Expanding Universal Care With the Integration of Plural Psychedelic Health Spaces

By Andréa McIntosh

A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs in partial fulfillment of the requirements from the degree of

Master of Architecture

Azrieli School of Architecture and Urbanism

Carleton University
Ottawa, ON, Canada

© Andréa McIntosh
SPACES FOR CONSUMPTION

psychedelic clinics

which embodied experience

The physical, social and

SETTING: HOSPITALS, RE-

The psychoactive com-

NON-DENOMINATIONAL

GROUP SETTINGS,

SETTING: SANCTUARY,

The physical components,

BEDS. PRESENT; DE-IN-

cultural environments in

FIELD, DESERT, FOREST,

expanding experienc

chological, sensory or

Beliefs or actions that are

influence over their psy-

chies, and systems.  Suvli-

mations of 'order'

Individuals entrusted with

leading a person through

Individual(s) who partakes

an experience, with direct

PSYCHIATRISTS, DOC-

PARTICIPANTS: FRIENDS,

MORPHIA

PARTICIPANTS: FRIENDS,

MORPHIA

DISORDERS: DEPRESSION,

PARTICIPANTS: FRIENDS,

MORPHIA

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,

PARTICIPANTS: FRIENDS,

MORPHIA

LERS, DANCERS, 18-35yr

LERS, DJ, NEO-SHAMANS,
ABSTRACT

Places of health are continuously informed by care practices. This thesis explores the introduction of psychedelic treatments into the realm of health care design by establishing a Psychedelic Architecture theory connecting plural epistemologies of health. Psychedelic Architectures, the spaces of psychedelic practice, encompass a diverse collection of health care designs guided by fluid understandings of communal, spiritual, ecological and spatial interrelations of health practices. By studying the cultural productions of psychedelic practices we inevitably widen and redefine what our mental health care spaces are capable of.

This thesis is interested in positioning architecture within the discourse of psychedelic health practices becoming more widely adopted in the 21st century. It asks, how has architecture been employed in places of psychedelic health? What are the connections between positive psychedelic experiences and therapeutic psychedelic settings? The resulting work explores the intuitive and ingenious uses of space in Psychedelic Architectures and posits that therapy, spirituality, and recreation intersect in places of care.
The process of exploring Psychedelic Architectures over the past 12 months has afforded me so many wonderful opportunities and discussions which have spurred new perspectives on my scholarship and personal practice. I could not have arrived at this result without my loving, brilliant, and persistent support network.

To my supervisors Natalia and Johan, I am so grateful for the guidance you have afforded me over the many Zoom calls we’ve shared. Your care and compassion for students is deeply felt, and deeply appreciated. You have enriched my perspective and introduced me to new avenues in the field which have opened my mind to a broader scope of architectural thought.

I’d like to thank the extended faculty at the Azrieli School of Architecture and Urbanism. Joining the 3-year Master of Architecture program has drastically changed my life. The studios and courses were rich with critical inquiry and constructive criticism in kind. I will certainly miss Building 22 as well, my second home, a place of knowledge, friendship and self discovery.
Thank you, Fisher River Cree First Nation, for the support you have given me. Kelly, your guidance as a post-secondary councillor has been invaluable.

To my dear friends. You are a wonderful and brilliant group of young designers. I have counted myself incredibly lucky to be amongst you as you inspire me and make me proud to be a part of this profession.

Thank you to my family for your enduring support over these many years of scholarship. To France, Garfield, Alex, Julie, Anik, Rose, Heather, Nathan, Sehar, and Zach I am so grateful for your continued belief in me. Tyler, my sweet husband, your love and endless dedication have made this experience better in every way. Thank you for always looking out for me and helping me see this dream come to fruition.

I’d also like to thank the places that I have explored over this thesis. These diverse and dynamic health architectures have given me a new perspective on the relationships between places and practices of care for which I am eternally grateful.
# TABLE OF CONTENTS

1. **Dried, burned, soaked, brewed, dissolved, inhaled**
   1.1. Anecdote 1: Dreaming and Wakefulness

2. **Psychedelics: An Architectural Theory**
   2.1. Set and Setting: Conditional Relationships of Psychedelic Architecture
   2.2. Neuroarchitecture and Psychedelic Health
   2.3. Placebo Architecture
   2.4. From Prohibition to Medical Administration
   2.5. Alt-Health: Contributions of Psychedelic BIPOC Communities
   2.6. Widening the Universal Perspective: A Short History of Medicalized Mental Health
   2.7. Anecdote 2: Awe-inspiring and Unearthly Beauty

3. **Plural Health - Settings of Psychedelic Practice**
   3.1 Festival Psychedelic Architecture
   3.1.1. Case Study: Zendo Project Psychedelic Peer Support Yurt
   3.2. Sacred Psychedelic Architecture
   3.2.1. Case Study: Santo Daime
   3.3. Clinical Psychedelic Architecture
   3.3.1. Medical Spaces of Psychedelic-Assisted Therapy
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>4. Syncretic Reconciliations: Hybridized Psychedelic Care Space</td>
</tr>
<tr>
<td>83</td>
<td>5. Conclusion</td>
</tr>
<tr>
<td>87</td>
<td>5.2. Anecdote 5: Personal Journey</td>
</tr>
<tr>
<td>90</td>
<td>6. Cited Works</td>
</tr>
</tbody>
</table>


03 1.4. Woman receiving cleansing smoke from ayahuasca shaman as part of a 3-day retreat located in Ecuador for $2500. 2018. Ayahuasca Foundation. Image sourced from: https://www.ayahuascafoundation.org/shipibo-tradition/


09 2.1. Diagram of conditional effects of psychedelic experience. By author.

15 2.1.1. Diagram of set and setting theory. By author.

16 2.1.2. Dosing room at the Imperial College of London. 2017. Thomas Angus. Image sourced from: https://www.imperial.ac.uk/psychedelic-research-centre/trials/

16 2.1.3. Patient being guided by two psychedelic practitioners during a psilocybin experience at the Imperial College of London. 2017. Thomas Angus. Image sourced from: https://blogs.imperial.ac.uk/photography/2021/05/19/in-pictures-the-centre-for-psychedelic-research/#more-2799

23 2. 2.3.1. MANtrandFORM is a work which intimates architectural thought with systemic understandings of the human body. 1976. Oswald Mathia Unger. Image sourced from: https://socks-studio.com/2011/04/25/o-m-ungers-city-metaphors/

25 2.4.1. A ‘Drop Acid not Bombs’ sign is held during an anti-war protest
LIST OF ILLUSTRATIONS

25 2.4.2. Therapists Marcela O’Talora and Bruce Poulter are trained to conduct MDMA-assisted psychotherapy. In this reenactment, they demonstrate how they help guide and watch over a patient who is revisiting traumatic memories while under the influence of MDMA. 2019. MAPS. Image sourced from: https://www.npr.org/sections/health-shots/2019/08/14/746614170/mdma-aka-ecstasy-shows-promise-as-a-ptsd-treatment


34 2.6.1. Image of Weyburn Mental Hospital in Weyburn Saskatchewan, Circa 1950. This hospital the first in Canada to use a psychedelic drug (LSD) to study mental health disorders. 1950. Photographer unknown. Image sourced from: http://wwwvanishedcompass.com/weyburnmentalhospital.html

34 2.6.2. Physicians at the Weyburn Mental Hospital administering LSD to their patients. 1952. Photographer unknown. Image sourced from: http://wwwvanishedcompass.com/weyburnmentalhospital.html

36 2.6.3. Historical timeline of early medical spaces which became settings for psychiatric treatments. By author.

36 2.6.4. Zooming in on the iterative process of psychiatric settings from the 20th century to current day psychedelic treatment rooms. By author.

43 3. 3.1.1. Collection of festival psychedelic architectures with categories of setting, psychedelics, disorders, materials, guides, set, and participants. Collection by author.

LIST OF ILLUSTRATIONS


3.1.5. Diagrams of the Zendo structure. By author.


3.1.7. The Zendo, a safe, warm, comfortable space. By author.

3.1.8. Moving in an out of the Zendo. Within the volume there is a health collective, guides, psychiatrists, and psychedelic practitioners who help to navigate difficult experiences. By author.

3.1.9. A simple gesture, with modest materials and an intimate scale, the shelter provides a place of wellness centered around harm reduction and communal support. By author.

3.2.1. Collection of sacred Psychedelic Architectures with categories of setting, psychedelics, disorders, materials, guides, set, and participants. Collection by author.


3.2.7. In the Santo Daime church the primary function of the physical space is to look inward. By author.

3.2.8. Performative acts of hymnal chanting, dancing, and bouts of silent meditation are supported by the use of and removal of chairs at different stages during the trabalhos. By author.

3.2.9. Ritual dancing opens a doorway towards numinous healing states, creating a rave of moving bodies. A psychedelic practice physicalized by communal corporal movement. By author.

3.3.1. Collection of clinical Psychedelic Architectures with categories of setting, psychedelics, disorders, materials, guides, set, and participants. Collection by author.

