

C O N T I N U U M



W U U N I T N O O

## **CONTINUUM**

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By

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FIGURE 02 | EVERGREEN BRANCH

## THESIS ABSTRACT

As a contemporary society, we pursue sustainability to mitigate environmental unbalance. However, we rarely reflect on the temporal and cyclical nature of our existence, which exposes the premise of sustainability; continuance through mindfulness and stewardship.

Like much of the world, cities such as San Francisco have evicted the dead from the city. The displacement of cemeteries from the urban fabric threatens to conceal our temporal nature, condemning us to mindlessly dwell in the present with little concern for the wellbeing of the future. This project seeks to reverse this trend by making room for a dynamic urban cemetery that reveals the cyclical essence of our existence, emphasizing a vocation towards community in time.

Located within Golden Gate Park the program embraces a new form of death-care not only as a more ecological method, but as a medium through which to recognize the continuity of Culture through Nature. By bridging the mortality of the body with the growth of the Redwood Forest, this thesis aims to reestablish connections between individual loss and collective life to enhance the profundity of sustainability.

## NARRATIVE OF THE THEORETICAL ASPECT OF THE THESIS

The attitude towards the natural world has drastically changed from ancient to modern times. Ancient man maintained a personal relationship with nature. Experiences with natural phenomena were understood emotionally as nature was conceived as a presence that revealed itself in the way in which it appeared. For ancient man, this presence appeared as a “thou” or “live presence”, since primitive man was unable to reduce an experience of the world into abstract-able concepts of space, time, or reality.

Because any experience with the natural world was understood as personal and subjective, ancient man explained natural phenomena in a personal way through stories in the form of myth. However, myths were not merely stories. They were explanations of natural phenomena that affected man’s perception of place in the world.

According to archaeologist and Egyptologist Henri Frankfurt, **“The ancients, like the modern savages, saw man always as part of society, and society as embedded in nature and dependent on cosmic forces. For them nature and man did not stand in opposition and did not, therefore, have to be apprehended by different modes of cognition.”**

The ancients ordered their buildings to coalesce with myths so as to participate in and with them, and to increase their chances

of survival in an unforgiving world. In ancient Egypt, it was understood that the creator arose from the waters of chaos and formed a mound of dry land on which to stand. All of creation then echoed from this hill. Because the dead, especially the king were believed to be reborn into the afterlife, no site promised more likelihood for a fortunate passage than the primeval hill. This led the Egyptians to erect pyramids that were each understood, in its own, to be the primeval hill of creation.

Through the mindfulness of repetition and annual recognition seen in myth and ritual, the dead were able to exist within the life of primitive man. Ancient people did not know a nonliving world and therefore made little distinction between the living and the dead. In the words of Frankfurt, **“The survival of the dead and their continued relationship with man were assumed as a matter of course, for the dead were involved in the indubitable reality of man’s own anguish, expectation, or resentment.”** Frankfurt elaborates stating, **“Death is not, as for us, an event – the act or fact of dying as Webster has it. It is somehow a substantial reality.”**

Thought of the scientific revolution evolved to see nature as a distinct force that was study-able through the use of instrumentation. As a result, nature was no longer conceived of as something that humanity lived in and with, but as some other; an “it”. David Winterton attributes this separation of man and nature to



the metaphysics of the 16th century claiming, **“Cartesian rationality finally destroyed the “fleshy” cosmos, revealing the world worked according to mathematical rules, Nature was invented. “Nature” (with a capital N) is that system, then, whereby everything non-human, but nevertheless subject to human-derived laws, is defined as Nature.”**

The view that we somehow exist separate from nature has led to an ever-increasing disregard for the well-being of the natural world as essential to our own health and our very existence. We have surrendered a living shared world for a dead and disconnected reality. If humanity is to survive, we must rescue the idea of nature from the dismal abyss into which we have thrown it. Winterton postulates, **“Nature must again be recuperated as the radical base for speculation in Western culture – not “Nature” as a mere observable fact, to be later assuaged into some use, but as the fleshy, foliate, earthy, and olfactory extension of ourselves.”**

Written during the housing shortage in Germany after the destruction of the Second World War, Martin Heidegger’s essay *Building Dwelling Thinking* is an urgent invitation to practice mindfulness in the way that we live. To illustrate a wholesome way of perceiving the manner in which we are on the earth, Heidegger speaks of dwelling in terms of the fourfold, **“Earth, sky, divinities, and mortals”**. These four elements exist together in simple oneness, an element

cannot be what it is without recognition of the other three. The earth of which he speaks is the ground that supports us both by physically upholding and nurturing us. Sky is representative of the cosmos that bring the earthly seasons and accompanying weather. Heidegger’s divinities are not reflective of the godhead of a particular religion but are a reference to the seemingly immortal flow of civilization. The mortals of which Heidegger speaks are human beings and are referred to as mortals because they are capable of death. By referring to mankind as mortals, Heidegger emphasizes the finite nature of our existence and our place within history. He believes that saving the earth and preserving the fourfold is how dwelling is made possible. Preserving the fourfold is possible only through a mindful recognition of its simple oneness, and by allowing its essence to take root in our minds.

Heidegger illustrates how a built thing gathers the fourfold, using the bridge as an example: **“It does not just connect banks that are already there. The banks emerge only as banks as the bridge crosses the stream. The bridge designedly causes them to lie across from each other...It brings stream and bank and land into each other’s neighborhood.”** He continues, stating, **“Always and ever differently the bridge escorts the lingering and hastening ways of men to and from, so that they may get to other banks and in the end, as mortals, to the other side.”** Thus, the bridge gathers the fourfold and provides a location for it to be realized. It separates and simultaneously brings together.

In *Lessons of a Dream* philosopher Karsten Harries responds to the work of Heidegger, voicing the importance of acknowledging our temporal existence and our place within time. By taking a step back and disorientating ourselves from the immediacy of the here and now we can begin to realize a vocation towards all of humanity. Harries writes, **“Temporal reality is established as a historical order in which the individual stands, an order that assigns us our place and charges us with responsibility. This is to say, just as buildings establish regions, wrest place from space, so they establish temporal situations, place the individual in time, and not just in time, but in a communally shared time, in history...this revision of Heidegger’s understanding of dwelling calls for building responsively, not just to our mortality, but to a love that lets us experience ourselves as essentially incomplete, in need of others, in need of community.”**

In the last hundred years a peculiar and concerning phenomena has been unfolding in the city of San Francisco. Due to increasing land value, lack of adequate space, and a growing population, the city banned burials in 1900. Just twelve years later San Francisco decided to not only ban new burials but to evict the dead from the city. Over time, more than 30 cemeteries have been uprooted from the city and the remains and memorials transferred to the neighboring town of Colma, a modern-day necropolis, where the dead remain out of sight and out of mind for the inhabitants of the city.

It is evident that the real-estate and resources required to support traditional cemeteries is a pressing matter. But land isn’t the most critical issue. The disappearance of cemeteries from the urban fabric threatens to blind us from our temporal existence and the responsibility it charges us with. Today we live in the here and now, trapped in our own single life histories. More often than not, we fail to dwell in time.

Richard Sennet, author of *The Fall of Public Man* and Senior Advisor to the United Nations Climate Change Initiative writes, **“Each person’s self has become his principal burden; to know oneself has become an end, instead of a means through which one knows the world.”**

While an experience with death has the capacity to expose the limit of our control over nature and reveal a belonging to the community that is time, the prevailing methods of death-care tend to alienate us from one of our most intimate experiences with nature: death, in which our bodies are reunited with the soil and the nutrients continue to sustain life. In addition to consuming a staggering number of resources, embalment, and cremation attempt to preserve or destroy our physicality and thus, put us out of touch with the natural process of decomposition that occurs in any lifecycle. Arborist William Bryant Logan writes, **“By ignoring the soil’s own work, we destroy it and harm ourselves.”**

However, new developments in the death-care industry show promise as a means to acknowledge natural processes and reduce resource consumption. Recently legalized in Washington State, human-composting utilizes technology to embrace a technique that nature has perfected since the beginning of time. Within the process, the body is placed in a capsule and covered in a layer of alpha, straw, and mulch. The capsule is sealed, and conditions regulated to support bacteria that accelerate the break down the body's cells. During the transformation, a great deal of heat is produced, and within a month the body is transformed to pure black dirt.

While technology provides a safe and ecological means to care for our bodies after death it does not present a mode of meaningful human ritual. In urban areas plagued by the underrepresentation of death, the loss of funerary rituals is also apparent. As Hans Georg-Gadamer writes, "The funeral procession – prompting everyone to remove their hats before the majesty of death as it drew past – is something that has disappeared from the life of the town."

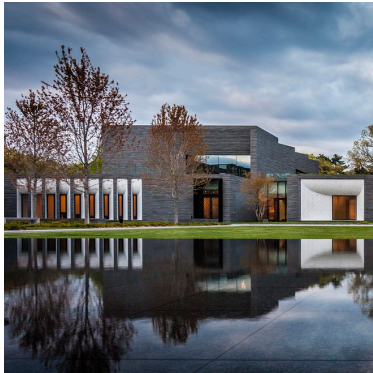
## THE PROJECT TYPOLOGY & PROGRAM

### MAUSOLEUM | ARBORETUM | LIVING MEMORIAL

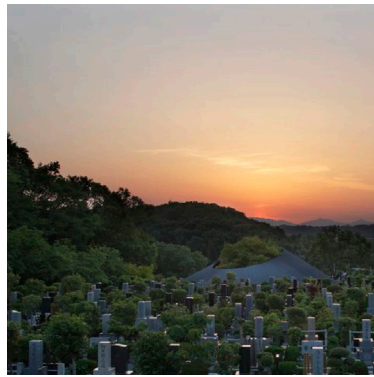
Cemeteries maintain value because of their potential to shed light on lost stories, histories, and experiences. As an expression of a continuation in history, cemeteries are unique places that allow us to reflect on our own lives. Confrontation with death gives weight and purpose to our actions because it presents us with the idea of our own mortality.

I would argue that cemeteries today are not inviting places. They do not engage the public in a meaningful way. Perhaps the problem lies in the representation of death and the lack of places to ponder our place in space and time. As the value of urban land increases and cemeteries are relocated further and further away from cities, the concept of death and also nature become underrepresented in urban areas.

This project seeks to create a meaningful place of memorial in a city that places little value in the representation of death. Through this project I will challenge the current modes of representing death visible in cemeteries and crematoriums today. These forms of representation concern themselves with the individual alone, and obscure the view of a person belongs to a community, more extensive than one's self.



**01** LAKEWOOD CEMETARY GARDEN MAUSOLEUM



**02** SAYAMA LAKESIDE CEMETARY COMMUNITY HALL



HARBOR VIEW BURIAL GOUND & CREMATORIUM **03**



SAN CATALDO CEMETARY **04**

## **PRECEDENT RESEARCH**

### **1. Typology:**

Cemetery or Community Hall

### **2. Context:**

### **3. Environmental Impact:**

Project attempts to minimize visual impact and environmental footprint while incorporating a holistic view of nature and humanity into the design

### **Case Study 1**

Lakewood Memorial Cemetery  
HGA Architects

### **Case Study 2**

Sayama Lakeside Cemetery Community Hall  
Hiroshi Nakurumah

### **Case Study 3**

Harbor View Burial Ground  
Western Design Architects

### **Case Study 4**

San Cataldo Cemetery  
Aldo Rossi



FIGURE 03 | LAKEWOOD CEMETERY | PAUL CROSBY

## LAKWOOD CEMETARY GARDEN MAUSOLEUM / HGA ARCHITECTS & ENGINEERS (2012)

**Typology:** Cemetery/ Mausoleum/ Memorial Garden

**Location:** 3600 Hennepin Ave, Minneapolis, MN 55408

**Size:** 24,500 SQFT

### Distinguishing Characteristics:

The portion of the Garden Mausoleum visible from the entry makes up only a small portion of the overall building. The majority of the building mass remains underground and is covered with a green roof reducing the visual impact of the building on the landscape/ Sculptural mounds on the green roof hide protruding skylights that usher natural light into the subterranean crypts below.

Materials selected for the building engage the visual and tactile senses through contrast of light and dark, as well as rough and smooth. Inviting the viewer to engage in a meaningful sensory connection with the natural world.

The crypt chambers are similar in geometry but create different atmospheres through the varying orientations of openings, views, and selection of stone. The spaces are treated as heterogeneous, reflecting the multitude of diverse perspectives when contemplating death.

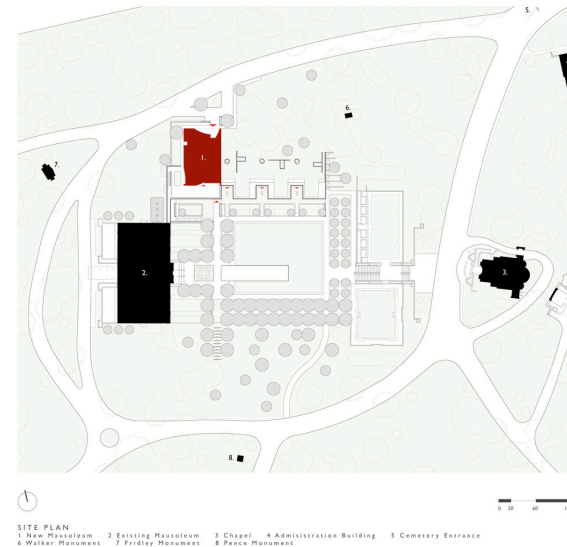
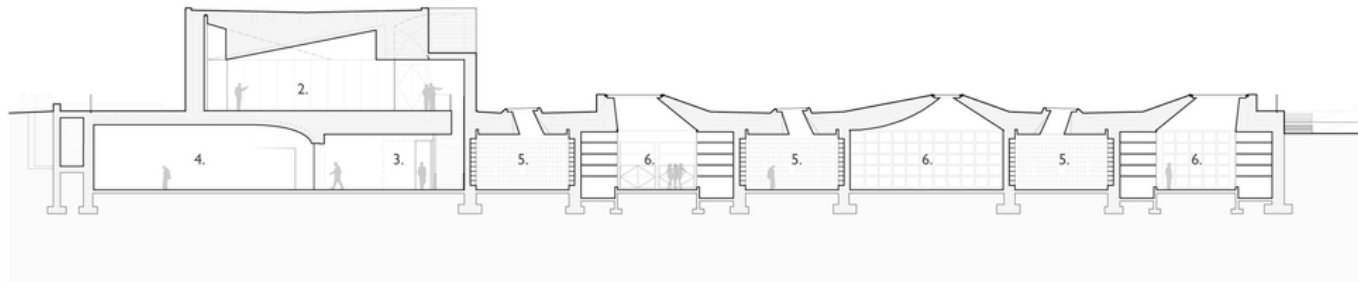


Figure 04 | Lakewood Site Plan, photo credit | HGA Architects

### Program Elements:

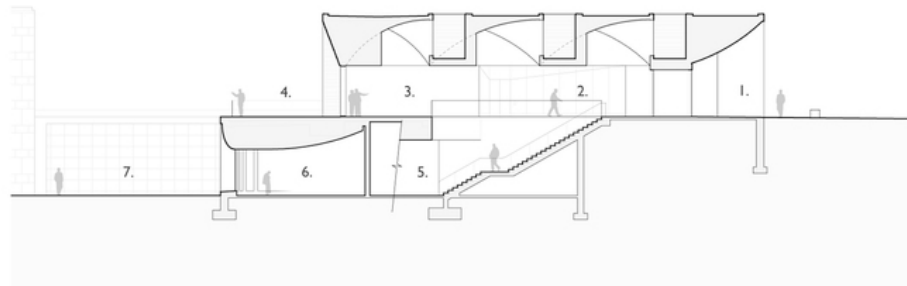
- Multipurpose/ Reception Room
- Comittal Room
- Crypt Room
- Foyer
- Terrace
- Lower Foyer
- Garden Crypts
- Columbarium Room



LONGITUDINAL BUILDING SECTION aA



1 Foyer 2 Multipurpose / Reception Room 3 Lower Foyer 4 Committal Room 5 Columbarium Room 6 Crypt Room



TRANSVERSE BUILDING SECTION bB



1 Street Level Entry 2 Foyer 3 Multipurpose / Reception Room beyond 4 Terrace 5 Lower Foyer 6 Committal Room  
7 Garden Crypts beyond

