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LAURENTIAN UNIVERSITY HABITAT FOR HOLISTIC HEALING AND WELLNESS:
GROWING SPACES FOR FOSTERING A CULTURE OF RITUALISTIC SELF-CARE

By Shannon McMillan

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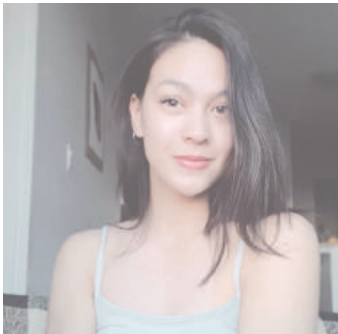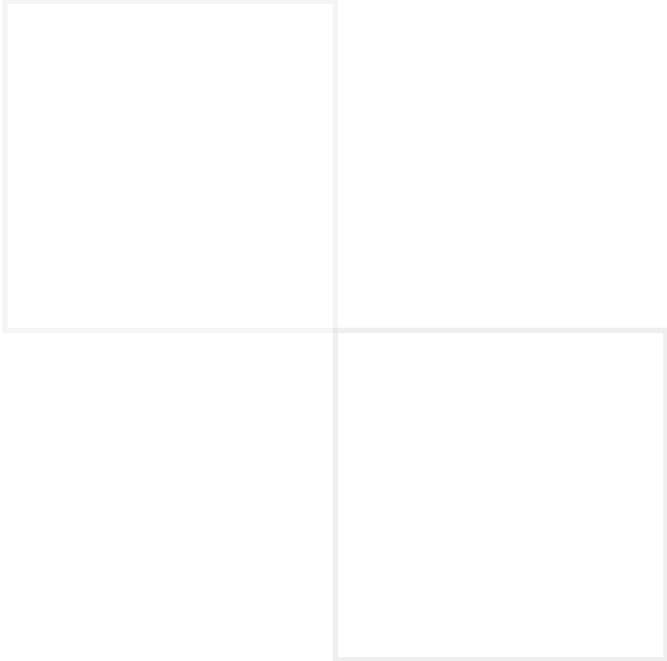
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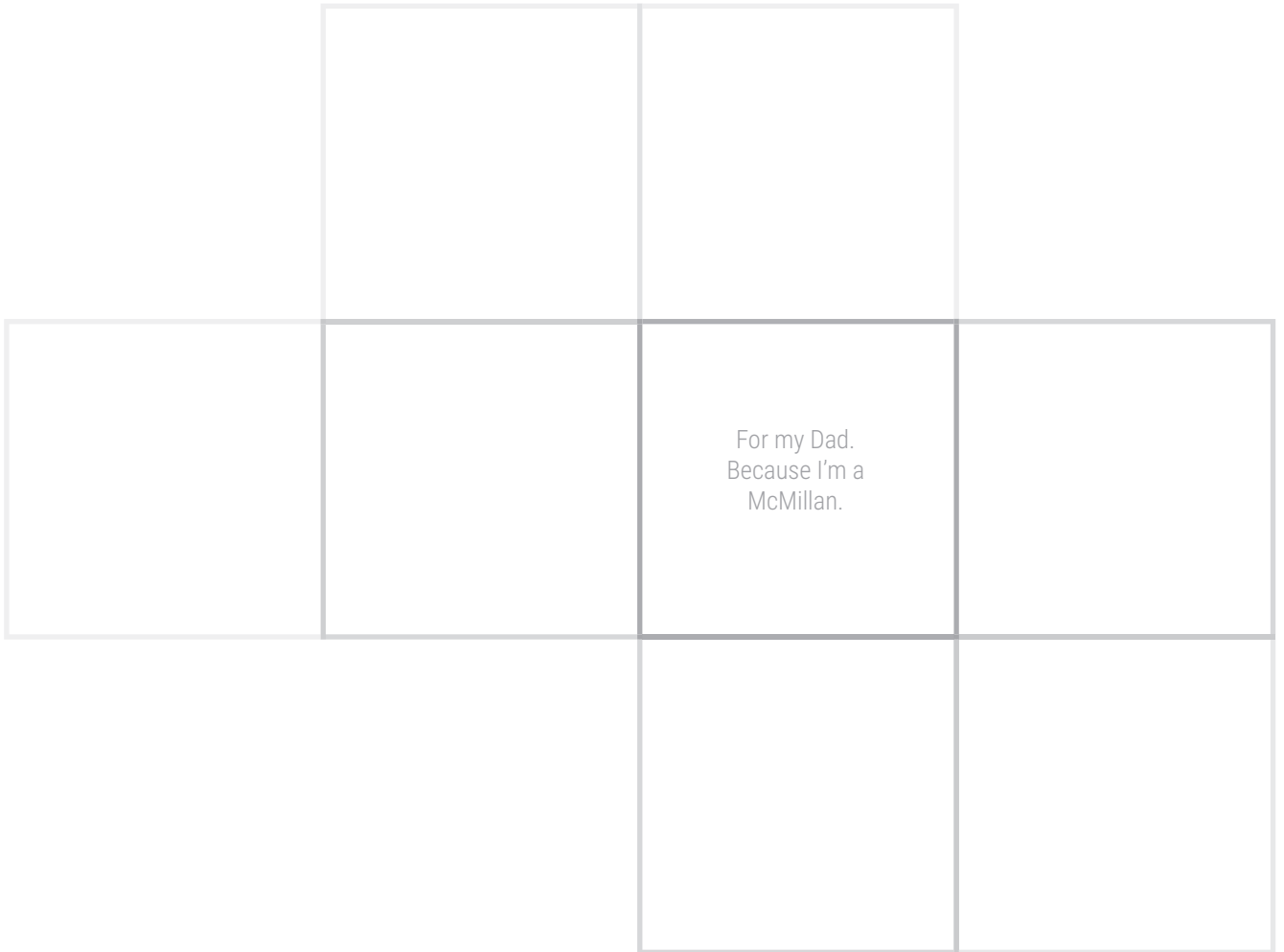
For my Dad.
Because I'm a
McMillan.

III

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ABSTRACT

If the built environment can affect wellbeing, could a design approach that is centered around fostering reflective lifestyle habits in post-secondary student wellness centers improve the cultural perception of spaces for mental health?

In health, "mind and body dualism represents the metaphysical stance that mind and body are two distinct substances, each with a different essential nature."[1] This frame of mind has distracted academic "focus away from the dynamic nature of human beings, [and] their relationship with the environment."[2] Contrary to mind-body dualism, this thesis argues that the built environment plays an intrinsic role in holistic wellbeing. Historically places for mental health have been about isolation away from society, and there is still an element of stigma or shame that shrouds these spaces. Contemporary society is at the crux of a cultural shift which hopes to see mental health maintenance as a fundamental element of holistic health. Architecture can mediate and promote this shift by providing spaces which, contrary to asylums or psychiatric offices, empower those struggling with their mental wellbeing.[3] Employing an approach called the 'measure-free recipe' methodology, this thesis proposal endeavors to curate texture, path, context and light; tactfully manage concepts of self, control, security and time; and architecturally manifest an environment which would promote phenomenological experiences of empowerment, curiosity, comfort and decompression. Development of the 'measure-free recipe' derives from a review of atmospheres which have negatively impacted cultural perception of holistic health, in comparison to phenomenologically positive atmospheres. Details of this approach will be further articulated later in the text. Importantly, the design of the Laurentian University Habitat for Holistic Healing and Wellbeing serves as the first 'measure-free recipe' taste test for growing spaces which foster ritualistic self-care.

Keywords: architecture, habitat, holistic, mental health, wellness, material culture, tea, ingredients, texture, path, context, light, tactics, self, control, security, time, asylums, routine, hierarchy, surveillance, shame, phenomenology, empowerment, curiosity, comfort, decompression, ritual.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

INTRODUCTION

4

THE POSITION

Philosophical paradigms—though often accepted without contemplation and seldom a factor considered at the core of a question under deliberation—are significant to the trajectory of a viable research exploration[5]. Being cognizant of these lenses through which people perceive and understand the world, or moreover identifying our personal biases can bring an awareness to how one's fundamental understandings relate to the employment of various methods of architectural investigation.[6] In health, the development of mind-body dualism was necessary to free the body from the limitations of religion at the time, and has since led to countless advancements in science.[7] This frame of mind has since been proven to be entirely misleading; although, because it has been ingrained into many aspects of contemporary western culture, it is currently restricting healthcare from benefitting from a more comprehensive understanding of health.[8] The lenses through which people come to understand their reality needs to be continually questioned and revised; as psychology professor Neeta Mehta explains that mind-body dualism has distracted academic "focus away from the dynamic nature of human beings, [and] their relationship with the environment."[9] Contrary to mind-body dualism, the position of this thesis argues that built environment plays an intrinsic role in holistic wellbeing.

THE CRITIQUE

One of the dominant concerns in conventional contemporary architecture is the shortage of, or disingenuous attention paid to, the human experience of design. Beyond sacred spaces, designers do not typically consider well-being or phenomenological implications. Although experience is unique to any given individual, designers can make a concerted effort towards developing environments that are conscious of their influence on humans. Historically places for mental health have been about isolation away from society, and although the current model for mental health is now primarily in offices woven into the urban fabric, there is still an element of stigma and shame that shrouds these spaces.

Objects of the built environment are a projection or manifestation of a given society's cultural priorities or ethos, and according to the critical art and architecture theorist Pamela Karimi, they "are active agents that inform collective identity through their performative, emotive and expressive capacities."[11] Contemporary society is at the crux of a cultural shift which hopes to see mental health maintenance as a fundamental element of holistic health. Architecture can mediate and promote this shift by providing spaces which contrary to asylums or psychiatric offices, instead empower those struggling with their mental wellbeing.[12]

THE MOTIVATION

"...one of the more sobering realities about serious mental illness in the twenty-first century is that its sufferers not only die at a much younger age on average than the rest of us (as much as twenty-five years sooner), but also that the incidence of serious illness and mortality in this population has accelerated in recent decades. On this most basic of levels we seem to be regressing."[13]

SUICIDE 24.5%

ACCIDENTS 36.5%

MALIGNANT NEOPLASMS 6.8%

HOMICIDE 4.4%

HEART DISEASES 2.2%

OTHER CAUSES EACH <2%
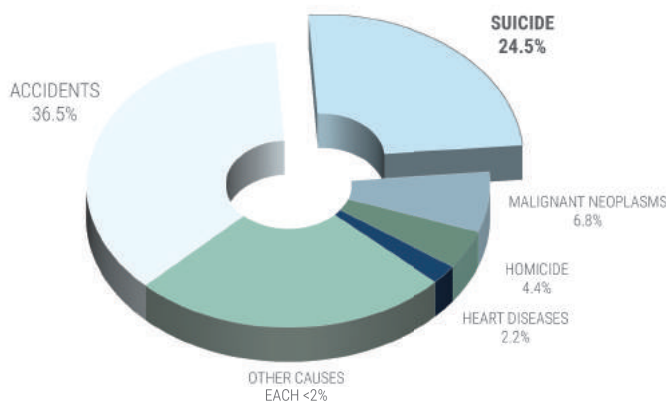
For people aged 15-34 suicide is the leading cause of death, preceded only by unforeseen accidents.[14] Given that this age coincides the general demographic of post-secondary students, it is not a coincidence that a recent national survey stated that twenty percent of Canadian post-secondary students are currently struggling with depression and anxiety.[15] This figure and these circumstances demand immediate and sincere attention. Unfortunately, post-secondary campuses are generally lacking in services for immediate, non-hospital, psychiatric support. The reality is that many students are not exposed to mental health care until a life-threatening crisis. Being a post-secondary student with an intimately personal understanding of these statistics, this research stems from a designer familiar with academic environments which are not conducive to maintaining mental wellbeing. This thesis borrows from Diana Agrest's book, *Architecture from Without: Theoretical Framing for a Critical Practice*, in recognizing that empathetically designed architecture holds the potential to manifest the diversity of modern society.[16] Agrest argues that if the primary underlying themes in architectural theory, which shape the discipline are defined in an exclusionary manner, then those excluded from this definition are likewise underrepresented in the built environment.[17] This thesis advocates for the representation of those typically omitted and further the empowerment of those struggling with mental health. Given that in 2018 at Laurentian University, Sudbury, Ontario, the student population voted "to double the budget for mental health services[…] out of their own pockets."[18] This vote was evidence of a genuine desire for mental health proactivity on campus. By exploring the role of thoughtful design in developing a student wellness center on Laurentian University main campus, this thesis opens the discussion of how to redefine mental healthcare in contemporary society.

THE QUESTION

IF THE BUILT ENVIRONMENT CAN AFFECT WELLBEING, COULD A DESIGN APPROACH THAT IS CENTERED AROUND FOSTERING REFLECTIVE LIFESTYLE HABITS IN POST-SECONDARY STUDENT WELLNESS CENTERS IMPROVE THE USE, EFFECTIVENESS AND CULTURAL PERCEPTION OF SPACES FOR MENTAL HEALTH?

20% OF CANADIAN POSTSECONDARY STUDENTS ARE CURRENTLY STRUGGLING WITH DEPRESSION AND ANXIETY

THE METHODOLOGY

If an architect has a series of tools or *ingredients* available to them, including texture, path, context and light for example, then the *methods* or ways in which these architectural ingredients are employed together can affect perceptions of concepts like self, control, security and time. Asylums employed these architectural ingredients (including texture, path, context and light), to manipulate perceptions (of self, control, security and time), in order to enforce intentions or *outcomes* of routine, hierarchy, surveillance and shame. Phenomenological architects[20] however, have also employed these same architectural ingredients in certain ways that encourage perceptions which support their intentions of empowerment, curiosity, comfort and decompression. By reviewing both historical spaces for mental illness alongside contemporary case studies that elicit positive emotional responses, this thesis hopes to develop a 'measure-free recipe' for spaces which promote holistic healing and wellbeing.

To say that the architecture of mental health is lacking, is not to imply that all architects are designing insensitively; nevertheless, it is necessary to propose that the discipline and the build environment are an opportunity that could aid in the betterment of these spaces. If given some loose guidelines that may be curated to the given context, the intention is that this 'measure-free recipe' design methodology could be used as a reference by designers seeking directions on phenomenological design for wellbeing. The term 'recipe' denotes guidance for a creative process, while the 'measure-free' aspect of this methodology implies a framework that is not rigidly prescriptive. Deviating away from a checklist approach instead highlights the importance of exploring the creative design potential of each unique circumstance. Employing the 'measure-free recipe' methodology, this thesis proposal endeavors to curate texture, path, context and light; tactfully manage concepts of self, control, security and time; and architecturally manifest an environment which would promote phenomenological experiences of empowerment, curiosity, comfort and decompression. Environments such as the Laurentian University Habitat for Holistic Healing and Wellbeing, designed through the 'measure-free recipe' approach, with the intention of cultivating a culture of self-reflection, can urge contemporary society to confront the concept of madness and further, to grow from it.

KEY DESIGN INGREDIENTS

To outline all potential design ingredients would be both exceedingly exhaustive and unproductive within the scope of this thesis; however, by drawing upon some of the work of the many influential architectural writers, one can begin to analyze and clarify the experiential influence of some spatial design tools. For their individual diversity and collective comprehensiveness, <u>texture, path, context and light</u> are the design ingredients of focus for the purposes of this thesis.

<u>Texture:</u> *"The visual and especially tactile quality of a surface[...], an essential or characteristic quality; essence."*[21]

<u>Path:</u> *"A way beaten, formed, or trodden by the feet of persons or animals[...], route, course, or track along which something moves."*[22]

<u>Context:</u> *"The set of circumstances or facts that surround a particular event, situation, etc."*[23]

<u>Light:</u> *"Something that makes things visible or affords illumination."*[24]

	TEA	METHODOLOGY	WELL-BEING
INGREDIENTS		THE ARCHITECT HAS A SERIES OF TOOLS AVAILABLE INCLUDING: texture path context light	THE STUDENT HAS A SERIES OF TOOLS AVAILABLE INCLUDING: medication therapy community lifestyle habits
TACTICS		THE WAYS IN WHICH THESE TOOLS ARE EMPLOYED TOGETHER CAN AFFECT PERCEPTION OF: self control security time	self control security time
OUTCOMES		ASYLUMS EMPLOYED THESE TOOLS TO MANIPULATE PERCEPTIONS OF TIME, CONTROL, SECURITY AND SELF IN ORDER TO ENFORCE: routine hierarchy surveillance shame PHENOMENOLOGICAL ARCHITECTS HAVE EMPLOYED THESE TOOLS TO ENCOURAGE PERCEPTIONS OF TIME, CONTROL, SECURITY, AND SELF WHICH SUPPORT: empowerment curiosity comfort decompression	STUDENTS CAN LEARN TO PERSONALIZE THE EMPLOYMENT OF THESE TOOLS TO ENCOURAGE PERCEPTIONS OF TIME, CONTROL, SECURITY AND SELF WHICH SUPPORT: empowerment curiosity comfort decompression

KEY DESIGN CONCEPTS

According to Francis Ching, as design ingredients "and principles become more familiar, new connections, relationships, and levels of meaning may be established."[25] The examination of how asylum architects in comparison to phenomenological architects have combined design ingredients (specifically texture, path, context and light), allows some general design methods to emerge. Some central tactics focus on the concepts of self, control, security and time; which ultimately determine the outcome of the design or quality of the experience.

SELF

Humans perceive their emotions and context through their body, and respond emotionally to the visual, auditory, and haptic qualities of the built environment; although many phenomenological designers have had long standing intuitions of this, recent research is starting to be able to quantify these speculations.[26] Harry Francis Mallgrave's book *From Object to Experience: The New Culture of Architectural Design*, probes the complexities inherent in the subjectivity of experience, highlighting that empathy is an intrinsic factor in perception.[27] In the book *Spatializing Culture: The Ethnography of Space and Place* by Setha Low, which discusses the evidence of inequalities, stereotypes, and social separations that can be revealed through spatial analysis, Low advocates for more conceptual interpretations of space through metaphors, affect and atmosphere—this allows for better flexibility in perception as one experiences built environments that are intended to affect us socially, politically, and emotionally.[28] Audience-tailored material symbolism for example can not only provoke consciousness of environment, but further self-reflection that draws attention to one's body and mind.

CONTROL

The directionality of path in particular allows designers control of sequence of atmospheres and experiences; which may also be used to emphasize hierarchy or equality.[29] Jenny Donovan's book *Designing the Compassionate City: Creating Places Where People Thrive*, is grounded in an egalitarian attitude which aims to highlight the need for human compassion and respect of human dignity.[30] Discussing the prosperity of the built environment, at both the scale of the individual as well as the collective community, Donovan advocates for design which nurtures controlled experiences.[31] The control of procession for example allows designers the ability to comment on larger issues through the decisions to either subscribe or contradict the typical.

SECURITY

Power plays a key role in the formation of the built environment, as architecture is a reflection of society and its priorities.[32] Thomas A. Markus' book *Buildings & Power: Freedom & Control in the Origin of Modern Building Types* explores how power is manifested in architecture. [33]Illustrating through buildings the ways in which madness is understood in society over time, Markus dissects spatial syntax and organizational strategies for control of power in relation to the given societal understanding of madness at the given time and context.[34]

TIME

Architecture can draw attention to and emphasize one's phenomenological experience of time both in body and in mind. As seen in the way the hue of light in Thorneloe Chapel (this building will be discussed later on in the text) evolves throughout the day according to the position of the sun, buildings can manifest time through the movement of natural light. Phenomenological designers have embraced, explored and curated temporality not just in respect to light, but also in the material and spatial responses to it. Contemporary architecture is typically thought of as a static object, without the consideration of how time, context and inhabitation of the object may play a role in it's life; including but not limited to aspects such as weathering, wearing, patinaing, etcetera.

THE NEGATIVE
ROUTINE, HIERARCHY, SURVEILLANCE, SHAME

MADNESS AS DIVINE INTERVENTION
MADNESS AS PHYSICAL
MADNESS AS MANAGED
MADNESS AS ENVIRONMENTAL
MADNESS AS PSYCHOLOGICAL
MADNESS AS CHEMICAL
MADNESS AS CULTURAL

THE NEGATIVE
ROUTINE, HIERARCHY, SURVEILLANCE, SHAME

"Buildings like poems and rituals realize culture."[35]

      Architecture throughout history has manifested the primary ways in which society has understood mental illness—madness as divine intervention, as physical, as managed, as environmental, as psychological, as chemical and potentially madness as cultural. This is not to say that these frameworks are mutually exclusive; however, the following examples were chosen to best highlight each understanding. Asylums employed architectural ingredients (including <u>texture, path, context and light</u>), to manipulate perceptions (of <u>self, control, security and time</u>), in order to enforce intentions or outcomes of <u>routine, hierarchy, surveillance and shame</u>.
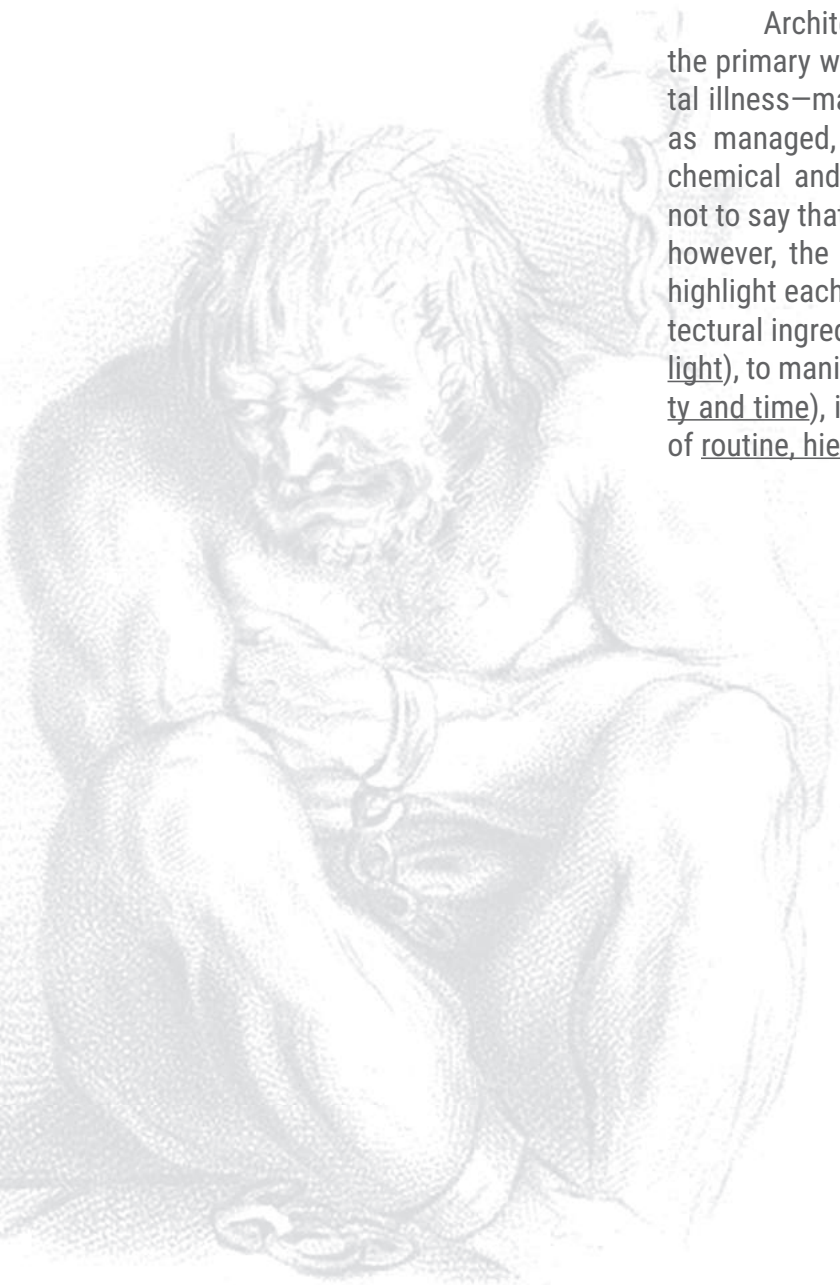
MADNESS AS DIVINE INTERVENTION

As with many aspects of medieval theocentric society, madness was reasoned through religion. This perception of divine origin can be traced back to ancient Greek culture, as human mental suffering was understood as supernatural retribution for mortals who betrayed the Gods.[36] Medieval civilization likewise believed that illnesses of the mind and body, being inseparably linked to impurity of the soul, were entirely deserved.[37] Some thought insanity to be a taste of the sinner's afterlife, but the general consensus was to repent or perish (resulting in periods of extremity characterized by the widespread persecution of the mad or those resembling any assumed demonic possession.)[38] Some madness however, often depending on the stature of the subject, was to the contrary seen as divine inspiration; Socrates asserted that "our greatest blessings [...] come to us by way of madness, provided the madness is given to us by divine gift."[39] Without the advances of basic modern medicine, the paradox of madness in medieval society was but one of the many possible afflictions looming; as the stereotypical crazed beggar was a known character of the medieval era.[40] Hospitals, were mere hostels for pilgrims and the homeless—with its etymology connected to 'hospitality,' hospitals were primarily religious institutions devoid of any medicinal competence.[41]

16

BEDLAM

One of the first hospitals, London England's priory of St. Mary of Bethlem, opened in 1247. Although Bethlem offered accommodation for the sick during the plague,[42] sociologist and history of psychiatry specialist Andrew Scull explains that they did not "provide anything which, even on the most generous assessment, could be termed medical help."[43] By the late 14th century, Bethlem began specializing in housing the mad.[44] Characterized by whips, shackles, isolation, starvation, violence, filth, and shame, unfortunately, Scull states that the first built environment for mental health was publicly perceived to be for persons of "unclean spirits that [...] must be restrained in chains."[45] Mental suffering reduced people's self-image to a special status "beneath the rank of beasts"[46] an image that dominated public perception of madness.[47] Until 1770 for example, Bethlem "operated as a kind of freak show and human zoo;"[48] as citizens paid to tour the wards and gawk at the fettered lunatics.[49] Although the closing of general public admission to asylums may have derived from a genuinely moral position, it would later also ironically result in further isolation, shame, and opportunity for further misconduct.[50] Bethlem or 'Bedlam' as it was known ("a scene or state of wild uproar and confusion,"[51]) would foster associations between built environments for mental health with chaos, insecurity, and fear of control.[52]
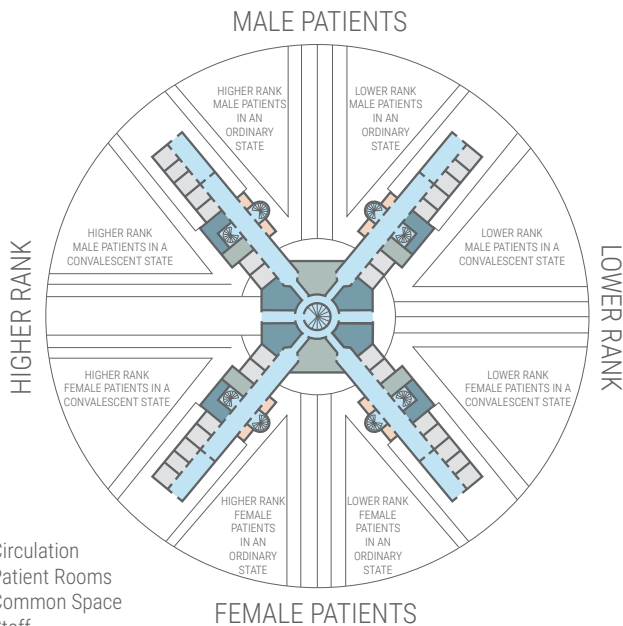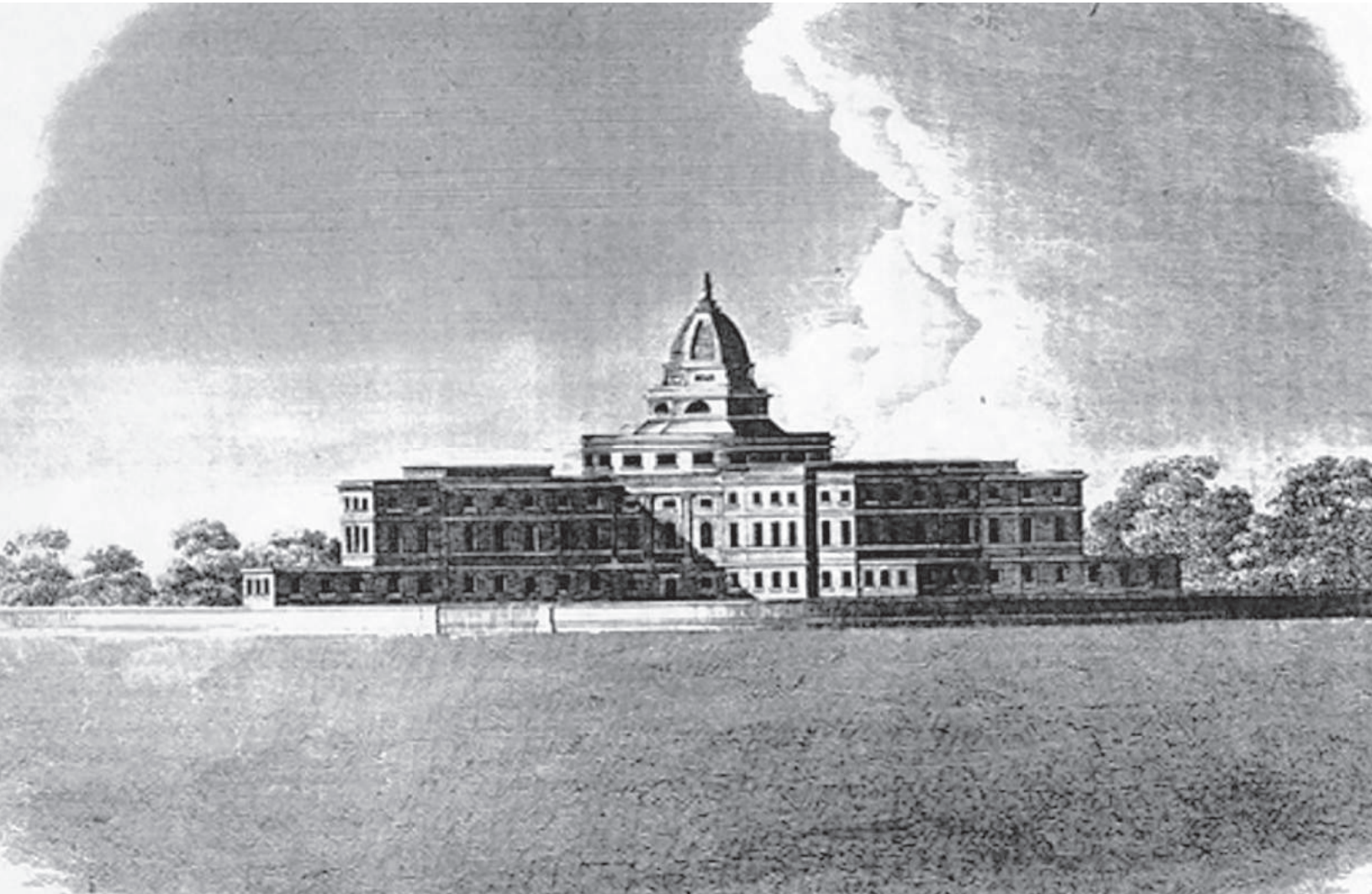
MADNESS AS PHYSICAL

