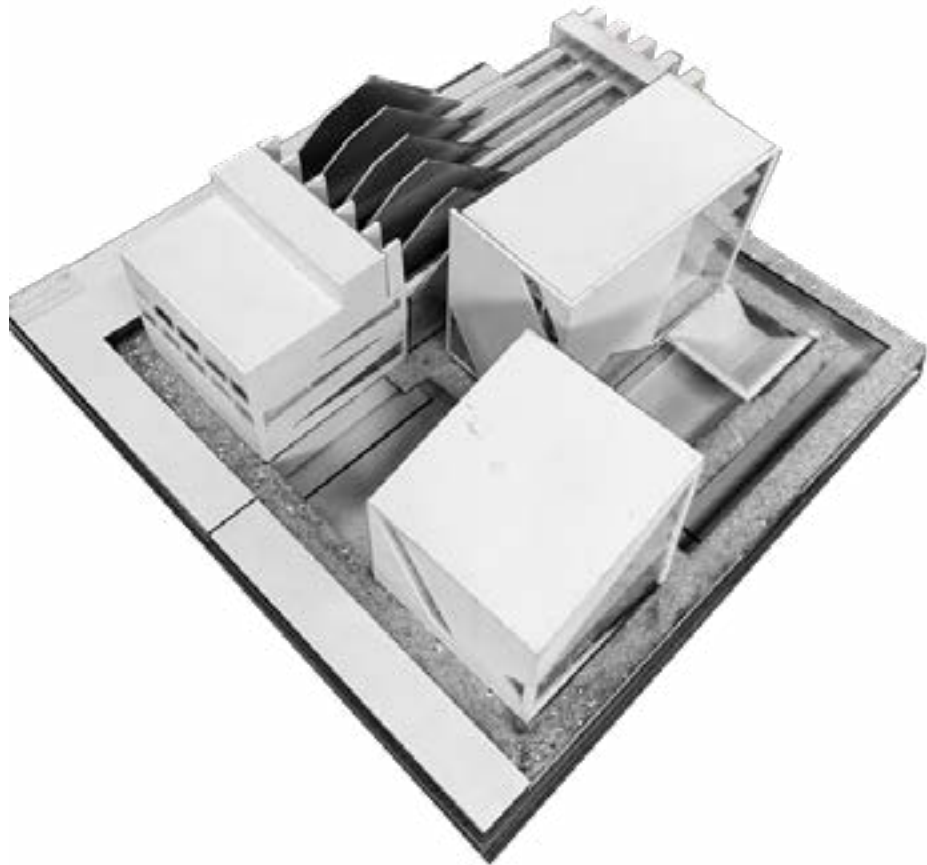
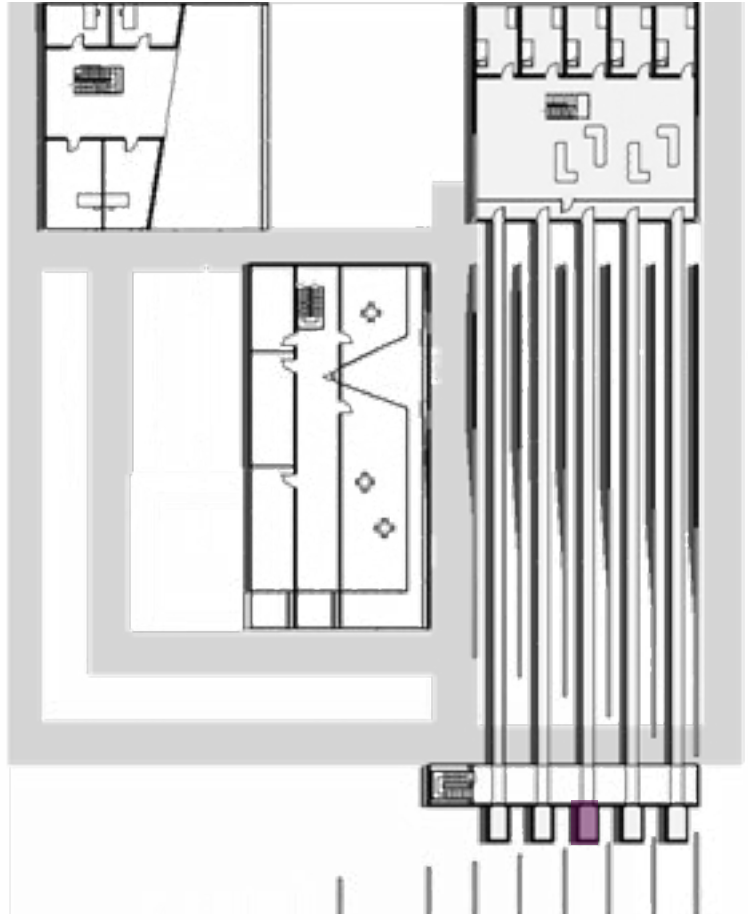
Gelassenheit is a German noun that translates to serenity, while this seems like a goal, you are not able to achieve it like other goals. Instead of working, you must let go of your own will. It is described as a way of thinking but becomes a way of life. You let go of what you know and begin to understand that which you never thought one would be able to grasp. Being able to just be present in the space provided. This safe space is a more private reflective space that allows one to be in the city, but also not in the city. Users are exposed to the elements of sound and smell but closed off from sight and touch.

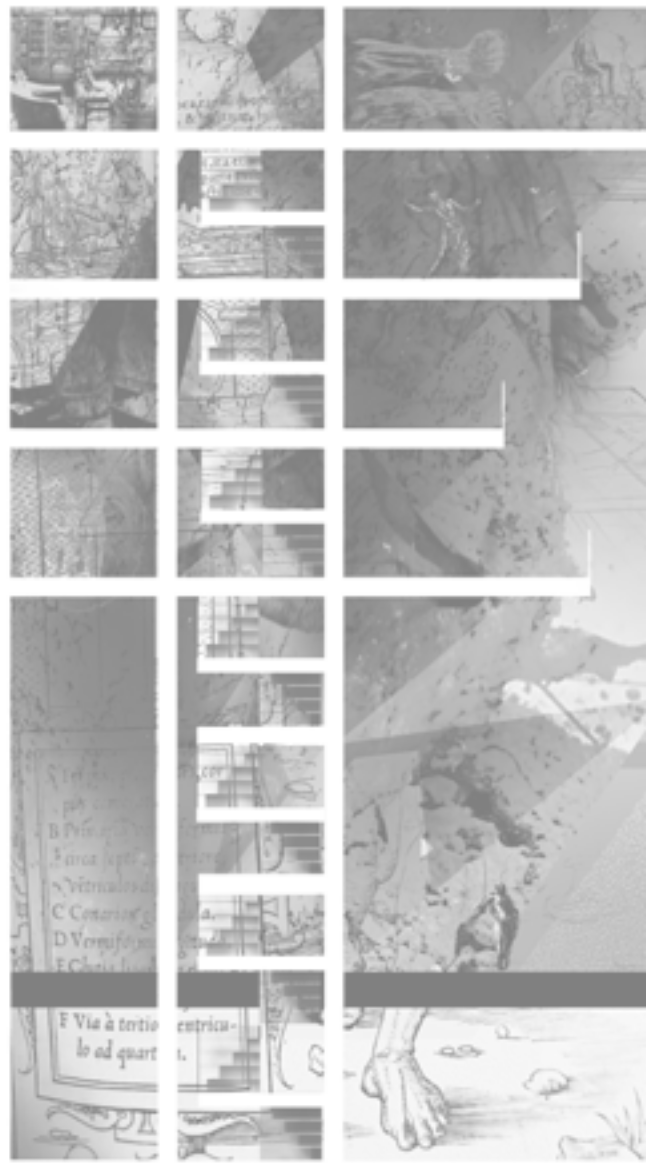




Section Perspective, Plan Overlayed

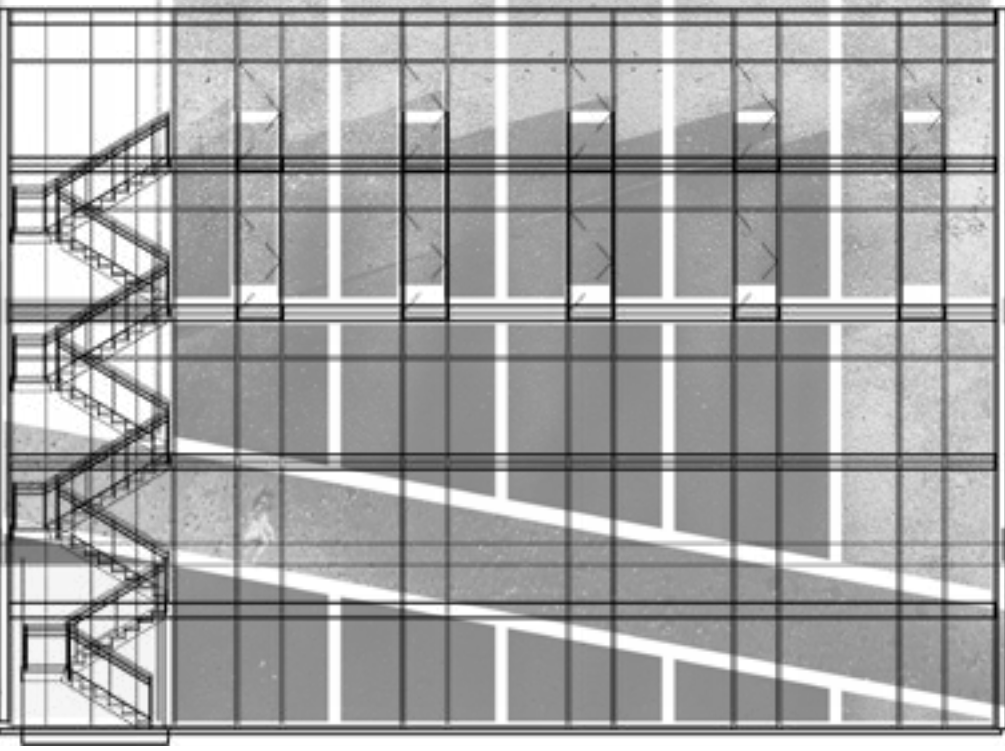
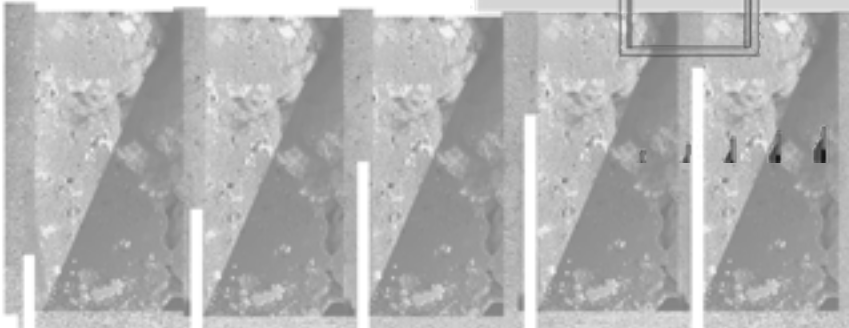
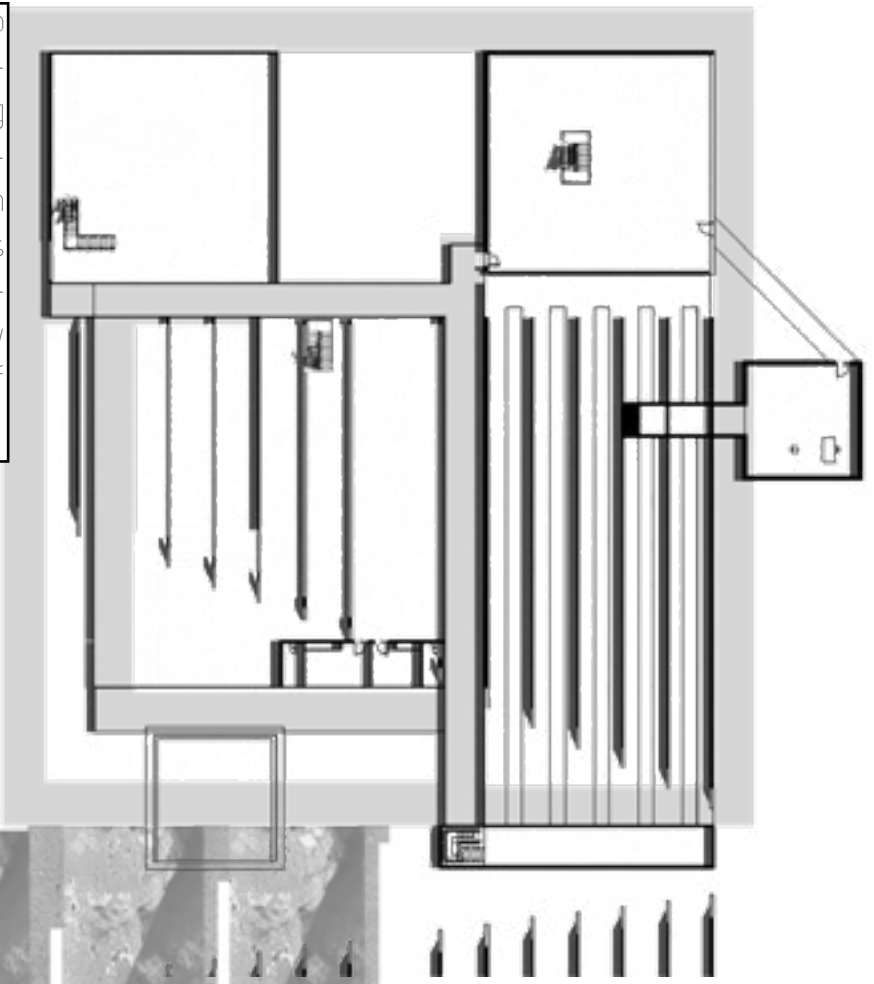
The water flows underneath which allows users to understand the flow of water within the building, they become aware of this now and begin to see it later on. The sound of the water against the metal panels orients the user, lets them know they are floating above the water in this transportation of thoughts to see this world in a new light, where one can feel their own presence and the line between the internal mind and the external world becomes blurred.