FIGURE 05 | LAKEWOOD SECTIONS | HGA ARCHITECTS



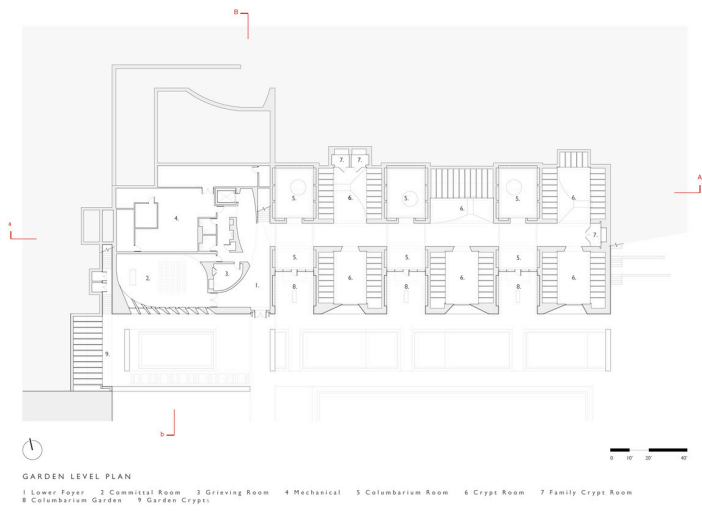


FIGURE 06 | LAKEWOOD FLOOR PLAN LOWER | HGA ARCHITECTS

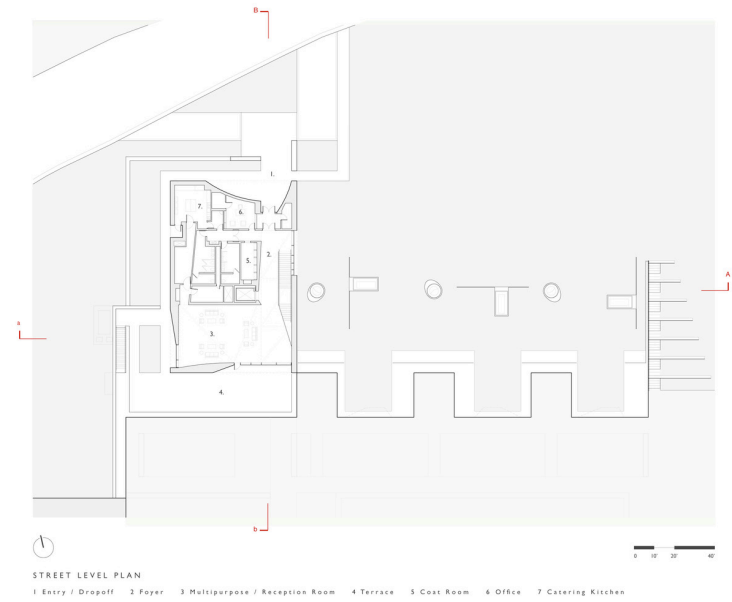


FIGURE 07 | LAKEWOOD FLOOR PLAN | HGA ARCHITECTS



FIGURE 08 | LAKEWOOD CRYPT | HIROSHI NAKAMURA

## Case Takeaways

The Lakewood Cemetery and Garden demonstrates how building and landscape can be fused to create a meaningful space for mourning. In every space, the design invites the natural world in while allowing oneself to be projected in the space outside.

Placement of the crypts on the garden level of the building allow for quiet, undisturbed contemplation and provide an interesting design opportunity through the use of natural light. Additionally, the use of contrasting materials engage the viewer in the experience by inviting the use touch as well as vision.

**“The design recognizes that in contemplating death – as in living matters – people have diverse perspectives and desire uniqueness.”**

**-Arch-daily**

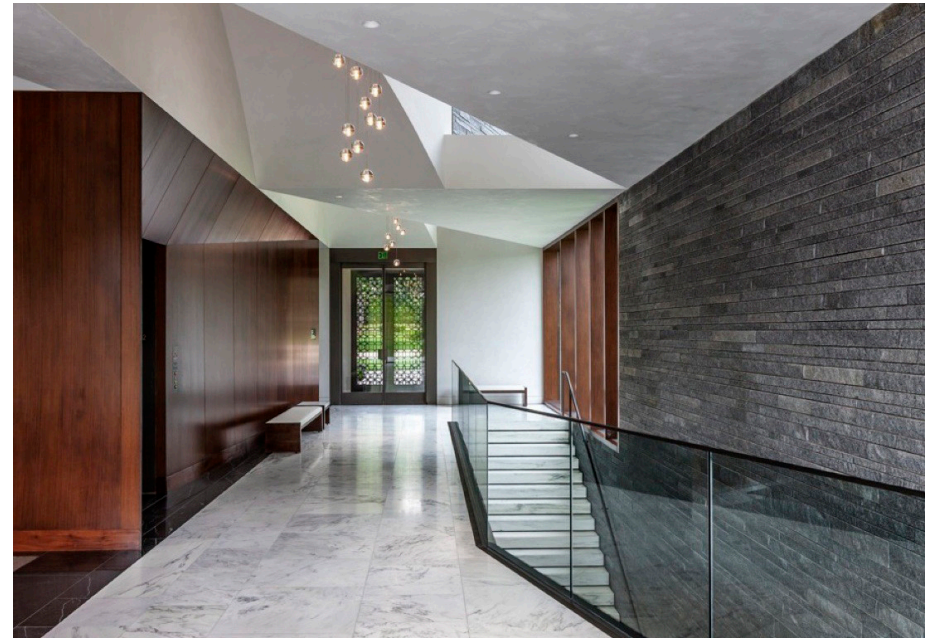


FIGURE 09 | LAKEWOOD HALL | HIROSHI NAKAMURA

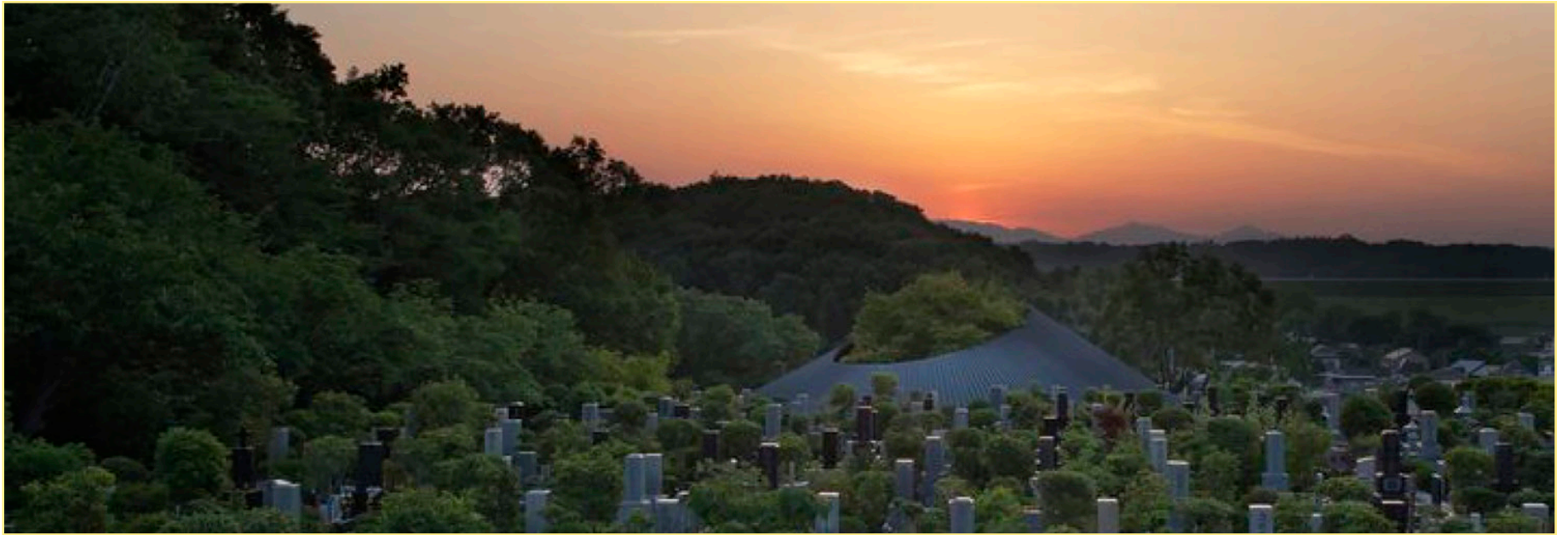


FIGURE 10 | SAYAMA LAKESIDE CEMETERY | KOJI FUJII

## SAYAMA LAKESIDE CEMETARY COMMUNITY HALL/ HIROSHI NAKAMURA & NAP (2013)

**Typology:** Cemetery/ Community Hall

**Location:** Saitama, Japan

**Size:** 5,198 SQFT

### Distinguishing Characteristics:

Located amidst the Sayama Lakeside Cemetery this community hall designed by Hiroshi Nakamura invites the public into a space that most people don't care to explore. The architect's goal was create an atmosphere of closure through the opening and restricting of different spaces and views.

The center of the building houses spaces for offices supports a green roof of deciduous trees. A warm timber frame structure directs gazes towards the sky as well as the surrounding reflection pond.

The form of the building seems to morph into the surrounding landscape. A somewhat conical frame of wooden joists directs the viewers attention to different aspects of the surrounding environment. Two contrasting landscape views are offered depending on the viewer's posture. When standing in the community space, the surrounding cemetery and accompanying landscape are visible only through the reflection bordering reflection pond, providing an "introspective space for gazing on nature indirectly". Upon sitting, the viewer is presented with views of the city, contrasting the quiet atmosphere that envelops the resting place of the deceased.

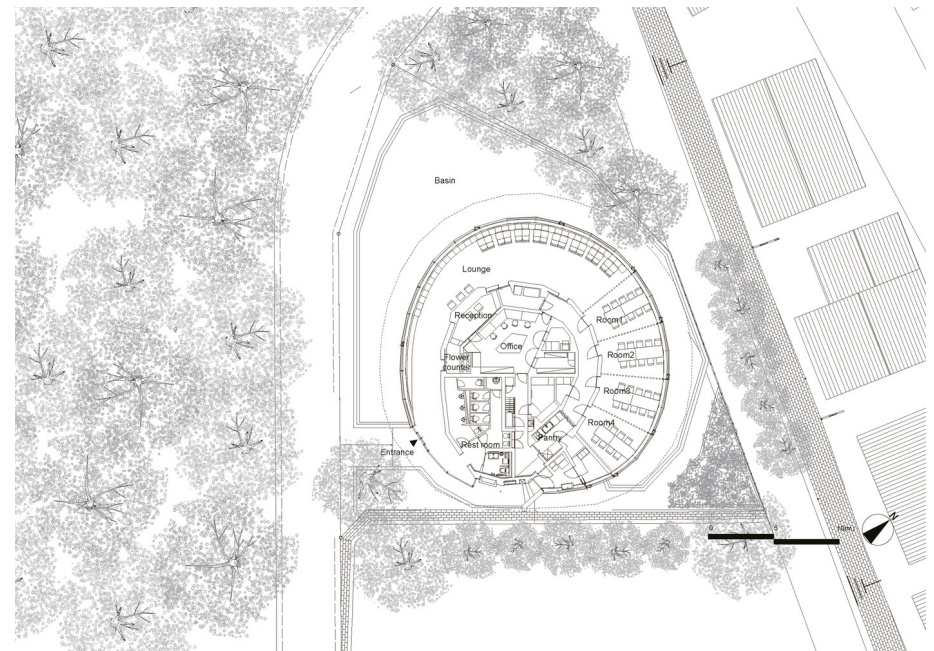


FIGURE 11 | SAYAMA SITE PLAN | HIROSHI NAKAMURA

### Program Elements:

- Reception Room
- Lounge
- Offices
- Flower Counter
- Pantry
- Breakout/ Gathering Rooms (6)

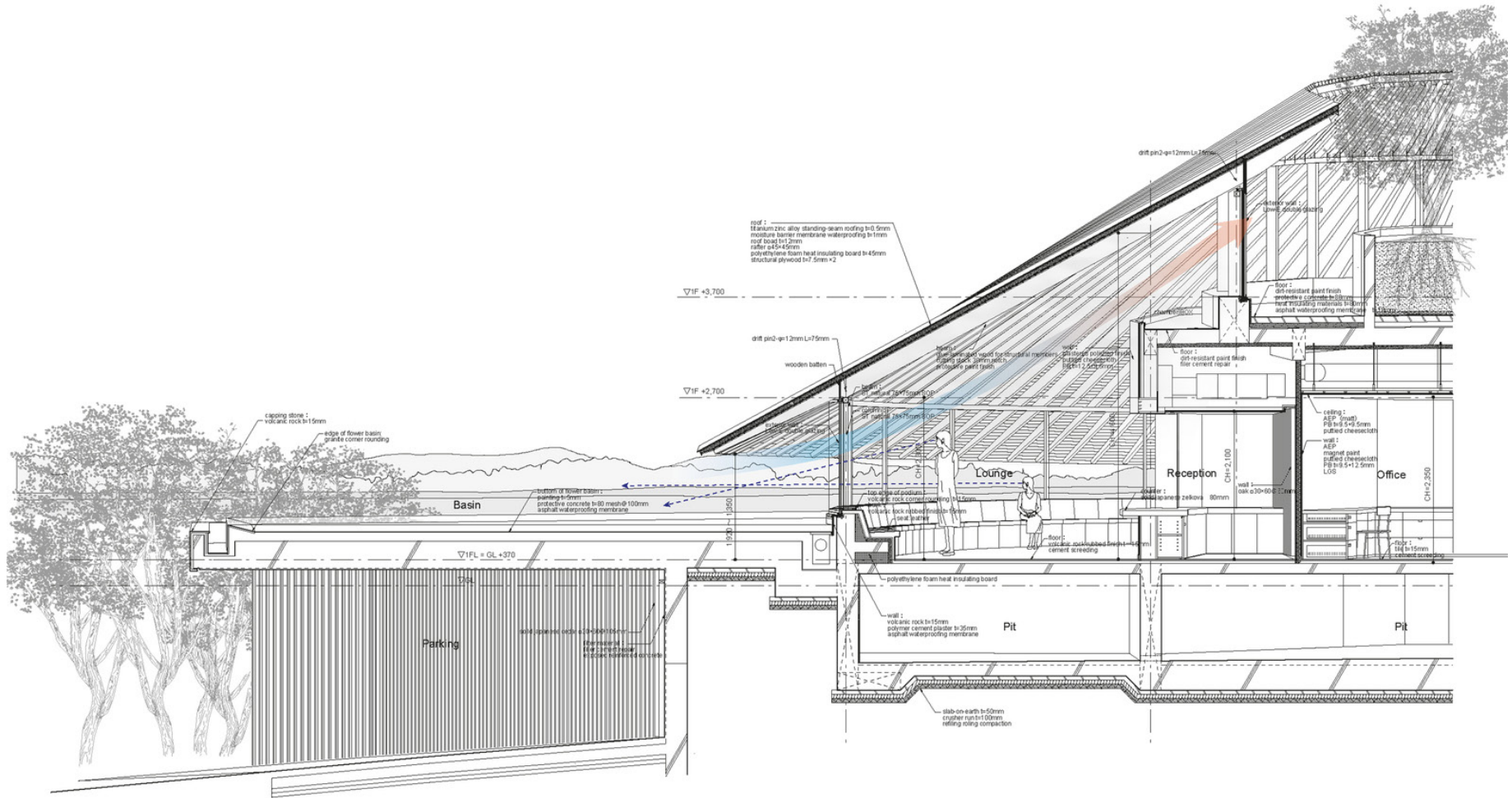


FIGURE 12 | SAYAMA SECTION | HIROSHI NAKAMURA

## Case Takeaways

The Sayama Lakeside Cemetery Community Hall embraces the landscape around it. The recession of the building into the earth provides an opportunity to contrast perspectives between the individual and the surrounding community.

The warm wooden structure of the building guides one's gaze towards the reflection pond and the sky above, and invites users to engage tactile and visual senses. Structural curtain walls support the roof structure giving the interior spaces a weightless feel contributing to the comforting environment.



FIGURE 13 | SAYAMA REFLECTION POND | KOJI FUJII



FIGURE 14 | HARBOR VIEW CHAPEL | WESTERN DESIGN ARCHITECTS



## HARBOR VIEW BURIAL GOUND & CREMATORIUM/ WESTERN DESIGN ARCHITECTS (2018)

**Typology:** Cemetery/ Crematorium

**Location:** Lytchett Minister, United Kingdom

**Size:** 10,290 SQFT

### Distinguishing Characteristics

Rested in the woodland burial ground, the Harbor View Crematorium & Chapel is the first new crematorium in Dorset in more than 30 years. Due to its location in the Greenbelt, a main goal of the project was to reduce the visual impact on the landscape. With the artificial mounds of earth and exposed stone walls, the design embraces the idea of ancient burial mounds. The recession of the building into the ground not only reduces the visual impact but creates a tomblike atmosphere. The majority of spaces are illuminated using natural light that further embraces the feeling of being underground. A clerestory creates the illusion that the green roof above is floating, enhancing the weightless character of the building on the landscaping.