In the early 19th century it was generally believed that madness originated from the physical failures of the human body itself. Since the mind was understood as the soul, to suggest an illness of the mind, would be to challenge the very existence of an immortal soul.[53] In a society deeply rooted in religion, this questioning of perception fueled countless heated debates and effectively brought the few outspoken medical radicalists to lose public respect as a professional.[54] Thus, therapies for madness were purely physical and typically included procedures such as "relatively uniform purges, bleedings, and vomits, administered seasonally to patients, with the occasional addition of tonics (such as alcohol) and cold bathing."[55]

RADIAL MODEL

William Stark's Glasgow Lunatic Asylum of 1814 employed a cross plan with airing courts between the radial arms of the establishment.[56] Creating contrasting environments that defined and embodying the of isolation of those confined, this radial model was reflected in many asylums and prisons at the time.[57] Stark demarcated half the building for males, and the other half for female patients; he further "divided those parts into 'higher rank' and 'lower rank' (by which he meant [hierarchical] social standing and wealth). These divisions were again subdivided into 'convalescent' (meaning likely to improve) [...while patients that were deemed unlikely to improve, fell under the term] 'ordinary state.'"[58] The division of space around radial circulation paths according to sex is inline with the concept of madness as physical (as it is the bodily differences which constituted the fundamental reasoning for females to be viewed as an incomparably separate and inferior classification); however, the further division of patient spaces according to status unquestionably played a role in linking the curing of madness to the maintenance of societal hierarchy and its practices.[59] Many of the overeager doctors advocating for and then ultimately controlling these asylums, were performing unconsented research on patients under their care.[60]

MALE PATIENTS

HIGHER RANK MALE PATIENTS IN AN ORDINARY STATE

LOWER RANK MALE PATIENTS IN AN ORDINARY STATE

HIGHER RANK MALE PATIENTS IN A CONVALESCENT STATE

LOWER RANK MALE PATIENTS IN A CONVALESCENT STATE

HIGHER RANK FEMALE PATIENTS IN A CONVALESCENT STATE

LOWER RANK FEMALE PATIENTS IN A CONVALESCENT STATE

HIGHER RANK FEMALE PATIENTS IN AN ORDINARY STATE

LOWER RANK FEMALE PATIENTS IN AN ORDINARY STATE

HIGHER RANK

LOWER RANK

FEMALE PATIENTS

Circulation
Patient Rooms
Common Space
Staff
Storage

18

MADNESS AS MANAGED

The physical horrors of the asylum ultimately sparked the 'moral treatment' (or moral management) movement, which focused on addressing the patient's mind rather than body, but did not necessarily equate to better therapy.[61] With the heightened realization that madness was not bound to social stature, many elite sought out semi-domestic places of privacy and confidentiality to commit their mad family members so that these embarrassing burdens would not be subjects of gossip.[62] Retrofitted homes—termed 'petites maisons,' in France, or 'madhouses' in England—catered to the wealthy emerged.[63] The concept of moral management, which employed a reward based disciplinary system, was underpinned by the notion that a patient could be compelled to act rationally and with civility in a controlled social setting, thereby masking the mental health struggle.[64] Therapy was ultimately to manipulate or train a patient with mandatory regular routines as outlined by the standard but excessively rigid customs and roles of the time.[65]

RETREAT MODEL

Throughout historical texts, William Tuke is often recognized as a key individual responsible for freeing the mad from chains.[66] Tuke's York Retreat, designed by John Devans in 1796, served as a pivotal model in asylum architecture.[67] Following the rise of 'madhouses,' the York Retreat in England was one of the first purpose-built establishments that believed in "separation from society, orderly daily regimen, and avoidance of mechanical restraints."[68] The core of the plan, allocated to administration and superintendent's quarters, was flanked by two floors of single bedrooms lining double-loaded corridor paths.[69] Tuke further offered patients visits with his own family and regularly spoke of himself as a surrogate father figure to the thirty patients in his residence.[70] Sited in the context of a rural area with attractive natural views, the airing courts were supplied with "animals such as rabbits, seagulls, and chickens, because it was believed that interacting with these creatures awakened benevolent feelings in the patients."[71] The description of 'retreat' implies a sanctuary, or escape from the troubles of civilization;[72] however, with time, any notion of security (the very origin of the retreat model) provoked worries of scheming relatives abandoning sane family members in remote sanatoriums to crumble under the surveillance and control of the asylums for their own corrupt personal reasons.[73] By the 19th century, the romanticised propaganda of the revolutionized asylum had failed to change the general public's perception, and as such "attempts to compel patients to think and act rationally would themselves be stigmatized as irrational."[74]

Circulation
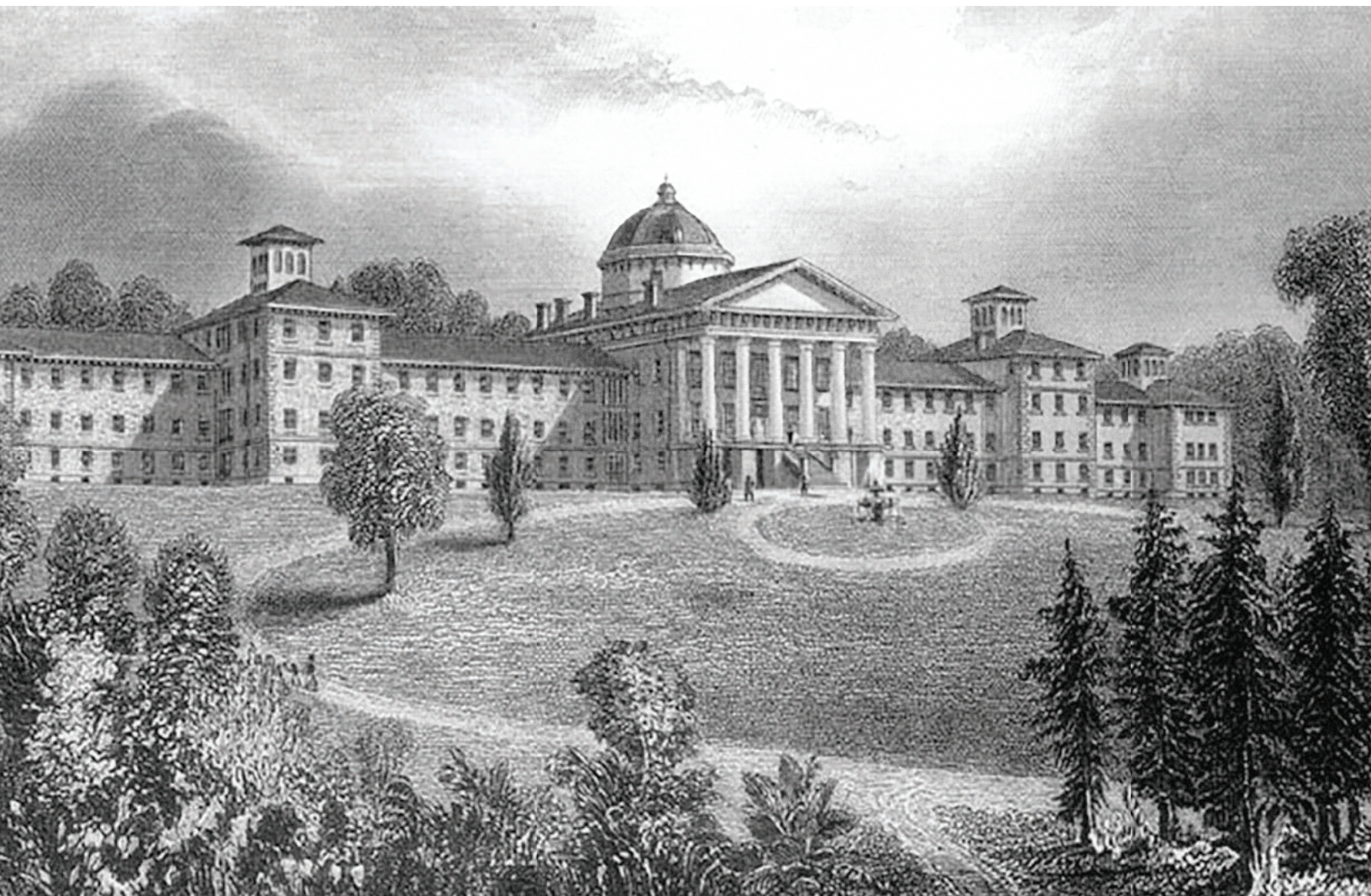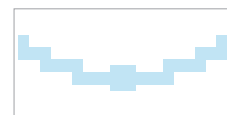Patient Rooms
Common Space
Staff
Storage
Animals
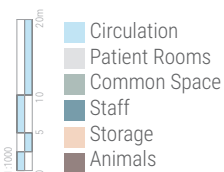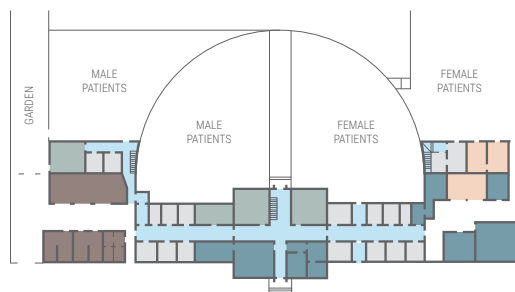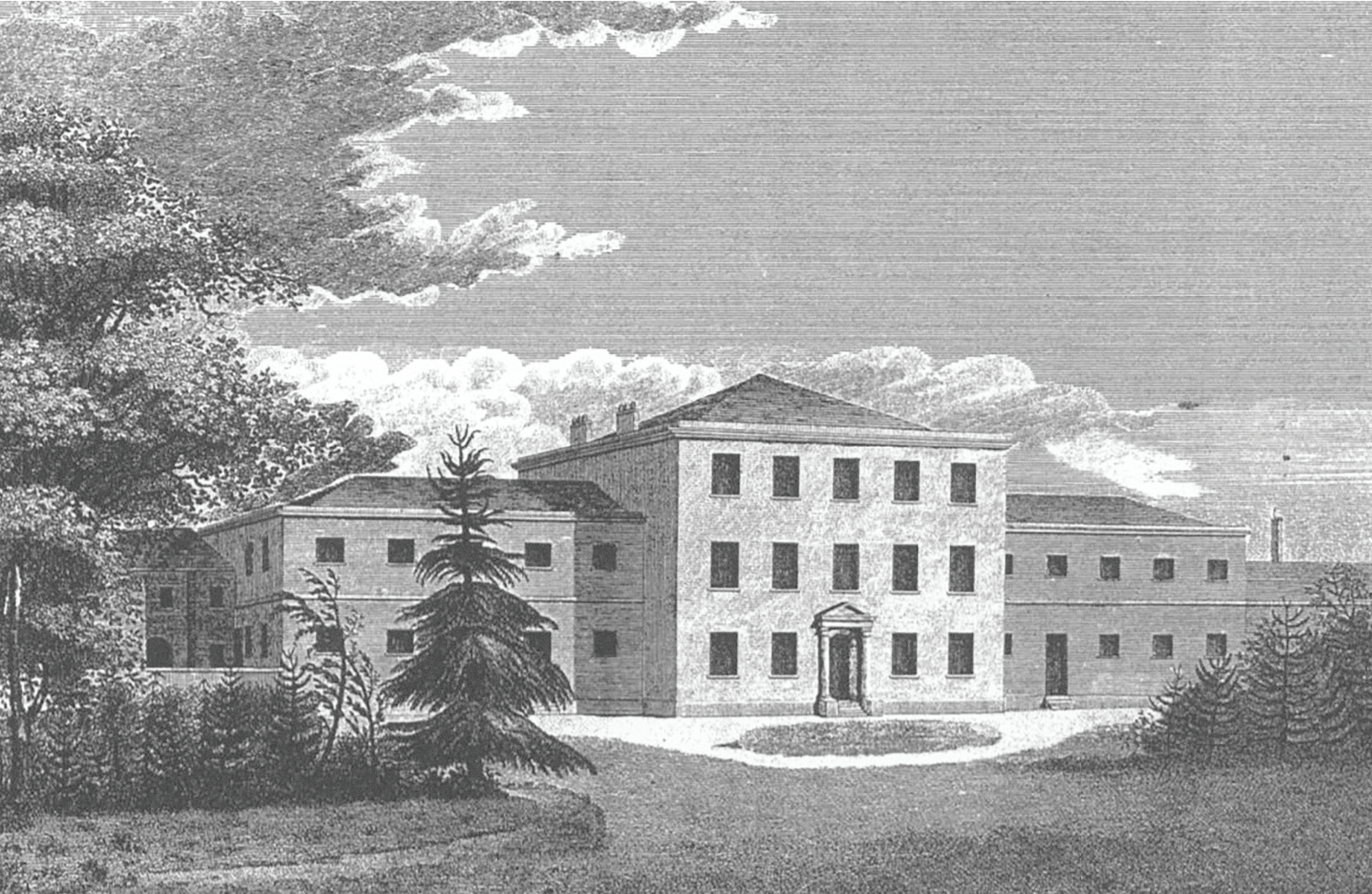
The New Jersey State Lunatic Asylum, built in 1848, employed what Kirkbride had developed as the linear model for an asylum—an adaptable prototype which came to characterize the majority of asylums in the nineteenth century.[78] With a thin, stepped footprint resembling outstretched wings, the asylum was spatially divided in half organized according to sex and then dived again hierarchally further into the wards according to severity of illness.[79] Kirkbride's linear paths made expansion to accommodate the growing population of patients straightforward, but manifested levels of surveillance and shame.[80] Located in a landscape of rolling hills amidst an abundance of fresh water, the site of the Kirkbride asylum was exemplary.[81] Success of the design was fostered by "Kirkbride's skills at self promotion and the doctor's good relationship with the press."[82] In fact, he claimed a curability rate of 90 percent.[83] The stone facade and overwhelming size of the formal establishment communicated the image of a stable and dependable institution. Yet it was this outward appearance that allowed for trouble within to transpire.[84] Survivor anecdotes revealed that these establishments, which supposedly reconnected the mad with nature, were in fact not only hiding physical mistreatment behind their facades, but further were also places of severe psychological manipulation and torture.

While psychiatrists advocated for recreational therapy, for example, the threshold between work and play could be greatly obscured to accommodate the agenda of the institution.[85] For example:

> *"patients were expected to labor as much as they were physically able. Men, especially those with farming backgrounds, would tend to the grounds. Women often possessed skills like cooking, cleaning, and sewing that were particularly useful to the asylum. (There is no doubt that asylums benefited financially from having inmates mend the sheets, to pick one of many examples). Labor inside the asylum was supposedly voluntary."[86]*

MADNESS AS ENVIRONMENTAL

Building upon the rural retreat setting, asylums began to outline the role of architecture as a way to connect patients to nature. The cure for madness was this connect to the ills of the industrial city, both social and environmental, spurring a period of environmental determinism; "the belief that all environmental factors, including both physical and social ones, rather than hereditary factors, determine behavior."[75] The article by psychiatrist Thomas Kirkbride, 'Modern Asylums', published in 1847, critiqued asylum architecture primarily for its lack of natural views from, ventilation through, and daylight into each individual patient room.[76] Carla Yanni, author of the book titled *The Architecture of Madness: Insane Asylums in the United States*, explains that the "natural environment was thought to be essential to the cure, and thus the site of an insane hospital was crucial to its success."[77]

While it is tempting to analyze the plans of the linear model and deduce from the rows of small patient rooms that these buildings offered the comforts of privacy for patients, regular routines forcing patients out of their rooms, it meant a true sense of privacy evaded these establishments.[87] In the design of the second building at the New Jersey State Lunatic Asylum in 1859, Kirkbride collaborated with Samuel Sloan to create a variation of the linear model which employed exterior courtyards. This type of degrading human museum refers back to 'Bedlam,' and put those struggling with mental health under the surveillance of a humiliating microscope.

Circulation
Patient Rooms
Staff

Circulation
Patient Rooms
Staff
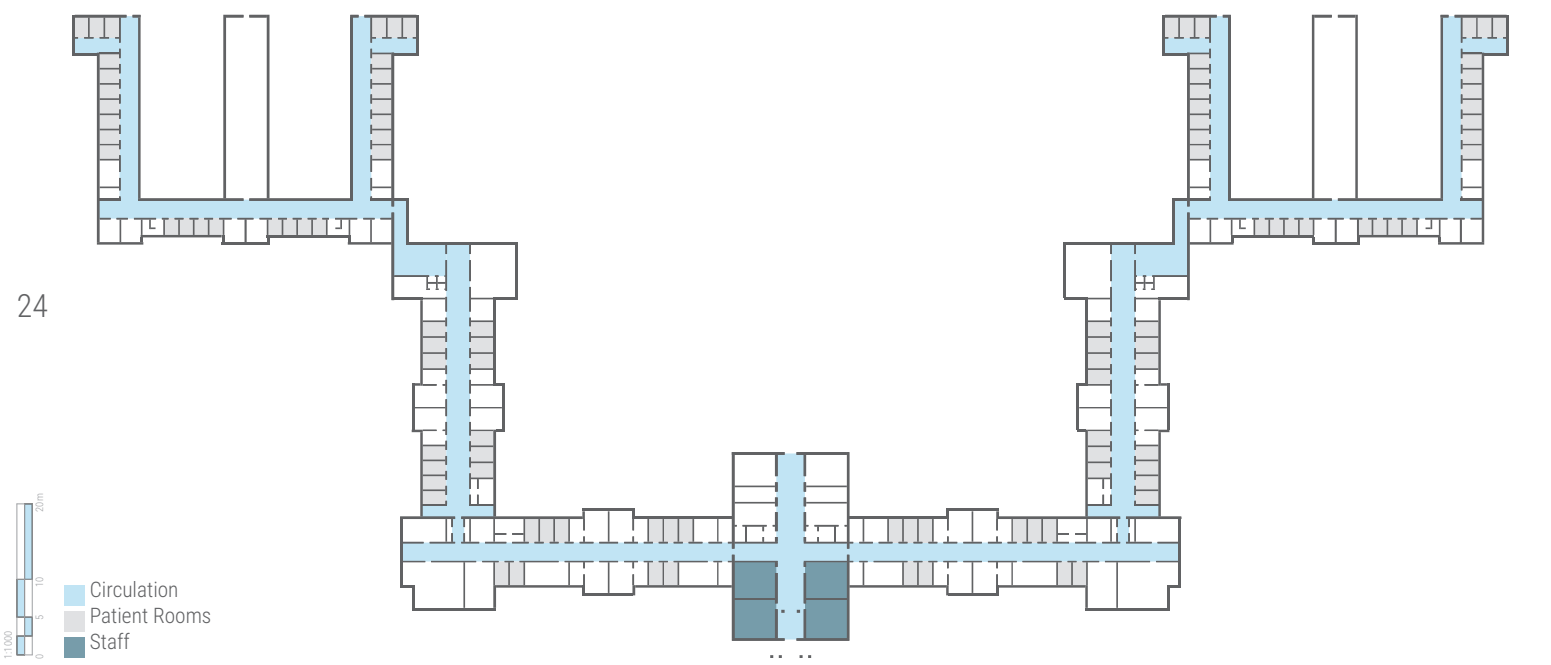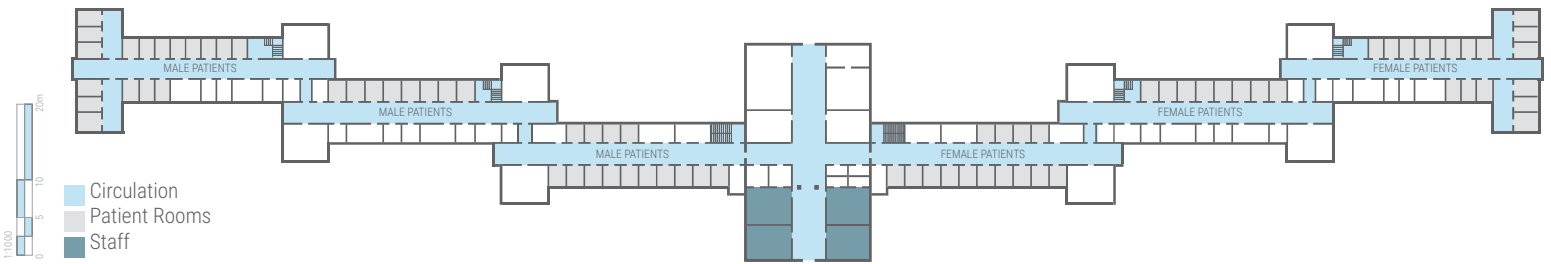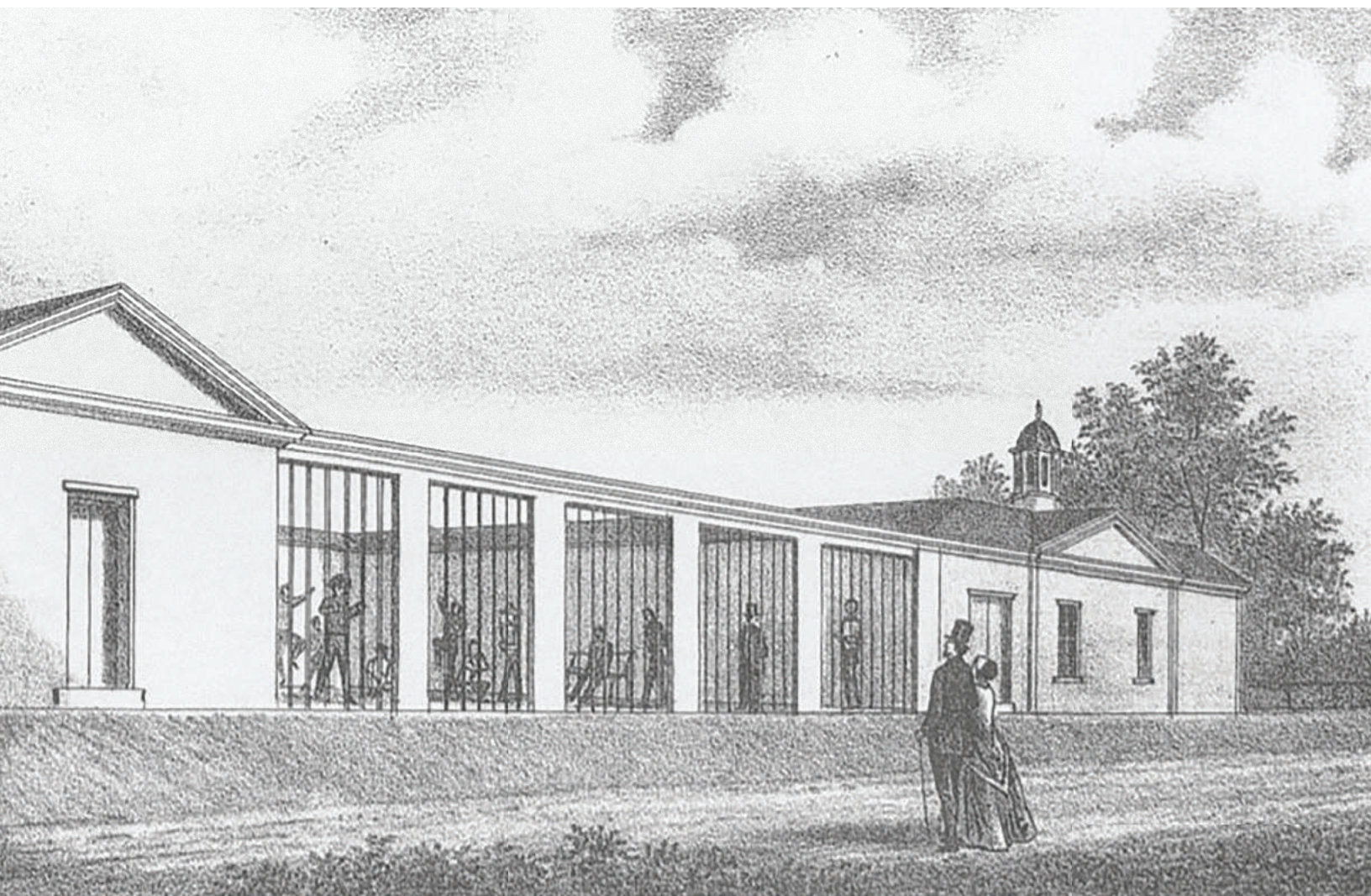
"… we can see local people staring at the inmates, who are in the courtyard of the outermost ward… in an attempt to discourage the practice of gawking at patients, doctors inadvertently sanctioned it when they began to charge an entrance fee for visitors. This type of tourism was not unusual in the nineteenth century, when upper-class ladies visited orphanages and schools for the deaf, and families strolled the grounds of picturesque cemeteries."[88]
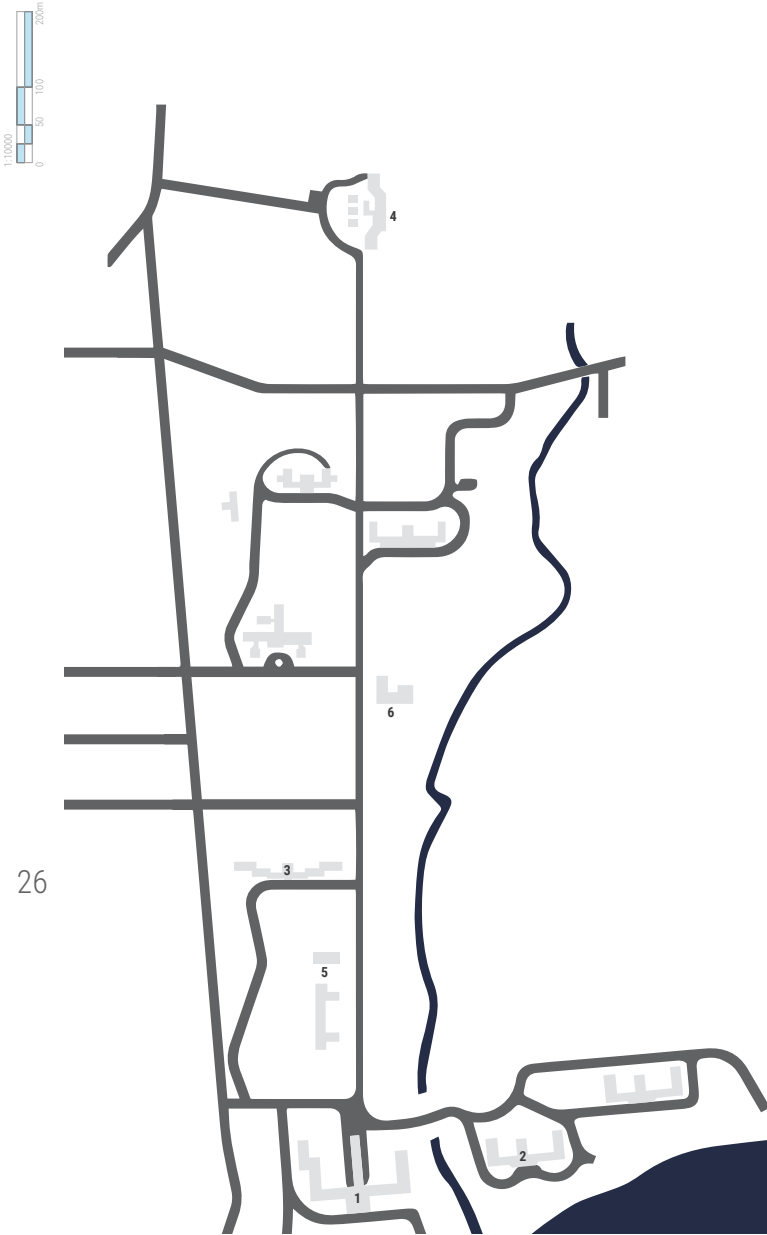
COTTAGE MODEL

Madness in the mid nineteenth century was seemingly increasing, as large-scale asylums were frantically being built in an effort to accommodate the high demand for support.[89] Granted, the common public perception was an outcome of the number of patients deemed incurable—syphilis and other diseases were later proved to be considerable contributors.[90] Overcrowding "undermined the doctor's stature as healers,"[91] and with time, environmental determinism (the idea that careful control of building design could cure madness) demonstrated its shortcomings. The large quantity of long term patients could no longer be ignored, and in 1869 the Willard State Hospital for the chronically insane in New York was the first institution to recognize "the existence of patients who would be dependent on the state until their death."[92] Rather than following the popularized linear path plan, the cottages at the Willard State Hospital were built by demand, arising in meaningless clusters of patients separated without a master plan layout.[93]

1. Chapin House [Main Building]
2. Pines [Male Patient Ward]
3. Maples [Male Patient Ward]
4. Grandview [Agricultural College Building]
5. Hadley Hall [Auditorium]
6. Sunnycroft
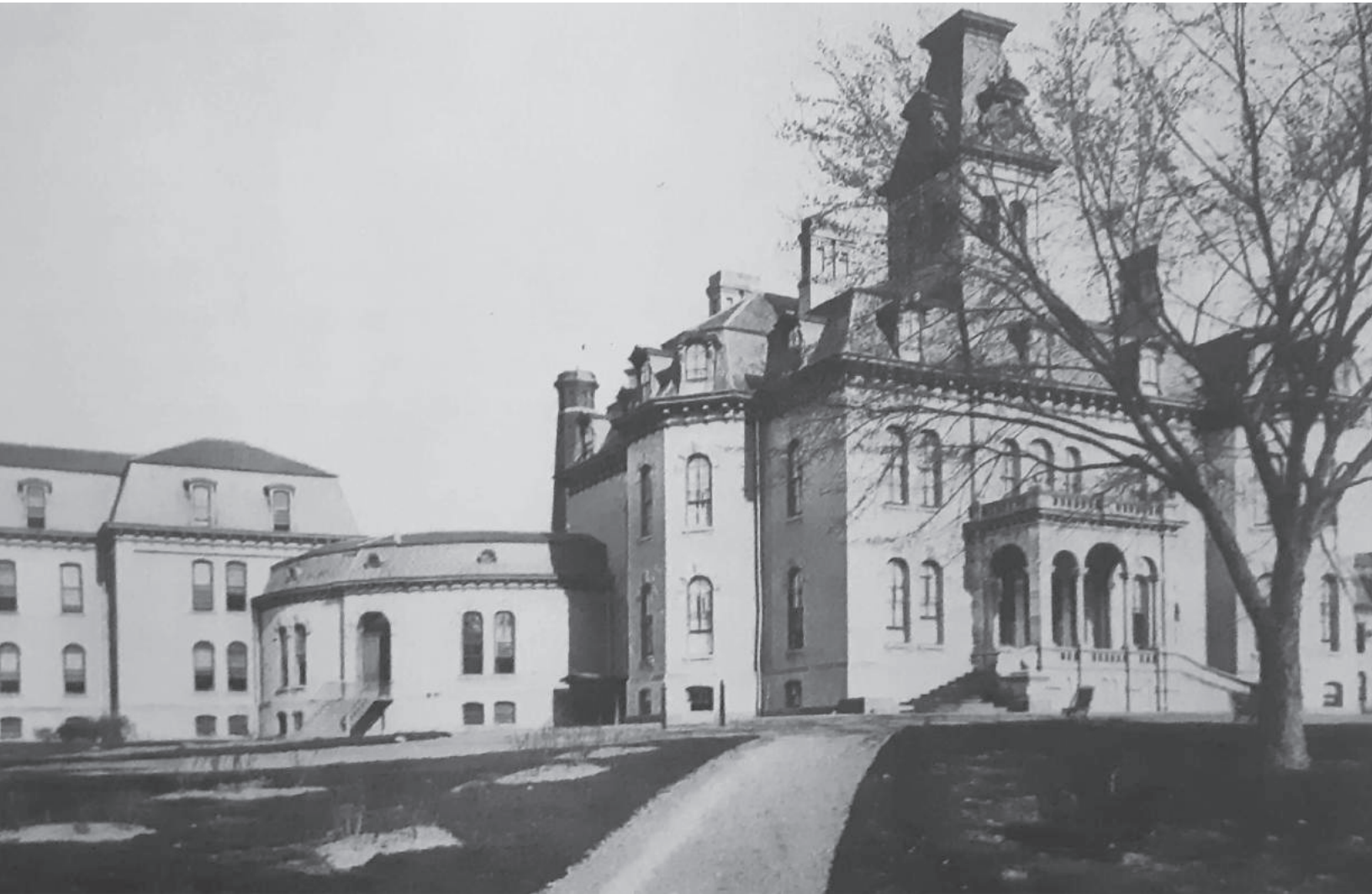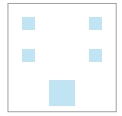
VILLAGE MODEL

By the late nineteenth century public confidence in the asylum was at a low, and a widespread variety of critics from diverse disciplines questioned the values and disadvantages between the congregate linear models (such as The New Jersey State Lunatic Asylum) and the segregate cottage models (such as the Willard State Hospital) of asylums.[94] The village model was:

> "...a combined system with one large hospital for acute patients and cottages for the incurable cases would serve both groups well. Medical officers could keep a close watch on the patients in the main asylum, and other attendants would care for the docile men and women at state expense on the asylum grounds."[95]

In 1878, James Rowland Willett designed the Kankakee complex; a village master plan which came to be a model for many asylum architects.[96] The buildings, laid out along suburban-like avenue circulation paths, were too large to resemble conventional houses, but strove for domesticity through the addition of front porches and gardens.[97] Since therapeutic treatments were still devoid of any meaningful developments, these villages were ultimately no more than holding spaces for the mentally ill to be contained until they die. The essence of environmental determinism had strong potential at the outset; although, context alone is not the only factor which can control behaviour and should not be the only design consideration. Regardless of the spatial model being linear, cottage or village, this perspective was most explored during a time when society was perhaps not yet prepared to have the open doctor-patient discussions necessary to facilitate any viable solutions under this philosophical framework.