3.3.2. Dosing room at the Imperial College of London. 2017. Thomas Angus. Image sourced from: https://www.imperial.ac.uk/psychedelic-research-centre/trials/

3.3.3. Diagram of psychedelic-assisted therapy process. By author.

3.3.4. Patient being guided by two psychedelic practitioners during a psilocybin experience at the Imperial College of London. 2017. Thomas Angus. Image sourced from: https://blogs.imperial.ac.uk/photography/2021/05/19/in-pictures-the-centre-for-psychedelic-research/#more-2799

3.3.5. Patient guided by two psychedelic practitioners at the John Hopkins psychedelic research lab. John Hopkins, Image sourced from: https://hopkinspsychdelic.org/

3.3.6. Observations of similarities between spiritual iconography present in clinical psychedelic settings and psychedelic tourism spaces. By author.

3.3.7. Floor layout of MDMA treatment room as described in the Manual for MDMA-Assisted Psychotherapy. Diagram by author.

3.3.8. Spatial investigations of the MDMA space imagined in a clinical facility with multiple offices along a long hallway. By author.


3.3.10. The clinical psychedelic health space. By author.
<table>
<thead>
<tr>
<th>Page</th>
<th>Illustration Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>3.3.11. Room layout at the John Hopkins psychedelic research facility. By author.</td>
</tr>
<tr>
<td>74</td>
<td>3.3.12. Spatial modifications of psychedelic health spaces observed and distorted. By author.</td>
</tr>
<tr>
<td>77</td>
<td>4. 4.1.1 Outdoor psychedelic living room. By author.</td>
</tr>
<tr>
<td>79</td>
<td>4.1.2. Psychedelic health pods. By author.</td>
</tr>
</tbody>
</table>
**Setting** The physical, social, and cultural environments in which psychedelic experiences takes place.

**Set** The preparations, intentions, personality, and cultural ideations that a person brings into a psychedelic experience.

**Recreational** Planned leisure and enjoyment which enriches the human condition. A term which has been used to trivialize psychedelic experience.

**Therapeutic** To heal and improve upon. To mend or move past a trauma or pain.

**Psychedelic** Psychoactive compounds and plant medicines eliciting hallucinogenic and/or consciousness expanding experiences. A distorted reality – in material and immaterial forms.

**Disorder** States of being, beliefs or actions that are counter to social norms, hierarchies, and systems. A common medical term for describing ‘atypical’ or ‘non-normative’ bodily or psychological conditions, acute or chronic.

**Guides** Individuals entrusted with leading a person through a psychedelic experience, with a direct influence over their psychological and/or physical wellbeing.
<table>
<thead>
<tr>
<th><strong>Participants</strong></th>
<th>Individuals who partake in psychedelic experiences. This includes patients and non-patients.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intention</strong></td>
<td>Written or mental objectives which guide psychedelic experiences</td>
</tr>
<tr>
<td><strong>Plural</strong></td>
<td>In reference to the collection of known and unknown architectures, histories, and practices of psychedelic health</td>
</tr>
<tr>
<td><strong>Psychedelic Health</strong></td>
<td>The intentional use of psychedelic substances for the purposes of enjoyment, spiritual and therapeutic experiences.</td>
</tr>
<tr>
<td><strong>Psychedelic Architectures</strong></td>
<td>A term coined by this thesis as the plural environments of psychedelic consumption and practice. Defining these spaces is a form of activism that acknowledges the lived realities of psychedelic communities, beliefs, and histories.</td>
</tr>
</tbody>
</table>
PART 01

Dried, soaked, brewed, dissolved, inhaled
Ayahuasca, psilocybin, mescaline (peyote), and Ibogaine are plant derived psychoactive compounds used by indigenous communities for generations in Gabon, Mexico, Peru, Brazil, the United States and Canada. LSD, MDMA and ketamine are chemically derived hallucinogenic compounds that have been developed by biochemistry manufacturers across Europe and the US. The consumption of psychedelics encompasses a wellness and mental health practice which is termed in this thesis as psychedelic health.

An exploration of these health practices, and their socio-spatial conditions, bring to light the importance of place in psychedelic care and in the field of design. Psychedelic Architectures, a novel architectural theory created by this research, are the environments where psychedelics are consumed and practiced. The introduction of Psychedelic Architectures to our field recognizes that space, practice and community are interdependent conditions of these health care spaces, their inclusion in architectural discourse advancing and expanding the field of health care design.

Until very recently in the Western world, psychedelic practices and their spaces have operated in hidden capacities.
With renewed interest in psychedelic research since the 1990s, the medical community is beginning to understand that psychedelics have a potential to produce positive and meaningful treatments for mental health disorders. In this process, we are re-evaluating long held beliefs about how these substances might become integrated within our wider health care networks, and how psychedelic practices are informed by treatment spaces.

With the adoption of psychedelics comes the re-assessment of drug policies which have disproportionately targeted BIPOC and marginalized uses of hallucinogenic drugs. Historically, we have criminalized psychedelic substances and trivialized their practices with dismissive terms such as recreational and radical. In the process of stigmatizing and concealing psychedelic activities we have undervalued the lived realities of these communities, and undermined the potential of these embodied, multisensory, and holistic health practices and networks.

The recreational and spiritual uses of psychedelics are rarely discussed as forms of health care. However, these substances have been consumed by millions of people over

---
thousands of years outside of Western medical frameworks of care. There are longstanding communal practices which encompass a wealth of knowledge that we would be remiss to ignore in the study of psychedelic health care design.

Increased awareness of their benefits and a continued desire to use psychedelics in spite of their illegality, has resulted in a discourse of decriminalization similar to what we have seen with marijuana. Market forces wishing to capitalize on increased interest may accomplish this within the next few years, and in some instances are already doing so with luxurious resorts and psychedelic tourism. There is an urgency to the questions of access, administration and safety as psychedelic health approaches mass-consumption.

An opportunity exists for architecture to help define these spaces as more than medical and commercial - avoiding ideological bottlenecks and advocating for wider applications and acceptance of these diverse practices.

The integration of psychedelic health into the realm of universal care may require that we rethink whether universal care settings exist for all psychedelic practices. The plural, spatial and material conditions of these communities are highly suggestive that a diversity of practices, places and peoples are significant contributors to meaningful health interventions. With a greater focus on plurality there is a
potential to reclaim agency from a health care system which has historically prioritized reproducible treatment settings over diversity in health practices.

Psychedelic Architectures vary significantly. They are transient, ad hoc, temporal, deeply communal and performative places. Some environments are co-opted for temporary uses, while others are intentionally designed for psychedelic practices. Ceremonial huts, living rooms, therapist offices, outdoor music festivals, hospitals, forests, cathedrals, desert communities, dance clubs, and hotel rooms. Each of these Psychedelic Architectures informs the intentions of psychedelic consumption, and the experience of psychedelic activity.

As a student of both architecture and neuroscience, and as a woman of Cree and Western decent, I have been fascinated by this multidisciplinary topic. Psychedelic practices blur epistemological boundaries of human consciousness, mental health, and environmental knowledge on health care practices. It’s adoption within Western medicine is syncretic and opens the door towards greater agency in mental health practices. Questions about how to administer psychedelic treatments redefine how we view and understand the importance of health care contexts on health care outcomes. Preparation, ceremony, belonging, and community being incredibly valuable towards generating meaningful
psychedelic experiences. The plural nature of psychedelic consumption will undoubtedly expand our understanding of health care spaces and health care practices.

It is novel in the field of architecture to position it's influence in psychedelic treatments and more is needed to explore this relationship. This thesis will examine cases studies of various Psychedelic Architectures to elucidate spatial interactions within these health practices. Three precedents demonstrate the plural ways we experience places of health, relate to them and feel connected by them – environmental factors which influence our health outcomes tremendously. In the future adoption of psychedelic practices, we will see new health care architectures which may borrow from the spatial knowledge of psychedelic communities. Speculative syncretic amalgamations of psychedelic space are investigated in the final section of this document as an exercise in integrating psychedelic health epistemologies.

In this thesis the word ‘health' is used interchangeably in the physical, mental and spiritual sense of the word. This intentionally challenges the limitations of categorizing well-being as a set of separate conditions. Rather, health may be thought of as the maintenance of relationships between interdependent systems within and beyond the body. Even broader still, this thesis recognizes that health is intrinsically

---

1.7. Zendo Project volunteers practice guiding psychedelic participants through challenging experiences.
linked to larger social structures of community, economics, justice, ecology, cosmology, and religion. Rather than focusing on deficits of ‘individual’ systems, this thinking is interested in strengthening connections and creating flourishing relationships within the vibrant fabric of life.

Including psychedelics within the canon of health care design is as radical as it is necessary. For many, this is an entirely new and unfamiliar understanding of health practices and spaces. The intent of this research is to create a theory of Psychedelic Architectures exploring the connections between practice, people and place which create meaningful psychedelic experiences. This thesis recognizes that widening the narrow spectrum of health care design with the adoption of psychedelic health practices contributes to redefining mental health care settings and practices in the Western world.
Anecdote 1: Psychedelics historian Michael Pollan quotes in his book “How to Change Your Mind” a conversation with philosopher Richard Boothby on a psychedelic experience Boothby had in the wake of losing his son to suicide, he states:

“If, in response to the swelling intensity of the whole experience, I began to tense up with anxiety, the scene appears to tighten in some way. But if I then consciously remind myself to relax, to let myself go into the experience, the effect is dramatic...