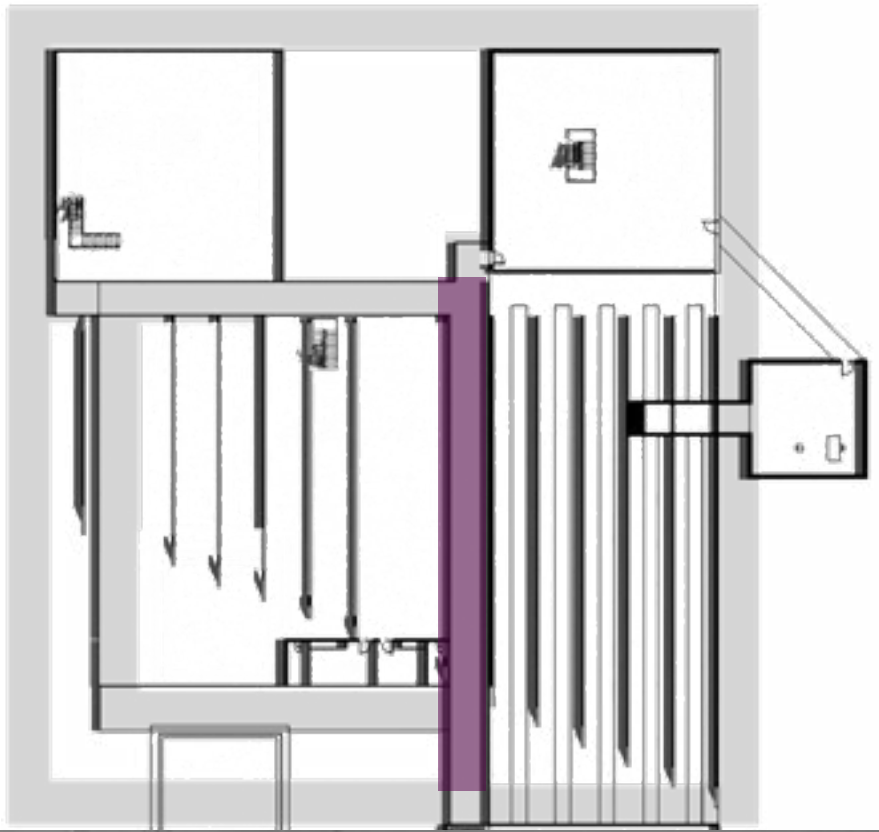


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As patients transition back into the facility they follow a staircase to the bottom floor. Cutting through the datum line, which represents the facilities connection to the rich history of the city's past. This presents the psychology of moving above and below grade through the orientation of connections to history.



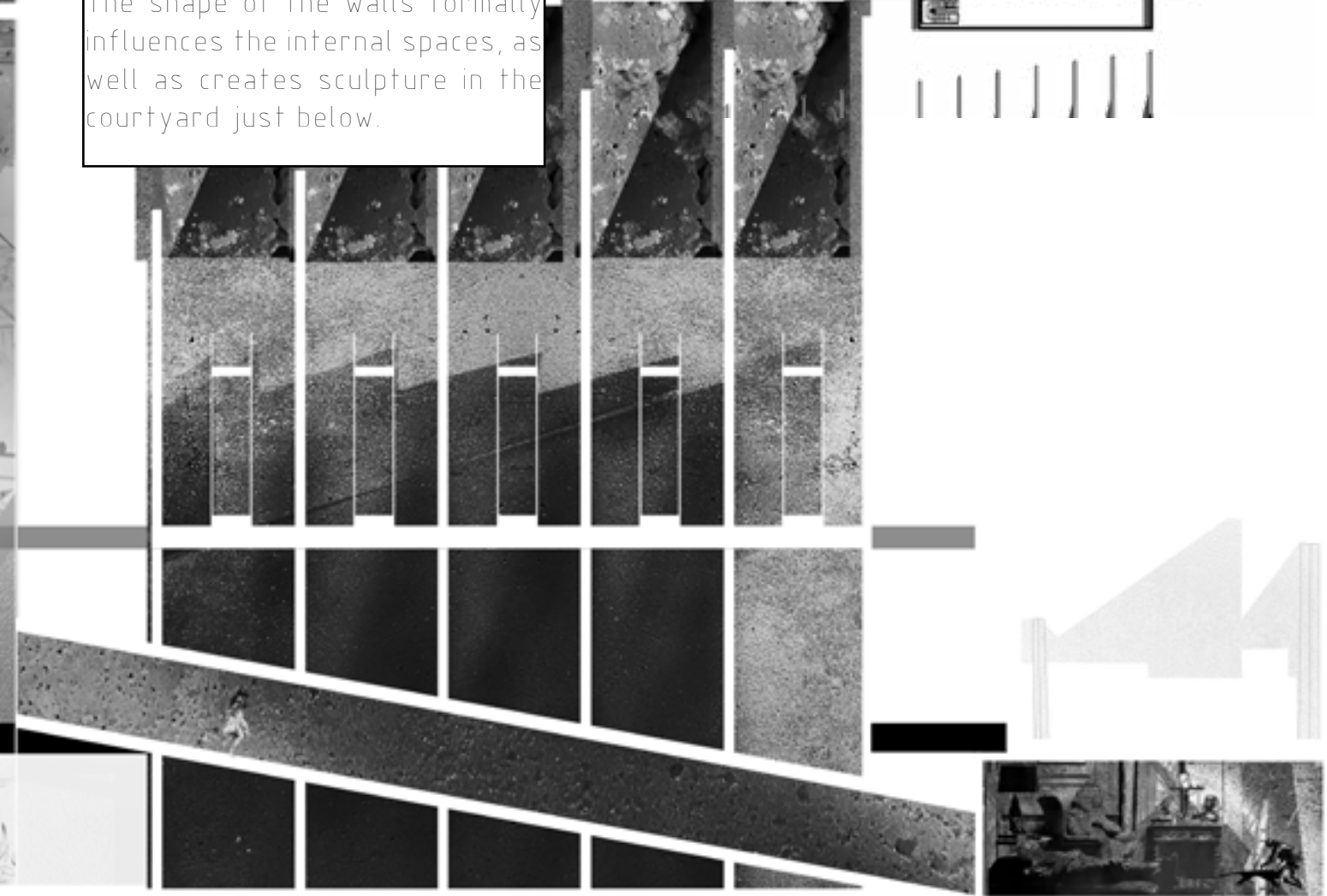
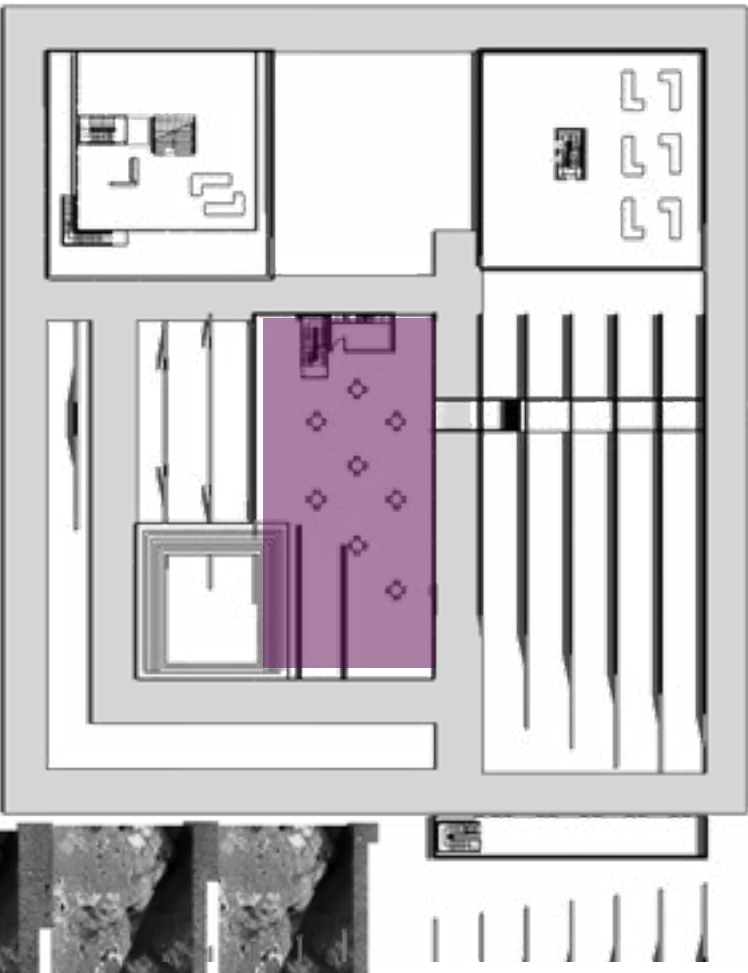
Users are still disoriented coming from below to enter the hall. They follow a path underneath the datum to see the floor above them. This orients the user in terms of verticality, so the body and mind knows it is under-ground, and moving above ground to be intermingled with other users, doctors, and visitors.



