Sanctuaries of the Heart:

Perception, Phenomenology and the
Architecture of Salutogenic Healing

by

Rabbiya Ahsan

A thesis
presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Master of Architecture

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Author’s Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis including any required final revisions as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Abstract

The thesis investigates the role of architecture as an active agent of healing by redefining salutogenic design through the lens of spatial phenomenology. It draws from the author's own lived experience with mood disorders as well as extensive interdisciplinary research. The paper critiques historic, as well as modern healthcare approaches and treatment methods for mental health, with case studies such as Bethlem Royal Hospital and more sterile hospitals of today. In contrast, it studies the ancient healing methods that integrate the mind, body and spirit through spatial symbolism and rituals.

Additionally, the project incorporates Maggie Keswick Jencks' diaries through the lens of Critical Discourse Analysis, to understand a patient's perspective when they navigate healthcare facilities. The thesis further studies the impact of the diaries in the form of a detailed case study of the Maggie Centre. Other case studies also contribute to understanding nature, materiality and sensory experience which combine under the umbrella term of spatial phenomenology and often nurtures positive recovery. Central to this research is salutogenesis, an idea that can be reframed to fit in the architectural narrative. This results in a proposed design of a mental wellness facility, located on the banks of the Grand River, a site with rich history and ecological vitality. The design serves as a manifesto for salutogenic design, choreographing light, sound, scent, texture and time, it dissolves the Cartesian split between mind and body and creates a space which contributes actively in the healing process.

KEYWORDS

Salutogenesis, Spatial Phenomenology, Healing Architecture, Mental Wellness, Mood Disorders, Medicine Wheel, Sweat Lodge, Maggie Keswick Jencks, Grand River, Embodied Experience, Sense of Coherence (SOC), Multisensory Design, Landscape, Cartesian Split

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My gratitude journey is a long one, and I want to begin it by thanking Allah for providing me with the health, intellect and courage to complete this degree.

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My friends, especially Fassu and Nimsi for being the best and strongest moral support I have known, despite the time differences. I am not sure how I would have survived without you.

This thesis is my quiet rebellion, it is a manifesto of healing, of unlearning and learning. It is a challenge to conventional norms, and it is an invitation to reimagine spaces of care.

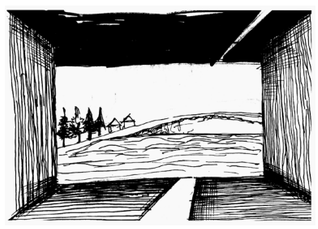
Land Acknowledgements



As a student of Waterloo, I acknowledge that the school of architecture is located on the traditional territory of the Neutral, Anishinaabe, and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, Land Promised to the Six Nations that includes six miles on each side of the Grand River.

I further acknowledge that my thesis site, situated at Cambridge Memorial Hospital on the the banks of the Grand River, is also on the traditional territory of the Neutral, Anishinaabe, and Haudenosaunee peoples, within the Haldimand Tract, Land Promised to the Six Nations that includes six miles on each side of the Grand River. I honour the continuing relationships and stewardship of the Indigenous Nations and promise to commit to support any and all forms of reconciliation through responsible and respectful design practices.

Dedication



Dedicated to,

my mama and baba. Their duas, and my dad's bank account.

my siblings, their jokes, and companionship at the right time. bassam and rajia remind me where I come from when I lose the way. you are my confidants, my secret-keepers.

my friends, their help in last minute freakouts, long distance calls, and sitting through long cry sessions. Fassu, Nimsi, and Areeba who showed up just as they were, and gave me the strength to be honest to myself too.

my city, for making me tough as nails. I am a Karachi girl through and through.

to people who became home, and places that became home.

to 95 Cambridge Street.

to Kaavish and Strings, and my Spotify playlist for keeping me sane and on track.

to the quiet mornings of tomorrow, and the fresh cup of coffee. because one day, tomorrow feels less like survival and more like beginning again.

to my 15 year old self, and my present self, and my future self. we crossed mountains, only we know about. we became more than we imagined.

I think it is safe to say that we did it.

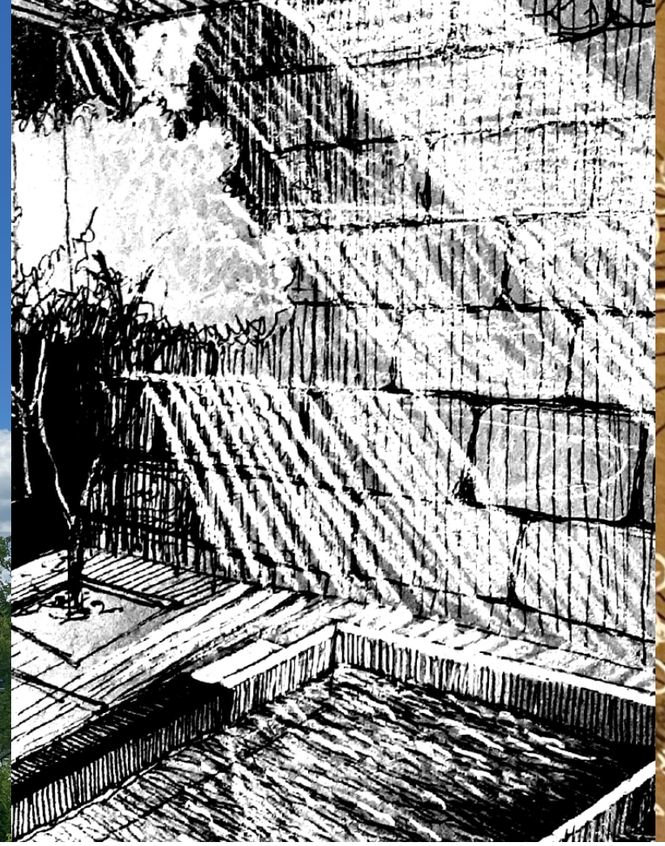





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Crisis and Support Helplines



Before the formal of this thesis begins, I wish to acknowledge the urgency of mental health and wellness care, and the reality that many might be needing the support. It is essential to act timely and responsibly when mental health declines into crisis. The following section offers a detailed list of key helplines, crisis services and regional supports across Ontario, with specific attention to Cambridge, Toronto and Mississauga religion. It is provided as a practical resource, as well as a reminder that architectural explorations that follow are grounded in the immediate need to care for and respond to mental distress.

National and Provincial Crisis Lines

Immediate Crisis or Suicide Risk
Call or text 988
24 hours a day, 7 days a week support for anyone contemplating suicide or concerned about someone else.

Canada Suicide Prevention Service
Call +1 (833) 456-4566 or text: 45645
Available anywhere in Canada, offers support by phone, chat or text.

2-1-1 Ontario
Call 2-1-1
It connects you with local referrals for mental health, housing, food and social services in your area

Kids Help Phone
Call +1 (800) 668-6868 or text
"CONNECT" to 686868
Supports children and youth, available 24/7

ConnexOntario (Mental Health and Addiction Helpline)
Call +1 (866) 531-2600
Helpline for support, referrals, and service navigation across Ontario

Greater Toronto Area (GTS) Helpline and Services

Distress Centres of Greater Toronto
Call (416) 408-HELP (4357)
Available 24/7, for confidential emotional support and crisis intervention across Toronto and surrounding GTA communities

Toronto Community Crisis Services (TCSS)
Call 211 or Text 988
It is a community led, non-institutional mobile crisis response within the city of Toronto

Spectra Helpline (Peel Region, including Brampton and Mississauga)
Call (905) 459-7777 or (416) 920-0497 for multilingual support
24/7 crisis and emotional support for the residents of Peel Region

Cambridge/Waterloo Region Helplines and Services

Here 24/7
Call +1 (844) 437-3247
Main 24/7 mental health and crisis line for Waterloo Wellington region, which includes Cambridge

Waterloo Region Distress Line
Call (519) 745-1166
24/7 local distress and emotional support

Cambridge Distress Line
Call (519) 658-6805
Localized listening and support services specific to Cambridge

Canadian Mental Health Association
Call (519) 744-7645
Offers community programs, peer support and mental health resources

Note:
- All the above listed numbers are free, confidential and available 24/7 unless stated otherwise.
- In an emergency, please call 9-1-1 immediately

0 | Preface

"I wanted to tell her that I have this recurring dream that I am locked in a small, dark room, and the walls are tight, so tight that I don't even have room to move about. I wanted to tell her that in the dream, I cannot see anything around me and I am breathing, breathing so hard, trying to calm myself down but my heart is beating, however many miles per hour is too much. And I know that my family, my friends, everyone I know is on the other side of the door, that they can just turn the knob and let me out but no one is doing it. They can hear me cry and I don't know why but they won't turn the knob and let me out but no one is doing it. They can hear me cry and I don't know why but they won't turn the knob and let me out. And the realization, it's hitting, it's hitting like a ton of bricks. I am going to die. I am drowning and it is so dark and no one can save me."

An excerpt from my book "Everyone Has Each Other: The Song of Home"[1]

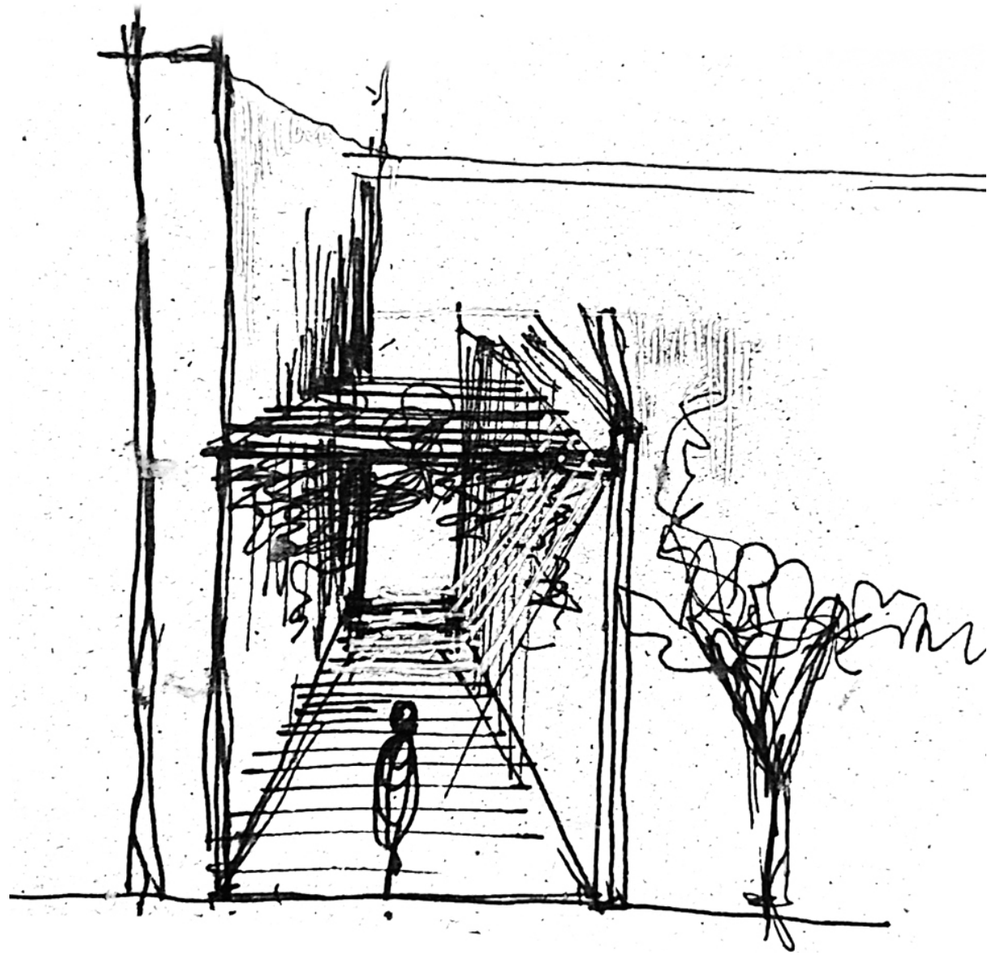
"The first thing I see from the door is the kitchen, but the kitchen is not just a room, not just a space. It is where I find the memory of my mother when she was much younger, when she would feed me with her hands, despite having so much work to do. It also reminds me of baba because once I dropped a lot of glassware from the cabinet and he quickly came to see if everything was okay, and reassured me that it's just crockery and the most important part is I am okay. I walk to the living room, and it reminds me of baba sitting there, for breakfast, lunch and dinner, just soaking in the time all his kids are around him. I store these memories in the shelves high up, where I cannot reach without a ladder. I store them in kitchen drawers and in between the creases on the sofa. I sit on the stairs and watch the dust particles bounce around. I try to catch them in my hands but they never stay. And everything around me is fleeting, nothing waits, nothing stays still. Except the house with the stairs."

An excerpt from my book "Everyone Has Each Other: The House with the Stairs"[2]

1 Rabbiya Ahsan, *Everyone Has Each Other* (2025).
2 Ahsan, *Everyone Has Each Other.*



Figure 0.1 - Physical Model of 'The House with the Stairs'



PHASE I: ORIGINS OF CARE

Healing through Rituals, Space and Medicine

1 | Introduction

Mood disorders have long been misunderstood and shaped by stigmatic beliefs. They fall into the category of mental health conditions which impact a person's emotional wellbeing and how they interact with the world. It can include mental health conditions such as depression, anxiety, Seasonal Affective Disorder, and even bipolar disorder. For centuries, those struggling with mood disorders were often feared and mistreated due to the lack of knowledge and understanding regarding such conditions. Ancient Egyptians and Mesopotamians attributed such disorders to demonic possession or a sign that Gods have been upset with an individual. This was a recurring pattern throughout history. The healing methods for these disorders were centred around pleasing the Gods, spiritual rituals and prayers as well as exorcism in the ancient times. They also included harsh treatments such as isolation, fasting, or physical treatments such as bloodletting and purging.[3] These treatments took place in specialized spaces which have varied from healing temples and cloisters to confinement and exorcism spaces. As beliefs shifted from supernatural causes to medical conditions, a pivotal moment was when Philippe Pinel instituted 'Traitement Moral' or 'treatment moral' at the Bicetre Hospital in Paris. He believed that the important elements in healing were kindness and patience, along with recreational activities such as long walks in nature and a pleasant conversation.[4] [5] This shift laid the groundwork for modern approaches to mental health care. In the current day and age, mental health issues such as mood disorders have been normalized and do not hold the same taboo as they did in the past. Healing institutions have also evolved over the period of time, transforming through cultural differences and different discoveries. However, this shift came after centuries of misguided treatment, and this thesis goes into detail about Bethlem Royal Hospital and Danvers State hospital. These facilities were notorious for their harsh treatments and neglect. Conversely, some cultures embrace a more holistic approach to healing, incorporating and encouraging a mind, body and space connection such as Sweat Lodge or medicine wheel. These highlighted the importance of connecting to the inhabited spaces, using earth's resources which are in abundance. While the understanding of mental health and its healing procedures have improved over the period of time, the spaces that are assigned to provide care have remained stagnant for the most part. As the knowledge surrounding mental health evolves, it becomes crucial to recognize the role of built environments in shaping emotional experiences. Architectural spaces have the power to soothe or agitate, even force isolation or encourage special connections with each other and the space. Maggie Keswick Jencks' journals offer an interesting insight of visiting a hospital as someone with an illness, navigating the spaces differently from everyone else. Despite advancements in therapeutic practices, many facilities currently remain very sterile and disconnected from the phenomenological needs of their inhabitants. With the growing concern around mental health and the methods of dealing with it, there is an urgent need to reconsider the way spatial planning and good design can contribute to healing outcomes.

The disconnection between space and users raises an important question about how spaces are truly experiences, and just seen. It is within this gap that spatial phenomenology becomes vital, since it is a specific branch of phenomenology that focuses on the meaning of space and how it is perceived and embodied by the users. However, in today's design, oftentimes, visual aesthetic and cost efficiency is kept at the forefront, which negates the user experience and spatial phenomenology of the program.

3 Kenneth J. Weiss, MD, and Group for the Advancement of Psychiatry. "Psychiatry's Ancient Origins." Psychiatric Times, November 16, 2020. https://www.psychiatrictimes.com/view/psychiatrys-ancient-origins.

4 Taylor, Barbara. "THE DEMISE OF THE ASYLUM IN LATE TWENTIETH-CENTURY BRITAIN: A PERSONAL HISTORY." *Transactions of the Royal Historical Society* 21 (2011): 193–215. http://www.jstor.org/stable/41432402.

5 Trent , James W. "Moral Treatment." Social Welfare History Project, October 24, 2023. https://socialwelfare.library.vcu.edu/issues/moral-treatment-insane/.

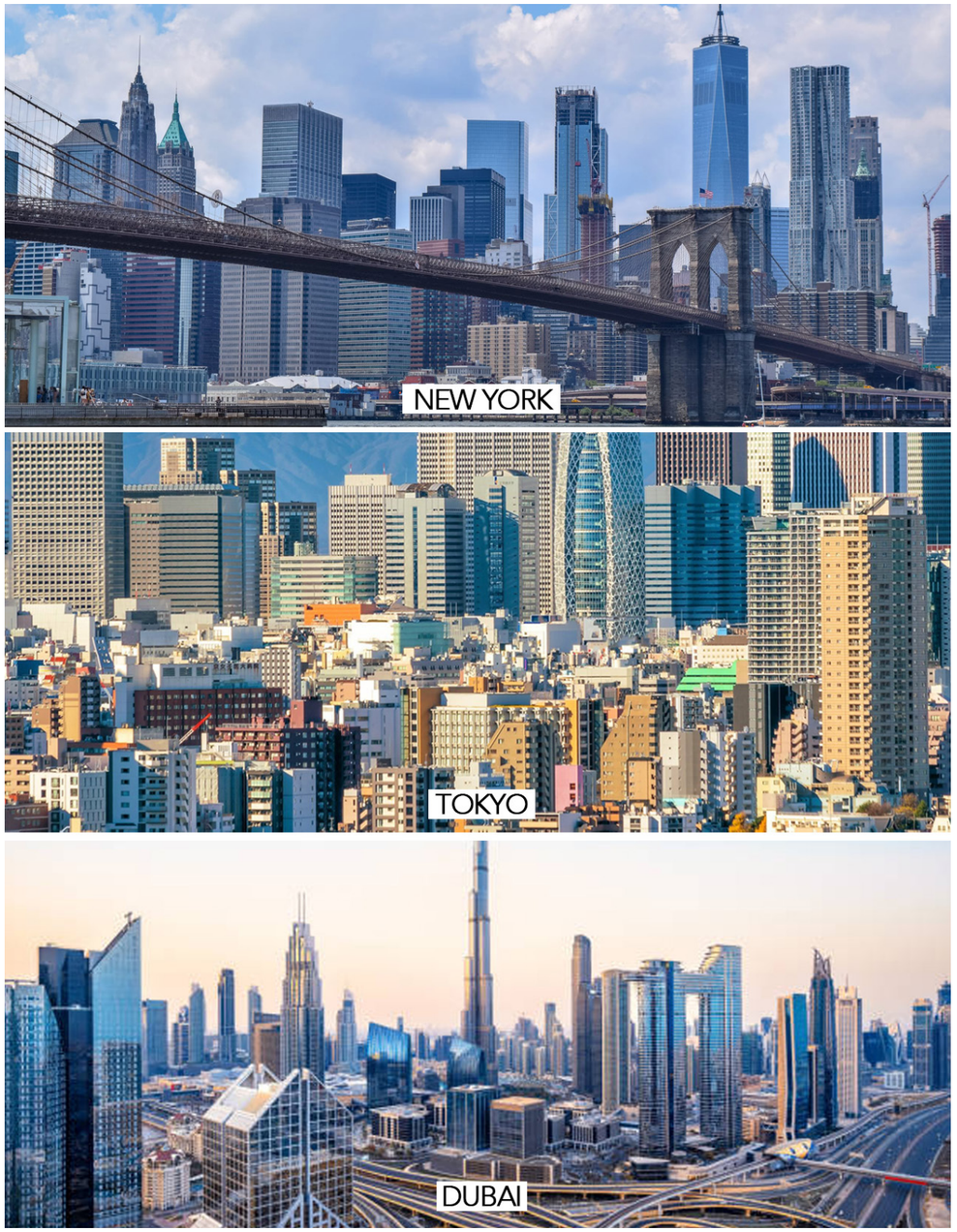


Figure. 1.1. Comparison of major cities, as discussed in the 'The World Class City Hypothesis' by John Friedmann

Some of the institutional architecture discussed in this thesis is molded by the strong and widespread influences of International Modernism. The World Class City concept was fused into the urban development discourse through the 1986 paper called 'The World City Hypothesis' by John Friedmann, a sociologist who identified key cities such as New York, London and Tokyo, stating that they played a dominant role in the global economy. These cities became a standard and soon, in a competition to be presented as a World Class city, all the major economic hubs and capitals started building in a way that projected modernity, innovation and prestige. They developed a language that adopted repeatable, efficient and formally restrained languages that could be adopted anywhere despite the context.[6] This became an architectural disadvantage because these cities started losing their individuality and created "placeless" environments. Most urban developments and amenities such as schools and hospitals often incorporate glass facades, rigid grids and non-contextual layouts to homogenize architecture and make construction easier. However, in all of that, the truest essence of architecture feels as if it is lost, and users end up feeling detached from the spaces inhabited by them. The World class city concept is prevalent in Canadian architecture as well and several Canadian hospitals are suffering from the same homogenous glass architecture that disconnects people from its surroundings.

While the strategies have rightly enabled a functional and consistent environment, in civic and healthcare architecture, the approach manifested through glass construction and standardized circulation systems. While most of the care facilities and hospitals have become very clinical and mental health has become institutionalized, there are still some facilities that try to set the foundations for a successful healing and care facilities. Maggie Jencks, a visionary whose studies and writings have led to the development of Maggie Centres, serves as an example of a restorative environment for people dealing with a mentally exhausting and draining fatal illness such as cancer.

The thesis does not reject Modernism as a movement, nor does it devalue the architectural lessons it has brought forth, it simply aims to acknowledge its contributions while identifying the need to provide these frameworks with research that is rooted in the very core of healing, theories about phenomenology, salutogenesis, narrative and site sensitivity, to assist in creating spaces that have a lasting impact.

Taking precedence from similar architecture which promote salutogenic wellness, my approach weaves together salutogenesis and spatial phenomenology to help create a cohesive research framework. While spatial phenomenology prioritizes how spaces are felt and experienced through a multitude of senses, emotions and memories; salutogenesis

6 Friedmann, John. "The World City Hypothesis." *World Cities in a World-System,* July 6, 1995, 315–31. https://doi.org/10.1017/cbo9780511522192.019.

provides the psychological and theoretical foundation of how environments can actively foster health and make ways for healing. Spatial phenomenology takes into account the light, sound, texture and movement – all the features that transform the space from passive to active agent in any event. For this thesis, spatial phenomenology acts as the experiential lens whereas salutogenesis becomes an ethical compass guiding design decisions and transforming architecture from a neutral backdrop to spaces of value and importance.

While designing mental wellness retreat, careful considerations of the site become crucial in curating an overall experience which encourages reflection, relaxation and healing. It is ideal to pick a location that is in proximity to a body of water and feels secluded to create a gap from the hustle bustle of daily life. However, it is essential that it remains accessible despite the seclusion to ensure that visitors can reach the space with ease. The balance between connectivity and isolation are a testament to the goal of the retreat, which is to provide a sanctuary that feels safe, comforting and welcoming without being detached from the outside world.

1.1 | BETWEEN STUDY AND SELF

This thesis is an amalgamation of my personal journey with mood disorders, namely depression and anxiety. Every human is different and their response to mental health issues differs vastly depending on the place, ethnicity and religious upbringing. The aforementioned excerpts are from a diary I have kept over a period of time, and it details my struggles as someone with mood disorders. It is important to incorporate my personal experiences into my research, since I connected with spaces through memories and experience. Looking back at my own journey, provides me with an understanding of the space, of how it morphs into a good or bad entity as per the event. I documented these experiences in a book titled *Everyone Has Each Other* which is a personal reflection on the ways home, cultural identity, family and mental health shape one another. The first excerpt from the chapter “The Song of Home” talks about how spaces can impact mood and emotions. The small room in a colder climate becomes reflective of the emotional suffocation, whereas, the house with the stairs evokes feelings of comfort, nostalgia and a sense of peace. While one delves into mental struggle and isolation, the other one talks about the sense of belonging.

This thesis draws from a combination of diverse texts from architects and scientists, case studies and theoretical frameworks. Additionally, as someone who has faced similar struggles, this thesis places me in the position to design with heightened sensitivity to how spaces can either support or hinder emotional well-being. This research is an opportunity for me to understand my own struggles with mental health and to create a manifesto, a guideline to design empathetic spaces that evoke a sense of belonging and focus on restoring and healing people. It studies in detail, and incorporates ideas from literary texts about spatial phenomenology, design and care to present a well-rounded solution to contemporary mental health environments.

Within this framework, narrative is used as a storytelling method as well as a design strategy. It refers greatly to how different people move through the space, and experience it over time, the difference between when they arrive, where they pause, where they gather and where they retreat to. The role of narrative becomes a driving force, assisting in designing spaces for social connection, quieter retreat, for healing and recovering. Narrative understands the difference between spaces that are clinical, and spaces that are intuitive, it decides the spaces that offer agency and the spaces that reinforce institutional conditions.

While there is strong emphasis on narrative, it is also important to mention that it is not the only tool used to make design decisions, but a great deal of attention is paid to practical factors as well, such as the site and its history, that determine orientation, the practical needs and proximity to a healthcare facility. Narrative simple works alongside the parameters, rather than taking any hierarchy, which makes the thesis land at the one central question: within the realm of architecture, how can a mental wellness institution be designed to support the complexities of mental health while avoiding the confinement and limitations of institutional care?

The question guided the research, through interdisciplinary theoretical research and spatial experimentation. The proposed design is a by-product of both personal connections to spaces as well as the research and focus on deinstitutionalizing mental health facilities to create more empathy-driven environments of care.

2 | Ancient Healing Practices

Ancient healing practices have consistently understood the significance of the relationship between the human mind, body and the spaces which people inhabit. Designing without the empirical sciences and discoveries of the modern world, it is essential to understand and explore how people intuitively designed structure based on their innate instinct, and place-based trial and error experiences spanning across generations. They created forms that resonate deeply with human experience and foster healing, integrating architecture, ritual and environmental connection in the ways that are still relevant in contemporary architectural inquiry. The practices can be studied and understood not as historical artefacts, but as spatial systems that shape perception, movement and embodied experiences. It also incorporates an understanding about larger concepts such as spatial phenomenology to see where certain architectural structures and programs lie on the spectrum; as well as the way in which they provide designers with precedence.

In the thesis, practices such as Medicine Wheel, Sweat Lodge, and Sacred groves are important to the study since they embody a unique intersection of architecture, nature, rituals and culture. These are not treated as templates to be replicated, but as analytical references through which we can understand not only the spatial and programmatic nuances, but also the strong connection with the world around them and how it impacted the way they understood healing spaces. The rituals include tuning in not just physically, but also mentally and spiritually. The following ancient healing structures are discussed in detail to provide critical insights as well as foundational design principles which, in different shape and manner, influence the design proposal of the wellness retreat.

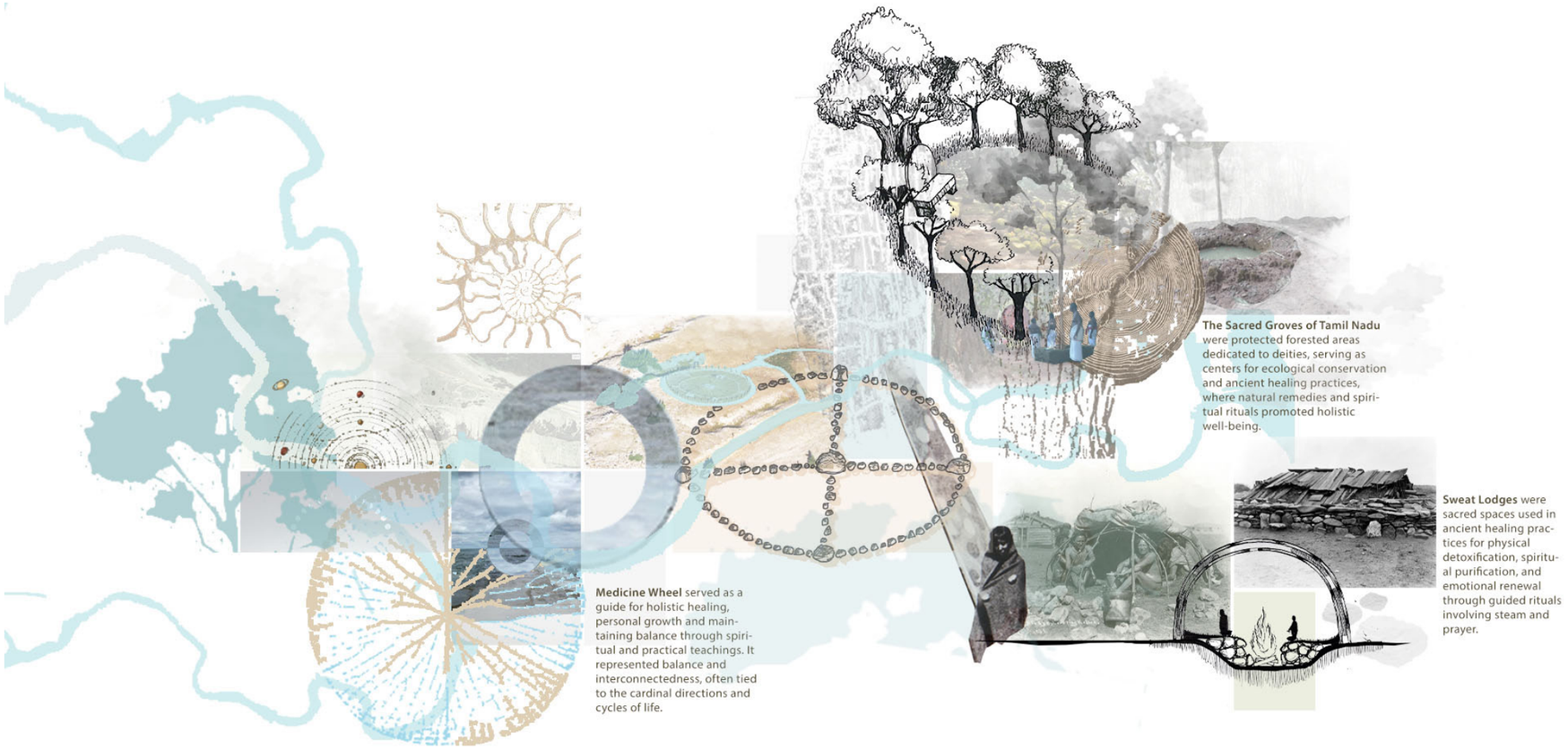


Figure 2.1 - Collage of the three ancient healing practices: medicine wheel, sweat lodge, and the sacred groves.