The space in which I seem to find myself, already enormous, suddenly yawns open even further and the shapes that undulate before my eyes appear to explode with new and even more extravagant patterns...

I felt all my organizing categories of opposition —

- dreaming and wakefulness,
- life and death,
- inside and outside,
- self and other

collapse into each other. Reality appeared to fold in on itself, to implode in a kind of ecstatic catastrophe of logic.

Yet in the midst of this hallucinatory hurricane I was having an experience of ultra-sublimity.”
PART 02

Psychedelics – An Architectural Theory
2. Psychedelics - An Architectural Theory

Psychedelic practices operate in context specific ways whereby individual, cultural and physical conditions of psychedelic practices are deterministic of highly subjective experiences. Versatile and ingenious, these architectural modes of production translate spatial and immaterial qualities of health into a multitude health spaces and networks contesting hegemonic positions on universal care.

This diagram to the left illustrates how psychedelic practices and spaces affects psychedelic experiences:

* Comfortable⁶, guided⁷, and/or prepared⁸ psychedelic settings and practices ---- afford higher chances of meaningful and therapeutic experiences.

* Uncomfortable, unguided, and/or underprepared psyche-

---

2. Comfort is the physical and emotional sense of ease and safety conditional on personal, cultural and spatial factors.
3. Guides take on many forms in psychedelic health. Shamans, sitters, psychiatrists, researchers, trusted companions and loved ones can all be guides to psychedelic participants. A defining characteristic is that participants feel a certain level of trust towards their guides. One might even consider that spiritual understandings of place can guide psychedelic experiences. For example, the spirit of a forest may guide a participant in ways that non-forest settings may not.
4. Preparation prior to a psychedelic experience involves intention setting. When an individual sets their expectations about a psychedelic experience with respect and knowledge of it’s effects it increases the opportunity for meaningful psychedelic experiences and reduces instances of ’bad trips.’
delic settings and practices ---- higher chances of unpleasant and emotionally challenging psychedelic experiences.\(^5\)

A comfortable, guided, prepared psychedelic experience may mean something different from one cultural context to the next. For some it may mean private and medically supervised treatments. For others, at home self-led care. It could be communal or explorative spaces. Or it may present itself as spaces of worship, tradition and ritual. The diversity of health beliefs and behaviours can not be accommodated by one type of care space. Thus, we find a wide array of psychedelic settings and practices dependant on diverse belief systems and contexts.

The needs of marginalized groups, and of those who do not align with Western health systems, have historically been misrepresented or ignored within these spaces. As a response to this displacement, psychedelic communities have created and, in many ways, reclaimed health generating spaces with self-governed communal practices, materializing spatial conditions unfound in medicalized networks.

With the possibility of decriminalization, it is likely that regulatory systems will be put in place to systematize the

administration of psychedelic consumption. There is a risk that psychedelic spaces and practices will be forced to conform to restrictive philosophies of care, perpetuating the marginalization of practices which do not align with these philosophies. This thesis advocates that we may avoid utilitarian approaches by learning from and allowing these spaces to continue to evolve alongside the medical adoption of these treatments. We should look towards syncretic understandings of health practices and spaces in order to strengthen and support the diverse realities of psychedelic participants.⁶

Outside of the medicalization of psychedelics, places and practices are largely non-prescriptive, self-governed, and self-sufficient. This is an important dichotomy which will be touched upon throughout this research in an effort to examine an ongoing evolution of health generating spaces. This thesis proposes the following axioms of Psychedelic Architecture:

---

⁶ The word ‘participant’ may very well replace the word ‘patient’ in psychedelic care. Practitioners commonly use the term to create a sense of agency around health-making practices and to assuage negative connotations associated to ‘patienthood.’ Psychedelic participants do just that, they participate in their own recovery process. Care is not something that is administered to them, it is an intentional act of engagement.
1. There is no singular way to design a psychedelic treatment space.

2. These spaces must remain inclusive and therefore must exist within and beyond medical paradigms of care.

3. We must explore the knowledge of marginalized psychedelic communities to inform future designs of psychedelic treatment spaces.

4. Challenges in the adoption of psychedelics are inevitable, it will take time to become socially and intellectually aware of the connections between psychedelic therapies and psychedelic spaces.

With the approbation of psychedelic health our design methodologies must be re-examined as they are often used for expedient purposes of mass ‘health-production’.

Our goals should be centered around learning from plural psychedelic practices and settings and including these perspectives within our future Psychedelic Architectures. We should do away with promoting singular solutions and rather advocate that health spaces, health communities, and health treatments are most successful when we choose them because they reflect something intrinsic to who we are.
My ambition is to acknowledge that psychedelic spaces already operate in successful and self-sufficient ways. Designers and health care professionals should be students of these incredible and overlooked precedents which are on the front lines of redefining mental health care in the 21st century. Psychedelic Architectures challenge our assumptions of what health care spaces are capable of - intuitive architectures responding to needs we have yet to meet within our own paradigms of care space.
2.1. Set and Setting – conditional relationships of Psychedelic Architecture

Outside of architectural discourse on context, the emerging field of psychedelic research has born a parallel concept named set and setting. This theory posits that conditional relationships of intention, place and practice are foundational to the therapeutic capacity and success of psychedelic treatments.

Set and setting theory is defined within the fields of psychology and neuroscience as the intentions, expectations and personality traits of participants and guides, along with the places where treatments are experienced, as cumulative conditions for the proficiency of psychedelic treatments.

* **Set**, a shortform for a participant’s mindset (their intentions, personality and expectations).

* **Setting**, the socio-cultural and physical contexts of treatment space.

The concept of set and setting arose in the early 1960s with psychologist Timothy Leary. He theorized that set and set-

7. Timothy Leary was a Harvard Psychologist and prominent scholar of psychedelic research. He helped to develop some of the first LSD human trials for the treatment of addiction and depression.
A socio-spatial concept which states that a participant’s mindset (their intentions and expectations) along with the socio-cultural and physical settings of therapy spaces have a significant impact on the outcomes of a psychedelic treatment.

2.1.1. Diagram of set and setting theory. By author.
ting attributed to why participants of LSD trials were found to have either adverse or meaningful experiences with the drug. If patients were fearful of LSD, if it was administered without their consent or if it was experienced in threatening environments, the result was quite reasonably unpleasant. However, if participants were well informed and comfortable with the process, they typically experienced powerful therapeutic sessions.10

Robin Carhart-Harris, Head of the Centre for Psychedelic Research at the Division of Brain Sciences, Faculty of Medicine, Imperial College London, states that the “therapeutic action of psychedelics is fundamentally reliant on context – both in the psychological and environmental sense. It is argued that neglect of context could render a psychedelic experience not only clinically ineffective but also potentially harmful – accounting, in part, for the negative stigma that still shackles these treatments today.”


9. Covert and illegal projects like the CIA’s MKUtra mind control experiments during the 1950s-70s gave psychiatric patients, sex workers, addicts, and prisoners LSD often without their knowledge, to determine the drug’s efficacy for controlling the minds of soviet operatives. These non-consensual and often traumatizing interactions with LSD were used to validate stringent drug policies in the Nixon era.


This concept advocated by Carhart-Harris and others, is now becoming foundational to the field of psychedelic research. It posits that the success of psychedelic medicine is largely dependant on how patients experience the treatment, a process being described as ‘Experiential Medicine.’ We might consider this as a paradigm shift in medical theory as historically patient experiences have been thought of as extra-pharmacological\textsuperscript{12} factors rather than conditional to the success of treatments.

The adoption of set and setting brings into question how the built environment participates in the experience of therapeutic treatments, placing a greater importance to how patients relate to health care practices and spaces in the development of medical interventions.

\textsuperscript{12} Extra-pharmacological is a term used in clinical drug trials which describes the effects of uncontrolled variables of human experience on the study of treatment outcomes. Personality, expectations of treatment, and interactions with clinical settings, are all considered to be extra-pharmacological factors - uncontrolled conditions which can influence pharmacological studies.
2.2. Neuroarchitecture and Psychedelic Health

The research of psychedelic practice is interdisciplinary. With advancements in neuroscience imaging we are better able to observe changes in the brain activated by psychoactive compounds, becoming aware of the complexities of human consciousness in biological terms. The discipline of architecture has also explored experience and human consciousness however from phenomenological perspectives. Although neuroscience and architecture are distinct ideologies, they share interests in supporting the human condition in terms of health, community, aging, learning, resilience, language, and memory. By aligning the intentions of both fields we expand theoretical boundaries of psychedelic health, advancing the fields of neuroscience and architecture from a plural perspective.

In an effort to make clear some of the relationships between both fields I will explore connections between neuro-psychedelic research involving psilocybin with that of phenomenological thought in architecture.

The consumption of psilocybin, also known as magic mushrooms, enacts a series of neurophysiological changes lasting 4–12-hours by releasing large amounts of serotonin.
in the brain.\(^3\) Serotonin is a neurotransmitter responsible for regulating physiological processes such as sleep, learning, memory and social behaviours. When the brain is flooded with serotonin it creates states of euphoria, it changes sensory and temporal perception, and also heightens feelings of connectiveness to others, the natural world, and the spiritual realm.\(^4\) Increased serotonin may also cause adverse effects including paranoia, nausea, and panic attacks, issues which psychophysiological screening and guided sitting help to significantly reduce or avoid.