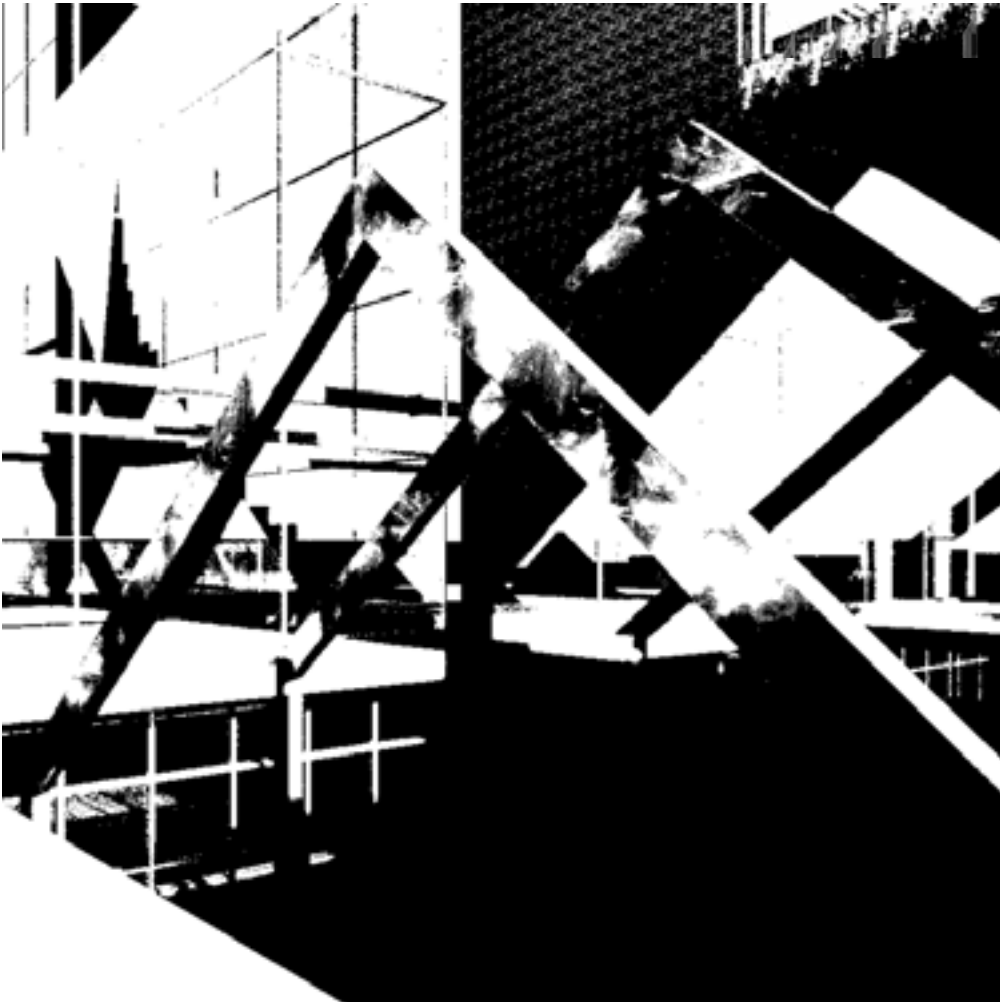
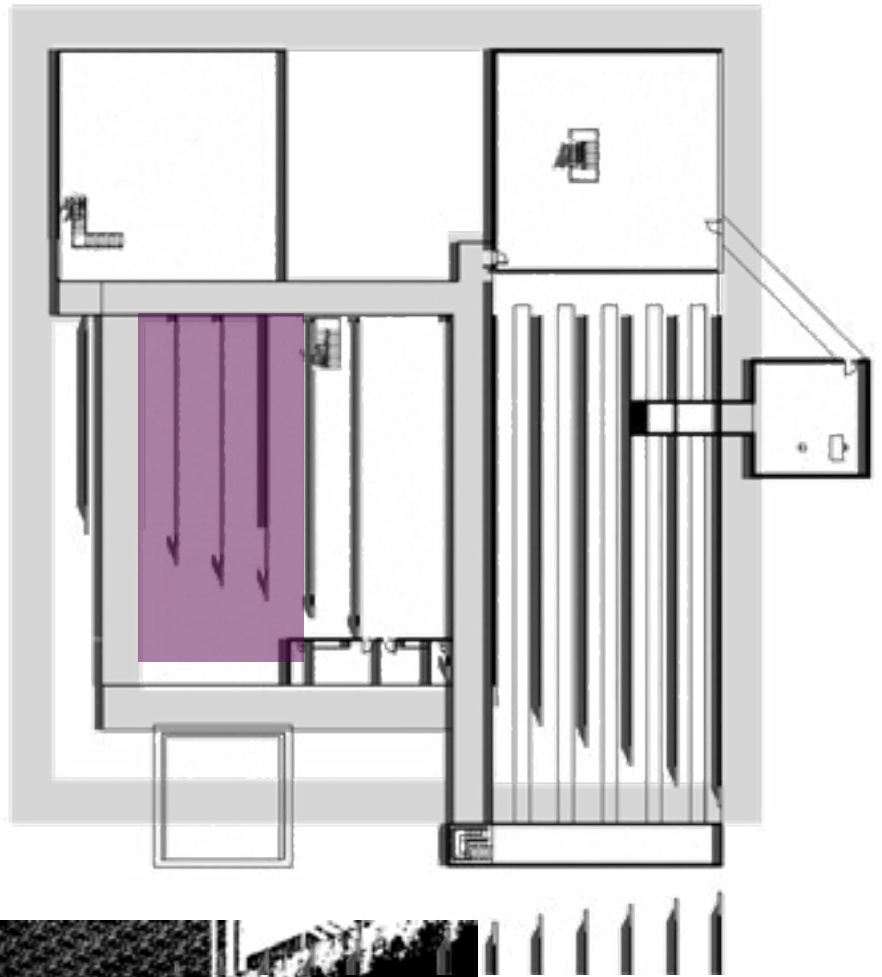




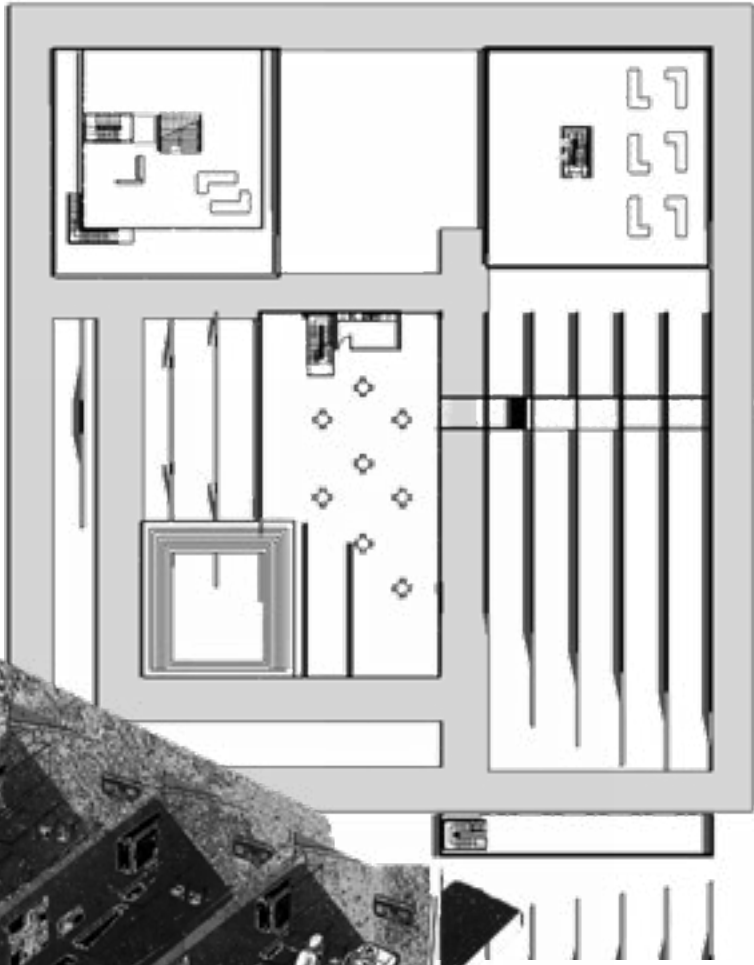
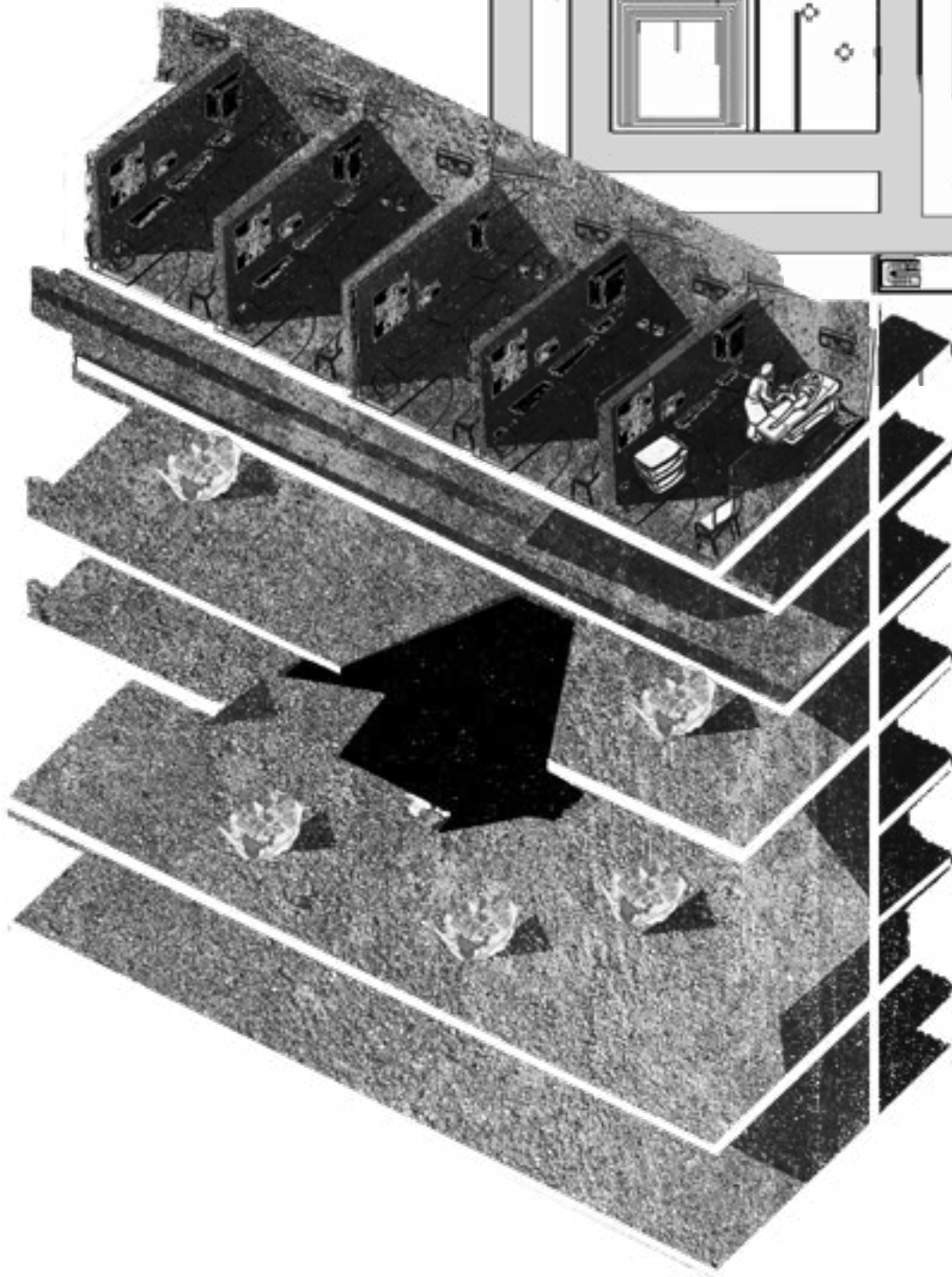
This hub becomes the overlapping of the outside city and the facility. Users have the ability to bring in visitors for an interlacing of people and space. The ambiguity of overlapping spaces vertically and horizontally provides this overlap visually. The viewer can look into the lives of the users and sees connections between people. The body can actually feel the similarities in spatiality from the pathways between the external walls and the rooms found within the recreation hall. The spaces within the building become the negative of the walls along the pathways that began the day. The shape of the walls formally influences the internal spaces, as well as creates sculpture in the courtyard just below.