The moat that one crosses to enter the building is a reference to Greek mythology and represents the transition from this world to a sacred place. Behind the chapel, the moat opens up to reflecting pond bordered by outdoor seating.

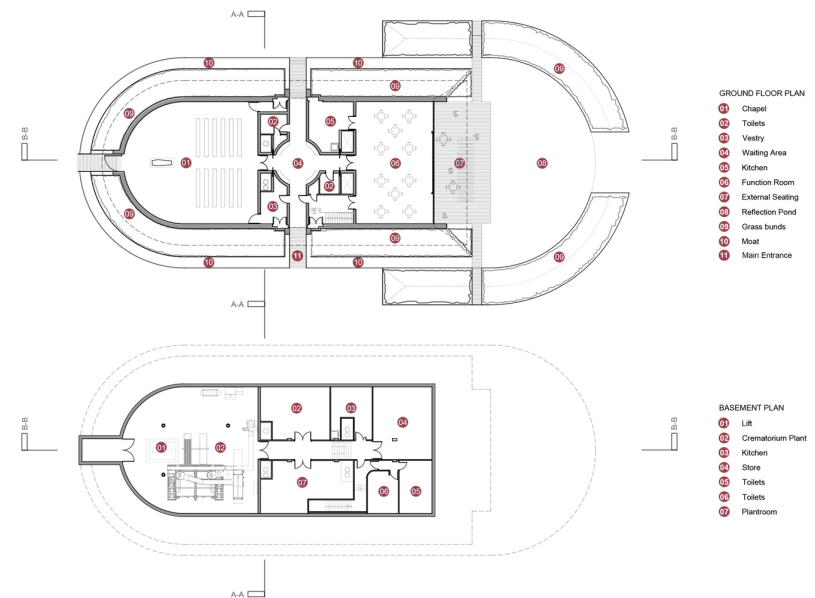


FIGURE 15 | HARBOR VIEW FLOOR PLANS | SHONA RACE

### Program Elements:

- Chapel
- Vestry
- Kitchen
- External Seating
- Crematorium Plant
- Waiting Room
- Reflection Pond
- Function Room
- Plant room

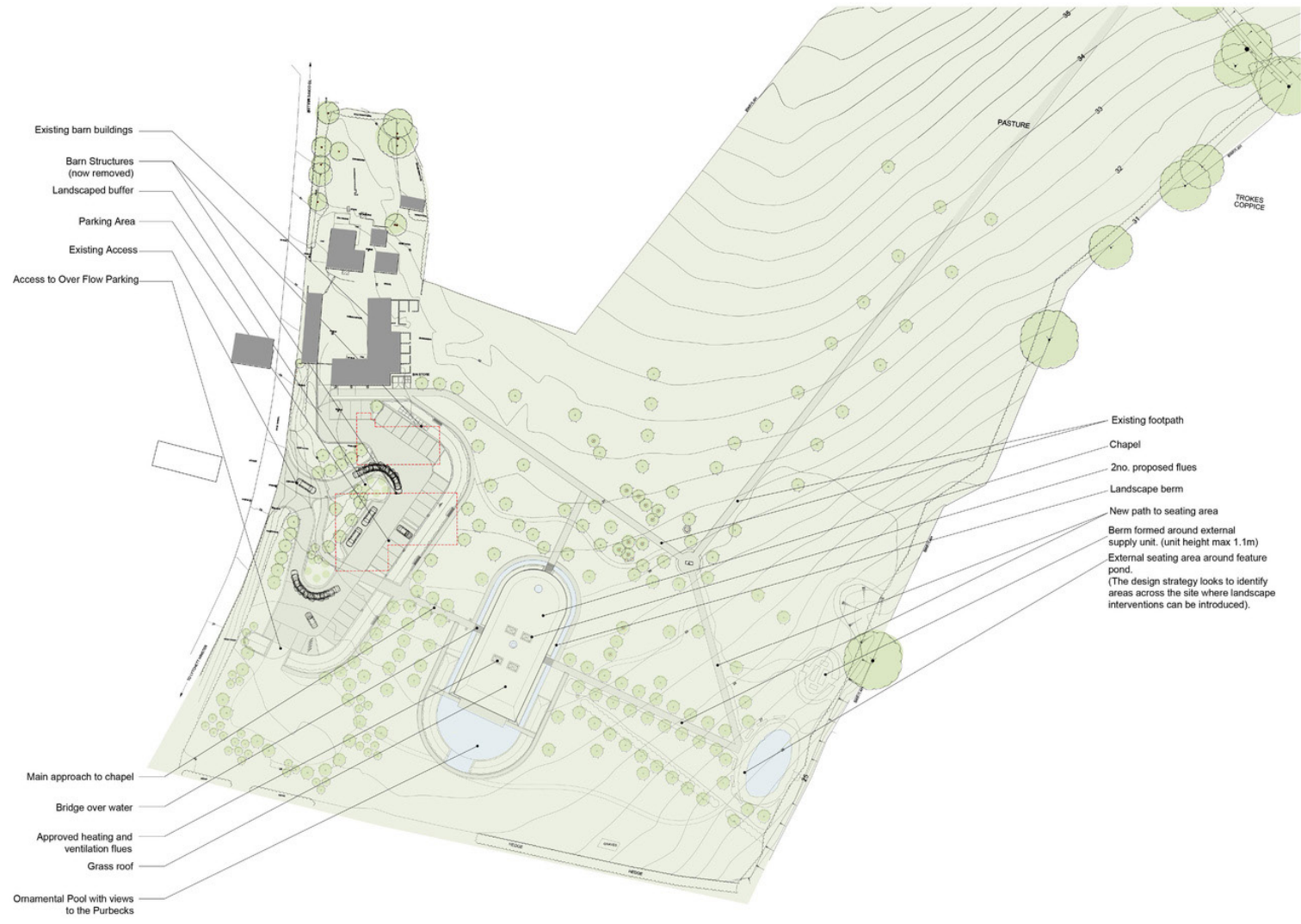


FIGURE 16 | HARBOR VIEW SITE PLAN | WESTERN DESIGN ARCHITECTS



FIGURE 17 | HARBOR VIEW LANDSCAPING | WESTERN DESIGN ARCHITECTS

### Case Takeaways:

The Harbor View Chapel and Crematorium acknowledges local tradition and materials. The building itself does little to overwhelm the lush landscape that characterizes the site.

Use of symbolism further strengthens the design and provides opportunities to incorporate natural elements.

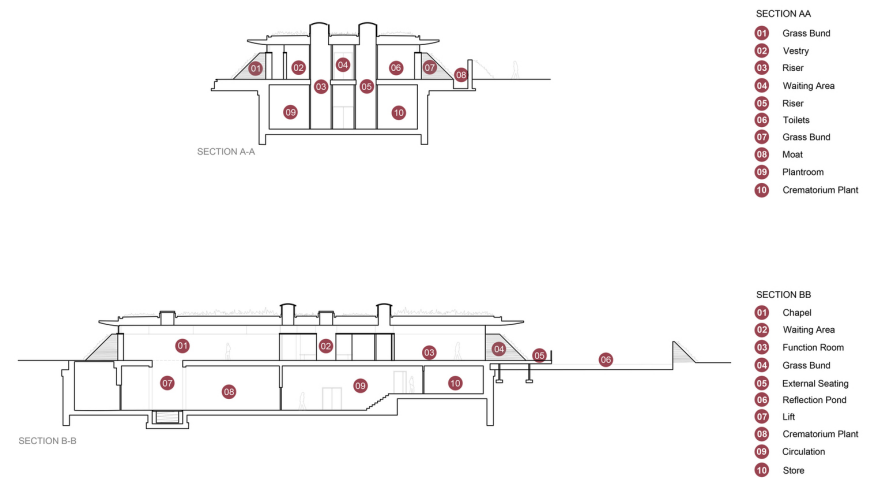


FIGURE 18 | HARBOR VIEW SECTIONS | WESTERN DESIGN ARCHITECTS



FIGURE 19 | HOUSE OF THE DEAD | LAURIAN GHINITIOU

## SAN CATALDO CEMETARY | ALDO ROSSI (1971)

**Typology:** Cemetery

**Location:** Modena, Italy

**Size:** Unknown

### Distinguishing Characteristics

Aldo Rossi's cemetery is built on the site of an ancient cemetery designed by Cesare Costa in 1858. Titled the "city of the dead" Rossi's design embraces the idea that the city is composed of the collective memory of its inhabitants.

Rossi embraces the idea of void, and relates the skeletal system of the body with his design for the cemetery. The absence of roof, floors, doors, and windows leaves an orange shell with openings. The presence of such voids confronts visitors with the thought of death, where truths are constant and irrevocable.

While the building was in the phase of construction Rossi was in an automobile accident that required hospitalization. While he was hospitalized, he theorized about the different fractures his body had endured and how they must be reconstructed.

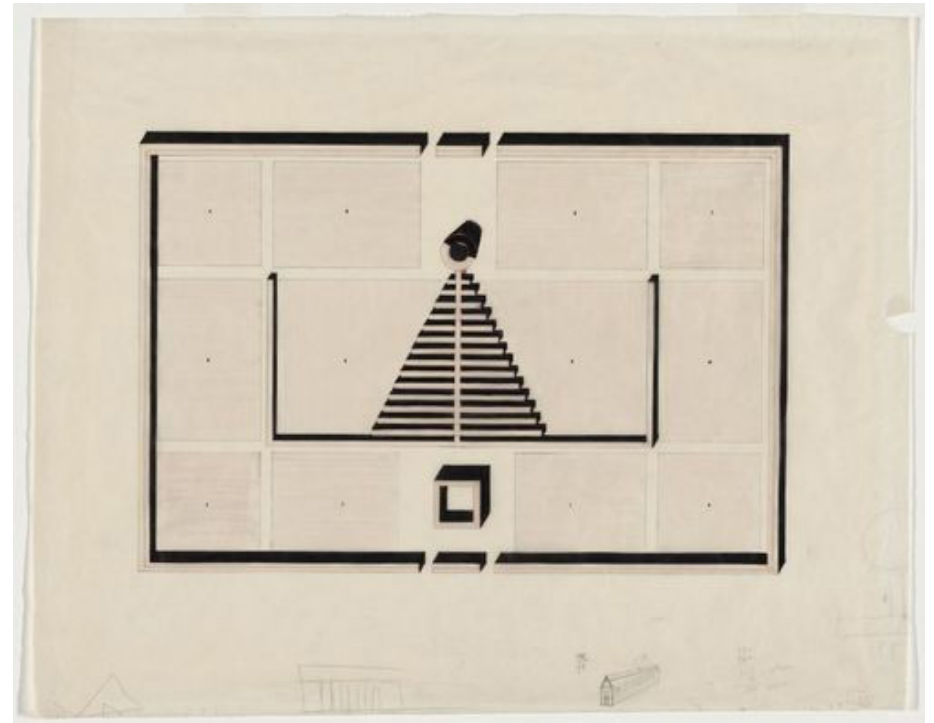


FIGURE 20 | SAN CATALDO SITE PLAN | ALDO ROSSI



FIGURE 21 | OSSUARY INTERIOR | LAURIAN GHINITIU

## Case Takeaways

Rossi's cemetery for the city of the dead embraces the void; that which is no longer there. The presence of an absence makes viewers ponder death, an activity that most people don't care to do. Aldo Rossi's idea of the city as a collective memory of its people is worth contemplation.

**"The question of the fragment in architecture is very important since it may be that only ruins express a fact completely... I am thinking of a unity, or a system, made solely by reassembled fragments."**

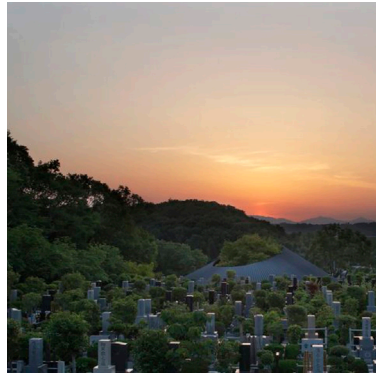
**-Aldo Rossi**



FIGURE 22 | MEMORIAL | LAURIAN GHINITIQU



**01** LAKEWOOD CEMETARY GARDEN MAUSOLEUM



**02** SAYAMA LAKESIDE CEMETARY COMMUNITY HALL



HARBOR VIEW BURIAL GOUND & CREMATORIUM **03**



SAN CATALDO CEMETARY **04**



## CASE STUDY & TYPOLOGICAL RESEARCH SUMMARY

Each of the case studies were strategically chosen based upon their uniqueness and relevance to the program I am pursuing. After studying each instance I discover that many of them tackle the same issues in similar fashions.

The Lakewood Cemetery and Garden Mausoleum demonstrates the ability of the architect to blend building and site. A garden level basement with accompanying sculptural skylights create a contemplative atmosphere and provides privacy for any visiting the crypts. The use of contrasting materials invites the visitor to engage their tactile and visual senses. The design recognizes that different people have unique perspectives when contemplating death and responds by providing alternative yet similar spaces for such contemplation.

The Sayama Lakeside Cemetery Community Hall invites the public into a space they wouldn't normally care to venture into. Experimenting with different view corresponding to different bodily positions creates varying perspectives, something very common when contemplating loss. The form of the building and the warm timber structure within embrace the landscape and respond to visitor's movements.

The Harbor View Burial Ground & Crematorium integrates elements of local burial rituals into the design. The design has little impact on the landscape due to the compiling of earth around its exterior and integration of a green roof.

Representation of mythical elements contribute to the narrative of the building. The inclusion of warm earthy materials embrace and comfort the visitor.

The San Cataldo cemetery by Aldo Rossi is a unique and thought provoking approach to a cemetery. "The House of the Dead" embraces the idea of the void or that which is no longer physically present. This absence of a presence, or presence of an absence, makes visitors ponder death and examine their own lives. Rossi does an impressive job of relating a place to store human remains to the skeletal system of the human body.

Each of the designs mentioned value preserving the landscape of the site, except for The San Cataldo cemetery. A goal with each design is to invite the public into a place that people don't normally seek out. The Sayama Cemetery Community Hall creates a public space within a cemetery that engages the community and opens a space for conversation.



FIGURE 23 | CURVATURE OF THE EARTH | NASA

## **PROJECT GOALS**

### **THE ACADEMIC**

This thesis document and accompanying design will show the advancement of my personal and professional character throughout the past five years. Through this project I aim to improve on my skills in writing and critical analysis and challenge myself along the way. This project is not only a showcase of my technical skills, but also a acknowledgment of a significant issue that architecture has the power to address. In the end, my goal is to obtain a Masters of Architecture degree that allows me to transition from academia to the professional practice.

### **THE PROFESSIONAL**

Through this project I hope to shed light on an emerging practice of death-care that is yet to appear in the public realm. As a more sustainable method, this practice also has the potential to provide a more meaningful form of memorial than conventional cemeteries. In the end, I hope that this project will accurately showcase my skills and place me in a setting where I can pursue my passions.

### **THE PERSONAL**

By the end of this project I wish to have something that I am proud of; something that represents the progression of my academic journey over the last five years. In the process , I hope to unite people towards a cause that benefits us all; the health of our environment. As more people in politics choose to ignore the effects of climate change, the issue becomes more pressing. I do not believe that this one project will solve the problem, but I aim to make the issue well known and worthy of contemplation.