28
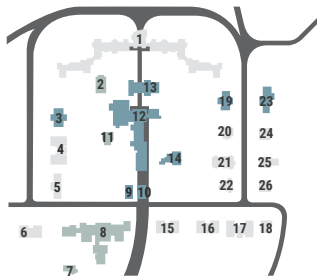
1. Main Wards and Administrative Building
2. Amusement Hall
3. North Infirmary
4. Patient Ward [Disturbed]
5. Patient Ward
6. Patient Ward [Disturbed]
7. Green House
8. Patient Work House/ General Dining
9. Business Office
10. Supplies
11. Female Bath House/ Morgue
12. Laundry/ Engineer Shop
13. Kitchen/ Bakery
14. Male Bath House/ Fire Department
19. South Infirmary
15-18. Patient Ward
23. Relief Ward
20-16. Patient Ward

Common
Patient
Staff

MADNESS AS PSYCHOLOGICAL

As the failures of architectural cures came to light, many doctors revisited the notion of madness as physical—treatments started to include electroconvulsive shock therapy, fever inducing injections, such as malaria infected blood, and even surgical lobotomy.[98] The popular darwinist inspired perspective that characterized late-nineteenth century culture eventually led to the compulsory 'sterilization' or mass execution of the mad for the 'purity' of the human species during WWII.[99] Sigmund Freud challenged these biologically based therapies with the development of psychoanalysis:

"a method of analyzing psychic phenomena and treating emotional disorders that involves treatment session[s] during which the patient is encouraged to talk freely about personal experiences and especially about early childhood and dreams."[100]
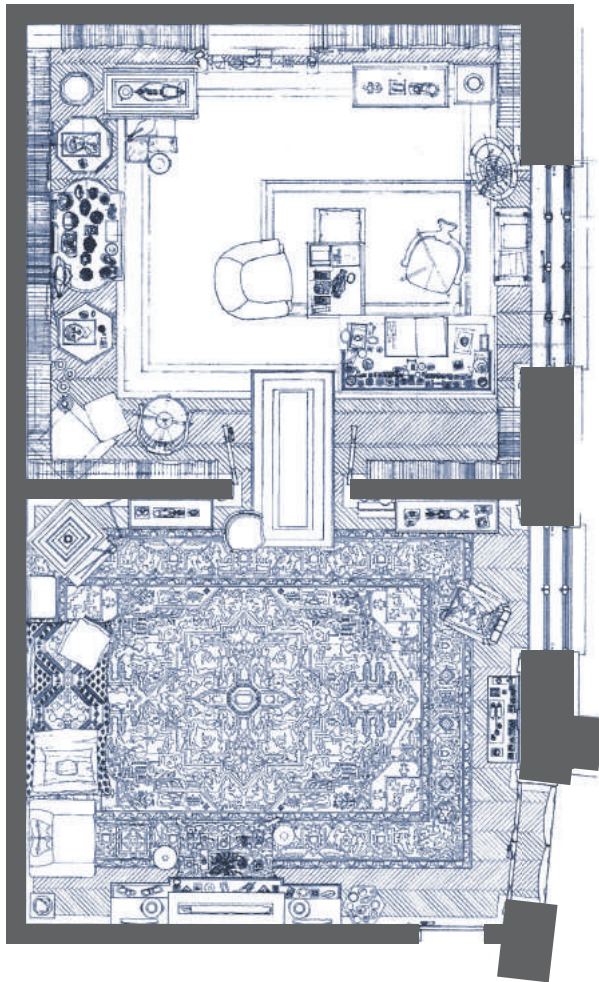
Freud posited that "madness had meaning, [...] was produced at the level of meaning, and had to be cured at the level of meaning."[101] In the years between 1895 and 1905, Freud revolutionized mental illness therapies with the idea that there are certain fundamental factors underlying all human decisions and emotions.[102] Madness "was not just a problem of the other, therefore, not a condition unique to the degraded and degenerate, but on the contrary, lurked to some degree within all of us."[103] The office for Freud was a way to further enhance his psychotherapeutic process.[104] Freud curated the doctor-patient power relationship with by way of the spatial manipulation of furniture and artifacts in his office at Berggasse 19 in Vienna.[105] Freud's chair is strategically placed behind the chaise-lounge and out of the patient's perspective within the consulting room in the Berggasse 19 office for example.[106] By "positioning himself in the place of "the one who must not be looked at," Freud immediately assumes the status of an otherworldly presence."[107] Whether his patients experienced this control of security as invasive surveillance or as comforting is uncertain, although the number of psychiatrists doubled over the twentieth century and would come to constitute the majority of mental health practitioners by 1973.[108] Yet the methods for treating madness as psychological were not cures to mental illness; psychiatry alone was "incapable of relieving the miseries of most schizophrenics and manic-depressives."[109] With the development of various approaches to psychiatric care, the understanding of madness as psychological flooded popular culture—art, novels, films, etc.[110] The film *One Flew Over the Cuckoo's Nest* communicated that psychiatry was essentially a method for enforcing conformity.[111]

The office remains the most common architectural model for addressing madness in contemporary society, and is the site for leading forms of psychotherapy today, such as cognitive behavioral therapy, interpersonal therapy, mentalization-based therapy, and psychodynamic psychotherapy—all working towards creating a variety of solutions to match the diversity of society.[112] There is arguably a fraction of psychological madness within fundamental human nature that requires proactive maintenance; however for many people struggling with depression or anxiety, the purely psychological models to date are insufficient.
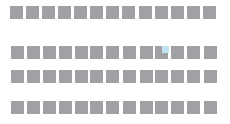
MADNESS AS CHEMICAL

The last quarter of the twentieth century was characterized by both the widespread fall of the asylum typology across North America and Europe, and the rise of psychopharmacology ("the study of the effect of drugs on the mind and behavior."[113])[114] Particularly at the outset, doctor-prescribed drugs were "addicting, overdoses could easily prove fatal, and withdrawal symptoms when they were discontinued were highly unpleasant, even dangerous."[115] Thorazine for example had been tested on a mere 104 subjects before being distributed to over 2 million patients across the United States thirteen months later. Pharmaceuticals had <u>control</u> of "the most

profitable industrial sector on the planet,"[116] and while a portion of patients benefit from various mental illness symptom alleviation "a very large fraction - well over 50% - do not obtain even this benefit from their drugs."[117]

While it may take several attempts to personalize dosages and chemical compounds to each individual patient, psychopharmacology has become much more regulated in the twenty first century despite it still being stigmatized for being a <u>shame</u>ful crutch which may numb the patient's ability to experience life fully. Combatting madness with chemical compositions alone is not a feasible proactive approach to such diverse conditions across individuals.

CLUBHOUSE MODEL

People struggling with mental health lack spaces for transition from the medicalization of hospitals, back into society.[118] "Where does a recovered person (whether he or she has benefited from psychoactive drugs or from any other kind of therapy) go after a hospital stay?"[119] The Fountain House, which opened in 1948 in New York,[120] began with the casual meeting of friends to help each other collectively reintegrate into their community.[121] The clubhouse model is most clearly described by outlining what it chooses not to be— it is not an asylum or a treatment center.[122] Most importantly the clubhouse model is decidedly not a residence, as the typology utilises this factor as a tactic for encouraging movement through the procession of urban <u>path</u>s and interaction with society; "one of the first steps for a person learning to live outside a mental hospital."[123]

Clubhouses focus on creating a supportive community that does not define a person by their struggle with mental illness, and further communicates to the greater public that everyone is worth of social interaction and dignity.[124] The clubhouse model understands madness not only as chemical, but arguably also as environmental. Most clubhouses occupying the empty pockets of the urban fabric (such as a room in a community centre, or a church basement), and while this is an improvement towards a more inclusive embodied cultural perspective, unfortunately it is exclusively a reactive model. The current state of holistic health resources on post-secondary campuses necessitates a more proactive approach.
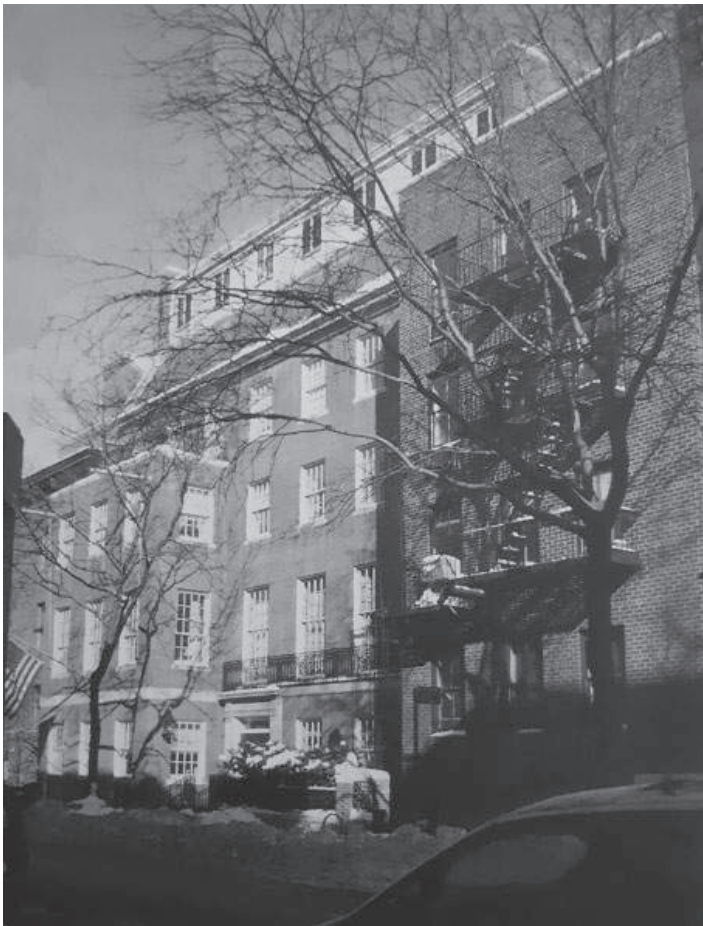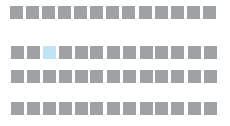
MADNESS AS CULTURE

The position of this thesis argues that madness isn't necessary definitively divine or chemical as outlined in one of the above categories; however, not addressing the fact that mental health influences everything one does, and not practicing any proactive self-care or maintenance of it, is decidedly mad. This cultural shift in perspective that holistic health is inclusive of, or is even underpinned by mental health, understands that society as a place supportive of overall wellbeing. This is not to undermine or detract from the progress of medicine, but rather to highlight the equal importance of the public realm in making mental health services both accessible and approachable in an equitable manner.

"[Madness] remains a fundamental puzzle, a reproach to reason, inescapably part and parcel of civilization itself."[125]

HABITAT MODEL

Recognizing the basic design ingredients (including texture, path, context and light) used by asylum architects across the outlined models, and the negative ways in which they were designed with regards to concepts of self, control, security and time, communicate intentions that match the anecdotal stories of routine, hierarchy, surveillance and shame experienced. The Laurentian University Habitat for Holistic Healing and Wellbeing serves as the first model that analyzes the ingredients, concepts and outcomes of both negative and positive design methodologies, in order to customize an atmosphere of healing and wellness.

THE POSITIVE

EMPOWERMENT, CURIOSITY, COMFORT, DECOMPRESSION

SHINGONSHU HOMPUKUKI WATER TEMPLE
VIETNAM WAR MEMORIAL
HILL OF THE BUDDHA
THORNELOE CHAPEL

If asylum spaces and phenomenological spaces exist through to the same design ingredients including texture, path, context and light, then phenomenological designers can employ tactics that address concepts such as self, control, security and time, in order to curate environments of empowerment, curiosity, comfort and decompression. By avoiding the negative failure patterns within the previously outlined asylum models, customizing imitative tactics found in phenomenologically designed spaces which have been experienced positively, this thesis offers the Laurentian University Habitat for Holistic Healing and Health.

"Architecture, more fully than other art forms, engages the immediacy of our sensory perceptions. The passage of time; light, shadow, and transparency; color phenomena, texture, material and detail all participate in the complete experience of architecture."[126]

PHENOMENOLOGY

The term phenomenology refers to "the branch of philosophy that deals with what you see, hear, feel, etc. in contrast to what may actually be real or true about the world."[127] Phenomenology, a philosophical movement predominantly shaped by theorists Edmund Husserl and Martin Heidegger,[128] never established prescribed tenets that developed into a system, but rather is seen as a general manner of interpreting one's surroundings.[129] The architectural phenomenologist, "in an era in which architecture has lost its metaphysical dimension and is no longer a privileged form of reconciliation between [hu]man[s] and [their] world,"[130] uses theory as a method or lens through which the authentic questions within the public realm are exposed, in order to further articulate their critical position within their own work. Phenomenology is the contemplation of essences, and it is through the curated intertwining of colour, light, form, and space that the architect may manifest these essenc-

es back into the built environment. This holds the potential to proliferate the phenomena that arise from various designs, landscapes, and programs; and further to raise the quality of daily human experience.[131] In this way, architecture may use phenomenology as a technique for bridging the disconnect between theory and practice.

By reviewing phenomenological case studies and design tactics through the concepts of self, control, security, and time, one can deduce the designers desired experiential outcomes. The following contemporary case studies have been selected primarily for their reputation for being able to elicit an emotional or phenomenological experience (empowerment, curiosity, comfort and decompression), but further because they do not medicalize the body or the mind. Likening the previously outlined clubhouse model, this non-medicalization is integral to creating a supportive environment that does not define a person by their illness; moreover, it is essential to communicate universal egalitarianism in that everyone is worthy of social interaction and dignity regardless of any struggle with mental wellbeing. Although these case studies are listed according to texture, path, context and light, as the primary reason for being drawn to each, this research understands that these elements (or architectural tools/ ingredients in a 'measure-free recipe') are inextricably intertwined.

37

SHINGONSHU HOMPUKUKI WATER TEMPLE

Tadao Ando
Awaji, Hyōgo, Japan: 1991

"The design of the temple creates a sequence of experiences that transcends everyday life."[137]

Architect Tadao Ando's design of the Shingonshu Hompukuki Water Temple, built in 1991 on Awaji Island in Hyōgo, Japan for the Shingon Buddhist sect, occupies the top of a hill overlooking Osaka Bay.[132] The entrance stairwell, bisecting the lotus plant pond (which constitutes the oval roof of the temple), descends into the earth and under the water; effectively submerging visitors into their landscaped context.[133] The interior, characterized by a quality of light likening a saturated sunset, is organized by gridded traditional Buddhist vermillion red timber pillars and latticed screens which stain the natural light that pours into the temple.[134] This condition of light penetrates deep into the temple by way of the surrounding polished concrete walls—this material texture allows the light to travel across and reflect around to thoroughly fill the spaces.[135] Visitors, following a path curating the exterior sweeping vistas to the intimate glow of the interior, are subjected to a succession of atmospheres.[136] The procession down the intimate entrance stairwell, cutting through the lotus flower filled water with polished but thick concrete walls, diverges from the typical metaphorical ascension to a spiritual space in order to isolate and accentuate the bodily experience. The distinctly memorable threshold from secular to sacred space, promotes self-awareness in body and mind. The design creates the haptic conditions through emphasized texture that allow the visitor to pause to feel fully the conditions of their reality, and empower them to control their experience at their own pace.
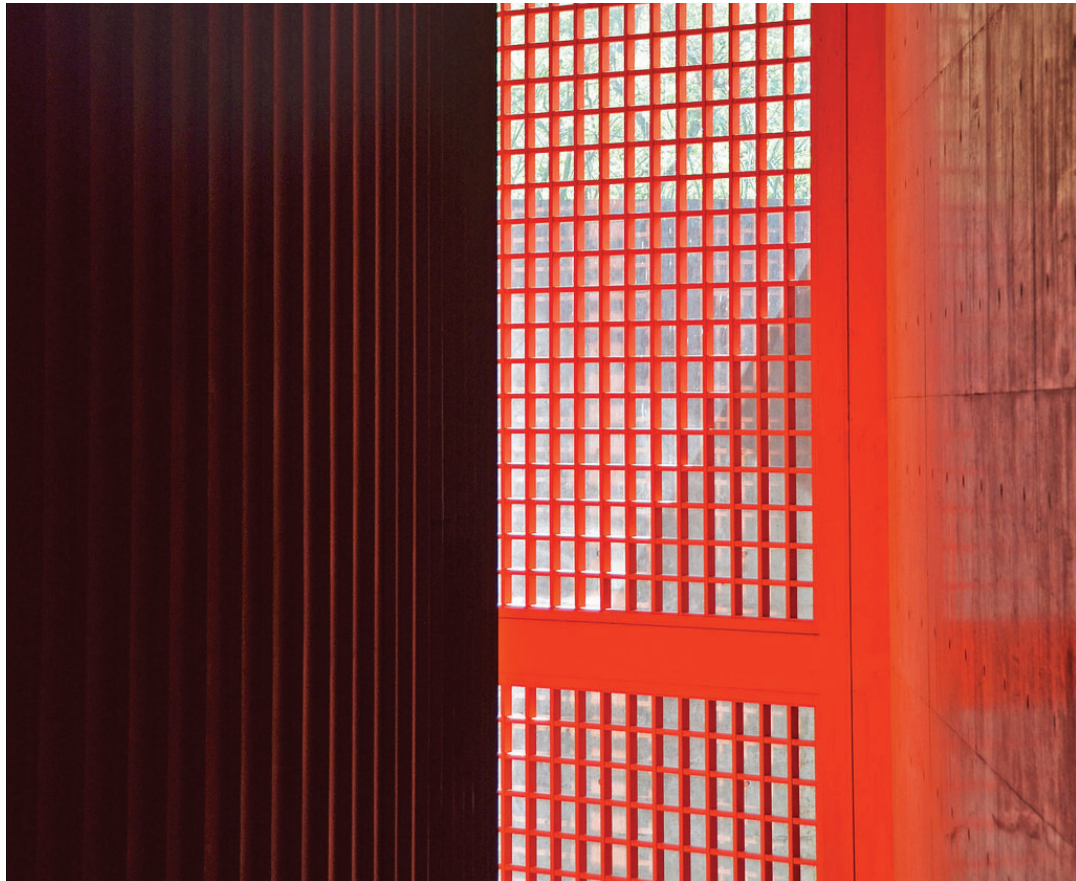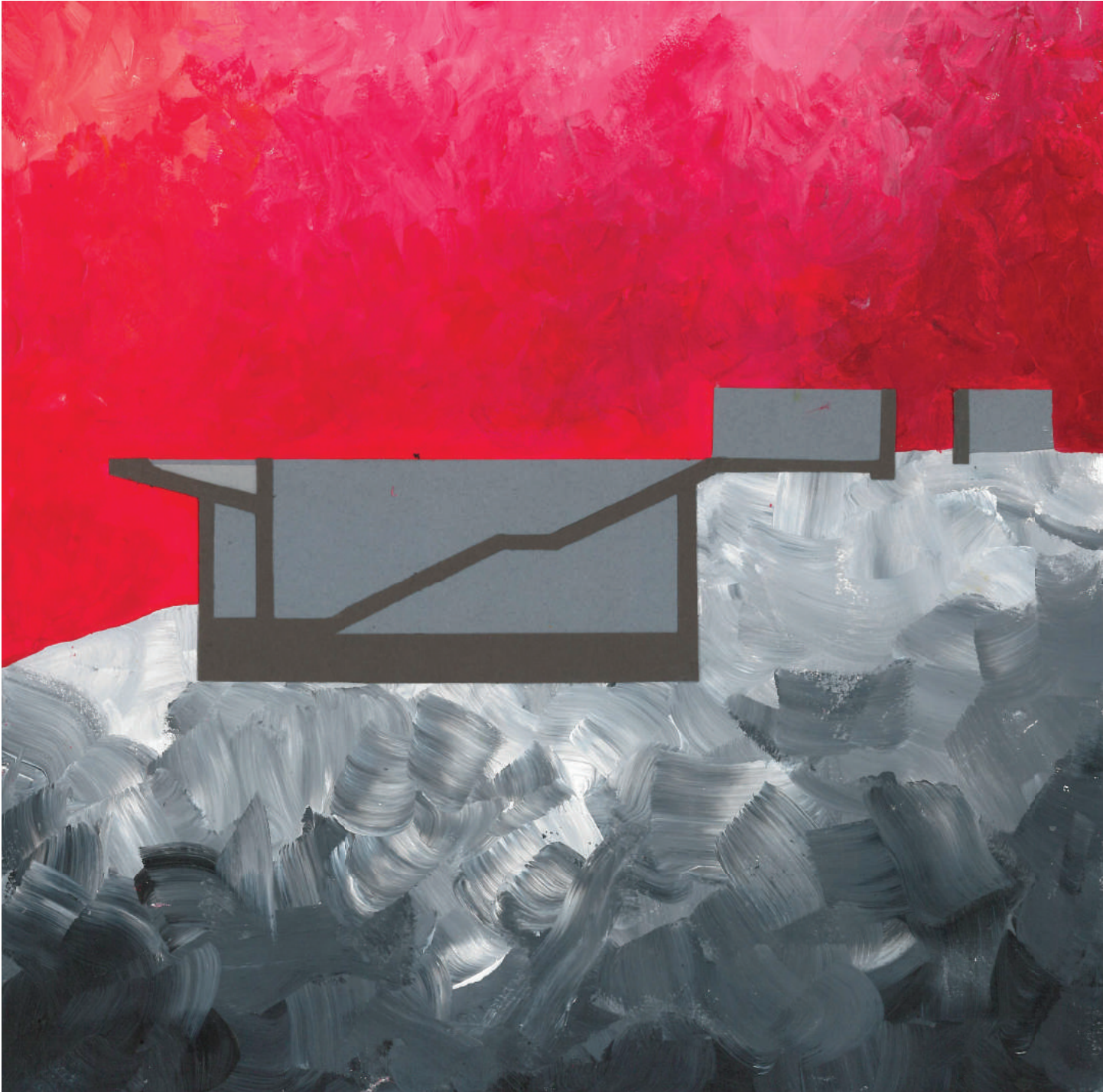
VIETNAM WAR MEMORIAL

Maya Lin
Washington, DC, USA: 1982

"...few anticipated the profound effect it would have on visitors, and more broadly, how it would change future memorials."[141]

Carved into the landscape, Maya Lin's design of the Vietnam War Memorial is a manifestation of the deep scars of war on society. Two black mirrored granite walls documented to be "each 246 feet 9 inches (75.2 meters) long, both dropping from grade to a central apex height of 10 feet 3 inches (3.1 meters)."[138] Light reflects off the polished texture of the granite, leaving the nonhierarchical list of names of those who died carved in relief; this physical space in the relief signifies a small offering to each person engraved. Visitors walk into the earth along the path of the wall—"a line that both divides and connects the living and the dead,"[139] serving as "an interface [...] between our world and the quieter, darker, more peaceful world beyond."[140]

Lin simultaneously reinforces egalitarianism at the microscale in the way that the names engraved are listed non-hierarchically. Beyond the strong directionality of path along the face of the walls of the memorial, the visitor ultimately controls the experiential sequencing of the procession to the memorial through the surrounding park. The depth of landscaped public space which encircles the memorial provokes curiosity, as it acts as the threshold that creates the conditions that help trigger the direction of the visitors focus towards contemplation and the haptic qualities of space. The threshold, with its many supplementary paths, gardens, and memorials, allows the visitors breathing space to recognize the difference between the context of the larger urban fabric and a space for contemplation.
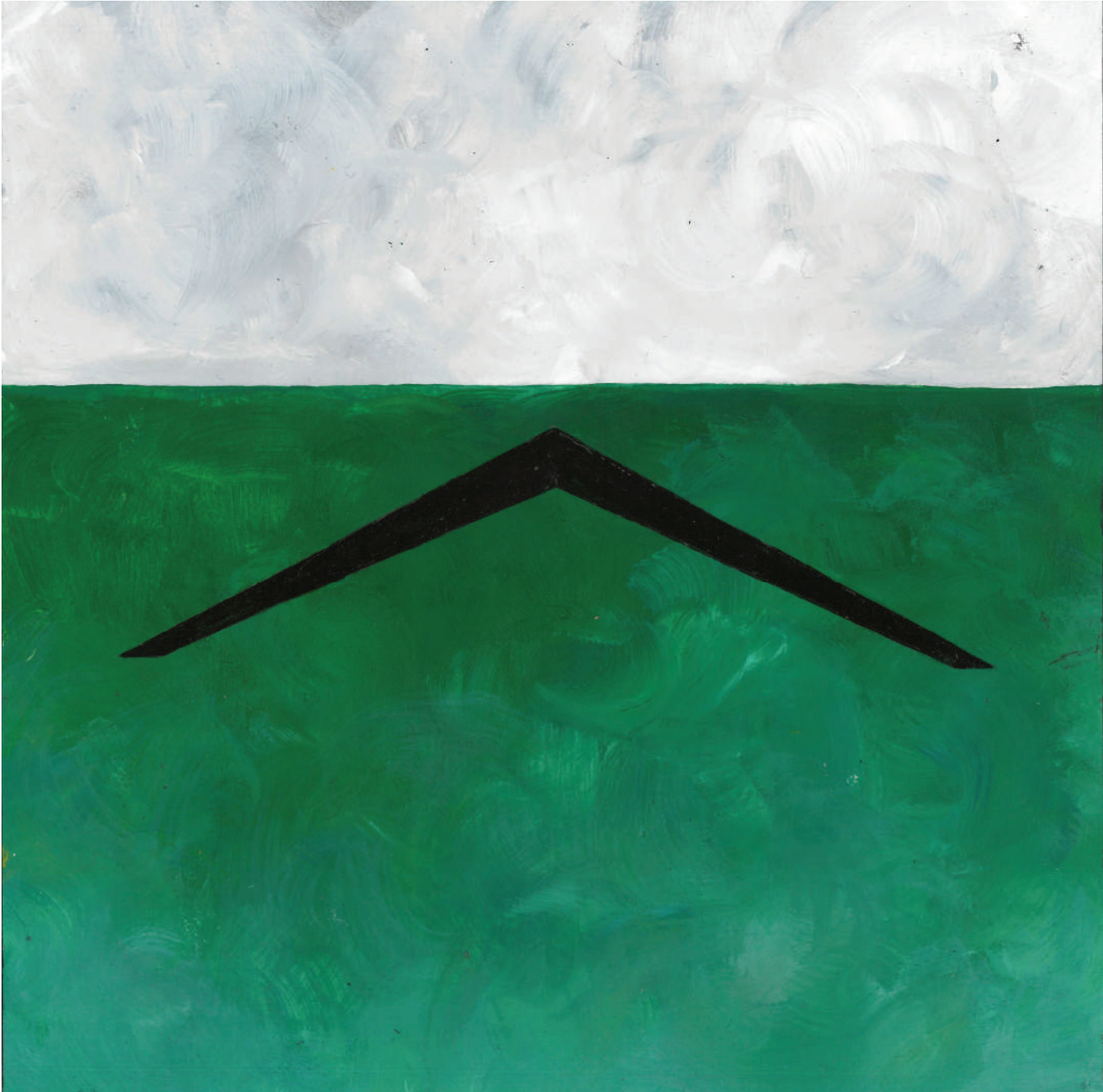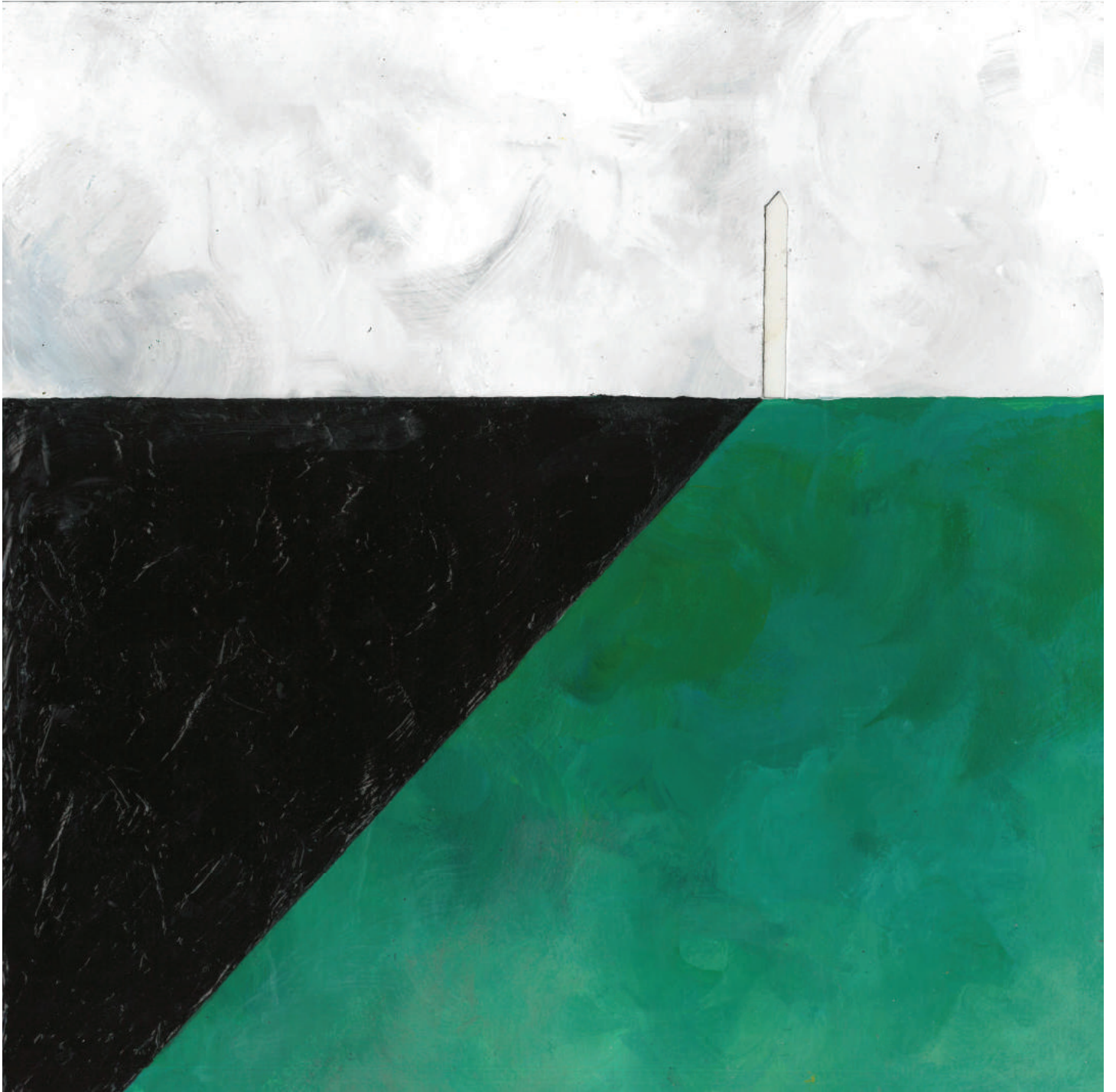
IN MEMORIAM