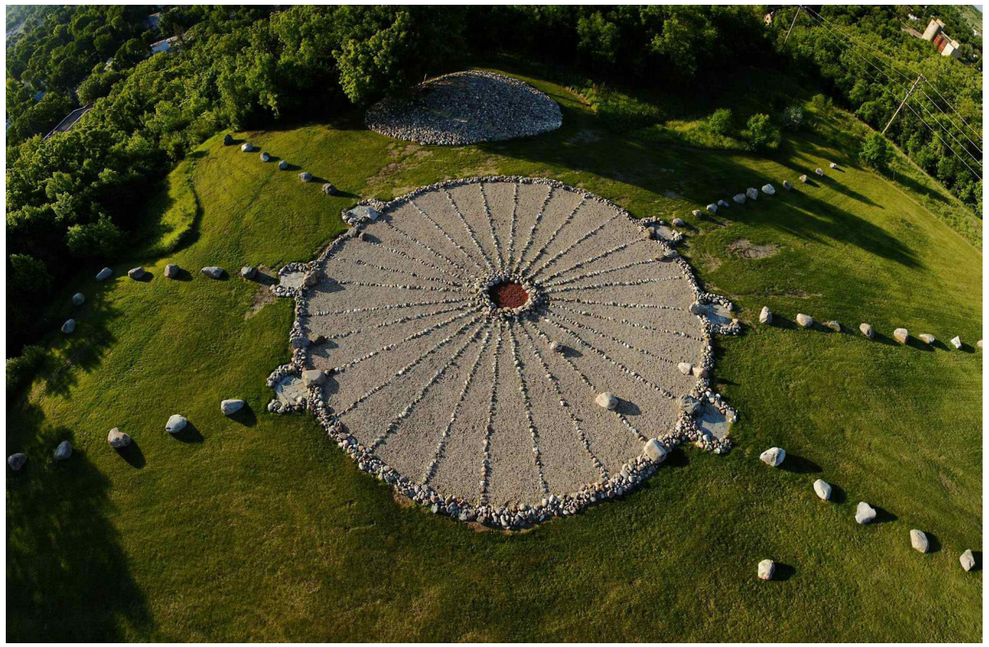


Figure 2.2 - Medicine Wheel built and used by Plains Woodland Indians 500-2000 years ago, locating in modern day Valley City, North Dakota



Figure 2.3 - Bighorn Medicine Wheel Historical Landmark in Wyoming, United States

2.1 | MEDICINE WHEEL

Indigenous healing is not restricted to physical medicine, but is a more holistic understanding that is grounded into the very belief system that they function around. This is integral to the thesis, since it helps in understanding a well-rounded program that improves the lifestyle of the healing retreat rather than being limited to the architectural program. *Braiding Sweetgrass* is a collection of short stories by Robin Wall Kimmerer that talk about Indigenous wisdom, scientific knowledge and the teachings of the plants. In Chapter 8, she talks about Witch Hazel and healing in general and writes, “there are some aches which Hazel can’t assuage; for those, we need each other. My mother and Hazel Barnett, unlikely sisters I suppose, learned well from the plants they both loved – they made a balm for their loneliness together, a strengthening tea for the pain of longing.”[7] This excerpt provides an introduction to the idea of a medicine wheel. Medicine wheel, sometimes also known as the Sacred Hoop or Sun Dance Circle, is a symbolic representation and a method of healing still practiced by Indigenous peoples of North America. It is not really an architectural physical structure, however it is implemented into Indigenous healing practices. A traditional medicine wheel is divided into four parts, which represent the four cardinal directions, as well as the Father Sky, Mother Earth, and Spirit and all of the quadrants have a different meaning attached, but they symbolize dimensions of health and cycles of life. They are also differentiated by four colours, and the meaning is common throughout different tribes.[8]



Figure 2.4 - Handmade wall hanging banner from Etsy, showing the four quadrants of a medicine wheel

<u>*Yellow/East*</u> - The Eastern direction of the circle is supposed to represent new beginnings. It is the part of the wheel that represents birth and childhood and is often associated with the spring season. The elements of this quadrant are fire and air since they both portray new spark and clarity of life. The colour yellow represents sunlight, and good energy. This part of the quadrant helps in healing by focusing on new beginnings rather than staying stuck in the trauma. It provides spiritual clarity

7 Kimmerer, Robin Wall. “Witch Hazel.” Essay. In *Braiding Sweetgrass,* 84. Minneapolis, Minnesota : Milkweed Editions , 2013.

8 “The Medicine Wheel.” St. Joseph’s Indian School, April 12, 2021. https://www.stjo.org/native-american-culture/native-american-beliefs/medicine-wheel/.

to foster a sense of purpose, to make one understand that they are a small part of the universe, and that everything happens for a greater reason. This approach helps one heal both, mentally and emotionally.

Red/South - This cardinal direction in the medicine wheel embodies the peak of youthful energy, vitality and the peak of life, and is associated with summer, since it is the season of growth of vibrancy. The element of this quadrant is water, due to its ability to be adaptable and flow, and the colour red conveys passion and strength since this quadrant represents adolescence. The southern portion focuses on emotional balance and is about one understanding and processing their feelings, developing empathy for others. Also, the idea of youthful passion encourages active participation in different events of life to reduce stress and feel more in control of the life one builds.

Black or Blue/West - The West part of the wheel is representative of contemplation, looking inwards, confronting challenges within oneself and transforming to becoming a better version. It is associated with the fall season, which is symbolic since it is all about shedding the idea of comfort, to face challenges and obstacles and have the mindset that allows for introspection and transformation. This direction in the wheel enforces one to confront traumas, physical, emotional or mental ones and turn them into opportunities for growth.[9]

White/North - The last part of the wheel portrays wisdom, and is associated with winter which is a season where people often rest, and reflect in isolation. It is representative of older years of life, where bodily strength may leave but intellect and wisdom remains. In older age, the Northern part of the circle allows for acceptance of a life lived well and preparing for renewal. This point is a culmination of the teachings from all the previous events and ages in life. The phase naturally leads back to the East, which as mentioned before is symbolic of new beginnings.[10]

In comparison to modern medicine, which focuses entirely on physical healing by mitigating threats caused by disease, the medicine wheel treats the whole person. The wheel categorizes different activities such as dancing, preparing food and walking in nature as physical; meditating and praying as spiritual; being present with your family and socializing in different ceremonies as emotional; and lastly creating art or gardening as mental wellness. By addressing physical, mental, emotional and spiritual dimensions of health, the medicine wheel negates the idea that wellness is simply a biological issue, it sees health as a state of balance within an individual and the environment. It addresses physical, mental, emotional and spiritual

9 Grinnell, George Bird. “The Medicine Wheel.” *American Anthropologist* 24, no. 3 (1922): 299–310. http://www.jstor.org/stable/660007.

10 Zimak, Hayley. “An Ontario Firekeeper Explains the Four Directions of the Medicine Wheel | CBC News.” CBCnews, June 25, 2020. https://www.cbc.ca/news/canada/thunder-bay/four-directions-medicine-wheel-1.5615827.



Figure 2.5 - Simple sweat lodge ceremony in the Crows Native American tribe

dimensions of health. It was an interesting case study for this thesis, to articulate a more holistic understanding or wellness, in a cyclical order, and to understand the relationships between the body, mind and the world around it. The medicine wheel also expanded the realm of architecture and was also followed as a concept, it became a fascinating example of a structure of healthy life without its formal reliance on any physical or tangible space.

2.2 | SWEAT LODGE

In the Native American legend, a young man from Blackfeet (Piegan) tribe, who was marked by a scar and rejected by the Chief’s beautiful daughter, journeys to the South of present day northern Montana and Alberta in shame. The Morning-Star was so moved by the scene, took Scarface to the Sun and the Moon, and purified him through a series of four sweat lodge ceremonies, at the demand of the Sun, who says, “do not bring him into my lodge yet, for he smells ill. Build four sweat lodges.” Sun led Scarface into the first sweat lodge, where he brought a hot coal on a stick. Breaking a piece of sweetgrass, the Sun placed it on the hot coal, and when the incense began to rise, Sun began to sing, “Old Man is coming in with his body; it is sacred.” The Sun, Moon and Morning Star returned Scarface back to the village, however he was more handsome than ever. The young man returned to his tribe and taught them the way to build the first sweat lodge for healing and purification purposes.[11] Since

11 Glenn Welker, “Origin of the Sweat Lodge,” accessed October 25, 2025, https://www.indigenouspeople.net/

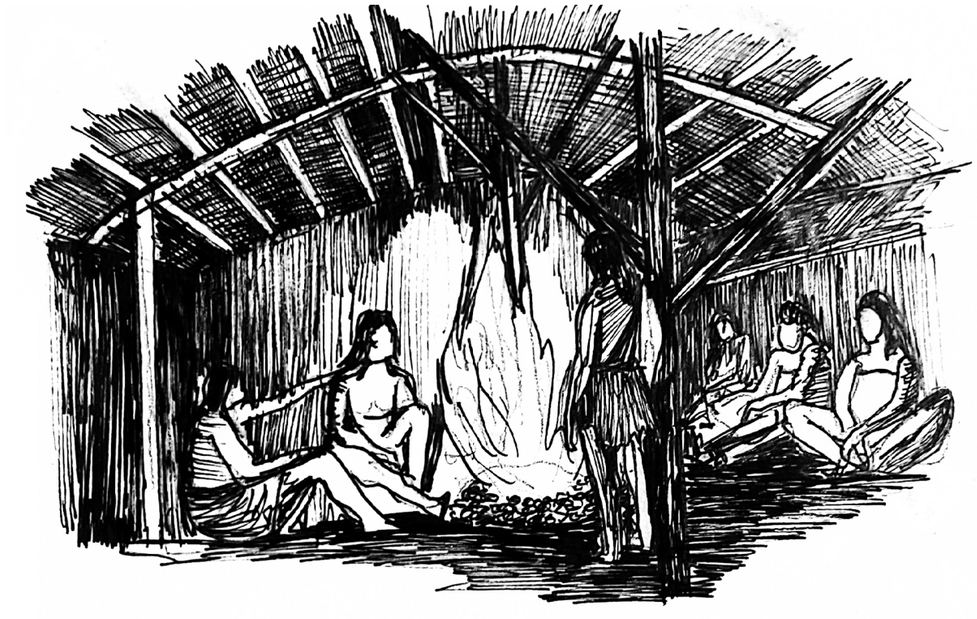


Figure 2.6 - Sketch of Reimagined California Sweating, 1877

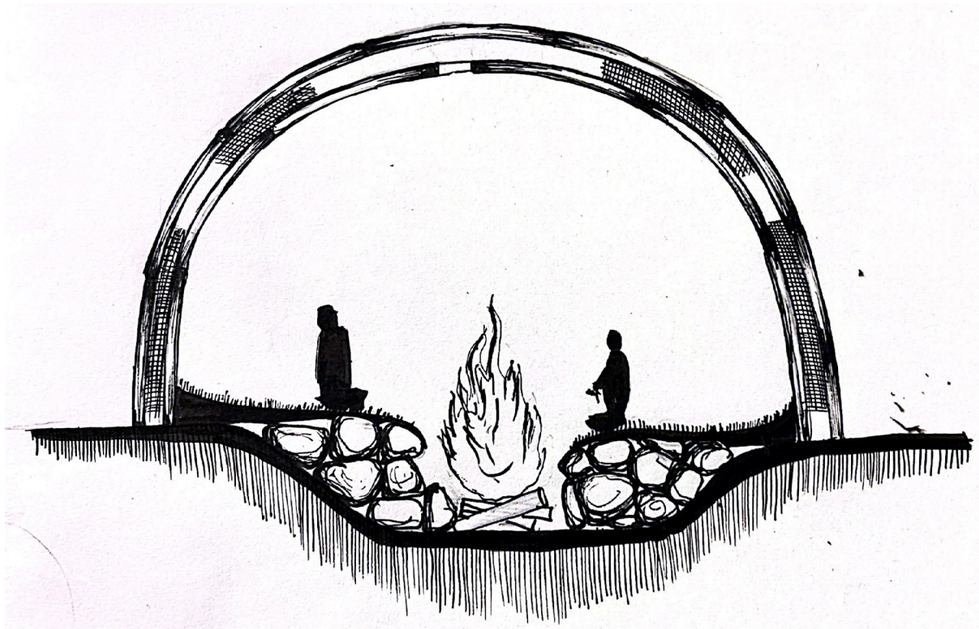


Figure 2.7 - Sectional sketch of a typical Sweat Lodge showing the different layers and levels of natural material

then, not just the Piagen tribal people, but most Indigenous communities and tribes have adopted sweat lodges as a major part of their healing process. Sweat Lodges are ceremonial structures that are built by Indigenous peoples in order to heal, pray and purify people. In this thesis, they were studied because of their use of enclosures built out of natural materials, sequential ritualistic proceedings, and creating a microclimatic and sensory condition to evoke certain responses. They are dome-shaped structures and made using natural materials such as willow branches. The other layer is usually of a naturally insulating material such as animal hides to trap heat in the lodge and to make it dark as well.

The idea of the enclosed dome structure is symbolic since it resembles a womb and since Indigenous peoples believe that all humans are Mother Earth's children, the womb stands for rebirth and transformation.[12] In the middle of the sweat lodge is a fire pit where heated stones are placed. A sweat lodge is a culmination of all the different elements of nature. The stones and the lodge itself represent the value of earth where they come from. The fire is used to heat the stones giving importance to the energy of the sun and fire. The water which is poured on the stones generates steam and begins the process of purification. Lastly, the steam emerges from the stones and represents the unseen forces of the universe. The ceremony performed in the sweat lodge is led by a spiritual leader or elder of the tribe and can take anywhere from one to several hours depending on how many rounds there are since each round represents something different such as healing, gratitude, forgiveness and guidance. During the time the ceremony is going on, there is complete darkness inside the lodge, with the exception of breaks between each round in which the door is opened to allow fresh air and additional stones to be brought in. The heat accumulated in the lodge and the perspiration is believed to have the power to purify body, mind and spirit, releasing the negative energy and toxins from the body. Through prayers, the participants of the ceremony communicate their physical ailments, emotional troubles and possible spiritual disconnection. This entire procedure is centered around holistic healing, and one is not given hierarchy over the other.[13] The ceremony addresses all kinds of illnesses as equally serious and addresses it with utmost concern and respect. Not only are they simply centres for healing, sweat lodges highlight the importance of communal connection in order to heal, and are spaces used for inter-generational knowledge-sharing, where the younger generations receive wisdom from the elders about Indigenous practices and traditions. Sweat Lodges demonstrated the ways in which simple spatial interventions led to embodied experiences and collective healing.

sweatlod.htm.

12 "Sweat Lodge." Anishnawbe Mushkiki, April 6, 2021. https://mushkiki.com/programs-services/sweat-lodge/.

13 Jessica Ravitz, "Back to the Beginning: The Sweat Lodge Ceremony, as Intended," CNN, December 1, 2016, https://www.cnn.com/2016/12/01/us/canada-sweat-lodge.

2.3 | SACRED GROVES OF TAMIL NADU



Figure 2.8 - Sacred Groves in Tamil Nadu, becoming biodiversity hotspots



Figure 2.9 - Modern Sacred Groves in Auroville

Sacred Groves, similar to Sweat Lodges, are areas of forest and woodlands that are set aside and considered to be spiritually significant in several different cultures and religions. In India specifically, they are referred to as 'devara kadu' in Karnataka, 'sarna' in Jharkhand, and they have other regional, local names as well. The groves are in the middle of the forests and dedicated to different deities and spirits and are maintained, some even to this day, through oral traditions and rituals held by different pundits, which are Hindu scholars and priests. In some Hindu traditions, significant value is given to certain types of trees as they are considered sacred healers. These trees include peepal (ficus) trees, and banyan trees.[14] The groves, or natural forest clearings act as natural temples, where some even have shrines and mandirs attached to worship deities. Different rituals take place in these clearings and they are often performed to seek blessings from their God, as well as protection and prosperity. Since the groves are considered to be sacred spaces where divine energy exists, it is believed that by praying in these spaces people can be rid of physical illnesses, mental and spiritual disconnection. There are some rules to the sacred groves such as cutting down of the trees is strictly prohibited, since it is their belief that their Divine Gods reside within the trees and that the trees have power to heal. Additionally, not everyone is allowed to have access to the sacred groves, which is a rule set to keep the ecological balance of the forest and minimal human interference allows them to do that. Lastly, it is also important to note that it is strictly forbidden to hunt and kill animals within the groves, for whatever reason there may be, in order to maintain the balance of the ecosystem.[15] Sacred groves of Tamil Nadu are deeply intertwined with the natural healing practices and place nature at the most important front and centre of human existence and balance. For this thesis, it was important to study Sacred Groves in greater detail because it discusses a unique theme of a long-term stewardship, which promotes the idea of care embedded in the deeper acts of life, in maintenance, restraint and intergenerational responsibility. Additionally, a key takeaway was man's lifelong connection and primitive connection with nature surpassing the extents of nature presented as a designed object. They emphasize on preserving the balance within the ecosystem to maintain harmony and continue the ancient traditions that have been present even before human existence.

One common factor in the aforementioned healing practices is the importance of the circular and organic configuration. Most of the spaces enforced a circular structure since in all the Indigenous beliefs, this shape and form carries significant value. Cardinal directions in many native worldviews, locate humans in relation to the cosmos in a mythical way. Mythical spaces are often arranged around

14 Amirthalingam, M. "The Sacred Groves of Tamil Nadu." Indian Forester. Accessed December 16, 2024. https://www.indianforester.co.in/index.php/indianforester/article/view/2145.

15 Sacred Groves of Tamilnadu. Accessed December 16, 2024. https://tnbb.tn.gov.in/sacred-groves.php.



Figure 2.10: Sacred groves often include shrines or temples, such as the temple to Lord Ayyanar in Pudukkottai, Tamil Nadu.

a coordinated system of cardinal points and a central vertical axis.[16] Circles being the microcosm of the cosmological universe alludes to the sacredness of space. The circle, in the universal archetype, carries a deeply profound meaning such as representing wholeness and unity. It represents a cyclical activity, and the most evident examples of this idea are the cycle of life and celestial bodies following circular movements. Lastly, circular formations have one central converging point. Not only does that allow for communal engagement and inclusivity, it places great importance on one point of convergence for the energy in a space. The circle embodies the ideas of wholeness and unity and there are a lot of overlaps in different cultures of this spatial configuration, leading us to believe that the shape and form transcends cultural and physical boundaries.

16 Ballengee-Morris, Christine. “Indigenous Aesthetics: Universal Circles Related and Connected to Everything Called Life.” *Art Education* 61, no. 2 (2008): 30–33. http://www.jstor.org/stable/27696273.

3 | Spaces of Suffering: The Architecture of Mental Health Neglect

At the crux of understanding mental health lies not just the evolution of medicine and psychology, but the evolution of spaces in which these events have taken place as well. Architecture is never neutral, and is reflective of the shifting ideas of care in this context. For centuries, mental health institutions were spaces for isolation and spectacle, rather than healing and refuge. They highlighted the suffering, amplified it even, and made the people feel like outcasts. The institutions were complicit in a system that oppressed and misunderstood mental health and its patients. It is important to study some of those institutions to understand how spaces can be an instigator of healing or oppression, depending on the ideas that inhabit it.

3.1 | BETHLEM ROYAL HOSPITAL



Figure 3.1 - An engraving of Bethlem Royal Hospital by Thomas Bowles

One of the primary examples of architecture of neglect is the Bethlem Royal Hospital, also known as ‘Bedlam’. It was one of the first institutions in Europe to admit people with mental disorders. However, soon it became known for its inhumane treatment of patients, who were often admitted without a diagnosis, which included but was not limited to restraining of patients, and beating them in front of the public. When more people were admitted than there was space, they turned mental health and its treatment into a spectacle.



Figure 3.2 - A Rake’s Progress, Plate 8, engraving and etching displayed at the MoMA



Figure 3.3 - The American Patient James Norris is a drawing by Mary Evans Picture Library

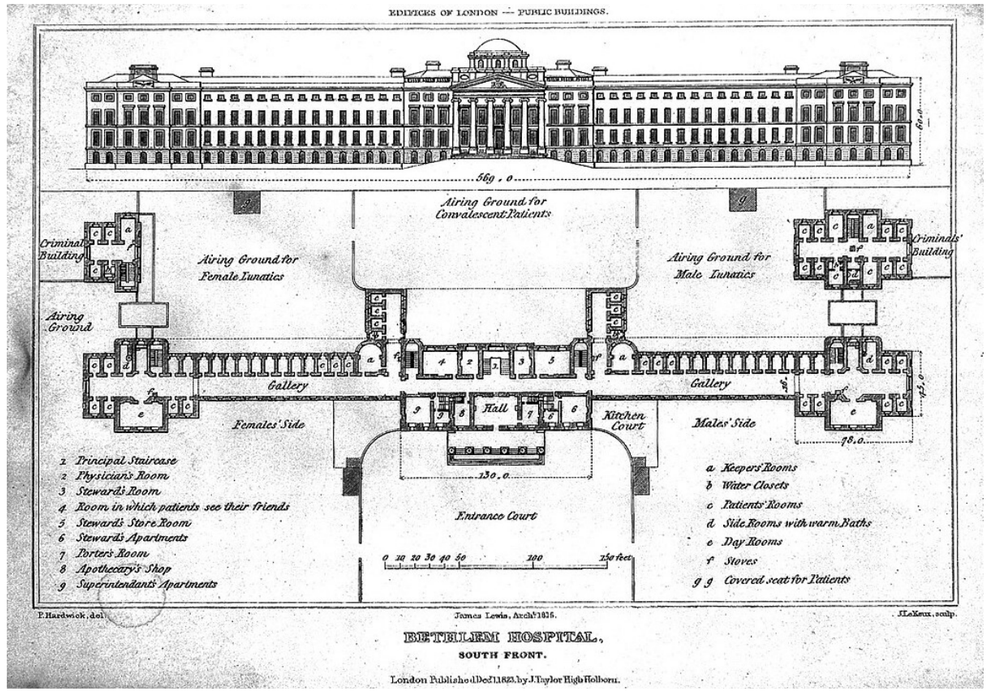


Figure 3.4 - Plan of Bethlem Royal Hospital

As seen in the plan in Figure 3.4, the architecture and design was as complicit in the inhumane treatment as any other factor. The plan resembled a prison with multiple cells and no access to nature or any outside spaces. Moreover, the plan did not have enough spaces to provide for the massive number of patients admitted, but in an unfair spatial division, kept spaces of spectacle, where visitors had access to tour the hospital once they paid to look at people with mental health conditions, and even mock them at times. Additionally, the long and narrow corridors were not an ideal choice for the type of institution that catered to several patients at one time, since the ends of the corridor received minimal attention and care from attendants and were often left and ignored for days on end.[17]

17 HistoryExtra, "Bethlem Royal Hospital: Why Did the Infamous Bedlam Asylum Have Such a Fearsome Reputation?" October 10, 2024, https://www.historyextra.com/period/victorian/bethlem-royal-hospital-history-why-called-bedlam-lunatic-asylum/.



Figure 3.5 - Scenes from the Hospital of Bethlem (Bedlam), St. George's Fields, Lambe Wellcome

The spaces closer to the centre were also reserved for people who belonged to upperclasses, and the architecture also became a tool to segregate socioeconomically. It was not until Bethlem Royal Hospital was moved from Moorfields to St. George's field in Southwark, did the conditions start improving.

Dr. William Charles Hood was appointed a resident physician and superintendent in Bethlem Hospital in 1852, and soon became a pivotal figure in reintroducing the idea of humanization of mental health patients.[18] He believed strongly in the moral treatment movement, an approach that sought to heal the patients without resorting to coercive practices or making a spectacle out of their sufferings.[19] Architecturally, Dr. Hood humanized the environment, by removing bars from windows to reduce the prison-like feel of them. He also worked towards furnishing the wards with carpets, armchairs and artworks like paintings and sculptures to create a more comforting and soothing environment. While the former rules consisted of staying within the premises to limit their movement, Dr. Hood's radical reforms encouraged freedom of movement, the importance of fresh air and supervised outdoor time as being crucial in healing. Most importantly, Dr. Hood believed that mental health was not taboo, rather was very curable, however, there was a method to it, and had to be done with utmost kindness and respect.[20] While Bethlem Royal Hospital became synonymous with cruel and inhumane treatment, to the extent that 'Bedlam' became a byword for chaos and madness, Dr. Hood worked hard on introducing healthier and radical reforms. He became a model for asylum reform, and his approach laid down the groundwork needed for modern psychiatric care.

18 "Sir William Charles Hood." Sir William Charles Hood | RCP Museum, January 4, 1870. https://history.rcp.ac.uk/inspiring-physicians/sir-william-charles-hood.

19 Trent, "Moral Treatment."

20 David Luck, "Records from Bethlem Royal Hospital, 1559–1932," British Online Archives, accessed October 25, 2025, https://britishonlinearchives.com/collections/104/media/428/the-historic-records-held-at-bethlem-museum-of-the-mind.

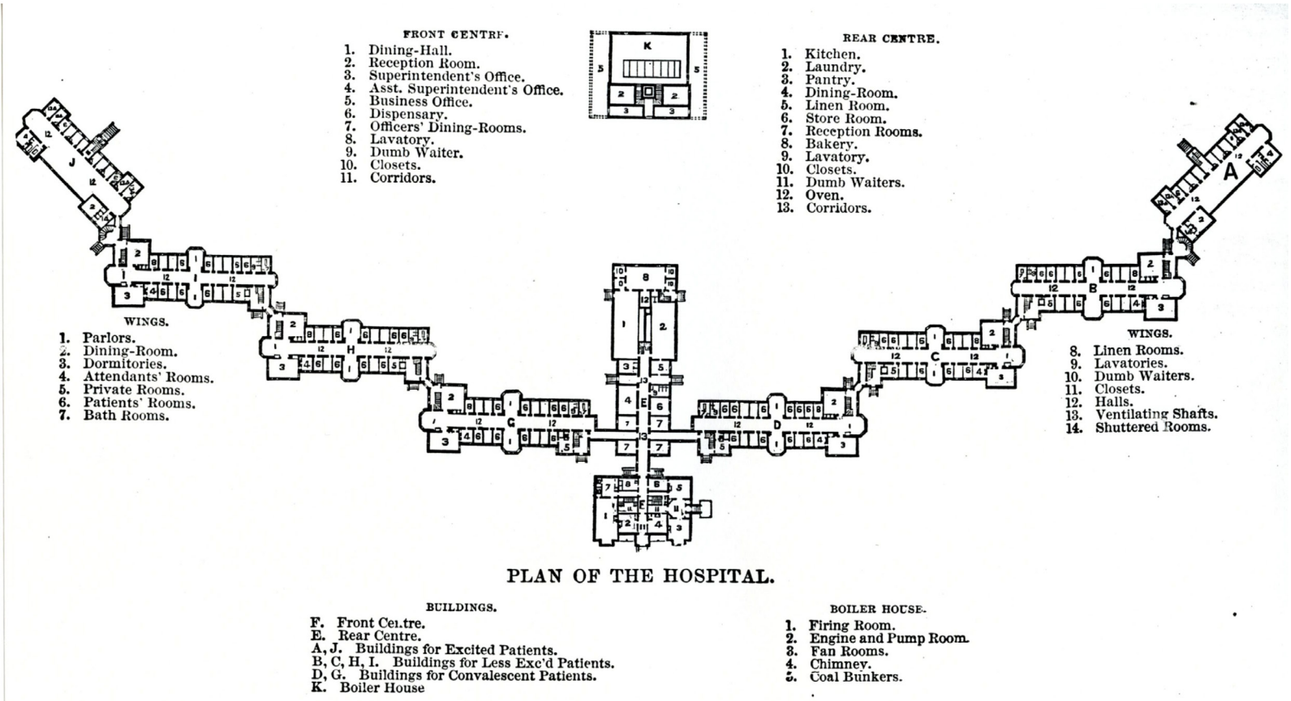


Figure 3.6 - Plan of Danvers State Hospital

3.2 | DANVERS STATE HOSPITAL

Danvers State Hospital was also known as the State Lunatic Hospital in Danvers, Massachusetts. Opened in 1878, it was initially introduced with the hope of progressive mental healthcare. It was based on the Kirkbride plan, which emphasized moral treatment and a therapeutic environment. It placed great belief in architecture's power to heal. Danvers was also designed as a completely self-sufficient hospital, meaning it had its own water supply and livestock farm, as well as a greenhouse and a cemetery. Despite the bright and innovative beginnings, Danvers rapidly turned into an institution that became infamous for the wrong reasons, namely harsh treatments and overcrowding.

The architecture became a mechanism to instill fear and control, rather than a tool for healing. The institution was in a grand Gothic style building which did not fit the idea of salutogenic healing. However, not only was the exterior dark and gloomy, the interior also resembled a maze, with corridors that merged into one another, making Danvers Hospital a symbol of institutional fear and domination.[21] It followed a similar pattern as the Bethlem Royal Hospital where patients with milder conditions were housed in proximity to the centre of the building, whereas those that were categorized as more 'disturbed' were pushed to the outer wings where they were neglected for days on end due to understaffing issues. As the population increased, different spaces such as the sun room and day rooms were



Figure 3.7 - Photograph of the Danvers State Hospital

21 Dr. Bebout, "Hell on Earth: Inside Danvers State Mental Hospital," Bebout Family Medicine, August 11, 2025, https://www.beboutfamilymedicine.com/hell-on-earth-inside-danvers-state-mental-hospital/.



Figure 3.8 - Troubling medical practices at Danvers State Hospital

then converted into sleeping quarters, and the patients were cramped into smaller spaces due to insufficient spatial planning.

Additionally, Danvers became a site of extreme and brutal treatments, which were in most cases, unnecessary as well. Electroconvulsive Therapy (ECT) was often administered to patients without anesthesia, even for mood disorders such as depression. The belief that these issues could be cured by 'resetting' the brain had become the common discourse around mental health at the time. These procedures were harsh and often resulted in fatal issues as well as fractures, dislocated jaws, spinal injuries and deep psychological trauma. Another common practice at the time was insulin coma therapy for bipolar disorder and depression, highlighting the extent to which mental health and its knowledge was misinterpreted. Patients were mostly locked in dark, soundproof rooms for days, not for their safety but as a form of punishment over the most minor things.

By the 1960s, Danvers was in a state of decline due to overpopulation and staff shortages. Moreover, the treatments were being understood as inhumane, and the appalling conditions led to widespread public outcry.[22] Outside the walls of Danvers, the situation was shifting due to the shift in the larger discourse around mental health, and more people were calling for community-based care facilities and deinstitutionalizing of such facilities. Monolithic institutions such as Danvers, while starting out on a positive note, quickly turned into a failed approach corrupted by neglect, fear and systemic failure.

22 William DeLong, "Why Danvers State Hospital Ranks among History's Most Infamous Asylums," *All That's Interesting*, July 30, 2020, https://allthatsinteresting.com/danvers-state-hospital.

4 | Modern Medicine and National Healthcare System



Figure 4.1 - Toronto General Hospital, Toronto

In a very stark contrast, modern hospitals and healthcare systems have very different principles and values than the ancient healing practices discussed above. In fact, the larger narrative around healing has shifted from holistic healing to curing. This shift prioritises physical curing and looks to make the process as brief and efficient as possible. While healing is understood as a longer procedure that emphasizes on improving the conditions of mind, body and spirit, curing focuses on the physical ailments. The approach that examines the origins of disease and factors that cause illnesses and is purely directed at the physical ailments is also referred to as pathogenesis. Modern healthcare systems are designed as sterile and neutral spaces which prioritize functionality and efficiency rather than other mental and emotional needs, all of which play a much larger role in healing than understood. Some of the examples of current healthcare facilities are Toronto General Hospital and St. Michael's Hospital in Toronto, Ontario.

Canada was, at a time, praised for its healthcare and its accessibility to everyone. However, there is still a lot of work needed in the healthcare department, since the system fails to provide adequate support for mental health. There are long waitlists, and even longer waiting times, which causes a deep disconnect between patients and the facilities. Mental health has carried a certain trauma in the past, and due to the lack of visibility, it was often seen as a taboo topic. It was managed by confinement and control, and institutional trauma is something that people inherently carry to this day. But, as seen in the images, the spaces in both the hospitals feel sterile and cold. Not only are they uncomfortable and clinical, one thing which is common in all of the images is that they do not have windows or any kind of visual access to nature. It reduces people to a body count, gives them a number, rather than considering them as individuals with different approaches to healing. Healing, in this paradigm, is diminished to something done to the body to make it better, rather than the person.

There are some architects who have been working on the architecture of healthcare, such as Farrow Partners, but the majority of the healthcare mindset is consistently sterile and focused on efficiency. While it is understandable that a high functioning hospital building has to be practical and fast-paced, architecture can still challenge some aspects of it. Spaces should be designed to reduce anxiety and stress, and a common ground should be found. There must be a small overlap, a coexistence of biology and biography, of science and spirit both. The end goal is not to reject modern medicine, since it is arguably the most important function in the healthcare world; but to expand the spatial knowledge to understand how architecture can contribute to salutogenic healing.