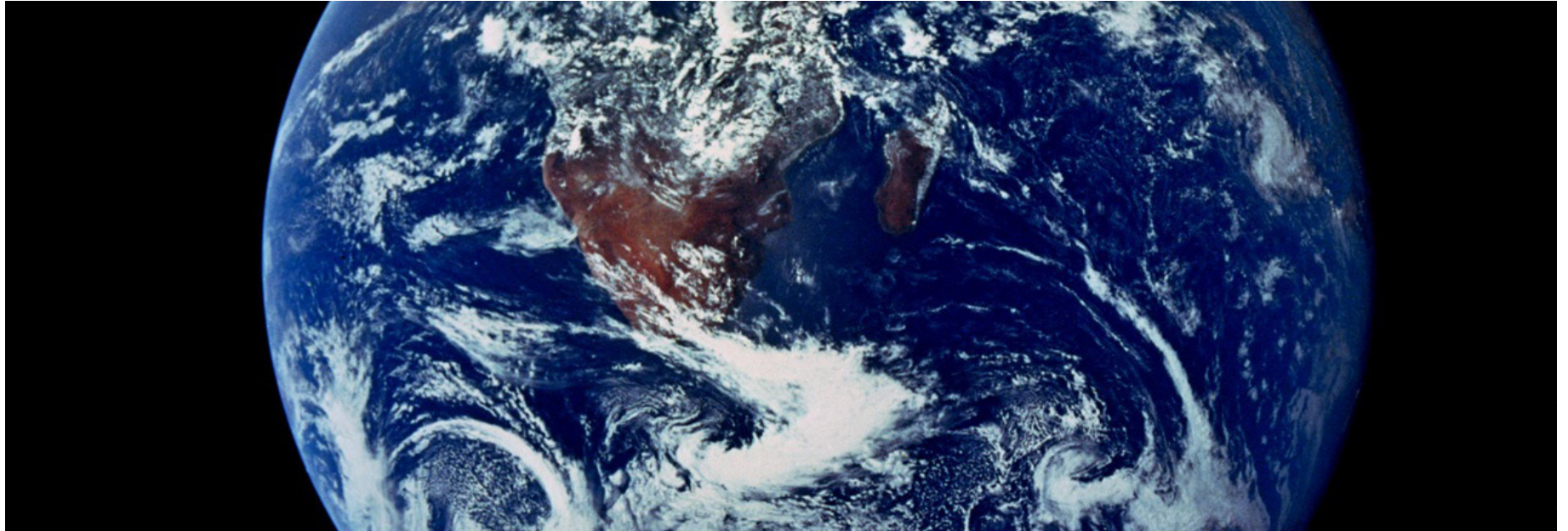


FIGURE 24 | THE BLUE MARBLE | NASA

## **THE PROJECT EMPHASIS**

### **SUSTAINABILITY**

The overarching idea for this project is the idea of sustainability. I believe that the problems we are experiencing regarding the health of the planet are caused by harmful human activities, but I think the issue is rooted in our inability to see ourselves as part of a larger community. I believe that the issue is cultural and that it will take a cultural revolution to begin to fix the problems we already have.

### **COMMUNITY**

My ultimate goal for this project is project is to allow people to recognize themselves as part of an ongoing community. While we are alive, we are aware of the immediate community of which we are a part. However, sometimes we fail to realize that the community to which we belong not only exists in the “here and now” but throughout history. Cemeteries are one expression of continuity, but they tend to be concerned with the individual alone, and fail to recognize the community as a whole. The goal of this project is to create not only a visually pleasing and functional memorial, but one that evokes an emotional response. An emotional response that acknowledges a continued community, reliant upon the environment and each-other.

### **ENDING THE STIGMA OF DEATH**

Cemeteries are powerful places where we are confronted with our own mortality as well as life histories. However powerful cemeteries might be, they are uninviting to the public who sees death as the end of life rather than the continuation of it. I aim to create a space that invites the public and allows concepts of death to be reintegrated into society without causing dread or distress.

Concepts of death are disappearing from urban areas as a result of increase in land value. As a result we are rarely confronted with the idea of our own finite existence, or our place in an continuing community. This project will challenge the current representations of death by proposing the representation of death as a representation of life. I hope to add richness to our lives and purpose to our actions by allowing people to rediscover the cyclical and finite nature of life.

## **MAJOR PROJECT ELEMENTS**

### **NON-DENOMINATIONAL CHAPEL**

This is a place where rituals regarding the loss of a loved one can be performed. The space should embody the spiritual atmosphere of a cathedral and unite people together.

Additionally, the space should be easily transformable in order to accommodate different arrangements and configurations of seating. The chapel space should incorporate a good deal of green space and earthy materials to celebrate the theme of returning to the earth.

### **PRIVATE MOURNING SPACES**

Intimate rooms that allow for a small tight knit group of family to say goodbye to their loved one. This space should have a warm comforting atmosphere as well as a sufficient amount of natural light.

### **RECEPTION AREA**

A space for gathering and remembrance. This will be a space for loved ones to tell stories and connect with each-other. Green space will be essential to making people feel more comfortable with such an unfamiliar process. Much like the chapel, this space should embrace natural light and create a comfortable environment for gathering.

### **TRANSITIONS**

The spaces “in-between” become significant in a place that deals with loss. Here, one has time to reflect on changes in ones own life

### **AREA FOR COMPOST VESSELS**

Bodies will be placed in composting vessels much like a casket that allow the body to decompose in an accelerated manner. Such vessels will need aeration and thus they should be aligned to create an efficient system. The vessels will be aligned much like the crypts of a mausoleum, and should emulate the rich choice of materials seen in such a typology. This area will border the the reception area and should be easily accessible to machinery.

### **NURSERY**

This is a space for remembrance and healing. Plants that respond to the seasons will be critical for allowing people to come to terms with the natural cycle of the world as well as changes within their own life. The blurring of boundaries between indoor and outdoor spaces will be important to present the theme of interconnection. This space will serve as a sort of living memorial to those who have passed. Intimate structures places

### **LOBBY AREA**

This space is where people will create a first impression of new and unfamiliar experience regarding the parting of a loved one. It must disarm notions of fear and uncertainty and create an uplifting space of hope and curiosity.

## **USER CLIENT DESCRIPTION**

### **EMPLOYEES:**

Technicians  
Arborists

### **CLIENTS:**

Families of those who have lost a loved one. This could be adapted to include those who are continually struggling with loss.

### **COMMUNITY:**

While the client of the facility will be families of those who have lost someone, the program will welcome the community in with open arms. The outdoor park & memorial space will be open to the public entirely, and the indoor space will allow be open depending on the requests of those involved in the funeral.

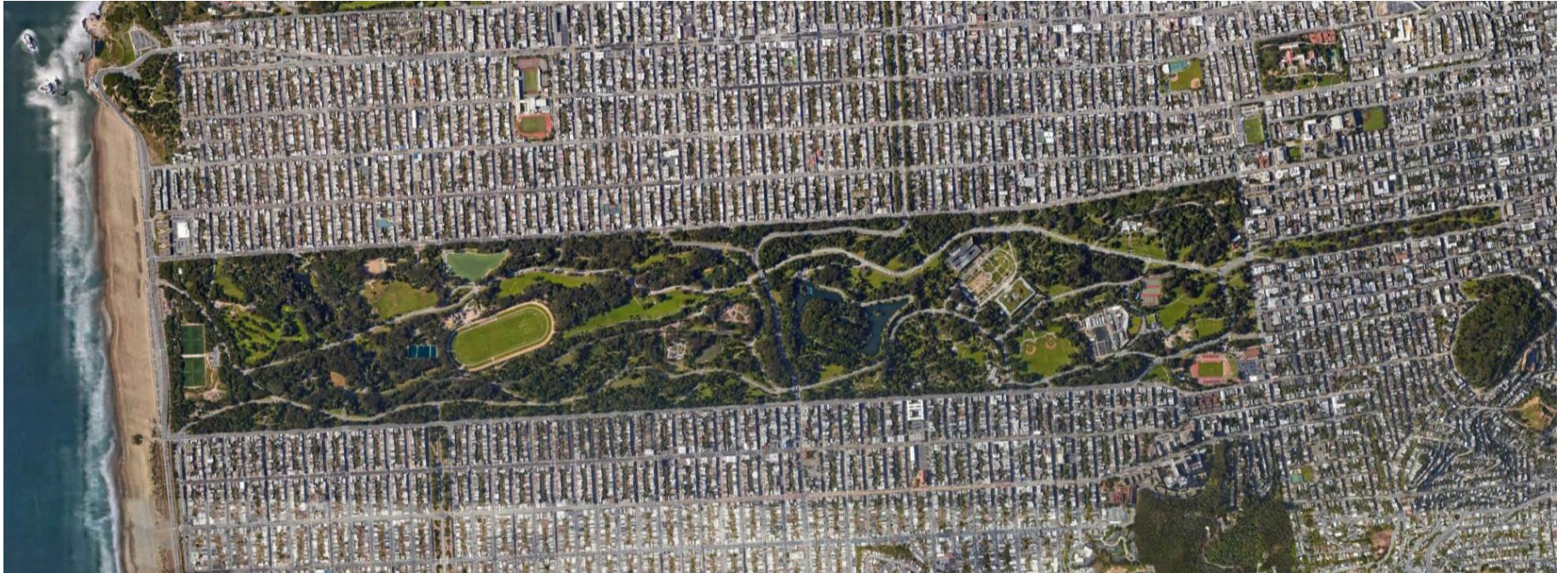


FIGURE 25 | GOLDEN GATE PARK | GOOGLE EARTH



## **THE SITE**

### **Location: Golden Gate Park, San Francisco**

The site for this project is located within Golden Gate Park in San Francisco, California. Considered the third most visited park in the United States, the park is visited by over 24 million people every year giving the site the potential to reach a large number of people. Within the park are located a number of different cultural buildings including the de Young Museum, the California Academy of Sciences, as well as a number of conservatories, botanical gardens, and historical buildings. Animals such as moose, caribou, and antelope once grazed free within the park but have since been designated their own area within the park. With an area over 1,000 acres and a large visitor base, the site within the park has the capacity to impact a large diverse numbers of people annually.



FIGURE 26 | GOLDEN GATE PARK NURSERY | GOOGLE EARTH



FIGURE 27 | SAN FRANCISCO, CALIFORNIA | GOOGLE EARTH

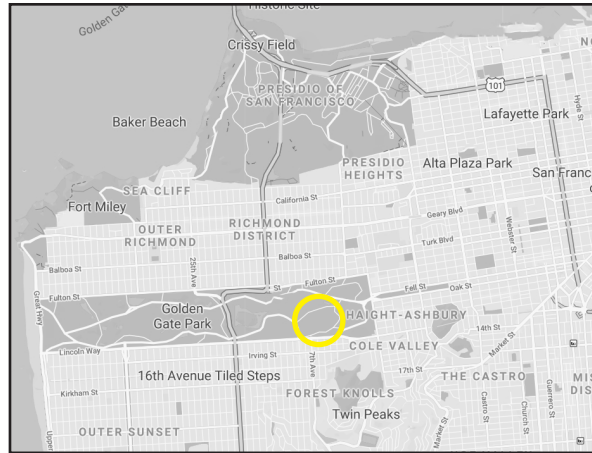


FIGURE 28 | GOLDEN GATE PARK | GOOGLE EARTH

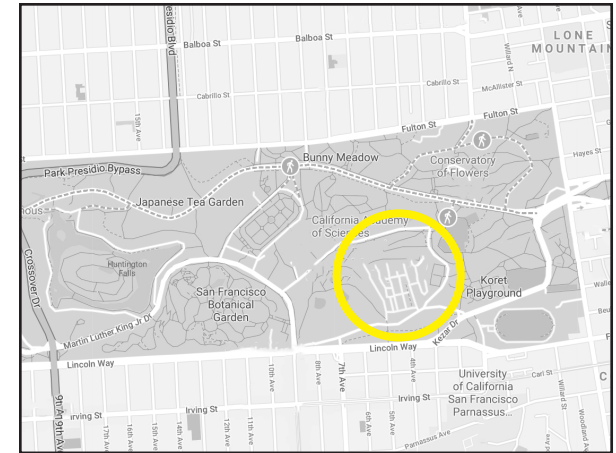


FIGURE 29 | PROPOSED SITE | GOOGLE EARTH

## SITE SELECTION

San Francisco, California was chosen as the site due to the decline of the representation of death within the urban fabric. Beginning in the 1800's the City of San Francisco banned new burials within the city and in the time since over 28 cemeteries have disappeared from the city limits. The graves and the bodies they held were transferred to the town of Colma where they remain out of sight and out of mind for the residents of San Francisco.

The site is located in close proximity to the prior locations of the "Big Four" cemeteries in San Francisco: Masonic Cemetery, Odd Fellows Cemetery, Mt. Calvary Cemetery, and Laurel Hill Cemetery. Placing the site in proximity to former cemeteries will help to restore lost stories and memories to the area.

A location within Golden Gate Park was selected because of its capacity to experience a large amount of visitor traffic. My design will attempt to change people's perspectives when it comes to death-care and what a cemetery should look like, so choosing a location that experiences over 24 million visitors annually will allow the site to impact a large group of people.



FIGURE 30 | SAN FRANCISCO AERIAL VIEW | SF PUBLIC LIBRARY



FIGURE 31 | ODD FELLOWS CEMETERY IN DECLINE | SF PUBLIC LIBRARY

## **SAN FRANCISCO CEMETERIES IN DISTRESS**

In 1902 the City of San Francisco banned new burials within the city for a variety of reasons: the primary one being that the land had become too valuable for the dead. Due to the influx of people following the gold rush of 1948 the city began to grow at an immense rate in the years following. As land became more scarce and cemeteries became to be viewed as a health hazard, there was a push to remove them from the city. In 1902, new burials within the city were banned, pushing the state of cemeteries into further decline. The lack of new burials left the cemeteries with a absence of revenue resulting in an inability to properly maintain the grounds. Grave sites were vandalized and ransacked, spiraling their condition into further decline. A movement to remove cemeteries from the city began.



FIGURE 32 | REMOVAL OF OLD FELLOWS | SF PUBLIC LIBRARY



FIGURE 33 | REMAINS OF SAN FRANCISCO CEMETERIES DUMPED ALONG OCEAN BEACH | SF PUBLIC LIBRARY

## REMOVAL OF CEMETERIES

In 1910 the US Supreme Court upheld the city's decision to ban new burials. Three years later in 1913, The San Francisco Board of Supervisors voted to remove all cemeteries from the city. Families were appalled by the city's decision and lawsuits ensued.

Roughly 20 years later the excavation process commenced and the dead were evicted from the city. Plot owners received a notice and given the option to pay for the grave to be properly moved, which included the headstone. Of all the cemeteries moved, the remains of Odd Fellows, a graveyard not associated with a church or religion, received perhaps the worst treatment. Unclaimed headstones from were dumped into the Pacific Ocean to function as a break wall at St Francis Yacht Club. Headstones can be spotted at low tide in the sand on Ocean Beach. Remaining headstones were used to construct drain gutters at Buena Vista Park. The remains found at unclaimed graves were further desecrated due to haphazard supervision. Some bodies were left behind and are discovered even today as new construction takes place.



FIGURE 34 | COLMA GRAVE LINERS | SF PUBLIC LIBRARY



FIGURE 35| COLMA GRAVEYARD | SF PUBLIC LIBRARY



## **TRANSFER TO COLMA**

In 1924, the City of Colma was established as a modern day necropolis for 'San Francisco's dead'. Shortly after, cemeteries began to be moved out of San Francisco. The Masonic Cemetery was one of the first to disappear in 1931. The remaining large cemeteries: 'Odd Fellows' (1932), 'Laurel Hill' (1939) and 'Mt Calvary' (1940) quickly followed.

The remains of Odd Fellows that managed to find their way to Colma proceeded to be further desecrated. Roughly 26,000 unidentified remains were interred in a mass grave in Greenlawn Cemetery in Colma. Years later the site was converted into a flower nursery business, but the graves remained. Surrounded by a chain link fence and closed to the public, the 5-acre site is consumed by equipment, debris, and a broken monument.

Colma is a unique city with a population of approximately 1,500 living and more than 1,500,000 dead. For San Francisco and the people who don't live there, Colma is a place for the dead to remain out of sight and out of mind.