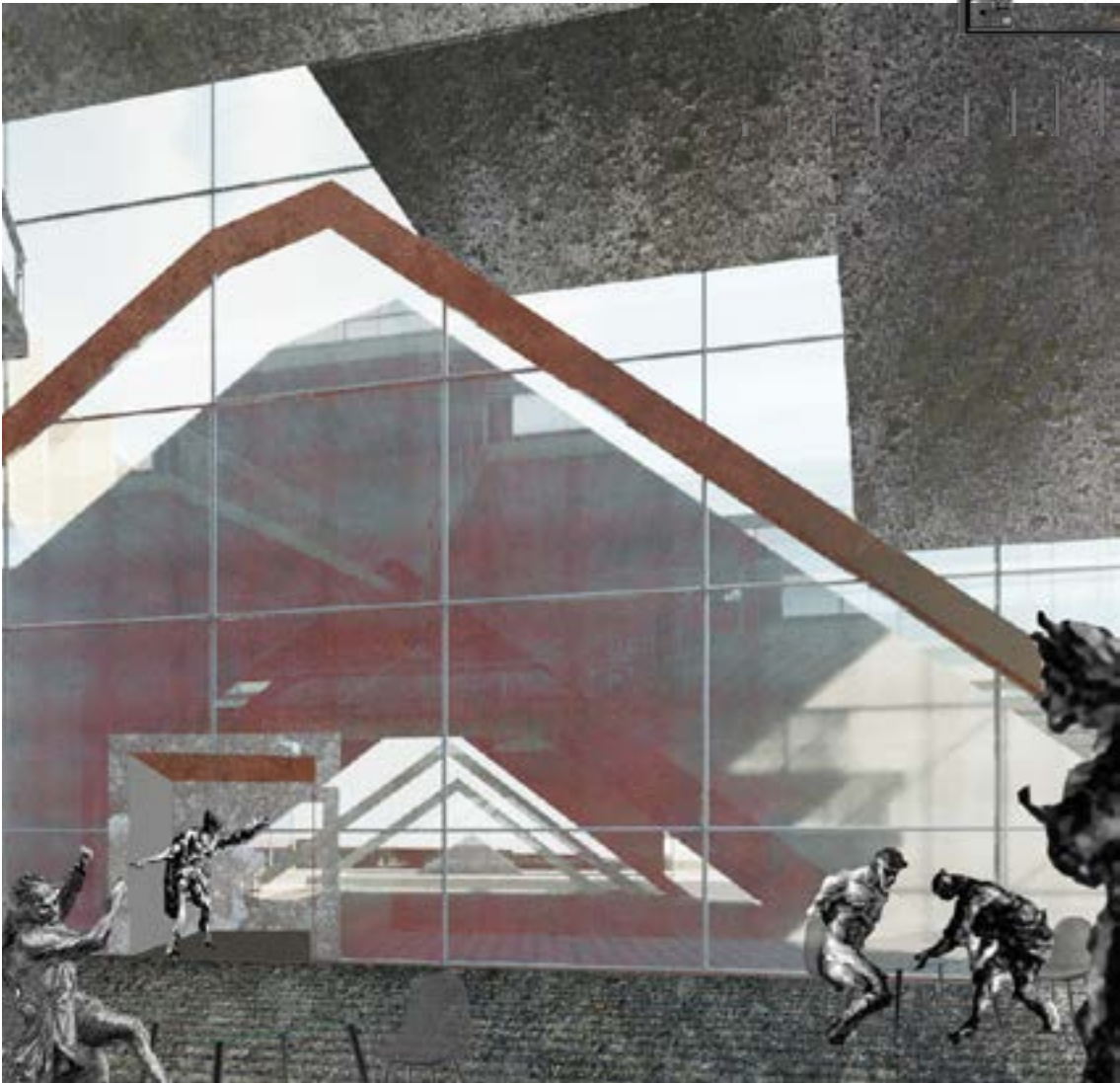
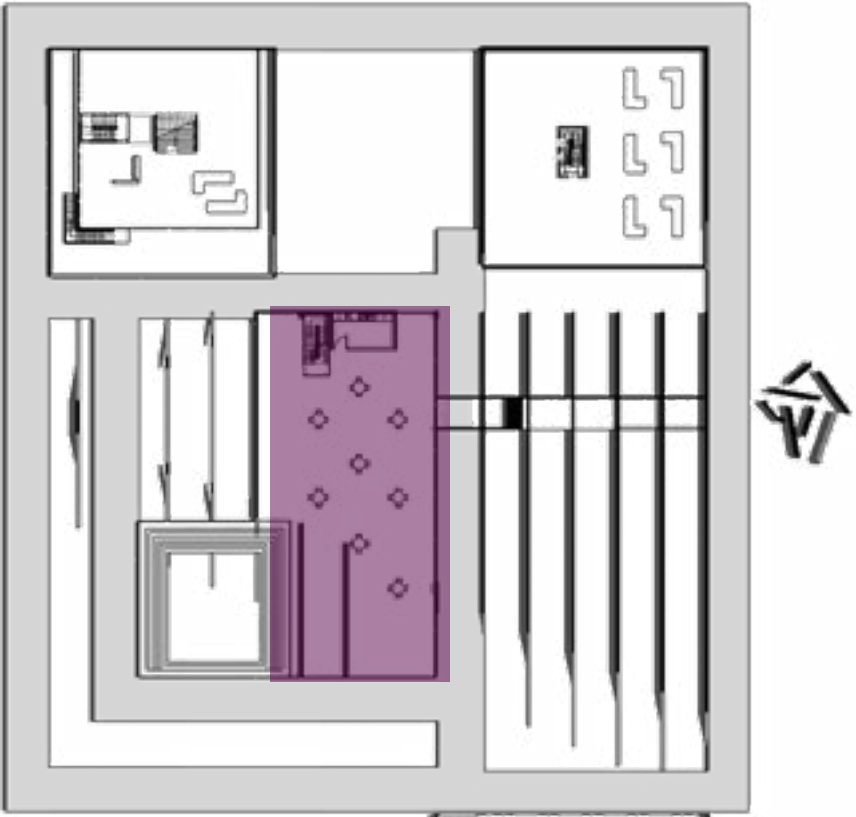
This courtyard of excavation the public to see the excavation of minds that is happening within the building, and allows users to understand what's happening within themselves.



The dining space is located on the bottom floor, while exam rooms are on the top level. This separation with similarities allows the facility to remain feasible for medical use.



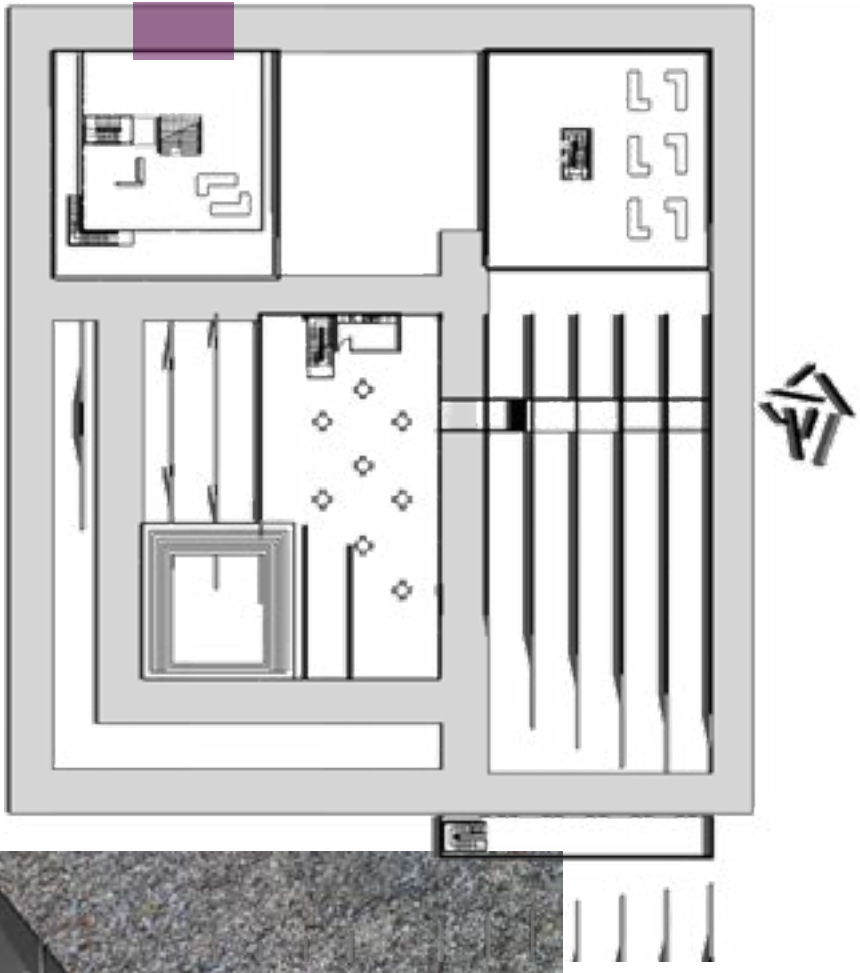
Staggering balconies give users different views of the towering walls outside.