Psychedelics are highly experiential, creating a temporary disruption to the flow of reality which allows new ways of thinking to emerge. In a psychedelic session some recount having a mystical experience, speaking with ancestors, or traveling through time and space – this psycho-spiritual phenomenon is known to the neuroscientific community as the 'peak experience'.\(^5\) In the peak experience participants may also have emotional reactions to color, material and sound, creating a synaesthetic awareness between the

---

14. Ibid.
sensory and self. The result of these existential explorations is that participants are able to perceive themselves and their world with more empathy, curiosity, and mindful awareness. These new associations help to break away from unhelpful thought patterns which are responsible in part for neuropsychiatric diseases such as mood disorders, depression and PTSD.

If we consider that psychedelics are a tool to help re-assess reality, we might start to question how our environments participate in the making of that reality. Architecture is in many ways a manifestation of human consciousness; its materials, spatial agencies, narratives, and sensory manipulations of light, sound and touch all contribute and reflect upon how we feel our way through life. Our connections to place are sensory, emotional and spiritual, tenets of human experience which are both intensified by psychedelic medicines and studied in architecture as phenomenological theory.

Phenomenology has been explored as a philosophy of meaning making to place, which may be unknowingly linked to psychedelic health. Juhani Pallasmaa, influential architect

and theorist, argues for the recognition of the spiritual qualities of architecture, stating that our connections to place are existential by nature and deeply felt in the experience of our buildings. Renown architect Peter Zumthor advocates in his book Thinking Architecture that material sensibilities encompass an architectural language capable of instilling feelings of integrity, warmth, stillness and being. As well Sarah Williams Goldhagen, architecture critic and researcher of embodied cognition, states that our wellbeing is connected to how we experience our environment, informing our sense of community and self. Collectively, these philosophies explore the experience of place and it ability to informs how we view ourselves and the world around us.

The interests of phenomenology are not dissimilar at all to the those of psychedelic practice, pointing to unearthed connections that may be explored further between phenomenological design principles and psychedelic neuroscientific research. Acquiring quantitative and qualitative data on in psychedelic settings should be considered by both neuroscientific research and architectural thought as a means to develop meaningful psychedelic experiences.

2.3. Placebo Architecture

In the past century there has been a substantial interest in researching the effects of the built environment on human health. Multidisciplinary studies and architectural projects have explored facets of human health behaviours along with material and spatial conditions of health care settings. However, it would be beneficial to think of health care design as contingent on medical culture, and on systemic conditions which perpetuate the need to rehumanize our spaces of care.

The conceptualization of placebo\(^{20}\) in the late 19\(^{th}\) century created an awareness that there are confounding variables of human behaviour which can alter and possibly discredit scientific findings. Placebo is primarily understood as 'non-specific, psychological or psychophysiological' factors by which different expectations, emotional and cultural identifiers of patients can alter the results of treatments.\(^{21}\)

---

20. Placebo is a concept of the effects of human behaviour and physical context on medical interventions. In clinical research this is problematized by the diversity of experimental participants which historically have been controlled for group identifiers such as race, gender, age, and medical histories. The epistemological parameters of clinical trials fail to address that we can not control for how patients feel about treatments, their previous experiences, nor their expectations of the treatments themselves.

We account for the placebo effect by extracting and eliminating non-treatment group data from treatment group data. It is with this paradigm that we attempt to systematize and remove the extra-pharmacological factors of human experience to create singular and reproducible treatments and treatment spaces, generating a system of universal care.

For the past century the built environment has been thought as a form of placebo, an extra-pharmacological factor that if improperly regulated could invalidate scientific findings and medical treatments. This represents one of the greatest challenges in health care design, medical practices are predicated on the control of external factors and have largely viewed the environment, and human behaviour, as confounding variables to treatment.

Systemic understandings of human health place patient experiences as secondary to the treatments themselves, and it is through this logic that we have encountered a disjunction of healthcare which exacerbates current systems. In contrast, set and setting theory in psychedelic treatments posit that how patients feel and relate to treatments is not secondary to care practices and that it is our belief in health care systems which permits successful treatment outcomes. This theory shifts the focus on health care settings from passive contributors of medical interventions to that of hav-
ing an integral function to treatment itself. Buildings, when considered as therapeutic technologies in the development of psychoactive care practices, acknowledges that it is the relationship between the patient and placebo which accelerates a cure.
2.4. From Prohibition to medical administration

Psychedelics have had a contentious history marred with prohibitive enactments. For example, the adoption of LSD in 1960s counterculture was intimately connected to ideologies of civic movements, however misuses of LSD were the direct and indirect causes of psychosis, suicide, and accidental deaths. These involvements along with the increased pressure from counter movements on federal institutions contributed to the criminalization of LSD in the 'war on drugs'. Soon after, the use of all other hallucinogenic compounds became severely regulated and further problematized through their involvement in criminal enterprises. As a result, the remaining small pockets of space dedicated to psychedelic experience were subject to religious persecution, stigmatization, mysticism, and secrecy.

However with time, and the continued advocacy of psychedelic practitioners, public perception of the benefits of psychedelics has begun to shift. In the 1990s, a group of academics and clinical psychologists lobbied the FDA to renew their access to psychedelics for human trials, re-igniting abated interests. Today psychedelics are being administered to patients experiencing mental health disorders such as

Post-Traumatic Stress Disorder (PTSD), addiction, depression, anxiety, autism, and body dysmorphia. Success has been found in the treatment of veterans suffering from PTSD with MDMA which showed significant long-term reductions in depression and suicidal thoughts post treatment.\(^\text{23,24}\)

Patients in palliative care treated with psilocybin reported reduced anxiety and a greater sense of acceptance of the transitional nature of life.\(^\text{25}\) Outside of medical paradigms, individuals taking ayahuasca with the intentions of personal growth reported a higher quality of life, reduced anxiety, and improved interpersonal relationships.\(^\text{26}\)

In the past 10 years the theory of set and setting in psychedelics has resurfaced as an ever important yet largely undefined phenomenon. However, we might start to think of it as the interdependent conditions of health practice before, during and after a treatment takes place. Psychedelic prac-


tices observe quite holistically that preparation, expectancy and belief in health systems shape the outcomes of healing interventions.\textsuperscript{27}

Just as architecture cannot be reduced to form alone, Psychedelic settings must also be understood as a continuation of expansive relationships to existing health cultures. This approach suggests that the success of psychedelic health is largely dependant on the contexts in which it finds itself, pockets of space matriculating nuanced understandings of people, place and practice.

2.5. Alt-health: contributions of psychedelic BIPOC communities

The recent clinical success of psychedelic research owes a great deal to the work and traditions of BIPOC communities. The common narrative of psychedelics is that they arrive sometime in the mid 20th century in the US, and become embroiled in communes, LSD parties, research studies, and large outdoor music festivals. However, this fails to account for the histories, traditions and practices of Indigenous groups who have generational knowledge connecting psychedelics to land, ceremonial spaces, and rituals of health. Looking at some practices involving ayahuasca and psilocybin (two out of many plant-based psychedelic medicines) brings a greater clarity to these relationships.

Psilocybin practices vary significantly from one Indigenous community to the next, each responding to geographical, cultural, and historical health contexts. Ayahuasca ceremonies from the Amazon region have been used for centuries to extract and eliminate unwanted spirits and pathogens. In some groups it has used to solve interpersonal conflicts, for the purposes of creative expression, or as

a spiritual guide to instances of warfare. In some instances it is consumed by shamans, in others it is consumed by community members within ceremonial spaces. There are cases of integration of ayahuasca consumption into Western practices as well. For example, the Santo Daime Church is a religion which offer ayahuasca and peyote as a sacrament within Judeo-Christian religious practices, creating an amalgamated space of spiritual health.

Psilocybin, the colloquially termed 'magic mushroom,' was consumed by Mazatec shamans and considered as essential in becoming a community healer. Psilocybin is still consumed in these communities for sacred and recreational purposes. Ephemeral qualities of psilocybin practice include the act of brewing of mushrooms into tea, tending to the hearth, chanting and the cleansing of tobacco smoke. Psilocybin is used to help find solutions, to reconnect with loved ones or even to find lost objects.

Plant-based psychedelic medicines are considered to have

their own teachings, identities, and intentions – their own agencies and idiosyncrasies – contributing to an interspecies connectedness. With this perspective there is greater value placed on the maintenance of relationships between human to human, human to non-human, and human to the cosmos.

Psychedelic practices of Indigenous groups throughout South America, Africa, Australia, India, Canada and the US have been subjugated to colonial pressures which have attempted to eradicate their uses. These practices have been branded as illegitimate, primitive, or superstitious, further rationalizing an epistemicide that maintains a cultural superiority over non-Western health practices. At times researchers of psychedelics acknowledge that there is an Indigenous lineage to psychedelic practice yet minimal efforts have been put forth to include BIPOC communities, and their spatial knowledge of psychedelic practice, into the development of clinical trials and policies for psychedelic consumption.³³

Native American mental health specialist Lisa M. Red Bear speaks to the appropriation of psychedelic plant-based medicines at the Injustice, Intersectional Trauma and Psy-

---
Psychedelics conference:

“When indigenous people speak their truth, it's recontextualized by the White dominant culture and the White dominant voice. [it] renders you, once again, to the place of the margins, of the place of being silent, of the place where your voice isn’t really important. If [psychedelic therapy] really does need to be a collective healing for all of us, if we’re really in the midst of a psychedelic renaissance, who are we leaving behind?”

