

ARCHITECTURE'S SPIRITUAL UTILITY IN THE 21ST CENTURY

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By

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Thesis Proposal

Thesis Abstract

How does architecture, in the built sense, influence humanity's desire to connect with something beyond ourselves? What responsibility does an architect hold in that condition?

Tracing history through religions, movements of culture and the subsequent architecture erected, we can see how various built forms simultaneously reflected and influenced people's connection to worlds both earthly and celestial. Is there a chance, at this moment, to build upon our historical accomplishments toward a broader engagement that stirs the most fundamental longings within us? A chance to resurrect stories and analogies beyond the frames of traditional religious architecture in a poetic, ecumenical sense.

This project proposes a solution to define architecture's spiritual utility as we inevitably press forward through time, technology and science. It elicits an attempt to distinguish the nearly imperceptible thread that connects all of us, our poetic imagination, through built architecture at several locations across the world. Taking intersubjective doctrines, cults, creeds and ideologies of various cultures and casting them to the cosmos, this project seeks to question how architecture may continue to inspire our distinguished and communal desire for interconnection.

Thesis Narrative

As a collegiate student of architecture, my exposure to architecture as a practice and as a built environment is relatively brief, however, my years of studying at the university and working at a firm has taught me countless architectural tricks from accentuating the entrance of a building to centering the grid of an acoustic tile ceiling. I have found knowledge within the practice, technical or otherwise, is, in short, seductive. I can only assume curiosity toward architecture and all its nuances isn't something I hold individually. There seems to be a common drive amongst my colleagues and cohorts to reach for more, to find the best solution given a circumstance and learn from that experience in anticipation to apply the newfound knowledge to the next problem at hand.

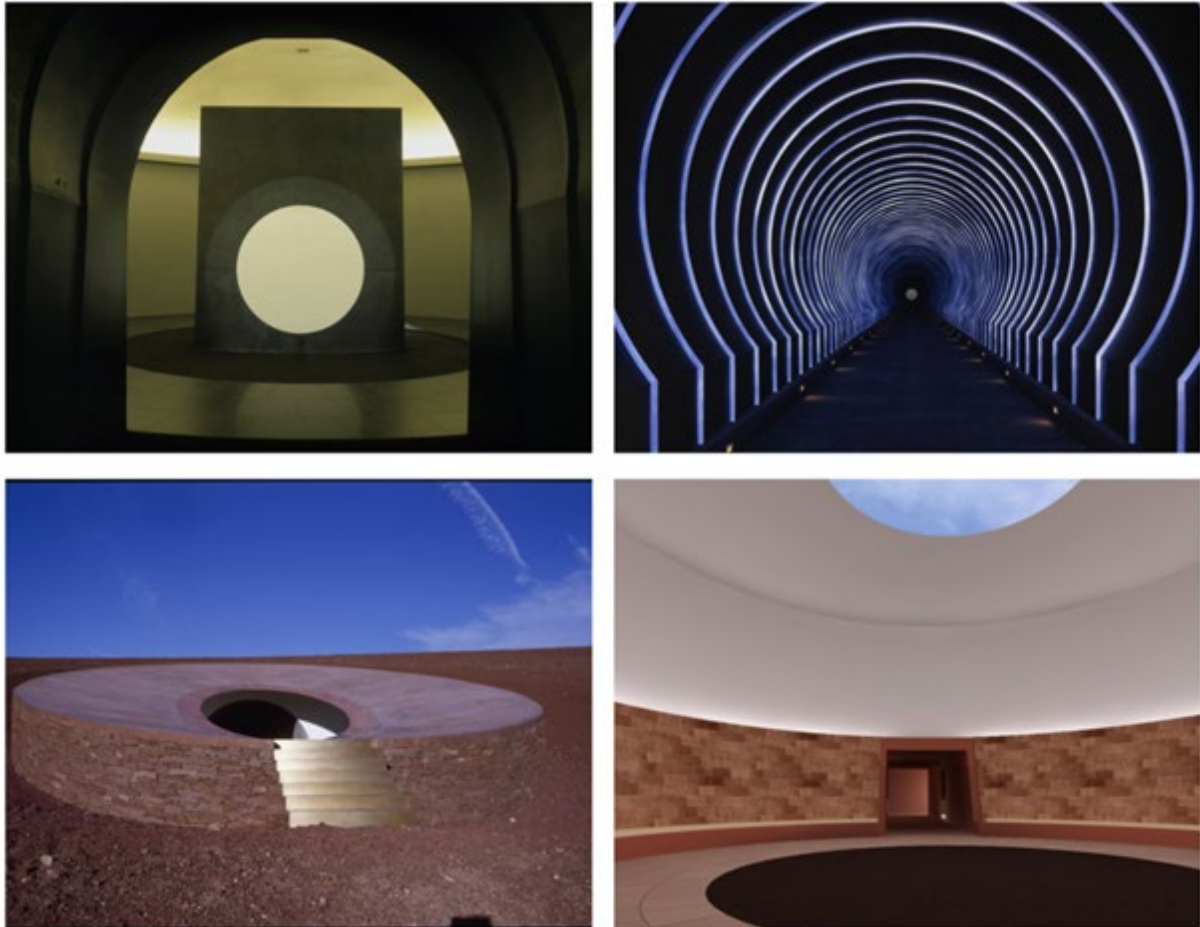
This underlying drive for experience and applicable knowledge fuels the practice of architecture today, as it always has and likely always will. This desire is not specific to the practice but, presents itself differently in other worldly environments. The search for a wholeness is not reserved for professionals and students, and it's certainly not restricted to the act of taking notes at a lecture or supplying a client with the most desirable plans. A wanting of completeness, or spirituality as I would argue, is a core human trait. It may be argued that spirituality is not present in the world of modern technology and assimilated cultures, that it was a romance of the past and holds no value in society but, I cannot believe it is so far gone we are unable to reawaking the longing through built architecture.

Typology

Observatories are often scientific and linked with the efforts of cosmological studies within universities and governmental affairs. Packed with telescopes, computers, and other technology required to document the position of planets, stars and other elements of our solar system and beyond, they are rarely built for any other reason.

There is an absence of this typology in today's world beyond the purely scientific functions. History shows us observatories that served astrological functions without modern technology. If we could frame the cosmos without modern technology, we might harbor an environment that guides the user to a gateway. Beyond the gate lies what can only been seen, not heard, felt, or picked apart for scientific reason.

Artist James Turrell has made an attempt to fill this void in typology. *Roden Crater*, a privately funded and constructed observatory, is a site in Utah, United States that creates an environment acting with light, form and movement, this project of his brings the user through moments of reflective thought, spirituality. Shown in the following images, it is a case example of the intended typology.



Images sourced from <https://roden crater.com/> © James Turrell

Fig. 01 Photographs of James Turrell's Roden Crater

Project Emphasis

Spirituality

Defining spirituality is a major aspect of this project. A collective decision, to agree on a definition or agree to disagree, is necessary for the project to hold merit. Looking at the historic applications and examples of the word may suggest a path forward in defining the word in the present, the focus of this project.

Human Nature

Identifying, specifically, the tendency of humans to grasp for a fulfilling thing in attempt to complete ourselves psychosomatically; to be able to provide evidence that we are in a constant search for a wholeness, consciously or not. The projects destination depends on the belief that this is an absolute truth.

Purposeful Application

Too much of a good thing is not good, everything in moderation.

Common phrases often remind us of ideas similar to the prior. In application of the potential solution, purposeful application is key for maximum satisfaction, particularly for psychosomatic health. Take a historic gesture of great architecture, Sagrada Familia for example, and its inspiring presence. Imagine a world where that standard of detail and purpose was everywhere. Imagine every built environment created with that same display of godly supremacy. The world would be null of conflict and the “great” would be the average, the expected, and nothing greater could be created. With lack of tension, we would not realize the sparks of excellence.

Thesis Research

Precedent Research

There are countless examples of what may be called spiritual architecture. Over the course of this project and prior to the start of project specific research, I have come across many built projects that speak to stories of place, capture a moment of the natural world or have been built directly for religious practices. I will highlight two relatively unknown projects, one by Travis Price, an architect and philosopher with his own practice in Washington, D.C. The second precedent presented is from Marjorie Schlossman, an artist in Fargo, ND.

Spirit of Place

Travis Price developed a series of built interventions along the west coast of Ireland. Titles of the seven sites are The Crossing, Home for the Children of Lir, Vault of Heaven, Thin Places Doonamoe, Temple of Tides, The Thin Places Anagh Head, and Tale of Tongs.

Focusing on Doonamoe and Anagh Head, the Celtic lore surrounding the projects are an extractable aspect to the power held in combining language and architecture. From his book *The Archaeology of Tomorrow*, "In Irish life they (thin places) are the places where time past, future, and present merge. If you read a lot of poetry and mysticism from Rumi to T.S. Elliot, you hear tell of it-time past is part of time future, and time future is time past, and time now is encompassing all. The thin places are real places in the landscape, a matrix of moments where people find themselves falling into timelessness or eternity, the world of the greater mind, the Pleroma, the living collective unconscious; the world where things outlive the physical. That's where the fairies and the banshees and the leprechauns and the gods all live..." (Price, 2006)

These embodiments of architecture show a remarkable case of architectural engagement of the poetic imagination.



Fig. 02 *Photograph of Annagh Head: <https://www.spiritofplacemayo.com/the-thin-places>*



Fig. 03 *Photograph of Doonamoe: <https://www.spiritofplacemayo.com/copy-of-the-thin-places-doonamoe>*

Roberts Street Chaplet Project

Marjorie Schlossman's endeavor of her Roberts Street Chaplet Project called upon architects local to Fargo, ND to design and construct each their own chaplets to house her original artwork. Architects involved were Julie Rokke, Michael Burns, Joel Davy, Phillip Stahl, Richard Moorhead and Jef Foss.

Below is a synopsis from the project's website.

" Artist Marjorie Schlossman collaborated with various architects to build environments in which her paintings hang. The first, The Roberts Street Chapel in downtown Fargo, North Dakota, preceded 6 smaller, more intimate and moveable chapels she calls "chaplets." She relished the idea of painting inside each finished chapel or chaplet, responding to that specific environment and its inspirations.

These spaces, and the art within them, are designed to provide people with a moment's respite from daily life, whether that moment is used to contemplate, pray, mourn or celebrate. Unlike a gallery, none of the artwork is for sale. Unlike a museum, there is no charge to enter."

The portable structures made a few stops around the state of North Dakota, showcasing a balance of the arts. The following images show each completed chaplet.



Fig. 04 Richard Moorhead's Chaplet: <http://www.robertsstreetchapletproject.com/chaplets/index.html>



Fig. 05 Joel Davy's Chaplet: <https://jlgarchitects.com/projects/roberts-street-chaplet/>



Fig. 06 Michael Burn's Chaplet: <https://www.mjbaltd.com/chaplet-slides>



Fig. 07 Julie Rokke's Chaplet: <http://www.robertsstreetchapletproject.com/chaplets/index.html>



Fig. 08 Phillip Stahl's *Chaplet*: <http://www.robertsstreetchapletproject.com/chaplets/index.html>



Fig. 09 Jef Foss's Chaplet: <http://www.robertsstretchapletproject.com/chaplets/index.html>

Design Solution

Historic and Related Context

This project aims to identify the shift in architecture's role of creating transformative environments and atmospheres that give a place to comprehensible and purposeful reflection for the subject. Places that recognize and amplify the human desire for something beyond us, something *other*. Places of spirituality.

“...feelings are not merely secondary aspects of consciousness, annoying or pleasurable sensations that act as obstacles to our proper functioning. They are important both because they obviously affect us emotionally but also because...it mobilizes and coordinates every aspect of the organism” (Pérez-Gómez, 2016)

Those that have read the introduction of *Attunement: Architectural Meaning After the Crisis of Modern Science* will recognize Alberto Pérez-Gómez's words as he initiates his discussion on the importance of the environment in which we live. Not as a conservation clause of saving rainforests and reducing carbon emissions but, as an increasingly underrecognized aspect to our bodily and mental condition as human-beings.