HILL OF THE BUDDHA

Tadao Ando
Sapporo, Hokkaido, Japan: 2015

"Until now, the buddha statue has stood alone in the field, giving an unrestful impression. The client wanted to give visitors a more serene appreciation of the buddha [...] Our idea was to cover the buddha below the head with a hill of lavender plants."[147]

At Tadao Ando's Hill of the Buddha at the Sapporo Makomanai Takino Cemetery in Hokkaido, Japan, a gently sloping earthen mound blanketed by 150 000 lavender plants, surrounds a 13.5 meter tall stone sculpture of the Buddha, immersing it within its context and reducing the visitor's experience of the intimidating approach to a more familiar scale.[142] Visitors follow the path through the lavender landscape procession, across a 40 meter long tunnel threshold, in order to circumambulate around the foot of the statue.[143] The texture of the seemingly floating folded concrete arches which comprise the tunnel, contradict the material's perceived inherent heavy characteristics, and create a dim but comfortably intimate atmosphere.[144] Apart from a single circular light well in the mound directly above the Buddha's head, which allows natural daylight to travel around the space with time.[145] As seen in the pathway design of Tadao Ando's Hill of the Buddha, partially restricting a complete view of the statue while also framing it not only implies a power or sacredness to the only space in which one can experience the statue in its entirety, but this simplification of wayfinding can also provide visitors a sense of security in understanding the spatial configuration. This is further underlined by the integration of the landscape and natural elements, which research has proven to aid in the experience of comfort and security by providing a calming aspect of the experience.[146]

THORNELOE CHAPEL

Townend, Stefur, Baleshta & Pfister
Sudbury, ON. Canada: 1968

Townend, Stefura & Baleshta Architects' Fielding Memorial Chapel of St. Mark or Thorneloe Chapel is a one-room Anglican sacred space which holds the seat of the tallest hilltop amongst the context of Laurentian University's main campus in Sudbury, Canada.[148] After arriving at the summit of the site, visitors follow the descending path into the earth and the heart of the light filled chapel space. The light enters through strips of stained glass between and rakes across the rough texture of the seven triangular concrete walls which seeming rise from the earth in a spiral to extend toward the heavens. As the hue of light in Thorneloe chapel evolves throughout the day according to the position of the sun, it is clear that buildings can manifest time through the movement of natural light. With access to the Chapel on the Laurentian campus, anecdotes match personal experience of decompression.

"The movement of the sun from east to west transforms the colour of the light in the sanctuary. In the early morning the light is coloured a deep blue. At midday, it is cyan, and in the early evening, it is yellow. The changing atmosphere in the sanctuary links the worshippers to the cyclical movement of the heavens."[149]
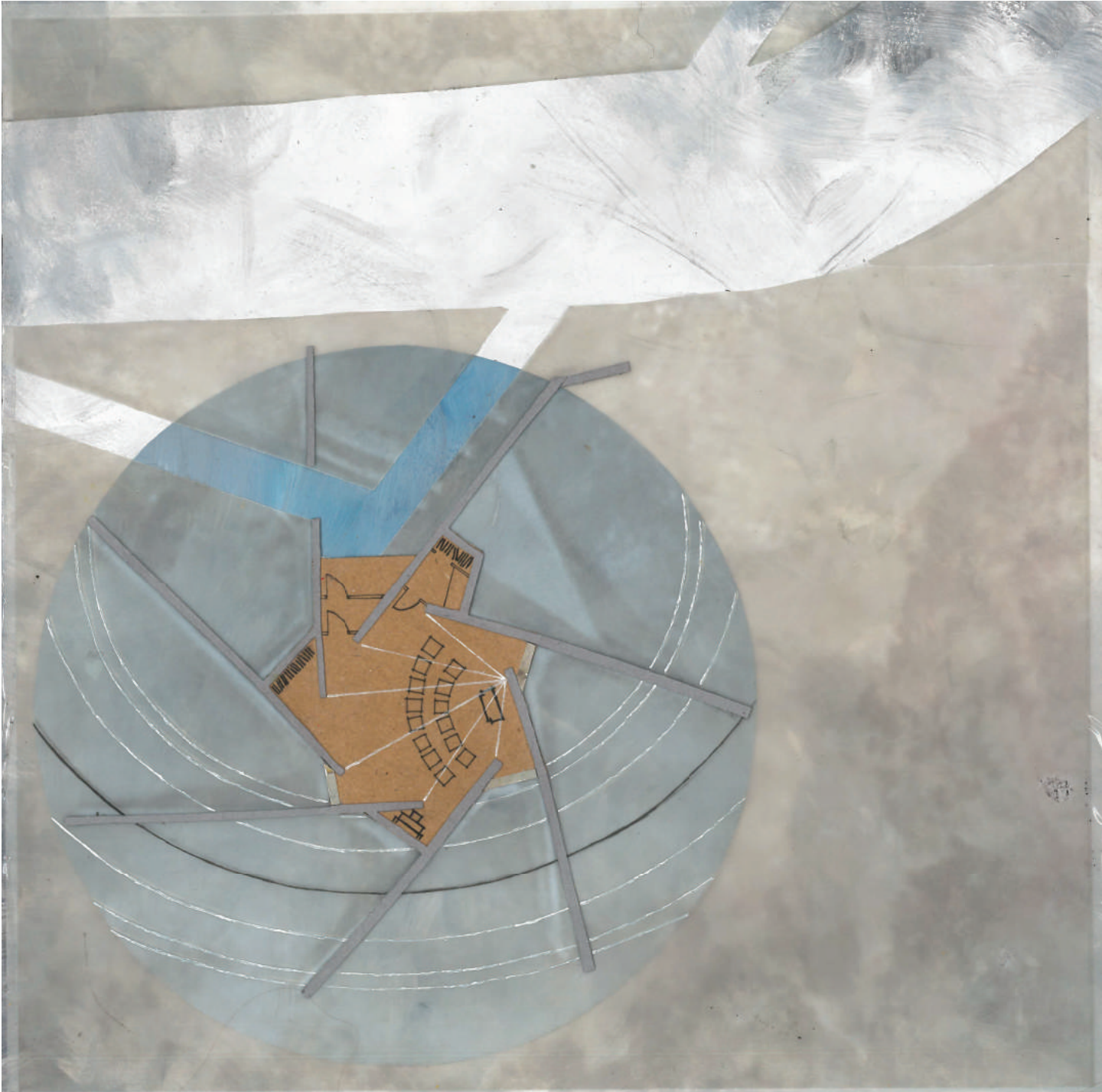
THE DESIGN
EMPOWERMENT, CURIOSITY, COMFORT, DECOMPRESSION

PSYCHOLOGY

PHENOMENOLOGY

ARCHITECTURE

"tea's power and magic is not found in its leaves, in the liquid it creates, or in our relationship to these things, but in its ability to help us feel connected to our shared humanity."[150]
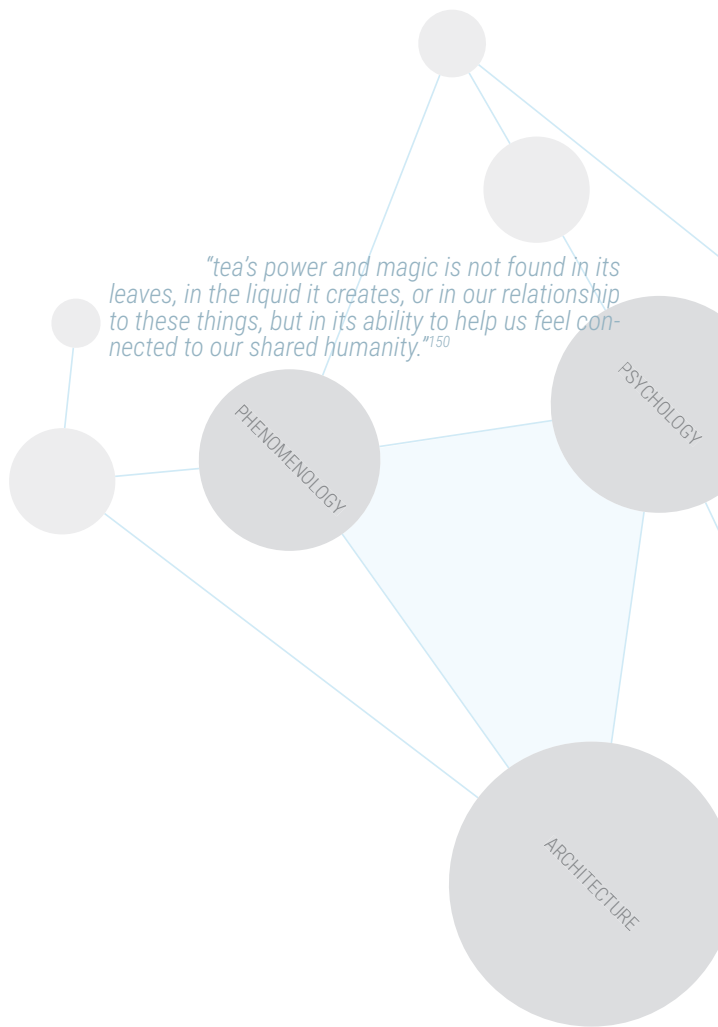
THE PROGRAM

The design of the Laurentian University Habitat for Holistic Healing and Wellness is the first 'measure-free recipe' taste test which hopes to mediate and promote a positive cultural shift for spaces of healing and wellbeing. For the purposes of security and preferences for confidentiality, it was immediately clear that the design (1) should be mixed programming to compliment the mental health support. In addition to this, patterns in the contemporary case studies suggest that this project (2) should be heavily integrated into the landscape. Further, to accommodate the subjectivity of comfort, the design (3) should provide a varying of spaces from public to private. Finally, because various creative forms of making is a personal ritual therapy, this thesis intends to (4) design spaces that foster empowerment, curiosity, comfort and decompression through ritual making.

In an effort to encompass the '4' noted considerations above, this thesis proposes that the clinic be paired with a garden. When combined with some of the existing mental health programs provided by Laurentian University, the garden—having a variety of spatial compositions and privacy options to choose from—offers rooms that can be booked out for mental health meetings with an on campus therapist. The garden can also host a student-run club in which members can learn to grow, harvest, prepare and enjoy their own herbal teas on a regular basis. A small tea shop in the greenhouse can also help contribute to or compensate for some of the operating costs of the project. It is through these potential programs that this thesis explores the different types of healthy connections, habits and relationships that can develop when people take time for themselves and for tea.

Tea has been used as a medicine across cultures internationally; however, it is the ritualistic mindfulness of tea that inspires the design of the Laurentian student wellness center. The Japanese tea ceremony for example, is a ritual of preparing tea as a meditative pattern of behaviour or lifestyle habit. There are material experiences associated with preparing oneself for this specific ritualized practice, which have been developed over centuries; the tea house aesthetic has been curated around elevating the sensorial experience of focusing on tea. Types of tea vary regionally based off of what is generally accessible locally, and the resulting tea rituals are manifested both spatially as well as materially. In this way, the type of plant used for tea is more significant to the design of the wellness center for the resulting ritual than for the physical medicinal properties.

THE INSPIRATION

This thesis sources inspiration from the dandelion not only because it has the capacity to be made into tea, but also because it is the infamous antagonist combatting the lawn—a designed object and community standard enforced generally unquestioned. A weed, such as the dandelion, is defined as "a valueless plant growing wild, especially one that grows on cultivated ground to the exclusion or injury of the desired crop."[151] This definition is based solely on the individual's preferences, perceptions or the arbitrarily fabricated value system of society. Making collaborative commitments to re-evaluating common public perceptions whenever possible can open various conversations about some of the irrational, groundless stereotypes troubling popular western culture. Once one begins to lay bare the unbiased data, it becomes increasingly clear that the many hurtful stereotypes that remain unchanging, have commonly been accepted at face value without any basic questioning. The seemingly fanatical public aversion that swells over simple dandelions for example, is rooted in misunderstanding; as seen in Ted Steinberg's book *American Green: The Obsessive Quest for the Perfect Lawn*, western society's fixation on weeds or dandelions—a ruinous plague scattered across North American suburban lawns—stems from an underlying association between the perfect lawn and the concept of the American Dream.[152]

74

The *99% Invisible* podcast "Lawn Order" asserts that "grass may be a plant, but a lawn is a designed object."[153] The lawn originated as an object of displayed power amongst "English elites to show off that they were so wealthy that they didn't need their land to grow food."[154] Following post WWII suburbanization however, the lawn was adopted by the middle class and became a symbol of "moral force for the good of civilization."[155] In *The Architecture of Country Houses*, author A.J. Downing states that "when smiling lawns and tasteful cottages begin to embellish a country, we know that order and culture are established."[156] Despite lawns having indisputable environmental, fiscal and political ramifications, a dandelion covered lawn grew to the equivalent eyesore of a boarded up window.[157] When held as evidence that a homeowner has deviated from upholding acceptable community norms, mere dandelions become a weapon in psychological shame warfare between neighbors.[158] While the underlying stigma has compelled most citizens to adhere to their community standards, some have begun to question whether or not dandelions are truly the menace they are framed as. Prior to the 1800s, North Americans would "pull the grass out of their yards to make room for dandelions and other useful "weeds" such as chickweed, malva, and chamomile."[159] The stems, leaves, roots and flowers of dandelions have been used for centuries amongst many Native American tribes in a variety of ways, including food, natural dyes, and herbal medicine.[160] Medicinally, dandelions can be prepared in a variety of ways—teas, tinctures, juices, powders, etcetera—in order to help with cleansing the digestive system, elevating one's mood, alleviating headaches, and stabilizing blood sugar, amongst other things.[161] With further questioning of this seemingly simple aspect of everyday cultural norms, it becomes apparent that the dandelion has been pigeonholed into its categorization as a pest. This common public perception is based on an irrational cultural stigma born from a fear of shame and a self-conscious desire to curate ones outward image to the judgmental eye of society. Reevaluating the value of mere dandelions can be a part of our public responsibility to build a culture of criticality grounded in both community and self-care.
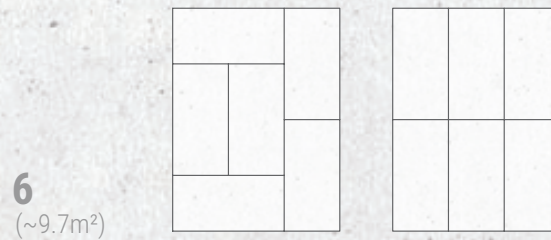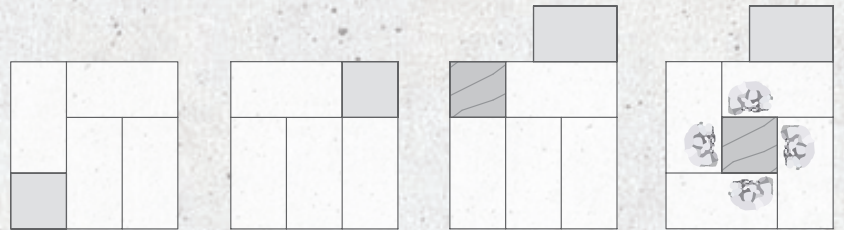
TRADITIONAL JAPANESE TEA MAT LAYOUTS

900mm

1800mm
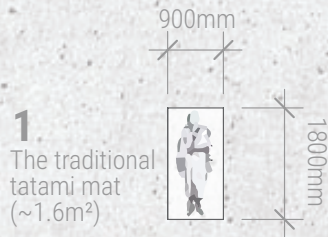
1
The traditional
tatami mat
(~1.6m²)

2
(~3.2 - 4.5m²)

tokonoma

3
(~4.9 - 6.1m²)
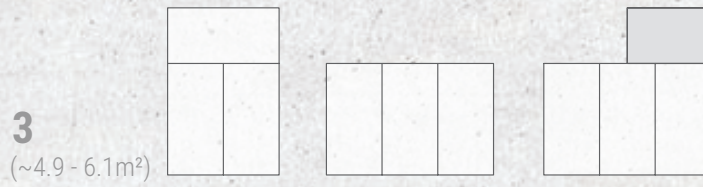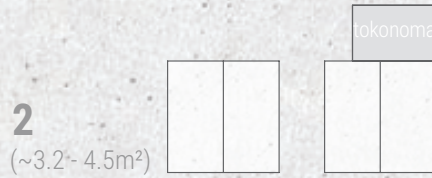
4.5
The most
common
traditional tea
formats
(~7.3 - 8.5m²)

6
(~9.7m²)

8
(~13m²)

10
(~16.2m²)
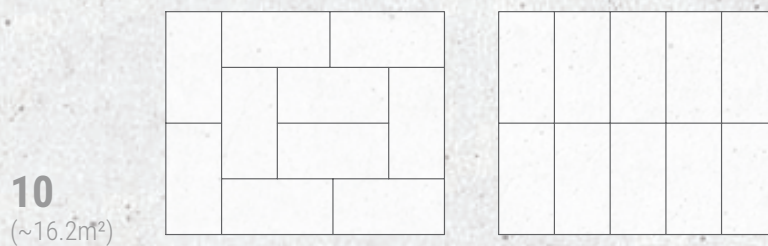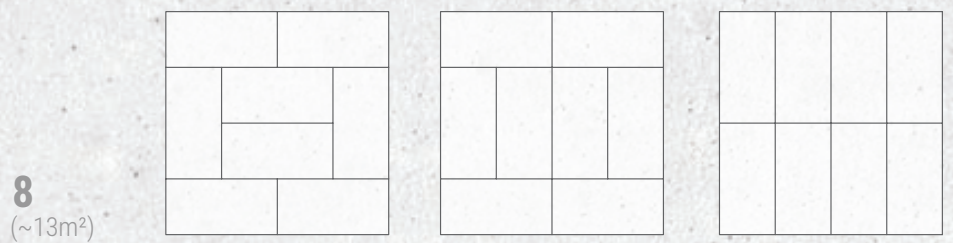
Intrigued by the various tatami mat layouts and how that geometric grid can permeate into the design of the Laurentian University Habitat for Holistic Healing and Wellness, the following creative exercise aided in understanding the grid as trans-scalar.

Site analysis began with a walking tour of the Laurentian University in Sudbury and analysis of the overall campus layout. Imagined amidst the forested area atop a dramatic bedrock topography, the building neighbours the university residences and straddles an existing footpath created by the students over time.

RAMSEY LAKE ROAD

SOUTH BAY ROAD

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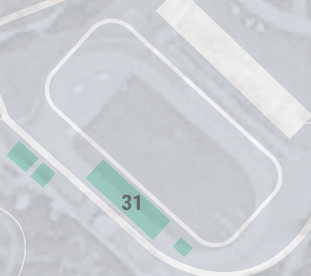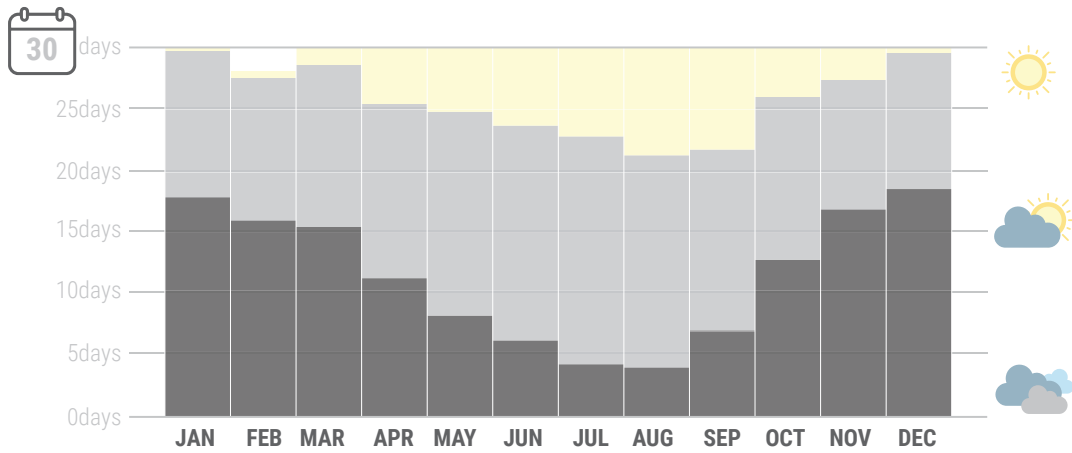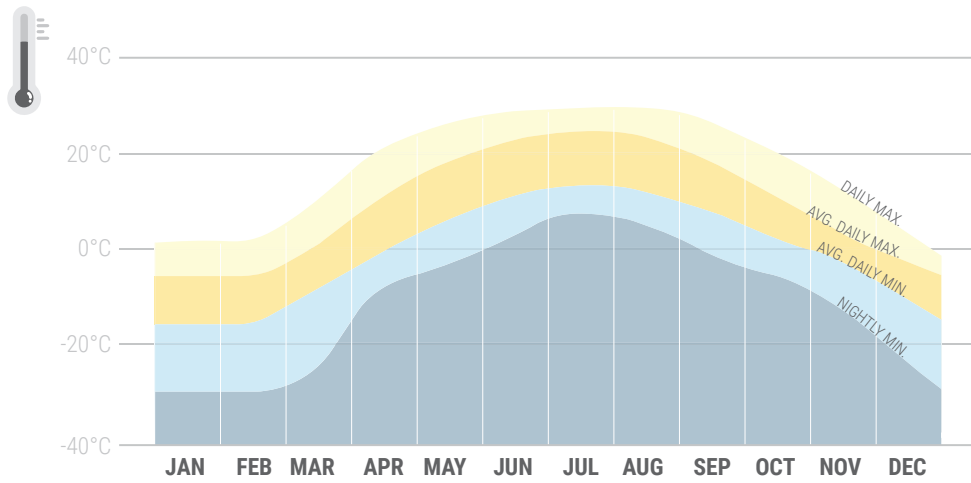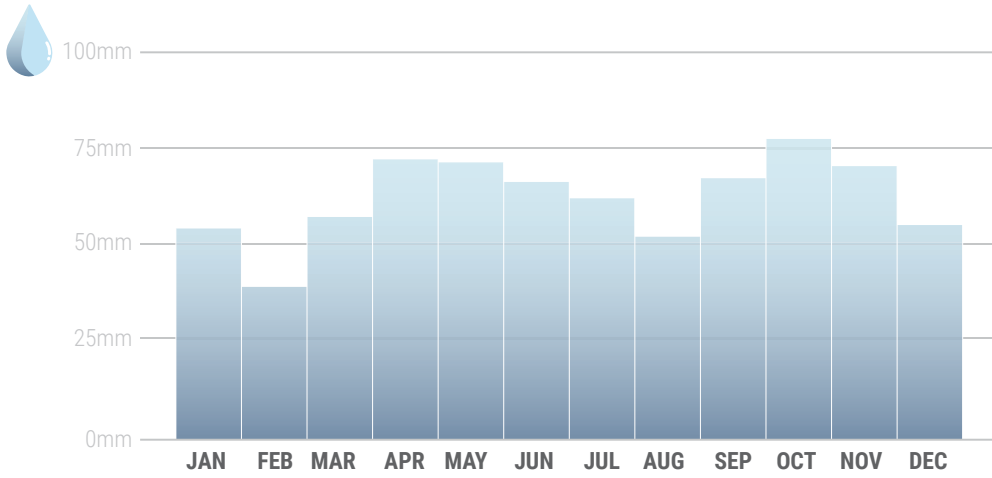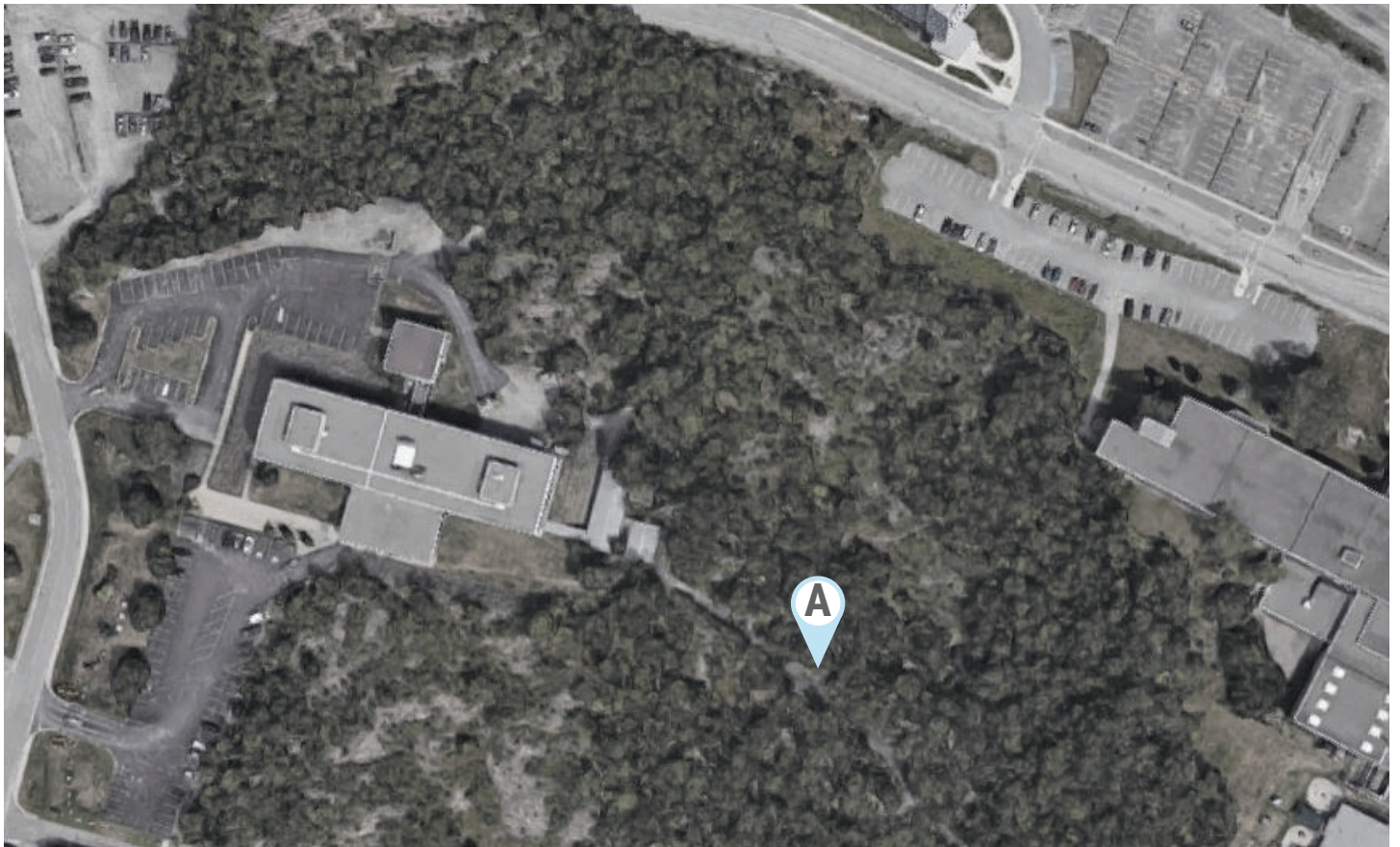
Further photograph-ing of the site revealed that the student's path had been lined with fallen trees, and that small areas for student relaxation amongst nature had already be-gun to arise informally. This was not only evidence that an oasis was needed in the academic environment, but also confirmed an intuition that this site has the potential to offer respite.
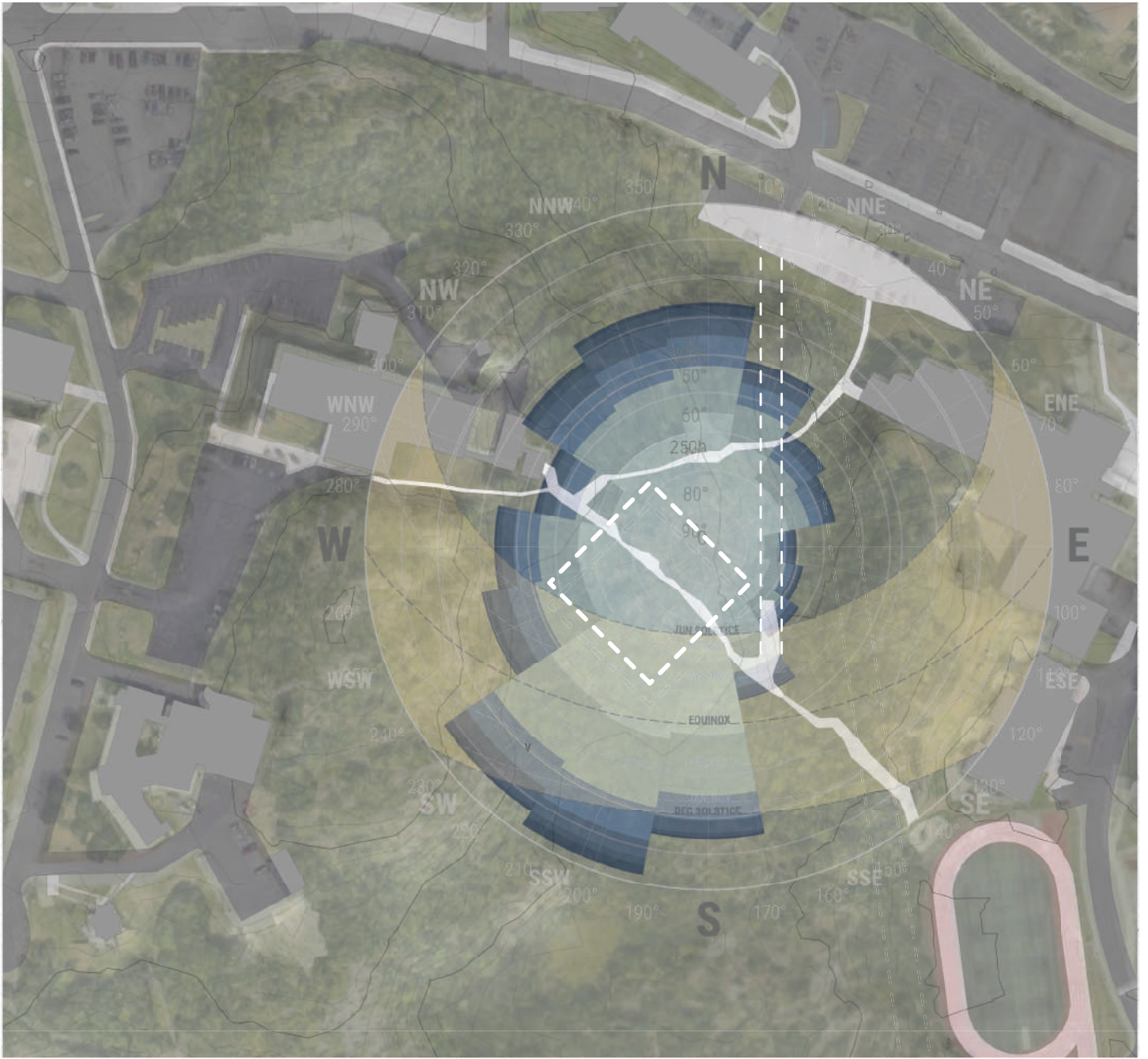
Wind rose diagramming the number of hours per year the wind blows from the indicated direction.