This statement brings forward questions of access and representation in psychedelics, pointing to the continued exclusion of non-Western health perspectives on communal, cultural, and ritualized practices of plant-based medicines. Cultural biases persist in clinical settings where psychedelics are currently being researched. Studies often fail to address an awareness of culturally based traumas in psychedelic set and settings. However, there are BIPOC movements within the psychedelics community which are championing the plural needs of diverse groups.

The Cultural Trauma Psychedelic Medicine Workshop shown on the left was an event hosted at the Brown Hotel in

Louisville, Kentucky, in 2019. The event touched on issues of colonization, mass incarceration and the stigma around psychedelic drug use and mental health in marginalized communities. It featured a range of interdisciplinary presenters, many of whom were BIPOC psychedelic practitioners or worked specifically with BIPOC communities. These practitioners were discussing how to prepare and interact with their clients in ways that they could most identify with, undoubtedly this is as much an ideological discussion about practice as it is a spatial one.

It’s important not to think of Psychedelic Architectures as the commodification of racial identity but rather as a form of cultural production which enriches the diverse lived realities of these groups. This is observed by Architect Mario Gooden in his book Dark Space: Architecture, Representation, Black Identity: “Architecture spatializes political, social and historical relationships as well as instrumentalize subjectivities. It brackets place, time and materiality to events in order to produce meaning and discourse.” Gooden’s work alludes to the fact that we must avoid the instinct to create superficial spatial interventions in the design of our spaces and look deeper towards spatializing the methods of cultural production which marginalized groups have championed.

Other advocacy groups such as Soundmind Philadelphia, the People of Color Psychedelic Collective, The SAGE institute, and The Chacruna are positioning psychedelics as a therapy which must be understood from BIPOC perspectives for BIPOC participants. With this activism there is an acknowledgement that people heal differently. Ideas of comfort and safety as well as methods of treatment should require context specific considerations. In this process, BIPOC psychedelic practitioners have been intuitively designing and re-envisioning what a psychedelic space is and how to make it an inclusive, safe and healing experience for their communities.
2.6. Widening the Universal Perspective – A Short History of Medicalized Mental Health

Architecture has played a significant role in pathologizing mental health practices, contributing to the focus on unwellness and disease in health care design rather than the connectedness that exists between people, place and practice. Psychiatric buildings have historically been places of removal and incarceration of the morally impure.37 Influential Western Philosopher Michel Foucault addressed the archeology of psychiatry in his doctoral dissertation “Madness and Civilization” in which he stated that mental illness in Western culture was disseminated through a religious lens - insanity the embodiment of a sinful state, the physical manifestations of crimes against God.38 Those suffering from a range of neurological illnesses such as autism, epilepsy, Alzheimer’s, and psychosis found themselves placed in institutionalized asylums. The cell became a utilitarian container designed to hide, reform, and control.

Through social engagement and political reform, these institutions were decommissioned and the burden of care for patients suffering from psychiatric ailments became local-

38 Michel Foucault. Madness and Civilization. Routledge, London. (p.75) 1971
ized to homelessness housing initiatives, hospitals, private therapy offices and treatment facilities. However, the legacy of compartmentalization, of removing, and pathologizing health practices still resides within our collective consciousness. This represents itself spatially in the rooms and buildings where therapies take place today. Sterile, secluded and institutional conditions devised to reform have interlaced themselves to mental health practices, beliefs, and settings.

On the following page the upper image is a collage of the historical progression of psychiatric care settings. In the lower image to the right, I have highlighted a current day psychedelic assisted therapy room in a clinical setting next to Freud’s infamous chair and sofa layout which became synonymous with psychotherapy and mental health treatment. Spatial remnants of Freud’s arrangement still exist today and inform not only the vast majority of the layouts of therapy spaces, but also our collective understanding of therapist and patient dynamics. These are staged intervention spaces for the purposes of removing illness and disorder.
2.6.3. Historical timeline of early medical spaces which became settings for psychiatric treatments. By author.

2.6.4. Zooming in on the iterative process of psychiatric settings from the 20th century to current day psychedelic treatment rooms. By author.
The evolution of mental health treatment settings is an iterative process which relies on previous frameworks of care. It is therefore unsurprising that we rely on current day therapy spaces within a pathology minded framework, at times in ad-hoc capacities, to support psychedelic research and treatments. However, we need to re-evaluate why traditional psychotherapeutic treatments have failed, and further to see this as a systemic issue conditional on the larger culture of health care and its settings.

Pathology is a Western medical concept and relatively new way of thinking about human health, prioritizing the study of disease to identify and cure illness over the promotion of holistic health networks and behaviours. This is also known as Pathogenesis, a pathology-centric health care ideology which differentiates the human body from mental, spiritual and environmental dimensions of health, categorizing them as separate rather than mutually dependent. Whereas Salutogenesis, the study of human flourishing as interdependent to social, communal and ecological wellness, observes that thriving systems intimately reliant on one another.39 This can also be seen in Plains Cree First Nations health perspectives of on maintaining a balance between the physical, spiritual,

emotional and environmental.\textsuperscript{40} Health in this community is thought of as the maintenance of relationships between networks, it avoids narrowly focusing on individual deficits and rather supports the resilience of these systems.

If we widen the spectrum of mental health care to include holistic health perspectives, we recognize that health care design(s) are inherently plural. Its histories are rich with knowledge about human need to connect in order to heal - increased sense of connectedness also being pervasive in psychedelic health practices. Generations of marginalized communities have explored these medicines as a means to improve social connectedness, ecological wellness, spiritual growth, meditation, life purpose and enjoyment. These are fundamental components of human health which we strive towards but often fail to accomplish in overtaxed health care systems, pointing to a continued need to explore and expand our knowledge of how our health care settings are interconnected to health care perspectives.

Anecdote 2: Author Nadjeschda Taranczewski recounts her psilocybin experience in a psychedelic-assisted therapy retreat in Holland.

“For a large part of the 7-hour trip, I was completely immersed in ‘Mind’ – a sea of the most breath-taking images and colours. Everything was geometry, fractals, worlds unfolding, collapsing, enveloping me, channelling through me.

Awe-inspiring and of unearthly beauty.

There was form and formlessness.

There was light and darkness.

Then there were moments of Consciousness. A recognition of what was happening. Every once in a while, there was utter bliss in ‘finding’ a body part, an awareness of there being a foot, feeling a hand against the floor, the hand of another human being (a facilitator who came to hold my hand). Every physical experience was incredibly intense and at the same time disembodied, because I could hardly relate it to myself.

In a vivid progression, all the people in my life I love passed by. I was overtaken with a sense of timeless connection, abundant love and deepest gratitude for having them in my life. It felt like a spider’s web of love was holding everything together, me included.

An overwhelming thought overtook me:

I am me. I am them. I am the space in-between.”
PART 03

Plural Health – Settings of Psychedelic Practice
In Psychedelic Architecture, the plural, social and intellectual embodiments of psychedelic activities produce different types of settings and different types of experiences. This has created a wide variety of psychedelic spaces in various geographical and cultural contexts, offering a rich diversity of spatial and material considerations of this health practice.

Psychedelic Architectures can be transient, ad-hoc, domestic, communal and performative spaces. For example, psychedelics consumed in a forest with friends is an extemporaneous use of greenspace which provides a transient setting for self-led experiences. Religious and spiritual Psychedelic Architectures are communal spaces which are deeply performative, emphasizing traditional hymns, chanting, dancing and music. Alternatively, medical psychedelic spaces introduce extra-pharmacological considerations of adaptable room settings, and in some instances, spiritual iconographies. Each distinct practice is engendered by its unique settings, informing and informed by physical, social and spiritual dimensions of psychedelic practice.

Varying perspectives on the application of psychedelics materialize different types of spaces and different types of
experiences. For example:

- psychedelics for self-led care – **PRACTICED** in domestic spaces
- psychedelics for fun with friends – **ENJOYED** in exploratory spaces
- psychedelics for religious experiences – **WORSHIPPED** in spiritual spaces
- psychedelics as illegal and harmful substances – **RESTRICTED** to hidden spaces
- psychedelics to study human cognition – **EXPERIMENTED** with in research spaces
- Psychedelics as treatments for mental health disorders – **PRESCRIBED** in clinical spaces

The wide applications of psychedelic health are inherently spatial, guided by individual and cultural understandings of where these substances should be experienced. I have created three case studies to investigate some of the spatial conditions of Psychedelic Architectures. This research serves two immediate functions. The first is to learn about plural psychedelic set and settings with an architectural lens. The second is to unearth diverse spatial considerations of these medicines to position psychedelics as a deeply personal practice which should exist within and beyond medical settings.
3.1.1. Collection of festival Psychedelic Architectures with categories of setting, psychedelics, disorders, materials, guides, set, and participants.
3.1. Rave and Festival Psychedelic Spaces

Festivals, recreational and temporary experiential spaces, can be viewed as an escape of rigid behavioral and architectural norms of health practices. Activities of self-expression, in particular of recreational drug use, challenge assumptions of what health practices are and how transient communities operate self-governed health networks. At these sites harm reduction and drug-testing services have become increasingly common in response to challenging or potentially dangerous drug consumption. In response, a psychedelic ‘emergency room’ has appeared at these events, creating a space of acceptance and support when psychedelics participants encounter challenging experiences.