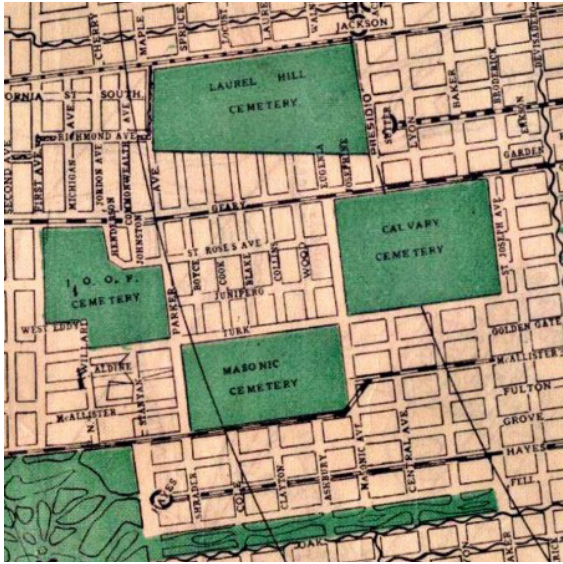


FIGURE 36 | SAN FRANCISCO'S BIG FOUR CEMETERIES | SF CITIZEN



FIGURE 37 | SAN FRANCISCO, CALIFORNIA 1946 | GOOGLE EARTH



FIGURE 38 | SAN FRANCISCO, CALIFORNIA 1987 | GOOGLE EARTH



FIGURE 39 | SAN FRANCISCO, CALIFORNIA 1993 | GOOGLE EARTH

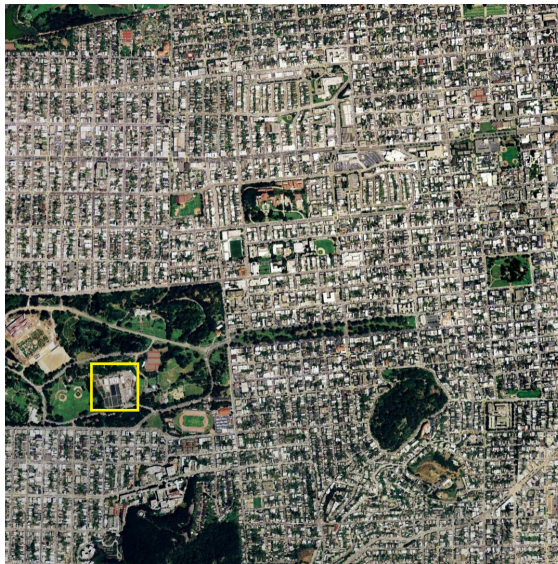
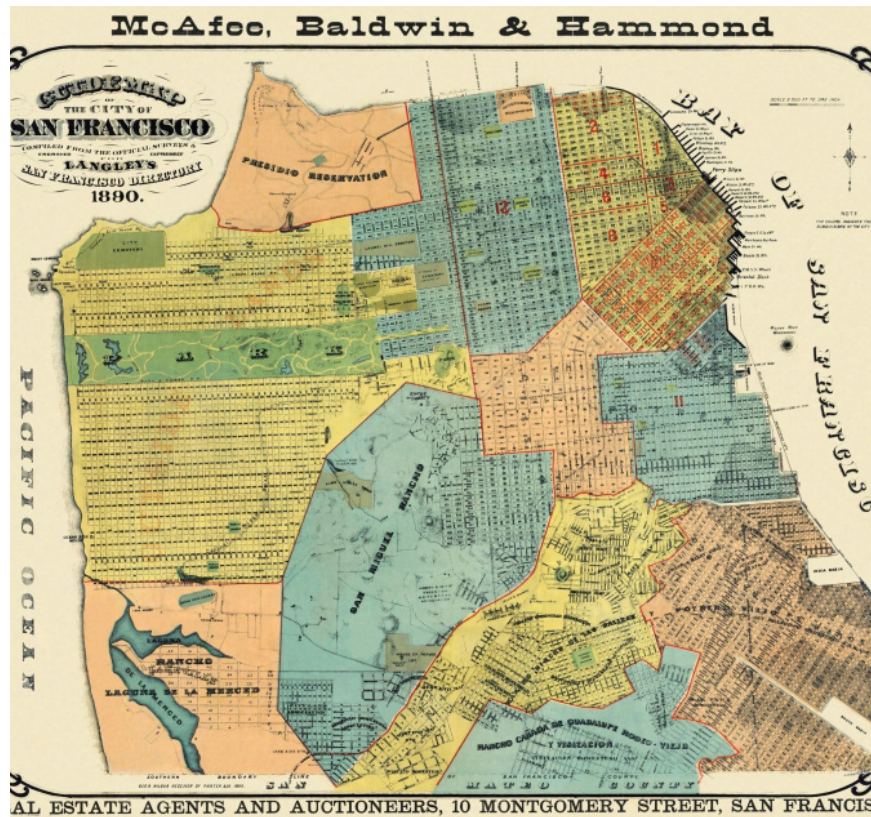


FIGURE 40 | SAN FRANCISCO, CALIFORNIA 2005 | GOOGLE EARTH



FIGURE 41 | SAN FRANCISCO, CALIFORNIA 2020 | GOOGLE EARTH



AL ESTATE AGENTS AND AUCTIONEERS, 10 MONTGOMERY STREET, SAN FRANCISCO  
 = CEMETARIES IN SAN FRANCISCO PRE-1900'S  
 FIGURE 42 | REMOVAL OF OLD FELLOWS | WILBUR 1890

## HISTORY OF THE SITE

The accompanying maps illustrate the removal of cemeteries from the urban fabric of San Francisco. At one point cemeteries were scattered across the city as observed in the 1890 map. As the city expanded, the land allotted to the dead was seen as too valuable for such use. Over 30 cemeteries were consequently removed to the city and transferred to the nearby necropolis of Colma, California.

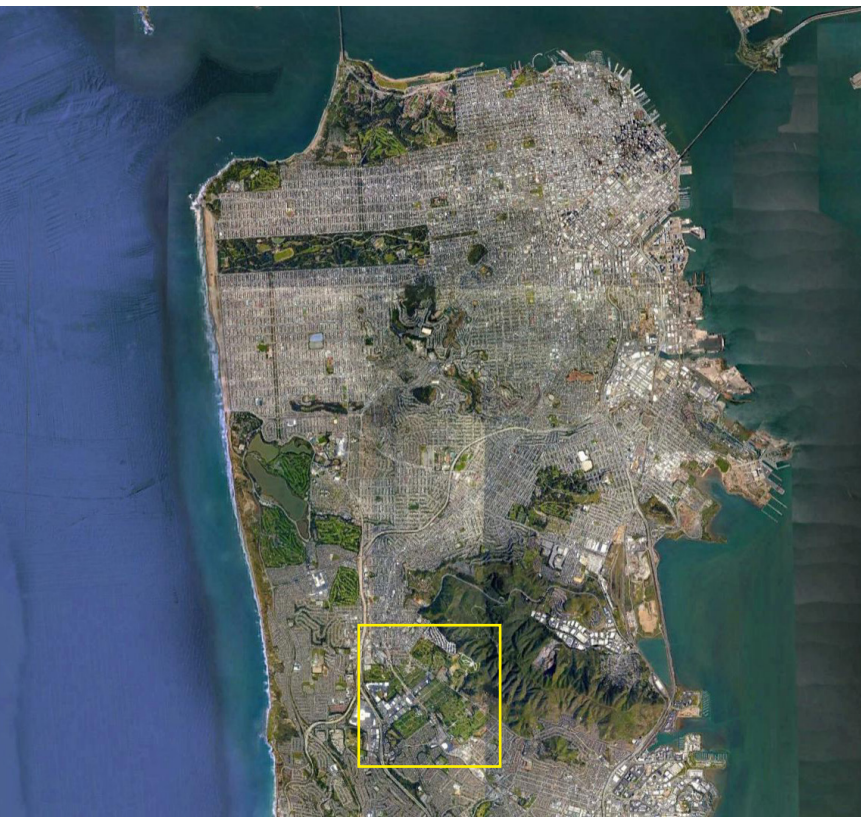


FIGURE 43 | CITY OF COLMA AERIAL VIEW 2020 | GOOGLE EARTH

With a living residency of just over 1,500, the dead in Colma remain out of site and out of mind for the inhabitants of San Francisco. Cemeteries have the capacity to remind us of our place among the ongoing community that is humanity. They allow us to recognize our temporarily and with it a vocation to the ongoing cultural order of the human species. The consequence of removing cemeteries from the urban fabric is extraordinary. Without their presence we are doomed to live in 'the here and now' without reverence for history or the future.



FIGURE 44 | GOLDEN GATE BRIDGE | THE PARNASSUS GROUP

## **REGIONAL SITE ANALYSIS**

### **SAN FRANCISCO, CALIFORNIA**

San Francisco, the cultural, commercial, and financial hub of Northern California, is the fourth most populous city in California. The city grew immensely during the gold rush and the years since, as people immigrated from around the world, and is now considered the third most diverse city in the United States. Well known for its tourist attractions such as Golden Gate Bridge and Alcatraz Island, the city attracts upwards of 25 million visitors each year. But a large population and visitor base has its affect on the environment. According to the American Lung Association, San Francisco also ranks among the top 10 cities for ozone and particle pollution in the United States.

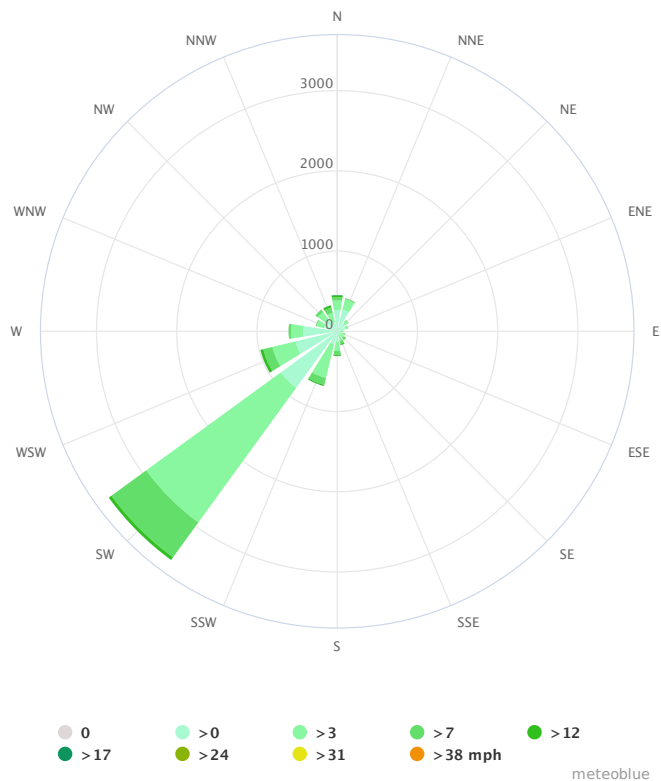


FIGURE 45 | SAN FRANCISCO WIND ROSE | METEOBLUE

## WIND ANALYSIS

San Francisco is considered the windiest city in California and the 33rd windiest city in the lower 48. The coupling effect of the cold Pacific Ocean and warm inland temperatures makes San Francisco experience high amounts of wind especially in the summer months. Wind primarily comes of the Pacific Ocean to the Southwest. San Francisco experiences the occasional thunderstorm, but average wind-speed tends to hover around 12 mph.

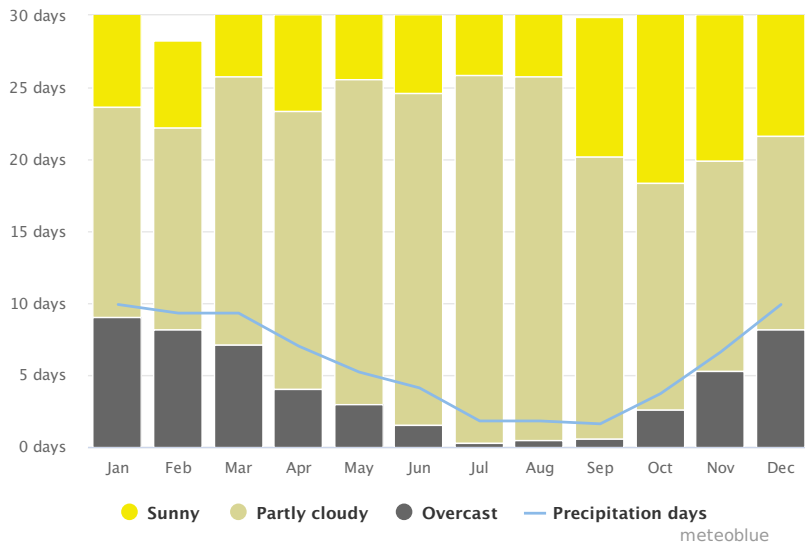


FIGURE 46 | SAN FRANCISCO YEARLY SKY CONDITION | METEOBLUE

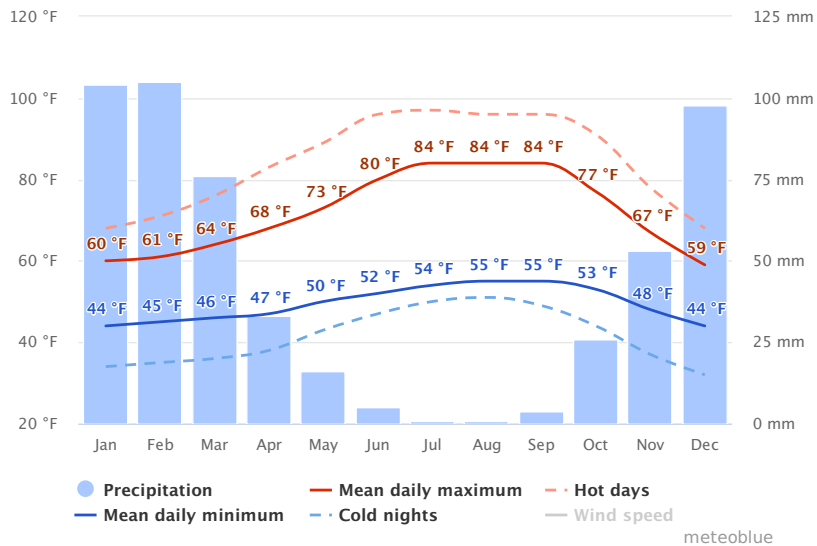


FIGURE 47 | AVERAGE TEMP. AND PRECIPITATION | METEOBLUE

## CLIMATE

San Francisco experiences a Mediterranean climate with warm dry summers and wet mild winters. The majority of San Francisco’s precipitation occurs from December to March.

The sky is partly cloudy for a majority of the year with the number of clear days occurring during the winter months. While San Francisco’s climate isn’t conducive to large storms, the geological location puts the city a risk for a large number of earthquakes.

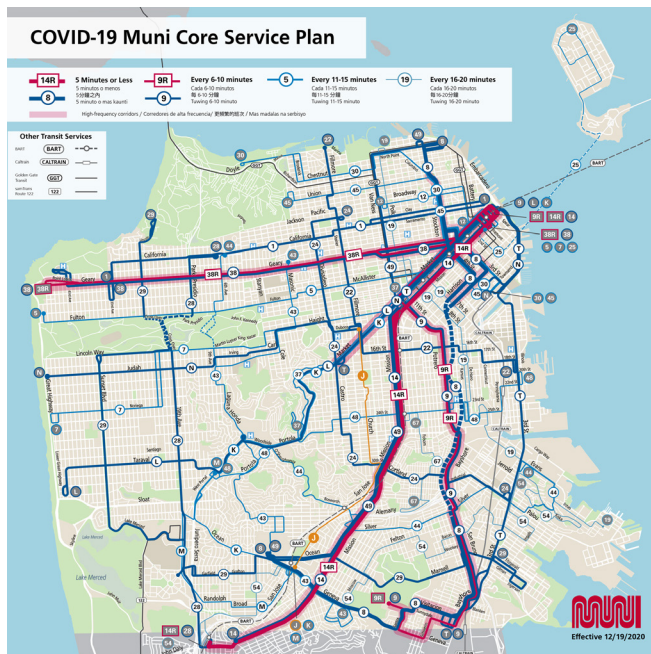


FIGURE 48 | SAN FRANCISCO PUBLIC TRANSPORTATION | SFMTA

## TRANSPORTATION

The site for this project is located along the southern edge of Golden Gate Park. There is an abundance of public transportation in San Francisco, and a bus route passes within feet of the site. There is also on street parking along the roads in the park which makes the site easily accessible to everyone while remaining in one of the more wild areas of the city. Walking paths wind through the park and locally link the site to the rest of the park. Due to the size of the site and the program a parking lot will also need to be incorporated into the design.





FIGURE 49 | GOLDEN GATE BRIDGE (2) | SF TOURISM

## **A PLAN FOR PROCEEDING**

### **THEORETICAL PREMISE**

The creation of environments that provide comfort and closure to a grieving group of people how the ability to change how we view the world and interact with others. By discovering instances that facilitate healing through nature I hope to uncover helpful information that I can apply to my project.

### **PROJECT TYPOLOGY**

I will be researching existing death-care facilities around the country in order to better understand how they negatively impact people and the environment. I will also study proposed research facilities that address the same types of problems that I am attempting to address. Understanding both past and future death-care facilities will be essential to understanding what types of spaces and atmospheres are beneficial to the grieving process.

### **HISTORICAL CONTEXT**

Further research into the historical context of my project will occur throughout the rest of the semester and carry on into the spring. I will continue look deeper and further into the history of death in cultures around the world, the representation of death, and the atmosphere that modern spaces that deal with death create.

### **SITE ANALYSIS**

My initial site for this living memorial is located in San Francisco, California, but I am unsure as to if this is the best place for such a facility/memorial. As of right now, Washington State is the only location where “human composting” is legalized, but I will be looking into locations where this is likely to be allowed in the future. The toughest part of selecting a site will be choosing an urban environment that has access to green space.

### **PROGRAMMATIC REQUIREMENTS**

In addition to examining case studies, I will research an emerging company in the field of death-care, Recompose, in order to discover what types of spaces the new technology requires. Interviews will be key to discovering what atmospheres, materials, and spaces people find helpful in the grieving process.