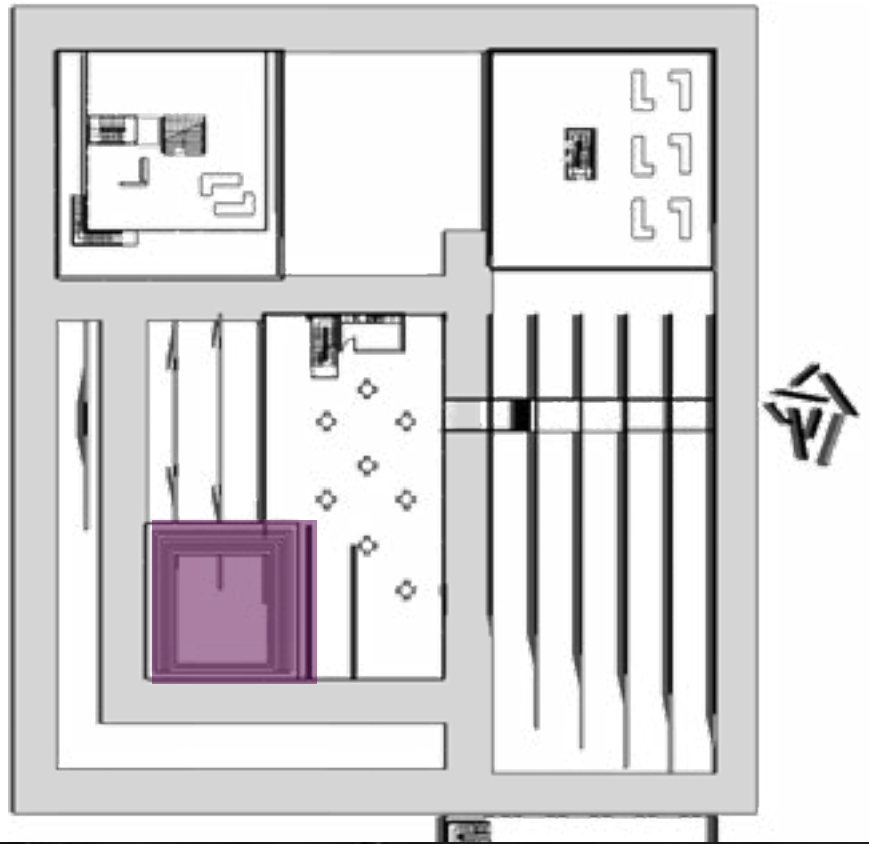




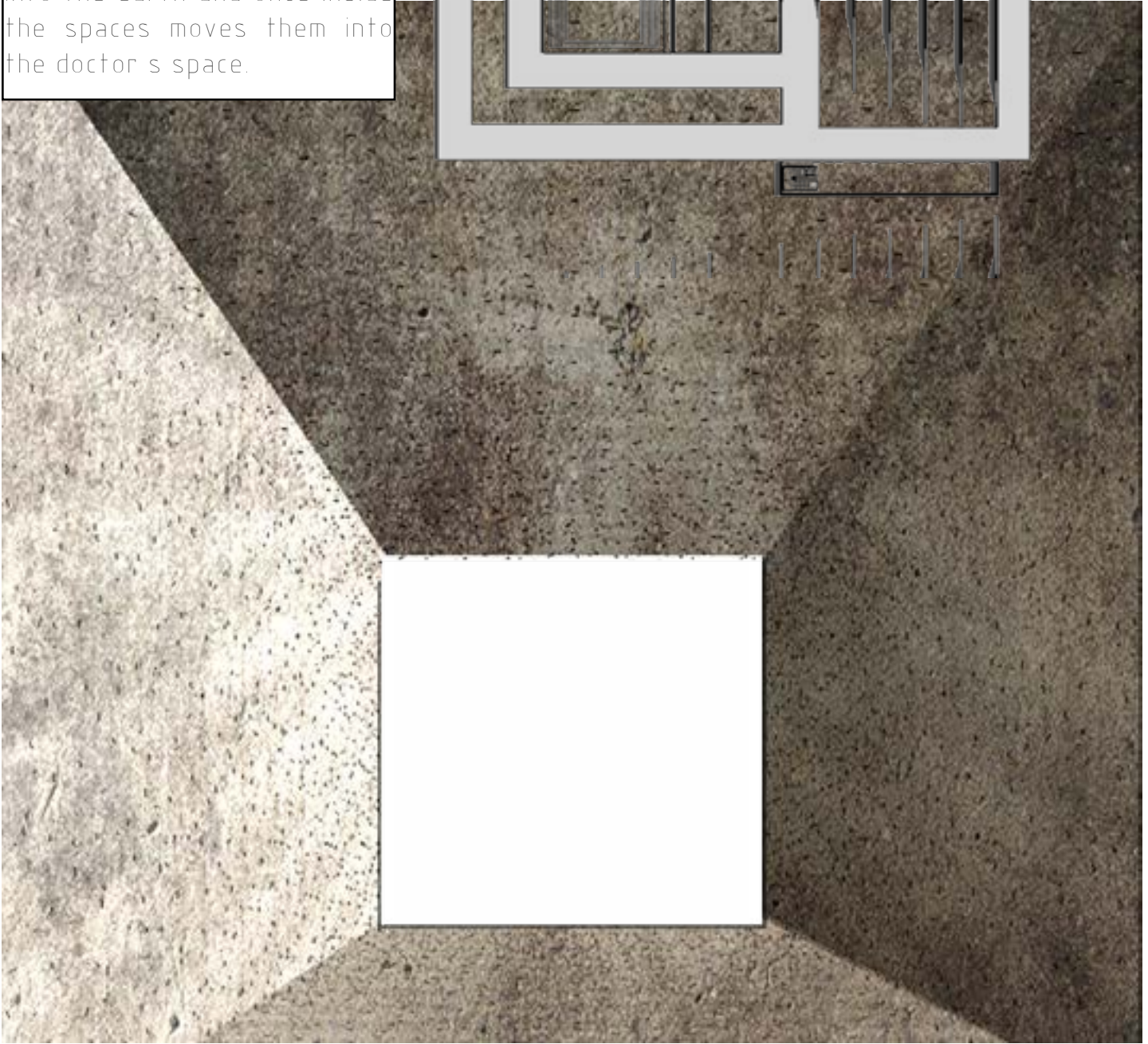
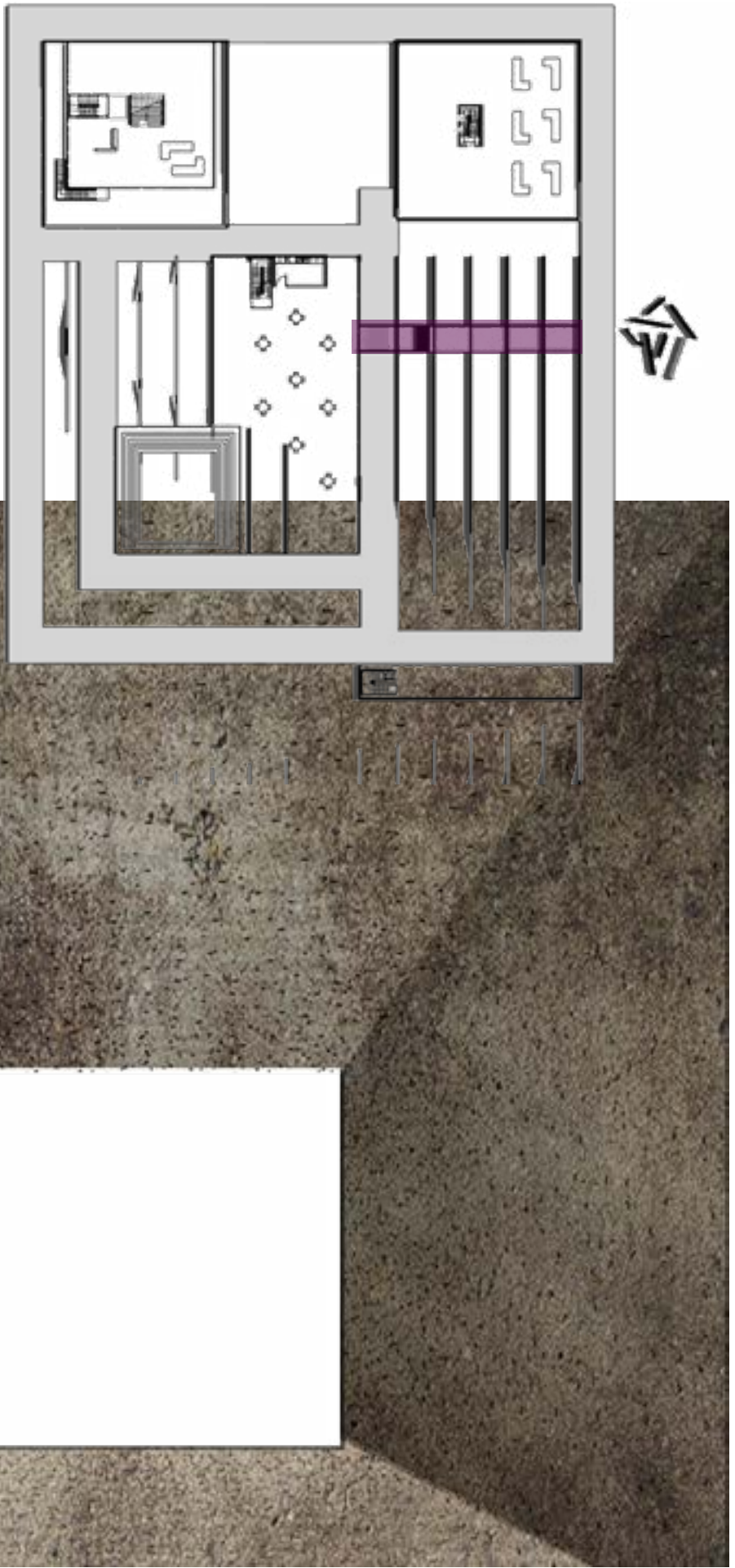
Outpatients and new patients would find themselves entering the administration building prior to their stay or a therapy session. The façade replicates similar contextual buildings while layering into the facility.