Case study: Zendo Project Psychedelic Peer Support Yurt

The Zendo project, a non-profit organization supported by the Multidisciplinary Association for Psychedelic Studies (MAPS), is a community outreach program offering harm reduction services at large outdoor events and music fes-

41. For 35 years, MAPS has operated as a non-profit organization specializing in the research and outreach of psychedelic health. The initiative contributes to psychedelic education, policy and cultural programs with chapters based in the US and Canada.
tivals. The volunteer-based initiative provides “tranquil spaces for those having a difficult psychedelic experience” at events like Burning Man, Coachella, Afrikaburn and Glastonbury festival. Between 2012 and 2018, the Zendo project supported over four thousand festival attendees. The initiative provides a setting for which community, education, and advocacy engenders a psychedelic practice supported by spatial and material considerations of a health care space. Guiding organizational principles as outlined on the Zendo Project website are:

- Provide safe, warm, comfortable space for those experiencing challenging psychedelic experiences.
- Talk through challenging thoughts and invite the person not to resist the experience.
- Sit with the person, be a calm presence of acceptance.
- Simply being with the person without judgement can be sufficient comfort and support.
- Difficult experiences are not necessarily bad. A ‘bad trip’ can still lead to personal growth.

42. The Zendo Project: Psychedelic peer support creating communities of compassionate care. https://zendoproject.org/
44. The Zendo Project: Psychedelic peer support creating communities of compassionate care. https://zendoproject.org/
Zendo's harm reduction yurt is somewhat unassuming when compared to the oft-aggrandizing sculptural monuments seen at Burning Man. Fittingly, it is a repurposed structure, initially designed to accommodate a portable meditation space. It is a circular structure with two oval entrances and a large oculus in the center of a 30-foot dome roof. There is an elevated seating and resting area which conforms to the shape of the inner chamber accommodating up to 30 meditators.

The oculus offers a natural light source and connects occupants to a sense of time outside of the structure. The yurt is a respite from the ongoings of the festival but as a singular open space the interior provides a highly communal experience. Within the volume there is a health collective, volunteers, psychiatrists, and psychedelic practitioners who offer to sit with and help to navigate difficult experiences. The architecture aligning with the intentions and behaviours of those occupying it.

This space operates quite differently than conventional psychotherapy and clinical spaces. The power balance between practitioner and participant is significantly reduced. There is no receptionist, no waiting room or office adorned with impressive medical degrees. The use of furniture is
restricted to a singular curved bench and there is no financial transaction of any kind. The cardboard panels were painted by members of the Zendo project, in turn informing the structure with a sense of belonging to program. Since it can be resituated, the architecture is somewhat placeless, the structure and its uses entirely dependant on the applications of the Zendo team wherever they find themselves. Integrated as an extension of Burning Man's safety framework, Zendo organizer Ryan Beauregard explains the strategic positioning of the Zendo yurt:

“We made the choice to set up and staff two locations at Burning Man, on opposite sides of the city, near what are called the 3:00 and 9:00 keyholes. We had a similar setup again in 2016, and in 2017 chose to consolidate our services to one location. This decision came with the support and suggestions of Burning Man’s official Black Rock Rangers and Emergency Service Department, as well as the Burning Man organization, recognizing the value of our services in Black Rock City and wanting to utilize our support within their existing safety framework.”

The following diagrams explore the spatial relationships seen in the Zendo project yurt Psychedelic Architecture.

3.1.7. The Zendo, a safe, warm, comfortable space. By author.
3.1.8. Moving in and out of the Zendo. Within the volume there is a health collective, guides, psychiatrists, and psychedelic practitioners who help to navigate difficult experiences. By author.
“Zendo was an amazing resource. It transformed what could’ve been a physically risky and emotionally devastating night into a powerful experience of growth and an emotional cleansing.”

3.1.9. A simple gesture, with modest materials and an intimate scale, the shelter provides a place of wellness centered around harm reduction and communal support. By author.
Architects Paul Discoe and Amy Nostrand designed the portable structure out of 69 recycled cardboard modules and timber framing. The Zendo project has reused this structure on more than one occasion and has replicated it’s design through GoFundMe campaigns enabling the structure and it’s services to appear at multiple events since 2012.

the Zendo yurt provides collective and communicative psychedelic health support in the temporary urban system. This Psychedelic Architecture permits a practice which avoids prescriptive uses of psychedelics and simply offers a warm and safe space for challenging experiences. As a simple gesture, with modest materials and an intimate scale, the shelter provides a place of wellness centered around communal support. Anecdotes on the following page speak the meaning of this place for those in need.  

47. The Zendo Project: Psychedelic peer support creating communities of compassionate care. https://zendoproject.org/
"I came in feeling desperate, like the only thing I knew how to do was ask for help... You made sure I had food and water. That I was alive and that I could keep on being alive. So warm, so open, so gracious and human."

"After doing psychedelics the night before, I felt I needed to talk to someone about what was happening in my head. My friend was sleeping so I knew that people at the Zendo would be able to help out. All I wanted was to talk to someone that could listen. I found that at Zendo. Thank you. This has been an important part of my journey at Burning Man."

"Positively transformed a difficult psychedelic experience through the attentive and compassionate care provided by the stellar team of volunteers maintaining a comfortable space amid the overwhelming environment."

"The Zendo staff has welcomed me into the safe and calm space. They have turned their entire attention towards me throughout the entire experience starting from me coming, entering, talking, napping for three hours, eating Zendo-provided snacks, and leaving."

"I am very grateful for you. I did not know who to turn to after my LSD trip and did not know anyone who could decipher the meaning behind my experience until this day."

"After learning from Zendo Project, I am now more responsible. I practice and spread harm reduction practices among my social group."

"For the first time in a long time, I truly felt safe. I woke up in a brand new world. I embraced the vulnerable feelings and integrated the experience by relaxing with friends and family back at camp."

"Zendo was an amazing resource. It transformed what could’ve been a physically risky and emotionally devastating night into a powerful experience of growth and an emotional cleansing."
3.2.1. Collection of sacred Psychedelic Architectures with categories of setting, psychedelics, disorders, materials, guides, set, and participants.
3.2. Sacred Psychedelic Spaces

Psychedelics can be tools for spiritual introspection, as can be observed in ceremonial Psychedelic Architectures. Multiple communities use psychedelics to achieve a means to transcendence or to evoke a heightened awareness of spiritual dimensions. In some cases, it is believed that this awareness allows for a communication with a spirit world, opening a channel that alleviates depression, interpersonal conflict and unwellness. The globalization of psychedelics has created syncretic and alternative religions and spaces for these medicines.

Case study: Santo Daime

The Santo Daime (SD) religion originated from the Southwestern region of the Brazilian Amazon in the 1930s. SD is an amalgamation of folk Christian, Indigenous shamanism and African animism, a syncretic religious psychedelic practice. Ceremonies, called trabalhos (meaning ‘works’ in Portuguese), are eight-to-twelve-hour sessions which

---

48. The term syncretic defines the amalgamation of different religions, ideologies, or concepts into a distinct union of diverse perspectives and values.
50. Animism engenders a belief that inanimate objects, plants and natural phenomena have souls and that supernatural forces organize the material universe.
include the sacred consumption of Daime, an ayahuasca tea consumed for ritual sermon of hymnal chanting, dancing, and bouts of silent meditation. Daime is revered as means for the mystical journey of the mind, revealing positive and/or challenging ideations of self.\footnote{Dawson, Andrew. Santo Daime: a New World Religion. London: Bloomsbury Academic, 2013.}

SD Psychedelic Architecture can be understood in terms of its physical, social and cultural conditions. The primary function of the physical space is to look inward. The image on the image on the bottom left is a layout of a typical SD spatial arrangement. Participants are divided by levels of Daime experience and gender,\footnote{Issues of gender non-conformity have been explored in various SD communities with some chapters deciding to offer gender placement according to chosen sex and other groups remaining conformist to sex at birth placement in accordance with traditional doctrines.} grouped around a Star of Solomon shaped altar in the center of a hexagonal space. The altar, the centripetal core of activity, is adorned with rosaries, images of Mary and Joseph, flowers, incense, stones and candles acting as a source of beauty to receive collective prayers. The mandalic organization increases visibility and audibility allowing for greater emotional intensity and mutual involvement between participants.\footnote{Hartogsohn, Ido. “Set and Setting in the Santo Daime.” Frontiers in pharmacology 12 (2021): 651037–651037.} The hexagon shape creates divine order to ritual, which SD scholar Andrew Dawson describes as a ‘field of power,’ a spatial

---

3.2.3. Adorning of the Santo Daime altar with candles, stones, flowers and cross.

3.2.4. Hexagonal spatial arrangements of Santo Daime practice as diagrammed by psychedelics researcher Ido Hartogsohn in his article ‘Set and setting in the Santo Daime’. Practitioners divided by experience level and gender facing central altar.
maintenance of symbolic practice.\textsuperscript{54}