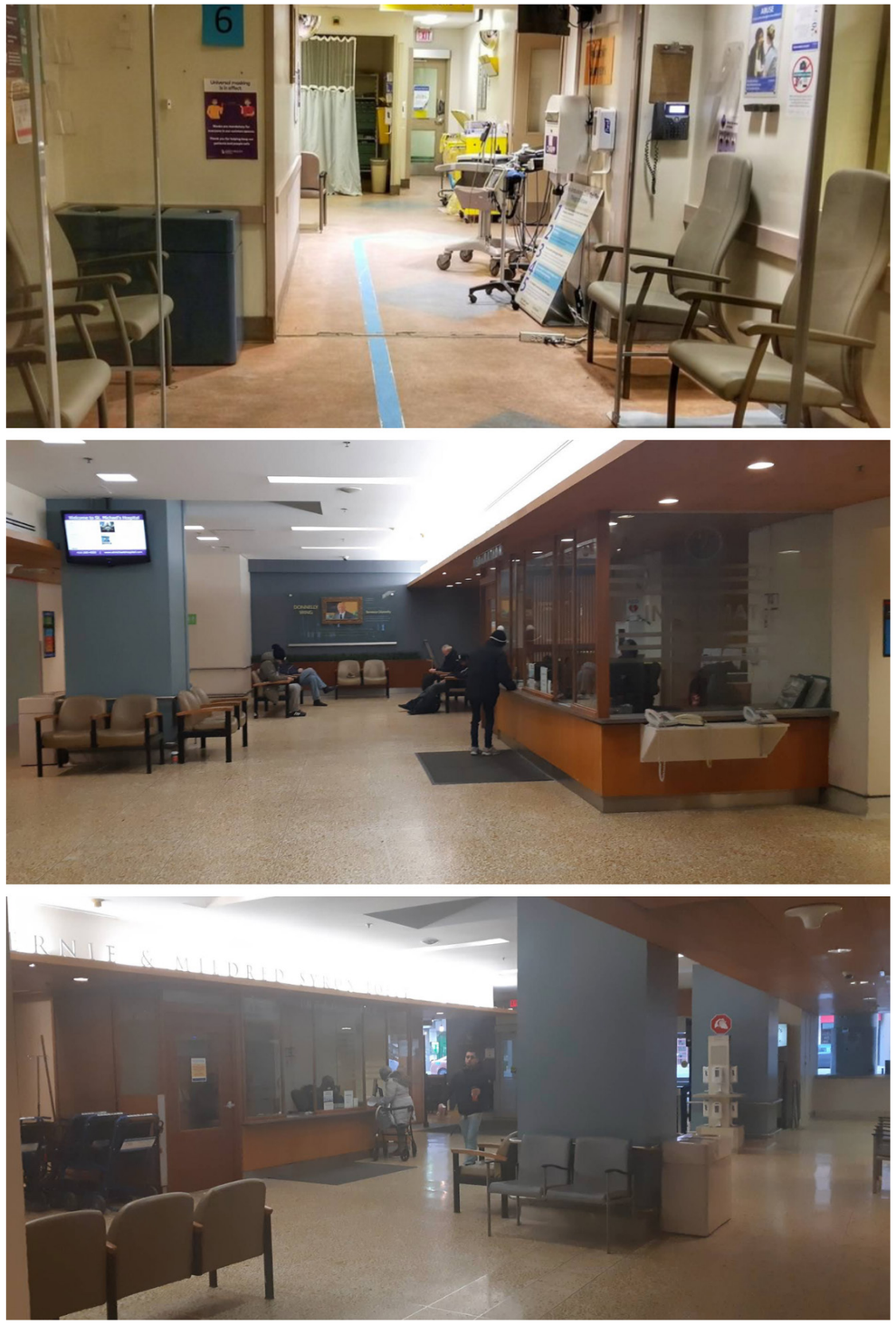


Figure 4.2 - St. Michael's Hospital, Toronto

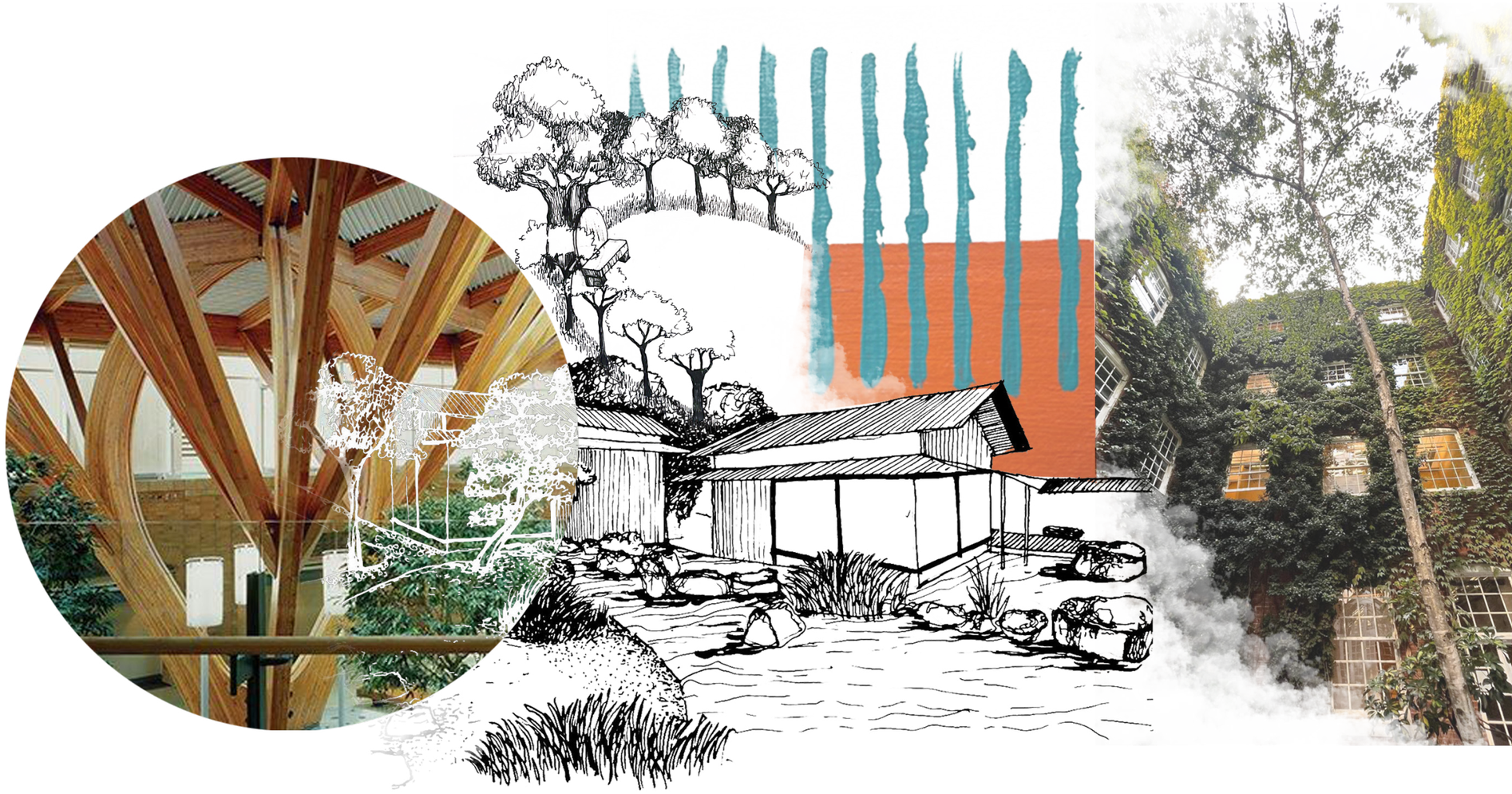


PHASE II: MAPPING KNOWLEDGE

Literature and Phenomenology

5 | Salutogenesis

Salutogenesis is a concept that focuses on the elements that aid in healing and well-being. Salutogenesis originates from the Latin word ‘salus’ which means health and Greek word ‘genesis’ for origin. Rather than just addressing diseases causing illnesses, it aims to address factors that help in holistic healing. The term was first coined by Aaron Antonovsky, and rather than addressing the question of what makes people sick, it focuses on the more important question which is, “what keeps people healthy?”[23] One of the most important factors of salutogenesis is Sense of Coherence (SOC), which has three sub-parts, comprehensibility, manageability and meaningfulness.[24]



23 Lindström, Bengt, and Monica Eriksson. “Salutogenesis.” Journal of Epidemiology & Community Health, June 1, 2005. https://jech.bmj.com/content/59/6/440.

24 Moksnes, Unni Karin. “Sense of Coherence.” Health Promotion in Health Care – Vital Theories and Research [Internet]., March 12, 2021. https://www.ncbi.nlm.nih.gov/books/NBK585678/.

Figure 5.1 - Collage of Salutogenesis

5.1 | COMPREHENSIBILITY

Comprehensibility refers to the sense of control patients feel when they are given the logical order of events that will happen which can be explained by experts. An example of this is, a person experiencing any medical ailment might approach the issue with confidence when they are also provided with the step-by-step detailed process of their diagnosis, treatment plan and the outcomes it may have. It is a method of living, which says that despite setbacks and surprise outcomes in life, one may be able to make sense of it if they make a logical order of events.

5.2 | MANAGEABILITY

The second point is manageability, which states that an individual needs to have certain resources to meet life's challenges. These resources are largely internal, such as resilience and adaptability to deal with hardships that may come their way. External resources often include support of loved ones and belonging to communities that aid in getting over complexities. Individuals who possess this skill often see life as something within their control even when faced with any issue.

5.3 | MEANINGFULNESS

Lastly, meaningfulness implies the idea and belief that individuals have regarding their purpose in life. It is a motivational component of salutogenesis and SOC which comes into play when individuals believe that they are here for a greater cause and they are more likely to engage and communicate through their challenges. This can stem from personal relationships, cultural and spiritual belief systems and confidence in oneself and their abilities.

SOC is an organized framework, which pushes for a more holistic healing of mind and spirit along with the body.[25] All of the sub-elements of SOC hint towards psychological understanding of self and an individual's place in the world.

This idea of salutogenesis is also interlinked with architecture since it discusses elements that make people feel better and provide an all-encompassing perspective of healing. In Gaston Bachelard's book, *Poetics of Space,* he writes, "[But] forests reign in the past. I know for instance that my grandfather got lost in a certain wood. I was told this, and I have not forgotten. It happened in the past before I was born. My oldest memories, therefore, are a hundred years old, or perhaps a bit more.[26] The statement suggests that spaces are not just passive backdrops in certain events of life, rather are active entities that help shape our experiences and memories. Spaces hold so much power that oftentimes, it is merely through passed down stories and other people's subjective experience that the biases are formed. (Bachelard 1994, 196) By designing neutral and inert spaces, architects largely take away the salutogenic component of healing, and patients are left to deal with psychological trauma of illnesses on their own. Salutogenesis places emphasis on interpersonal relationships, community support, body autonomy and agency in order to get better, and unfortunately, current healthcare facilities tend to disregard these elements in order to design efficient, but bereft spaces.

Salutogenesis is a medical and theoretical framework that is translated further into a spatial language with emphasis on spatial organization, material choice and the sequencing of programs. Antonovsky's Sense of Coherence comprising comprehensibility, manageability and meaningfulness can also be understood as conditions that can be supported or made possible by turning them into tangible architectural spaces. Since comprehensibility refers to the sense of control, its architectural translation would most likely be through clear spatial divisions, and easy circulation. Manageability emphasizes agency, it gives the right to choose, and could be represented through multiple movement paths, multifunctional spaces that transform as per the needs of an individual. And lastly, since meaningfulness seeks the purpose in life, it can be cultivated within design through material tactility and sensory engagements, all of which grounds people onto the site. Salutogenesis can serve as an evaluative lens, through which architecture's capacity to support care and dignity can be tested.

25 Ibid.

26 Bachelard, Gaston, and Maria Jolas. *The poetics of space: The classic look at how we experience intimate places.* Boston: Beacon Press, 1994, 196..

6 | Literature Review

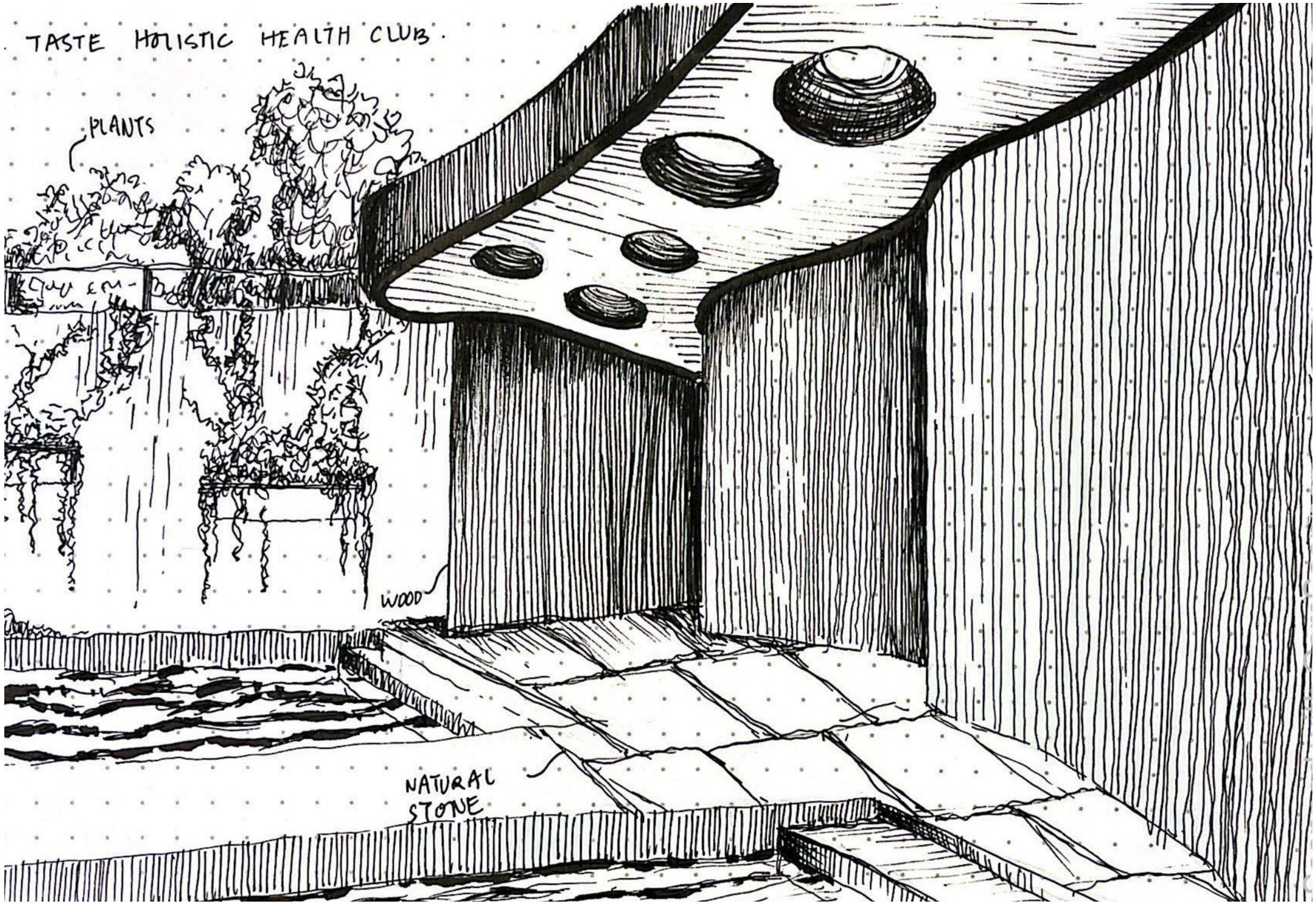


Figure 5.2: Sketch of One Taste Holistic Health Club, China

Between structure, walls and floors, architecture shapes an understanding and perception of spaces, it holds biases and memory, ideas of which have been explored in different literature. Published literature by expert architects and philosophers has revealed the secret to understanding architecture in its truest essence, it is important to start looking at spaces as dwellings and active agents in people's memories.

Phenomenology is a critical lens to understand the impact of design and spaces on one's psychology. It looks as spaces beyond just physical spaces, but as lived experience shaped by the body and its interaction with the surroundings. Maurice Merleau-Ponty is one of the most notable philosophers who have worked with the idea of phenomenology.

In *Phenomenology of Perception,* Merleau-Ponty challenges the Cartesian dualism which separates the mind and body, presenting them as disconnected entities, as well as the empiricist and intellectualist views of perception; since it assumed that the world is experienced solely through a mental analysis. Merleau-Ponty's unique perspective tells people how the body shapes our experience. It brings us to reconsider the way we engage the world, and every interaction, big or small, leaves certain impacts on the way we perceive the world. The body within a space becomes more than a detached observer, rather it becomes fundamental to understanding reality.[27] By taking this approach, perception is removed as an intellectual or visual concept, and is replaced by something more fluid and dynamic, where the body plays an active role in understanding the surroundings. This concept forms the very backbone of spatial phenomenology, and it is extremely relevant to designing wellness spaces. In the book, Merleau-Ponty writes, "exteroceptivity thus demands an articulation of stimuli, the consciousness of the body invades the body, the soul spreads across all of its parts, and behaviour overflows its central region. It might be objected that this 'experience of the body' is itself a 'representation', a 'psychical fact' and that as such it is at the end of a chain of psychical and physiological events that can only be attributed to the 'real body'."[28] This little excerpt does a remarkable job of summing up the core idea of Merleau-Ponty's hypothesis, which dissolves the boundary between mind and body. He argues that in order to sense something external, that is, out of the body, the body has to act as more than just a receiver. Building on this foundation of the concept of phenomenology and perception, Juhani Pallasmaa gives it an architect's perspective in Eyes of the Skin. His writing critiques the emphasis of looking at the world and spaces simply through the visual lens. In reality, he argues, spaces are an amalgamation of different senses and embodied experience. Spaces are not only seen, but inhabited, heard, touched, smelled, tasted and even felt by mind, body and spirit. The soul of architecture and design lies within its ability to engage and create a multi-sensory experience.[29]

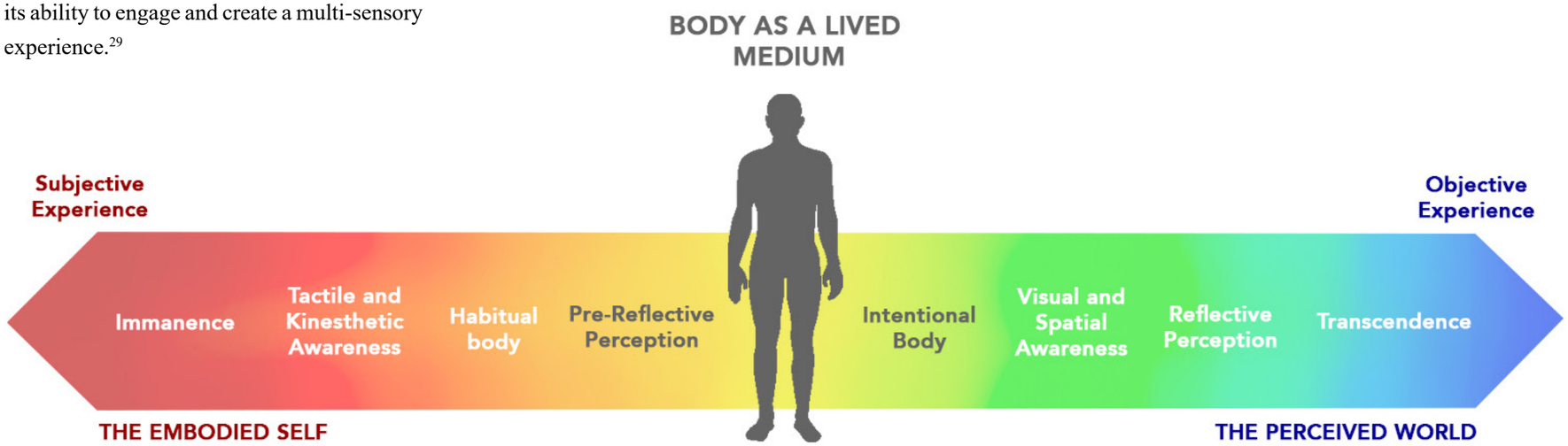


Figure 6.1 - Mind-Body Continuum based on Maurice Merleau-Ponty's Phenomenology of Perception

27 Merleau-Ponty, Maurice. *Phenomenology of perception*. Victoria, British Columbia: Franklin Classics, 2023.
28 Merleau-Ponty, *Phenomenology of Perception,* 78.
29 Pallasmaa, Juhani. *The eyes of the skin: Architecture and the Senses*. Hoboken, NJ: Wiley, 2024.

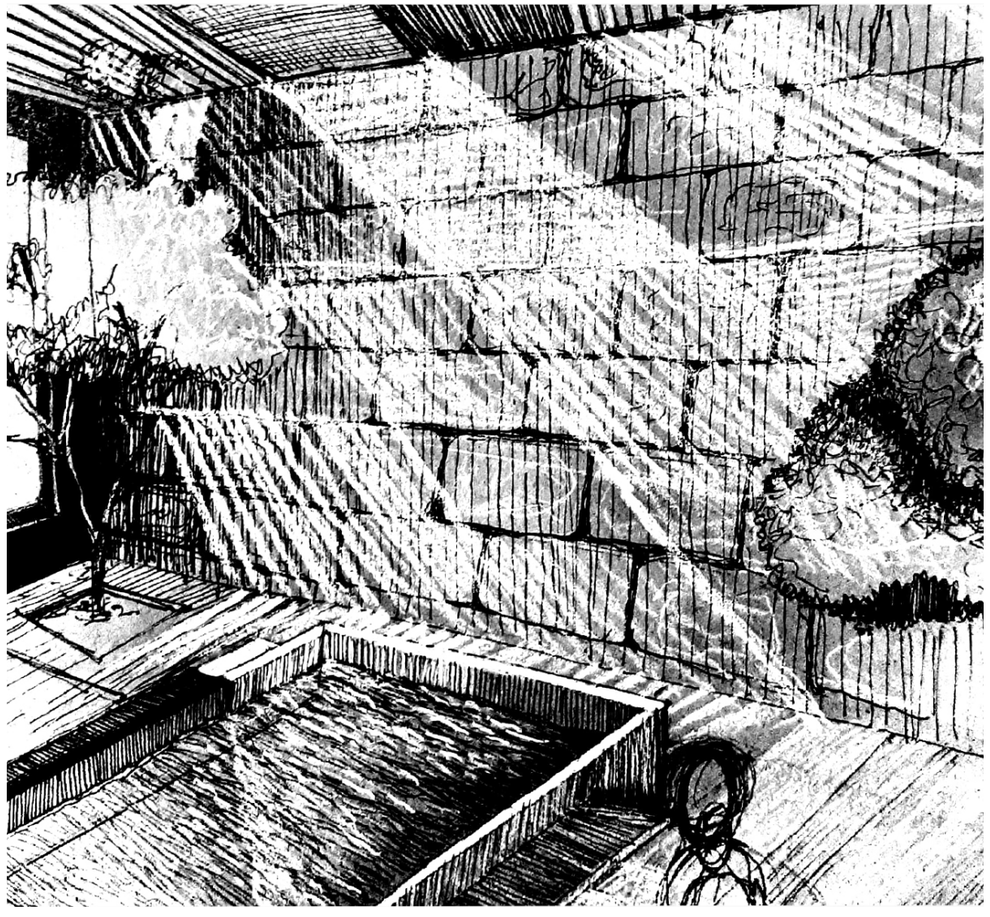


Figure 6.2 - Sketching to visualize a multi-sensory experience from *Eyes of the Skin*

Spaces form memories and recall it too, through materials, scents, textures and light. Similar to Merleau-Ponty, Pallasmaa understands the body as the true site of architecture. He writes, “the task of architecture is to make visible how the world touches us”,[30] and at another point he also writes, “every touching experience of architecture is multi-sensory; qualities of matter, space, and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscle.”[31] The first excerpt moved architecture beyond the realm of simply visual perception to one towards embodied reciprocity. The second one stacks on to the same idea and lists out the way building is felt and experienced through much more than just the body and the eyes. Both argue that architecture’s greater impact lies not in the physicality of it, but how it balances the relationship between self and world.

Memory is an essential aspect of phenomenology, it allows people to form a bias with spaces. This idea is explored in the book *Poetics of Space* by Gaston Bachelard, who, like Pallasmaa, hypothesizes that memory is not just a recalling of facts, rather is a reconstruction and recollection of events that are woven into the intricate web of spatial phenomenology.[32] Despite having a similar stance, both authors approach memory and spaces in different ways. While Pallasmaa writes, “the body remembers spaces and experiences. We inhabit the spaces of memory as much as the spaces of the present.”[33], it is evident that his approach lies in the idea that memory is inseparable from the collective experiences. Bachelard takes the idea of memory in a more intimate manner, he explores it in connection to the most intimate space - home. He argues that memory is biased, and is shaped by events and spaces, often reconstructed in a manner that exposes one’s inner desires and fears. In *Poetics of Space,* he writes, “the house we were born in is physically inscribed in us. It is a group of organic habits.”[34] Memory is an intangible entity that is based on habit and lived experiences, where spaces actively take part in shaping important events of one’s life. Memory then shapes perception which makes the experience of spaces subjective and deeply personal.

Although the authors, Maurice Merleau-Ponty, Juhani Pallasmaa and Gaston Bachelard, approach spatial phenomenology from different disciplines, their arguments converge on a shared understanding that spaces are not neutral afterthoughts, they hold the power and should be given the responsibility to shape experiences and memories. Tye Farrow, from Farrow Partners, recently published a book called *Constructing Health: Enhancing*

30 Pallasmaa, *The Eyes of the Skin,* 54.

31 Pallasmaa, *The Eyes of the Skin,* 41.

32 Bachelard, Gaston, and Maria Jolas. *The poetics of space: The classic look at how we experience intimate places.* Boston: Beacon Press, 1994.

33 Pallasmaa, *The Eyes of the Skin,* 72.

34 Bachelard, *The Poetics of Space,* 87.

Mind Health through Design, wherein he asserts the idea that buildings shape one's neurochemistry. He claims, "we can design places that cause the brain to release dopamine (pleasure), serotonin (contentment), and oxytocin (connection) instead of cortisol and adrenaline which arise in spaces that feel unsafe or alienating."[35] Farrow also raises another interesting and relevant point, when he writes, "does the mind stop at the periphery of the skull? As we will discover, recent research shows that the mind extends well beyond this limit and through the boundaries of the skin and body, forming close interconnections with the surrounding environment. These relationships play a significant role in the health of our extended minds and inform the role architecture plays in enhancing mind health."[36] Farrow also refers to and challenges traditional Cartesian dualism just as Maurice Merleau-Ponty did in his book, since his stance states that the mind extends through the body, further into the space around us. Designing spaces of care should practice a shift in priorities, by creating spaces which are not for utility, or modern contemporary aesthetics, rather spaces that can listen, feel and catalyse the salutogenic healing process.

Questions of Perception: Phenomenology of Architecture by Juhani Pallasmaa, Steven Holl and Alberto Perez-Gomez, is an interesting compilation of essays which discuss the best strategies to design keeping in mind the teachings of phenomenology.[37] The architects talk about architecture evoking different senses within us and influencing one's way of thinking. Steven Holl writes, "anyone who has become entranced by the sound of water drops in the darkness of ruin can attest to the extraordinary capacity of the ear to carve a volume into the void of darkness. The space traced by the ear becomes a cavity sculpted in the interior of the mind."[38] This excerpt, if analyzed carefully, discusses architectural strategies to give hierarchy to other senses over visuals. It states that the quality of sound is best observed and heard in the lack of light, where visual senses cannot dominate. Steven Holl also emphasizes the transformation of user experience depending on time. He says, "architecture is a temporal art. Movement through space, the passage of light during the day, the weathering of materials - these are all aspects of the experience of architecture."[39] He presents us, the readers, with another important spatial phenomenological strategy that highlights the grounding transformation of the building throughout the day.

All the texts discussed in this chapter point towards designing mindfully, with special care given to the power of salutogenesis rooted in good architecture. They assert and establish the understanding that buildings, gardens, rooms and waiting areas all shape the mind, memory and health of people who move through them. While one's interaction with space might be short-lived, or temporary, the embodied experience lingers within and helps them form a bias around similar spaces. Different tangents, namely perception, memory, materiality and atmosphere are all aspects of a multi-faceted phenomenological approach. Architecture has the capacity to heal, and architects should be held accountable to create positive and salutogenic spaces of care. The literature forms a strong theoretical foundation in this thesis, and helps guide the investigation on how spatial design functions as a mode of care in mental wellness institutes.

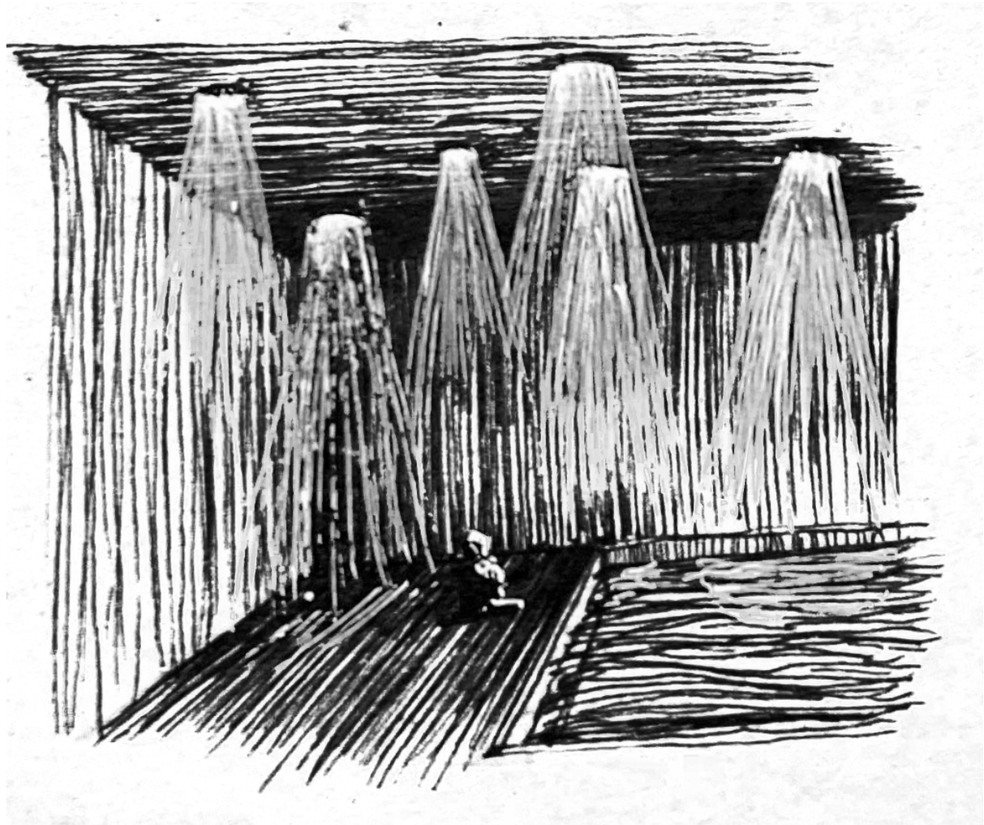


Figure 6.3 - Sketching a visual of embodied spatial experience

35 Farrow, Tye. *Constructing health: How the built environment enhances your mind's health.* Toronto, Ontario: Aevo UTP, An imprint of University of Toronto Press, 2024.

36 Farrow, *Constructing Health.*

37 Holl, Steven, Juhani Pallasmaa, and Alberto Pérez Gómez. *Questions of perception: Phenomenology of architecture.* Tokyo: A + u Pub, 1994.