The physical world we exist in serves multiple roles, the function of providing shelter and sustenance, both relatively easy to recognize and calculate. Adjacent, the influence our environment has on our consciousness is not as perceptible to the eye, however, it is just as important.

In the past, architecture itself was manifested in cathedrals and halls that gave people intersubjective direction by weaving culture and symbolism to create space for our “embodied consciousness” (Pérez-Gómez, 2016). This was often done with religious

intent to connect the cosmos and earth through materiality, the meaning found in the environment created was present for everyone, in turn enriching cultural contributions. This cohesive public presence hosted and prioritized by meaningful architecture contrasts today's focus on the "solitary consumer" (Pérez-Gómez, 2016), where an influx of content claiming to enrich our lives is served endlessly, void of materiality and place.

We can recognize the significant elements of architecture from time past because today we design in a much different way. Public buildings today, in large part, prioritize function and code requirements leaving the overall form and materiality to fulfill the psychosomatic requirements of the design. This recognition itself is evidence of a change in perception over time.

Pérez-Gómez points to nineteenth-century Europe as a point where the urban scene shifted to a less attractive, relatively unhealthy environment that serves generally as a vein to commute and consume. As he states, "buildings and urban environments thereafter (the 19th century) became primary instruments of surveillance and control in the service of the new policed nation-states, necessary mechanisms for coping with the potential excess of the newly free citizens." (Pérez-Gómez, 2016) In a sense, projecting the opposite direction of traditional city function, to harbor an underlying orientation.

For Vitruvius, in the time-period of the Greek empire, a well-designed city provided an environment for a healthy existence, it should host balance (temperance) in alignment with the human body. Accounting for natural phenomena and oriented with the cosmos, it would serve as the base for development of functions within the city. Subsequently designed theatres and temples brought divinity to a human scale, through proportion and symbolic ornament these built environments reflected the cosmos to the people and simultaneously the people back to the cosmos.

Further on, Gothic cathedrals served as the most impressive, influential buildings that fit a similar purpose. Looking eastward we can see the same historic celestial alignment in architecture, with temples and mosques framing the dawn of the new day, enveloping the people in rich stories, insight and purpose.

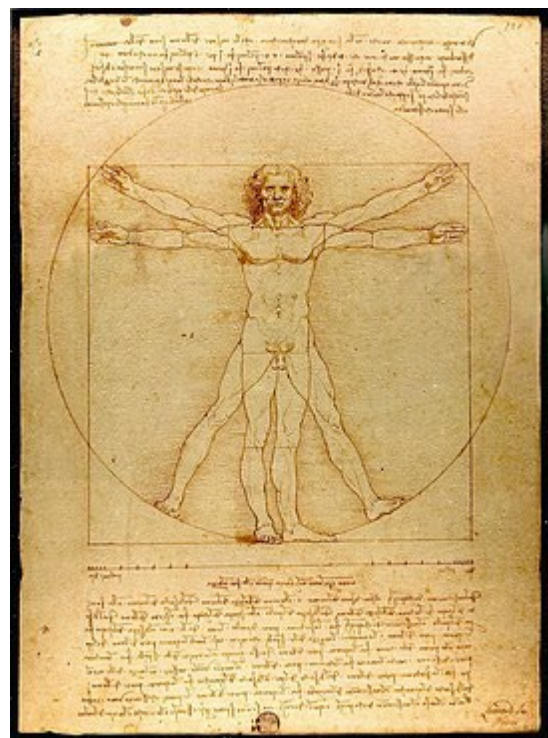


Fig. 10 DaVinci's Vitruvian Man:
https://en.wikipedia.org/wiki/Vitruvian_Man



Fig. 11 Saint Peter's Basilica dome interior: <https://www.flickr.com/photos/tobi0406/4004526094>



Fig. 12 Sun Temple at Konark: <https://alternativetoursindia.com/visit-odisha-beautiful-sun-temple-konark/>

Even at the domestic scale, as human's, we have a knack of making our individual dwellings personal and significant. Whether it's photos on a wall or sentimental possessions set on a shelf, we create places of comfort and can do so in surprisingly bleak situations. In the post-industrial world, where we are today, the comforts of home often disappear when we step out into the world. Commuting to our jobs or classes or getting groceries pulls us into a built environment that lacks the direct personability of a dwelling, as it maybe should, but it does not broadly reflect the presence of meaning it ought to.

Rene Descartes, a French philosopher from the early 17th century, is credited with his popular hypothesis of the mind and body existing as separate entities that are closely intertwined. Subsequently, given they are separate entities they ought to be able to exist apart from one another and operate on their own. Although it is a debatable philosophic theory, taken to relatively extreme levels the condition does align with the hedonistic gravity of the world that is now broadly more pronounced. As we evolve towards a painless world, in this hedonistic sense, parallels of *atheos* (*for the Greeks it meant to be abandoned by the gods*) is evermore present. Seen in global homogenization, self-driving vehicles and the Metaverse of virtual reality, there is evidence to suggest we are traveling toward autonomy at its most catastrophic level.



Fig. 13 Dystopian urban scene: <https://www.rca.ac.uk/news-and-events/news/rca-researchers-and-designers-imagine-utopian-and-dystopian-driverless-futures/>

The worst scenario for architecture, and broadly humankind, would be the actualization of dystopian civilizations automated by technology. A truly autonomous being exists, in the Cartesian sense, as a mind free from the body. The draw to participate in anything communal holds no value, whether in culture or with nature, because to attain self-fulfilling prophecy within one's own mind, apart from physical happenings, would be the pinnacle of existence. If this is true, there is no reason to exist beyond the mind. Rendering our sensuous world of experience irrelevant, this is the problem presented to architecture.

“Such atmospheres, never merely about sensuous pleasure or consumable novelty, could function as the contemporary alternative to the sacred, paradigmatic architectural space of world traditions.

If so, we can hope they might foster the weakening of the strongly held values that are always at the root of human discord and violence”

– Alberto Pérez-Gómez, *Attunement: Architectural Meaning After the Crisis of Modern Science*

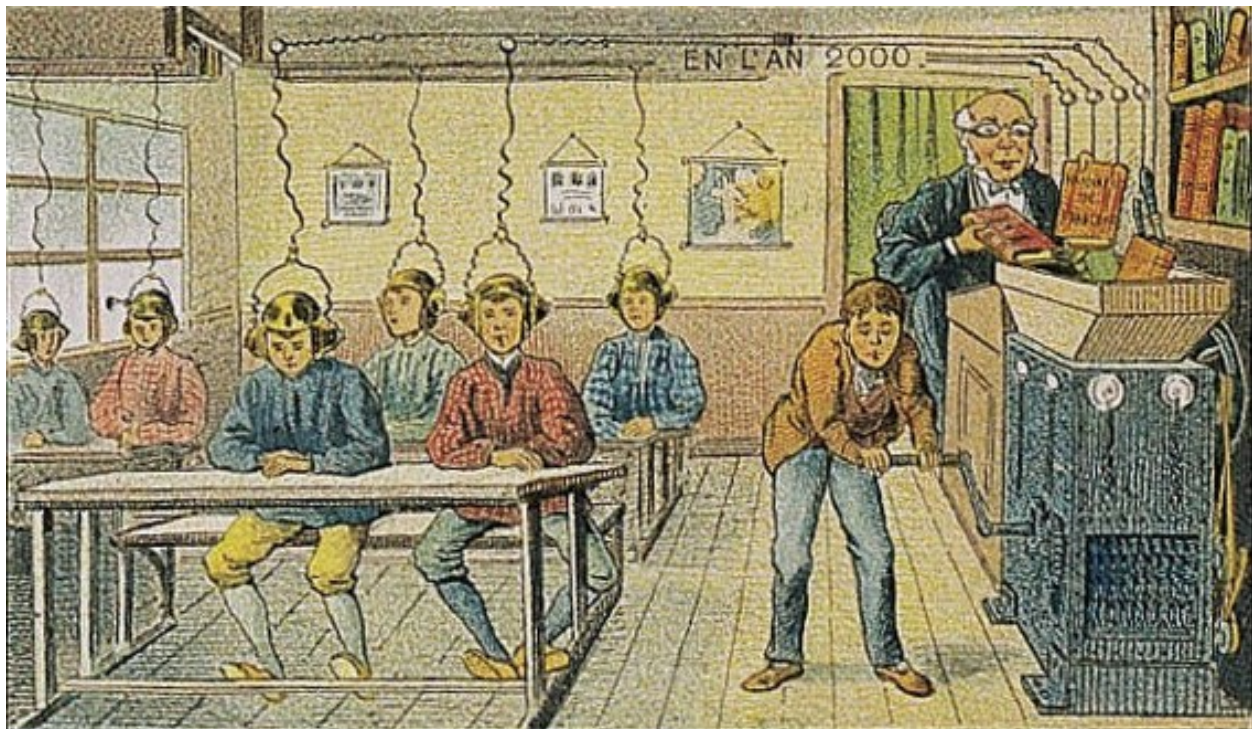


Fig. 14 Dystopian classroom: <https://www.wired.com/2011/06/visions-de-lan-2000/>

I set forth this condition of architecture in the most optimistic light. It is not completely my own, and it is not meant to set our world on a live stage of apocalyptic collapse, especially within the practice of architecture. This condition is presented to question architecture's current intent, to question both the architect's and the user's intent, broadly but, more specifically with this project, to question how architecture might continue to inspire our distinguished and communal desire for interconnection beyond traditional sacred forms as they have arguably attained their most spectacular moments.

Certainly not all buildings are built with awe-striking purpose, that has been constant throughout architecture's history. However, with the turning-point of the scientific and industrial revolutions came a compounding shift of thought processes and beliefs, especially in western society. These changes certainly affected architecture as a practice and recognition of this architectural shift is where the intent of this project began.

I offer then that there is a balance act in place, as large as existence itself, beyond architecture but, not inaccessible or invincible to architecture.

A scale that is continually overweighted to the less poetic, specifically in architecture.

Before we might attempt to right the scale, we must establish the depth spirituality holds as a concept in our world today as an enhancement of our human principles and functions. Religion is the most recognized structure of spirituality and, is present around the world with titles of Atheism, Buddhism, Christianity, Daoism, Hinduism, Islam, Judaism and many others. Events throughout the entirety of history up to today show us the differences in these religions, the atrocities and conflict that cannot be ignored. Despite the differing views, however, the very thin thread that ties them together is that they are beliefs, schools of thought, methods of meditative thinking.

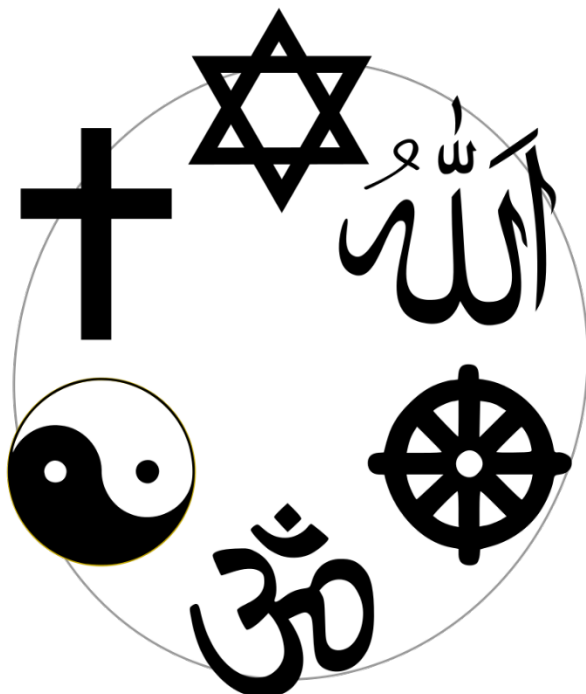


Fig. 15 World religions:
https://en.wikipedia.org/wiki/World_religions#/media/File:Religious_syms_bw.svg

In Barbara Dalle Pezze's essay investigating what Heidegger means by the term 'Gelassenheit' (the essence of thinking) from his writing titled "*Conversation on a Country Path about Thinking*" (published in 1966), Pezze presents Martin Heidegger's "calculative thinking" and "meditative thinking". Calculative thinking gives us answers to mathematical equations, spells out our goals to reach in five years and helps us decide to wear a black or red shirt. It provides relatively quick, qualitative information that ends one thought with the beginning of the next. Meditative thinking, as Pezze states, "means to notice, to observe, to ponder, to awaken an awareness of what is actually taking place around and in us" (Pezze, 2006).