# DEFINITION OF RESEARCH METHODOLOGY

## PHYSICAL MODELING

Rip and tear models will be utilized to quickly investigate different design advantages and problems. All models will be well documented in order to preserve changes in a working model. As the design is refined the models will evolve to express more detail as well as a deeper understanding of the site.

## INTUITIVE DESIGN

Personal and real world experience will be a driver in my final design. Nothing can compare with experiences rooted in reality. As I move through physical models, group critiques, drawings, and artefacts I will discover solutions to the problems I am attempting to address.

## GRAPHIC ANALYSIS

Graphic analysis will allow me to map out data that will form relations and give insight into my decisions. This will be particularly helpful when attempting to relate spaces to each-other.

## PARTI MODEL | ARTIFACT

The act of creating will foster imaginative curiosity and inform my final design.

## QUANTITATIVE DATA

- Direct Observation
- Precedent Studies
- Archival Search
- Physical Iterations

## QUALITATIVE DATA

- Statistical Data: Will be obtained through an archival search
- Scientific Data: Will be obtained through instrumentation and or simulations; will also be gathered through archival search

# **DOCUMENTATION OF THE DESIGN PROCESS**

## **MEDIUM FOR DESIGN INVESTIGATION**

- Computer representation
- Hand Sketching
- Hand Modeling
- 3D Printing

## **DESIGN PRESERVATION METHODS**

- Updating of thesis book
- Recording of diagrams and hand drawings
- Recording of process models
- Research document creation

## **PUBLICATION OF MATERIAL**

Material for this project will be recorded in a final thesis book available via the NDSU Institutional Repository as well as in a physical hard cover book.

## **DOCUMENT ORGANIZATION**

File Labeling: Year-Trojan\_Thesis\_Phase\_Name  
Example: 2020-Trojan\_Thesis\_Site Analysis\_Wind Diagrams

## **SOFTWARE FOR INVESTIGATION**

- Autodesk Revit Architecture
- Autodesk AutoCAD
- Rinoceros 7.0
- Enscape

## **SOFTWARE FOR REPRESENTATION**

- Adobe Indesign
- Adobe Photoshop
- Adobe Illustrator
- Acrobat DC
- Enscape

## THESIS SCHEDULE

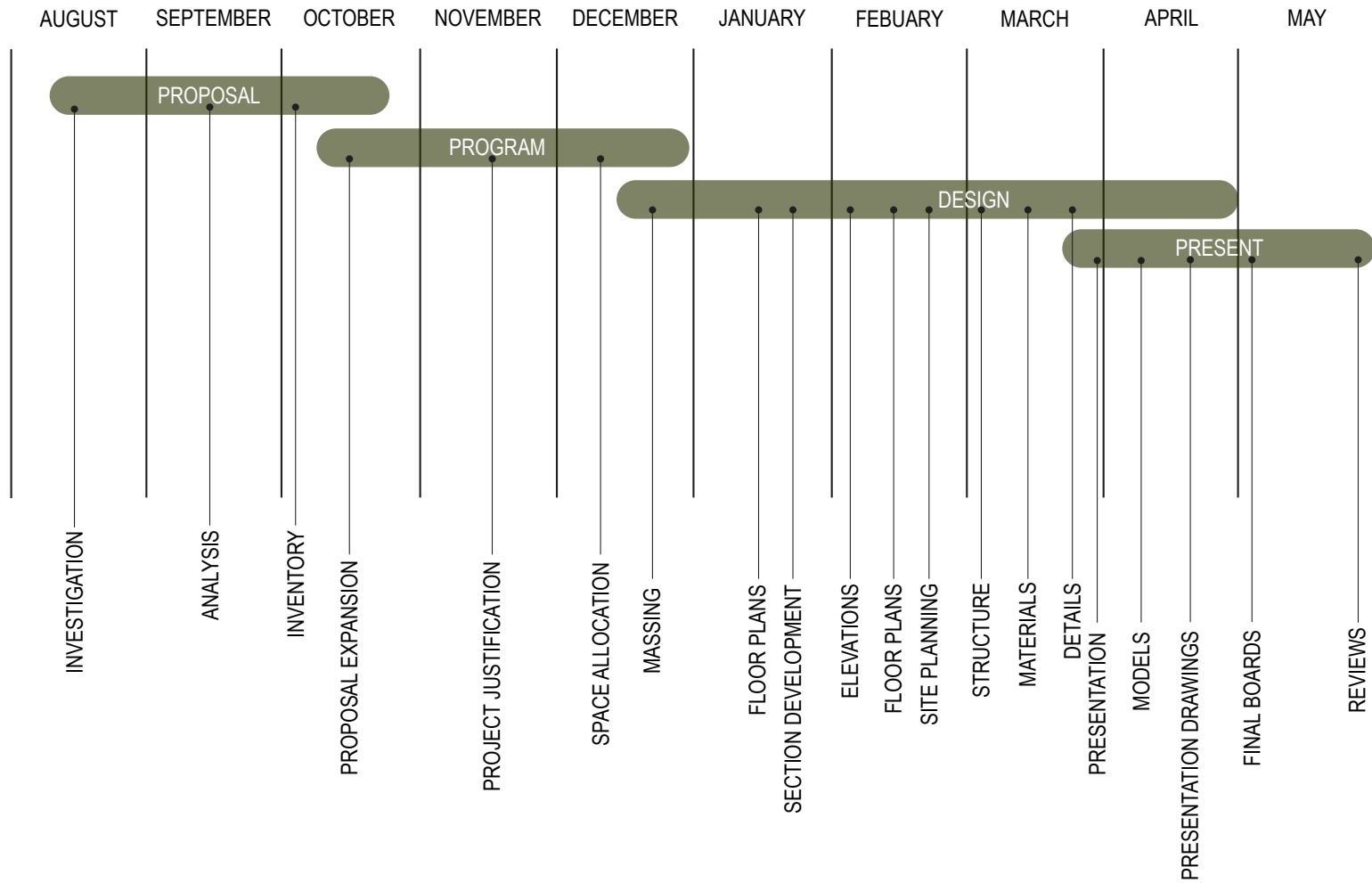


FIGURE 50 | THESIS SCHEDULE | JOSH TROJAN

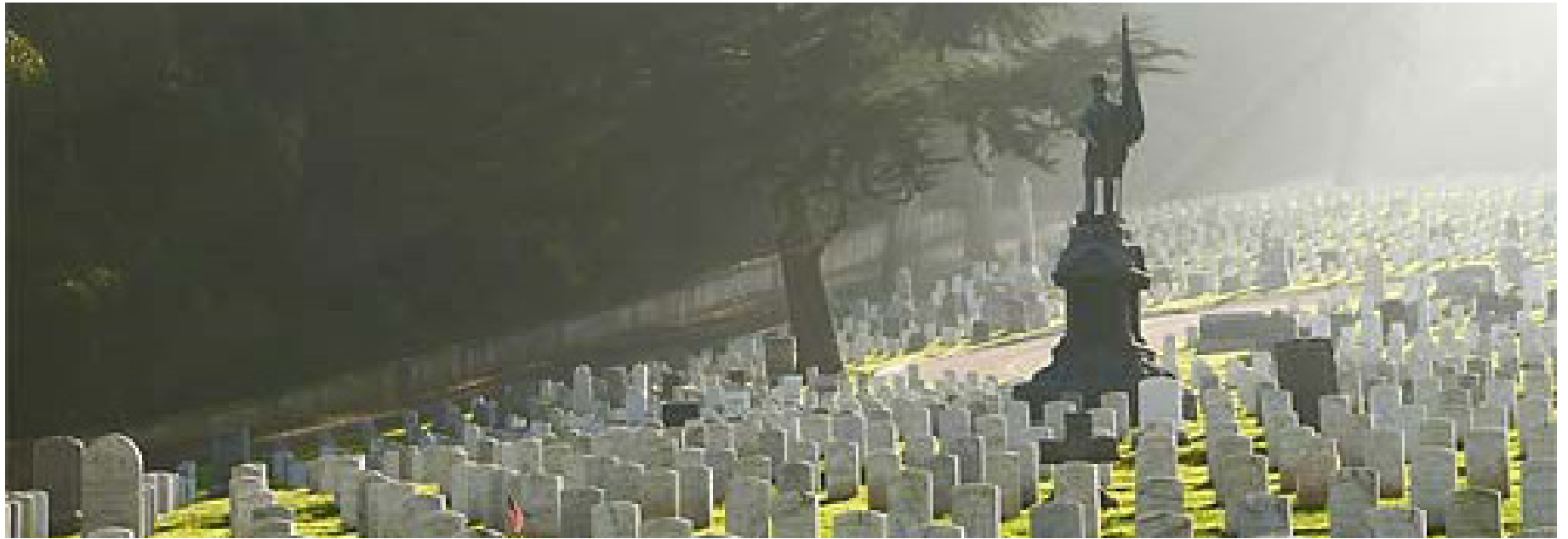


FIGURE 51 | SAN FRANCISCO NATIONAL CEMETERY | NPS

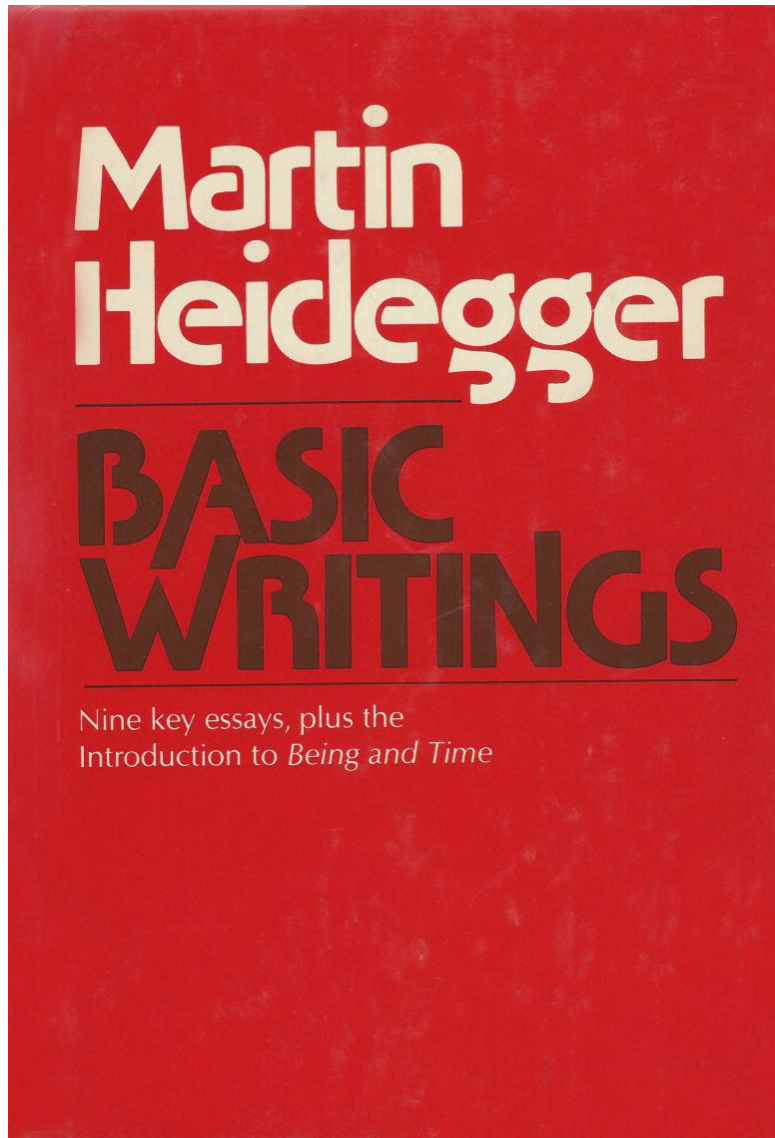
## RESULTS FROM THEORETICAL PREMISE

The Intellectual Adventure of Ancient Man highlights the importance of emotions, perceptions, and personal experience in mythopoetic thought. The invisible subjective experience of reality had a profound affect on how man ordered his own life as well as the life of the community to which he belonged. Man's life as well as the function of the state are embedded in nature and "the natural processes are affected by the acts of man no less than man's life depends on his harmonious integration with nature" (Frankfurt 26). A harmonious integration between man and nature led man to dwell in a wholesome way; in unity with nature. Nature for ancient man was understood as a life presence that revealed itself to man in the way in which he experienced it. Such a view allowed ancient man to see the essence of the things around him instead of the of the mere quantifiable properties that science reduces nature to.

In Building Dwelling Thinking Martin Heidegger questions, the ability of the modern man to dwell. He reasons that the alienation that man feels from his environment is not due to a lack of adequate housing but to an inability to think about one's existence in a wholesome way. By examining the etymology of the words building and dwelling he restored meaning that has been lost in language through time. A critical point for my thesis arises from Heidegger's discussion of divinities and mortals. According to Heidegger dwelling is made possible by recognition of the entire fourfold together in one. He emphasizes the extent of our existence on this earth by

regarding humans as mortals. As human we are mortals and our time on this earth is limited. This is something that we must accept. His reference to divinities is a reference to the immortal flow of culture that each human is a part of. This is a sort of vocation or calling to recognize that we are part of a community existent in time. While this is invisible to us, we must ever await the return of the divinities and hope we hold up to them what is promised.

Throughout Changes in the Hierarchy of Value References Associated With Flying in Space we see that the perceptual field has an impact on our values regarding ourselves as well as the entirety of humanity. Astronauts who have experienced space travel report a heightened concern for the common good of humanity as well as an increased sense of spirituality. Seeing oneself from a distance broadens one's perceptual field by creating the space for realizing a vocation to a larger group than the individual. Seeing the earth and humanity from a distance, according to anecdotal examples, emphasizes the fragility and temporarily of the planet and thus ourselves. It calls us to be stewards of the one thing that allows us life.



## BUILDING DWELLING THINKING

Written in the housing shortage after World War II, the essay *Building Dwelling Thinking* by German philosopher Martin Heidegger explores the underlying relations between building and dwelling. The work was presented to the Darmstadt Symposium on Man and Space in 1951 and later published in 1954. Throughout the essay, Heidegger questions the ability of man to dwell in the modern age, arguing that the modern way of seeing the world has severed the essential historical relationship between building and dwelling. He states that we no longer see building and thus dwelling as something that constitutes our very way of existing.

Through ritual, ancient people gave thought to their place in the world. They believed that the reenactment of ritual attributed to the success of the harvest equally as much as the skill of the farmer. I believe that in the modern age, man no longer gives thought to the nature of his existence, but instead relies on quantifiable data in order to assign relationships and meaning. The nature of a thing does not reside in algebraic expressions, but in the way which we think of and relate to it. Heidegger regards humans as mortals because their time is limited. Today with an emphasis on consumerism and individualism, we often fail to take time to consider our finitude and thus our belonging to a community that is greater than the here and now. Mortality is constitutive of being human according to Heidegger, and we can only dwell by thinking of the essence of that which we are.

FIGURE 52 | BUILDING DWELLING THINKING | MARTIN HEIDEGGER



Understanding the time in which the essay was written is crucial to understanding the essay as a whole. The essay was published in 1954, shortly after the end of World War II in 1945. Germany faced the monumental task of rebuilding the country amidst the devastation and destruction left behind by the conflict. This time in German history experienced the worst housing shortage in the country's history and thus architects and builders were charged with the responsibility of rebuilding and reshaping the built environment. Heidegger recognized this responsibility and published his essay at a critical time for examining the nature of dwelling. Heidegger claims that the real plight of dwelling is not due merely the shortage of houses, but to the inability of man in the modern age to "ever learn to dwell" (p. 346).

The essay begins by exploring the fundamental relationship between building and dwelling. Heidegger claims that building and dwelling are related as an ends and a means, but to simply regard the two as separate activities obscures the view of their essential underlying relationship. The claim is made that not every building serves as a dwelling he references bridges, hangars, stadiums, and power stations as an example. We do not dwell in such buildings. They serve merely as functional buildings to house man and machine.

Language is the master and shaper of man according to Heidegger, but our inversion of this relationship has hindered our ability to see our own nature and well as the essence of things around us. The nature of building has been lost through the history of language, but Heidegger returns to ancient language to restore

lost meaning by examining the etymology of the word building, or in German: Bauen. The Old English and High German world The Old English and High German world for building, *baun*, means to dwell and signifies to remain in a place. The modern word *bin* belongs to the word *bauen* and refers to the manner in which humans are on the earth. *Ich bin* when translated means I am, and thus highlights the profoundness of dwelling, as dwelling is the very manner in which we exist on the earth. Heidegger goes on to exploit lost meaning by probing the meaning of the gothic word *wunian*. Like *bauen*, the word *wunian* means to remain in one place, but goes further to explain how that remaining is experienced. *Wunian* means to be at peace. The word for peace, *friede*, means to preserve from harm and danger, but primarily to spare. Real sparing according to Heidegger, occurs when "we leave something beforehand in its own nature" (p.357). Through language Heidegger illustrates that to build is to dwell and also to be.