>1km/h
>5km/h
>12km/h
>19km/h
>38km/h
>50km/h
>61km/h
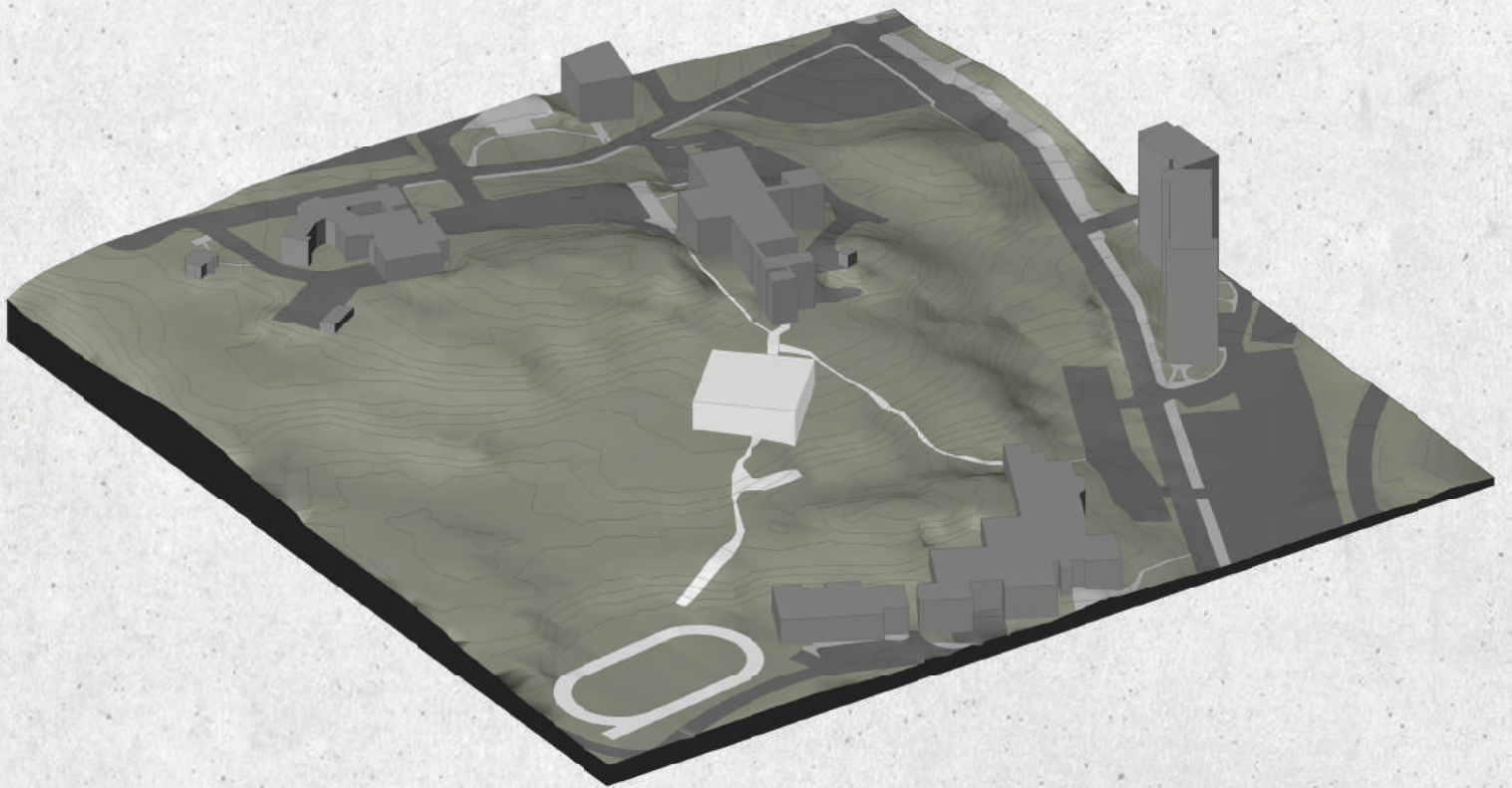
THE MATERIAL CULTURE

"Material culture includes all past and present human-made and human-altered forms, such as skateboards, billboards, succotash, yurts, paintings, pyramids, tattoos, gardens, medieval armor, and divided highways. While these objects and forms are not the only significant aspects of culture, they are uniquely telling, and can indicate the beliefs of people and societies that use them. The study of material forms and objects is important because they are pervasive and they embody and perpetuate ideas about cultures, regions, religions, nations, and individual and collective identities."[162]

The designed spaces of the Laurentian University Habitat for Holistic Healing and Wellness foster experiences of empowerment, through material culture. The Japanese term wabi refers to "humility, asymmetry and imperfection[;] a beauty of disintegration."[163] Respect of wabi is recognition of one's reality in its entirety, while simultaneously underlined by a rejection of society's obsessive idealization of an immaculate but idle perfection.[164] If the aesthetic of wabi is a "a connection to the world in its imperfection, a way of seeing imperfection as itself embodying beauty,"[165] then the term sabi is "the subjective state that is appropriate to the experience of wabi: a kind of desolation or meditative depression that can be sweet."[166] Thus, the concept of wabi-sabi is the "beauty of the withered, weathered, tarnished, scarred, intimate, coarse, earthly, evanescent, tentative, ephemeral."[167]

88   Following design cues from Tadao Ando's Water Temple, this thesis curates haptic moments of emphasized material culture that provoke pause. For example, aspects of the built environment that are meant to be physically touched by the human body (handrails, table surfaces, and seating planes) are to be of a finely sanded, warm hued, smooth but weathered wood. Because everything is considered circumstantially, the premise of this concept dissolves the boundary between commonly understood ideals of beauty and perceived lack

thereof.[168] Contemporary western culture generally associates mental health with being defective or broken often beyond restoration; which perpetuates both the belittling impression that people are lesser because of their strife, while furthering the stigma and silence suppressing those struggling with their mental wellbeing.[169] Likening the common perspective that pleasure only exists because of its contextualizing relationship to pain, the intrinsic acceptance within wabi-sabi embodies the potential to overcome preconceived dividing judgements ingrained in society.[170]

"As a society, we often look at people with trauma as being broken, damaged, and beyond repair. But nothing could be further from the truth. That toxic belief that we are somehow less because something bad happened to us feeds into the cycle of silence and continued tragedy. Yet none of us can escape trauma, because at some point in all our lives, something bad will happen. [...] But the reality is that we are all capable of healing. We are not victims, we are survivors. We are not broken, we are in a state of change. Of growth. Of becoming more beautiful as we examine these areas of damage or weakness and repair and heal them."[171]

The material culture of emphasizing the assumed imperfections or evidence of the construction process throughout suggests that people may become more uniquely beautiful when they address, embrace, and reclaim their story entirely. Material contradictions, are used throughout the building to emphasize empowerment metaphors. The decompression space attempts to make a light material seem heavy through the thick layering of slag in the primary walls of focus; as if to imply a gravity to the lighter, transient or fleeting moments that are often overlooked.

"[Wabi-Sabi] contrast[s] with other ideals of perfection—relentlessly pursuing youth, being static or being without flaws. In many ways, those ideals are completely unrealistic and unattainable, and almost without grace. Finding comfort and beauty in the passing of the moment and being relaxed in accepting that which we cannot change seem more forgiving. It makes finding peace and contentment attainable and encourages you to be more observant and kinder to yourself. Wabi-sabi brings you back to the essence of what it means to be human, and to your relationship with natural processes and the journey that you are on."[172]

COPPER

A MATERIAL THAT IS WEATHERS WITH TIME AND WATER EXPLORES THE TEMPORAL DIMENSION OF DESIGN AND IMPLIES THAT NOTHING IS STATIC.

CONCRETE

A MATERIAL THAT STRECHES THE SPAN OF THE GRID, THE CONCRETE FLOOR AND ROOF SLABS COMMUNICATE A WEIGHT AND PERMANENCE TO THE CHARACTER OF THE BUILDING.

OSB

A MATERIAL THAT BECUASE OF ITS IMPERFECT AETHETIC, IS TYPICALLY USED FOR CONSTRUCTION PURPOSES, NOW QUESTIONS SOCIETAL CONCEPTS OF BEAUTY WHEN IT IS CELEBRATED FOR ITS UNIQUE AETHETIC.

CAST CONCRETE

USING CONCRETE CAST IN OSB SHOWS THE PROCESS OF CONSTRUCTION AND IS USED TO HIGHLIGHT WHERE THE BUILDING MEETS THE EARTH.
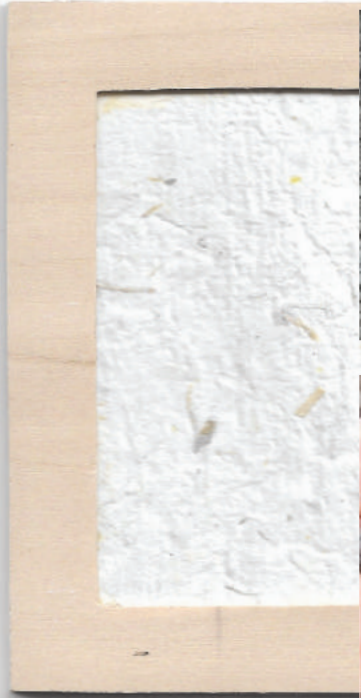
GABION BASKETS

GABION BASKETS MADE FROM ROCKS ON SITE FROM THE CONSTRUCTION COMMUNICATES A WABI-SABI WORLDVIEW.
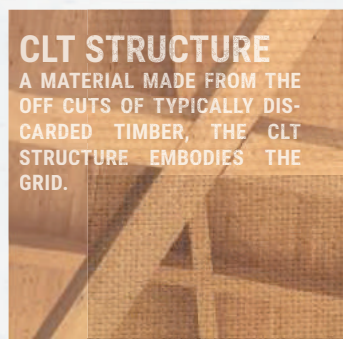
CLT STRUCTURE

A MATERIAL MADE FROM THE OFF CUTS OF TYPICALLY DISCARDED TIMBER, THE CLT STRUCTURE EMBODIES THE GRID.

SLAG GABION BASKETS

TWO SLAG FILLED GABION WALLS ARE THE VISUAL FOCUS OF THE DECOMPRESSION ROOM. COMMUNICATING VALUE IN THE IDENTITY OF SUDBURY, PLACE, AND INDIVIUALITY.

CEDAR SIDING

CEDAR THAT IS ALLOWED TO WEATHER WITH TIME IMPLIES A LIFE TO THE BUILDING; THE BUILDING WILL NEED TO BE MAINTAINED IN ORDER TO KEEP FOSTERING THE PROGRAM IT HOLDS.
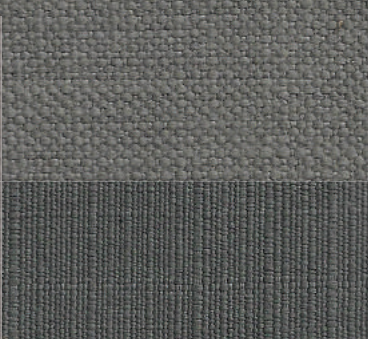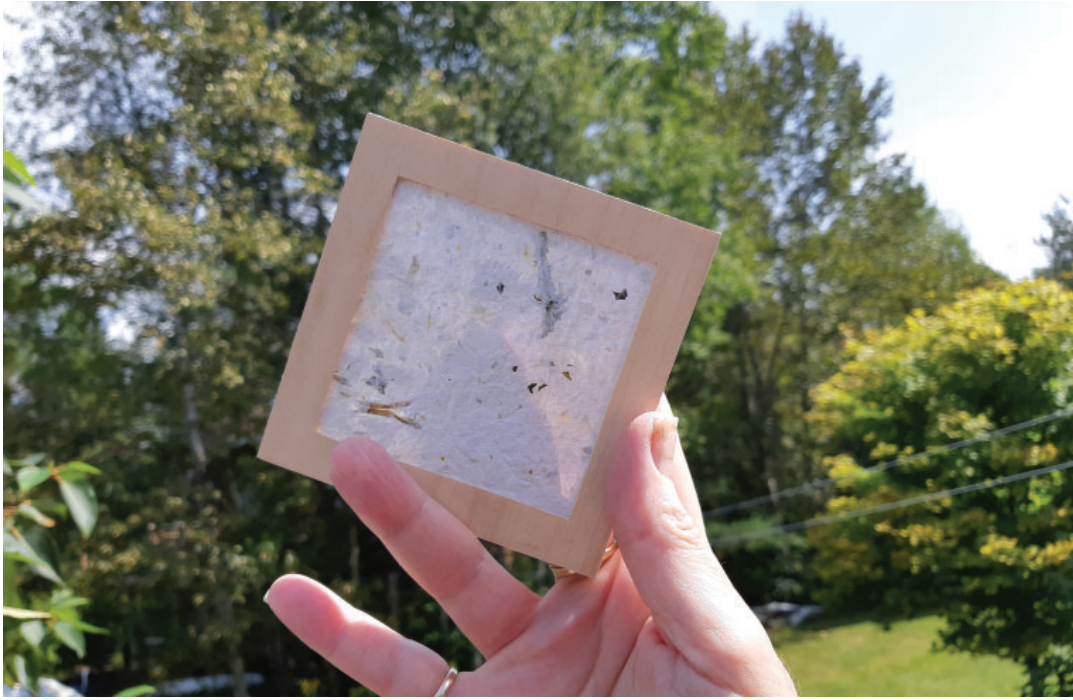
Material explorations primarily surrounded the dandelion. Dandelion paper screens are imagined as walls that provide both privacy in concealing individual identity and security in knowing that there are other people seeking decompression from the academic environment.
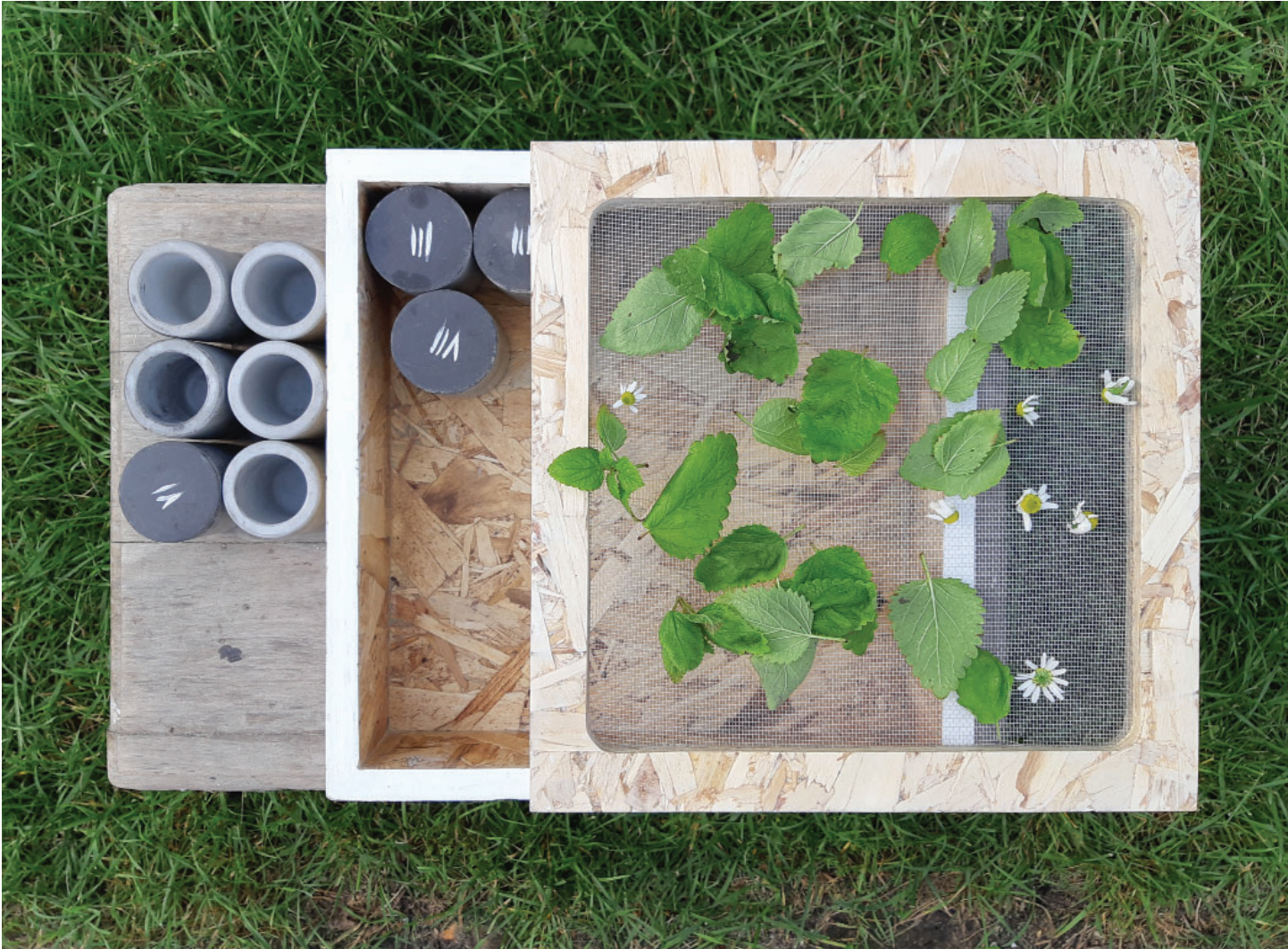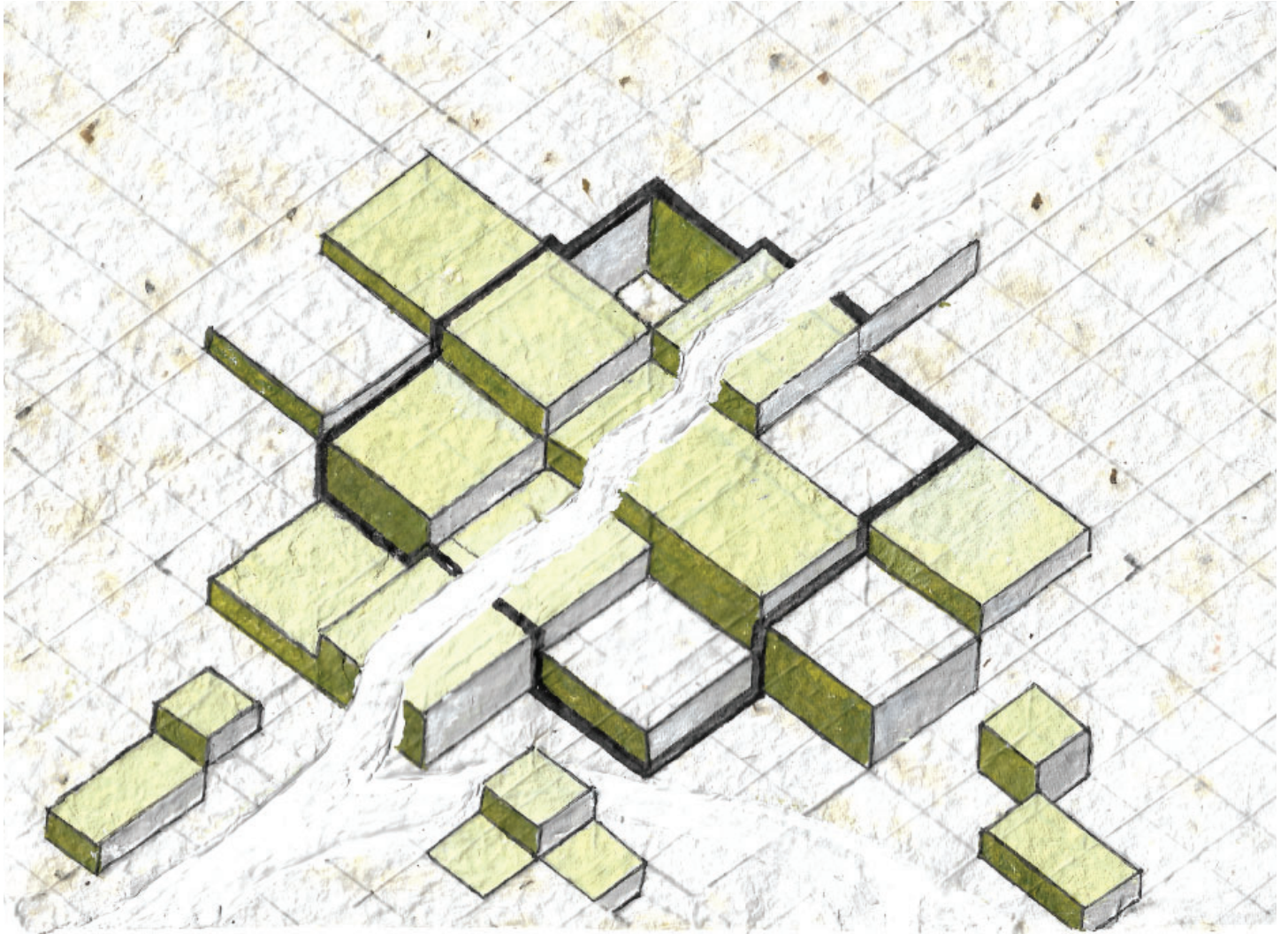
The design of the OSB tea tray not only includes a screen for drying herbs for tea, but also further facilitated the filtering, making and drying of all dandelion paper made in the process of this thesis.
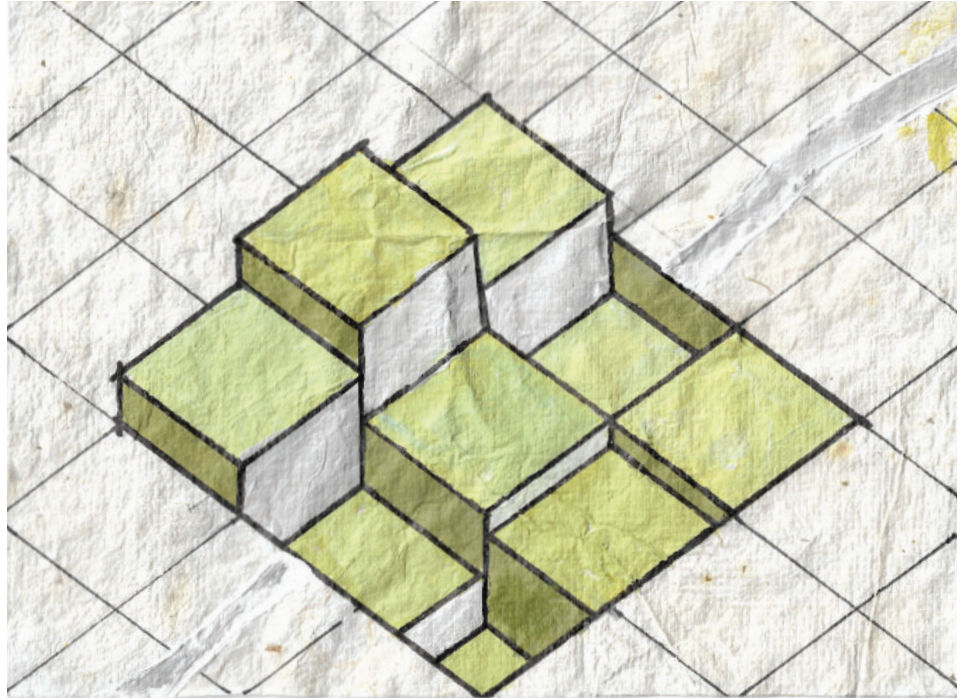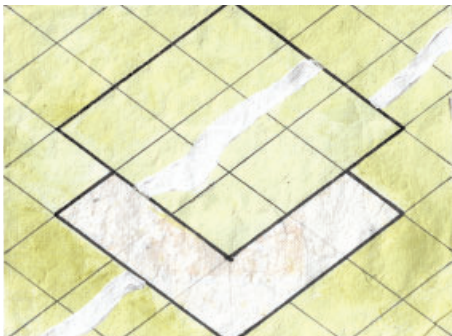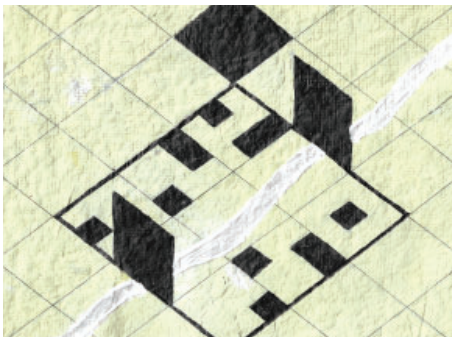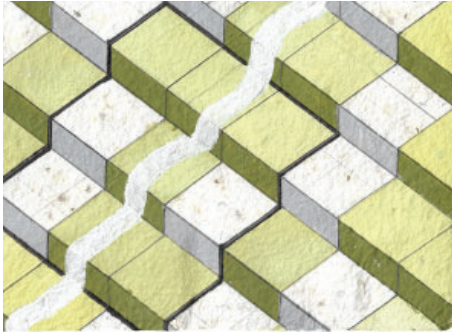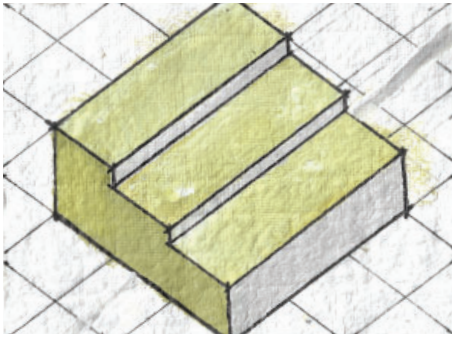
The grid parti exercises which examine the diaglog between grid and landscape on dandelion paper (to the left), assited in the development of the the final design which builds upon the parti diagram above.
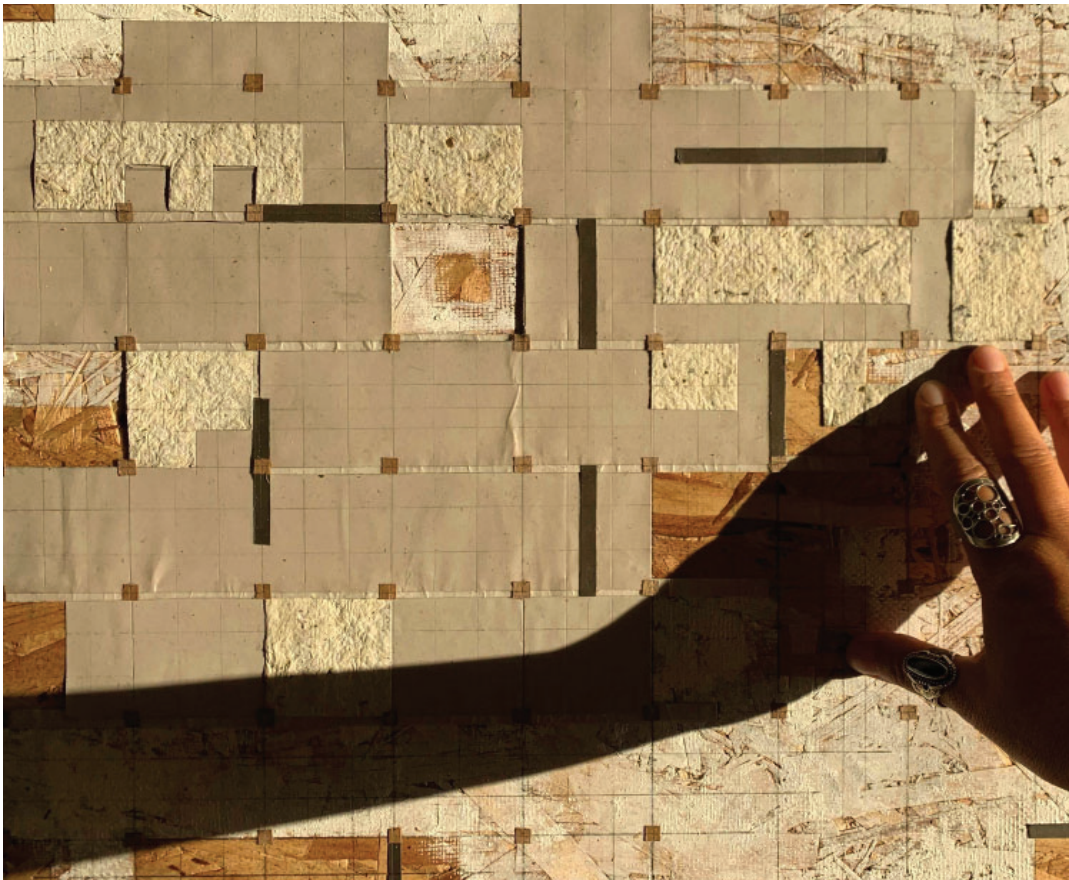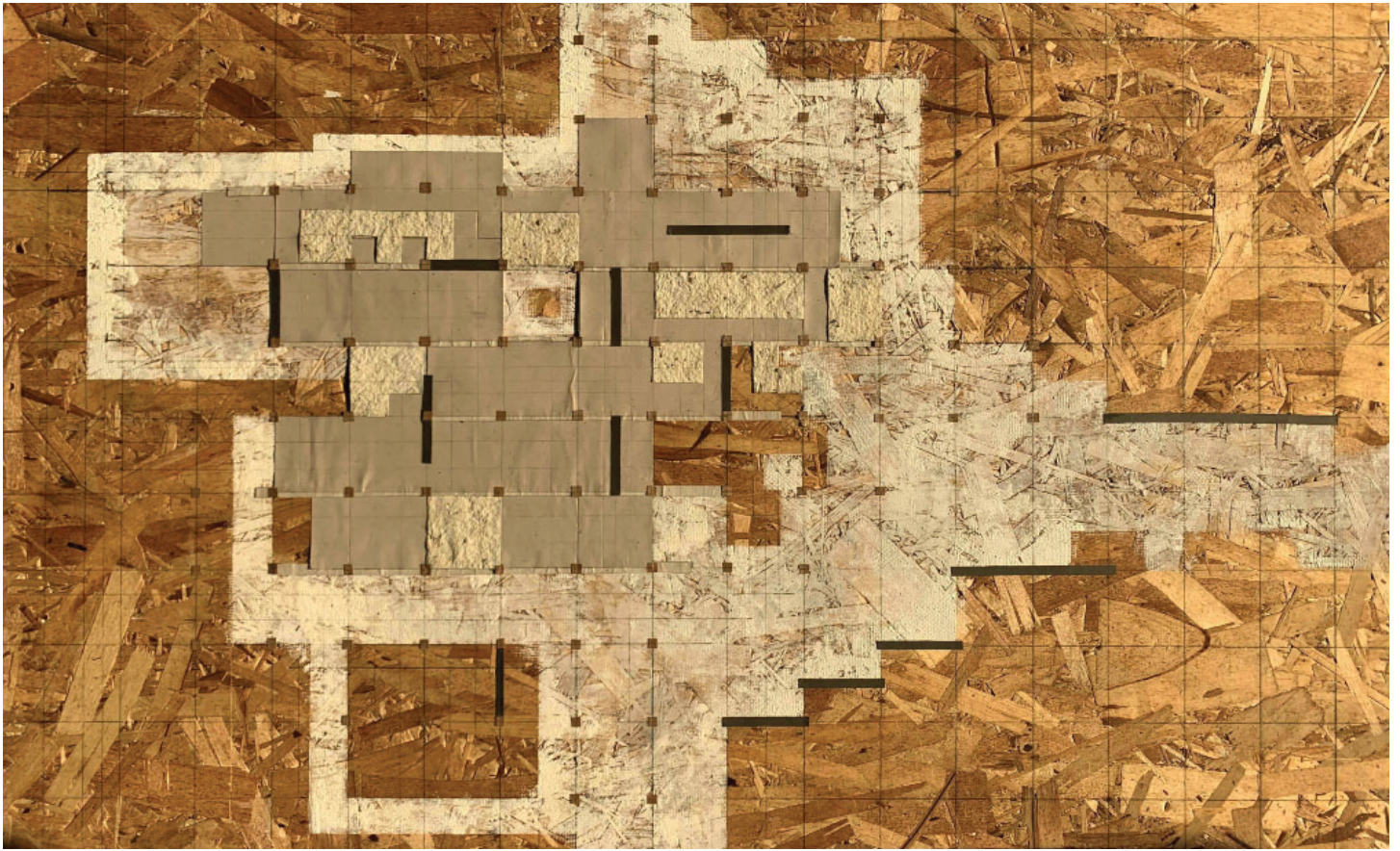
A larger creative grid exercise was used to explore the layout of the building, the relationship between the grid of columns, directing gabion walls and moments of OSB cast concrete where the building meets the ground.