38 Holl, Pallasmaa, and Pérez-Gómez, *Questions of Perception.*

39 Holl, Pallasmaa, and Pérez-Gómez, *Questions of Perception.*

7 | Archival Research and Critical Discourse Analysis

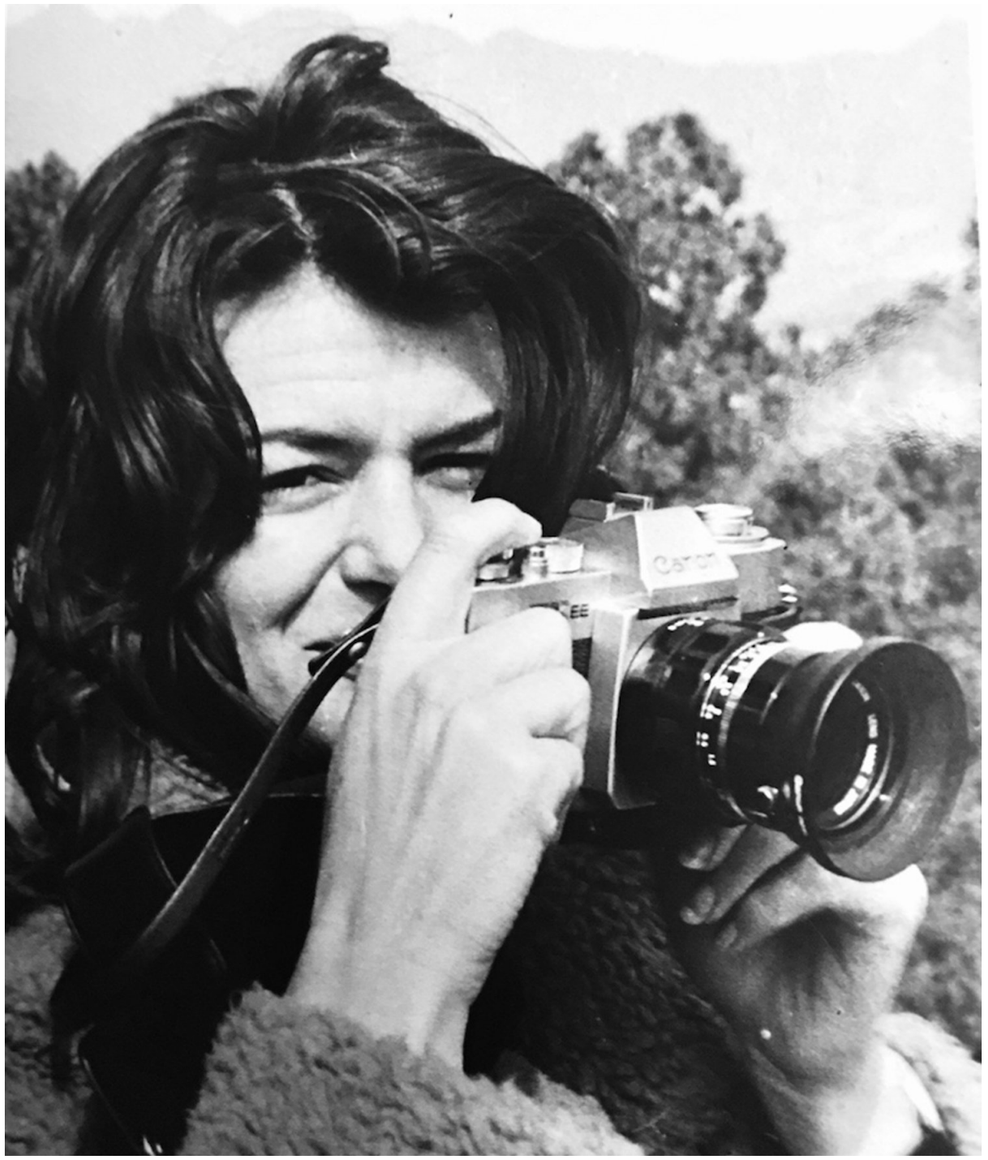


Figure 7.1 - Maggie Keswick Jencks

Maggie Keswick Jencks was a Scottish writer, artist and landscape architect married to architect Charles Jencks. In 1993, Maggie was diagnosed with terminal breast cancer. During her treatment, she began keeping a diary about her experiences, her ups and downs with cancer. Based on the diaries she kept, and her own need, she developed the concept of Maggie's centres. Her diary was published under the title, 'Views from the Frontline' and can be used as a model to understand healing spaces. While the diary as well as Maggie centres have a core responsibility and a target user group of people with cancer, it can be used as an important study to guide the manifesto of the design of wellness retreats. It is essential to conduct a thorough Critical Discourse Analysis of Maggie's diaries to understand several layers of meaning about how hospital environments are constructed and experienced within the discourse of treatment and healing. The ethical considerations that must be taken when analyzing Maggie's diaries is to understand the perspective and her reflections as someone who was going through a rather tragic time in her life at the time, which is why her work and her words both must be presented with extreme care and sensitivity. As an architecture student, conducting research that involves Maggie Jencks' diaries offers a perspective of a patient going through life altering diagnoses and her ethos is a contribution to possible design solutions. Additionally, Maggie Centres in the United Kingdom followed her contributions and her words to build cancer care facilities which have left a lasting impact on her legacy.

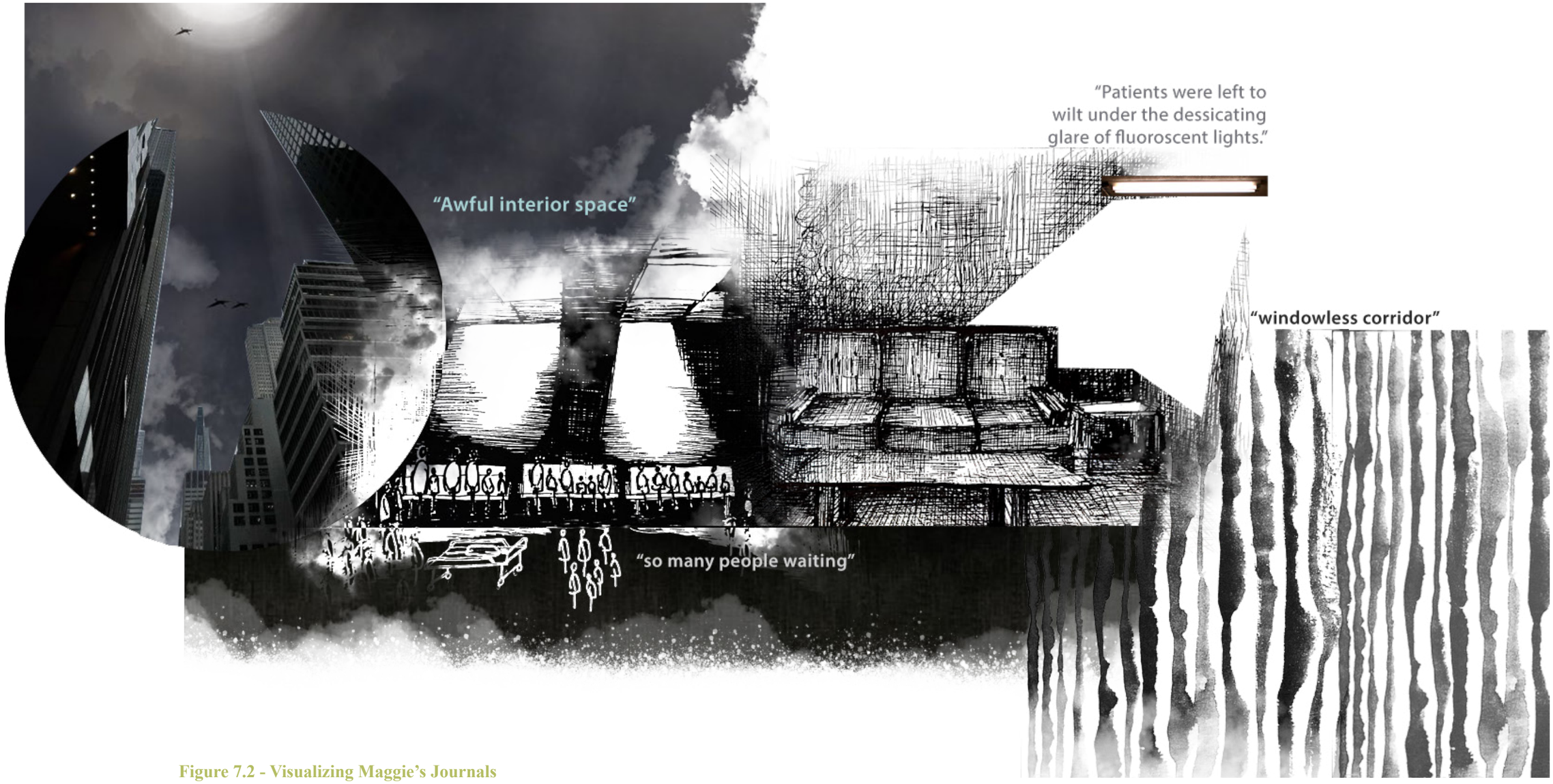


Figure 7.2 - Visualizing Maggie's Journals

In a carefully constructed Critical Discourse Analysis of Maggie Jencks' reflections on hospital design in 'A View from the Frontline', her spatial vocabulary, metaphors and implied power dynamics can be analysed to understand her perception of healthcare spaces as a patient.[40] In the diary, she writes, "illness shrinks the patient's confidence, and arriving for the first time at a huge NHS hospital is often a time of unnecessary anxiety".[41] The sentence is under the subtitle, 'Waiting Areas Could Finish You Off'. Immediately, Jencks sets the tone that larger institutions with big buildings are intimidating and disproportionate. The contrasting use of words, such as 'shrink' and 'huge' refer to a spatial imbalance, where the building is used as a dominating factor and the human-scale level diminishes. Furthermore, Jencks writes, under the same subtitle, "Overhead (sometimes even neon) lighting, interior spaces with no views out and miserable seating against the walls all contribute to extreme mental and physical enervation. Patients who arrive relatively hopeful soon start to wilt."[42] This sentence is very impactful since it manages to sum up the cumulative sensory toll little elements take. These things, in isolation, might not be a great deal to someone, but to patients who are sitting in the waiting rooms and are riddled with anxiety, it collects to become very nerve-wracking. Additionally, usage of simple but definitive phrases such as 'no views out' and 'seating against the walls', constructs an image of the space that feels more confining than restorative. In a similar context, she also adds, "no patient should be asked…to sit in a corridor without further inquiry, immediately after hearing they have an estimated three to four months to live."[43] She places great responsibility on architecture, well-intended and thoughtful spatial planning to create spaces of care. In the next sentence, she writes, "waiting times could be used positively. Sitting in a pleasant, but by no means expensive room, with thoughtful lighting, a view out to trees, birds and sky, and chairs and sofas arranged in various groupings could be an opportunity for patients to relax and talk, away from home cares. An old-fashioned ladies' room - *not* a partitioned toilet in a row - with its own hand basin and a proper door in a door frame - supplies privacy for crying, water for washing the face, and a mirror for getting ready to deal with the world outside again."[44] She acknowledges that spaces hold emotions, and patients who are receiving life-changing news should be able to have room to process their feelings and emotions. Good design and architecture has the responsibility to aid in this process, to assist people as they feel life's ups and downs. And the solution she provides is a contrasting spatial discourse, which feels more warm with human-scaled spaces. The subtitle in itself holds a somber meaning, something as mundane as it can be observed through the lens of someone who has a fatal illness and in an instance transforms into spaces of death.

40 Jencks, Maggie Keswick. "A View from the Frontline – Jencks Foundation." Jencks Foundation. Accessed October 24, 2025. https://www.jencksfoundation.org/explore/text/a-view-from-the-frontline.

41 Jencks, "A View from the Frontline."

42 ibid.

43 Ibid.

44 Ibid.



Figure 7.3 - Different Maggie Centres across the world

Maggie's diary is not just an illness memoir, it acts as a spatial manifesto and was used as a guideline to construct Maggie Centres all across the United Kingdom. The spaces are cancer care facilities and they honour Maggie's diaries and words by designing with salutogenic healing approaches in mind. By analysing her diaries, we do not just see spaces as neutral, rather they become an active agent in events and are equal participants in life's several experiences.

8 | Sketching as Spatial Research

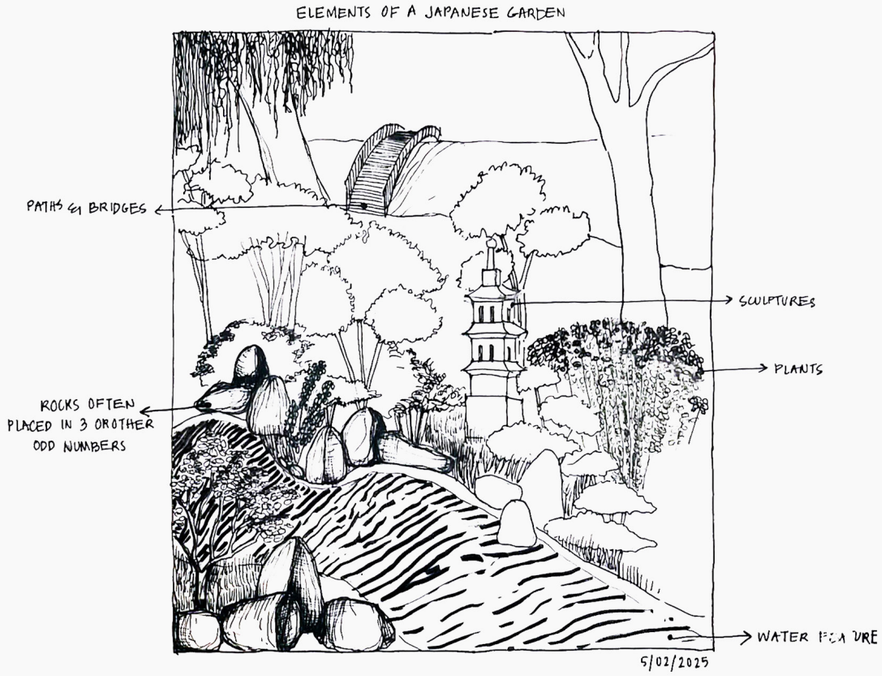


Figure 8.1 - Sketching a study of Japanese Garden and its elements



Figure 8.2 - Sketching a quick observation drawing of my home, for House of the Stairs

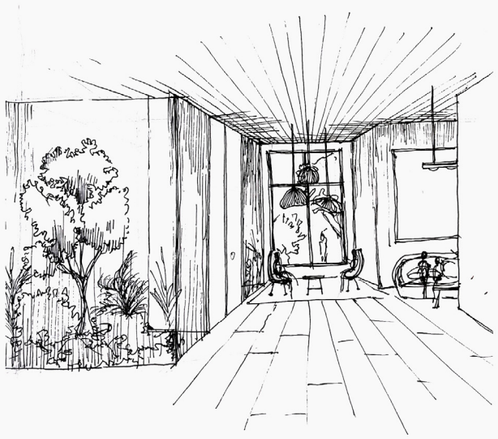


Figure 8.3 - Visualizing an open interior space with a terrarium

Since a lot of the thesis lies at the intersection of space and perception, sketching automatically becomes an integral documentation tool in the research process. To draw is to think about every little detail and every little stroke, each line demands the hand, eye, body and mind to be present in the moment. Drawing is a way to think spatially, to imagine and construct a better future, allowing atmospheres, micro-climates and subtle connections between light and dark, sacred and profane to emerge on the paper.

While photography is an important tool as well, a sketch grounds you in time and space, it holds memory in suspension. The details that are drawn and the details that are omitted both inform a person's perception of space, and no two people can approach sketching the same space in the exact same manner. It reveals the process of noticing, of understanding the space in its truest essence. This advocates the idea of phenomenology of space, since it states that space is not merely a physical space, but also a vessel of lived experiences shaped by one's individual memories and presence.

Additionally, the thesis promotes salutogenic principles, encouraging activities that have a productive act of doing, and the act of drawing is rhythmic, demands mindfulness and offers a breakaway moment of attentiveness and presence of mind. Drawing and sketching can be seen as both a generator of ideas and a means for documentation, and this thesis places great emphasis on the visual communication tool. It aids in decoding spatial qualities and understanding different design strategies, it becomes a bridge between perception and architecture.



Figure 8.4 - Shadow study of the Aga Khan Hospital, Karachi before sunset

9 | Sensing Spaces Across Cultures

Precedent study, in this thesis, plays a crucial role in grounding the architectural research into built work, and establishes spatial practices. The collection of precedent studies conducted for the research were not only selected on the formal or programmatic similarity, but also by their ability to offer a deep and critical insight into spatial phenomenology as well as ethics of care. Maggie Centre by Heatherwick Design Studios demonstrates a sensitive and non-institutional approach to healthcare, and places dignity and mental wellbeing as a topmost priority for its patients. 165 Rehab for Neurorehabilitation carries on the similar idea of having a non-institutional medical setting which enhances the user's experience through sensory and material engagement as well as its emphasis on courtyard spaces as anchors that encourage connection to nature. Aga Khan University Hospital also looks at the balance between indoor and outdoor spaces, while its climatic strategies were integrated into the built structure through different design practices. Lastly, Portland Japanese Garden is an interesting project in its quality of architecture being humble in front of nature. All the precedents strengthen the thesis research and provide strategies and elements of design.



Figure 9.1 - The entrance of Maggie Centre, Leeds, United Kingdom

9.1 | MAGGIE CENTRE, LEEDS, UNITED KINGDOM BY HEATHERWICK DESIGN STUDIOS

Maggie Centres are a network of dedicated cancer support spaces that are mainly located in the United Kingdom, with the exception of two that are in Hong Kong and Japan. The main idea of Maggie Centres is to provide support to people with cancer as well as provide therapy and assistance to their family and friends. Maggie Centres' designs are delegated to some of the best architects, with the manifesto founded by Maggie Jencks, and their design honors the cause in the best manner possible. Foster + Partners, Steven Holl Architects, Frank Gehry and Zaha Hadid are just some of the names that have worked on different Maggie Centres. The Maggie Centre located in Leeds was designed by Heatherwick Design Studio and it is a stellar example of a care facility. The location of this facility is essential because it is situated adjacent to the St. James' University Hospital's oncology department, in close proximity to the A&E routes.[45]

45 Pintos, Paula. "Maggie 's Leeds Centre / Heatherwick Studio." ArchDaily. ArchDaily, July 24, 2021. https://www.archdaily.com/941540/maggies-leeds-centre-heatherwick-studio.

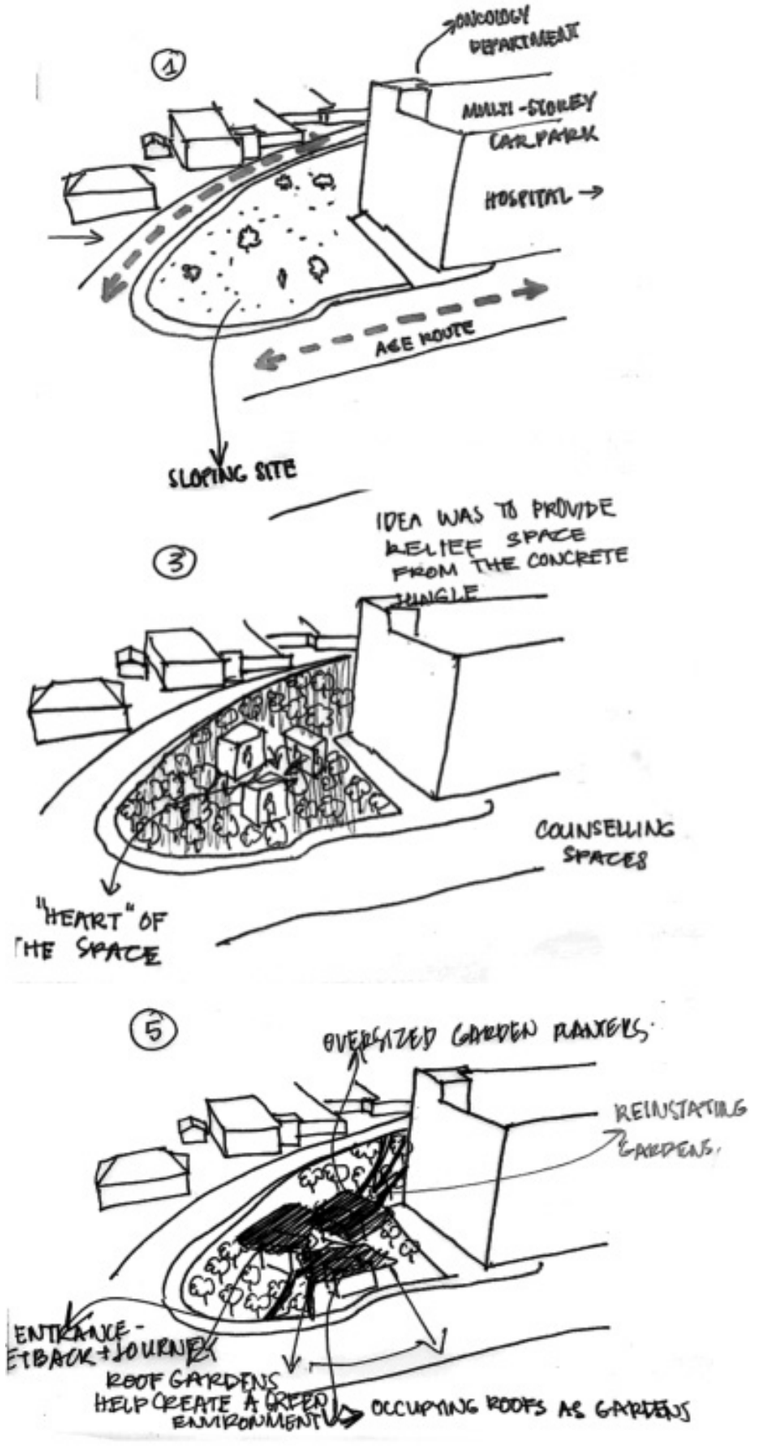


Figure 9.2 - Building process of the Maggie Centre, reinstating the gardens



Figure 9.3 - Sketch of the interior of Maggie's Centre

Despite being positioned closely to the busy emergency routes, the care facility exists separately within the hospital, with the architecture serving a dual purpose of not just providing care and shelter but also becoming giant-sized planters, incorporating the greenery within the design itself. Leeds' Maggie Centre stands out for its distinguished approach because it utilized a dead grassland and all the greenery lost in designing and building the structures was then reinstated on the roof. It creates a soothing blend of design and nature, approaching the building with great intricacy and detail. This carries onto the interior of the Maggie Centre as well, with great attention and detail to the material usage and color palette. Divided in three areas, the built structure also works with the topography of the site, which is in a steep slope. The functions are divided such as waiting area, library, private counseling room and indoor shared spaces. The architects were careful to design the building in a way that it omitted any sharp corners so as to avoid feelings of confinement and tension. People are free to come and go as they please, and can eat, relax and socialize with others in this space. Maggie Centre's layout, spatial configuration and attention to detail makes it an exemplary care facility and there are several learning points and key takeaways from this particular case study. Some vital factors such as connection to nature, the phenomenology of the interior spaces related to the usage of materials, the colors and how the spatial configuration might make one feel; are essential tools in understanding how to design relief spaces of care. There is a stark contrast between the hospitals in the GTA context and the case study. One is designed in a very clinical manner, disconnecting the users from the mental and psychological aspects of healing whereas the other uses architecture as the primary tool for providing relief to people. Moving forward, it is crucial to use the case studies to understand the extent of impact architecture has on the healing process of patients.



Figure 9.4: Entrance to Maggie’s Centre, Leeds



Figure 9.5: Interior of Maggie’s Centre, Leeds showing curved timber walls and warm and inviting interior

9.2 | 165 REHAB FOR NEUROREHABILITATION, BASEL, SWITZERLAND BY HERZOG & DE MEURON

165 Rehab for Neurorehabilitation is located in Basel, Switzerland and is a successful example of salutogenic healthcare design. Herzog & de Meuron, a Swiss-based architectural firm, has, through its projects, shown immense sensitivity to contextual design and material exploration. The architects of the facility followed a brief which stated that the hospitals should not feel like a clinical healthcare institution. The architects, while discussing the project, state, “Because the patients are so restricted, because they have to stay at the rehab centre for such a long time, we have set ourselves the task of designing a multifunctional, diversified building, almost like a small town with streets, plazas, gardens, public facilities, and more secluded residential quarters where people take different paths to move from A to B. We have tried to create surroundings that allow the patients as much autonomy as possible.”[46] Herzog & de Meuron’s approach was to create a contained microcosm resembling a small town. Additionally, by allowing patients to move about in the easily navigable space as per their choice, it gives them agency and a sense of independence. This approach aligns with one of the key takeaways of salutogenic healing which states that patients can only truly begin to heal when they are provided an environment to do so. The design also applies ideas from philosophical theories such as spatial phenomenology through its spatial organization, material usage, connection to nature et cetera. The layout of the rehab wraps around several courtyards, both inwards and outwards.

46 “165 Rehab, Clinic for Neurorehabilitation and Paraplegiology.” Herzog & de Meuron. Accessed December 16, 2024. https://www.herzogdemeuron.com/projects/165-rehab-clinic-for-neurorehabilitation-and-paraplegiology/.



Figure 9.6 - Exterior view of 165 Rehab for Neurorehabilitation by Herzog & de Meuron



Figure 9.7 - Courtyard of 165 Rehab for Neurorehabilitation by Herzog & de Meuron

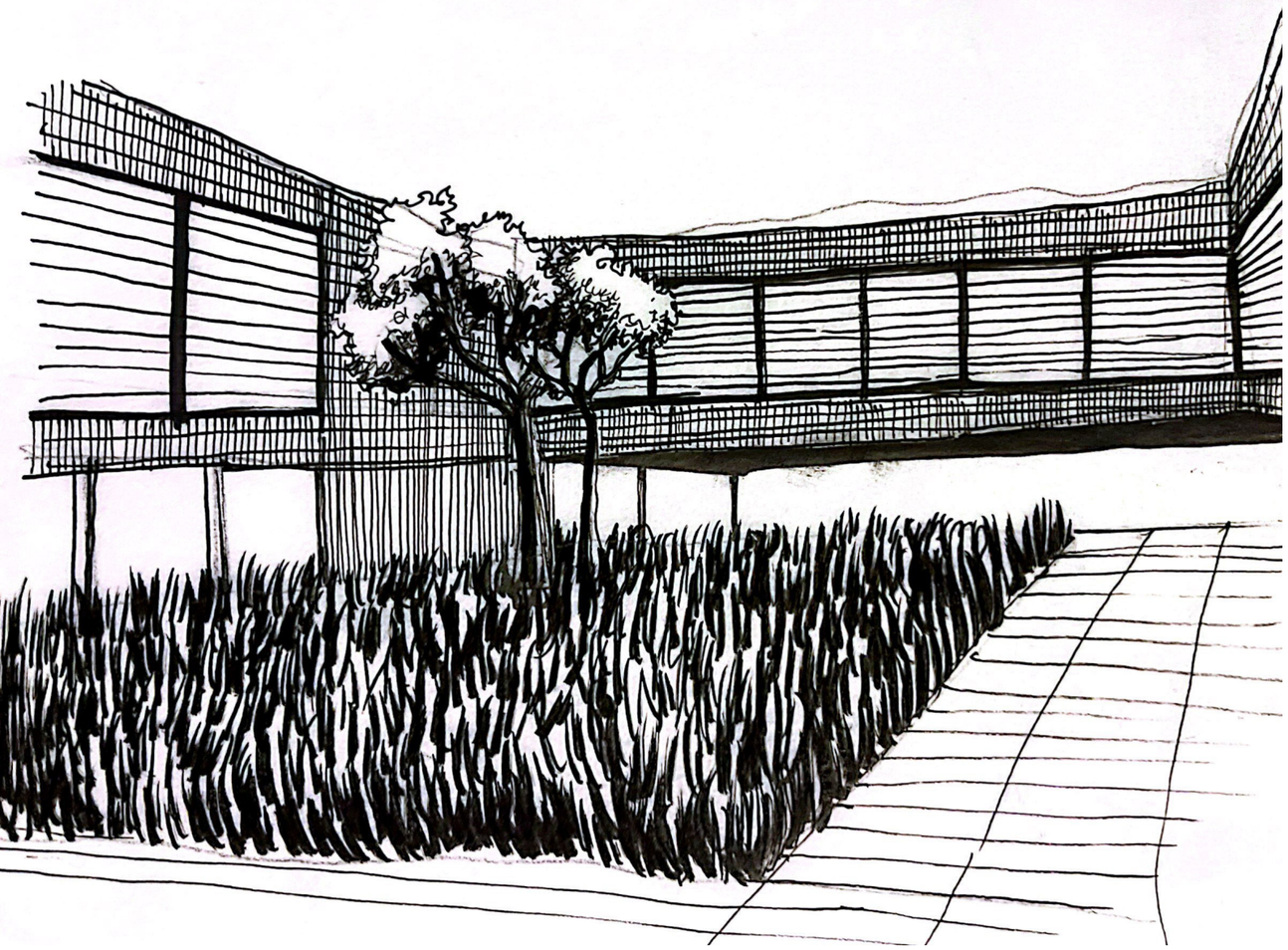


Figure 9.8 - Entrance courtyard of the rehab institution

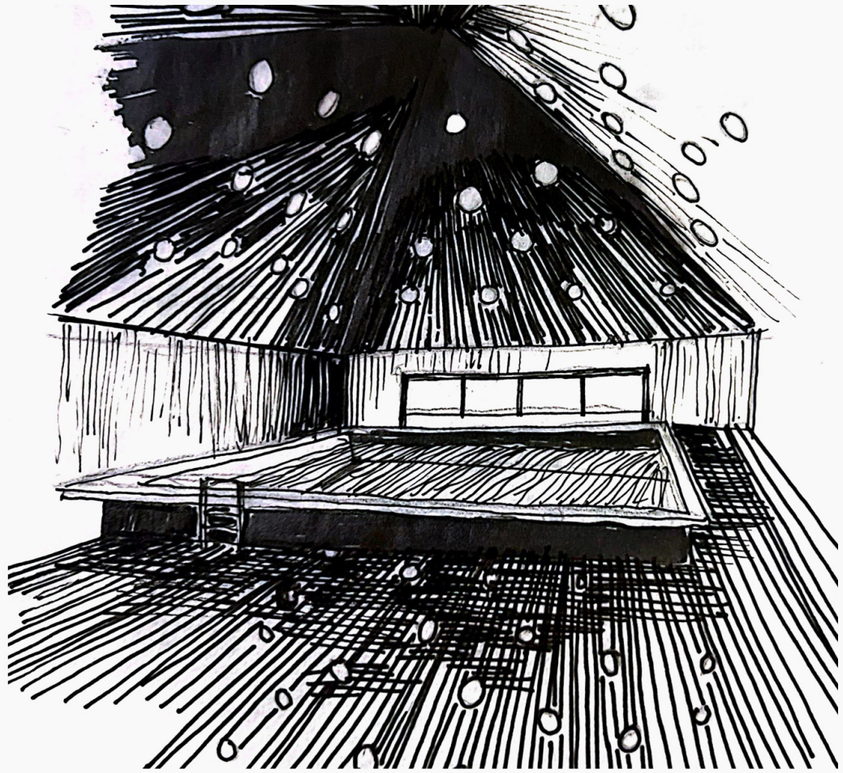


Figure 9.9 - Sketch of the interior meditation space

The courtyards have different qualities such as, the water garden is more calm and the sound of the water in silence allows for a more contemplative space, meanwhile, the entrance courtyard is more active with outdoor furniture to allow people to sit and socialize outdoors. The interior courtyards act as light wells into the building, and all the rooms are designed such that there is no room without a view to the outdoors, as seen in the solid and void plan.