To further explain the manner in which we are on the earth, Heidegger speaks of dwelling in terms of the fourfold, "Earth, sky, divinities, and mortals" (352). The four elements of the fourfold exist together in simple oneness; by speaking of one element the other three are already brought to mind. One element cannot be what it is without the recognition of the other three. The earth of which he speaks is the ground that supports us by both physically upholding and nurturing us. The sky is representative of the cosmos that bring the earthly seasons and accompanying weather. Heidegger's divinities are not reflective of the godhead of a particular religion but are a reference the immortal flow of culture.

As humans living today, we do not exist solely in the here and now. Although the divinities are withdrawn into concealment, we must ever await for “that weal that has been withdrawn” (p. 356).

The mortals of which Heidegger speaks are human beings and are referred to as mortals because they are capable of death. By referring to mankind as mortals, Heidegger emphasizes the finitude of our existence on this earth and our place within the ongoing community of time.

Heidegger believes that saving the earth and preserving the fourfold is how dwelling is made possible. Preserving the fourfold is accomplished in saving the earth, receiving the sky as sky, in awaiting the divinities, and in initiating mortals. Saving according to Heidegger, “does not only snatch something from danger...to save really means to set something free into its own presencing...saving the earth does not master the earth and does not subjugate it, which is merely one step from spoilation” (p. 358). The fourfold is preserved through our recognition of its simple oneness, and by allowing it to be what it is.

The focus then turns to “In what ways does building belong to dwelling?” The example of a bridge is used to explore this relationship. As Heidegger explains, “it (the bridge) brings stream and bank and land into each others neighborhood...the bridge gathers the earth as landscape around the stream” (p. 360). Likewise, the bridge gathers together earth, sky divinities, and mortals. Here Heidegger returns to ancient language to restore the lost meaning of gathering, which by ancient word is

called a thing. What Heidegger is trying to get at is that, ‘only things that are locations allow for spaces’. Language is again utilized to shed light on lost meaning. The German word for space, Raum, means a space cleared for settlement. Boundaries define this space but are not the point at which something stops. Instead, Heidegger, referencing the Greeks, claims that a boundary is where something begins its presencing. Thus “spaces receive their being from locations and not from space” (p. 363).

Spaces receive their being from locations which come to be because of a thing that as a thing gathers the fourfold. However, in the modern era, man is increasingly looking to abstract the things around him to establish formal relations. With such a goal in mind, places come to be regarded as mere positions between which lies a distance or measurable space. This intervening space, or spatium, sees things such as the bridge, “as a mere something at some position, which can be occupied at any time by something else or replaced by a mere marker” (p. 361). But things as they are, are never just like other things. The bridge as it is, is that bridge at that time in that space. It is like no other bridge because no other bridge occupies that space in that time. As the dimensions of height, breadth, and depth are further abstracted from space, intervening space (spatium) is reduced to extension (extensio). If abstraction ensues extensio threatens to be further reduced to analytic-algebraic relations which “contains no spaces and no places” (p. 362). Such abstraction alienates us from the nature of things because the generality of such an abstraction “can in no case make numerical magnitudes of the ground of the nature of space and

locations" (p. 362). By preventing the nature of things from presenting themselves, we fail to dwell in a wholesome way.

Heidegger is by no means against the quantification and measuring of things, but instead he elicits us to think of things as things and not their abstractions. By relating ourselves to such things we are staying with the things and thus dwelling occurs. Heidegger asks us to think of the bridge in Heidelberg, and claims that by thinking about the bridge and what it is we "may even be nearer to that bridge and to what it makes room for than someone who uses it daily as an indifferent river crossing." (p. 363) Thus mindfulness about a thing can bring us closer to the essence of that thing than any attempt of abstraction or quantification.

As Heidegger concludes the essay, he attributes man's homelessness not to the lack of houses but to an inability to learn to dwell. However, as Heidegger so beautifully puts it "as soon as man gives thought to his homelessness, it is a misery no longer...rightly considered and kept well in mind, it is the sole summons that calls mortals into their dwelling" (p. 364) Although one may not be dwelling currently, by reading this essay and thinking of the essence of the manner in which we build we may be able to dwell once more. The fact that building, dwelling, and thinking are not separated by commas in the title of the essay is a testament to the interconnectedness of the three; an overarching theme in the essay.

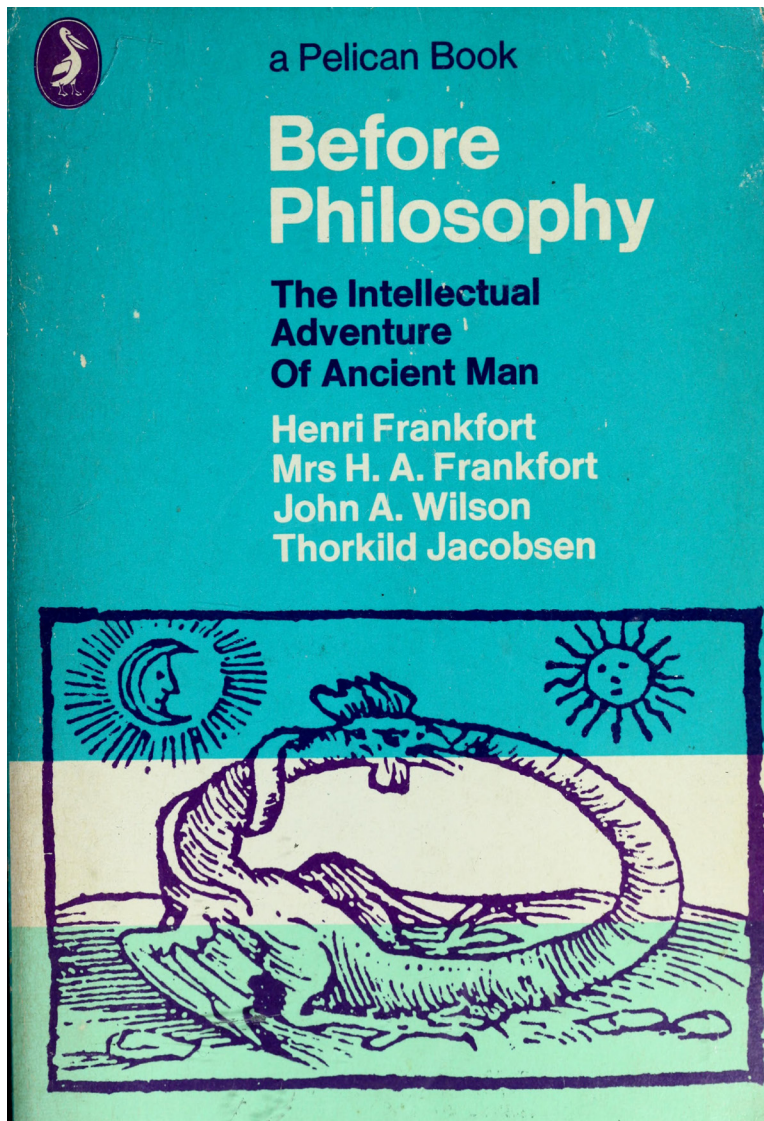


FIGURE 53 | THE INTELLECTUAL ADVENTURE OF ANCIENT MAN | HENRI FRANKFURT

## THE INTELLECTUAL ADVENTURE OF ANCIENT MAN

As a collection of essays by four individual authors, *The Intellectual Adventure of Ancient Man*, seeks to understand the basis and origin of mythopoetic thought. For the purpose of understanding the distance between mythopoetic and modern thought, I will be focusing on Chapter 1 of the book which explores the relationship between myth and reality. Written by Henri Frankfort, a Dutch Egyptologist and archaeologist, the essay is a lecture delivered in a public course in the Division of the Humanities at the University of Chicago. In a way, the lecture aligns with the purpose of mythopoetic thought whose goal is to evoke understanding thought than to rationally prove a point.

I am utilizing this text to understand the differences between ancient and modern forms of thought. Modern thought rejects emotional understanding and the perceived experience of a phenomena in favor of a rational understanding. As a result, scientific rational thought excludes the role of imagination and experience in the apprehension of reality. While the role of personal experience and imagination are not directly measurable, they should not be discarded as they have a profound impact on our sense of reality.

In the ancient Near East there are very few examples of speculative thought. This in not to say that the ancients were incapable of rational thought. Rather, they did not care to think rationally for it represented a detached and abstracted view of

their existence; one which they couldn't personally relate to. Instead, ancient thought was concerned with the imagination and the role of personal experience. Speculation is "once removed" from experience because it attempts order and explain experience. The ancients did not often care to speculate because they believed that the experiences themselves were meaningful. Additional abstraction was not needed.

Regarding today's world, Frankfurt claims that speculative thought "finds its scope more severely limited than it has been in any other period" (p. 1) He attributes this limitation to the prevalence of science as a tool for interpreting experience. Speculative thought in the modern age becomes limited to the nature of man and his problems, a question that even science is unable to answer.

The difference between ancient and modern attitudes towards the natural world is evident in how nature comes to be understood throughout each. For ancient man, the phenomenal world is regarded as a "thou" denoting a live presence that is understood in the way it reveals itself. According to Frankfurt, the quality of "thou" is "the relation that exists when I "understand" another living being" (p. 4). For the scientific man in the modern age, nature becomes to be understood as an "it" which denotes the relation of subject and object. He goes on to highlight another difference between the two: predictability. Science sees nature as an "it" and attempts to understand and predict phenomena through the application of universal laws. Nature regarded as a "thou" possesses the unpredictability of an individual or a live presence, no experience is exactly the same because each experience is that which it is. Frankfurt makes the claim that "the knowledge which "I" has of "Thou" hovers between the active judgment and the passive undergoing of an impression" (p. 5). The active judgment of which he speaks refers to the identification of an object. On the other hand, passive understanding refers to the emotional understanding that unfolds when a live presence elicits personal emotions such as fear or happiness. The ancients valued their experience with a "thou" and thus every interaction with the natural world was related to personally. Frankfurt references Crawley saying "Primitive man has only one mode of thought, one mode of expression, one part of speech – the personal" (p. 5). It is not as though ancient man personified the inanimate world around him, but rather that he simply did not know an inanimate world. Every object was understood to be a live presence that first elicited an impression.

The focus then turns to the method of thinking and expression for ancient thought. The imaginative and intellectual experience of a "thou" left an impression with man that influenced his thought. To express experiences and understand phenomena the ancients told stories in the form of myth. They did not attempt to analyze or rationalize experience. The purpose of such myths was not to provide entertainment but to "recount events in which they were involved to the very extent of their very existence" (p. 7). Myth was the result of the imagination, but it was never pure fantasy. Instead, it is a medium for abstract thought through which an "unverifiable metaphysical truth" was revealed. Myth would never hold up to rational cross

Myths for the ancients were not merely stories but dramatized recollections of events with which they were personally involved. The example Frankfort gives is that of the New Year's festival in Babylonia. During the celebration of the festival, the account of creation was re-enacted through a dramatized performance intended to share the annual proclamation of knowledge with the powers "in order to involve them once more with its potent truth" (p. 8). Consequently, Frankfurt comes to view myth as a form of poetry that exceeds poetry in the sense that through ritualistic re-enactment it attempts to "bring about the truth it proclaims" (p. 8).

Frankfurt proceeded to examine the structure of mythopoetic thought. We would have trouble considering mythopoetic thought as a form of logic, but he claims that labeling mythopoetic thought as logic is "justified" and deems it "emotional thought". As mentioned before the ancients were capable of logical reasoning, but they did not often indulge it because it implied a detached experience of reality. Frankfurt makes the claim that the ancient way of reasoning is not as different from our own way of reasoning as we might often think. When examining the two forms of reasoning, it is evident that the differences arise from the emotional attitude and intention" in which the two were approached rather than a pre-logical mentality. Therefore, mythopoetic thought is no less valid than the modern rational when attempting to establish relationships.

While science disregards personal experience and emotional thought, the ancients believed that "whatever is capable of affecting mind, feeling, or will has thereby established its

undoubted reality" (p. 11). Products of the imagination: dreams, hallucinations, and symbols were seen as inseparable from reality. Symbols for ancient man were not by any means separate from that which they represented. One object stood for the other and maintained the qualities of that which it represented. The figure of thought "a part can stand for the whole" is reflective of such thought. An example of this comes from ancient Egypt where a person's name was seen to be pregnant with his essence. By destroying pottery with the names of one's enemies carved into it, it was understood that real harm was done to them. Such ritualistic acts were understood to have a real affect on reality. According to Frankfurt "It would be meaningless to ask a Babylonian whether the success of the harvest depended on the skill of the farmers or on the correct performance of the New Year's festival...both were essential to success" (p. 13). The prosperity of man's own life was determined by his active participation in the processes that were seen to bring about the truth they proclaimed.

Just as symbols and dreams were concrete in the life of ancient man, so was a continued relationship with the dead. Death was not the end of existence but a substantial reality. This is especially evident in the Egyptian Pyramid Texts which reads:

"When heaven had not come into existence,  
When men had not yet come into existence,  
When gods had not yet been born,  
When death had not yet come into existence..."

Like modern thought, ancient thought explains phenomena in terms of cause and effect. However, contrary to the law-like subject object view of causality that science upholds, ancient thought interpreted cause and effect on a personal level. For ancient man it was not a matter of "how" but "who". An example of this can be seen in ancient Egypt, where when the Nile River failed to rise it was understood that the gods were upset with the actions of the people. Some action, such as a sacrifice, was then required to renew a positive relationship with the gods. Through ritualistic enactments, ancient man was able to form connections that would seem absurd to modern thought. Every encounter with the natural world was observed to have meaning. Frankfurt touches on the capability of ancient thought to establish correlations when he writes: "Every resemblance, every contact in space or time, establishes a connection between two objects or events which makes it possible to see in one the cause of changes observed in the other" (p. 18). For ancient man every experience with natural phenomena influenced a certain way of thinking.

Just as ancient man has a concrete understanding of causality, he maintained a concrete and qualitative understanding of space and time. Modern thought abstracts space and time until it is merely a function of values and measurements. Primitive thought on the other hand is incapable of abstracting a concept of space or time from its experience of it. The emotional significance of space was recognized not only by the individual but also the community. For example, there was a correlation between day and night, east and west, and life and death that was cultural known. Relationships between the cyclical

nature of man's life and his experience of space and time were established. This led cultures such as the ancient Egyptians to align important events, such as the coronation of a new leader, with cycles of nature such as a new moon. The coordination between man and nature endowed man's life with a sense of unity.

The ancients realized that thoughts do not operate autonomously. For this reason, they did not discard experience and emotions from their understanding of natural phenomena. Emotional thought was a medium through which man understood the universe and ordered his life. It allowed man to think and thus dwell in a wholesome way. According to Frankfurt "The experiencing of this unity with the utmost intensity was the greatest good ancient religion could bestow" (p. 26).

It is critical to look at the development of thought throughout history in order to understand the current situation. The superior objectivity of science threatens the presence of emotion and experience when considering reality and interpreting phenomena. However such aspects of reality can not be rejected because we know an object before we understand it. Science must come to terms with mythopoetic thought if we are to dwell in a wholesome and unified manner. The focus once again turns to the intention of the authors, which is to evoke an understanding rather than to argue a point. This chapter and consequent book highlight that the key aspect to living a unified life is an intentional mindfulness of ones relationship to the natural world.



FIGURE 54 | A MAN ON THE MOON | NASA

## CHANGES IN THE HIEARCHY OF VALUE REFERENCES ASSOCIATED WITH FLYING IN SPACE

This article is a psychological study conducted by four members of the Department of Psychology at the University of British Columbia. Peter Suedfeld, Katya Legkaia, and Jelena Brcic attempt to understand the effect that flying in space has on personal values. The study examines one hundred twenty-five different firsthand accounts of space flight found in autobiographies, interviews, and oral histories. The 125 accounts of space travel utilized in the study represent about 20% of humans who have flown in space; a considerable sample size. Data collected for the study comes from publicly accessible material including: “46 published books of memoirs and autobiographies, 100 media interviews, and 17 oral histories and 17 on-line diaries downloaded from the Internet” (p. 1426).

I am utilizing this text to understand the relationship between perception of others and values such as spirituality and universalism. The accounts of the astronauts utilized for this study contain firsthand descriptions of experiences of humans who have had the opportunity to see humanity from the remarkable distance of space. After reading the study it is evident that space flight does have an impact on values such as spirituality and universalism. My thesis aims to return a sense of universalism and interconnectedness to architecture through a reintegration and re-imagination of the modern city cemetery. An experience of a cemetery has the capacity to allow us to see



ourselves from a distance. It allows us to see ourselves as part of an ongoing community present not only in the here and now but in time and history. I believe that the alterations in value references observed in astronauts can be applied to conceptions of perceptual distances here on earth, specifically perceptual ideas of community prompted by one's experience of the cemetery.