Further axonometric diagrams were developed in order to examine the tectonics of the building material relationships at a more detailed scale.
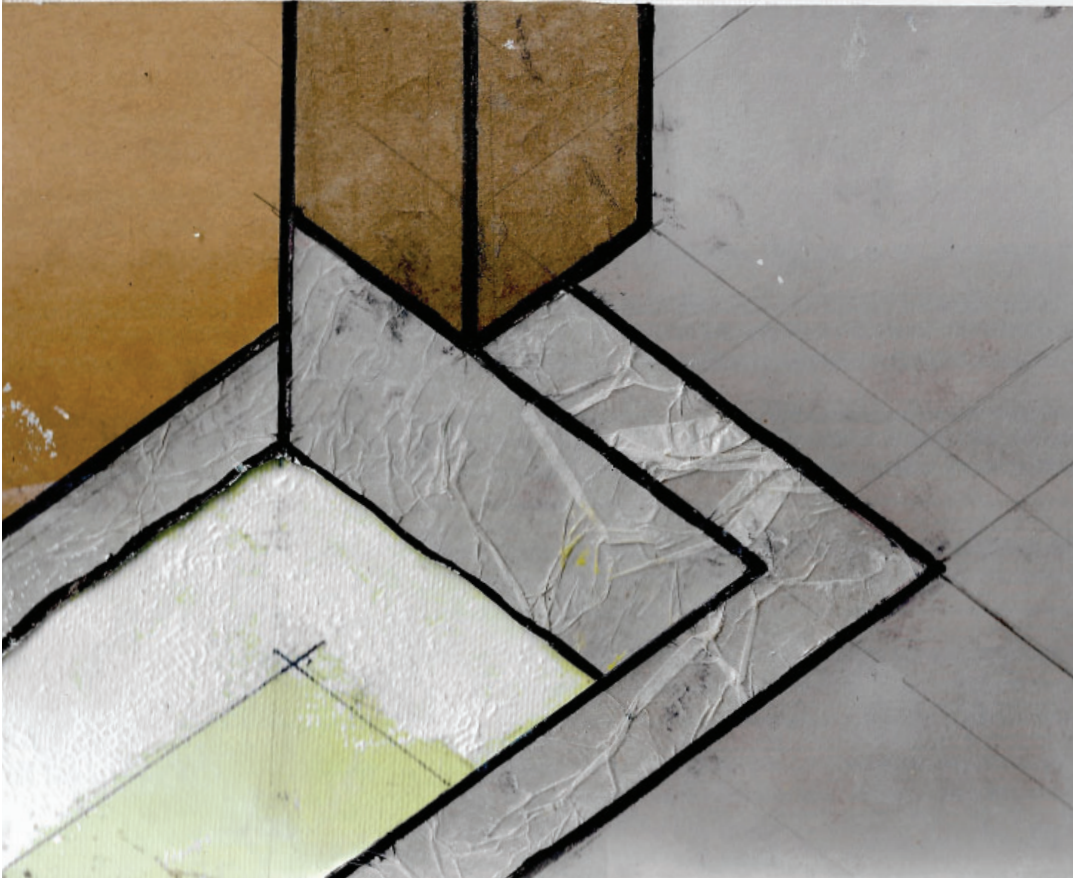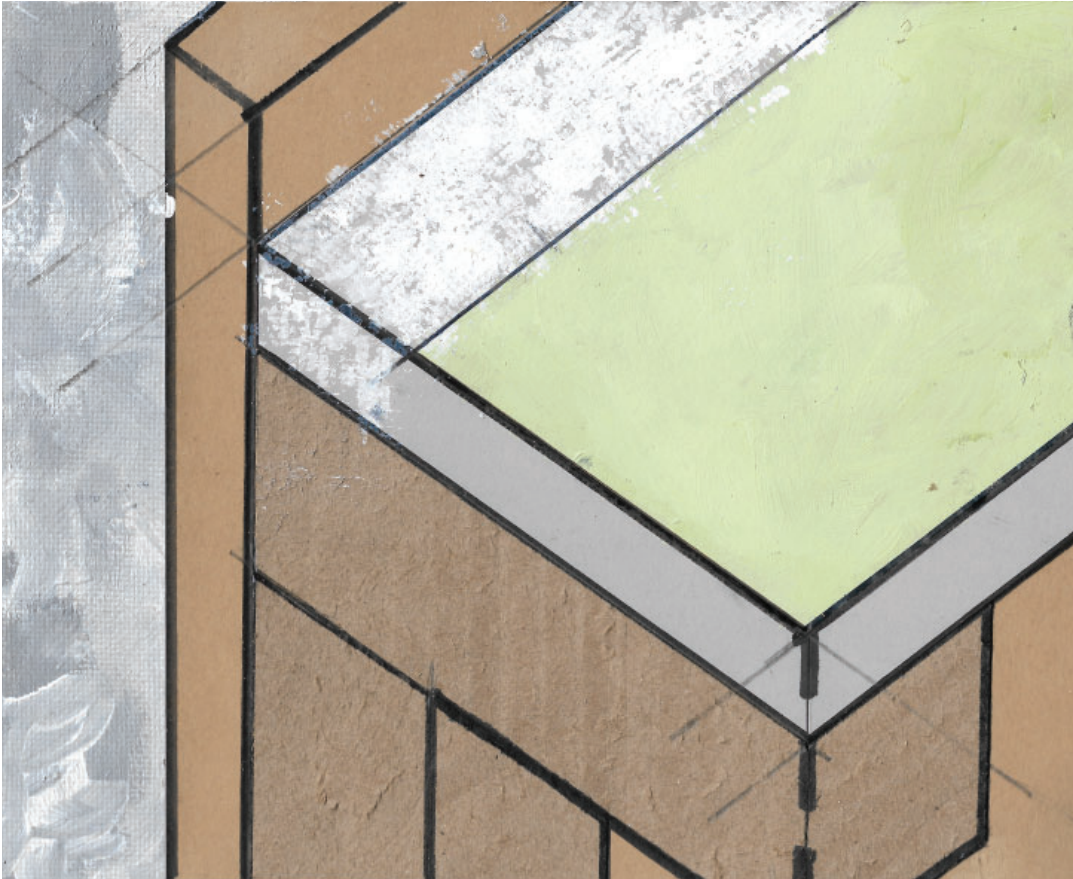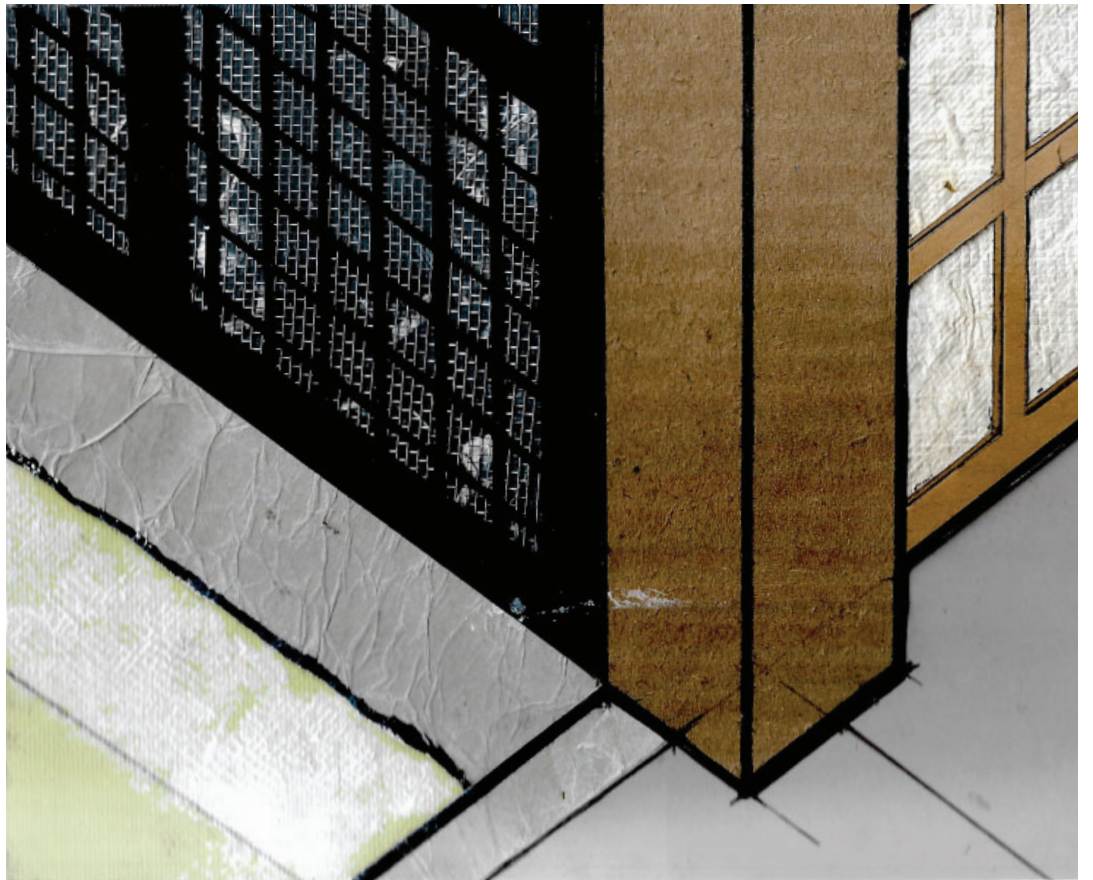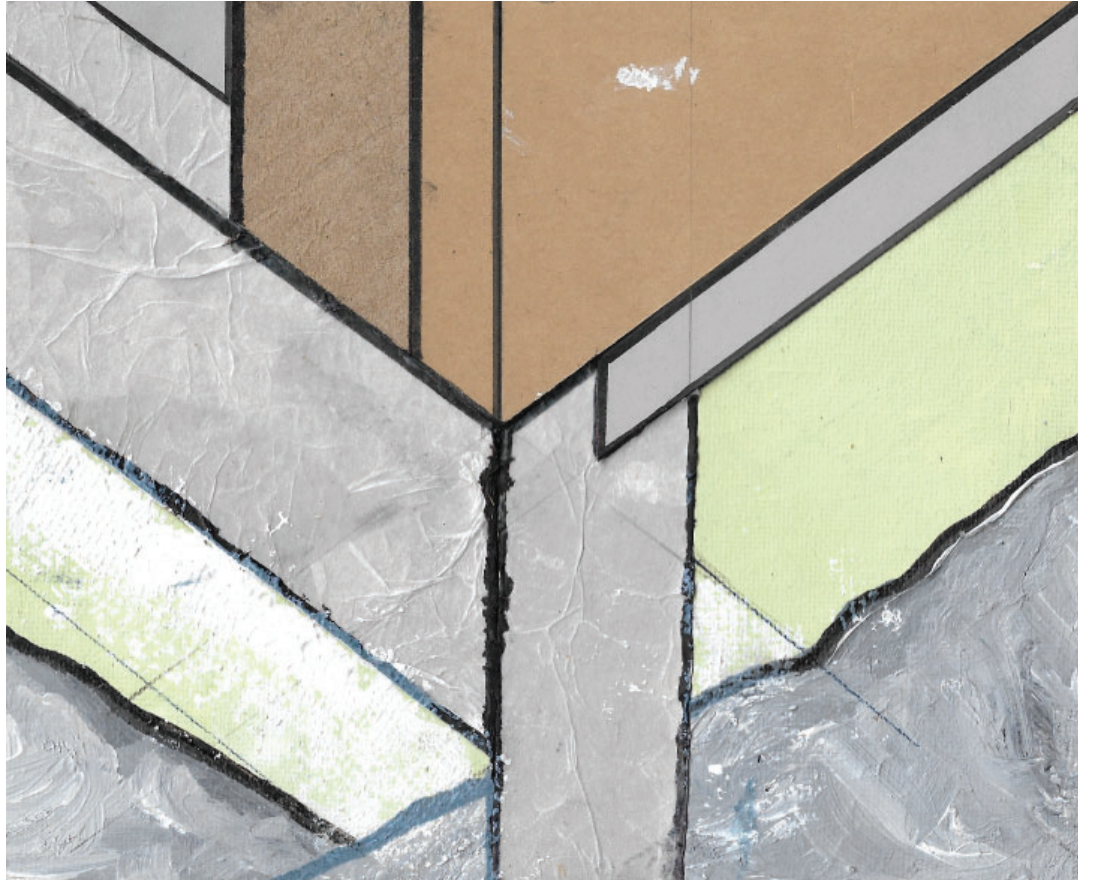
THE THRESHOLD

Intrinsic to the process of prioritizing material expression, is the deliberate intention of appealing to human senses throughout the course of design development. Architects Herzog and deMeuron utilize materials to penetrate the often deceptive complexities within our perceptions of reality, and encourage curiosity of, conscious observation of, or engagement with the phenomenological.[174] For example, if typically "something transparent appears light to us; [and] something opaque appears heavy"[175] then, they endeavour to use materials to contradict that stereotypical notion and allow our senses to further surpass any physical material assumptions that may be restricting a personal understanding of our physical reality in that moment.[176] People have the tendency to let their minds become absent in the rhythm of everyday, and generally do not spend time being curious or fully experiencing our human condition in the present reality.[177]

Copper is used at the main thresholds at the top and bottom of the main corridor that straddles the existing footpath, in a effort to provoke intrigue. Copper opens the temporal dimension of the design and communicates to students entering that nothing (including a mental state) is static.
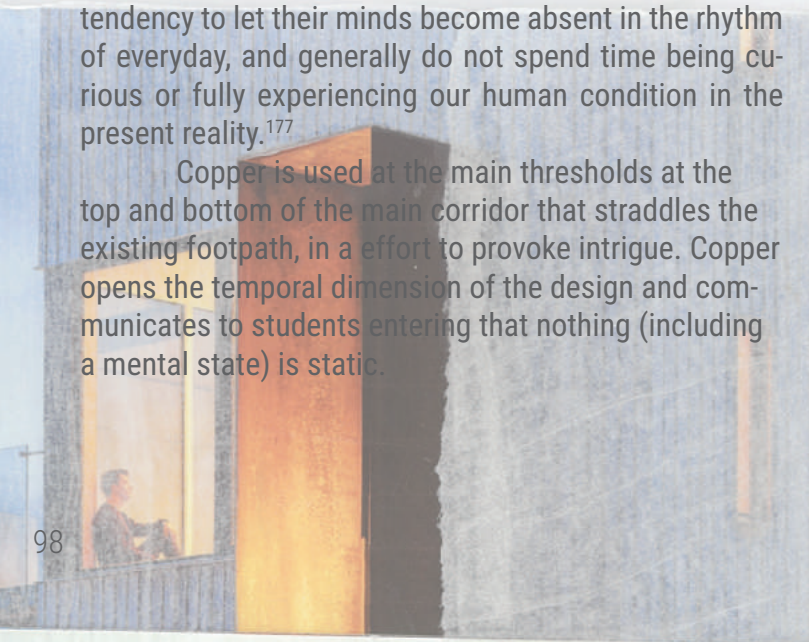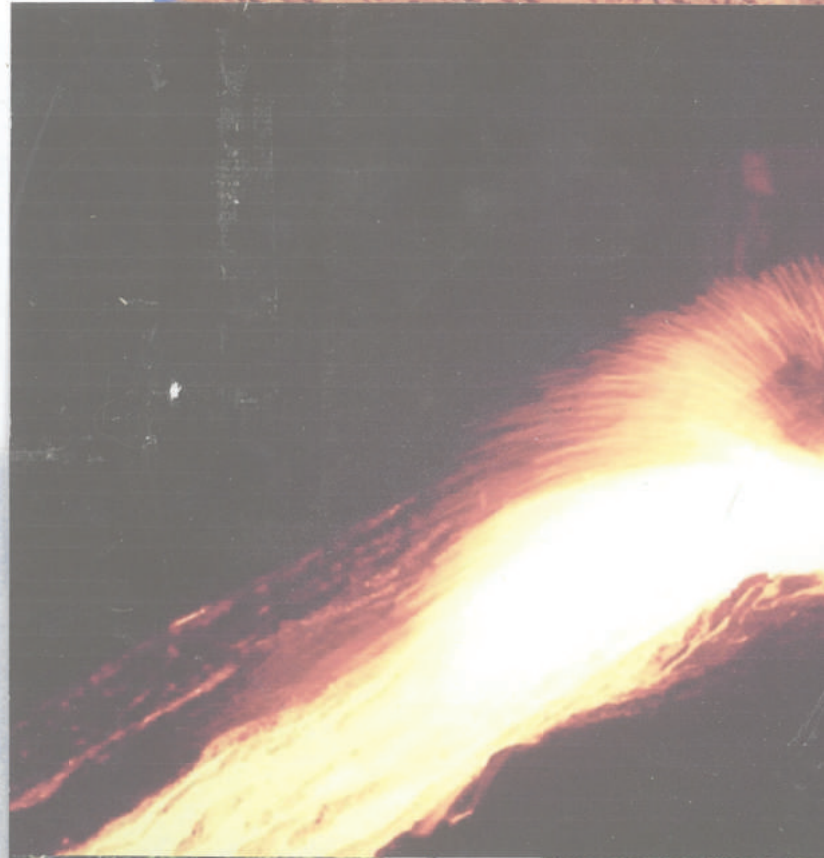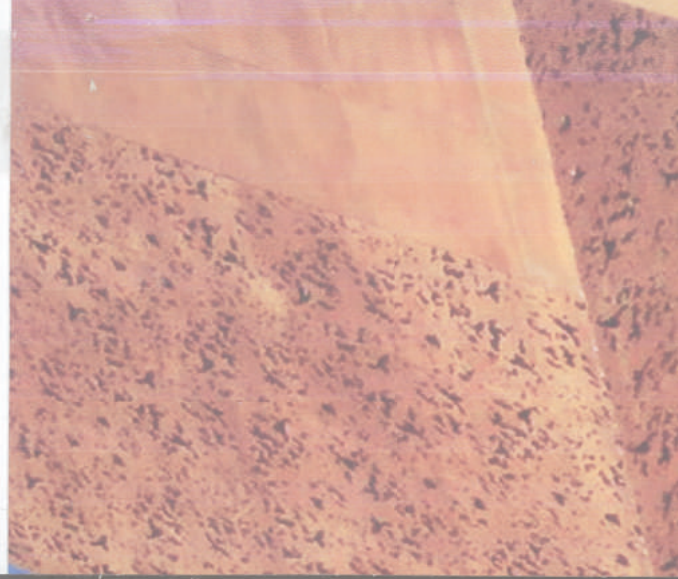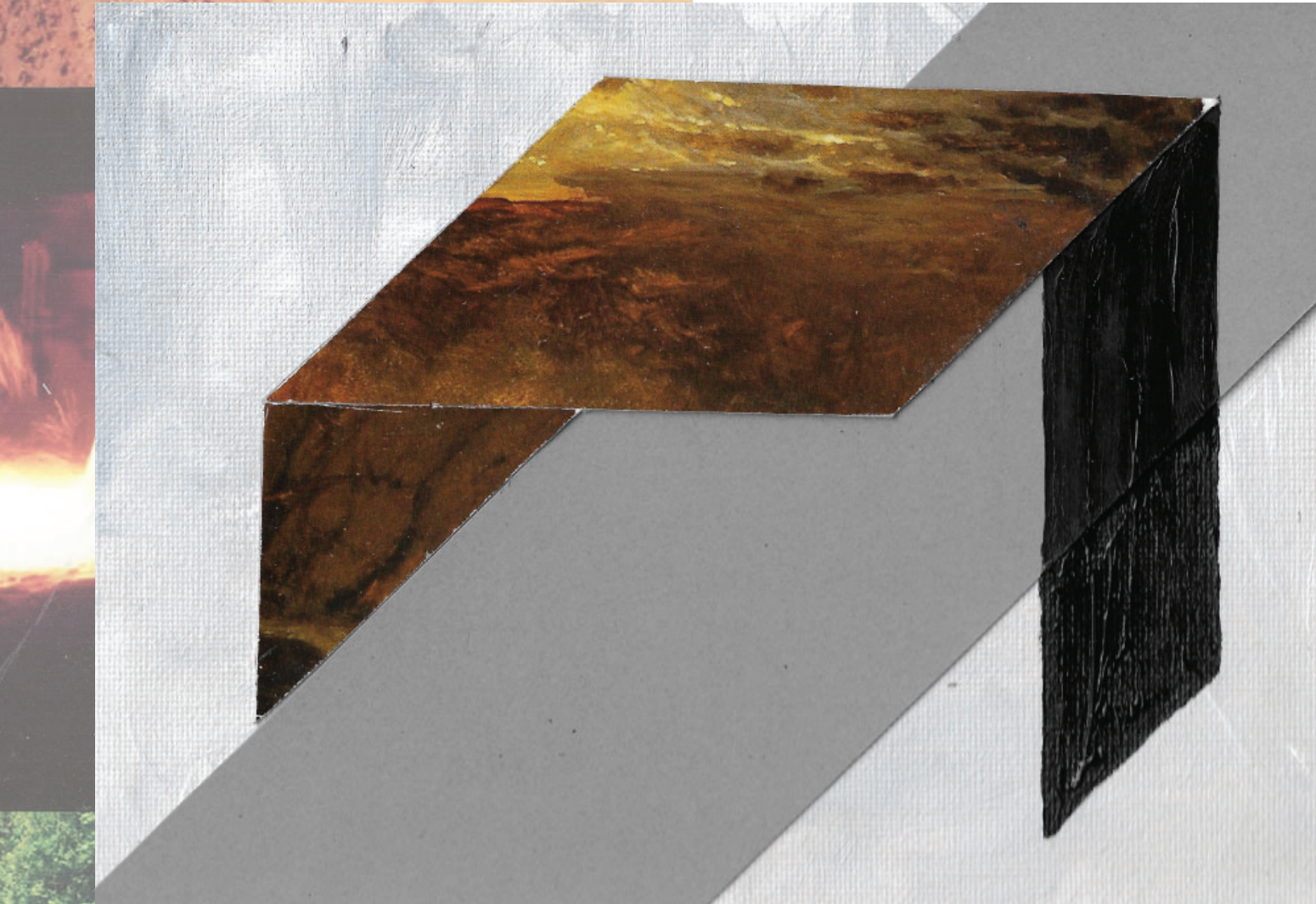
THE GARDEN

The garden offers the comfort of nature and constitutes the majority of the building, allowing the landscape to permeate indoors. The garden hosts spaces for a clinic, a student-run tea club, and tea shop while providing spaces for mixed use programs to emerge over time in response to the needs of the student body. With a range of spatial compositions from public to private, the garden also offers rooms near the decompres-

sion space that may be booked out by students to meet with a friend, a peer mentor, or a lisenced therapist. It is through these programs that this thesis brings to focus the various kinds of healthy habits and relationships that can develop over tea.

Gabion walls throughout the landscape and building towards the decompression/ tea/ light room. Embodying the wabi-sabi world view, gabion walls made from the rocks uncovered during construction grow taller as they near the tea room.

The dandelion paper screens act as a veil of security that blurs individual identity to a silhouette. This veil of security while contributing to the notionthat students are not alone in their search for comfort.

102

GREEN

CHAMOMILE

MINT

LEMON BALM

104

DANDELION

Hudson Bay Lowlands
Boreal Forest
Great Lakes - St. Lawrence Forest
Deciduous Forest

WHITE BIRCH

MAPLE SAPLINGS

CEDAR SAPLINGS

SUMAC

GOLDENROD

ASTERS

LADY FERNS

POTHOS

VIRGINIA CREEPER

BLUEBERRIES

PALE CORYDALIS

COLUMBINE

THE TEA ROOM

In guided meditations light is often described as a warm, cleansing, force which fills the body, relaxes the muscles and allows us to feel the weight of our bodies grounding us in the present moment and context. Taking design cues from Tadao Ando's Hill of the Buddha, the space of greatest significance is respectfully offered the noticeably tallest volume within the design.

A quiet space for students to pause for self-reflection as individuals in a supportive place together. Natural light pierces through a battered slag gabion wall to create a dappled effect which would travel across the room according to the sun's location—inspired by Thorneloe Chapel, this movement of light hopes to ground the user in time, context, and relative perspective. Simultaneously, artificial daylight, in sync with the colour of natural daylighting, floods up from the bottom of the wall, pulsating in time with a breathing exercise—this rhythm of light hopes to ground the user in their breathing and sense of self.