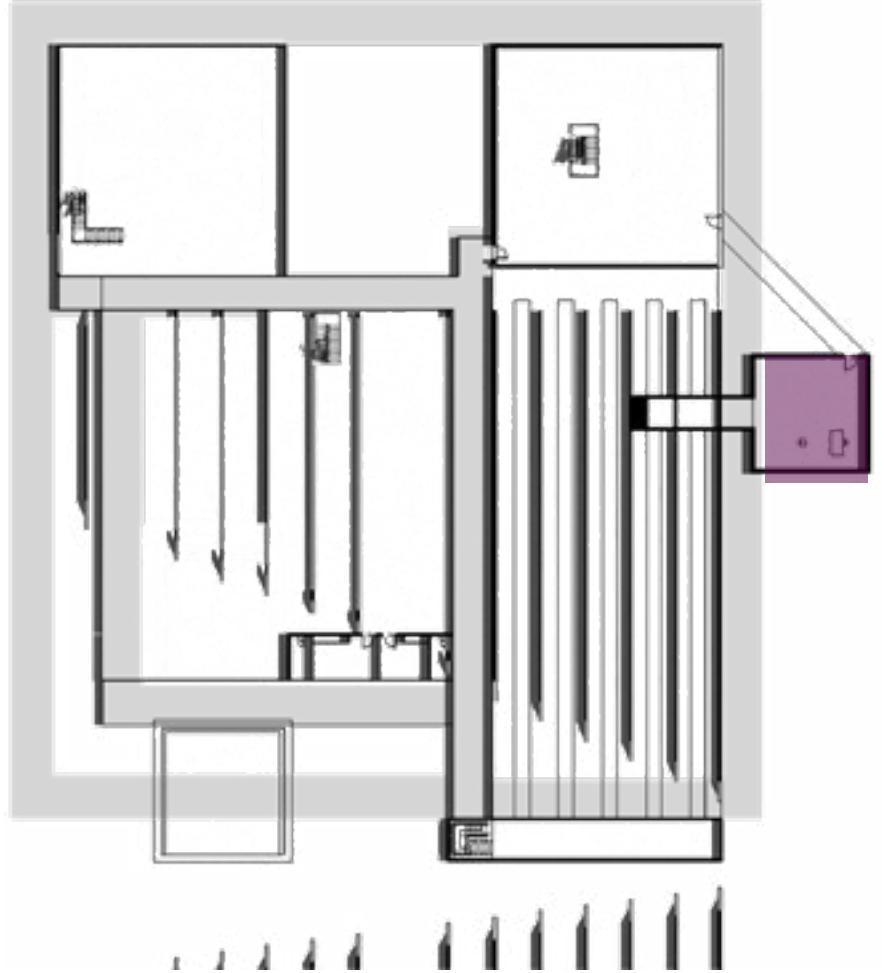


The group therapy space allows outpatients to come in and intermingle with the long term inhabitants. The descending steps mimic that of the Greek theater and the origins of therapy as storytelling.

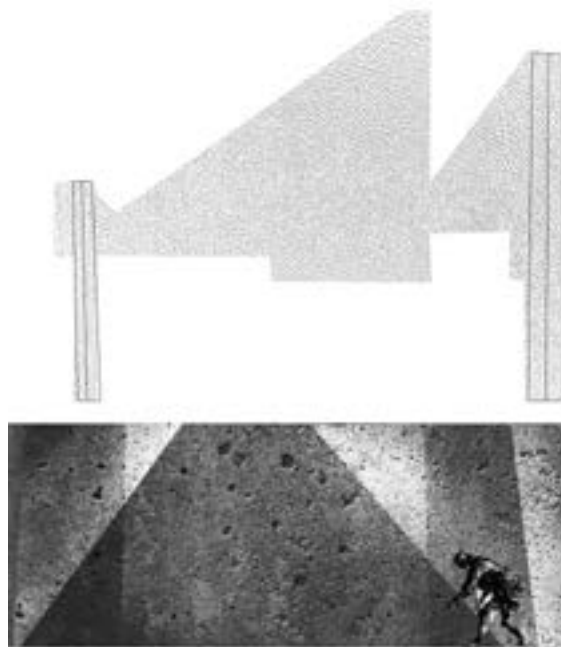
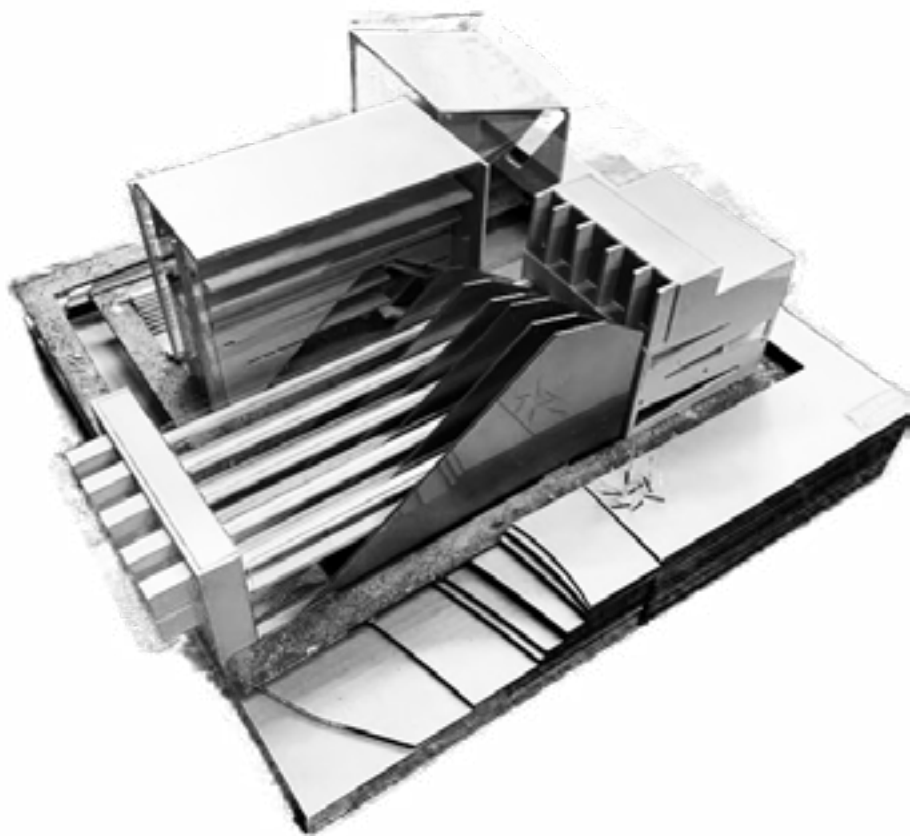


Users would move through the recreation hall, a more public space and into the tunnel
Which gives a pathway into the psychological therapy space, that invites them to go from a more public space into a very private space. It gives a sense of moving into self from the outer world. This tunnel also does not allow them to be oriented on the site, it only shows them a sense of digging into the earth and once inside the spaces moves them into the doctor s space.

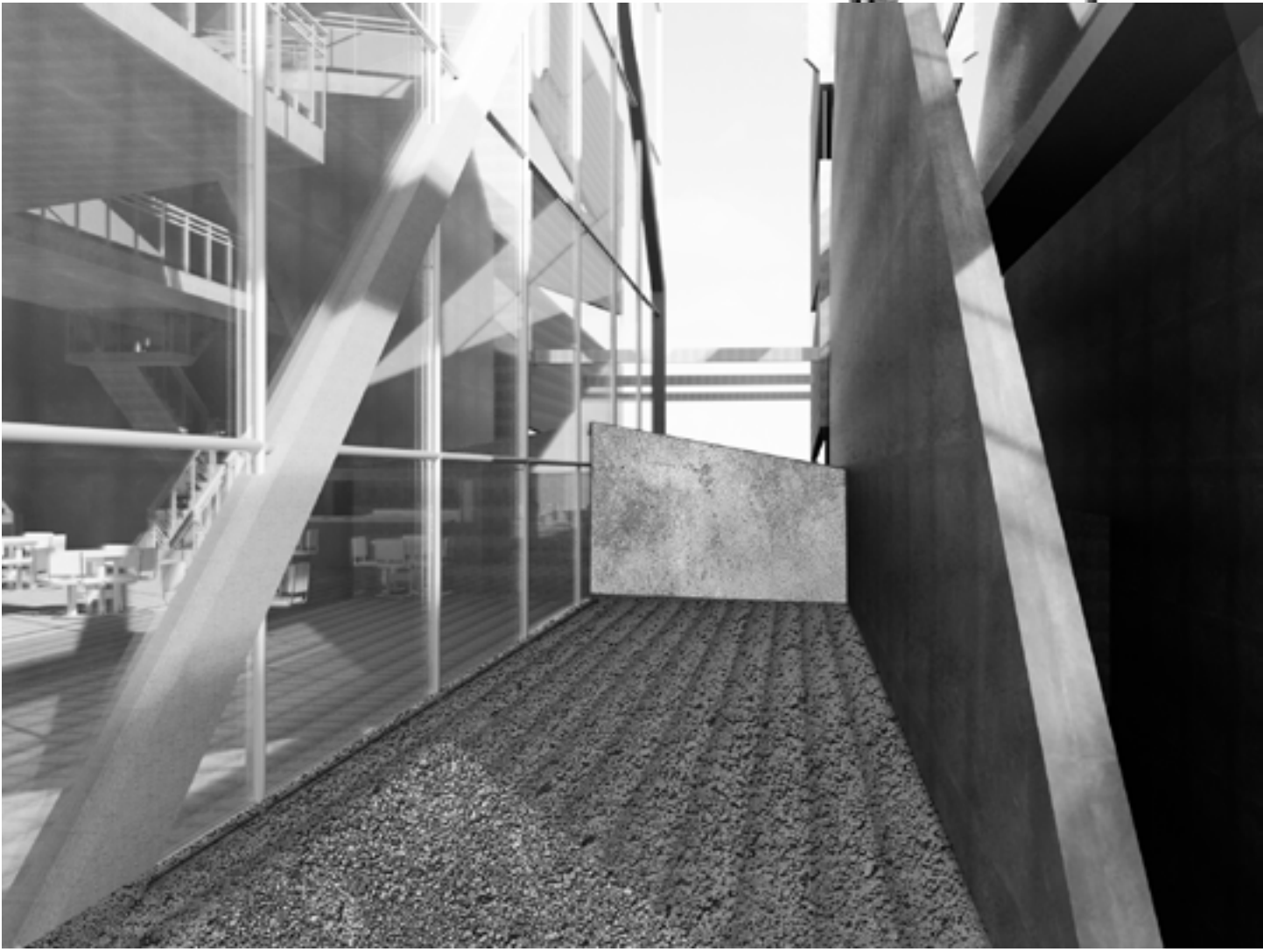
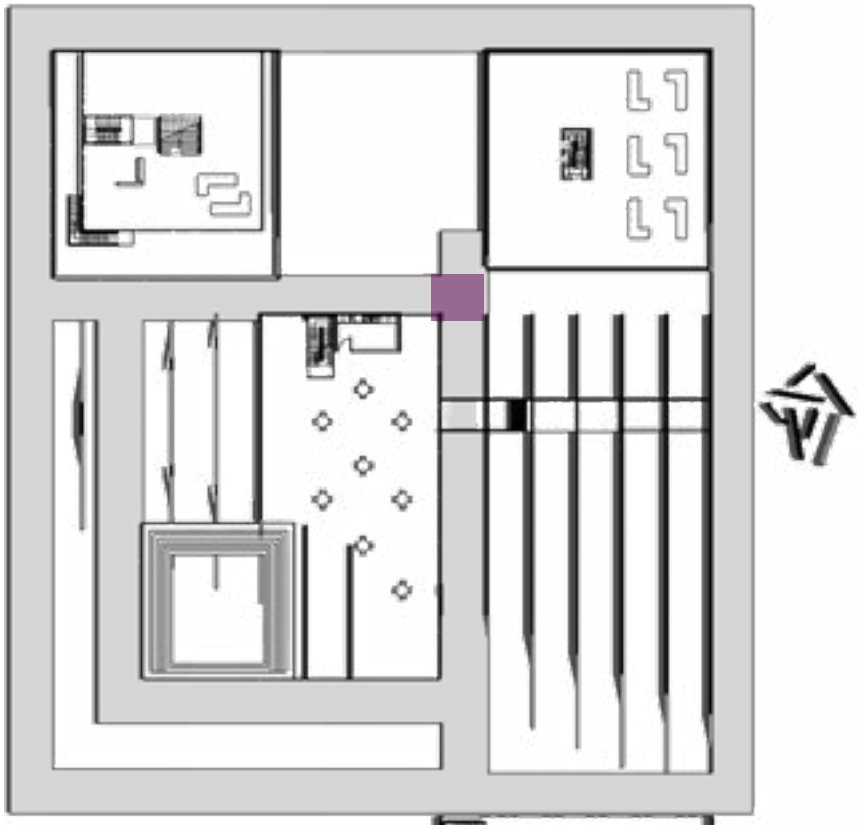