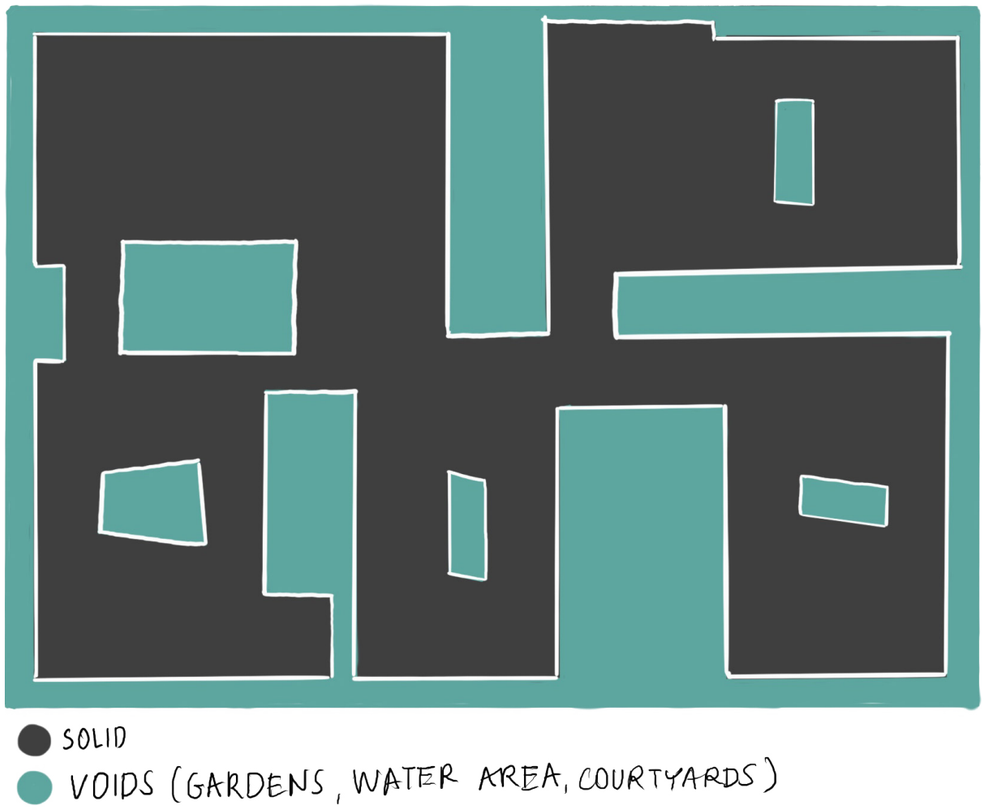


Figure 9.10 - Solid and void study of the building

The materials used in the rehab facility are a limited palette of wood, glass and concrete. Wood is associated with natural warmth that creates a welcoming and non-clinical atmosphere, which is in contrast to the clinical and sterile atmospheres of the usual healthcare facilities. Moreover, using materials like wood also reinforces the idea of connectivity to nature, it creates a sensory bridge between indoor and outdoor environments, making the space a therapeutic experience for everyone involved. 165 Rehab by Herzog & de Meuron sets a benchmark of connecting healthcare design to spatial phenomenology, which can be followed by institutions aiming for a similar approach to salutogenic healing. Since healthcare institutions already have a negative connotation attached to it, it is essential to design the spaces in such a manner that users feel calm and relaxed, instead of anxious and over-stimulated which is what a lot of the facilities do in the modern healthcare system.



Figure 9.11 - Wood of different kinds used in the facade of the building



Figure 9.12 - Placing horizontal lattices in front of large windows as screens



Figure 9.13 -Balance between interior and exterior spaces



Figure 9.14 - Biggest courtyard of the hospital

9.3 | AGA KHAN UNIVERSITY HOSPITAL, KARACHI, PAKISTAN BY MOZHAN KHADEM AND PAYETTE ASSOCIATES

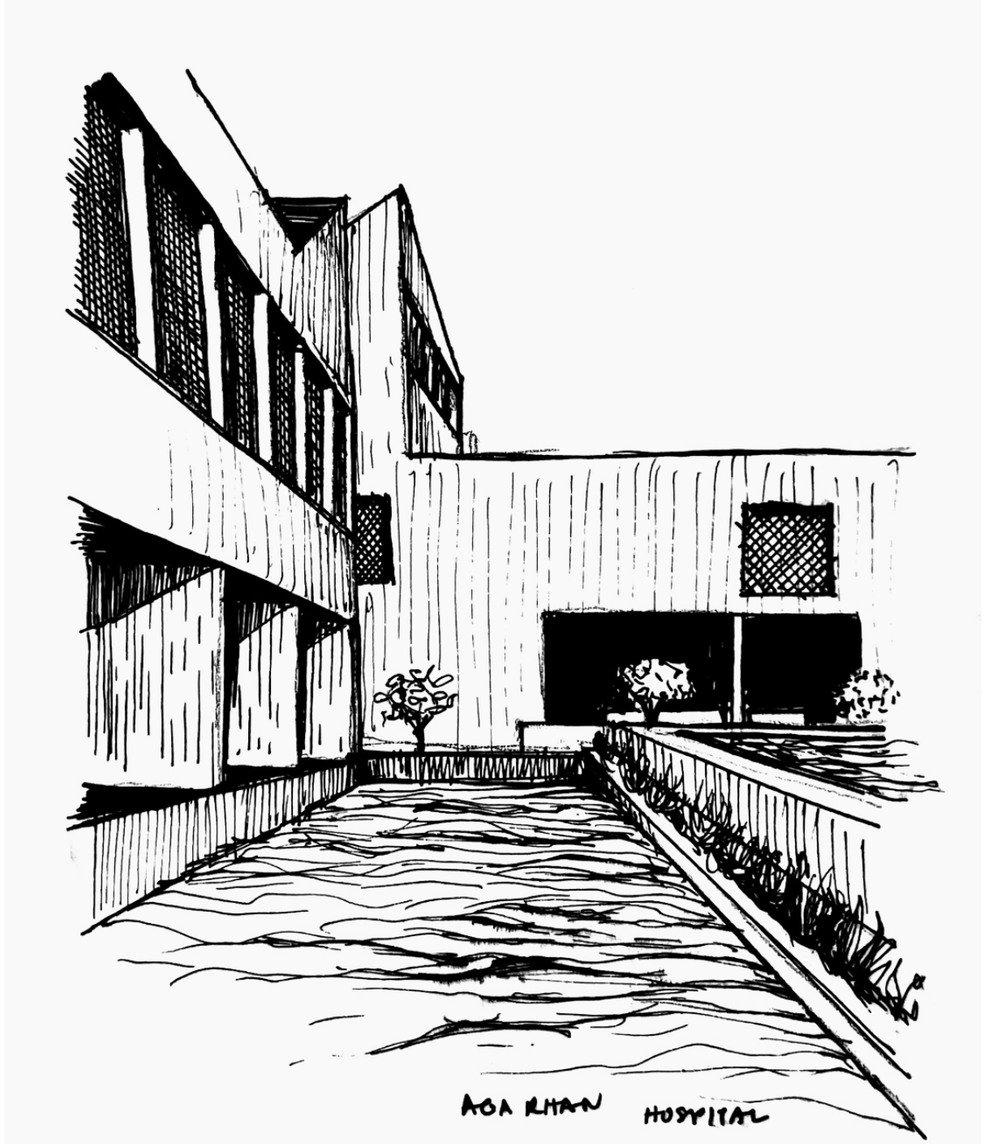


Figure 9.15 - Quiet area of the Aga Khan Hospital, Karachi

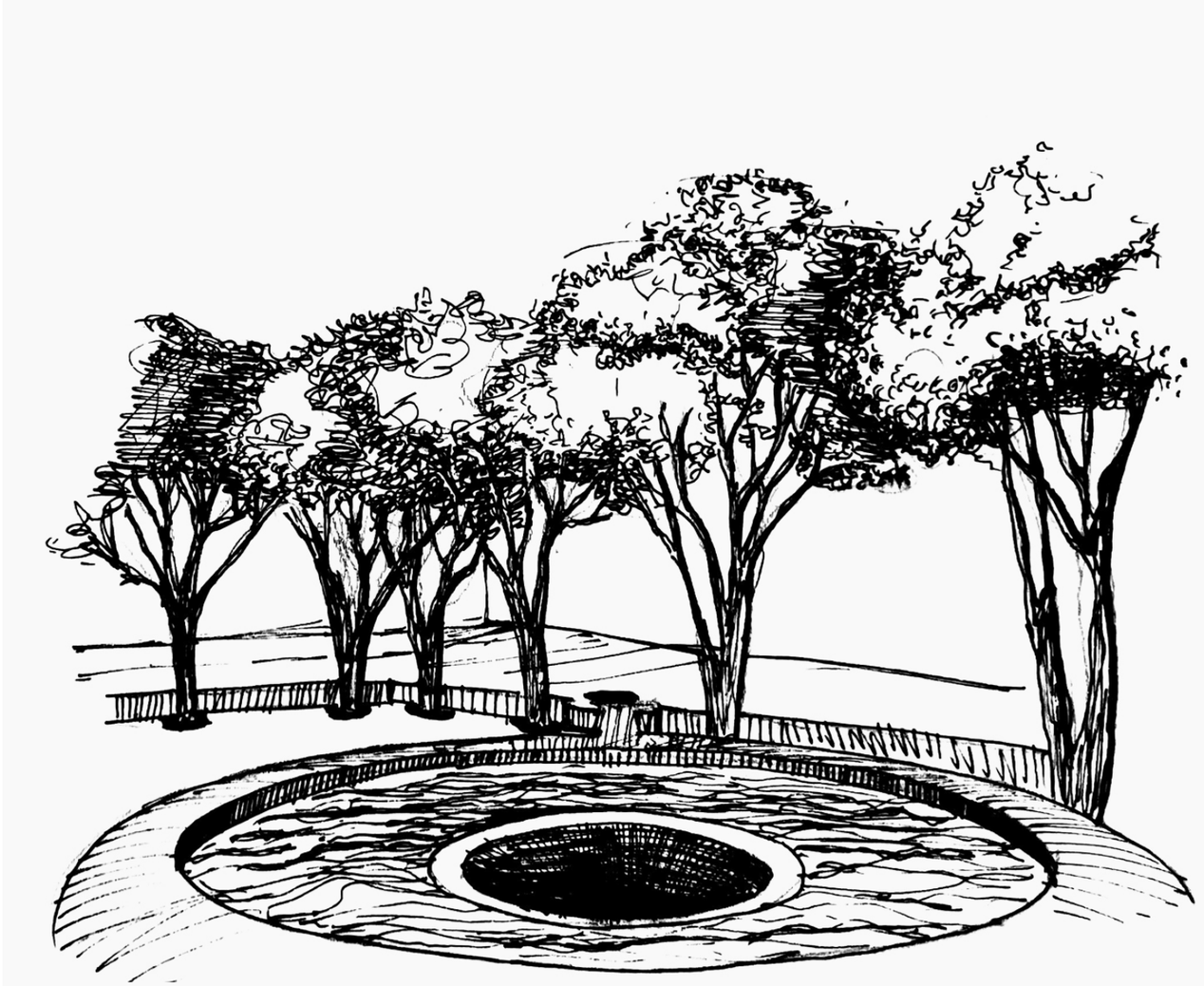


Figure 9.16 - Sketch of the courtyard in the Department of Psychiatry, Aga Khan Hospital, Karachi

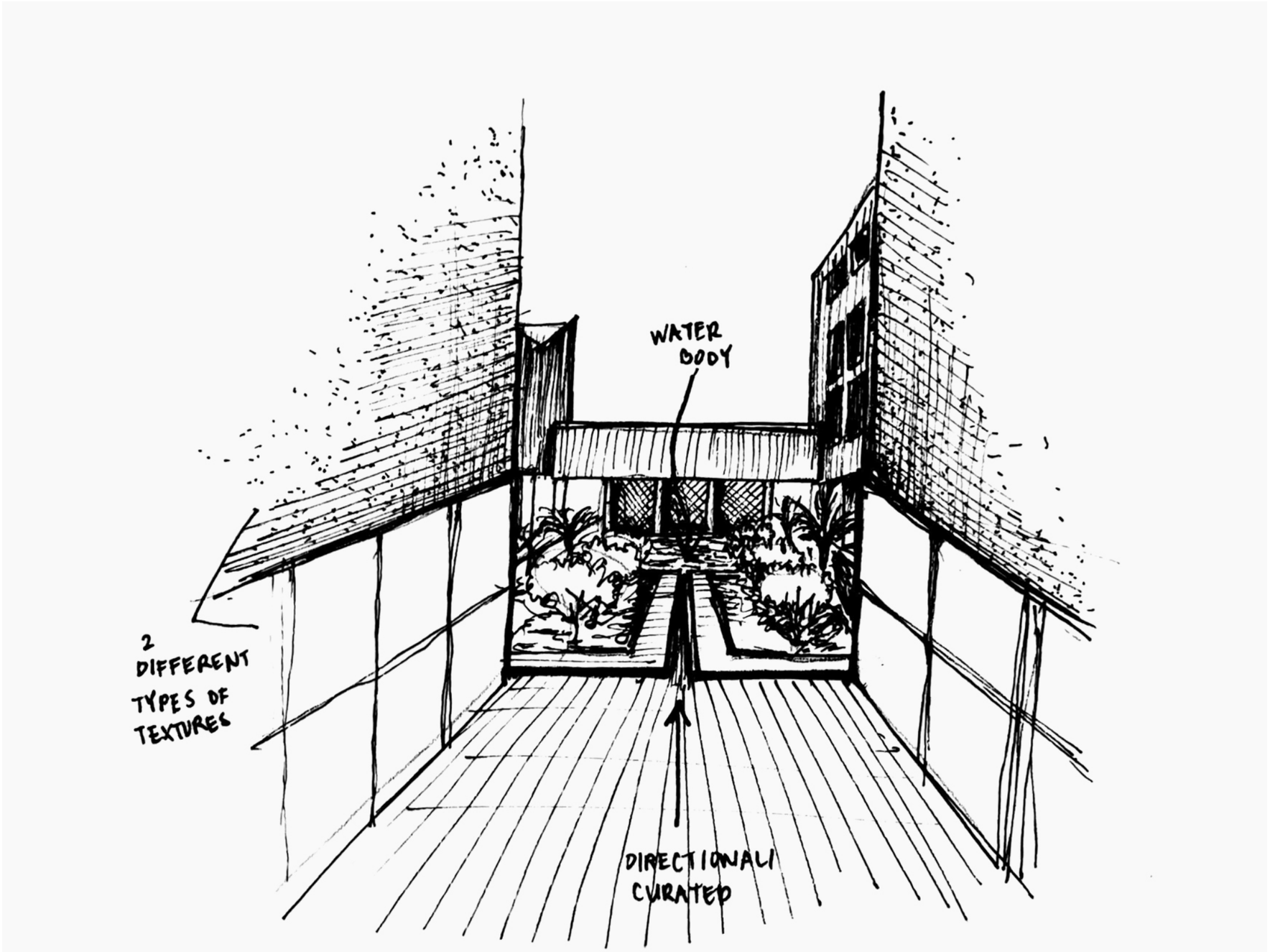


Figure 9.17 - Quick observation sketch of architectural elements that create a salutogenic atmosphere in Aga Khan Hospital

Aga Khan University Hospital (AKUH) was established in 1985 and is the most expansive and facilitative healthcare facility in Karachi. Spanning across 84 acres, with a campus and a high functioning hospital, the designers created a centre for healing and learning. The design philosophy consisted of architecture that drew great inspiration from Indo-Persian and Mughal Islamic architecture. This led to a layout with a series of interlinked courtyards and verandas, which creates a seamless blend of inside and outside spaces. The pathways transition from indoor to outdoor spaces easily, while also maintaining the privacy and hygiene of the hospitals. While hospitals can be spaces of dread and disdain most of the time, the architects of AKUH were careful in curating experiences that heightened sensory engagement and response. The entrances of the different facilities create a funneling effect, disconnecting the users from the traffic and hustle bustle of busy urban Karachi context. The fired terracotta tiles create a tactile effect which engages users through the material stories as well.[47]

Terracotta is a beneficial material in this context since it cools the structure naturally, and is a significant addition to the other passive design strategies used in the buildings. These include thick walls, jaalis (terracotta screens) and shaded walkways. All of these ideas are rooted in great care, not just for the wellbeing of the patients, but also are environmentally responsible. Beyond the great built area lies another important topic of conversation, which are the parks of AKUH. The parks are not merely for show, they are highly functional spaces which are integral to the hospital's manifesto of care. These courtyards and open spaces are intricately woven through the entire structure, creating meticulously designing gardens where patients can be brought to by their family members or hospital staff to find a moment to connect to nature. There are different types of parks scattered around the entire hospital complex, which offers different degrees of socialization. While some of the spaces are active and public, there are smaller gardens and courtyards that are more tranquil in nature. Some of the gardens and courtyards also include interesting water features such as fountains, lily ponds and small waterfalls, and these are not just interesting to look at, but also create a microclimatic situation amidst the illness. The sound, or the lack of it, along with the wind and the birds create a soundscape that acts as a catalyst in the healing process. Over the years, the complex has expanded to include more facilities and more buildings, however, the newest additions like the Princess Zahra Pavilion also carry forward the same ethos as before.[48] An interesting observation about the hospital complex is that the architecture does not impose itself, rather works with the environment around it, guides the user through tactile pathways and shaded corridors. It has proven to be conducive to holistic healing by not separating curing and healing into different boxes. The built and unbuilt environment acknowledges the patient as a human being rather than a body in need of a treatment. Light and shadow interplay, along with the sounds of nature helps in lowering stress, regulating breathing and elevating the overall somber connotation attached with healthcare. Over time, it has also become an interesting space for students to de-stress after a long day, acting as a public centre for wellness in completion.



Figure 9.18 - Terracotta jaalis designed especially for passive cooling and ventilation

47 Ebrahimi, Sara Honarmand. "The Aga Khan University Hospital in Karachi and the Unity of Din An..." ABE Journal. Architecture beyond Europe, December 31, 2024. https://journals.openedition.org/abe/16699?lang=en#ftn50.

48 "Three Decades of Design at Aga Khan University." Payette, July 23, 2019. https://www.payette.com/studio/aku_legacy/.



Figure 9.19: Water body next to the hospital building creates a microclimate in contrast to Karachi's climate



Figure 9.20: Courtyard with seating around the trees creating outdoor spaces where families can wait



Figure 9.21: Harmony of built and unbuilt area



Figure 9.22 - Exterior of the Portland Japanese Cultural Garden by Kengo Kuma, blending seamlessly with the Japanese gardens in the background

9.4 | Portland Japanese Garden Cultural Village, Portland, U.S.A by Kengo Kuma

Portland Japanese Garden Cultural Village is a project by Kengo Kuma, nestled into the hills of Portland. It is a fine example of built environments being respectful of nature and the surroundings. The Japanese gardens have been a natural and architectural staple, and the Cultural Village acts as a learning center. Unlike many conventional approaches, the reason this project stands out is because rather than overpowering nature, and competing with it, it is designed in a way that honours its surroundings.



Figure 9.23 - Timber clad interior space of the Portland Japanese Garden

The built form is a composition of clusters with low, timber-clad pavilions which are spread across the topographical slopes. They are integrated in a manner that makes space for a central courtyard which acts as the datum of this architectural masterpiece. Massing is kept low-rise and horizontal to reinforce the idea that architecture must always be humble in front of vast nature. The buildings carry a sense of humility and connectivity to the ground. The overhand eaves of the built space extend outwards, and not only do they provide shelter to visitors from rain and sun, they also act as an active third space, lingering somewhere between inside and outside.[49] In several parts of the buildings, views of the Japanese gardens are framed carefully and intentionally to give primary importance to it. In terms of materials, the project makes good use of the local and natural materials, namely cedar wood for structure and cladding, and Oregon basalt stone for foundation walls. Most of the materials are left raw, once again, returning to the idea that items retrieved from nature embody beauty and should be left to the test of time. Showing the wear and tear of the building heightens the sensory experience as well as celebrates time. Most joinery details are also crafted with precision which is reflective of Japanese woodworking traditions. The wood carvings offer a tactility that brings another layer of sensory engagement.

The interior of the pavilions maintain a silence and calm atmosphere, similar to the Japanese gardens. Spaces are smaller and human-scaled, softly lit, with a lot of light during the day coming in from the large sliding doors. They are also used as tools in blurring the harsh distinction between inside and outside, and allow sounds of water and wind to enter the interior space. All the rooms consist of unique elements of nature such as moss-covered stones or bamboo groves. The Tea Cafe or chashitsu in Japanese culture, is more than just a mere place of refreshment. It is rooted in the historical practice of ‘chanoyu’ or tea ceremony where the act of making tea is a quiet, and respectful performance. In the museum, the tea house does not consist of any ornate or fancy architectural elements, but the design is impactful through its natural textures, humble entrances and light quality. Kengo Kuma’s design focuses on drawing attention to natural textures, filtered lights and framing the intimate relationship between nature and architecture.

In the context of spatial phenomenology, the project embodies ideas of tactility, spatial and sensory awareness. It emphasizes moments of pause and calm, rooted in Japanese cultural beliefs and history. The architecture functions as a bridge and works to connect people to nature in a more sensitive manner. The phenomenology and key takeaways from the project can be used to construct spaces of calm, creating softer transition spaces between inside and outside. It offers a model for designing spaces of care that prioritize sensory engagement over clinical functionality.

49 “Portland Japanese Garden Cultural Village.” Kengo Kuma and Associates. Accessed October 24, 2025. https://kkaa.co.jp/en/project/portland-japanese-garden-cultural-village/.

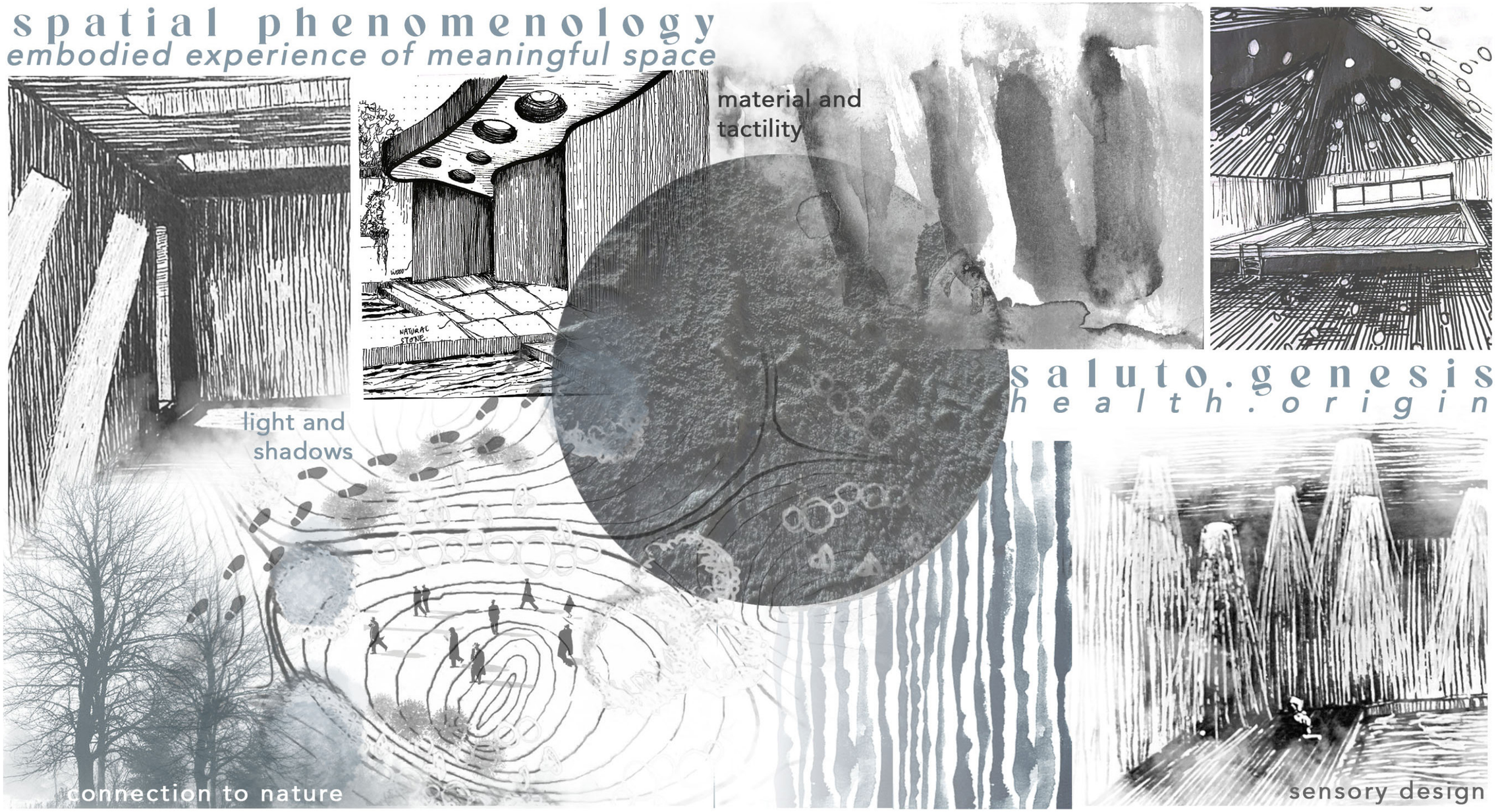


Figure 10.1 - Collage of the elements of spatial phenomenology

I hate the peeling paint, but there is a corner, and even though the room is barely lit, my eyes are fixated on the peeling paint. It is a small corner, barely noticeable, but my eyes don't move. Around me, there is silence, but I can hear the dripping water from the tap that does not fully close. And someone across the street is arguing loudly. It is all muffled, like I am under water and it does not hurt, but it does feel uncomfortable.

I try to look away, to close my eyes, to change my focus. But I can't and the peeling paint is glaring right back at me. It mocks me, bringing me to stand in front of my 18 year old self, when I thought the world was ending for me. It had just started then, the peeling. So I had told myself it gets better, tomorrow comes, the sun rises, we fix the paint. But it has been 8 years and an eternity of tomorrows passed by, but I am still here, and I am still failing, and the patch has gotten bigger. It has become all-consuming, until it is all I can see. The peeling paint is suddenly everyone I have ever lost, the friends I fought to keep, the time that kept slipping away. Suddenly the peeling paint is grief, and everything I failed at, everything I could not be good at. It is the expectations I tried my best to meet, the goals that now felt too far, the disappointments I caused. The peeling paint is grief, it is everything I dreaded. And it does not go away. It keeps getting bigger. And I look down, I cannot look into the eyes of my 18 year old self, who will ask, "tomorrow came and you did not fix this eye sore like you said you would." But I am still waiting for tomorrow to fix the paint.

An excerpt from *Everyone Has Each Other: The Peeling Paint*

'Hegemony of the eye' is a phrase by Juhani Pallasmaa referring to the dominance of visual sense in design. Most traditional architecture privileges visual aesthetic, however in this case, vision cannot be given the sole responsibility of creating salutogenic healing spaces. Architecture needs to be immersive, it is not just performative, it is not just for the eyes. Spatial phenomenology advocates for an emotionally responsive approach, which integrates tactile, auditory and other engaging elements to create spaces that nurture, especially for people grappling with anxiety or depression. Some of the design strategies in the realm of spatial phenomenology include: tactile engagement, varying acoustic levels, difference in lights and shadows throughout the day and connection to nature.





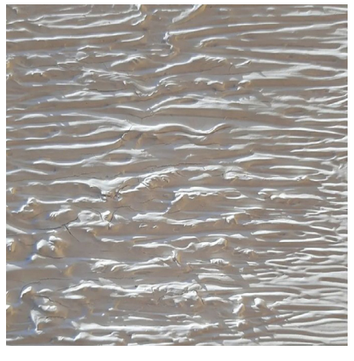


Figure 10.2: Creating textures and conducting a shadow study

10.1 | TACTILE ENGAGEMENT

"The door handle is the handshake of the building." - Juhani Pallasmaa.[50]

The design of the wellness retreat puts great emphasis on tactile awareness, recognizing the sense of touch for not only its physicality but also the keeper of memory. According to Pallasmaa as well, the body remembers textures, whether it is on walls, or the floor one walks on. To utilize this strategy to its full potential, walls and floors can vary in textures across the different zones, changing the haptic rhythm. Increased tactile engagement can be strategized and placed in the liminal, transition spaces such as hallways and entryways, where the textured elements can make thresholds. Tactile walkways, using materials such as grooved wood, natural slate or pebbles can also encourage people to walk slower. In contrast, sleeping quarters, and meditation rooms could get away with lesser tactility since the primary function is to soothe, not stimulate. Creating the difference also implies different functions and the type of activities that will take place in the programs, and would create an institution that is not just looked at, but is inhabited.

50 Pallasmaa, *The Eyes of the Skin,* 54.

10.2 | ACOUSTICS

"The architecture of quietude is experienced through the body rather than the eye, and it offers healing silence and refuge in a world of overstimulation."[51] - Juhani Pallasmaa.

In the wellness retreat, silence has to be curated and spaces have to be arranged in an order that keeps active spaces separate from the calm ones. In mood disorders, it is very easy to get overstimulated, which is why this becomes an integral strategy. Additionally, Steven Holl's belief that 'the ear carves a space into the void' renders acoustics an important approach in phenomenology.

The built area is divided into three different zones, the first one being the louder, semi-public zone where people other than those in the program can come as well. This space includes functions such as reception, waiting areas, family meeting area and the dining space. The second part is the quieter zone, which includes prayer rooms, meditative and therapy areas, and this is separate from the two zones. The last one is the residential unit, where people will be staying and sleeping throughout their stay. Therapy and meditative spaces should be able to absorb sound, to create an environment that can mimic a cocoon. Some of the spaces will have a strategic openness to allow sounds of nature, such as birds and the waves from the Grand River to come through. Lastly, it is also essential to create natural soundscapes, such as gentle fountains and water bodies to allocate the balance between silence and ambient sounds of nature, creating an ideal healing environment.

51 Pallasmaa, *The Eyes of the Skin,* 53.



Figure 10.3: Sketch showing light coming in from the skylight, which eventually changes as the day proceeds

10.3 | TEMPORAL EXPERIENCE

"Architecture is a temporal art. Movement through space, the passage of light during the day, the weathering of materials - these are all the aspects of the experience of architecture."
- Steven Holl.[52]

Phenomenology requests people to live through time, experiencing the day and night and the in-between, not just move through it. The retreat should attempt to capture the changing of time, the temporal nature of architecture. A collection of openings such as skylights, curtain walls, and light wells are used to bring sunlight in during the day. As the time changes, it also adds on to give an ever-changing effect, a building that is never the same, changing through time, through seasons.

52 Holl, Pallasmaa, and Pérez-Gómez, *Questions of Perception,* 36.



Figure 10.4: Cable car in San Francisco. Soft daylight enters through the trains windows, it casts shifting patterns of light and shadow across the seats and interior surfaces as the vehicle moves through the city.



Figure 10.5: Skylight in Main Library, San Francisco, United States of America. The skylight becomes a marker of time, allowing the movement of the sun to register within the space as the shifting light and shadow, and it makes the time duration perceptible through experience.