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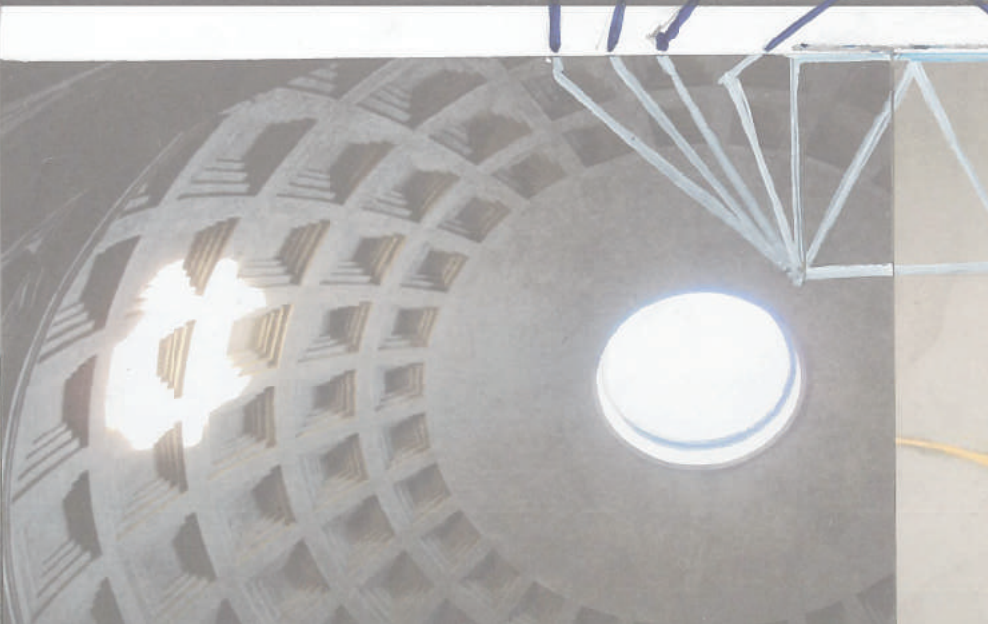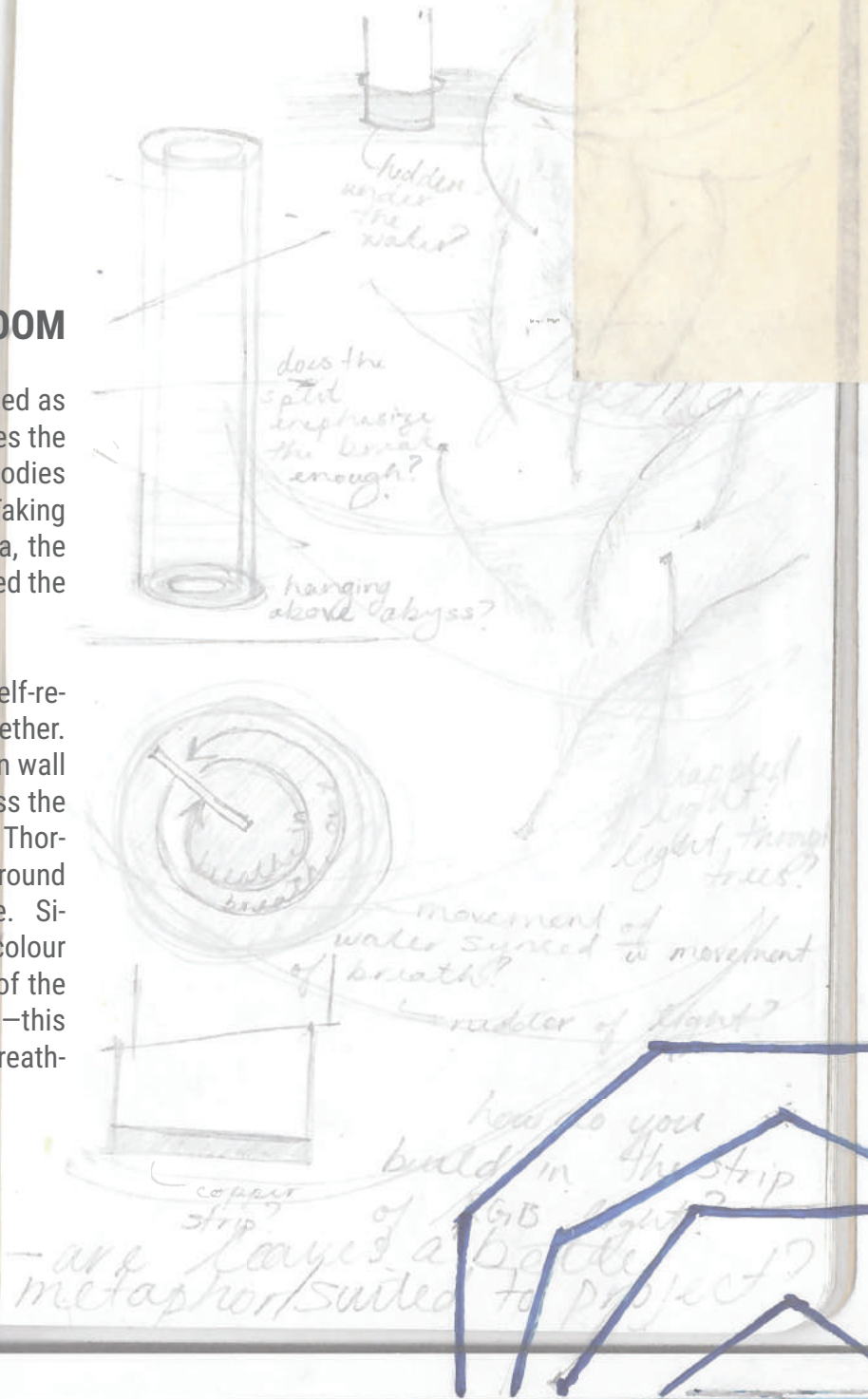
The atmosphere of the decompression room is inspired by an undergraduate installation by Sahana Dharmaraj, Jenna Lamb and myself. If the world grows quiet, clarity emerges in light of perspective.

Inhale/Exhale is a concrete installation that examines the relationship between light and water as a building medium, and its capacity to modulate phenomenological experiences. By designing a light fixture that fluctuates in harmony with a rhythmic breathing exercise, the atmosphere inhales, exhales, disentangles and regenerates; encouraging synchronized requiescence.
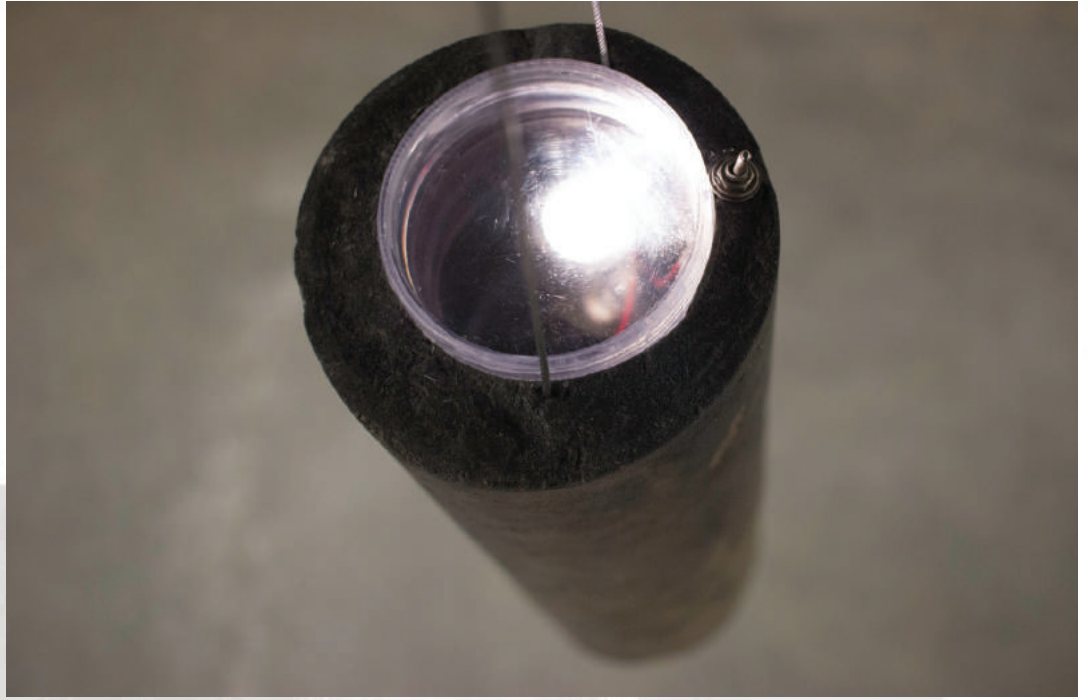
The decompression/ tea/ light room is the place of arrival at the end of the journey.
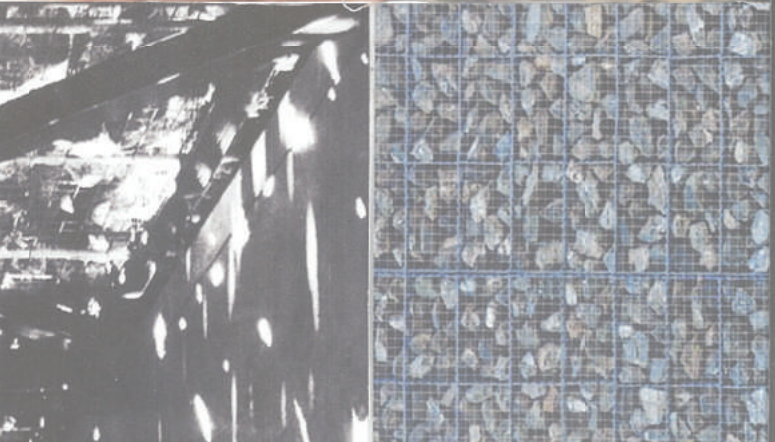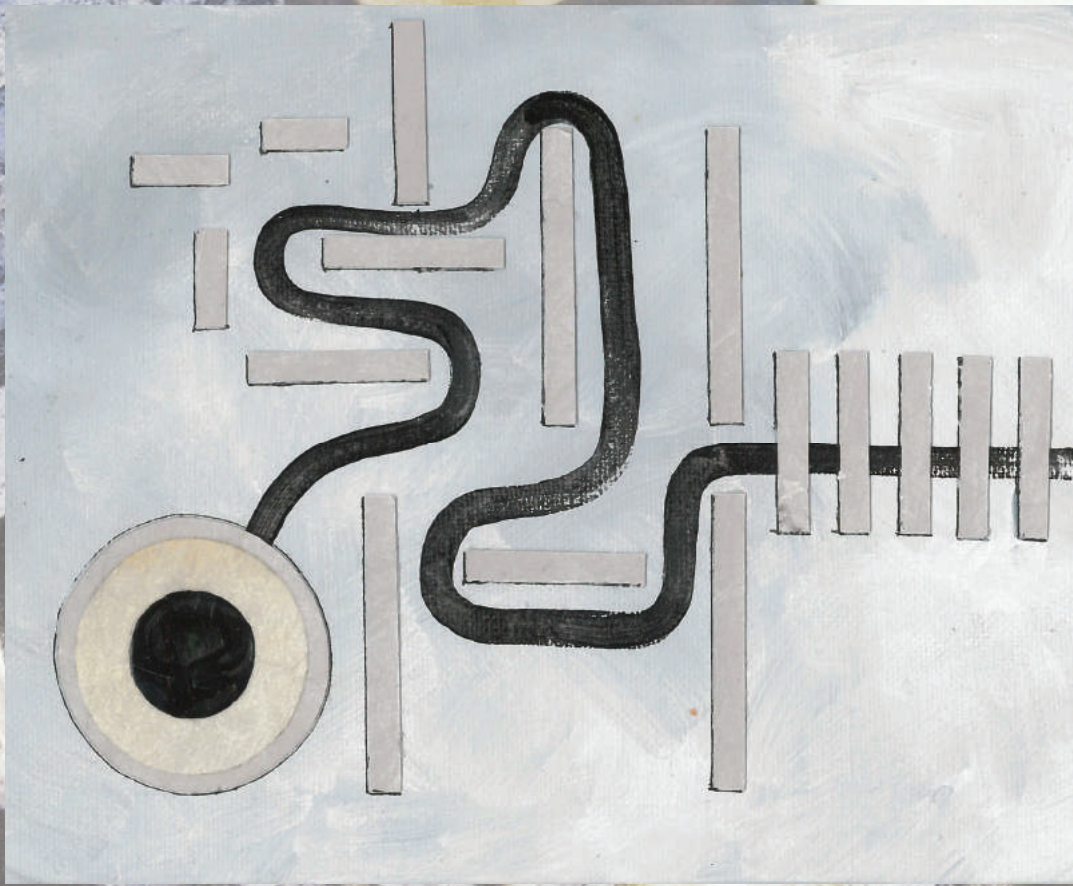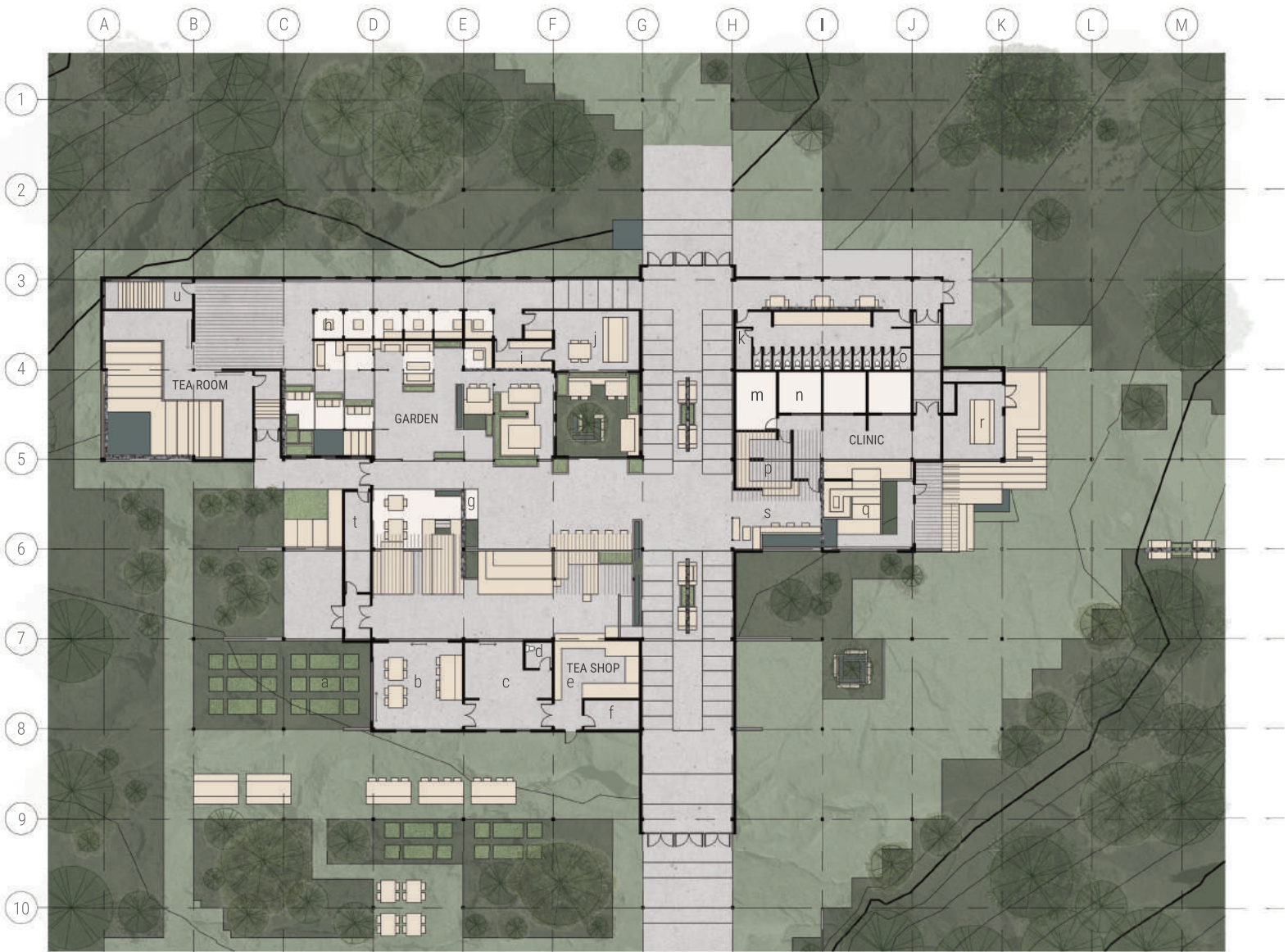
a   tea club garden

b   tea club meeting space

c   tea club mixed use space

d   tea club shop washroom

e   tea club shop

f   tea club shop storage

110

g   info panel; panel under skylight, on gabion wall that describes the building and any programs to date that are available to students

h   typical secure meeting room/ tea nook; available for booking (with a friend, peer mentor or li-censed therapist)

i   storage

j   quiet reading room

k   nursing room

l   washrooms

m   clinic doctors office

n   typical clinic examination room

o   barrier free washroom

p   clinic admin

q   clinic waiting area

r   clinic meeting room

s   clinic entry

t   storage

u   stairwell to under decompres-sion room; water tank reservior and servicing for rain water col-lection
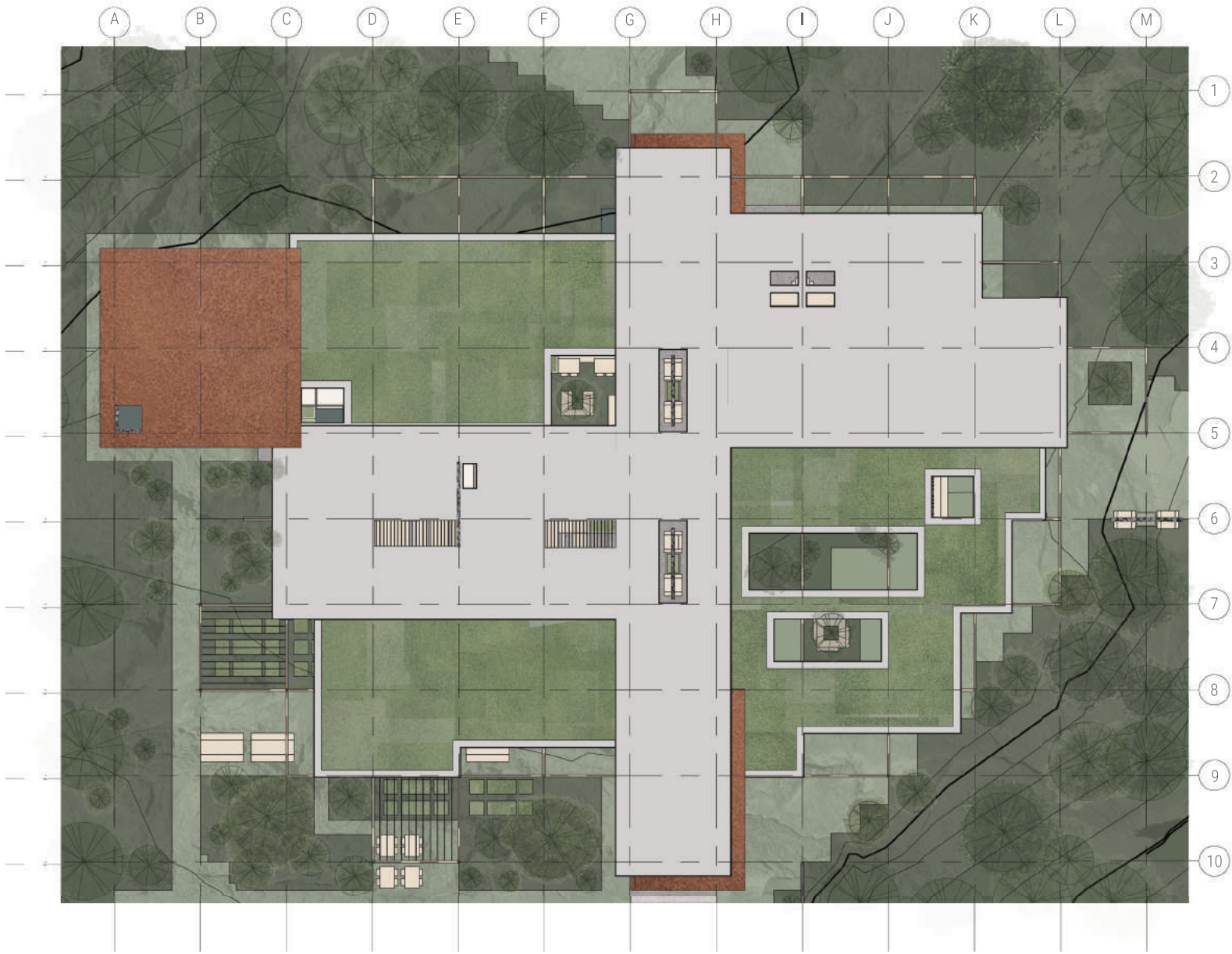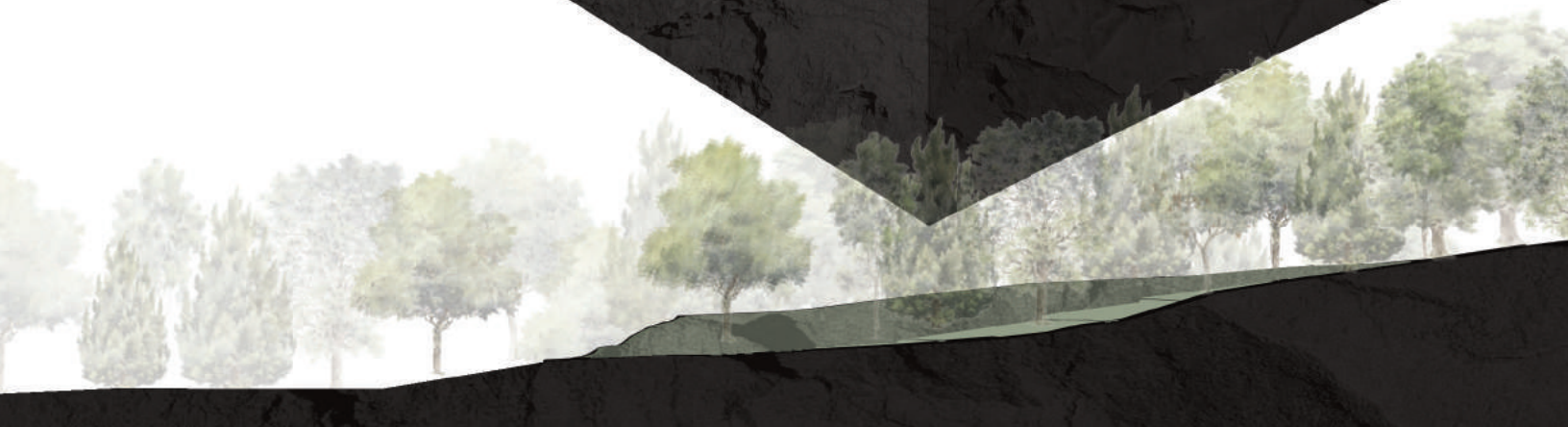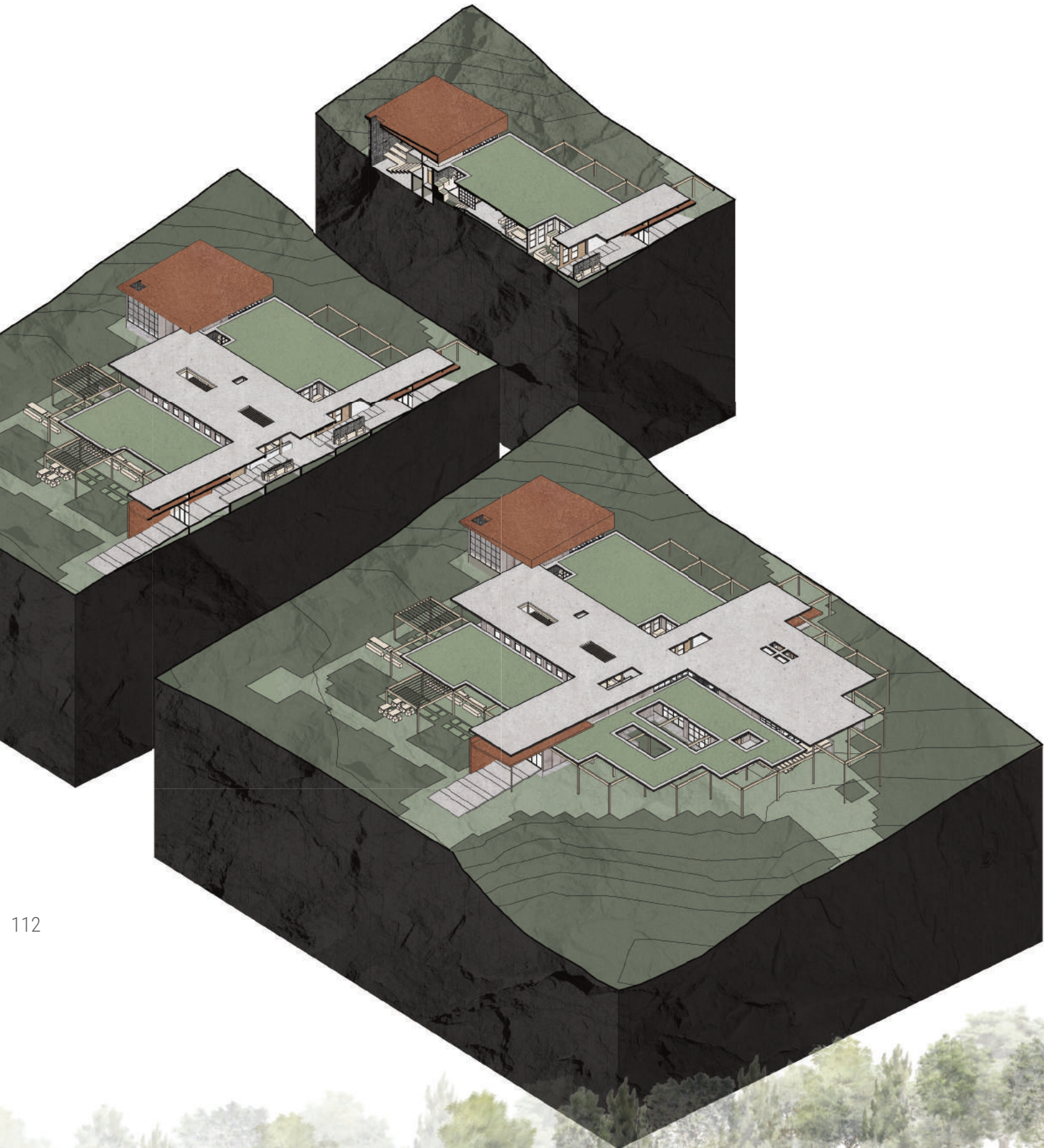
Rainwater drains toward the skylight that acts as a metaphorical impluvium and axis mundi. The waters trickles down the battered slag gabion walls at the focus of the space to be collected below the decompression room and irrigated throughout the garden. Light (either natural from the window behind the wall or the artifical lighting of the slowly pulsing breathing exercise) is filtered through the holes in the slag to create a dappled light atmosphere for individual contemplation; filtered perspective.
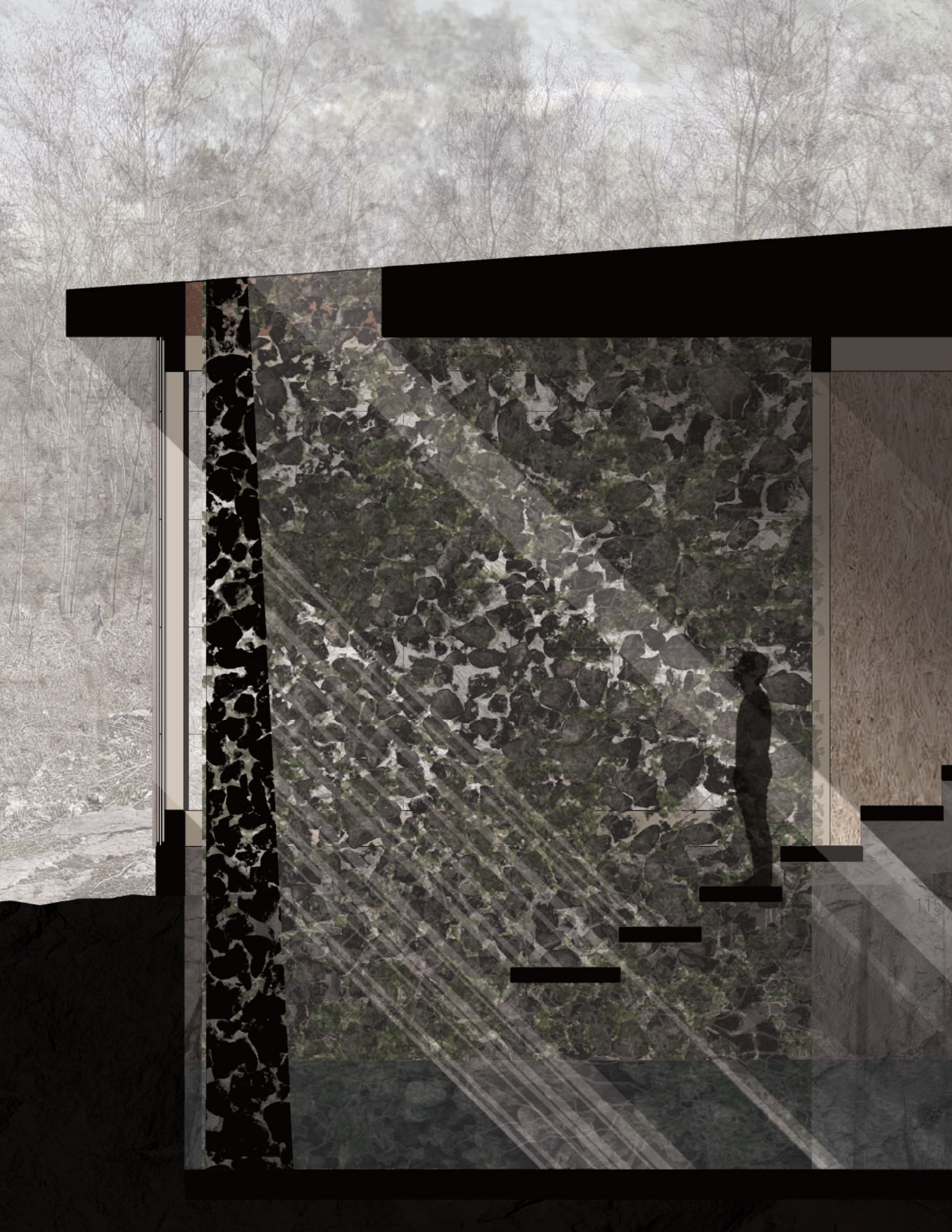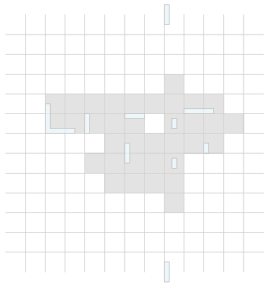
TEXTURE. SELF. EMPOWERMENT.

Texture throughout the design embodies a wabi-sabi material culture. The weathered cedar at points that touch the body (handrails, benches, doors, etc.) in particular emphasize materiality to provoke haptic moments or awareness of physical self, while communicating metaphors of imperfection and empowerment.
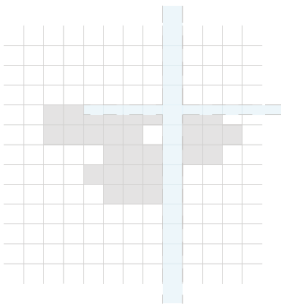
PATH. CONTROL. CURIOSITY.

The building straddles an existing footpath created over time by the students, and the primary entrances are demarkated by copper. The main corridor is communicated through size but the gabion walls that grow taller as they direct students through the garden toward the tea room, spark curiosity while offering a variety of different paths to explore at their own pace.
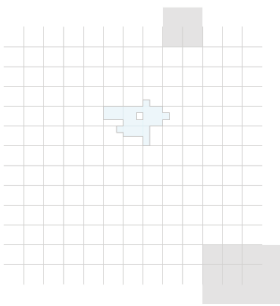
CONTEXT. SECURITY. COMFORT.

The design offers an oasis that allows students to feel secure in allowing themselves to address their wellbeing in the comfort of the garden, admist the given context of the academic environment. The dandelion paper screens respect individual right to privacy by blurring identity to a shadow, but aid in comforting students that they are not alone in their search for comfort.

LIGHT. TIME. DECOMPRESSION.

The movement of natural light accross the tea room has the ability to communicate time. As sun or the slowly pulsing artifical light in time with a breathing exercise is filtered through the central focus slag wall, the dappled light creates an atmosphere condusive to contemplation, breathing, relaxation and decompression.

CONCLUSION

IF THE BUILT ENVIRONMENT CAN AFFECT WELL-BEING, COULD A DESIGN APPROACH THAT IS CENTERED AROUND FOSTERING REFLECTIVE LIFESTYLE HABITS IN POST-SECONDARY STUDENT WELLNESS CENTERS IMPROVE THE CULTURAL PERCEPTION OF SPACES FOR MENTAL HEALTH?