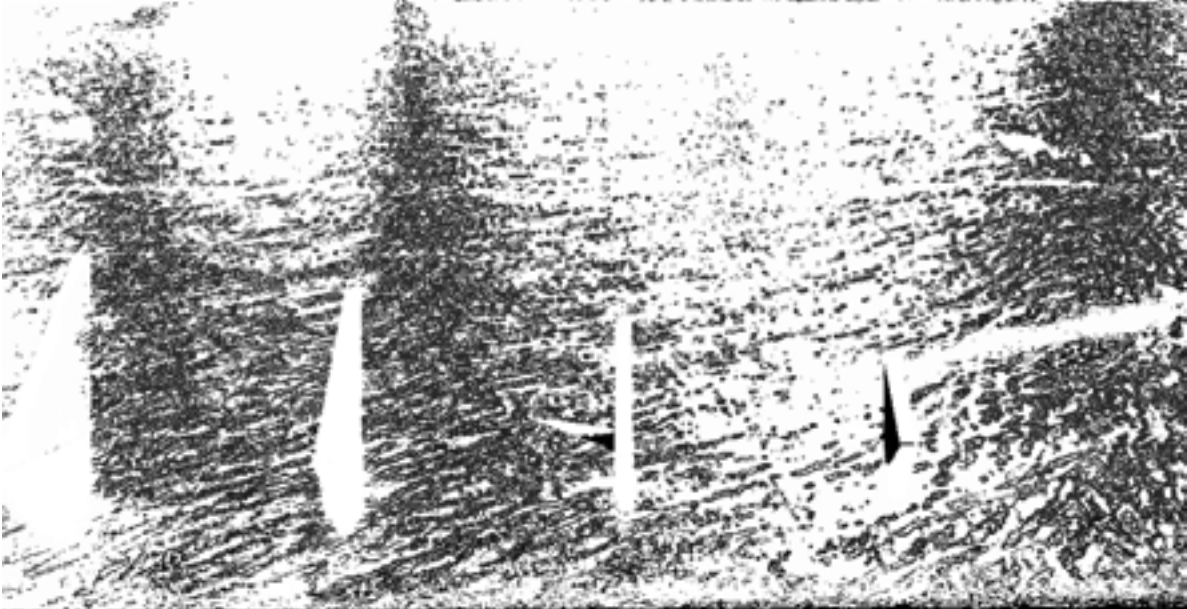
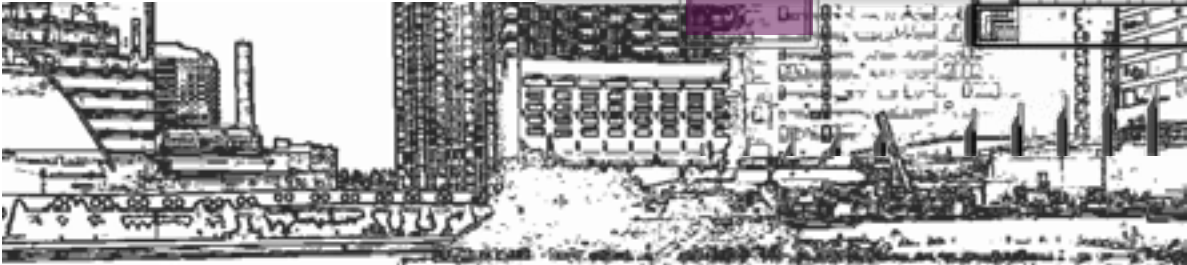
Just like Freud treated people in his home, surrounded by his artifacts, this space becomes the doctor's home, where you move from your space (the dormitories) into the public (the recreation hall) and into the doctor's home (the therapy space). The psychology of moving underground, digging into the earth to find yourself in a place of self-discovery affects your brain chemistry, while being underneath the shards of broken glass forces you back to that place of instant release. The glass allows you to continue to understand that you're actually underground, while most underground spaces trying to make you feel like you're in a different space, I want the user to know where they're at for them to truly understand that this is affecting them and their healing processes. The glass above also gives a nod back to the beginning of my artefact where a piece was broken to signify the beginning of the process; when you're in the space you are brought back to the beginning of the process to show how far you've come. You gain a small sense of where you are located in relation to everything else, but it is never fully revealed until you are outside the facility and able to see the glass shards carving into the ground.

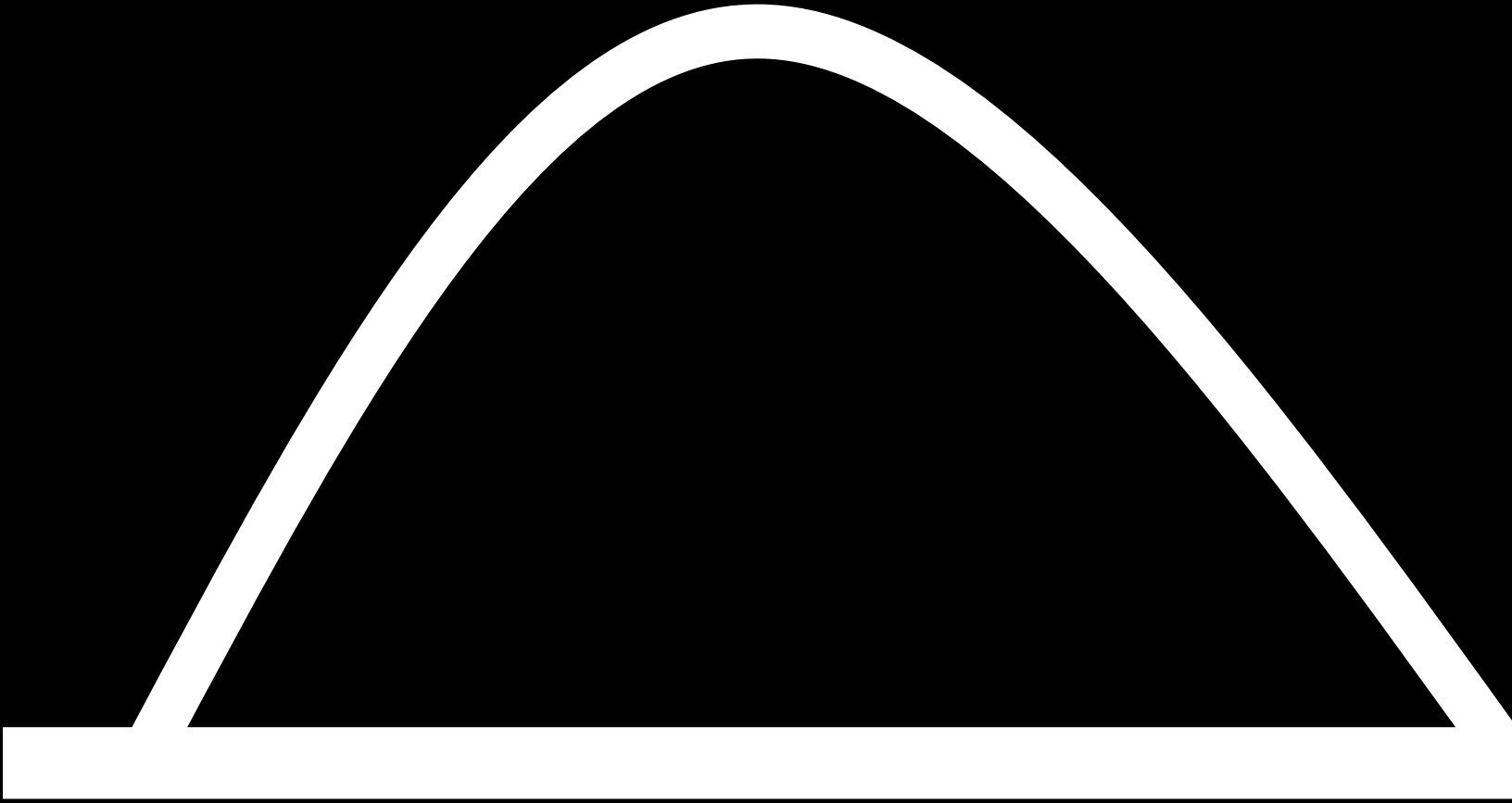


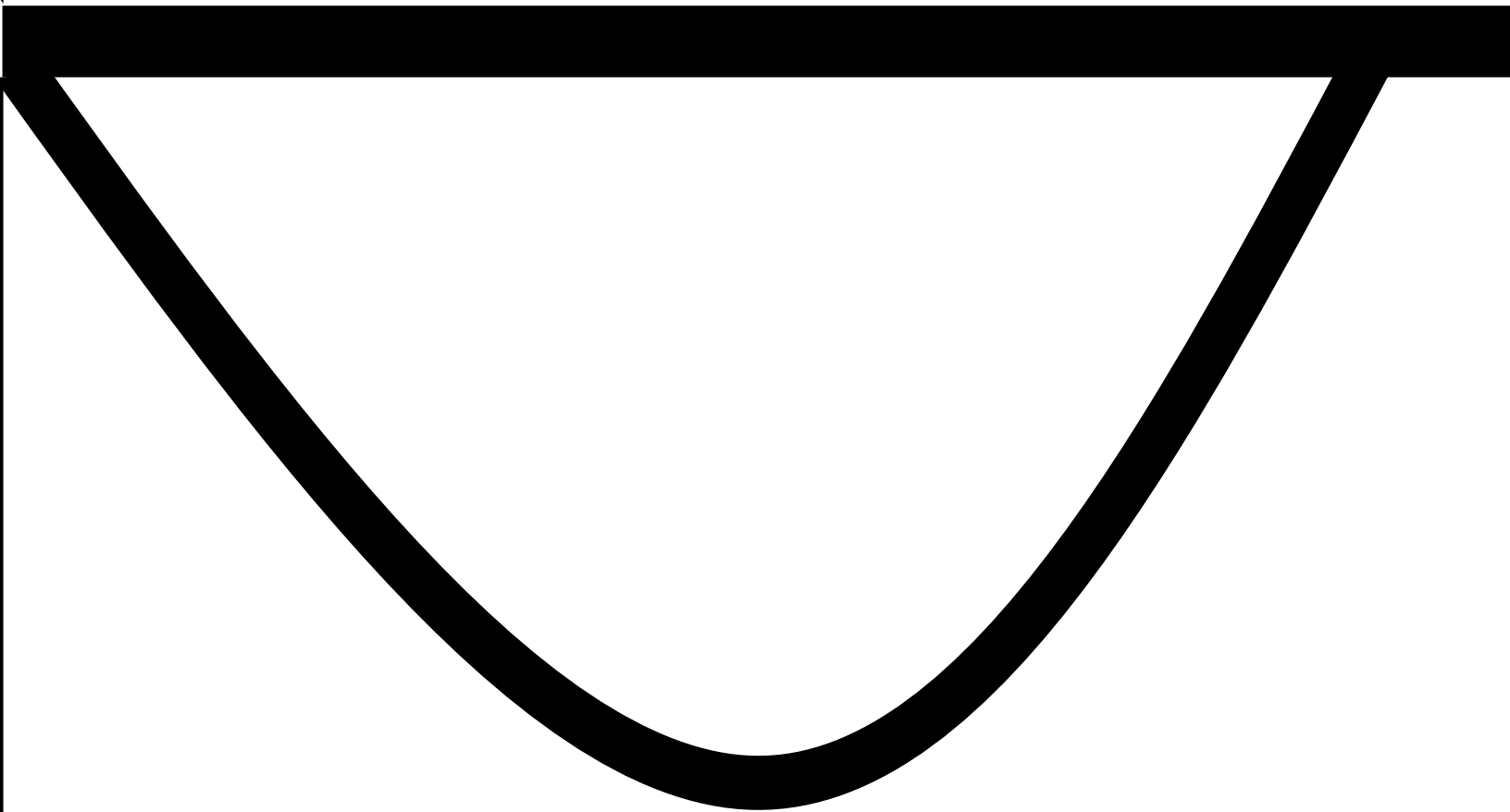
As users transition back into the more public space they find themselves along the datum looking into the spaces they have been throughout their day.