This does not mean we enter a tranced state of mind that renders us useless in the practical sense, but rather broadens our understanding of the practical, completely conscious. If we can identify this difference between calculative and meditative thinking and search for a communal core in the later, what we may find is the "poetic imagination" (Paz, 1991).

Octavio Paz, author and poet who produced his work in the 20th century, wrote of this in his book *Children of the Mire*.

"In spite of this diversity of poetic (religious) systems – rather, in its very center – a common belief can be discerned. This belief is the true religion of modern poetry, from Romanticism to Surrealism, and it appears in all poets, sometimes implicitly but more often explicitly. I am talking of analogy. The belief in correspondences between all beings and worlds predates Christianity, crosses the Middle Ages and, through Neoplatonism, illuminism, and occultism, reaches the nineteenth century...it (analogy) was the principle before all principles, before the reason of philosophies and the revelations of religions...Although religions belong to history and perish, in all of them a nonreligious seed survives; poetic imagination." (Paz, 1991)

This realization is not meant to belittle any religions values and beliefs, they hold great positions in society and guide us along paths of fulfillment. But what identifying the poetic imagination does in establishing a communal bond is important. The presence of reflective thought is the thread of spirituality that ties us together across religious, political and societal boundaries. If we allow it to flourish, we reap the rooting of our own presence in history, our specific contexts in relation to everything that has happened before us. It gives us meaning and purpose in our "uniquely human temporality" (Pérez-Gómez, 2016).

"Throughout history, houses of worship and sacred grounds have traditionally been the focal points around which these narratives (for the stages of life and for life's purpose and meaning) evolved and were represented."

– Karla Cavarra Britton, *The Risk of the Ineffable* from *Transcending Architecture: Contemporary Views on Sacred Space* edited by Julio Bermúdez

At the origins of Panentheism, divine intervention took place in the elements of everyday life. The sun rising out of the horizon shone light brought vision of the flowing stream, trees swaying in the wind and lightning flashing across the sky. The presence of God was directly related to natural phenomena as life on earth and the cosmos was existence of divinity itself. As time progressed, understanding of the universe evolved; God was no longer present in the rocks and trees but, contributed to life from the cosmos above.

From Vitruvius during the height of the Greek Empire and his writing on The Zodiac and Planets, “The word “universe” means the general assemblage of all nature, and it also means the heaven that is made up of the constellations and the courses of stars. The heaven revolves steadily around the earth and sea on the pivots at the ends of its axis. The architect at these points was the power of Nature, and she put the pivots there, to be, as it were, centers, one of them above the earth and sea at the very top of the firmament and even beyond the stars composing the Great Bear, the other on the opposite side under the earth in the regions of the south. Round these pivots as centers, like those of a turning lathe, she formed the circles in which heaven passes on its everlasting way. In the midst thereof, the earth and sea naturally occupy the center point” (Morgan, 1960)

As science and beliefs evolved, the Gothic era brought with it the most recognizable architectural displays of sacrality. Gargoyles, ornament, stained-glass and light are commonly associated features of the era and, the latter is where we find the key to understanding the architect’s contribution in relation to the spiritual.

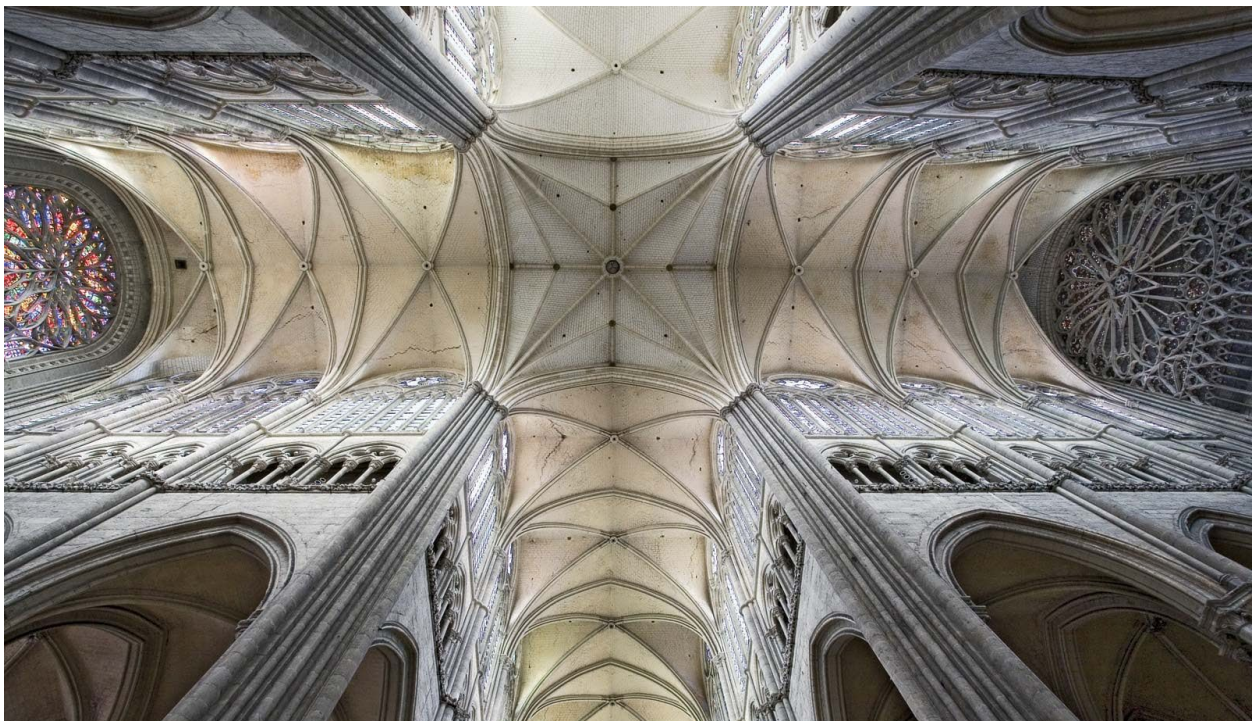


Fig. 16 Amiens Cathedral ceiling: <https://www.britannica.com/technology/rib-vault/images-videos>

In the 11th century, renovation of the Church of Saint-Denis just north of Paris, was led by Abbot Sugar. From one small element we can discern the construct of spirituality at the time. The inscription on the new golden doors to enter the church translates as follows,

“Whoever thou art, if thou sleekest to extol the glory of these doors,
Marvel not at the gold and the expense but at the craftsmanship of the work.
Bright is the noble work; but being nobly bright, the work
Should brighten the minds, so that they may travel, through the true lamps (*lumina vera*)
To the True Light (*verum lumen*) where Christ is the true door.
In what manner it be inherent in this world the golden door defines:
The dull mind rises to truth through that which is material
And, in seeing the light (*lux*), is resurrected from its former submersion.”
(Crow, 2011)

From this inscribed poem, we can begin to understand the purpose of the church and how the poetic imagination presents itself in the Gothic churches and cathedrals throughout the era.

From Jason Crow’s essay, *The Sacred Stones of Saint Denis*, “The poem distinguishes among three different types of light: *lux* is the immaterial light that is God; *verum lumen* is the perfect material light that is Christ; and the *vera lumina* are the material lights of lamps.” (Crow, 2011)



Fig. 17 Basilica of Saint Denis: <http://parisdiarybylaure.com/wp-content/uploads/2015/12/SAINT-DENIS-18-fa%C3%A1ade-1.jpg>



Fig. 18 Entry doors of the Church of Saint-Denis: https://commons.wikimedia.org/wiki/File:Saint-Denis_Basilique_Saint-Denis_Portal_3.jpg

We can see then how the rebuilt church, partly constructed with the already sacred stones from the ruins of the earlier church at this location, housed this experience of immense spiritual weight as the light of the lamps was the path to the “perfect material light” of Christ shining through the stained glass in presence of the immaterial light of God found at the intersection of the material lights.

Certainly, the number of particular elements, buildings and cities that are woven with language that grounds them to a meaning rooted in the fabric of our world and history is inexhaustible.

Across the entirety of the globe these stories and religions, temples and theatres are set on the backdrop of the cosmos and, rarely does the poetic engagement of historic spiritualities fail to acknowledge this condition.

Artefact Documentation



Fig. 19 Project artefact: *infinite light*

The project's artefact models our universe today, in reference to Plato's cosmologies spelled out in his dialogue *Timaeus*, Ptolemy's geocentric model revolving around earth, Copernicus' heliocentric model centered on the sun, and other models of the cosmos that both predate and succeed those mentioned including Vitruvius' previously mentioned earth-centered axis and Giordano Bruno's infinite universe.

Pérez-Gómez summarizes Giordano Bruno's model of the universe succinctly. From *Attunement*, "...Bruno unified celestial and terrestrial physics; he believed that we inhabit an infinite universe, on a moving earth. Yet because he (Bruno) also believed that nothing is outside the realm of human experience – the mind-body-world continuum as it emerges as consciousness – Bruno believed that the divine is not entirely distinct from the human, and is therefore present in everything, in nature and cultural artifacts. For him, infinity is coupled with the idea of every creature's participation in the divine; in the infinite space of a love-permeated universe, all things are fused." (Pérez-Gómez, 2016)

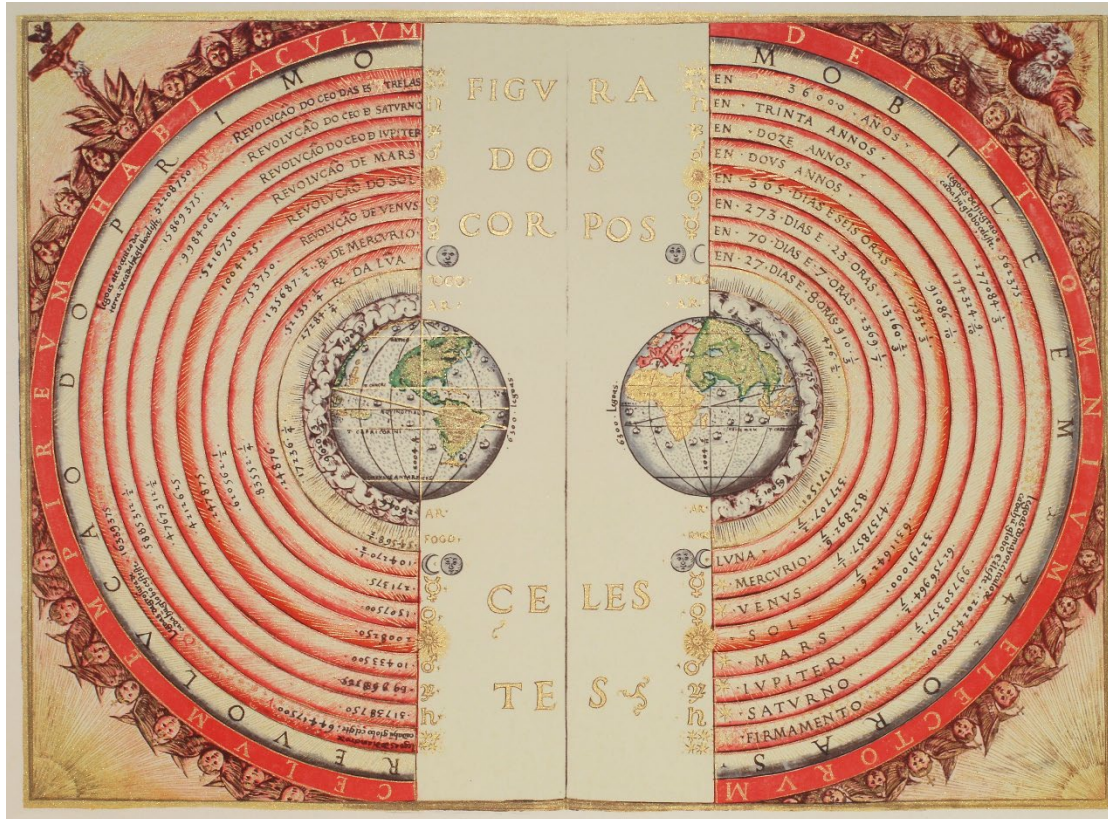


Fig. 20 Ptolemaic universe: https://en.wikipedia.org/wiki/Geocentric_model#/media/File:Bartolomeu_Velho_1568.jpg