Music and dance are foundational to SD Psychedelic Architecture. Music creates a sense of structure leading participants to spiritual transcendence and forming the religious universe of SD diaspora.\textsuperscript{55} Singing is performed by all participants and is accompanied by guitars, maracas and other percussive instruments. Brazilian ayahuasca scholar and Indigenous advocate Bia Labate states of the role of music in SD practices:

“In Santo Daime, the ‘hymns’ are the main conductors of religious ritual. Memory, emotion, language, and cognition are all mobilized in the sonic experience of ayahuasca. Without music, there is no ritual, and no guided experience of ecstasy. In sum, music is a technology that permits intersubjective communication between persons, species, and peoples.”\textsuperscript{56}

Ritual dancing, called bailado, opens a doorway towards numinous, healing states. There are three types of synchronized dancing in the SD religion (the march, marzuka, and waltz) which are variations of repetitive left-right move-


Hymn of Eu Cheguei Nesta Casa

Eu cheguei nesta casa
Eu entrei por esta porta
Eu venho dar os agradecimentos
A quem rogou por minha volta
Eu estou dentro desta casa
Aqui no meio deste salão
Estou alegre e satisfeito
Junto aqui com os meus irmãos
Ia fazendo uma viagem
Ia pensando em não voltar
Os pedidos foram tantos
Me mandaram eu voltar
Me mandaram eu voltar
Eu estou firme, vou trabalhar
Ensinar os meus irmãos
Aqueles que me escutar

I arrived in this House
I entered through this door
I came to give thanks
To those who prayed for my return
I am in this House
Here in this temple
I am happy and satisfied
Here with my brothers and sisters
I was about to travel
I was thinking of not coming back
There were so many voices
They ordered me to return
They ordered me to return
I am firm, I will work
Teaching my brothers and sisters
Those who will listen to me

Hymn of Pisei Na Terra Fria

Pisei na terra fria,
Nela eu senti calor.
Ela é quem me dá o pão
A minha Mãe que nos criou.

I stepped on the cold earth
On her, I felt warmth
She is the one who gives me bread
My Mother who created us

My Mother who created us
And gives me all the teachings
My body, I deliver to her
And my spirit to the Divine

With the blood of my veins,
I signed my name
I deliver my spirit to God
And my body to the grave

My body to the grave
Neglected in the night air
Someone speaks of me
Sometimes, in thought

3.2.5. Hymns of the Santo Daime in Portuguese and in English.
ments. Dancing can occur in spurts or for multiple hours in a rave of moving bodies. If we compare this to Western approaches to mental health treatment where the body is mostly still during psychiatric treatment, SD dancing engenders a counter-hegemonic practice physicalized by corporal movement.

Ido Hartogsohn, leading psychedelics researcher and author of Set and Setting in the Santo Daime makes nuanced observations of the inter-relationships between place, practice and culture for these practices. In his research he states:

The effects of ayahuasca are profoundly mediated through complex layers of intentions, expectations, visual, auditory, and symbolic environments, social and cultural systems, etc. These various contextual factors comprise a rich cultural apparatus that serves to mitigate harms and facilitate social and personal benefits. Such contextual factors produce a distinct form of experience, that is often markedly different from the experiences produced by other contextual environments.”

---

The SD Psychedelic Architecture offers a syncretic perspective of psychedelic health, acknowledging multifaith connections between the physical and spiritual body. These spaces, explored further in the following diagrams, contextualize social, physical and cultural components of psychedelic health.
3.2.7. In the Santo Daime church the primary function of the physical space is to look inward. By author.
3.2.8. Performative acts of hymnal chanting, dancing, and bouts of silent meditation are supported by the use of and removal of chairs at different stages during the trabalhos. By author.
3.2.9. Ritual dancing opens a door-way towards numinous healing states, creating a rave of moving bodies. A psychedelic practice physicalized by communal corporal movement. By author.
3.3.1. Collection of clinical Psychedelic Architectures with categories of setting, psychedelics, disorders, materials, guides, set, and participants.
3.3. Clinical Psychedelic Spaces

As of 2022, Health Canada has amended its Food and Drug Regulations permitting psychedelic drugs to be requested through a Special Access Program. The amendment allows registered physicians to request psychedelics on behalf of patients in life-threatening conditions. For example, it may be requested for treatment-resistant depression or for patients suffering from end-of-life palliative distress, offering a form of compassionate care to vulnerable groups.

With the increased use of psychedelics within clinical settings we are beginning to see a change in how practitioners use medical spaces. This has been a response to psychedelic treatments being reliant on extra-pharmacological factors of patient expectations, intentions, and the physical and social dimensions of environmental settings.

The theory of set and setting states that therapeutic psychedelic experiences are contingent on psychological and experiential factors which make participants feel at ease with the process. Comfortable, guided, and/or prepared psyche-

delic settings and practices afford higher chances of meaningful and therapeutic experiences. As such, hospital conditions may require some reconfigurations to address this type of treatment. Fluorescent lighting, inability to change room temperature and furniture, and unfamiliar or surgical equipment of hospital settings are spatial conditions which were not designed for these types of experiences. This section will review the changes that are taking place in clinical Psychedelic Architectures to address an emerging practice of psychedelic-assisted therapy (PAT).
Case study: Medical Spaces of Psychedelic-Assisted Therapy

The diagram below illustrates PAT as a hybrid form of psychotherapy combined with psychedelic treatment sessions. PAT typically includes 1-2 guides per participant which meet in a private enclosed space within a research or medical center. There are preparatory sessions to help set expectations prior to treatment, followed by 1 or more psychedelic sessions which typically take 4-12 hours each. Follow up appointments termed ‘integration sessions’ allow participants to discuss how self-discoveries of psychedelic experience might be integrated into daily life.

---

3.3.3. Diagram of psychedelic-assisted therapy process. By author.
The images at the top left demonstrate a room designed by the Imperial College of London for conducting psilocybin PAT. In the background, equipment and wall-mounted objects are covered by white bedding sheets. The patient bed, a symbolic piece of furniture for disease, is surrounded by printed panels of a woodland scene, implying that natural imagery assists therapeutic practice. Curtains are added to the panels should there be a need to adapt this scene for patients having challenging visual experiences. In the session the overhead lighting is dimmed, salt lamps offer a soft light source and infer a spiritual and relaxing disposition to this space.

In another room seen in figure on the bottom left two guides lead a participant through a psilocybin PAT at the John Hopkins Psychedelic research lab in Maryland, USA. The room is private, there is mood lighting, and instead of a hospital bed the participant is laying down on a sofa in a staged space described by the research team as "a living room-like session, comfortable aesthetic environments free of unnecessary medical or research equipment." Guides wear casual attire and sit on the ground, addressing the participant at eye level. On the mantle behind the sofa there is a tradition-

al Mayan psilocybin sculpture and a buddha statue. It is also encouraged to bring items for a personal altar, small tokens and photographs which are meaningful to participants.

Pan-spiritual iconography is ever-present in PAT clinical spaces. This is due to how powerful symbology elicits states of awe and spiritual transcendence in psychedelic treatments. Seen below is an image of pan-spiritual items in the John Hopkins room as compared to those in a commercial ayahuasca retreat in Peru designed for Western patrons. In both spaces a wide variety of deities and spiritual figures feed into Western perspectives of Zen and mystical imagery. This is a re-occurring theme in Psychedelic Architectures, which suggests the need for participants to interact with a greater power, even in cases where they are not religious.
Beyond visual considerations of PAT set and setting, there is a debate on how furniture arrangements best support patient experiences. For example, in the treatment of PTSD with MDMA some researchers have found that the living room style sofa and two chair layout as seen on the left and below, is more beneficial than having patients in a hospital bed. The Manual for MDMA-Assisted Psychotherapy in the treatment of PTSD written by psychedelics practitioner Michael Mithoefer, suggests that the sofa allows patients to turn away from guides should the monitoring process become overwhelming.60

Collectively, these efforts re-evaluate how health care settings inform psychedelic treatments. Further considerations of preparing the physical space (as seen below) include biophilic images, eye covers for introspection, safety guidelines on locked windows, and the use of the music in session. Additionally, spiritual items, furniture placement, adaptable room settings, and the introduction of craft supplies is encouraged to ease patients into these experiences.

With this evolving approach to therapeutic care space, there is a heightened focus on how patients feel before, during and after psychedelic interventions. These spatial considerations will continue to evolve in a number of ways as we start to transition psychedelics to a more widely adopted form of health practice. The following diagrams explore the changes being explored in clinical psychedelic Architectures.
3.3.10. The clinical psychedelic health space. By author.
Preparing the physical space

- Furniture placement
- Greenery and biophilia
- Spiritual and personal tokens
- Sound management and music
- Cleansing rituals
- Privacy and looking inward
- Craft supplies and non-verbal exploration
- Safety and guidance
- Adaptible settings
- Individual and group sessions

3.3.11. Room layout at the John Hopkins psychedelic research facility. By author.
3.3.12. Spatial modifications of psyc-chedelic health spaces observed and distorted. By author.
PART 04

Syncretic Reconciliations: Hybridized Psychedelic Care Space
The introduction of psychedelics to Western ideologies of wellness is syncretic, a term defined as the joining of one or more religions, epistemologies or cultures. Psychedelic health is a practice that is adopted and therefore amalgamated into medical systems of the Western world which have largely evolved outside of psychedelic health practices. How these systems transform and unify will create new Psychedelic Architectures and socio-spatial conditions of people, place and practice.