The users find themselves within the thermal baths that merge with the river below. This connects the design to ancient healing methods.





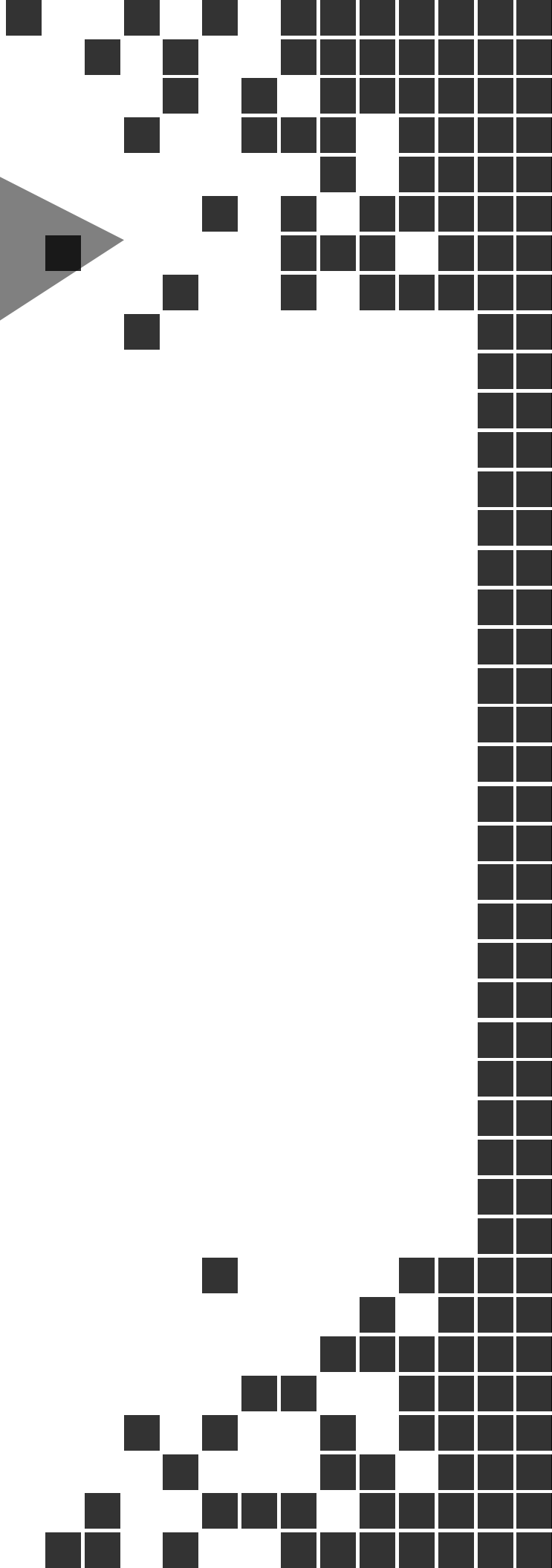
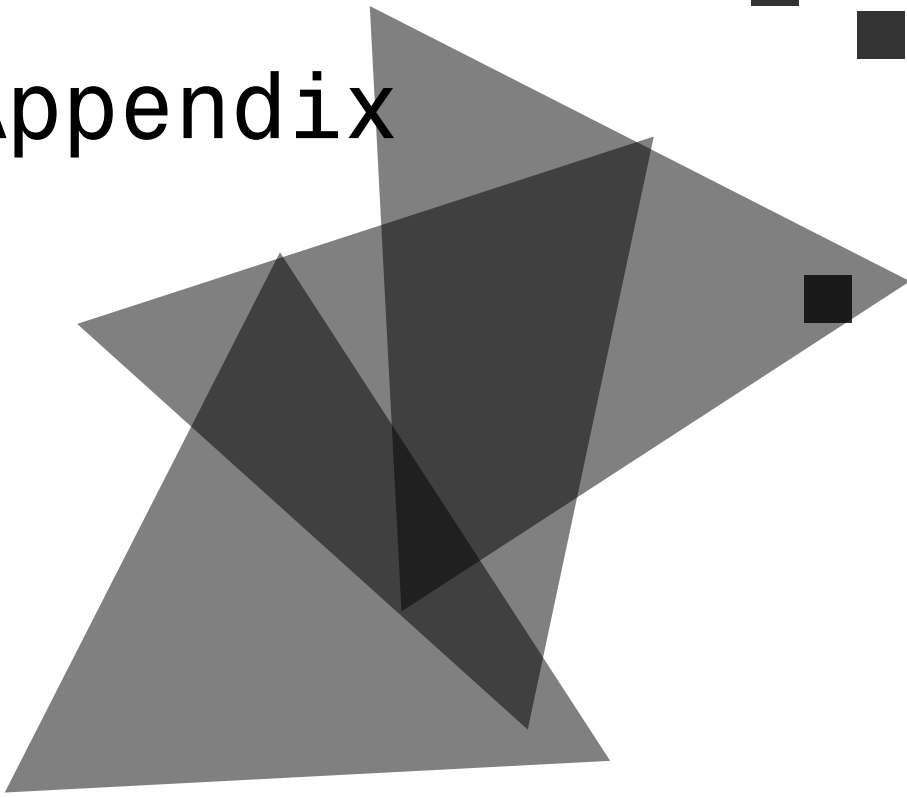


As the cycle of the day comes to an end, with inspiration from Le Corbusier's Poem of the Right angle, patients can look back on all of their experiences and find themselves back in their rooms. The patient ends in a dream dimension. A unique world produced within the minds of the individual.





Appendix





Reference Page

AD Classics: Convent of La Tourette / Le Corbusier. 2010, December 15. ArchDaily. Retrieved from <https://www.archdaily.com/96824/ad-classics-convent-of-la-tourette-le-corbuiser>

Gadamer, H. (1996). *The Enigma of Health*. Stanford, CA: Stanford University Press.

Karen Cilento. Kolumba Museum / Peter Zumthor. 06 Aug 2010. ArchDaily. Retrieved from <https://www.archdaily.com/72192/kolumba-museum-peter-zumthor/>

My House – The Mental Health House/ Austin Maynard Architects. 2017, June 06. Retrieved from <https://www.archdaily.com/873011/my-house-the-mental-health-house-austin-maynard-architects>

Nepean Mental Health Centre / Woods Bagot. 29 Sep 2014. ArchDaily. Retrieved from <https://www.archdaily.com/550968/nepean-mental-health-centre-woods-bagot/>

New Administration Building at Institute of Mental Health / LOOK Architects. 07 Jan 2015. ArchDaily. Retrieved from <https://www.archdaily.com/584621/new-administration-building-at-institute-of-mental-health-look-architects/>

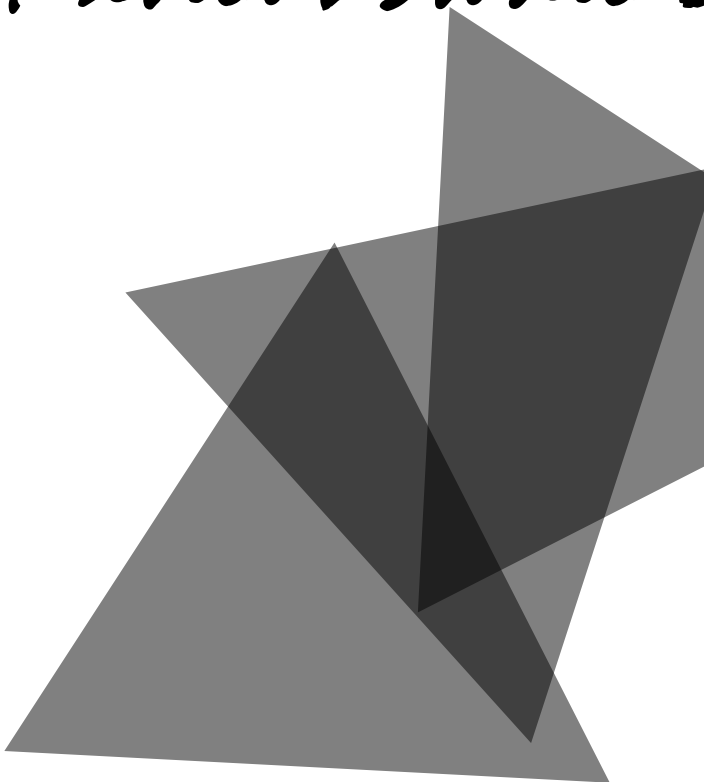
Perez-Gomez, A. (2016). *Attunement*. Massachusetts Institute of Technology Press.

Robinson, S., & Pallasmaa, J. (2017). *Mind in Architecture: Neuroscience, Embodiment, and the Future of Design*. Cambridge, MA: The MIT Press.

The Therme Vals / Peter Zumthor. 11 Feb 2009. ArchDaily. Retrieved from <https://www.archdaily.com/13358/the-therme-vals>

Zumthor, P., & Galbraith, I. (2015). *Atmospheres: Architectural Environments, Surrounding Objects*. Basel: Birkhäuser.

Previous Studio Experience



Joan Vorderbruggen

Tea House

Fall 2015

Darryl Booker

Montessori School

Bird House

Spring 2016

Regin Schwaen

Oscar Zero Visitor's Center (Wood)

Plains Palm Garden Conservatory (Brick)

Fall 2016

Mark Barnhouse

Manufacturing Warehouse (Concrete)

Sanford Out-Patient Surgery Clinic (Steel)

Spring 2017

Fall 2017

Bakr Aly Ahmed

Integrated Design

Spring 2018

Paul Gleye

Urban Design in Brussels

About Me



My name is Hannah Rummel. I am currently a 5th Year Architecture Student at North Dakota State University. I intend to graduate in May of 2019 with my Master's degree and go on to work in the field wherever the wind takes me.

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