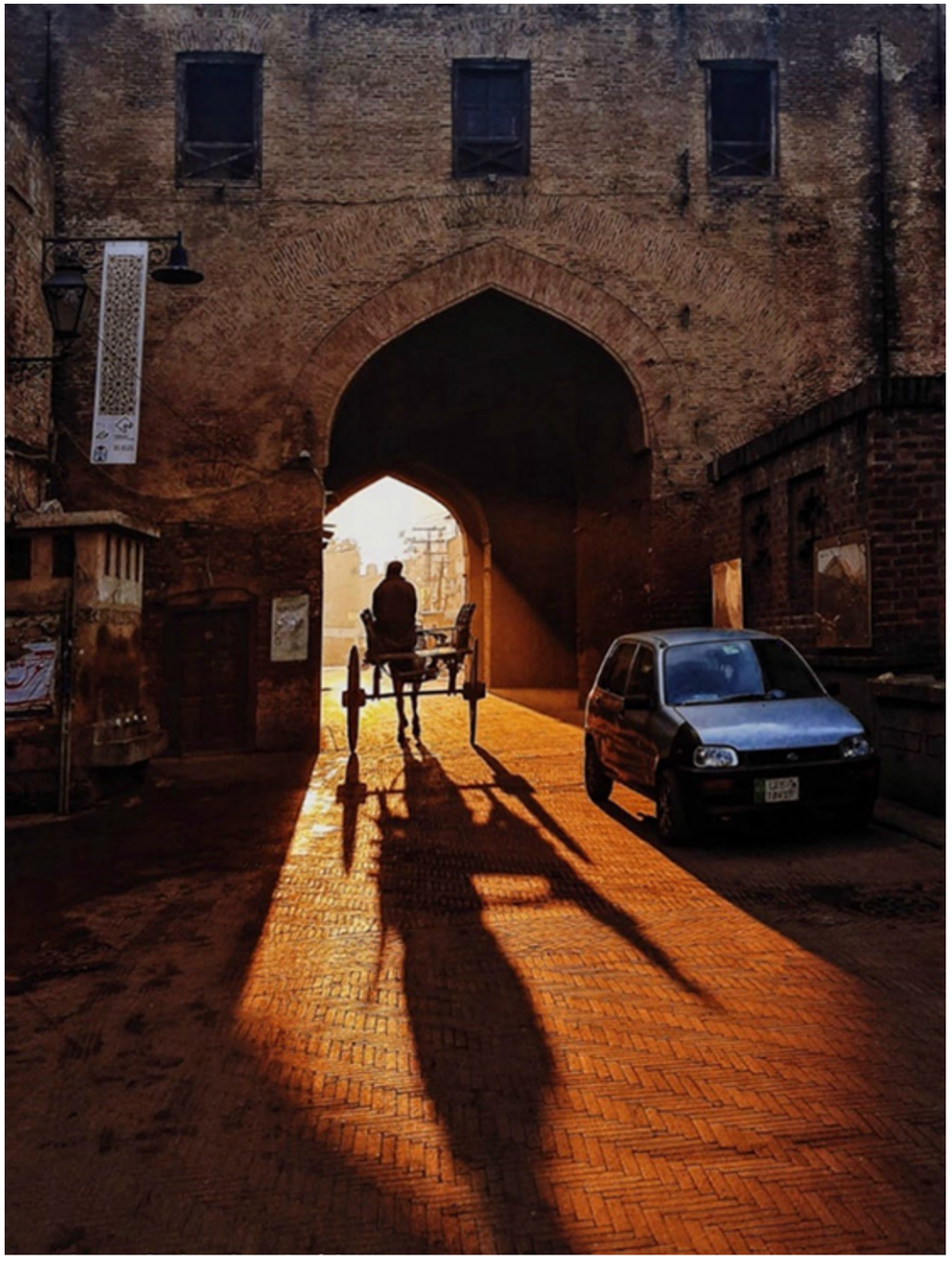


Figure 10.6: Sunrise at Delhi Gate, Lahore, Pakistan



Figure 10.7: Golden hour in Indus Valley School of Architecture, the light highlights the weathered materials transforming an otherwise mundane experience into a memorable one



Figure 10.8: Midday in Peetal Gali, Karachi, Pakistan. Uneven light filters from the makeshift canopies tied for shade. Memories linger in material, atmosphere and movement, and the past informs the present in the space.

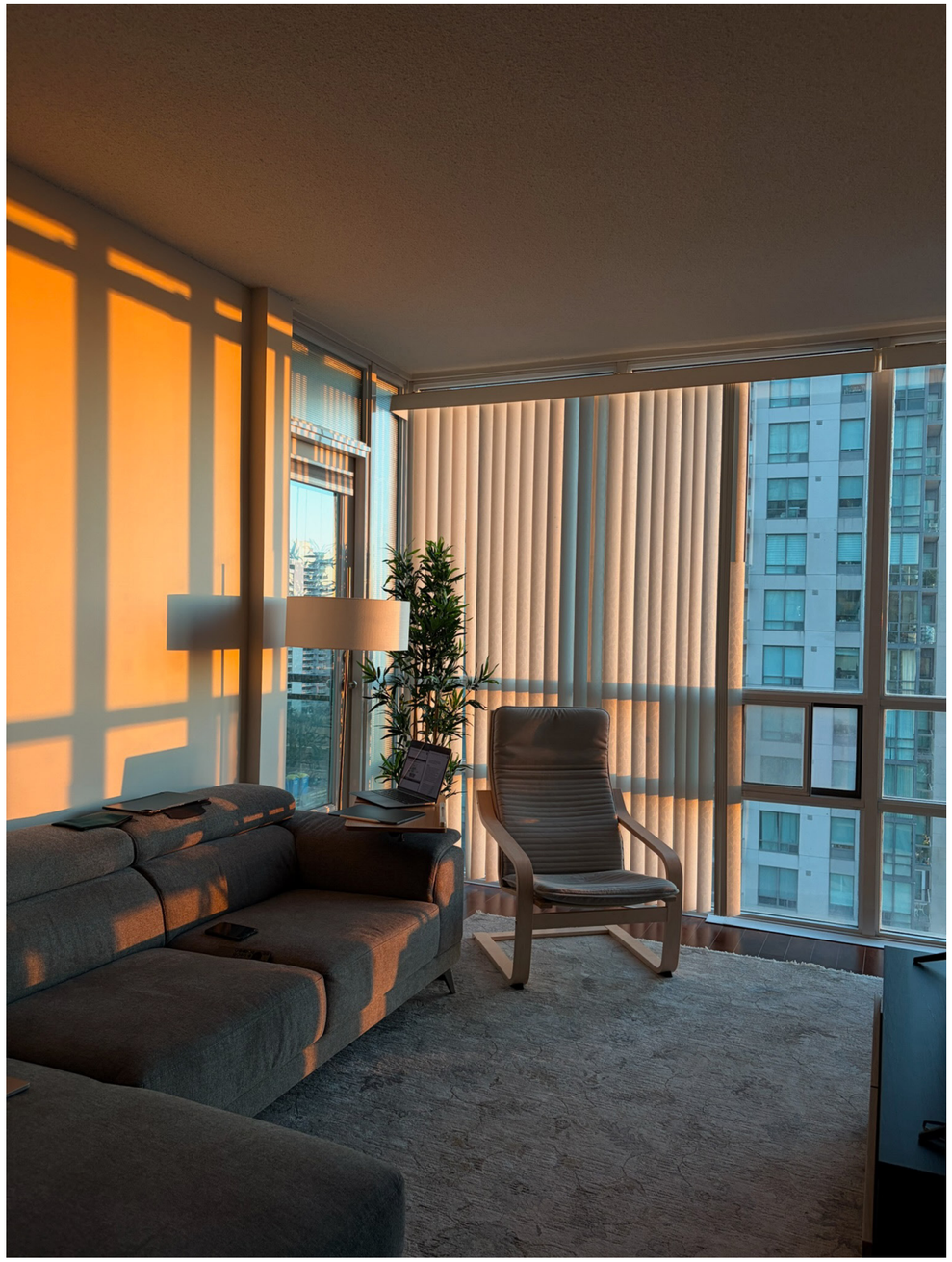


Figure 10.9: Sunrise in my apartment, Mississauga, Canada. The space changes as the day passes, but the sunrise grounds me into the moment and creates an everlasting memory of the space.

10.4 | CONNECTION TO NATURE

"Water is a potent metaphor in architecture… registering not only the vibrations of the passing train, but also as a metaphor for the subtle nuances of history, reverberations from the past."[53]

"If I settle under a tree - whether for shade or psychological security - that is a metaphor for the relationship between me and the conditions in which I find myself. We might describe it as a poetic manifestation of a relaxed, innocent, mutual relationship with gentle accommodating nature. [Trees] shelter, embrace, protect…and provide a datum, a home, a refuge. It provides psychological protection and a datum, a reference point by which we know where we are in the world."[54]

Nature has played a great role in healing, and has been understood and respected for it. This idea, as discussed in previous sections, was most prevalent in Indigenous beliefs. At the heart of the wellness center lies the multisensory landscape component, which is essential to salutogenic healing. Creating green spaces that are visible from all the program zones, whether it be therapy rooms or communal dining or the administrative offices is an important strategy. The range of greenscapes move from accessible to visual, with gardens being a centre for social gathering and activities, whereas the terrarium functions as a visual centre of the preserved ecosystem. The moments of nature can be distributed in little pockets, and something as little as a patch of moss, or the smell of grass after a spell of rain can also collect familiarity and meaning over time. These little events become personal and transformative in the healing procedure.

53 Unwin, Simon. *Metaphor: An exploration of the metaphorical dimensions and potential of architecture.* Abingdon, Oxon: Routledge, 2019.

54 Ibid.

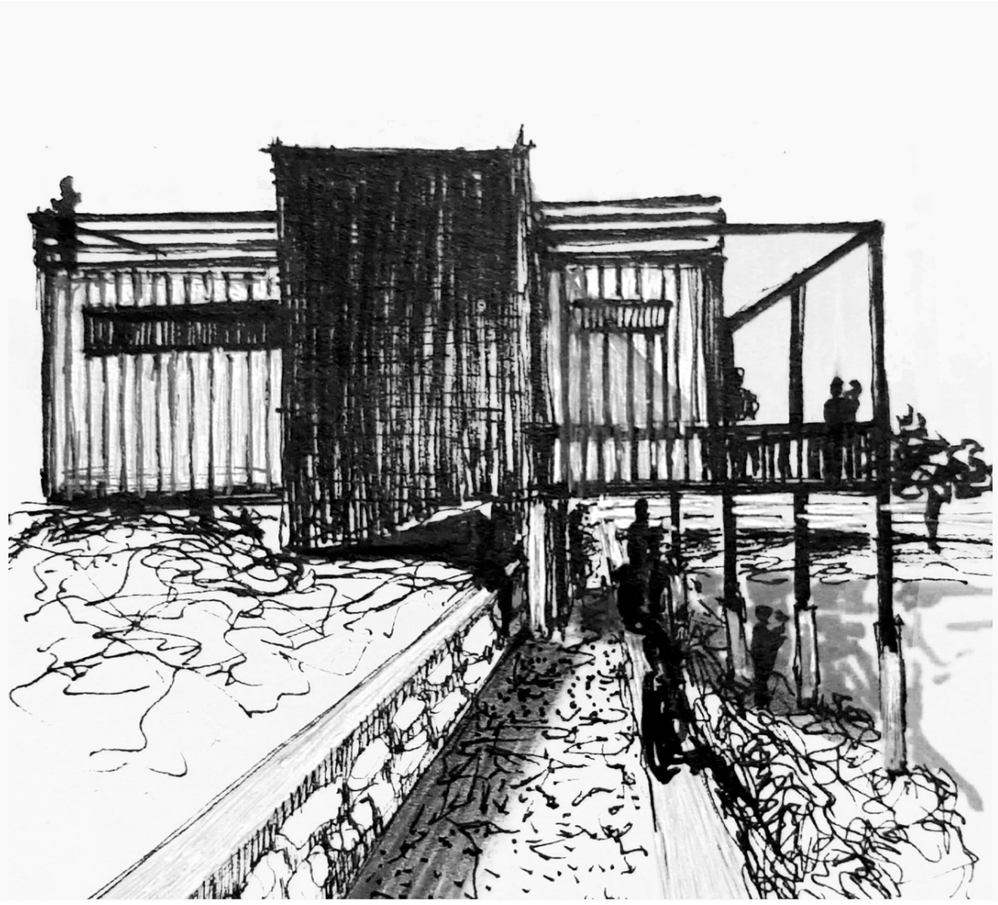


Figure 10.10: Sketch of an imagined retreat in proximity to a natural water body, water becomes an important anchor, its temporal nature playing a significant role in healing.



Figure 10.11: Trees becoming shelters for anyone who seeks for one under it



Figure 10.12: Trees becoming shelters for anyone who seeks for one under it



PHASE III: EMBODIED HEALING

Designing the Salutogenic Environment

There are spaces I have not revisited since I was 10, spaces that carry ghosts of my past, my first steps, my first words, the first time I understood that my mother possessed the sixth sense to know when I was sad. There are spaces I did not value in the moment, spaces that sheltered my family, my banters with my siblings and my admiration for my baba. There are spaces that have heard my laughter with friends, that have witnessed my tears of exhaustion, and there are spaces where I have watched the moon and the sun set alongside friends who felt like sisters. And while I have not inhabited these spaces in a long time, I exist within them. I exist there, transcending the logics and measurements of time, because nostalgia cannot be confined by geography. I exist in these spaces because these spaces exist in my memory, and as long as the memory remains alive, so too does space.

The Geography of Nostalgia

The phenomenological qualities of space transcend time and physical presence, they persist through memory and experience. This conclusion from the theoretical research informs the nature of the design of Sanctuaries of the Heart, a mental wellness centre. It frames architecture as an experience, rather than just the physical space that people visit for the time. The design is a combination of layered architectural strategies that address the different tangents of the same space. Spatial organization, along with material palette, landscape integration and sensory engagement all come together to create a balanced composition of spaces. Architecture is multifaceted to solve several problems at once, it responds to different users and states of being. The building uses natural elements as visual anchors and sensory cues which enable the occupants to connect and engage with the environment around them. Moreover, phenomenology provides the framework that ensures that architectural decisions are rooted in embodied experiences rather than abstract form, and every design strategy plays a bigger role in terms of inhabiting space. The project consists of layered solutions to some of the most deep rooted problems in healthcare and design, by offering a nuanced spatial environment where meaning emerges through movement, perception and the surrounding environment.

11 | The Site: A Quiet Reach



Figure 11.1 - Photograph of the site in Spring



Figure 11.2 - The Grand River, Cambridge

11.1 | HISTORY OF THE GRAND RIVER

The site sits at the edge of the Grand River, in close proximity to the Cambridge Memorial Hospital in Cambridge, Ontario. Along with the river, flows years of lived history, from the Indigenous settlements to the Six Nations who sought refuge after the American Revolution. Before Europeans settled in, the Grand River Valley was home to Neutral people, an Iroquoian-speaking nation. They were called the 'Neutrals' because they did not partake in neighbouring conflicts, or 'land grabbing' specifically that of the Huron, in the North and Haudenosaunee in the South. The Neutrals were very successful and organized, they distributed roles among themselves. From 1300s to 1600s, they built large, fortified villages and worked as farmers, hunters and traders, utilizing the rich and fertile Grand River soil.[55] Charles M. Johnston in *The Valley of Six Nations,* writes about the cultivation of different crops, "a stay there is quite recreating and convenient; the rivers furnish much excellent fish; the earth gives good grains, more than is needed. They have squashes, beans, and other vegetables in abundance, and very good oil, which they call á Touronton."[56]

However, their stability was disturbed with the arrival of Europeans, who brought with them a wave of new diseases in the mid 1600s. When the Haudenosaunee expanded their territory, in addition to the diseases, led to a rapid decline of the Neutrals and was overtaken by Haudenosaunee, or the Six Nations. After the American Revolution, in the later years of 1700s, many Haudenosaunee lost their traditional lands in the New York state, and felt it was best to ally with the Crown. In return for their allyship, the Mohawk leader Joseph Brant, sought refuge and recognition for their loyalty. It was in 1784 when Governor Frederick Haldimand, a Colonel Administrator, issued a contract that granted them a tract of land six miles, or 9.6 kilometers deep on either side of the Grand River, stretching to Lake Erie. While the contract was supposed to provide security to Six Nations, and give them claims over their land, it was undermined from the very beginning. On paper, the land belonged to the Six Nations, however, colonial pressure to surrender or sell portions of their land for cheap began to build up. Within a few decades, Six Nations had lost a large percentage of land and were left with a fraction of what they had been promised, without receiving a fair amount in return for it.

Even after years of manipulation, in the war of 1812, fought between the United States and Great Britain, people from Six Nations fought alongside the British Crown, proving their loyalty. Their service was required once more, during the Rebellion of 1837, in which they performed despite loss of land and autonomy. It was during this time, when new challenges

55 Johnston, Charles M., ed. *The Valley of the Six Nations: A Collection of Documents on the Indian Lands of the Grand River.* University of Toronto Press, 1964. http://www.jstor.org/stable/10.3138/j.ctt1vxmcrp.

56 Johnston, *The Valley of the Six Nations,* 6.

entered into Six Nations territories. Christian missionaries and government agents began infiltrating with their mission to 'civilize' Indigenous populations and teach them western ways of living. They started building schools, churches, and began changing the way of governing. The local population did their best in resisting these rapid changes, by preserving their religious and cultural practices such as the ceremonies of the Longhouse. By the mid 19th century, the land given to Six Nations had been reduced to what is present-day Six Nations Reserve near Brantford. But even after being reduced in size, it was a center of cultural resilience. The Elders and clan mothers worked to authorize the traditional governance through the Haudenosaunee Confederacy Council, despite the pressure mounting to line the systems more in line with the Western models of government.

In the early 20th century, the stress of assimilation grew as residential schools started becoming functional. The schools separated children from their families, in order to teach them Western ways of living, the language, and traditions. Haudenosaunee people endured harsh conditions and suppression of their culture, but they stood resilient in the face of cultural genocide. During all of this, the Grand River acted as a site of connection. The river bonded different communities, where villages communicated and traded via the river, turning it into an artery of cultural exchange. During this time, the Six Nations kept petitioning the Canadian government and even the League of Nations, trying to reassert their rights under the Haldimand proclamation and highlighting the loss of their land over the years.[57]

By the late 20th and early 21st centuries, the Grand River was once again highlighted. In 2006, Caledonia's land reclamation brought worldwide attention to the area. Indigenous peoples defended their sovereignty and stopped new development on the land, which was a recurring issue. This standoff was in public knowledge and with worldwide attention, it exposed many land claims over centuries that were left unresolved. Today the Grand River flows through southwestern Ontario, and passes through many towns and cities, including Kitchener, Waterloo, Cambridge, Brantford and Caledonia and many smaller communities and finally merges into Lake Erie. It is the powerful symbol of strength, and is home to members of six Haudenosaunee nations: Oneida, Onondaga, Seneca, Cayuga, Tuscarora and Mohawk. The culture and beliefs persisted, and schools teach Cayuga and Mohawk. Longhouse ceremonies are also practiced and their diplomacy holds value. However, the reserves are faced with different kinds of challenges now, some of which are protecting the river's environment.

The story of the Grand River is one of centuries of hardships, of diseases, losses of land and the betrayal of the Crown. The Grand River is a link between the past and present and holds

57 "The Grand River's History: A Truly Grand Story." The Haldimand Press, January 30, 2024. https://haldimandpress.com/the-grand-rivers-history-a-truly-grand-story/.

memories of centuries worth of civilizations. The Grand River has nurtured and is a witness of undying loyalty to one's land.

11.2 | ABOUT THE SITE

Along the gentle curve of the Grand River, sits Cambridge Memorial Hospital. The mental wellness centre is a deinstitutionalized space that acts as a standalone extension of the hospital.

The selection for this site intentionally positions it in contrast to the spatial and symbolic logic of typical healthcare facilities. Cambridge Memorial Hospital is a well functioning, main hospital of the city, however it consists of many of the same features as International Modernism, which makes it a point of critique for this thesis. It is also essential to note that the site is not a neutral piece of land, it has been shaped over a long period of time by lived histories and experiences, by Indigenous presences and ecological processes. The collective and shared history of the land informs the project's approach to care as well, rather than being isolated from the context. Despite the evolution of the city over the period of years, the edges of the Grand River have maintained its vegetation. It is this green corridor where willows, maples and cottonwoods have rooted themselves into the fertile floodplains. Other varieties of vegetation includes white ash, basswood, oaks (red, white and bur oak) and black walnut in trees; whereas in shrubs there are red osier dogwood, staghorn sumac, elderberry, common ninebark. Some of the wildflowers and groundcover include virginia creepers, goldenrod and milkweed, which also brings in fireflies in summer evenings and monarch butterflies within the site. This blend of vegetation creates an ecosystem that also supports diverse wildlife such as white-tailed deer, muskrats, beavers. Red foxes and even eastern cottontail rabbits. It is also an ideal habitat to several birds such as great blue Heron, Belted Kingfisher, Mallards, Red-tailed Hawk, Canadian geese, Bald Eagles, Ospreys and songbirds such as Yellow Warblers, Red-winged Blackbird, Cardinals and Chickadees. The thriving eco-system and a layered habitat creates a living corridor that supports hundreds of species.

The landscape also offers quietude, which is essential to the program and function, by having the power to disconnect from the city which lies in close proximity. It becomes a place where one can slow down, breathe and connect with nature. The site becomes very fitting for a wellness centre, the river becomes central by visual and auditory connections. Salutogenesis considers this an ideal environment to nurture health and strengthen the sense of coherence, to return to the feeling that life is understandable, manageable and meaningful. Cambridge Memorial Hospital being in such close proximity, stands as a place of care, and an assurance in cases of medical emergencies. Hospital and wellness centers amalgamate to create a middle ground of medicine and care, where healing unfolds, not just through medical treatments, but by cultivating balance, hope and meaning.



Figure 11.3 - Cambridge Memorial Hospital


RED OAK

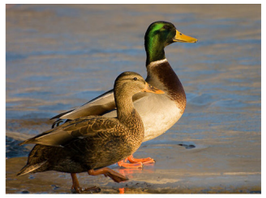

WHITE OAK


GOLDENROD


MILKWEED


BLUE HERON

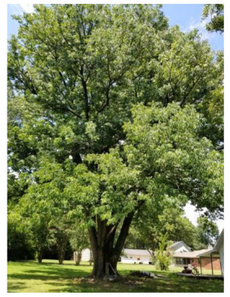

BELTED KINGFISHER


MALLARD


RED-TAILED HAWK


CANADIAN GOOSE


CHICKADEE


WHITE ASH




CARDINAL


COMMON NINEBARK


RED-WINGED BLACKBIRI


ELDERBERRY


YELLOW WARBLER


VIRGINIA CREEPERS


OSPREY


WILLOW


STAGHORN SUMAC


RED OSIER DOGWOOD


BLACK WALNUT


BUR OAK


BASSWOOD



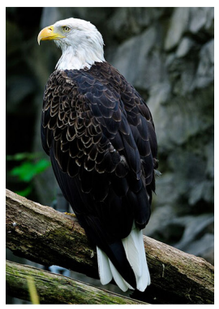

BALD EAGLE

Figure 11.4 - Different wildlife and vegetation on site



Figure 11.5 -Map of Site, showing sun angle, bus routes, main roads and zoning

11.3 | STRENGTHS, WEAKNESSES, THREATS AND OPPORTUNITIES (S.W.O.T. ANALYSIS)

The decision to situate the wellness centre at the bank of the Grand River in close proximity to the Cambridge Memorial Hospital was made after conducting a thorough analysis, weighing the strengths and weaknesses of the site. While the site is very promising, it also necessitates some considerations of existing site conditions. The site is part of a larger green corridor where different ecosystems coexist. It is home to many trees and wildlife such as willows, maples, monarch butterflies and deers or foxes. This biodiverse corridor is more than just a visual scenic landscape, it creates a layered and multisensory scape, which intricately connects with one's memory. The gentle flow of the river, as well as the presence of songbirds replaces the urban noise.

The proximity to a functioning hospital with an Emergency ward strengthens the project's foundations, allowing clinical care in the conversation rather than the wellness centre existing in isolation. Choosing a site that is in the vicinity of an already established hospital system ensures that there is a developed and working vehicular and pedestrian system, which in turn improves accessibility and integration within the community fabric. The site is directly accessible through Coronation Boulevard, which is also known as Regional Road 8, and it also intersects with Hespeler Road, known as Regional Road 24, making it one of Cambridge's most significant arterial junctions. The bus stop is conveniently located right at the edge of the hospital entrance, further guaranteeing a seamless public access to the site. The Grand River also has years of historical value, it holds memory, legacy and presence. According to the architect, Daniel Libeskind, to understand architecture, it is important to seek what the site is telling us. He says, "what has been repressed in memory on a site? What are the voices that are whispering to us across an abyss, across catastrophes, across voids? What are the voices saying to us? What are the invisible aspects that are really there? And you have to be aware of them in order to build anything of true significance."[58] Through design, it becomes important to honour the site as more than a land as a real estate, it becomes a space for reciprocity and respects the land as a teacher and a witness that has stood the test of times.

That said, since it is an ecological edge, there are some things that we need to be careful of when building. While the flood risk percentage is very low for the vicinity of the proposed site, it is still a condition that can be addressed through design and adaptive architecture. Moreover, since the site has a rich wildlife presence, building on it may be met with resistance by the community, so it is important to design in a minimally invasive manner, where architecture honours nature, not imposed on it. However, one potential weakness is the occasional increase in noise levels at the Coronation-Hespeler intersection during peak traffic hours. While the hospital massing acts as a buffer between the road and the proposed architectural design, mitigating most of the unwanted noise, some noise might occasionally reach the site depending on the time of the day.

There are abundant opportunities for different levels of integration when it comes to design. Since the site has a rich history, it could also become a center for land-based education, where Elders could come and talk about their healing traditions. Partnering with Indigenous artists and artisans, growing their native crops and learning their healing methods can also open conversations about reconciliation. Overall, despite some weaknesses, the site mostly is a hub of opportunities and the healing centre places itself within the site as a soft rebellion and a centre of care.

58 Libeskind, Daniel. "Time Space Existence Interview Series." Interview by European Cultural Centre Italy & PLANE-SITE. European Cultural Centre Italy, October 21, 2022. Video, 04:12. https://www.youtube.com/watch?v=SdnVqR1nv_k.

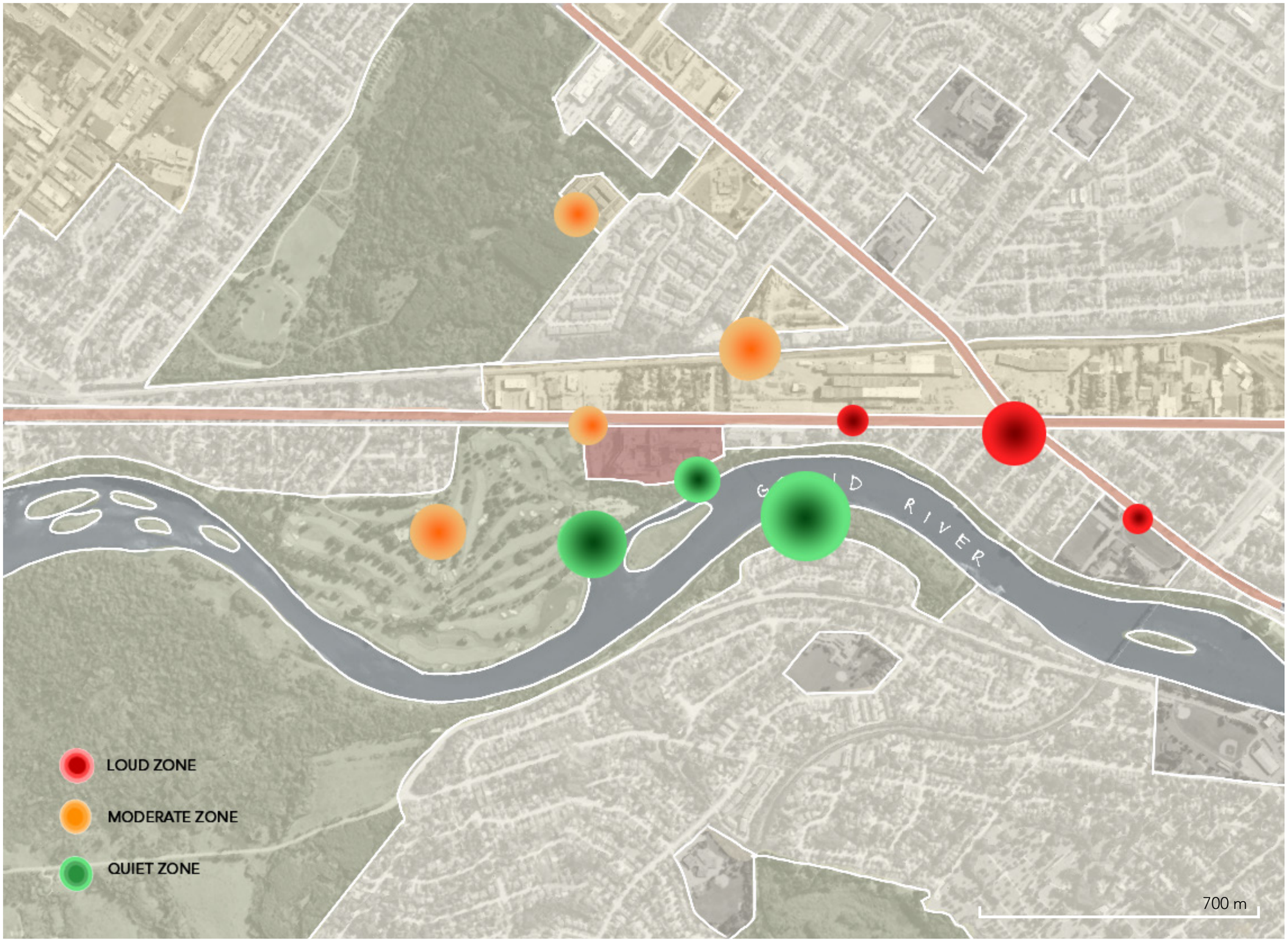


Figure 11.6 -Marking different areas based on noise levels



Figure 11.7 - The proposed site area



Figure 11.8 - Proposed site, view of The Grand River, photograph during winter



Figure 11.9 - The proposed site area



Figure 11.10 - Site photographed during summer



Figure 11.11 - Courtyard space in the Cambridge Memorial Hospital



Figure 11.12 - Diverse vegetation existing on site

12 | The Design: Redefining Healing through Spatial Phenomenology

The plan of *Sanctuaries of the Heart* unfolds as a curated sequence of spaces and visual encounters. It ensures that at every turn, the eye is drawn towards a tree, which helps the users and inhabitants guide themselves and navigate throughout the space. Additionally, there are three thick stone walls that not only guide the movements, but also act as inhabited thresholds, with niches and openings that frame our views towards gardens, green spaces, or water bodies. They reveal glimpses of the landscape beyond. There are multiple types of green spaces, ranging from courtyards, which are accessible to visual gardens - or terrariums which are inaccessible, creating several moments of pause and continuity. Together, these elements combine to ignite a tactile and perceptual dialogue between body, space and nature, embodying the very core of spatial phenomenology where each and every movement is intentional, healing and a process of dwelling. The following drawings and images provide a better understanding of the design of the space.