In the final section of my thesis, I explore syncretic reconciliations of hybridized care to further develop Psychedelic Architecture theory. These drawings amalgamate spatial cues from the case studies to make observations and inferences of commonalities between psychedelic recreation, spirituality, and medical care. In this work the notions of health care space are fluid, plural and in a constant state of re-examination.
The diagram below imagines that the woodland scene from the Imperial college treatment room has become alive, the room now an outdoor setting and ecological presence becoming tangible to practice. There is an intentional challenge to the sofa and chair arrangement of clinical psychedelic therapy spaces. Rather than one sofa there are two, this takes into consideration that psychedelics are traditionally experienced in communal settings. The fire ties into the ephemera of storytelling and of Indigenous psychedelic practices.
The diagram on the following page explores how we might create psychedelic architectures for a greater number of participants while keeping in mind the need for intimate settings. The curved seating arrangement is borrowed from the Zendo project as it creates a space to rest while keeping the experience communal and inwardly focused. A new take on the altar, transparent LED media screens, is proposed as a way to easily interchange meaningful imagery to suit a wide variety of groups. The three pods demonstrate varying states of psychedelic experience from more immobile states, to sitting up/conversing, and also dancing/moving. These rooms should be adaptable to the changing emotional and physical states of participants, whereby the space can remain flexible between multiple stages of psychedelic sessions.
4.1.2. Psychedelic health pods. By author.

The altar from the Santo Daime is reimagined as hexagonal LED media screen center displaying adaptable imagery.

Room A: Pod for stillness

Room B: Pod for dancing

Room C: Pod for socializing

Curved seating borrowed from the Zendo project creates comfortable communal arrangement.
More research needs to be conducted to include and learn from psychedelic communities in the development of future psychedelic health practices in the Western world. By stating that these practices are adopted into Western health care, we acknowledge the important work that marginalized communities have already put forward in psychedelic health practices. Continued discussions will be significant in establishing what these spaces will look and feel like, and how they will operate in our cities and health care networks.
A story recounted by my friend and designer Daniel E. on his first experience with psilocybin.

“My girl advised me to wait till I was in a good mood because it would help make the trip better. While waiting for them to kick in, we set up our space by cleaning up, having some food, and playing pleasant music to make the atmosphere more relaxed.

I thought they weren’t working but about an hour in I started to feel like my body was humming. The song ‘Chicken Grease’ by D’Angelo from his album Voodoo was playing and I distinctly remember feeling tuned in with the syncopation of the beats. The sound felt so much richer than the many times I had listened to it previously.

As I closed my eyes, I saw complex patterns that looked like geometric fractals folding in on themselves. For a moment, I was scared, I was unsure whether to keep my eyes open or closed, but my girlfriend’s voice helped soothe my worries. She reminded me that she was there for me and this was deeply reassuring to me.

The song ‘How does it Feel’ by D’Angelo was playing in the background and I felt it wash over me. I was more connected to the world around me. Like my sense of self had been stripped away and was now part of a greater ensemble connected to everything and everyone. Near the end, I shared emotional conversations with my girlfriend which made us both feel closer to each other in meaningful ways.”
The diversity of Psychedelic Architectures intimates the conditional relationships between participants and therapeutic practices. This thesis asserts that psychedelic practice will inevitably change Western perspectives of mental health treatments. How we observe and support these changes as designers will help to define how these practices are adopted in the 21st century. Returning to axioms of Psychedelic Architectures presented at the beginning of this thesis:

There is no singular way to design a psychedelic treatment space.

This has been observed in the plural applications of Psychedelic Architectures in recreational, spiritual and medical practices. For example, the Zendo project, a simple circular structure reminiscent of a yurt serves as a community health care space at large outdoor events. The Santo Daime, a hexagonal space operating as a means to amplify spiritual and communal experiences around an altar. Alternatively, PAT spaces borrow from medical and psychotherapeutic designs with adaptable and human-centered approaches.
to health care settings. These three precedents represent a fraction of a much wider network of plural Psychedelic Architectures which points to context specific applications of these practices.

These spaces must remain inclusive and therefore must exist within and beyond medical paradigms of care.

Nonmedical uses of psychedelics must be allowed to operate and evolve alongside their medical adoption. These spaces are valuable community resources which approach human health in diverse ways. The Zendo project operates as a non-profit psychedelic peer support space, equating a practice of acceptance and belonging to that of a health care network. The spiritual uses of psychedelics in the Santo Daime church continue to serve psycho-spiritual needs of marginalized communities. We are also beginning to see changes within clinical settings, such as the integration of spiritual tokens and personal altars which can be considered as an intuitive act of redesigning medical spaces for plural perspectives of health.

We must explore the knowledge of marginalized psychedelic communities to help inform future designs of psychedelic treatment spaces.
Outside of the hospital, psychedelics are typically consumed as a communal practice within centripetal spaces. There is an emphasis on music and on symbology which heightens spiritual experiences. These socio-spatial considerations may be further explored in medical settings to revisit the use of antiquated conditions such as medical beds in psychedelic treatments. Further, there needs to be a dialogue on whether these treatments are best suited to clinical settings or if a syncretic spatial typology off campus is most beneficial.

Challenges in the adoption of psychedelics are inevitable, it will take time to become socially and intellectually aware of the connections between psychedelic therapies and psychedelic spaces.

Psychedelic practices are already vulnerable to misuses, as we have seen throughout the 1960s-1970s with LSD. Today the wellness sector is vying to push products and services to market for wealthy clients which may cause issues of access for lower income and marginalized groups. However, BIPOC movements and psychedelic advocacy groups are creating a dialogue around these issues, approaching psychedelic health in more equitable ways. We should keep this in mind for future design of Psychedelic Architectures as these projects will undoubtedly touch on these issues.
How we participate in the design Psychedelic Architecture will undoubtedly inform their practices and their future adoption. This moment in time is an opportunity to think of the environment in its therapeutic capacities, and to envision our health spaces as empathic and plural as we move forward into the realm of psychedelic health.
Anecdote 4: My personal experience with psychedelics.

I had my first experience with psychedelics at 18. I was tree planting in Thunder Bay, Ontario and overheard that my fellow tree planters were planning on taking magic mushrooms.

I want to clarify that a rebellious drug taker I was not. I did wear Birkenstocks with socks, but this was largely due to a lack of self-awareness. I spent the entire day going back and forth in my mind nervously about whether I should do this, and against my equally non-rebellious friend’s guidance, I decided to buy myself some shrooms.

What unfolded over the span of 6 hours by the fire, in the woods on that cold May evening, was certainly extra-ordinary. A sensual vividness overwhelmed every modality of self, what was stable and firm became fluid, what was temporary felt ineffably permanent. My sense of time was elastic, my sense of touch was emotional, and the dancing fire, the laughter around me, became more beautiful than ever before.

My intention was to have fun with my friends and in this short-lived moment in my young life I had certainly accomplished this.

It is later in life at the age of 27, that I came to appreciate psychedelics as transformative tools of mental health.
I had just completed my BSc. and by that time I had been struggling with bouts of depression for many years. A friend spoke to me of his use of psilocybin for his anxiety and depression.

I was made aware of the importance of intention-setting prior to consuming psychedelics, and of being in a safe and meaningful place to radically alter their effects. He spoke of them as if they were more than recreational, that they were tools for re-examining the pain of deep seeded traumas in his life.

I could see there was still a risk, as there is with any drug use, and I decided for myself that it was worth the risk.

I created a psychedelic space in my bedroom. I dimmed the lights and lit a candle. I piled blankets onto the bed as body temperature regulation may be affected by psychedelics.

I turned off my phone and played music on my laptop.

My husband was nearby and was instructed to simply check in on me and help me navigate challenging thoughts should they arise. I had craft supplies and a journal next to me with a guiding intention written on the inside.

- Let it go.
Largely without expectation, the experience that evening was incredibly powerful.

I had an initial flurried fascination of sounds, textures and visuals which later turned into deeper realizations about what was of real value to me in my life. I saw my family, my friendships, my love of the city, my dog, as undervalued and incredibly meaningful contributors to who I was. In this vulnerable experience I was able to examine worried ruminations about mistakes and traumas of my past and I was able to give compassion to my younger self who did not have the skillsets to address them properly.

Years have passed since this transformative experience, and even now I look fondly at this chance I took on psychedelics.

It informed me to be kinder to myself and to value the relationships that I am a part of.

It afforded me an ability to think through feeling and to recognize that at any given moment natural splendors exists all around me.

Psychedelics still carry many unknowns. It will take decades for psychedelics to become more widely understood and their capacity as agents of health to be accepted. However, I implore designers to think of psychedelics as an emerging modality of health, and should they choose, one that may offer them a greater empathic perspective towards themselves and the world they help to create.
6. Cited Works


George, Jamilah R., Timothy I. Michaels, Jae Sevelius, and Monnica T. Williams. The Psychedelic Renaissance and the


Hartogsohn, Ido. Set and Setting, Psychedelics and the Placebo Response: An Extra-Pharmacological Perspective on


Levels.” Neuropsychopharmacology (New York, N.Y.) 44, no. 7 (2019): 1328–1334