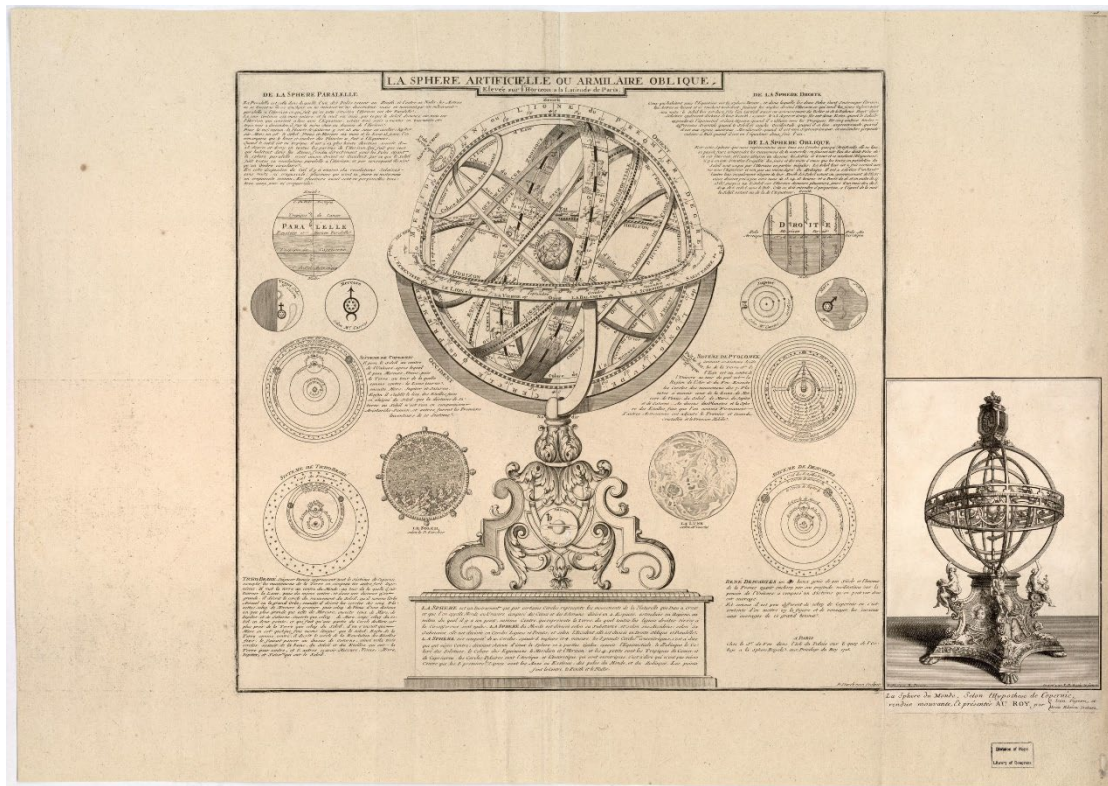


Fig. 21 Armillary sphere: <https://www.loc.gov/resource/g3181b.ct003796/?r=0.055,-0.111,1,0.812,0>

Thus, calling upon fragments of these forementioned models, the importance of the specific fragments is perhaps not so much as the presence of the fragment itself.

Part of what has designated traditionally spiritual places as such was the use of analogy, of language, and fragments, or symbols, within them. I relate the ideas of fragment and symbol in the sense that they serve similar purpose in representing a smaller part of a larger whole. These vortexes of language and fragments, poetry and symbols, hold immense historic contribution to the sense of purpose we hold

From *Architecture in the Age of Divided Representation* by Dalibor Vesely

“The metaphoricity of fragment not only pertains to the domain of the arts but is also a germ of a new universal restorative power, relevant to our culture as a whole...The tool that permits us to move through the forest of symbols and indices is analogy. Analogy can reveal the deep relation between distant realities which we cannot link together in logical thought” (pg.340,343)

What resulted from this consideration of past interpretations and stories is this collage that holds an infinitely reflected plastic light within a demonstration of amateur welding set atop a block of wood. I describe this built thing that way because without meaning, without stories, without analogy, without the poetic imagination, that is what it is, a grossly oversized paperweight.



Fig. 22 Project artefact



Fig. 23 Project artefact: internal clockwork

I believe I'm on course in saying built architecture follows suite. Without a basis of poetic materiality and form, no matter the extent analogy is incorporated, and especially concerning spiritual architecture, our buildings exponentially lose their utility over time.

Where does this history of deep connection and broad understanding of the cosmos show itself today? It's difficult to say but, given the current states of abandoned religious sites and pedophilic stains on fragments of the church today leading to mistrust as some of the most drastic displays, I don't believe we can claim a universal relation with our spirituality. The condition of the spiritual architecture, as buildings of spirituality regardless of religion, are no longer all-encompassing commonplaces given population expansion and homogenizations. Again, highlighting a change in how we might reach for God.

As the poetic imagination evolved, we see beliefs and desire outside of religion. 17th century physicist, mathematician and cosmologist Robert Fludd published *Utriusque Cosmi, Maioris scilicet et Minoris, metaphysica, physica, atque technica Historia* (The metaphysical, physical, and technical history of the two worlds, namely the greater and the lesser, in Germany between 1617 and 1621. A fragment of which set our human relation to the cosmos, in that every star in the heavens has it's seed in the plants of the earth.

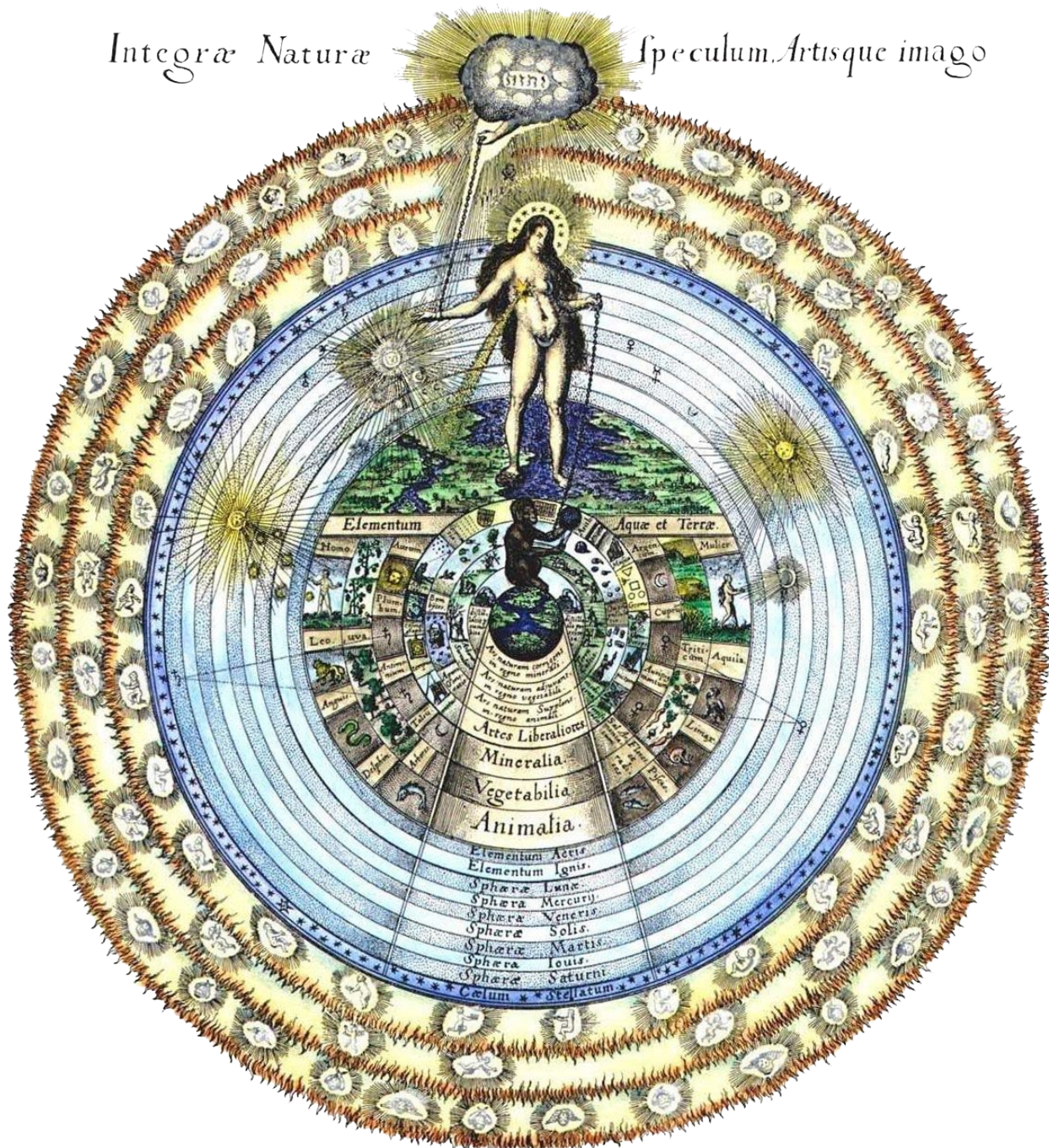


Fig. 24 Robert Fludd's Anima Mundi:

[https://commons.wikimedia.org/wiki/File:Anima_Mundi_\(by_Robert_Fludd,_Utriusque_Cosmi_Historia,_1617\).png](https://commons.wikimedia.org/wiki/File:Anima_Mundi_(by_Robert_Fludd,_Utriusque_Cosmi_Historia,_1617).png)