The Laurentian University Habitat for Holistic Healing and Wellbeing spatially promotes the wabi-sabi worldview; programmatically cultivates a proactive cultural shift towards ritualistic self-care; and phenomenologically communicates the 'measure-free recipe' through material culture. This design proposal would need to be tailored to each University through the 'measure-free recipe', however, post-secondary institution may begin this process by dedicating a space soley for decompression. This addresses the reality of student mental health, offers a platform to hear student concerns and aids in subverting the negative aspects typically critiqued in the majority of contemporary academic environments. If iterated upon, this design methodology has the potential to flood popular perspectives of health as holistic via the built environment; an opportunity past any of the negative aftermath following mind-body dualism and towards a more empathetic built environment suited for contemporary society.

ENDNOTES

1 Neeta Mehta, "Mind-body Dualism: A critique from a Health Perspective," *Mens sana monographs* 9, no.1 (2011): 202-9.

2 Neeta Mehta, "Mind-body Dualism: A critique from a Health Perspective," 202-9.

3 Pamela Karimi, "Architecture, Matter and Mediation in the Middle East," in *Traditional Dwellings and Settlements Review* 25, no. 1 (2013): 45-53.

4 Neeta Mehta, "Mind-body Dualism: A critique from a Health Perspective," 202-9.

5 Spence K. Cordes, "The Paradigms that Ground Theorizing," in *A Primer on Theory of Architecture*, (New York: Routledge, 2017), 50-83.

6 Spence K. Cordes, "The Paradigms that Ground Theorizing," 50-83.

7 Neeta Mehta, "Mind-body Dualism: A critique from a Health Perspective," 202-9.

8 Ibid.

9 Ibid.

10 Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Chichester: Wiley-Academy, 2005).

11 Pamela Karimi, "Architecture, Matter and Mediation in the Middle East," 45-53.

12 Ibid.

13 Andrew Scull, *Madness in Civilization: A Cultural History of Insanity from the Bible to Freud, from the Madhouse to Modern Medicine*, (London: Thames & Hudson Ltd., 2015), 406.

14 "Leading Causes of Death in Canada," *Statistics Canada*, accessed January 4, 2019.

15 Simona Choise, "Reports of Mental Health Issues Rising Among Postsecondary Students: Study," *The Globe and Mail*, last modified May 31, 2018.

16 Diana Agrest, *Architecture from Without: Theoretical Framings for a Critical Practice*, (Cambridge: MIT Press, 1993).

17 Diana Agrest, *Architecture from Without: Theoretical Framings for a Critical Practice*.

18 Erik White, "Laurentian University students vote to each pay $50 to mental health services," *CBC News*, last modified November 14, 2018.

19 Steven Holl, Juhani Pallasmaa, and Alberto Perez-Gomez, *Questions of Perception: Phenomenology of Architecture* (San Francisco: William Stout Publishers, 1994), 37.

20 Some examples of phenomenological designers include Tadao Ando, Steven Holl, Juhani Pallasmaa and Alberto Perez-Gomez.

21 "Texture." *Dictionary.com*. Accessed August 12, 2019.

22 "Path." *Dictionary.com*. Accessed August 12, 2019.

23 "Context." *Dictionary.com*. Accessed August 12, 2019.

24 "Light." *Dictionary.com*. Accessed August 12, 2019.

25 Francis D. K. Ching, *Architecture: Form, Space* and Order, (Kindle Edition: John Wiley & Sons Inc., 2014), Kindle Locations 469-470.

26 Harry Francis Mallgrave, *From Object to Experience: The New Culture of Architectural Design*, (New York: Bloomsbury Academic, An imprint of Bloomsbury Publishing Plc, 2018).

27 Harry Francis Mallgrave, *From Object to Experience: The New Culture of Architectural Design*.

28 Setha Low, *Spatializing Culture: The Ethnography of Space and Place*, (New York: Routledge, 2017).

29 Jenny Donovan, *Designing the Compassionate City: Creating Places Where People Thrive*, (New York: Routledge, 2017).

30 Jenny Donovan, *Designing the Compassionate City: Creating Places Where People Thrive*.

31 Ibid.

32 Thomas A. Markus, *Buildings & Power: Freedom & Control in the Origin of Modern Building Types*, (London: Routledge, 1993).

33 Thomas A. Markus, *Buildings & Power: Freedom & Control in the Origin of Modern Building Types*

34 Ibid.

35 Henry Glassie, "Vernacular Architecture and Society," *Material Culture* 1(1984): 7.

36 Andrew Scull, *Madness in Civilization*, 20.

37 Ibid., 80-81.

38 Ibid., 88-89.

39 Andrew Scull, *Madness: A Very Short Introduction*, (New York: Oxford University Press, 2011), 7.

40 Andrew Scull, *Madness: A Very Short Introduction*, 16.

41 Ibid., 18.

42 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States,* (Minneapolis: University of Minnesota Press, 2007), 17.

43 Andrew Scull, *Madness: A Very Short Introduction*, 19.

44 Ibid., 18.

45 Ibid., 19.

46 Ibid., 21-22

47 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," *Journal of the Society of Architectural Historians* 62, no. 1 (2003): 46.

48 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 20.

49 Ibid.

50 Andrew Scull, *Madness: A Very Short Introduction*, 43.

51 "Bedlam," *Dictionary.com*, accessed December 5, 2018.

52 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 19.

53 Andrew Scull, *Madness: A Very Short Introduction*, 35-37.

54 Ibid., 37.

55 Ibid., 43.

56 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 24.

57 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 34.

58 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 24.

59 Ibid.

60 Don Weitz, "Electroshock:Torture as 'Treatment,'" In *Mad Matters: A Critical Reader in Canadian Mad Studies*, ed. Brenda A. LeFrancois, Robert Menzies and Geoffrey Renume, (Toronto: Canadian Scholars' Press Inc., 2013), 158-169.

61 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 24.

62 Andrew Scull, *Madness: A Very Short Introduction*, 39.

63 Ibid., 39-40.

64 Ibid., 45.

65 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 27.

66 Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, (London: Tavistock Publications, 1967) 242.

67 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 24.

68 Ibid., 45.

69 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 37.

70 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 55.

71 Ibid., 29.

72 Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, 243.

73 Andrew Scull, *Madness: A Very Short Introduction*, 52.

74 Ibid., 44.

75 Neslihan Dostoğlu, "Utopia and Determinism: Architectural Deterministic Thinking in Urban Utopias," *METU Journal of the Faculty of Architecture* 8, no. 2 (1988): 144.

76 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 36.

77 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 56.

78 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 24-49.

79 Ibid., 33.

80 Ibid.

81 Ibid., 34.

82 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 65.

83 Ibid., 55.

84 Ibid., 53.

85 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 37.

86 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 73.

87 Ibid., 76.

88 Ibid., 71-73.

89 H. Kazano, "Asylum: the Huge Psychiatric Hospital in the 19th century U.S," *PubMed* 114, no.10 (2012): 194-200.

90 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 42.

91 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 80.

92 Ibid.

93 Ibid., 81-82.

94 Ibid., 90-91.

95 Ibid., 91.

96 Carla Yanni, "The Linear Plan for Insane Asylums in the United States before 1866," 44.

97 Ibid., 45.

98 Andrew Scull, *Madness: A Very Short Introduction*, 63.

99 Ibid., 65

100 "Psychoanalysis," *Merriam-Webster*, accessed January 4, 2019.

101 Andrew Scull, *Madness: A Very Short Introduction*, 73.

102 Ibid.

103 Ibid., 74.

104 Diana Fuss, "Berggasse 19: Inside Freud's Office (With Diana Fuss)," *Joel Sanders Architect*, June 11, 2015, accessed October 21, 2018.

105 Diana Fuss, "Berggasse 19: Inside Freud's Office (With Diana Fuss)."

106 Ibid.

107 Ibid.

108 Andrew Scull, *Madness: A Very Short Introduction*, 89.

109 Ibid., 92-93.

110 Ibid., 87.

111 One Flew Over the Cuckoo's Nest, *Google play movie*, Directed by Milos Forman (Burbank: Warner Bros. Entertainment Inc., 1975).

112 "Psychotherapy," *National Alliance on Mental Illness*, accessed January 4, 2019.

113 "Psychopharmacology," *Merriam-Webster,* accessed January 4, 2019.

114 Andrew Scull, *Madness: A Very Short Introduction*, 115.

115 Ibid., 106.

116 Ibid., 119.

117 Ibid., 116.

118 "The Challenge," *Fountain House*, accessed January 5, 2019.

119 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 153.

120 Ibid., 154

121 "The Challenge," *Fountain House.*

122 Carla Yanni, *The Architecture of Madness: Insane Asylums in the United States*, 154.

123 Ibid.,155.

124 Ibid., 154.

125 Andrew Scull, *Madness in Civilization*, 411.

126 Steven Holl, Juhani Pallasmaa, and Alberto Perez-Gomez, *Questions of Perception: Phenomenology of Architecture*, 41.

127 "Phenomenology," *Oxford Dictionary*, accessed October 7, 2018.

128 David R. Cerbone, Understanding Phenomenology (Stocksfield: Acumen, 2006), 40.

129 Dermot Moran, *Introduction to Phenomenology* (London: Routledge, 2000), 4.

130 Dermot Moran, *Introduction to Phenomenology*, 3.

131 Ibid., 4.

132 Peng Yunxiang, "Water Temple, Tadao Ando," *Visual Lexicon*, last modified October 4, 2017.

133 Tadao Ando, *Tadao Ando: the colours of ligh*t, (London: Phaidon, 2017), 252.

134 Tadao Ando, *Tadao Ando: the colours of light*, 252.

135 Peng Yunxiang, "Water Temple, Tadao Ando," *Visual Lexicon*.

136 Tadao Ando, *Tadao Ando: the colours of light*, 252.

137 Ibid.

138 Vladimir Gintoff, "Spotlight: Maya Lin," *ArchDaily*, last modified October 5, 2018.

139 Elizabeth Ellsworth, *Places of Learning : Media, Architecture, Pedagogy*, (London: Routledge, 2005), 53.

140 Elizabeth Ellsworth, *Places of Learning : Media, Architecture, Pedagogy*, 53.

141 Vladimir Gintoff, "Spotlight: Maya Lin," *ArchDaily*.

142 Jessica Mairs, "Tadao Ando surrounds huge buddha statue with lavender-covered mound at Sapporo cemetery," *Dezeen*, last modified August 8, 2017.

143 Jessica Mairs, "Tadao Ando surrounds huge buddha statue with lavender-covered mound at Sapporo cemetery," *Dezeen*.

144 Ibid.

145 Ibid.

146 Clare Cooper Marcus, *Therapeutic landscapes: an evidence-based approach to designing healing gardens and restorative outdoor spaces*, (Hoboken, New Jersey: Wiley, 2014).

147 Jessica Mairs, "Tadao Ando surrounds huge buddha statue with lavender-covered mound at Sapporo cemetery," *Dezeen*.

148 "The Fielding Memorial Chapel of St. Mark, Thorneloe University," in *OAA Awards 2017*. Toronto, ON: Canadian Architect, 2017.

149 "The Fielding Memorial Chapel of St. Mark, Thorneloe University," in *OAA Awards 2017*.

150 Joseph Wesley Uhl, *The Art and Craft of Tea*, Quarry Books. Kindle Edition.

151 "Weed," *Dictionary.com*, accessed June 20, 2019..

152 Ted Steinberg, *American Green: The Obsessive Question for the Perfect Lawn*, W. W. Norton & Company; reprint edition, 2007.

153 "Lawn Order," *99% Invisible*, last modified August 18, 2015. Podcast.

154 "Lawn Order," *99% Invisible*.

155 Ibid.

156 Andrew J. Downing, *The Architecture of Country Houses*, (New York: W. W. Norton & Company, 1859).

157 Stephen J. Dubner, "How Stupid Is Our Obsession With Lawns? (Ep. 289)," *Freakonomics*, last modified May 31, 2017..

158 "Lawn Order," *99% Invisible*.

159 Brigitte Mars, *Dandelion Medicine: Remedies and Recipes to Detoxify, Nourish, and Stimulate*.

160 Ibid.

161 Ibid.

162 Anne Burkhard, "Object Lessons: Thinking about Material Culture," *Art Education*, 59:2, 33..

163 Crispin Sartwell, *Six Names of Beauty*, (New York, NY: Routledge, 2004), 83.

164 Erin Niimi Longhurst, *A Little Book of Japanese Contentments: Ikigai, Forest Bathing, Wabi-sabi and More*, (San Francisco, CA.: Chronicle Books LLC, 2018), 74.

165 Crispin Sartwell, *Six Names of Beauty*.

166 Ibid.

167 Ibid., 84.

168 Ibid., 86.

169 Sienna Saint-Cyr, *Kintsugi: Powerful Stories of Healing Trauma*. University Place, (WA: SinCyr Publishing L.L.C., 2018), Kindle Edition.

170 Erin Niimi Longhurst, *A Little Book of Japanese Contentments*, 74.

171 Sienna Saint-Cyr, *Kintsugi: Powerful Stories of Healing Trauma*.

172 Erin Niimi Longhurst, *A Little Book of Japanese Contentments*, 74.

173 Hanno Rauterberg, *Talking Architecture: Interviews with Architects* (Munich: Prestel, 2008), 83.

174 Ruth A Peltason and Grace Ong-Yan, *Architect : the work of the Pritzker Prize laureates,* (New York, N.Y. : Black Dog & Leventhal : 2010), 114.

175 Ruth A Peltason and Grace Ong-Yan, *Architect : the work of the Pritzker Prize laureates,* 114.

176 Ibid.

177 Alain De Botton, *The Architecture of Happiness*, (Toronto: McClelland & Stewart, 2006).

178 Candice Kumai, *Kintsugi Wellness: The Japanese Art of Nourishing Mind, Body and Spirit*, (New York, NY: HarperCollins Publishers, 2018), 40.

179 C. Norberg-Schulz, "The Phenomenon of Place," in Nesbitt, K. (Ed.), Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995, (New York, NY: Princeton Architectural Press, 1976), 420.

6, 2019. Mixed media.

3.14 McMillan, Shannon. *Vietnam War Memorial Collage B*. January 6, 2019. Mixed media.

3.15 McMillan, Shannon. *Vietnam War Memorial Collage C*. January 6, 2019. Mixed media.

3.16 McMillan, Shannon. *Vietnam War Memorial Collage D.* January 6, 2019. Mixed media.

3.17 Mairs, Jessica. "Hill of the Buddha: Bottom of Statue." *Dezeen*. August 8, 2017.

3.18 Mairs, Jessica. "Hill of the Buddha: Bottom of Statue." *Dezeen*. August 8, 2017.

3.19 Mairs, Jessica. "Hill of the Buddha: Top of Statue." *Dezeen*. August 8, 2017.

3.20 Mairs, Jessica. "Hill of the Buddha: Bottom of Statue." *Dezeen*. August 8, 2017.

3.21 McMillan, Shannon. *Hill of the Buddha Collage A*. January 6, 2019. Mixed media.

3.22 McMillan, Shannon. *Hill of the Buddha Collage B*. January 6, 2019. Mixed media.

3.23 McMillan, Shannon. *Hill of the Buddha Collage C*. January 6, 2019. Mixed media.

3.24 McMillan, Shannon. *Hill of the Buddha Collage D.* January 6, 2019. Mixed media.

3.15 Cress, Kevan. *Thorneloe Chapel at LU: Interior (1)*. 2013. Photograph.

3.16 McMillan, Shannon. *Thorneloe Chapel at LU: Exterior*. January 6, 2019. Photograph.

3.17 Cress, Kevan. *Thorneloe Chapel at LU: Interior (2)*. 2013. Photograph.

3.18 Cress, Kevan. *Thorneloe Chapel at LU: Interior (3)*. 2013. Photograph.

3.19 McMillan, Shannon. *Thorneloe Chapel at LU Collage* A. January 6, 2019. Mixed media.

3.20 McMillan, Shannon. *Thorneloe Chapel at LU Collage* B. January 6, 2019. Mixed media.

3.21 McMillan, Shannon. *Thorneloe Chapel at LU Collage C*. January 6, 2019. Mixed media.

3.22 McMillan, Shannon. *Thorneloe Chapel at LU Collage D*. January 6, 2019. Mixed media.

4.1 McMillan, Shannon. *Relevant disciplines in scope of thesis*. January 6, 2019. Digital graphic.

4.2 McMillan, Shannon. *Traditional japanese tea mat layouts*. January 6, 2019. Digital graphic.

4.3 McMillan, Shannon. *Tea mat geometry exercise A*. July 14, 2019. Mixed media on OSB.

4.4 McMillan, Shannon. *Tea mat geometry exercise B*. July 14, 2019. Mixed media on OSB.

4.5 McMillan, Shannon. *Tea mat geometry exercise C*. July 14, 2019. Mixed media on OSB.

4.6 McMillan, Shannon. *Tea mat geometry exercise D*. July 14, 2019. Mixed media on OSB.

4.7 McMillan, Shannon. *Laurentian University Campus Map*. January 24, 2019. Digital drawing.

4.8 McMillan, Shannon. *Sudbury Rain Information*. January 24, 2019. Digital graphic.

4.9 McMillan, Shannon. *Sudbury Temperatures Information*. January 24, 2019. Digital graphic.

4.9 McMillan, Shannon. *Sudbury Sun Information*. January 24, 2019. Digital graphic.

4.10 McMillan, Shannon. *Site*. January 24, 2019. Digital graphic on Google maps image.

4.11 McMillan, Shannon. *Site 2*. January 24, 2019. Digital graphic on Google maps image.

4.12 McMillan, Shannon. *Site Photograph 1*. May 12, 2019. Digital image.

4.13 McMillan, Shannon. *Site Photograph 2*. May 12, 2019. Digital image.

4.14 McMillan, Shannon. *Site Photograph 3*. May 12, 2019. Digital image.

4.15 McMillan, Shannon. *Site Photograph 4*. May 12, 2019. Digital image.

4.16 McMillan, Shannon. *Site Plan*. July 20, 2019. Digital drawing.

4.17 McMillan, Shannon. *Site Plan Axonometric*. July 20, 2019. Digital drawing.

4.18 McMillan, Shannon. *Material culture*. September 4, 2019.

4.19 McMillan, Shannon. *Paper screen testing*. June 20, 2019.

4.20 McMillan, Shannon. *Paper-making tea tray 1*. June 20, 2019.

4.21 McMillan, Shannon. *Paper-making tea tray 2*. June 20, 2019.

4.22 McMillan, Shannon. *Paper-making tea tray 3*. June 20, 2019.

4.23 McMillan, Shannon. *Parti exercise 1*. June 20, 2019. Acrylic on handmade dandelion paper.

4.24 McMillan, Shannon. *Parti exercise 2*. June 20, 2019. Acrylic on handmade dandelion paper.

4.25 McMillan, Shannon. *Parti exercise 3*. June 20, 2019. Acrylic on handmade dandelion paper.

4.26 McMillan, Shannon. *Parti exercise 4*. June 20, 2019. Acrylic on handmade dandelion paper.

4.27 McMillan, Shannon. *Parti exercise 5*. June 20, 2019. Acrylic on handmade dandelion paper.

4.28 McMillan, Shannon. *Parti exercise 6*. June 20, 2019. Acrylic on handmade dandelion paper.

4.29 McMillan, Shannon. *Parti exercise 7*. June 20, 2019. Acrylic on handmade dandelion paper.

4.30 McMillan, Shannon. *Material culture*. June 20, 2019. Mixed media.

4.31 Gaber, Tammy. *Mixed media process plan on OSB by Shannon McMillan*. September 2, 2019. Digital image.

4.32 Gaber, Tammy. *Mixed media process plan textures on OSB by Shannon McMillan*. September 2, 2019. Digital image.

4.33 Gaber, Tammy. *Mixed media process plan textures on OSB, and material exploration pieces by Shannon McMillan*. September 2, 2019. Digital image.

4.34 McMillan, Shannon. *Material culture detail 1*. August 25, 2019. Mixed media on canvas.

4.35 McMillan, Shannon. *Material culture detail 2*. August 25, 2019. Mixed media on canvas.

4.36 McMillan, Shannon. *Material culture detail 3*. August 25, 2019. Mixed media on canvas.

4.37 McMillan, Shannon. *Material culture detail 4*. August 25, 2019. Mixed media on canvas.

4.38 McMillan, Shannon. *Threshold Inspiration*. June 15, 2019. Mixed

media.

4.39 McMillan, Shannon. *Threshold Parti*. August 13, 2019. Mixed media.

4.40 McMillan, Shannon. *Garden Inspiration*. June 5, 2019. Mixed media.

4.41 McMillan, Shannon. *Garden Parti*. July 9, 2019. Mixed media on canvas.

4.42 McMillan, Shannon. *Garden Atmosphere*. February 3, 2019. Mixed media.

4.43 McMillan, Shannon. *Landscaping in Sudbury*. July 21, 2019. Digital graphic.

4.44 McMillan, Shannon. *Decompression Inspiration*. June 5, 2019. Mixed media.

4.45 McMillan, Shannon. *Decompression Parti*. July 9, 2019. Mixed media on canvas.

4.46 McMillan, Shannon. *Decompression Inspiration (second iteration)*. July 9, 2019. Mixed media.

4.47 Martel, Braeden. *Inhale/Exhale by Sahana Dharmaraj, Jenna Lamb and Shanno McMillan*. 2016. Digital Image.

4.48 Martel, Braeden. *Inhale/Exhale by Sahana Dharmaraj, Jenna Lamb and Shanno McMillan*. 2016. Digital Image.

4.49 McMillan, Shannon. *Water Path*. June 5, 2019. Mixed media on canvas.

4.50 McMillan, Shannon. *Plan*. September 8, 2019. Digital drawing.

4.51 McMillan, Shannon. *Roof Plan*. September 8, 2019. Digital drawing.

4.52 McMillan, Shannon. *Site Section*. September 8, 2019. Digital drawing.

4.53 McMillan, Shannon. *Site Sectional Axonometrics*. August 25, 2019. Digital drawing.

4.54 McMillan, Shannon. *Decompression Atmospheric Section*. September 12, 2019. Digital drawing.

4.55 McMillan, Shannon. *Design Ingredients; Texture*. September 12, 2019. Digital graphic.

4.56 McMillan, Shannon. *Design Ingredients; Path*. September 12, 2019. Digital graphic.

4.57 McMillan, Shannon. *Design Ingredients; Context*. September 12, 2019. Digital graphic.

4.58 McMillan, Shannon. *Design Ingredients; Light*. September 12, 2019. Digital graphic.

BIBLIOGRAPHY

Ando, Tadao. *Tadao Ando: the colours of light*. London: Phaidon, 2017.

Agrest, Diana. *Architecture from Without: Theoretical Framings for a Critical Practice*. Cambridge: MIT Press, 1993.

"Bedlam." *Dictionary.com*. Accessed December 5, 2018. https://www.dictionary.com/browse/bedlam

Burkhard, Anne. "Object Lessons: Thinking about Material Culture," *Art Education*, 59:2, 33-39.

C. Norberg-Schulz."The Phenomenon of Place." In Nesbitt, K. (Ed.), *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995*. New York, NY: Princeton Architectural Press, 1976.

Cerbone, David R. *Understanding Phenomenology*. Stocksfield: Acumen, 2006.

Ching, Francis D. K. *Architecture: Form, Space and Order*. Kindle Edition: John Wiley & Sons Inc., 2014.

Choise, Simona. "Reports of Mental Health Issues Rising Among Postsecondary Students: Study." *The Globe and Mail.* Last modified May 31, 2018.

"Context." *Dictionary.com*. Accessed August 12, 2019. https://www.dictionary.com/browse/context?s=t

Cordes, Spence K. "The Paradigms that Ground Theorizing." In *A Primer on Theory of Architecture*. New York: Routledge, 2017. 50-83.

De Botton, Alain. *The Architecture of Happiness*. Toronto: McClelland & Stewart, 2006.

Donovan, Jenny. *Designing the Compassionate City: Creating Places Where People Thrive*. New York: Routledge, 2017.

Dostoğlu, Neslihan. "Utopia and Determinism: Architectural Deterministic Thinking in Urban Utopias," *METU Journal of the Faculty of Architecture* 8, no. 2 (1988): 143-152.

Downing, Andrew J. *The Architecture of Country Houses*. New York: W. W. Norton & Company, 1859.

Dubner, Stephen J. "How Stupid Is Our Obsession With Lawns? (Ep. 289)," *Freakonomics*. Last modifies May 31, 2017. http://freakonomics.com/podcast/how-stupid-obsession-lawns/

Ellsworth, Elizabeth. *Places of Learning : Media, Architecture, Pedagogy*. London: Routledge, 2005.

Foucault, Michel. *Madness and Civilization: A History of Insanity in the Age of Reason*. London: Tavistock Publications, 1967.

Fuss, Diana. "Berggasse 19: Inside Freud's Office (With Diana Fuss)." *Joel Sanders Architect*. June 11, 2015. Accessed October 21, 2018. http://joelsandersarchitect.com/berggasse-19-inside-freuds-office-with-diana-fuss/

Gintoff, Vladimir. "Spotlight: Maya Lin." *ArchDaily*. Last modified October 5, 2018.

Glassie, Henry. "Vernacular Architecture and Society," *Material Culture* 1(1984): 7.

Holl, Steven, Juhani Pallasmaa and Alberto Perez-Gomez. *Questions of Perception: Phenomenology of Architecture*. San Francisco: William Stout Publishers, 1994.

Karimi, Pamela. "Architecture, Matter and Mediation in the Middle East." *Traditional Dwellings and Settlements Review* 25, no. 1 (2013): 45-53. http://www.jstor.org/stable/23612200.

Kazano H. "Asylum: the Huge Psychiatric Hospital in the 19th century U.S." *PubMed* 114, no.10 (2012): 194-200.

Kumai, Candice. *Kintsugi Wellness: The Japanese Art of Nourishing Mind, Body and Spirit*. New York, NY: HarperCollins Publishers, 2018.

"Lawn Order." *99% Invisible*. Last modified August 18, 2015. Podcast. https://99percentinvisible.org/episode/lawn-order/

"Leading Causes of Death in Canada." *Statistics Canada*. Accessed January 4, 2019.

"Light." *Dictionary.com*. Accessed August 12, 2019. https://www.dictionary.com/browse/light?s=t

Longhurst, Erin Niimi. *A Little Book of Japanese Contentments: Ikigai, Forest Bathing, Wabi-sabi and More*. San Francisco, CA.: Chronicle Books LLC, 2018.

Low, Setha. *Spatializing Culture: The Ethnography of Space and Place*. New York: Routledge, 2017.

Mairs, Jessica. "Tadao Ando surrounds huge buddha statue with lavender-covered mound at Sapporo cemetery." *Dezeen*. Last modified August 8, 2017.

Mallgrave, Harry Francis. *From Object to Experience: The New Culture of Architectural Design*. New York: Bloomsbury Academic, An imprint of Bloomsbury Publishing Plc, 2018.

Marcus, Clare Cooper. *Therapeutic landscapes: an evidence-based approach to designing healing gardens and restorative outdoor spaces*. Hoboken, New Jersey: Wiley, 2014.

Markus, Thomas A. *Buildings & Power: Freedom & Control in the Ori-*

128

gin of Modern Building Types. London: Routledge, 1993.

Mars, Brigitte. Dandelion Medicine: Remedies and Recipes to Detoxify, Nourish, and Stimulate. Storey Publishing, LLC. Kindle Edition

Mehta, Neeta. "Mind-body Dualism: A critique from a Health Perspective." Mens sana monographs 9, no.1 (2011): 202-9.

Moran, Dermot. Introduction to Phenomenology. London: Routledge, 2000.

Norberg-Schulz, C. "The Phenomenon of Place," in Nesbitt, K. (Ed.), Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995, (New York, NY: Princeton Architectural Press, 1976), 420.

One Flew Over the Cuckoo's Nest. Google play movie. Directed by Milos Forman. Burbank: Warner Bros. Entertainment Inc., 1975.

Pallasmaa, Juhani. The Eyes of the Skin: Architecture and the Senses. Chichester: Wiley-Academy, 2005.

"Path." Dictionary.com. Accessed August 12, 2019. https://www.dictionary.com/browse/path?s=t

Peltason, Ruth A. and Grace Ong-Yan. Architect : the work of the Pritzker Prize laureates in their own words. New York, N.Y. : Black Dog & Leventhal : 2010.

"Phenomenology." Oxford Dictionary. Accessed October 7, 2018. https://www.oxfordlearnersdictionaries.com/definition/english/phenomenology

"Psychoanalysis." Merriam-Webster. Accessed January 4, 2019. https://www.merriam-webster.com/dictionary/psychoanalysis

"Psychotherapy." National Alliance on Mental Illness. Accessed January 4, 2019. https://www.nami.org/learn-more/treatment/psychotherapy

"Psychopharmacology." Merriam-Webster. Accessed January 4, 2019. https://www.merriam-webster.com/dictionary/psychopharmacology

Rauterberg, Hanno. Talking Architecture: Interviews with Architects. Munich: Prestel, 2008.

Saint-Cyr, Sienna. Kintsugi: Powerful Stories of Healing Trauma. University Place, WA: SinCyr Publishing L.L.C., 2018. Kindle Edition.

Sartwell, Crispin. Six Names of Beauty. New York, NY: Routledge, 2004.

Scull, Andrew. Madness: A Very Short Introduction. New York: Oxford University Press, 2011.

Scull, Andrew. Madness in Civilization: A Cultural History of Insanity from the Bible to Freud, from the Madhouse to Modern Medicine. London: Thames & Hudson Ltd., 2015. .

Steinberg, Ted. American Green: The Obsessive Question for the Perfect Lawn. W. W. Norton & Company; reprint edition, 2007.

"Texture." Dictionary.com. Accessed August 12, 2019. https://www.dictionary.com/browse/texture

"The Challenge." Fountain House. Accessed January 5, 2019. https://www.fountainhouse.org/what/impact/challenge

"The Fielding Memorial Chapel of St. Mark, Thorneloe University." In OAA Awards 2017. Toronto, ON: Canadian Architect, 2017. https://issuu.com/iqbusinessmedia/docs/oaa_awards_final_de/148

Uhl, Joseph Wesley. The Art and Craft of Tea. Quarry Books. Kindle Edition.

"Weed." Dictionary.com. Accessed June 20, 2019. https://www.dictionary.com/browse/weed

Weitz, Don. "Electroshock:Torture as 'Treatment.'" In Mad Matters: A Critical Reader in Canadian Mad Studies. Ed. Brenda A. LeFrancois, Robert Menzies and Geoffrey Renume. Toronto: Canadian Scholars' Press Inc., 2013.

White, Erik. "Laurentian University students vote to each pay $50 to mental health services." CBC News. Last modified November 14, 2018.

Yanni, Carla. The Architecture of Madness: Insane Asylums in the United States. Minneapolis: University of Minnesota Press, 2007.

Yanni, Carla."The Linear Plan for Insane Asylums in the United States before 1866," Journal of the Society of Architectural Historians 62, no. 1 (2003): 24-49.

Yunxiang, Peng. "Water Temple, Tadao Ando." Visual Lexicon. Last modified October 4, 2017.