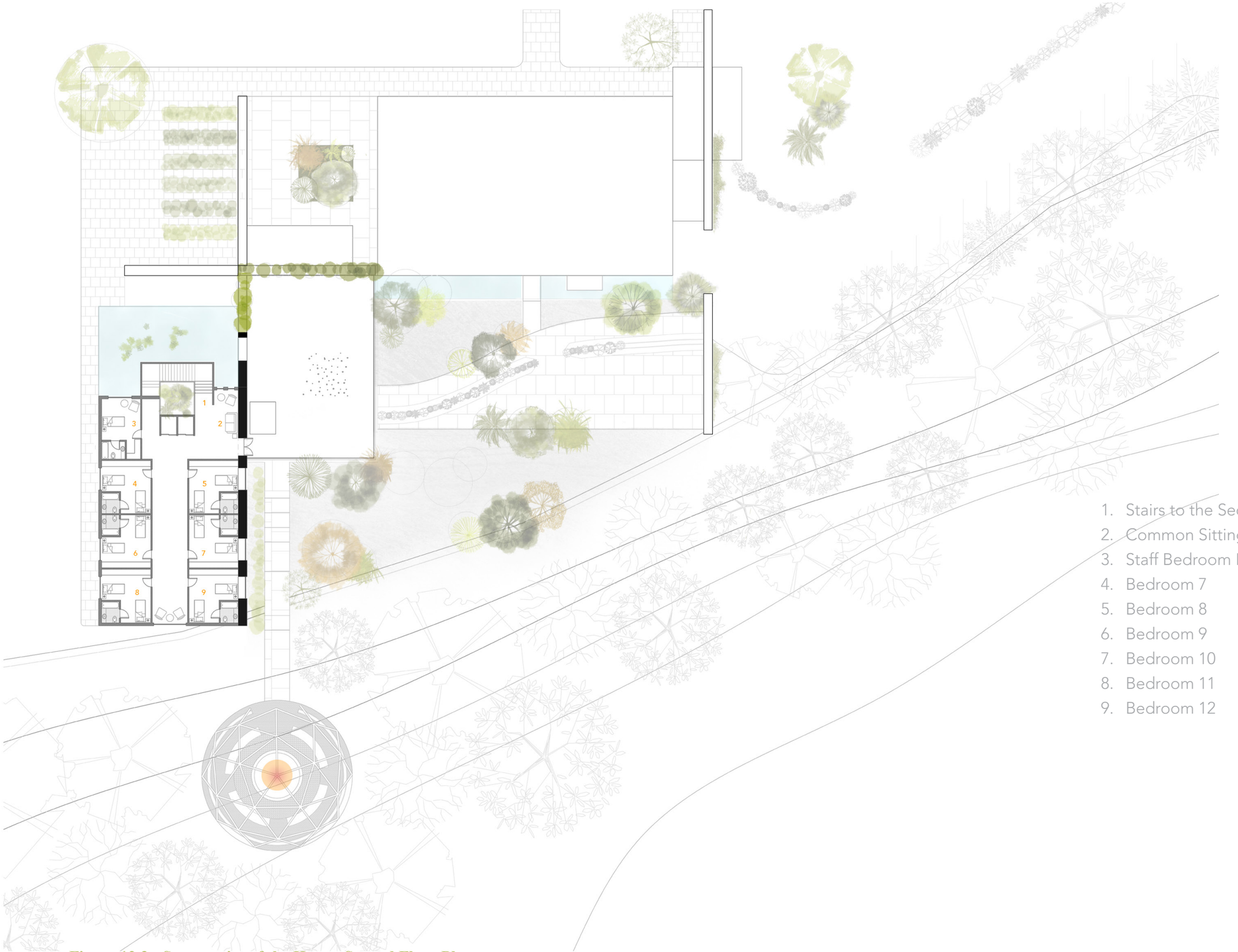


Figure 12.1 - Interior waiting area view



Figure 12.2 - Sanctuaries of the Heart: First Floor Plan

1. Drop off Area
2. Main Entrance
3. Reception
4. Waiting Area
5. Admin Office/Nutritionist Office
6. Staff Room
7. Medical Room
8. Emergency Examination Room
9. Family Meeting Space
10. Male/Female Toilets
11. Communal Dining Area
12. Kitchen
13. Courtyard
14. Herb Garden
15. Gym
16. Male Spiritual Room
17. Female Spiritual Room
18. Meditation Area
19. Stillwater Garden
20. Therapy Room A
21. Therapy Room B
22. Therapy Room C
23. Garden
24. Paved Area
25. Dwelling Area Entrance
26. Staff Bedroom A
27. Terrarium/Visual Garden
28. Common Sitting Area
29. Bedroom 1
30. Bedroom 2
31. Bedroom 3
32. Bedroom 4
33. Bedroom 5
34. Bedroom 6
35. Steps to the Fireplace
36. Fireplace
37. Water Garden



1. Stairs to the Second Floor
2. Common Sitting Area
3. Staff Bedroom B
4. Bedroom 7
5. Bedroom 8
6. Bedroom 9
7. Bedroom 10
8. Bedroom 11
9. Bedroom 12

Figure 12.3 - Sanctuaries of the Heart: Second Floor Plan

PROGRAMMATIC ARRANGEMENT

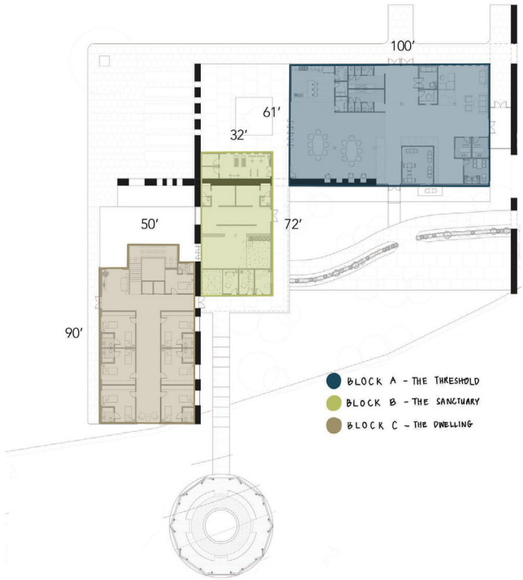


Diagram illustrating the overall layout and relationship between the three programmatic blocks: The Threshold, a space for gathering and care; The Sanctuary, a quietude of reflection and The Dwelling, a place of everyday living.

BUILT AND UNBUILT

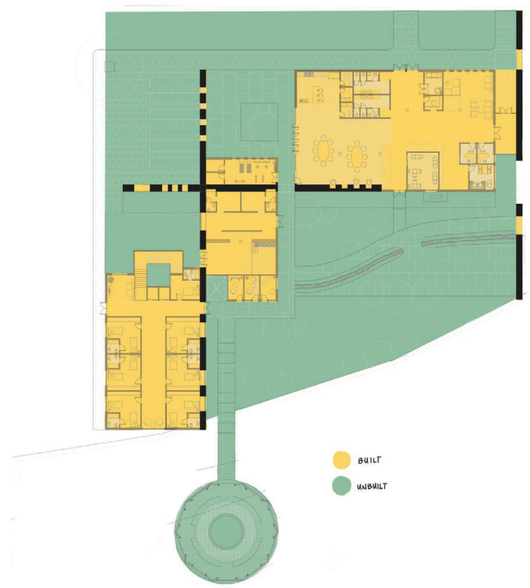


Diagram showing the proportional relationship between built and unbuilt spaces, where the landscape is oriented outwards rather than enclosed, acknowleding the Canadian climate in which expansive external green areas are more sustainable than little pockets of spaces which are left unused in winters.

VISUAL CONNECTIVITY WITH NATURE

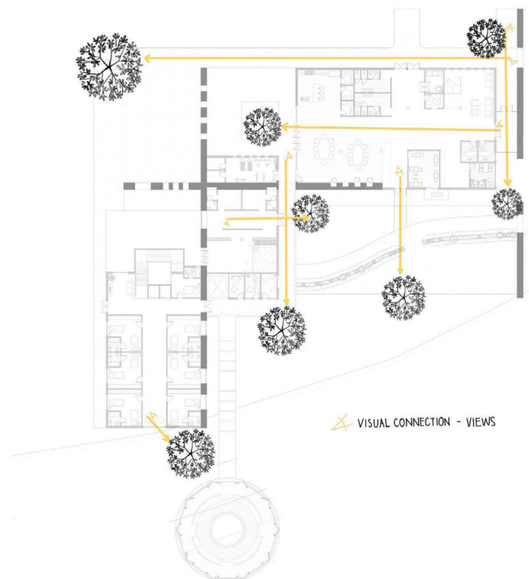


Diagram reveals the constant engagement with nature, allowing the eye to meet a tree at every turn, reinforcing the phenomenological connection between movement and landscape.

Figure 12.4



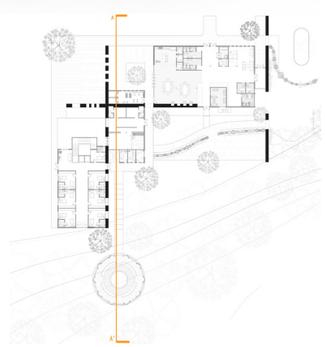
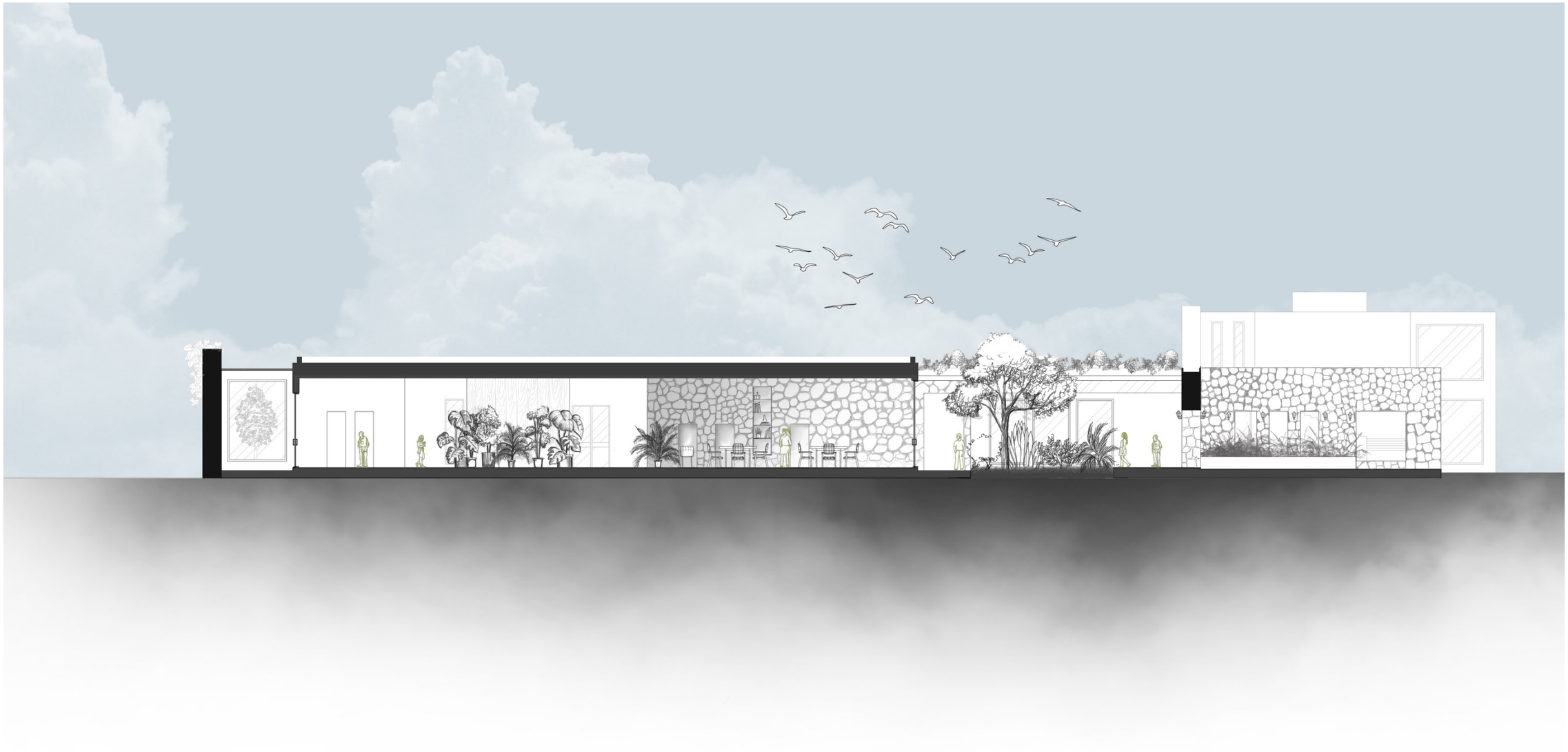


Figure 12.5 - Sanctuaries of the Heart: SECTION AA’



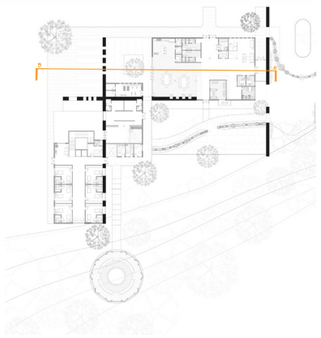


Figure 12.6 - Sanctuaries of the Heart: SECTION BB’



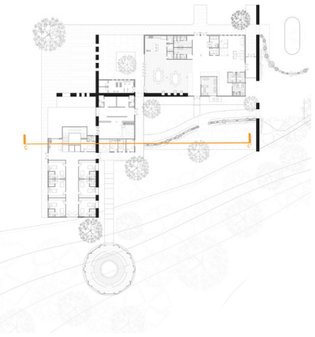


Figure 12.7 - Sanctuaries of the Heart: PERSPECTIVE SECTION CC'

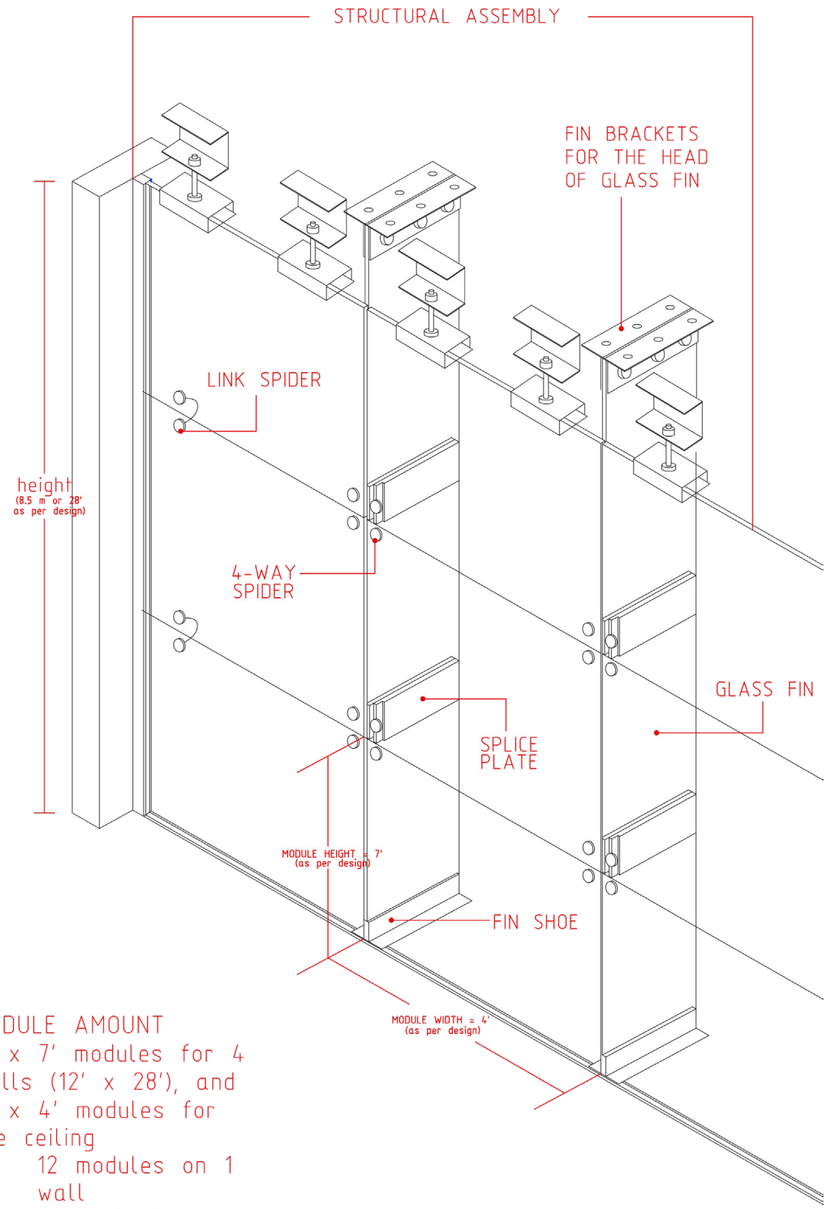
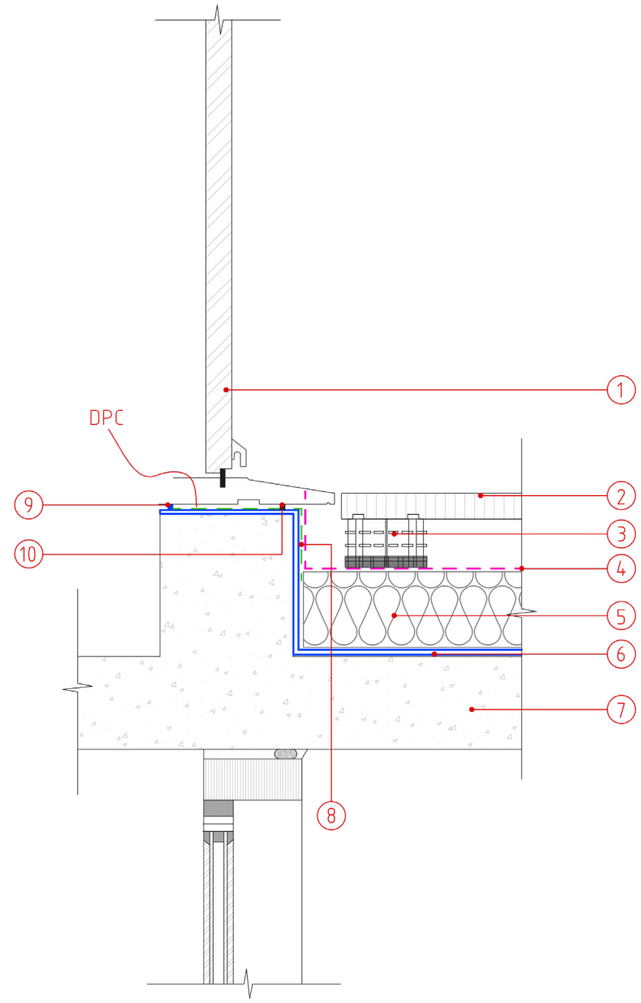


Figure 12.8 - Glass Fin assembly

RAILING AND ROOF ASSEMBLY



1. GLASS RAILING
2. PAVING SLABS
3. SUPPORT PLATE
4. INSULATION LAYER
5. ROOF INSULATION BOARD
6. LIQUID WATERPROOF MEMBRANE
7. CONCRETE ROOF SLAB
8. RUBBER-BASED DAMP PROOF COURSE
9. SEALANT
10. FLASHING

Figure 12.9 - Railing and Roof assembly



Figure 12.10 - Sanctuaries of the Heart: North Elevation



Figure 12.11 - Sanctuaries of the Heart: South Elevation



Figure 12.12 - Sanctuaries of the Heart: West Elevation



Figure 12.13 - Sanctuaries of the Heart: East Elevation



Figure 12.14 - Drop Off Entrance View



Figure 12.15 - Drop Off Entrance View 2



Figure 12.16 - Main Entrance View



Figure 12.17 - Framing Views - Direct visual connection with the tree



Figure 12.18 - Open Waiting Area

12.1 | WAITING ROOMS

Maggie Jencks described waiting rooms as clinical and sterile spaces which induced anxiety.[59] They were spaces that were the first step into the healthcare journey, and they left people feeling isolated and scared. The idea was to create a waiting area that was welcoming, warm and grounding. Not only do large windows offer continuous visual connection to the outdoor gardens and green spaces, but some of it is brought inside. Strategically planting shade-loving plants such as Bush Honeysuckle, Oak Sedge and Canadian Wild Ginger within the facility as well, offers a direct connection as well as a sensorial experience. The therapeutic presence is heightened by the spatial arrangement of the furniture, which is placed in gentle clusters rather than stiff, linear and along-the-wall formations.

Replacing fluorescent lighting with warm, dimmable lighting creates an ambient atmosphere, and does not compete with the sunlight coming in during the day. The waiting spaces then ease the overstimulation and transform from places of anxiety and passive anticipation to a liminal threshold and a transition from anxiety to healing.

59 Jencks, “A View from the Frontline.”



Figure 12.19 - Reception and Waiting Area during the day, where natural light comes in through the tall, vertical windows. The windows also create a visual connection with the views outside.



Figure 12.20 - View from the Waiting Area to the communal dining and kitchen area



Figure 12.21 - Dining Area with views to the courtyard

12.2 | COMMUNAL DINING

Communal dining within a wellness retreat can be considered a spatial ritual. One of the most important parts of the medicine wheel is spending time with people to foster belonging and connection. The idea of a communal dining area allows for a similar atmosphere, and is different from the institutional white dining halls that place emphasis on efficiency and sterility, not emotional and mental wellbeing. The plan consists of an open kitchen which has a visual connection to the dining hall. This makes mealtime an activity rather than a routine, and can be used to form gentle bonds.

The design of the dining space allows for sunlight to come in through the floor-to-ceiling windows and has a view of the garden and courtyard. Large, wooden dining tables invite a shared experience and feel more personal and home-like than standard cafeteria tables. The thick textured wall also has nooks carved in, which act as alcoves for people who want to have a private meal or some time to themselves. Kitchen being in a close proximity anchors the space, and becomes a visual symbol of care through nourishment. The scent of cooked food is also part of the experience, engaging the sense of smell and becomes an active fragment in everyone's sensory memory.

Communal dining supports multiple ways of existing, and is an ideal place for people in different places in the spectrum of social interaction. Some people might be seeking lively conversations, whereas some people might want to be around people without engaging in any conversation. All of the different personalities and types of interactions can be accommodated within one space. The design and environment allows for the simple and mundane act of eating with others to become a slow healing process.

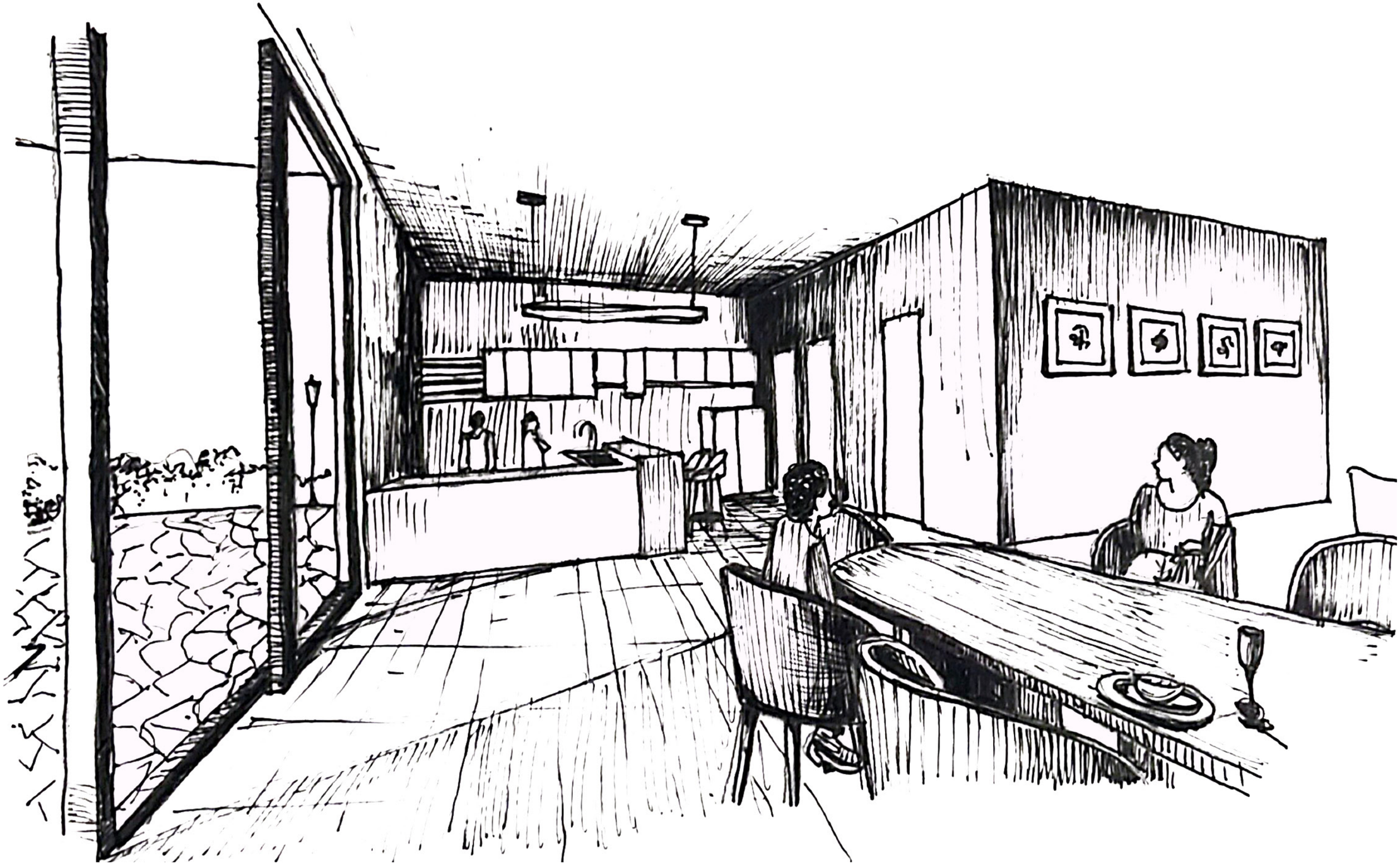


Figure 12.22 - Sketch of Kitchen and Dining Area illustrating these spaces as social anchors within the building, enhanced by the daylight that exaggerates openness and invites interaction during different times of the day

12.3 | THERAPY SPACES

In the research, we have established the importance of having spaces that create positive memories and biases. Therapy spaces are arguably one of the most critical programs of the wellness centre. The design must move beyond the realms of clinical conventions, and institutionalized form of care. Healing should be supported, not just through conversation, but also through embodied spatial experiences.

The approach challenges the standard spatial setting within a therapy room which is often considered sterile and confined. It limits people and fits them into a similar type, with a setting that simply includes two chairs that face each other. There is essentially no difference in the furniture placement of an office and a therapy room. Instead, the architecture of such spaces should blur the boundaries between built area and nature, spilling over to the green spaces. Select therapy rooms can overlook a fountain that attracts songbirds, allowing for sounds of nature to uplift and soothe the visitors. The ambience is further made better through diffused lighting, which intentionally counters the heavy and bright white light, often found in most hospitals and clinics. It invites quietude, which is often reflective and helps people to open up during their sessions. The interior works best if it is flexible, with space for floor cushions and low seating, as it often helps people feel more comfortable and informal. Acknowledging the subjective nature of therapy, the rooms are not definitive in terms of therapy. If individuals prefer to meet in different areas such as under a specific tree, or more private nooks of the facility, it should not be considered a design flaw. We must understand that what feels safe and supportive for one person, might not for another. The architecture should support autonomy and choices, as well as acknowledge that healing occurs in many forms and spaces.



Figure 12.23 - Dining Area with views to the courtyard 2



Figure 12.24 - Views to the Courtyard, highlighting the trees which act as guiding elements in the project, as well as the anchor walls, which invite engagement with material and tactility



Figure 12.25 - Path to the Garden and Block B



Figure 12.26 - Garden with a grassy and paved side for people to enjoy nature

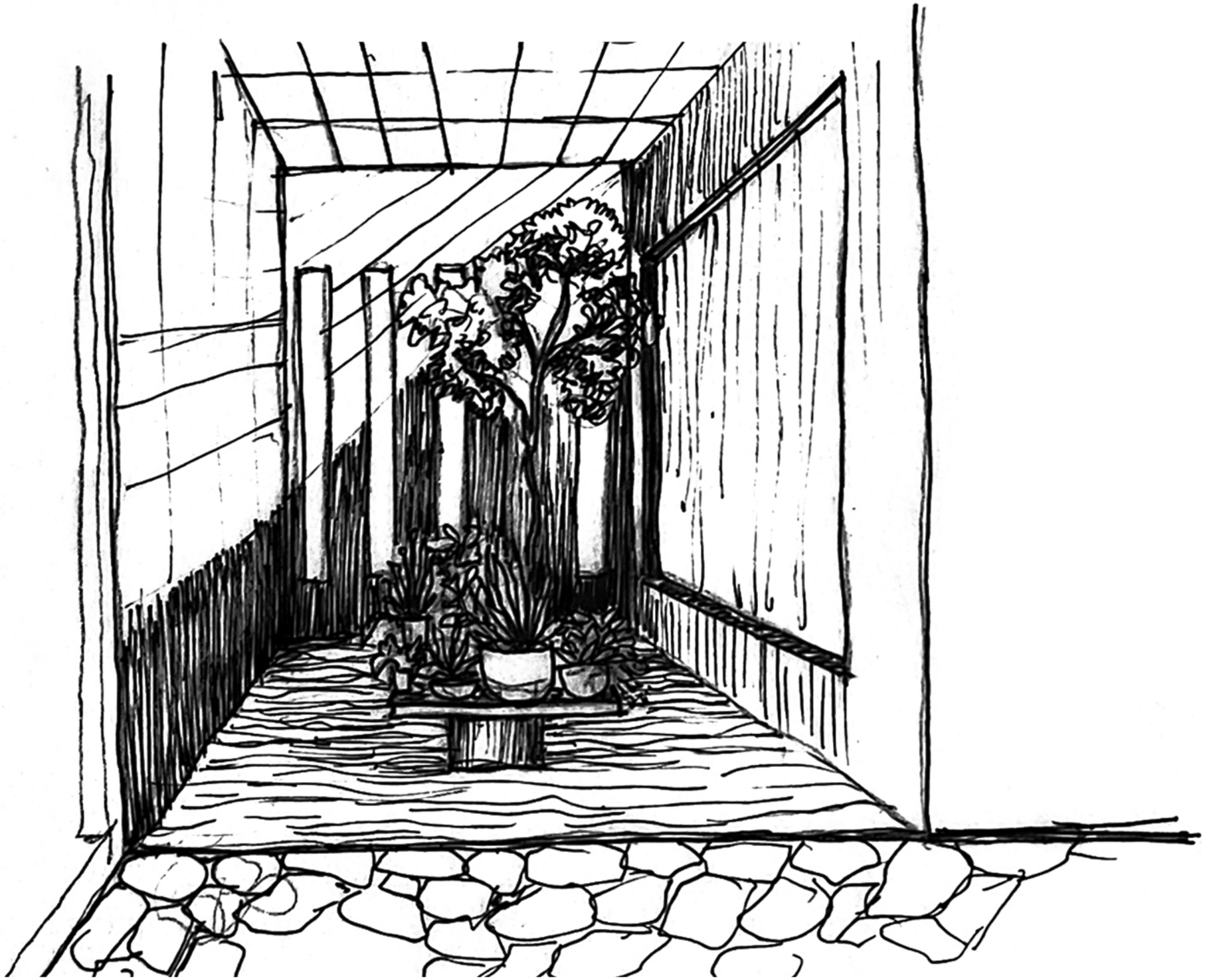


Figure 12.27 - Sketch of a still water area designed as a space of quietude, where light, plants and water come together to create a meditative interplay



Figure 12.28 - View of the Stillwater Garden

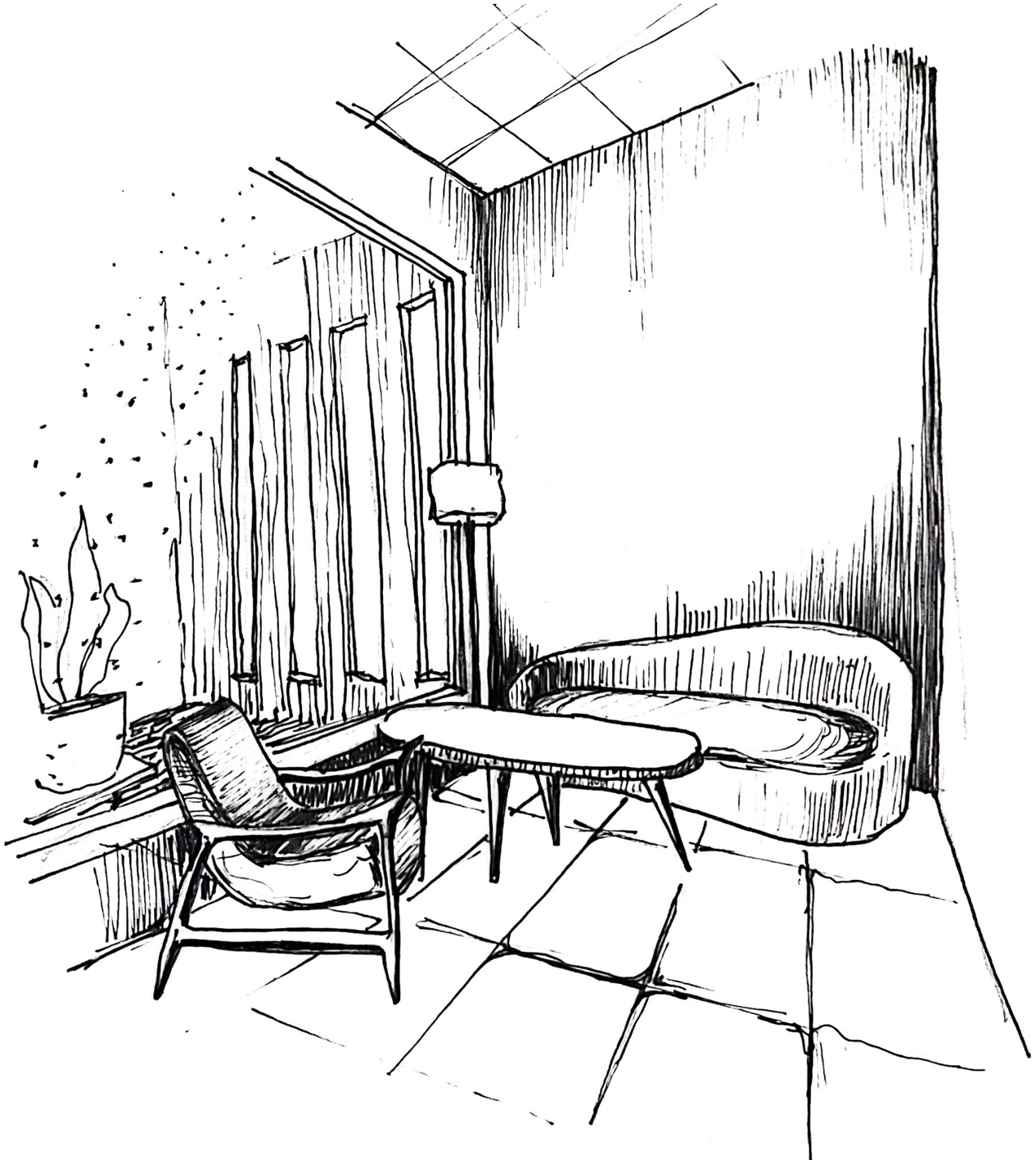


Figure 12.29 - Sketch of an imagined therapy room, with soft and relaxing furniture with views to the Stillwater Garden



Figure 12.30 - View of the Garden area during sunset



Figure 12.31 - Meditation Room

12.4|FENESTRATIONANDLIGHTING

In the design of *Sanctuaries of the Heart*, light becomes a narrative that evolves throughout the day, curating moments of movement and stillness. The role of light changes as the day moves progresses, playing different roles at different times. Daylight falls differently throughout the facility, with tall vertical windows collecting diffused northern lights, or the 'dwelling' area bringing in light through the light wells. There are other moments where light is an active participant in the space, for example in the meditation room where light comes in through angled pin needles and the Stillwater Garden with a glass block skylight. The function reverses as the sun sets, with the building beginning to glow from the inside.