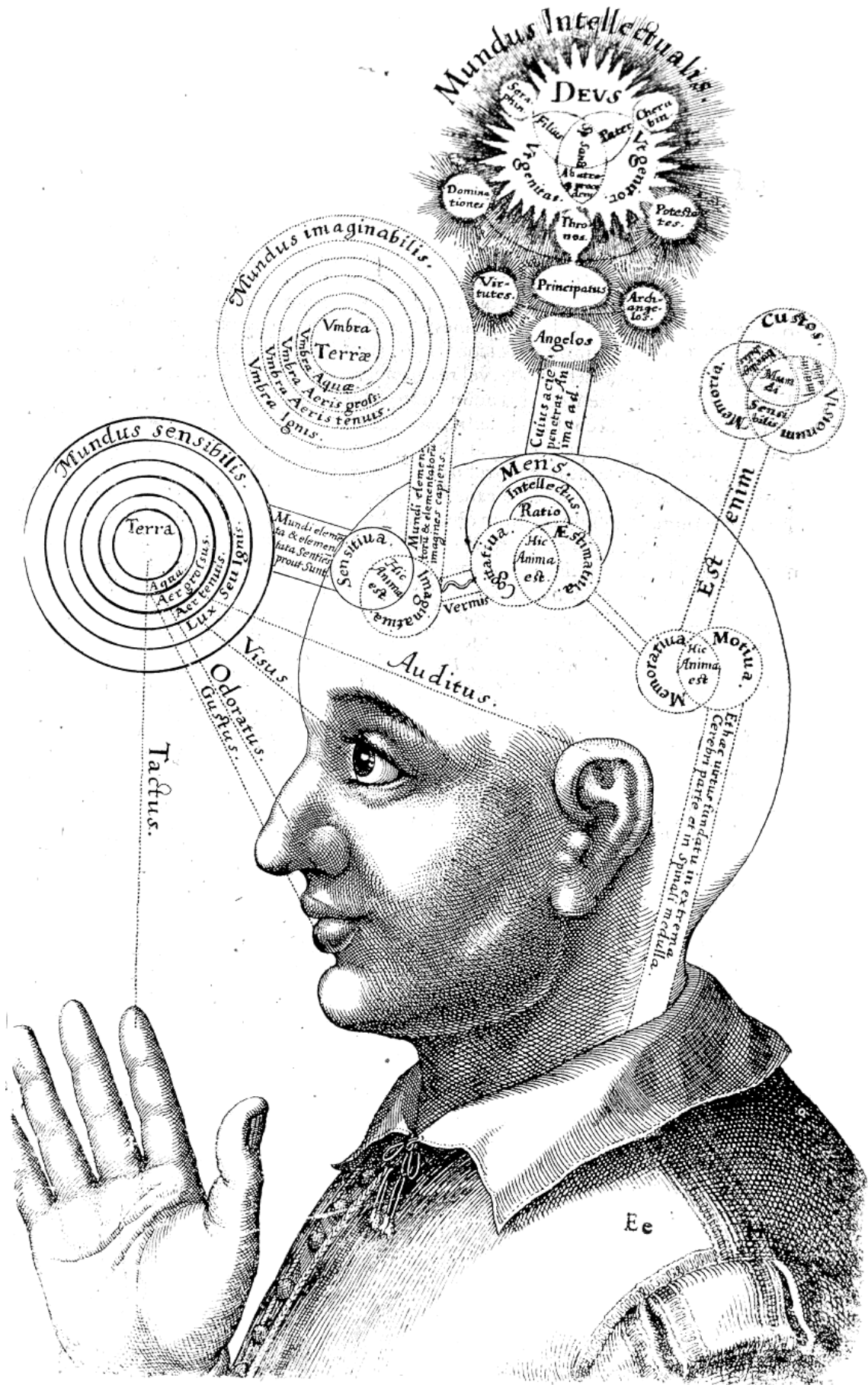


Fig. 25 Robert Fludd's Spiritual Mind:

https://en.wikipedia.org/wiki/Robert_Fludd#/media/File:RobertFuddBewusstsein17Jh.png

A reflection of this analogy can be interpreted from German artist Anselm Kiefer's painting *Sol Invictus* completed in 1995. From Markus Bröderlin's description in *Anselm Kiefer the Seven Heavenly Palaces*,

"Beneath a sunflower bloom that reaches up high like a streetlamp, the artist lies gazing up into the array of dark seeds that look to him like a night sky. Seeds fall like stardust from the protective plant, and the figure is plunged into a chaotic vortex. The painting bespeaks the pantheistic longing to be subsumed into a cosmic whole. Yet, this consolation is dispensed to the lost denizen of the cosmos – the fractal subject – by nothing more than a shriveled sunflower, shedding its last seed" (Bröderlin, 2001).

Kiefer's painting is evidence of a modern desire to be immersed in something other, whatever form it may take. Presenting the opportunity for architecture to provide, not serving as God itself but, to create an atmosphere that gives place to the spiritual poetic imagination.

Our progression to our current environment of culture and society is at a point where I believe, short from the point of no return, architecture can reinvoke the importance and presence of the poetic imagination no matter the context. Architecture can be the lens through which intelligent buildings and efficient mass production are kept in check, saving space for play, imagination and curiosity, as one cannot advance without the other.

Architecture can be the host of spirituality, places that recognize and amplify the human desire for something beyond us, something *other*, and reclaim its purpose as the host of spirituality.

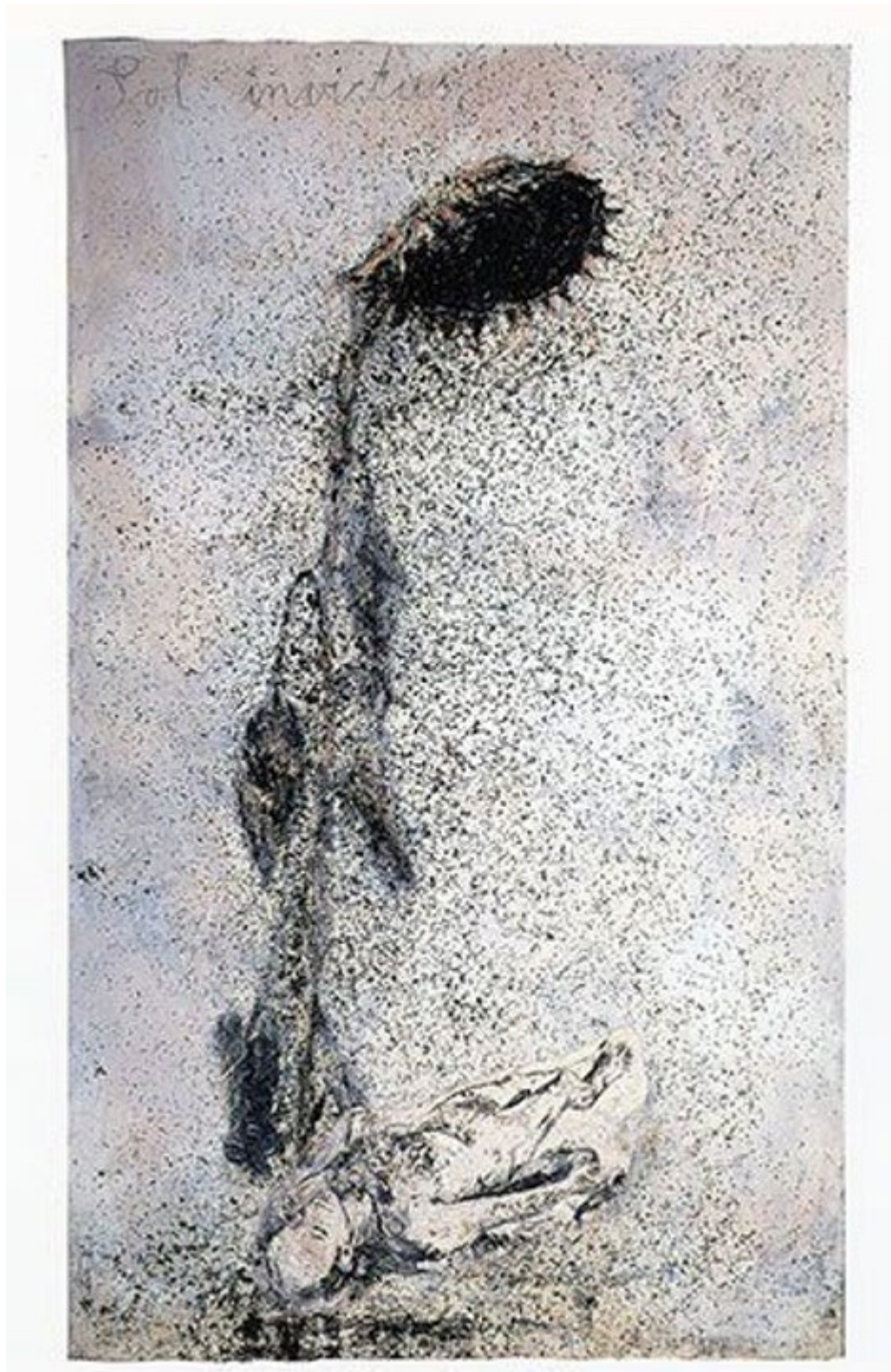


Fig. 26 *Sol Invictus*, Anselm Kiefer, 1995:

<https://i.pinimg.com/originals/70/21/81/7021810835edf83a1c0d3156901b3854.jpg>

Process Documentation

The process of design for this project took the form of sketches on transparent paper. The ability to overlay the drawings was crucial to the poetic entanglement of the architectural intervention.

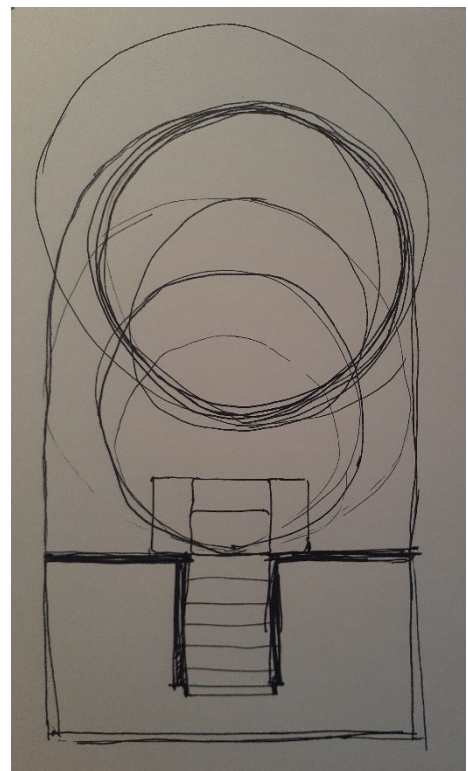
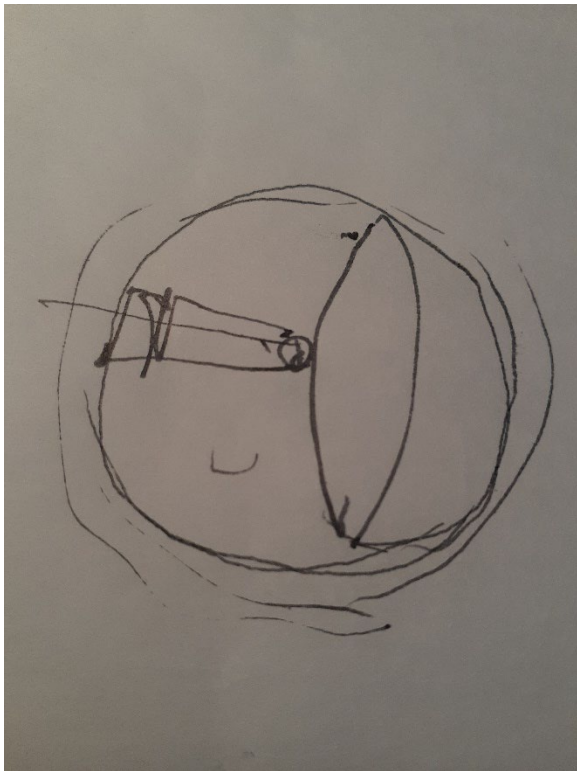
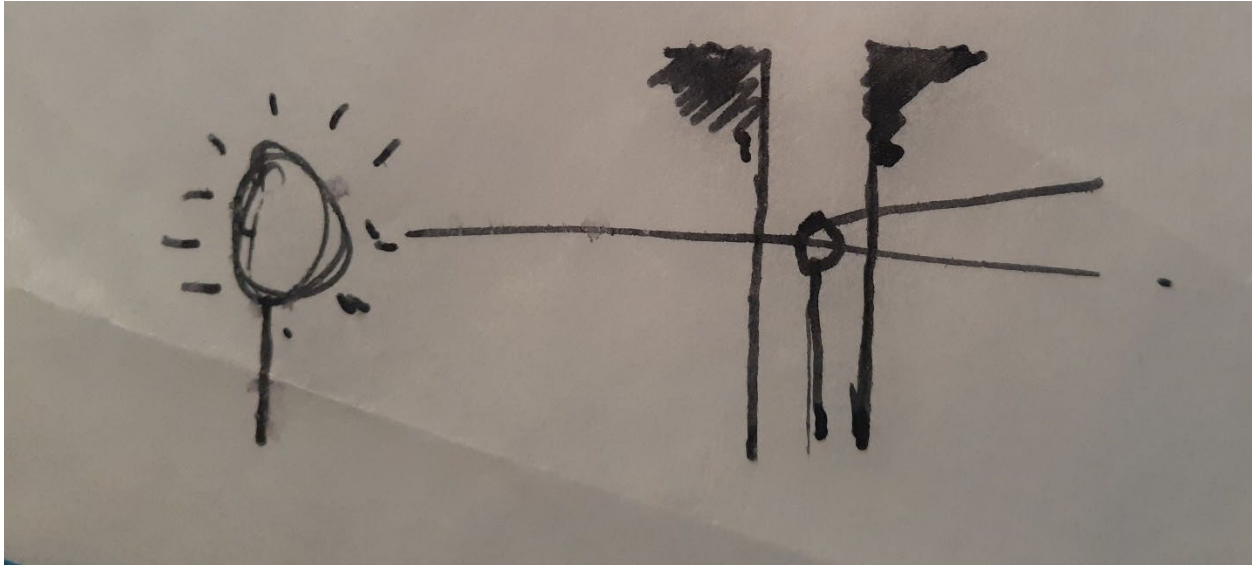


Fig. 27 *Sketches of project development*

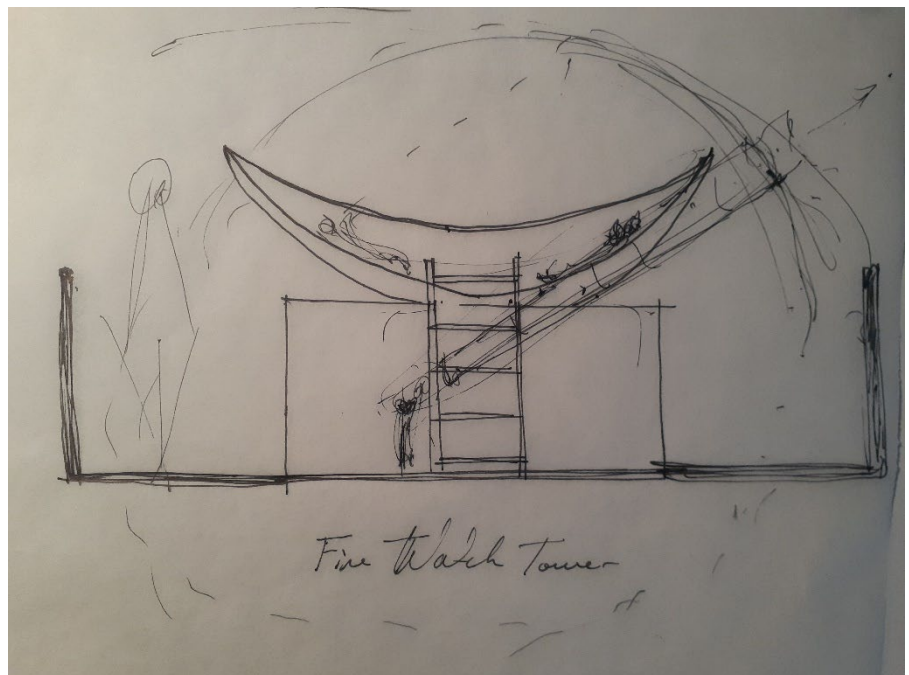
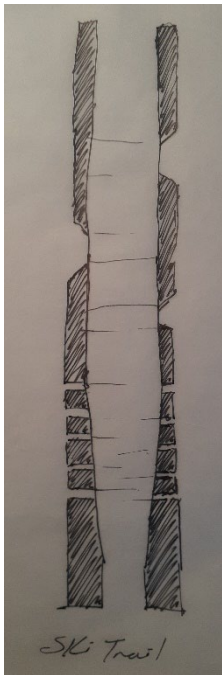
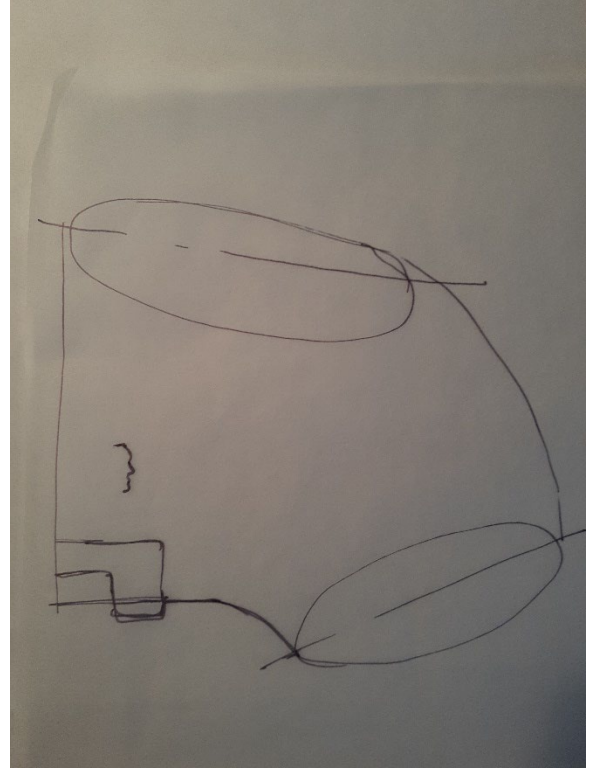
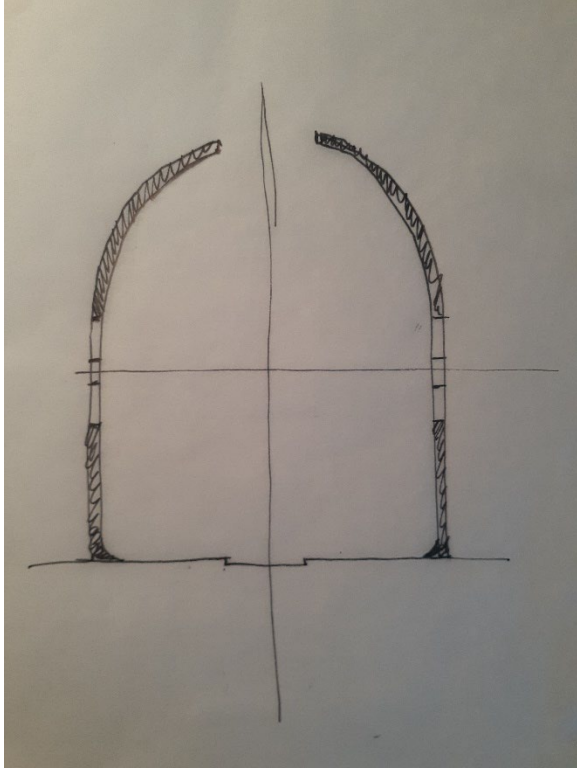


Fig. 28 Sketches of project development

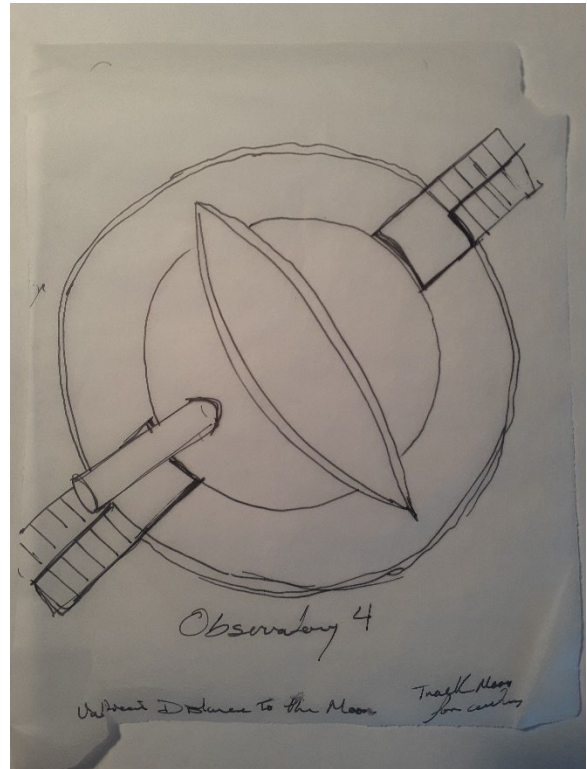
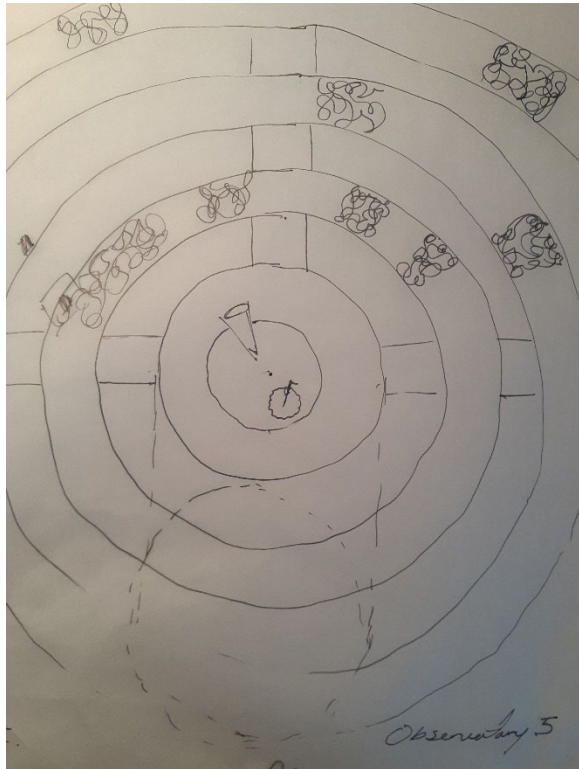
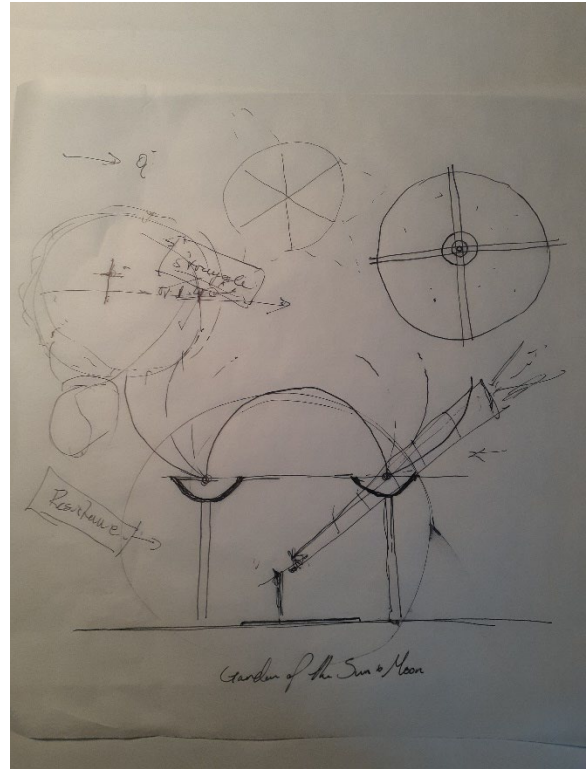
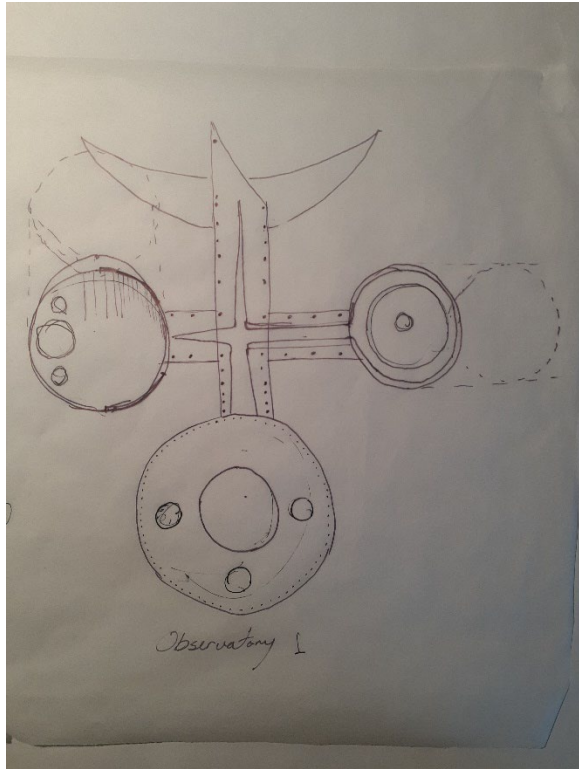


Fig. 29 Sketches of project development

Solution Documentation

The following is a net of observatories set across the world, each fragment with their own unique elements but, connected by cosmic orientation, spiritual alignment, historic tradition and engagement of the poetic imagination.

As the idealized project is comprised of a continual work of twelve observatories exploring the topic, four are presented within this book.