The pathways are also illuminated with low, warm light that closely resembles a series of candlelight, which does not take away from the ambience of the space, rather enhances it further. Light becomes a companion, lining the pathways, and providing illuminance wherever one goes. Through fenestration and night-time illumination, architecture maintains an unbroken concept of care, providing healing at all times of the day.

12.5 | VISUAL GARDENS

The word 'terrarium' is derived from aquarium with 'aqua' being substituted in place of 'terra' meaning earth. They are miniature worlds that isolate and preserve ecological conditions. Terrariums, similar to greenhouses, mediate between nature and architecture. Existing at the intersection, they are a constructed environment, which creates an ecosystem within an indoor setting. Terrariums are not just the content or the space, but they are the container of ecosystems as well. They frame nature as an experience, showing the decay of time and the process of aging as a sensory experience. In the book *Terrarium. Earth Design: Ecology, Architecture and Landscape,* it states, "[Therefore] The terrarium can also be interpreted as an element of mediation between the space for life, the atmosphere, and Earth."[60] Since the terrariums are enclosed, nurtured ecosystems, it truly embodies the idea of care. Similar to these ecosystems, they must be tended and cared for and it becomes symbolic due to spaces of care. Additionally, terrariums bring the wilderness indoors, in a controlled manner, and are good for when one does not have direct access to 'real nature'. Integrating the concept of a terrarium into the design thesis centred around mental wellness, compels one to explore the relationship between nature, care and architecture. Terrariums offer a microcosm of ecological balance and sensory experience, adding both metaphorical and practical insights into the healing environments. It also acts as a light well for the building, bringing in filtered light through layers of glass and vegetation, and creating an everchanging monument that anchors people in time. As containers of care, terrariums evoke emotional resonance, and become symbolic by requiring patience and tending to.

60 Silvia Mundula, Kevin Santus, and Sara Anna Sapone, *Terrarium, Earth Design: Ecology, Architecture and Landscape* (Sesto San Giovanni: Mimesis, 2024), 14.



Figure 12.32 - View to the Common Sitting Area on the first floor



Figure 12.33 - Passing by a terrarium or visual garden as one goes through the stairs



Figure 12.34 - Sketch of the terrarium



Figure 12.35 - Small seating area in Block C, the dwelling area



Figure 12.36 - View to the Water Garden from the Herb Garden



Figure 12.37 - View of the Herb Garden



Figure 12.38 - View of the Water Garden and the stone walls from the meditation room



Figure 12.39 - View of the intersecting walls



PROPOSED PLANTS/TREES FOR OUTSIDE AREAS (COURTYARD, GARDEN, PARKING ETC.)



PAGODA DOGWOOD



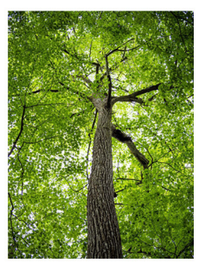
HACKBERRY



SUGAR MAPLE



SERVICEBERRY



BASSWOOD



KENTUCKY COFFEETREE



PAPER BIRCH

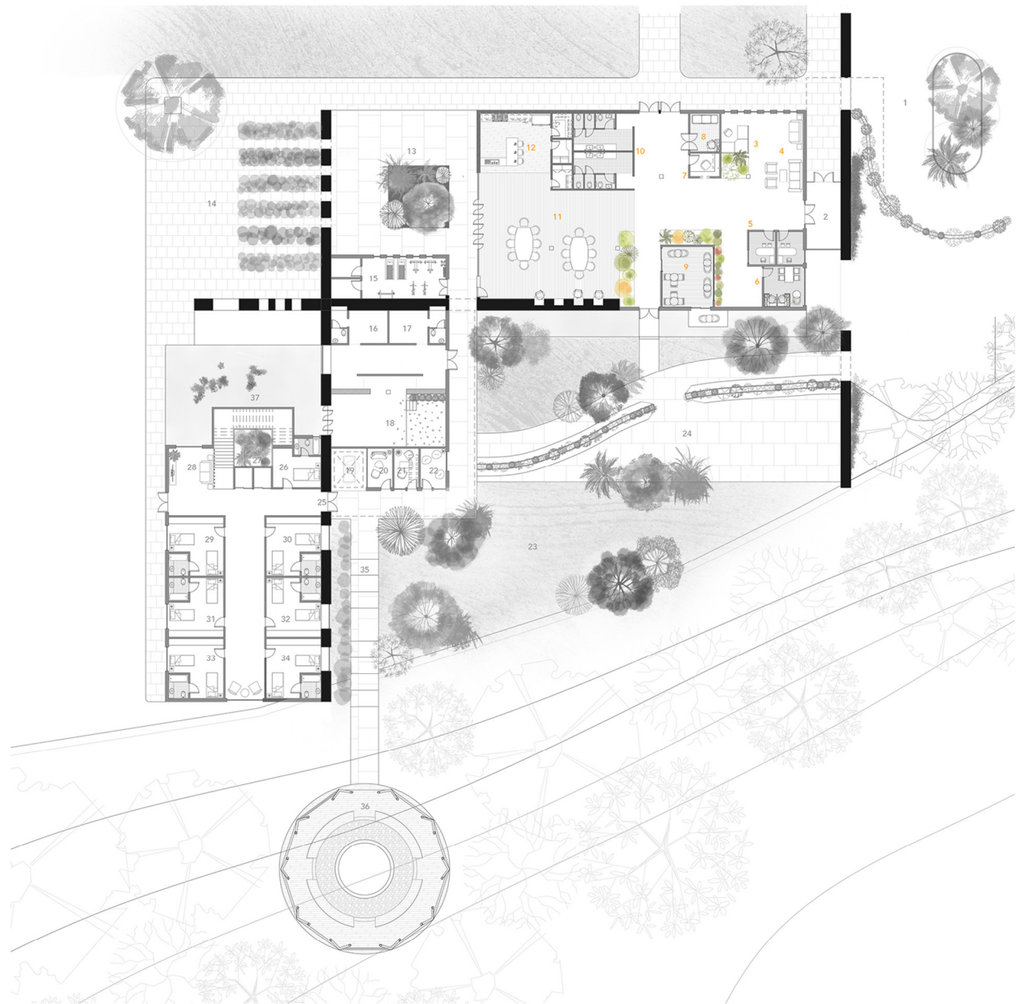


RED OAK



EASTERN WHITE PINE

Figure 12.40 - Proposed Vegetation for Outside Areas



PROPOSED PLANTS/TREES FOR INDOORS (SHADE LOVING PLANTS)



SNAKE PLANT



ZZ PLANT



HOSTA VARIETIES

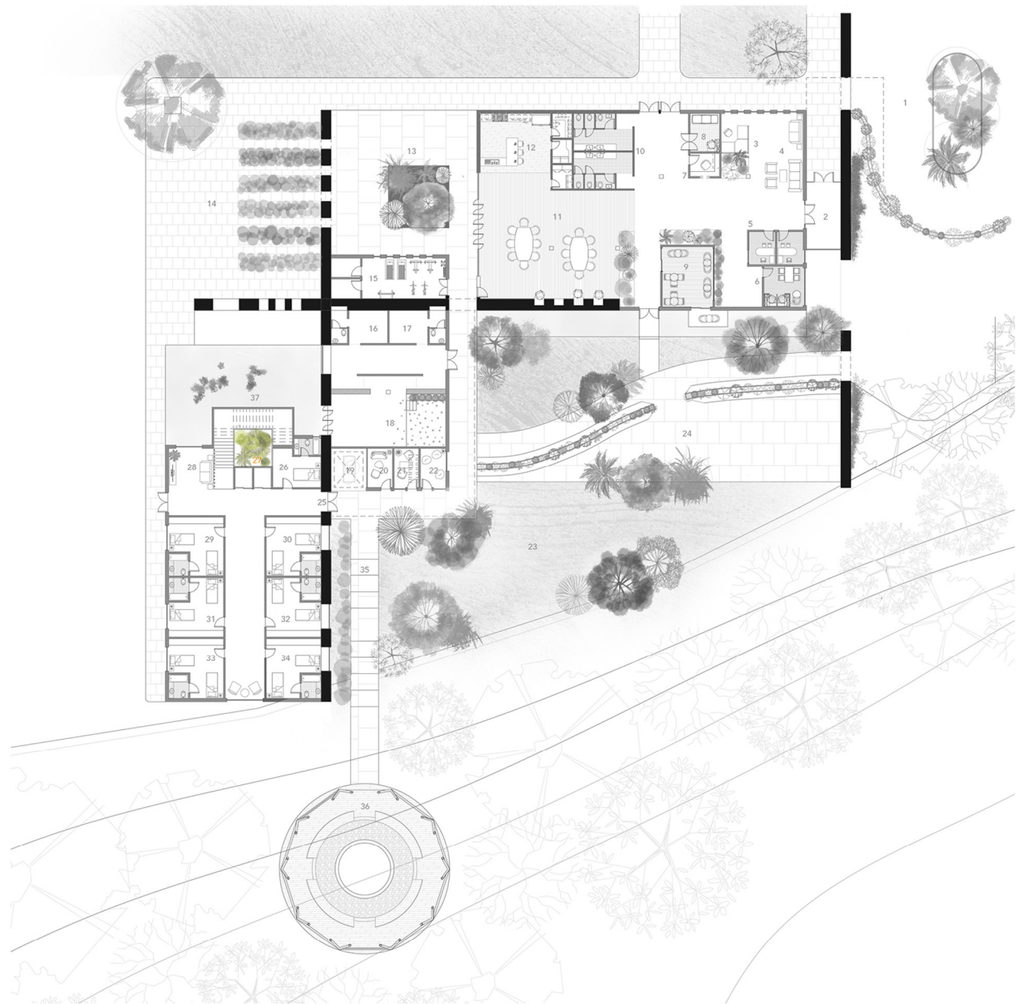


WILD GINGER



MAIDENHAIR FERN

Figure 12.41 - Proposed Vegetation for Indoor Areas



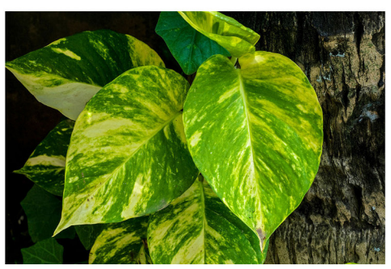
PROPOSED PLANTS/TREES FOR THE TERRARIUM



BIRD'S NEST FERN



PEACE LILY



POTHOS



PRAYER PLANT



MOSS

Figure 12.42 - Proposed Vegetation for the Terrarium



PROPOSED PLANTS/TREES FOR THE HERB GARDEN



LAVENDER



SAGE



YARROW



OREGANO



THYME

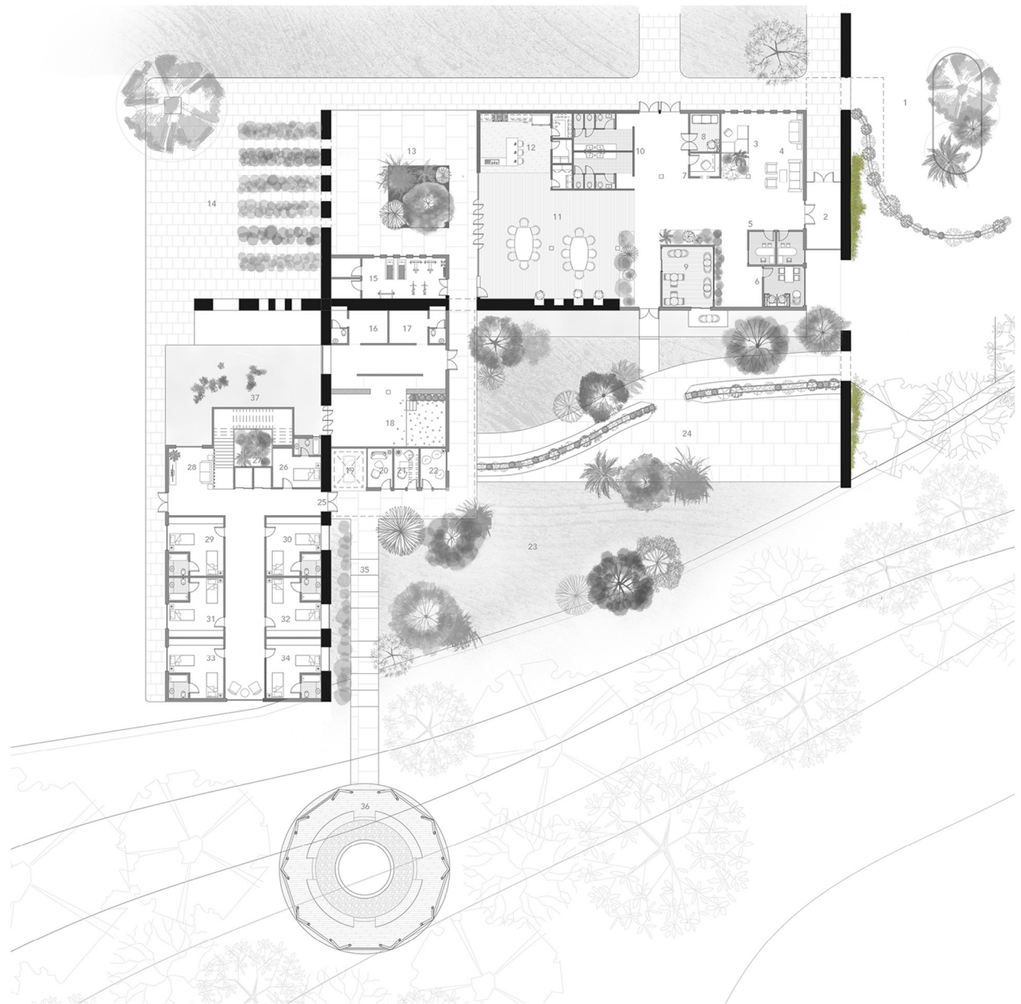


CHAMOMILE



LEMON BALM

Figure 12.43 - Proposed Vegetation for the Herb Garden



PROPOSED PLANTS/TREES FOR THE WALL CREEPERS

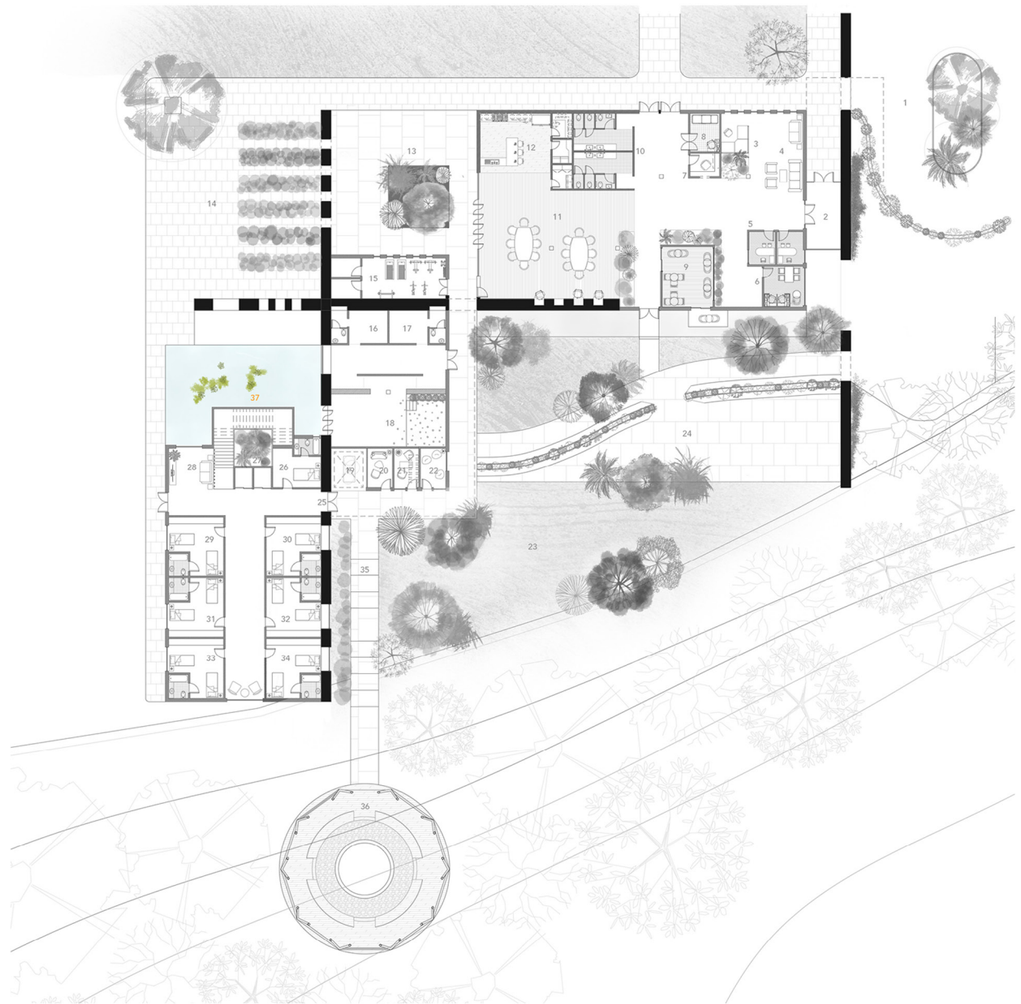


VIRGINIA CREEPER



BOSTON IVY

Figure 12.44 - Proposed Vegetation for the Wall Creepers



PROPOSED PLANTS/TREES FOR THE WATER GARDEN



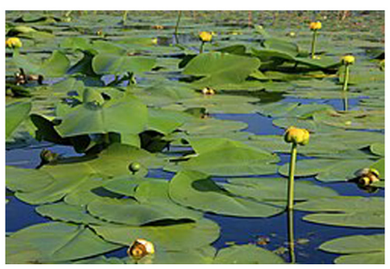
WHITE WATER LILY



BLUE FLAG IRIS



SWEET FLAG



YELLOW POND LILY

Figure 12.45 - Proposed Vegetation for the Water Garden

12.6 | WATER

Water plays a crucial role in the scheme of this project, as it is a continuous symbolic and spatial presence. The placement of the project in extremely close proximity to the Grand River is indicative of its divine connection to the water. While the Grand River is not entirely visible from the building's viewpoints, it still involves a spectrum of sensory engagements, through sound as the wind hits the water and causes the ripples, and the birds that fly over the river as well. Several different sized water bodies along the built area also signify the importance of water in design. These water gardens and pathways reflect the different qualities of water, the glitter as the sunlight hits the surface, and the sound of water changing as per the wind. Through the gradience and temporal nature of water, it becomes a medium through which time, atmosphere and sensory perceptions are registered. All these qualities ground architecture in the lived experience rather than an isolated visual presence.



Figure 12.46 - Pathway to the fireplace

12.7 | FIREPLACE

The fireplace is situated closest to the banks of the Grand River. It is a symbolic element of the wellness centre. As read in the previous sections, across cultural healing traditions, fire has played a big role in the healing process. It symbolizes the act of letting go, and a possibility for beginning again. Placed in the middle of a circular deck, the fireplace is more than an aesthetic gesture. It is an anchor for seasonal gatherings, storytelling sessions and group meditations. It is up to individuals to engage in guided rituals or sit in silence, but the fireplace exists as a space for emotional release and re-grounding. It is placed separately from the built area since it holds special value.

The proximity to the river also represents duality of oneself, fire and water being two opposite elements. The different layers of sensory engagement invite different activities such as writing letters to release into the flames, an act which portrays lifting a burden from one's own self. It can also be a year round activity, and can be an event or ceremony when a treatment period ends. When the flames flicker next to the flowing Grand River, the fireplace becomes a witness to transformation, marking the birth of a newer, more rejuvenated self.



Figure 12.47 - Fireplace View



Figure 12.48 - Fireplace View 2

13 | Conclusion

"I prayed that Death helped me pack a bag, waiting patiently as I moved around the house to collect the memories from crevices unknown to other people. They were my nooks and my crannies, and only I know what I stored in these corners. I wished it would wait by the stairs as I soaked in the sunlight from the big skylight above. I prayed that Death sat with me for a while as I cooked my siblings' favorite meal one last time, and we could eat it at our spot on the table. I hoped Death waited by the door as I glance at everyone existing peacefully. One last time. But then Death would assure me that I'm not really gone, that I exist in the universe, in the space around those that love and those that have loved me. Because we're never really gone, are we? We exist in fragments, in memories, in mannerisms. And Death would tell us that we don't have to be scared to miss out.

I hoped Death would come like a companion who would take the bag that Life made me carry, the same bag I carried for so many years without even realizing how much it was weighing me down. It would say, 'here, give these to me. You don't have to carry all that anymore.' And finally I put it down. And only when I do that, do I realize how exhausted I am. My bones crack as I move, and it shouldn't be like that. But I am so tired, and Death can see that when it says, 'come on, let's go home.'

I hope Death feels like coming back home."[61]

The research for this thesis began as a question, stemming from lived experiences: can spaces feel like they hold us? Is there a way they can heal? At its origin, *Sanctuaries of the Heart* became a pursuit in understanding mental health struggles and placing self in the research to understand spaces of comfort and care at a personal level, to design meaningful spaces of care. However, what started as a personal question unfolded into an exploration of built environments acting as more than backdrops in one's psychological and emotional wellbeing.

In the early stages of the thesis, I examined the origins of healing, the ancient practices that attuned the mind, body and spirit. The three that were further researched were the Medicine Wheel, Sweat Lodge and the Sacred Groves wherein great emphasis was placed on ritual, community and space actively participating in healing. Spaces transform from neutrality to sacredness, and become foundational references that vary in contrast to the architecture of neglect, the design in mental health institutes that followed many years after. Some of the many inhumane medical practices in the 17th to 19th century took place in named institutes like Bethlem Royal Hospital and Danvers State Hospital. The names, which to this day are associated with great horror and paranormal activities simply by the negative memories and bias of the space, as a reflection of the events that took place when it was operational.[62] Furthermore, the research seeks to understand modern medicine and its influences, or lack thereof, of all the different practices. Through the juxtaposition across time, I understood that architecture can alienate or include people and good architecture is inclusive of people by default. And in the case of modern medicine, architecture, due to its sterility, has lost its power to influence and include.

To find a solution for this problem, the thesis turns towards spatial phenomenology, a concept that explores how humans perceive spaces, how they experience the same space differently, and derive the meanings through body, memories and senses. The theory of Salutogenesis by Aaron Antonovsky, and phenomenology from different architects and philosophers such as Maurice Merleau-Ponty, Juhani Pallasmaa, Steven Holl and Gaston Bachelard serve as theoretical anchors of this research. Salutogenesis provided a model that reframes health not as the absence of illness, but elements that provide healing, and in an architectural lens, that places great emphasis on the surroundings. The theories combined together, changed an intangible concept and question about healing to tangible strategies and greatly informed the final design language. Furthermore, the research also demanded a qualitative and interdisciplinary inquiry, for which an archival research methodology and critical discourse analysis was conducted. It became essential to study Maggie Keswick Jencks' diaries, and her approach to salutogenic design. Using her diaries and understanding the phrases she used to describe spaces that she frequented, gave an insight of a lived experience and helped in design accordingly. I used phenomenological observation and analysed architectural precedents such as Portland Japanese Garden and Aga Khan University Hospital, and institutes which place wellness centres at the crux of responsibility; weaving the theoretical learnings into spatial practice. The visualization process became essential to my method of research, sketching externalised memory and physical models and material studies explored tactility and architectural understanding of space. The visuals as well as a nuanced and layered research provided the strong framework needed for the third phase, which was the design.

Several forms of transferable architectural knowledge also emerge from this work. Storytelling becomes an essential tool in research, as well as in design. Narrative plays a deeper role in the design of *Sanctuaries of the Heart,* it is a tool of evaluation, guiding the experiential sequences and grounding the

61 Ahsan, *Everyone Has Each Other.*

62 DeMar, Chloe. "Hospital of Horrors." The Oakmonitor, October 3, 2023. https://oakmonitoronline.com/10231/features/hospital-of-horrors/chloemdemar/.

design into the site as well. Landscape and elemental conditions such as water, light and material tactility also unravel through the design and play a crucial role in developing a phenomenological experience of the place. It supports the experience of calm, and temporal awareness and allows for its inhabitants to express agency and support healing through salutogenic spatial conditions.

It is also important to acknowledge the limitations of this thesis. The proposal does not negate the importance of medical healthcare, and the functional systems of the hospitals. It also aims to understand that architecture cannot fully solve the issue present in the healthcare system, independent of medical, social or therapeutic systems, it simply aims to design conditions in which healing, regulation and agency becomes possible. Architecture's role in salutogenic healing is a catalyst, it is a supportive role rather than a determining one. The design is also bound by cultural specificity and varied care practices, along with differing institutional contexts and approaches. The limitations do not weaken the purpose of the project, rather clarify its responsibility as a discipline that supports care through the design, and spatial, and environmental conditions, while also starting a broader conversation about meaningful healing.

The extensive and months-long research resulted in a physical proposal, a mental wellness retreat along the banks of the Grand River. However, it is not the endpoint. Through cultural memory, historical scars and sensory engagement, it becomes understandable that architecture has a power beyond the realm of shelter and visual aesthetics. *Sanctuaries of the Heart* outgrew the bounds of a thesis, it became a process, a journey of unlearning and learning to understand that healing is not linear; there is not a step-by-step guideline to help people heal and get better and neither is it prescriptive. In this ongoing journey, healing and design unfold in cycles and cannot be contained within a single building. It is a manifesto, a continuum of care and this dialogue invites future architects, researchers and healers to look beyond the clinical aspects of healthcare. In some senses, the work remains unfinished, just as often healing does. Architecture has the responsibility to resist rigidity, welcome transition and autonomy. To design for wellness, is not to design a perfect space, but it is to understand that architecture has to be built out of memory, perception and care.

"No man is as wise as Mother Earth. She has witnessed every human day, every human struggle, every human pain, and every human joy. For maladies of both body and spirit, the wise ones of old pointed man to the hills. For man too is of the dust and Mother Earth stands ready to nurture and heal her children."
- Anasazi Foundation

The Seven Paths: Changing One's Way of Walking in the World.[63]

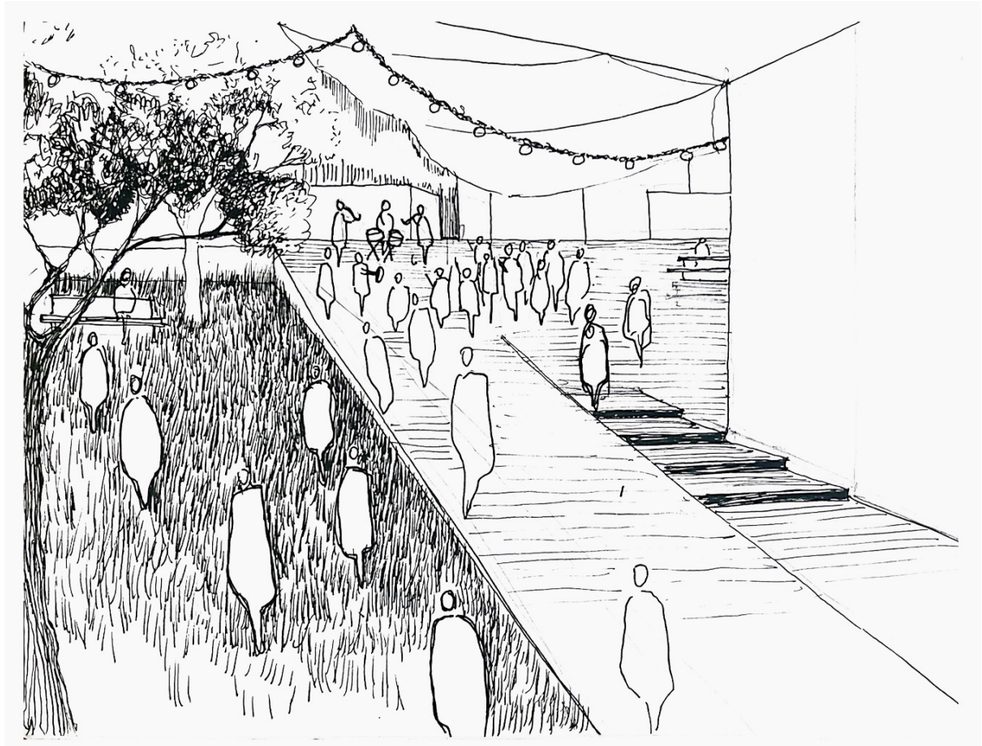


Figure 13.1 - Imagined sketch for a cohesive communal fabric

63 Good Buffalo Eagle, and Jim Ferrell. *The seven paths: Changing one's way of walking in the world.* Rego Park, NY: Gildan Media, LLC, 2013. https://www.indianforester.co.in/index.php/indianforester/article/view/2145.

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Spiritual Ecology
Stress Coping Resources
St. Michael's Hospital
Sweat Lodge
S.W.O.T Analysis
T
Tactility
Texture
Therapeutic Environments
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Toronto General Hospital
V
Visual Gardens
W
Water Feature
Witch Hazel