Plainer View

Located nine miles south and east of Cooperstown, North Dakota, the observatory holds both a telescope and unaided viewing. The roofline suggests a peeling upward of the expansive Great Plains region, grounding the building for participation in the heavenward orientation. Slices in the canopy cast a broken moonlight, illuminating paths to the oculi. The telescopic space acts as a basin, holding the cosmic rainfall of the night sky. Two benches are set perpendicular to the raised viewing platform where the telescope is set. The adjacent unaided viewing area is terraced again to a basin that catches moonlight from three openings above. Outward from the stepped seating a moment is framed. The collision of the innumerable stars above falling upon earthly expanse.

Seasonal conditions certainly play a role here, but with the ideal condition of a cloudless sky on the longest night of the year, the winter solstice, one might witness this magnificence presence through the form of the architecture.

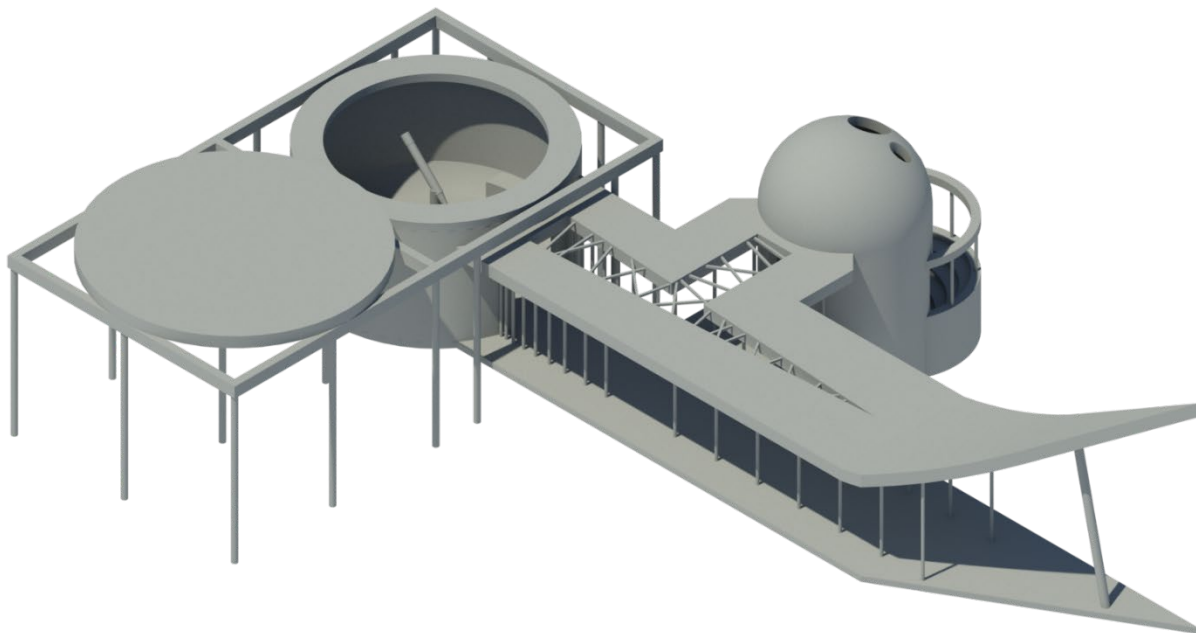


Fig. 30 *Isometric view of Plainer View Observatory*



Fig. 31 Section views of *Plainer View Observatory*

A Treatise on Stars

Within New Mexico's Chain-of-Crates Wilderness Study Area, eighty miles west of Albuquerque, in the desert forest, this observatory was designed from the language of Pulitzer Prize Finalist Mei-Mei Berssenbrugge in her poems *Star Beings* and *Scalar*, written in reflection of her time living and hiking in New Mexico. The open-sky observatory spans the unnamed crater's basin bridging the telescopic and unaided viewing areas. Spanning 400ft across the basin, the walkway connecting the pair of platforms shows a very direct connection across a distance. That connection is a common basis in the poems.

From Berssenbrugge's poem *Star Beings*,

"In late afternoon, stars are not visible.

Everything arrives energetically, at first.

I wait to see what I'll recognize, as diffuse sky resolves into points of light and glitter.

When Venus appears, objects are just visible; silhouettes seem larger, nearer; voices are audible at a distance, though words don't make precise sense.

Glancing to the right of Antares in medium blue, I intuit cosmic allurement.

Stars arrive non-visually, first.

I practice to see light in this process of evanescence, like an aroma.

The field of heaven, which operates outside space-time, is formed by the acts of other entities, other stars, and by people who rise in the dark to look for them and place them.

When mind extends toward the sky, it may take form of a perceived star, because respect is a portal.

When your experience ardently links to an object or person where you live - husband, tree, stone - you try to hold onto the visibility of this object and its location.

Connecting with a geography of sky gives this sense of security, inspiration.

I ally with a crater on the plain, also the comet's light" (Berssenbrugge, 2020)

Following the language from the first stanza from her poem, Berssenbrugge continues to dictate this relation to the cosmos. This observatory follows the language across this distance to the waves of the cosmos. Setting a place for the collapsible distance between our eyes, the eyes of our soul, and the light-stricken web of infinity above.

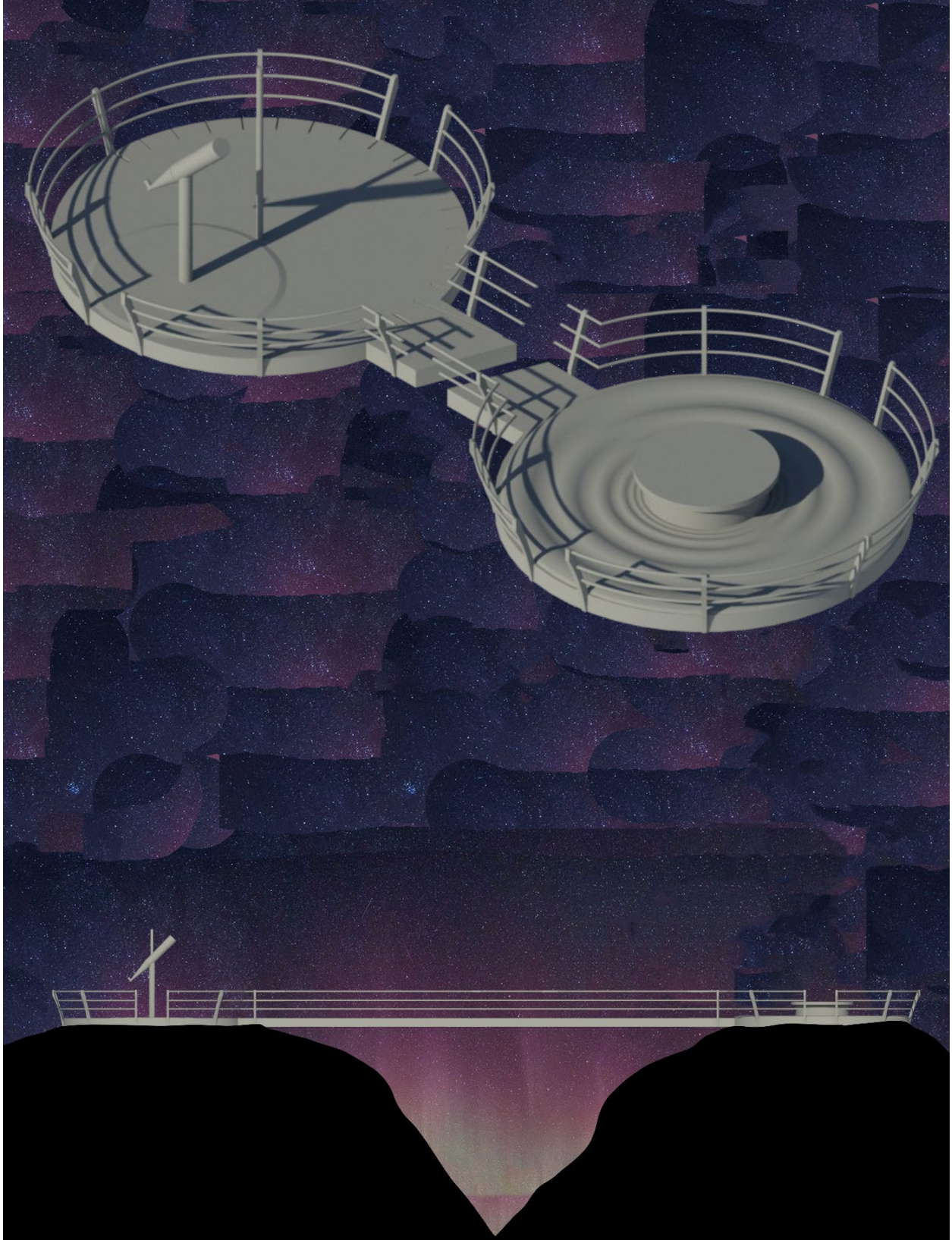


Fig. 32 Isometric and elevation views of *A Treatise on Stars Observatory*

Fateh Sugar Lake

In continuous tracing of this architectural cosmos, we land in northern India. Built on Fateh Sugar Lake as its own island in Udaipur, Rajasthan, this observatory sets together the seven upper Lokas in Hindu cosmology over Robert Fludd's *Amina Mundi* cosmic model, where earth and all its conditions are encircled by atmosphere and celestial beings. Earth, the base Lokas of the seven upper Lokas, is at the center of the observatory where the telescope is set extending above the visual plane. Vines grow down through the concentric rings of the Lokas reaching to the water below. The plantings remain as a constant of our earthy condition and envelope the observer, protecting them from bustling noise from the surrounding city. The lesser axis aligns with the axis of the neighboring, less publicly accessible Udaipur Solar Observatory, where state funded scientific observation occurs.

The greater axis anchors the walkways, aligning with the summer solstice, framing the arrival of the sun's light over Udaipur's skyline.

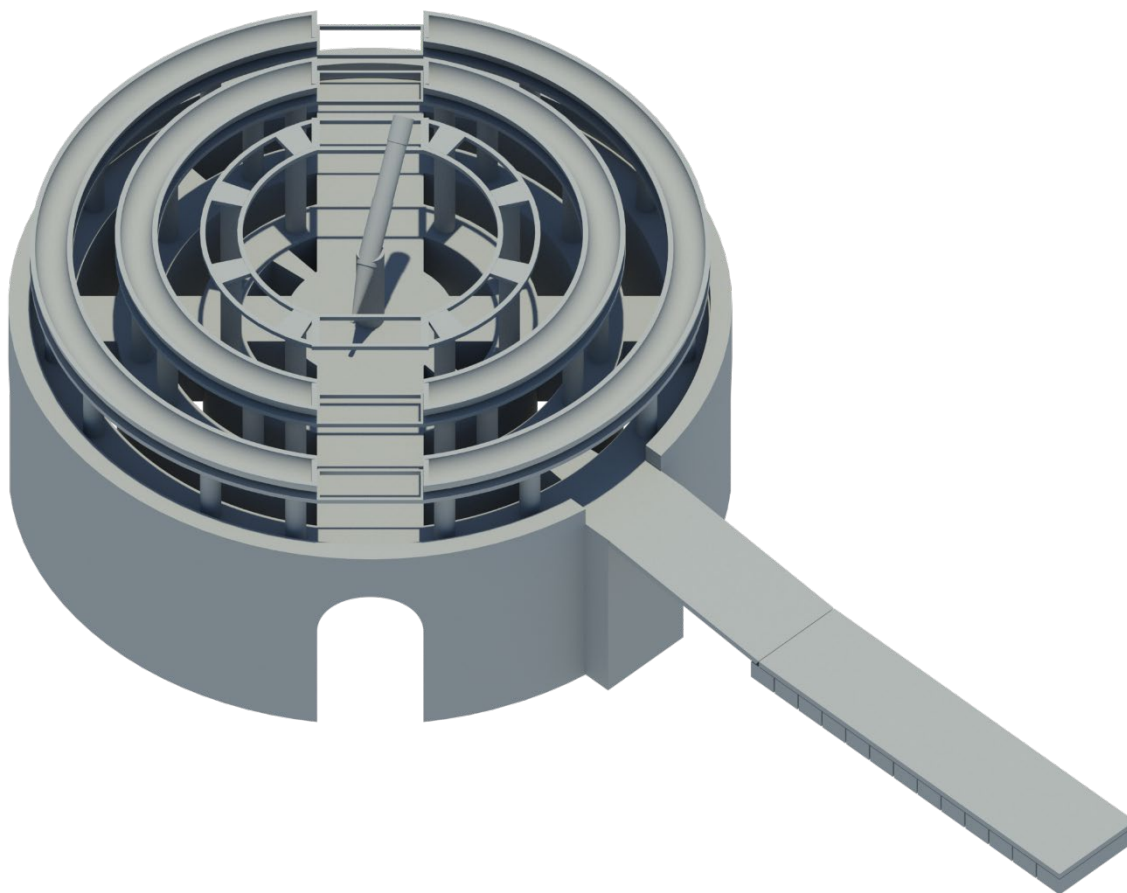


Fig. 33 Isometric view of Fateh Sugar Lake Observatory



Fig. 34 *Plan and section view of Fateh Sugar Lake Observatory*

The Distance of the Moon

The final stop here today brings us to Rome. In alignment with the Vatican City, across the Tiber River, sits Piazza di San Silvestro. Formerly a hub for the city's public bus transit, this center is now a public plaza and, the envisioned site for The Distance of the Moon Observatory.

In the absence of local observatories as the Vatican's own was pushed out of the boundaries of the Vatican, and eventually to Arizona as consequence of artificial light pollution, the placement of this observatory is evermore justified.

Inspired by Italian poet Italo Calvino's *The Distance of the Moon*, the observatory continues the overarching rubric of public accessibility.

From the beginning of Calvino's writing,

“How well I know! -- *old Qfwfq cried*, -- the rest of you can't remember, but I can. We had her on top of us all the time, that enormous Moon: when she was full -- nights as bright as day, but with a butter-colored light -- it looked as if she were going to crush us; when she was new, she rolled around the sky like a black umbrella blown by the wind; and when she was waxing, she came forward with her horns so low she seemed about to stick into the peak of a promontory and get caught there. But the whole business of the Moon's phases worked in a different way then: because the distances from the Sun were different, and the orbits, and the angle of something or other, I forget what; as for eclipses, with Earth and Moon stuck together the way they were, why, we had eclipses every minute: naturally, those two big monsters managed to put each other in the shade constantly, first one, then the other. Orbit? Oh, elliptical, of course: for a while it would huddle against us and then it would take flight for a while. The tides, when the Moon swung closer, rose so high nobody could hold them back. There were nights when the Moon was full and very, very low, and the tide was so high that the Moon missed a ducking in the sea by a hair's breadth; well, let's say a few yards anyway. Climb up on the Moon? Of course, we did. All you had to do was row out to it in a boat and, when you were underneath, prop a ladder against her and scramble up.”
(Calvino, Weaver, 1968)

The split-level observatory calls participation of multiple parties, as the telescope viewing below and the crescent seat above rotate with user input, driven by motors in the lowest chamber. In an unseen dance, twirling together beneath a clear night sky permeated by the *Cosmicomics* of Italo, the users might find a collective moment of longing. A desire to set their own ladder to the moon.

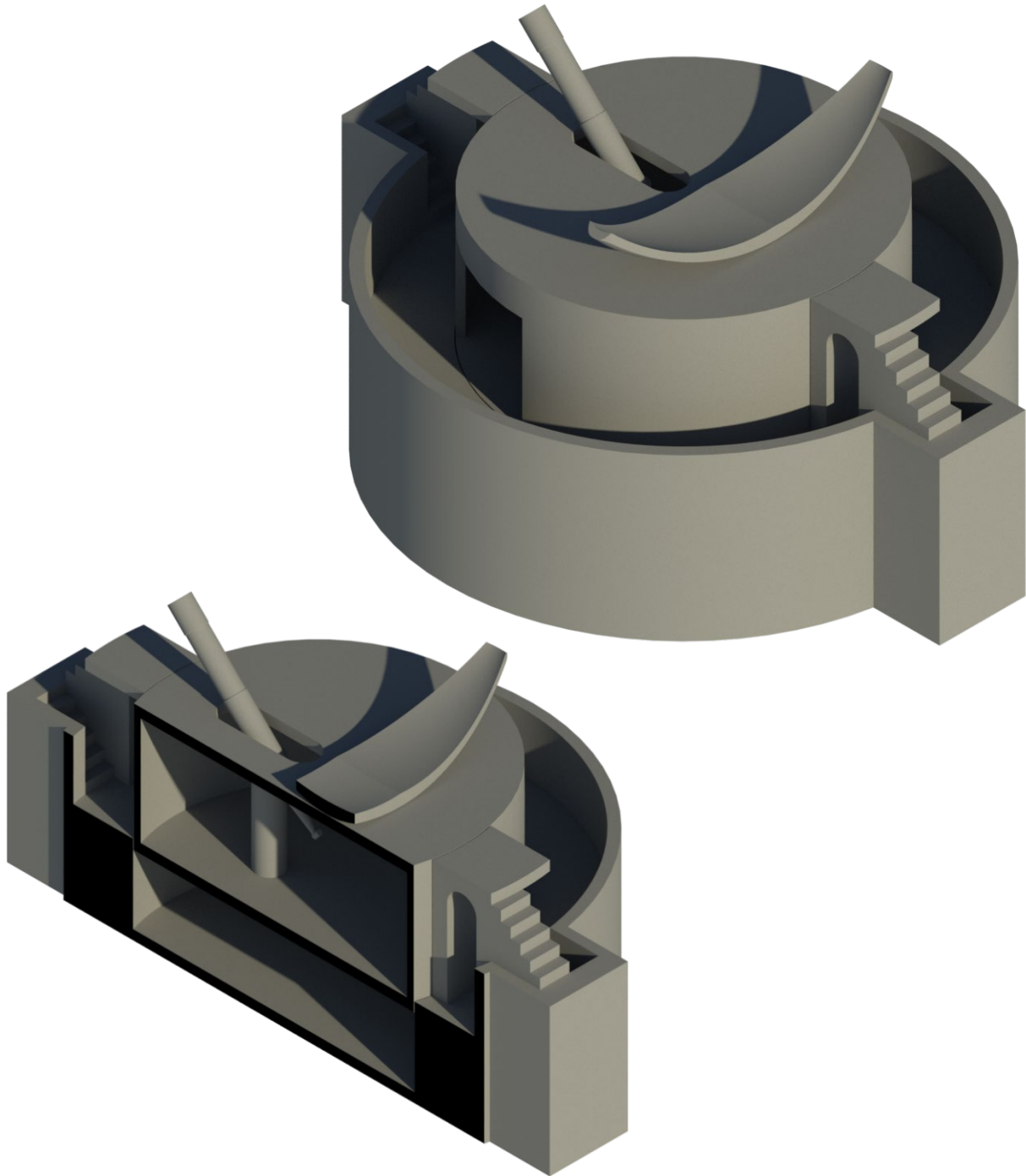


Fig. 35 Isometric views of *The Distance to the Moon Observatory*



Fig. 36 Section and plan view of *The Distance to the Moon Observatory*

Closing Remarks on the Project

In the continuation of the project, architecture's spiritual utility for the 21st century might be found in the framing of our constant human condition for connection to something beyond us. Built beside the traditionally sacred architecture of our world, architecture must strive to provide a wholeness, a summation of intellect and emotion through its actions: a place for self-understanding and reflection. A place of encompassing spiritual engagement of the poetic imagination.

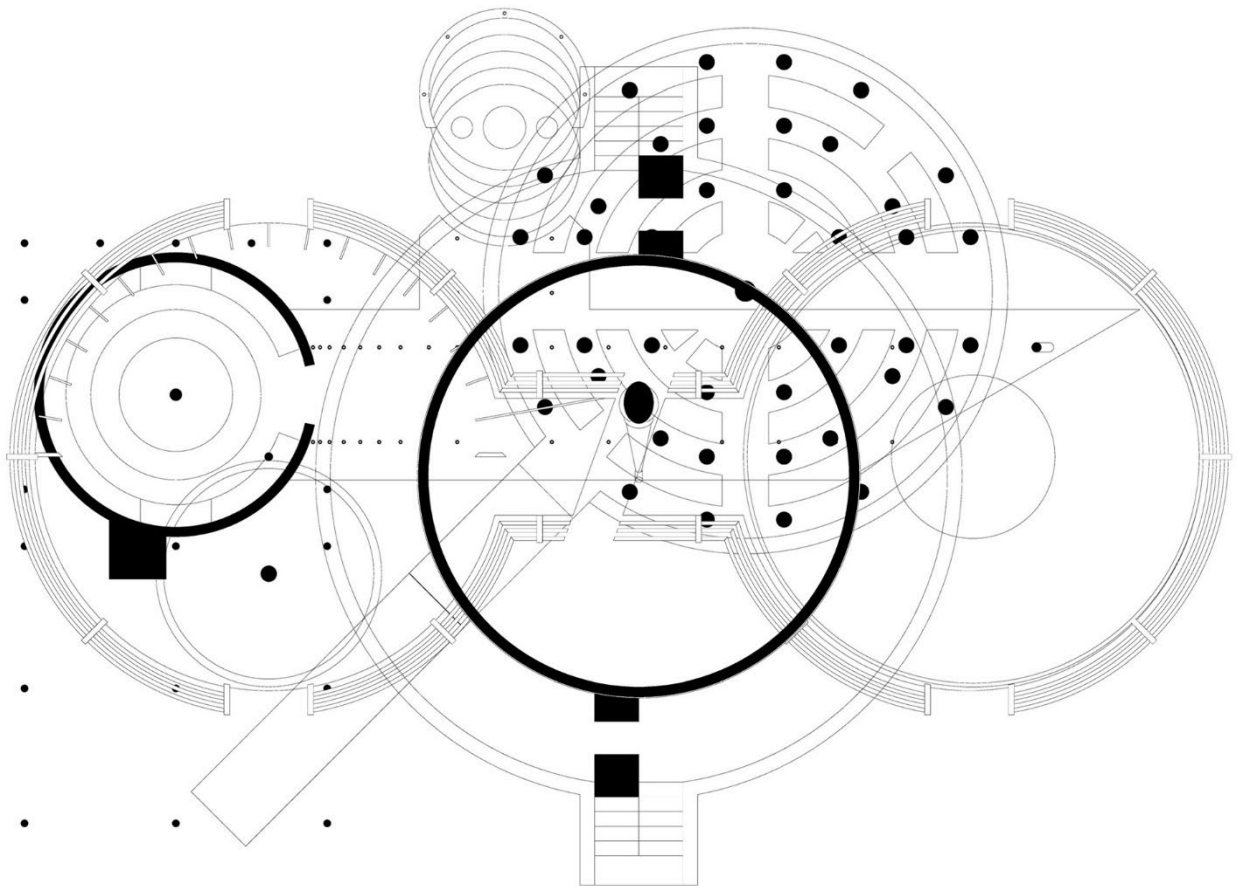


Fig. 37 *Overlaid plans of observatories*

Public Display of Thesis



Fig. 38 Public display of thesis boards and artefact



Fig. 39 *Display of artefact at Memorial Union Gallery showing*

Appendix

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Previous Design Studio Experience

2018-19, 2 nd year	Fall:	Jamestown Rowing Club Boathouse, Urness Breathing Room, Urness
	Spring:	Marfa Dwelling, Yergens Rourke Towers: Mixed Use, Yergens
2019-20, 3 rd year	Fall:	Downtown Fargo Visitor Center, Gleye Downtown Fargo Student Center, Gleye
	Spring:	ND Capitol Office Building, Schwaen Fin House, Schwaen
2020-21, 4 th year	Fall:	Capstone OASIS Tower, Hussein
	Spring:	Residential Design, Crutchfield Upsford Rugby Stadium, Crutchfield
2021-22, 5 th year	Fall:	Thesis Preparation, Wischer
	Spring:	Thesis Project, Wischer