This study references the accounts of 125 different astronauts. This sample size represents a minuscule proportion of humanity, as fewer than 500 humans have flown in space as of 2008. To further illustrate how small this number is, it is about 1/1000 of 1% of the world population. The space capsule itself functions as a "natural laboratory" for studying human values amongst an elite group of individuals. The training for such individuals is physically demanding and continues to increase in intensity as missions become more technical and lengthier.

Values are thought to remain somewhat constant in humans but are subject to change in response to significant life events. Significant experiences, such as space travel, have the capacity to alter one's value system. Suedfeld, Legkaia, and Brcic acknowledge the possibility a feedback loop in which a person's values may influence their occupation choice, which in turn has the capacity to influence their initial values, but note that it is merely a possibility. To assess the changes in values, data was collected from before, during, and after the mission. Instead of using a questionnaire, the typical approach of such a study, the analysts use literature and interviews since the opportunity to administer questionnaires in the three different time periods

was not possible. The authors utilize literature to quantify mentions of 56 value markers relating to 11 major value categories. The comparison of these value markers before, during, and after the mission shows that value references do indeed change throughout the three periods.

As Suedfeld, Legkaia, and Brcic mention, "one repeatedly mentioned change is an increased realization of, and care for, the unity of the human species and planet earth" (p. 1414). In an interview following his mission in 1991, Alan Shepard recalls his experience in space saying, "To me and I think to all of us, it was a realization that our world is finite, it is small, it is fragile, and we need to start thinking about how to take care of it." In a different case Jerry Linengerer reminisces on his time aboard space station Mir in his book *Letters from Mir* writing, "We are all on earth together, and the earth when viewed from space is not divided up piecemeal, but exists as a wondrous whole" (p. 246). These first person anecdotal examples illustrate how a change in perception generates a positive shift in values towards the common good of humanity as a whole. This alteration in perception and values is attributed to the enlightening view of the "beautiful blue marble" from the portal like window of the spacecraft. Prior to the study the authors hypothesized that transcendence, subdivided into universalism and spirituality, would experience a rise from preflight to in-flight to post-flight due to the views of the earth from the spacecraft.

As mentioned earlier, due to the inability to administer preflight, in-flight, and post-flight questionnaires the conductors of the experiment relied on a procedure termed (TCA) or thematic

**Table 5**  
Value Hierarchies for Subjects Providing Data in All Three Flight Phases

Value	Preflight	In-flight	Postflight	Signif. Trends	F(df = 1, 55)	p
	M% (SD)	M% (SD)	M% (SD)			
Achievement	32.9 (14.5)	26.8 (18.4)	24.7 (18.3)	Linear	8.1	0.01
Enjoyment	9.3 (8.1)	17.7 (16.6)	10.7 (10.9)	Quadratic	14.5	0.00
Self-direction	11.5 (10.6)	6.0 (8.6)	7.3 (7.4)	Linear Quadratic	11.5 10.9	0.00 0.00
Benevolence	10.0 (10.5)	5.9 (7.6)	6.6 (11.6)	None		
Stimulation	9.9 (7.8)	8.7 (11.1)	5.5 (7.5)	Linear	13.5	0.00
Universalism	3.9 (4.8)	8.8 (13.1)	12.5 (16.6)	Linear	16.9	0.00
Security	7.0 (6.0)	7.8 (10.8)	7.2 (6.5)	None		
Conformity	5.8 (4.5)	6.3 (9.1)	6.8 (8.0)	None		
Power	5.1 (4.6)	5.5 (7.4)	9.4 (8.1)	Linear	17.2	0.00
Spirituality	2.8 (4.1)	5.0 (7.3)	6.8 (11.9)	Linear	7.8	0.02
Tradition	1.8 (2.5)	1.6 (2.7)	2.6 (5.3)	None		

FIGURE 55 | TABLE OF VALUE HIERARCHIES | NASA

content analysis. According to the authors “TCA refers to a general way of inferring psychological processes of states from running text, whether oral or written” (p. 1421). These processes involved human scoring to measure “cognitive, emotional, and motivational variables.” Due the inability to administer questionnaires, a self-report developed by Schwartz was used as a basis for the TCA template creation. The paragraph served as the unit for scoring and the length of the paragraph was held to a constant by combining and trimming paragraphs.

Each paragraph could only be scored once for a reference to a value marker although multiple markers relating to the

same value could be scored. Two trained readers examined each paragraph and there was an 86% agreement on the value category between the two readers.

The results of the experiment yielded results that were for the most part in line with the initial hypothesis. The overall frequency of value references ranked achievement as the most prevalent value. Universalism and spirituality were lower on the list and obtained ranks of 6 and 10 out of the respective 11 values.

Universalism was more prevalent among crews who spent more than 6 months in space. The authors attribute this occurrence to more leisure time to contemplate the world from which they came. Across flight phases, references to power, universalism, and spirituality experience a linear upwards trend. The markers *world of beauty* and *world at peace*, denoting the value of universalism, increase during flight. Post-flight accounts of a unity with nature spike after returning from a mission. An interesting observation that the authors make is that “belief in God increased greatly after the astronaut returned, but references to membership to a particular religion dropped from each phase to the next” (p. 1432). Perhaps the shift from a religious view to a spiritual view is due to a focus on universalism and the observed absence of barriers on earth. A significant finding of the experiment shows that “Post-flight, the increase in remarks involving Spirituality and Universalism showed a growing concern with collective interests added to, rather than placing, individual values” (p. 1432). The findings of the supported the initial hypothesis that “self-transcendence

through concern for others, broadly defined, is one way to pursue meaning” (Schwartz).

The findings of this experiment support a majority of the hypothesis as well as buttress my argument that seeing humanity from a distance increases a concern for the others and the common good of humanity. Anecdotal examples show that astronauts came to the realization that our world is small and finite and that we need to start taking care of it. It is important to note that the view that the astronaut’s experienced widened the perceptual field of the astronauts, and a broadened sense of perspective allowed the astronauts to regard humanity in a new holistic way. The perceptual field matters because it influences our thinking, as this experiment demonstrates.



FIGURE 56 | ODD FELLOWS CEMETERY MEMORIAL DAY 1909 | SF ALMANAC

## PROJECT JUSTIFICATION

Architecture has the power to affect how we experience the world. The urban fabric as a whole tells the story of the people who inhabit it at any given time. Looking at cities today, the story I see is that of the here and now. Monetary and material satisfaction have taken priority over the equilibrium that exists between us and our planet. This project reflects my desire to recognize a belonging to something larger than myself. I believe that creating a space that embraces the prosperity of future generations while recognizing those past will allow us to see ourselves as part of a community that exists throughout time. My hope is that such realization will move current and future generations to adopt a stewardship for the natural world, as the continuation of humanity depends on our ability to maintain a balanced relationship with nature.

Thus far in my academic journey I have produced works that focus on specific social and economical problems. These projects were designed with very specific user groups in mind, and while such designation assists the design of a project it often fails to recognize the larger context in which such a project exists. With this project I hope to address the pressing issue of sustainability that humanity is confronted with and in doing so embrace not only the immediate community in which the project exists but the world community as well as the community of mankind. Pursuing such a project has improved my understanding of myself and the world around me which is crucial for someone who will be designing for diverse

groups of people.

This project is essential at this stage in my professional development because dealing with such a sensitive requires me to understand various views people hold towards it. Developing such a project forces me to understand and design a typology which I am not familiar with.

This project will contribute to my knowledge base by forcing me to look at an architectural project through an unfamiliar lens. By researching my topic and attempting to understand it through its cultural development I hope to gain insight into “how it has become what it is” and what it might become. Utilizing such an approach will contribute to my knowledge of how to understand an idea as well as a building more thoroughly.

At this stage in the project, I have noticed that attempting to understand the evolution of an idea or a typology throughout history has lead me to think more critically about why things are the way that they are. I have increasingly found myself asking “why” and “so what” when approaching this project. This is particularly helpful to me as a designer because it forces me to explore ideas in new ways, opening new possibilities and ways of perceiving.

Scientists agree that the next ten years will be pivotal in determining how the effects of climate change and global warming play out. The trending solution is that of creating “green buildings” that boast low energy and resource consumption. While such a movement is notable and necessary

to pursue, it attempts to fix the problem with that which created it. As a profession, architects have the power to affect how people see and experience the world around them.

I believe that the key to ensuring a sustainable future lies not only in continuing to improve the efficiency of our buildings, but in transforming the way we see ourselves situated in the world.

By creating a space that allows one to recognize their position in the community that is mankind, I hope to bring to light a more wholesome view of our existence and an accompanying environmentally conscious alternative to current death-care practices. Current methods of death care such as cremation and embalming are particularly expensive and consume a considerable amount of resources. Land within major cities is becoming more and more scarce and urbanization continues to consume major swaths of land. It no longer makes sense to have cemeteries in the city as they consume a great deal of space. Likewise, it no longer makes sense to sell someone a piece of land for eternity. A human composting facility would provide a more economical, more environmentally friendly method of death care while reintegrating the profound experience of life that is death.

The project can be economically justified in one of two ways. A publicly funded project and facility would ensure that everyone has equal access to death care, which is a notable cost for the average person. Utilizing tax dollars to create a government run facility would serve the goal of the project in recognizing ones place and involvement within a larger community.

A privately owned facility would embrace competition within the industry and promote the best possible services and environments for the users. Privately owned facilities would also allow a greater deal of freedom with the design. The death care industry generates a great amount of money annually, and I foresee many investors wishing to become involved with a promising new method for caring for the dead.

While the project ensures a monetary return on investment it aims to provide returns that are not quantifiable in the form of dollars. Such a facility would embrace a wholesome view of existence and community, fostering a new way of caring for the world and interacting with the other. The world cannot be reduced to a number and neither can our experience of it.

The goal of this project is to enhance the relationship we have with our environment and thus ensure the future health of our species. My design will attempt to do this through two means. By proposing an environmentally friendly method of death care my design will provide an alternative to the harmful methods of cremation and embalming. The second means of creating a positive environmental impact which exists inseparable from the practice of human composition, is a way of seeing the world. Such a controversial method of death care would not be socially accepted if it did not reflect the way which we see the world. Likewise, I don't believe we can see ourselves as inextricably involved in the natural world as well as within a community in time, without such a provocative method of caring for the dead. Together these two methods of creating an positive environmental impact aim to move us to build with a sense of

stewardship through provoking a love for future generations and appreciation of those past.

This project is important in its social context because today we fail to recognize our place among a community in time due to the importance society places on the immediacy of everyday life. Additionally, we have become dissociated with the idea of a global community working towards a common goal. This project seeks to restore the sense of a global community as well as to reinvigorate a stewardship towards the planet and future generations. It is important and necessary to implement the project in its cultural context because as a species we must recognize our place within a community in time. Working to undo the damage that has been done and continuing to maintain a healthy environment is culturally important because it reveals our reliance on the earth for our very survival.

San Francisco is a hub for finance, technology, and culture within the United States. By placing such a controversial project in a city such as San Francisco it is certain that it will attract a great deal of attention. This is important especially since the goal of the project is to alter a large number of people's world views. At the dawn of the 20th century the city banned new burials within the city and in the time since has exported multiple cemeteries and hundreds of thousands of graves out of the city. The representation of death within the urban fabric of the city is lacking, and the neighboring Necropolis of Colma, California continues to consume land. A solution to caring for the cities dead will serve as a precedent for other cities and nations to follow.



FIGURE 57 | ODD FELLOWS CEMETERY 1885 | SF ALMANAC

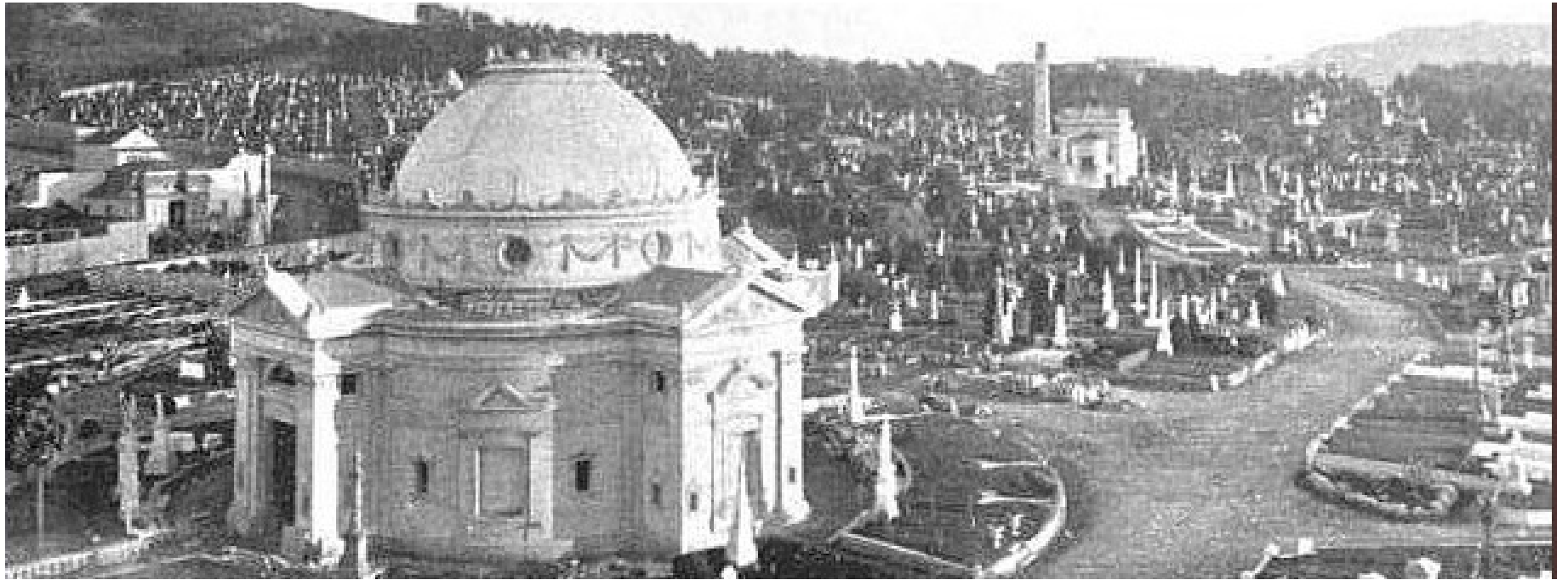


FIGURE 58 | ODD FELLOWS COLUMBARIUM | SF ALMANAC



## **HISTORICAL AND SOCIAL CONTEXT**

Ancient man once thought emotionally as well as. The imaginary was acknowledged to exist and have an effect on reality. Dreams and emotions were acknowledged as a critical part of reality because of their ability to alter our perceptual field. Mythical explanations for natural phenomena proclaimed their own truth, but it allowed man to view his existence in a wholesome interconnected way. Death was understood to not be the end of reality but an altered reality in which the dead maintained a relationship with man through stories, memories, and ritual.

Today as cities continue to expand cemeteries and the representation of death are being driven out of the city to make room for more economical uses of land. As the representation of death is placed out of sight and out of mind, we blind ourselves of our temporal fragile existence on the earth that we are dependent on.



FIGURE 59 | SAN FRANCISCO NATIONAL CEMETERY | NICKO MARGOLIES

## PERFORMANCE CRITERIA

The performance of my design will be measured both qualitatively and quantitatively. Since the goal of my design is to transform current notions and practices associated with loss, there will be a considerable emphasis placed on the qualitative aspect of my design. How the space is experienced and how likely people are to use the space compared with traditional cemeteries will be what defines the success of the project. While the performance of my design will largely be based on qualitative aspects, there are certain quantitative aspects that will be measured. The trans-formative qualities of the space and its ability to attract interest and participation could be collected in terms of the human occupancy over a duration of time. The measurements stated will be obtained through pre-design and theoretical post-design occupancy data. As mentioned previously, the performance will largely be measured through the use of qualitative data in terms of the human experience.

Architectural drawings, a collection of process sketches, and exploratory models will be utilized to provide a comprehensive analysis of the design. As mentioned, the majority of the analysis will be qualitative and therefore it will be more difficult to assign a number to such an aspect. I know of no means to measure the trans-formative qualities of the space, or the emotional impact the design has on its users, but these aspects of the design will be the driving forces in my project. The qualitative aspect of the design cannot be measured as easily as qualitative aspects such as cost and square footage.

This project will be evaluated based on emotional significance and the ability of the philosophical narrative to influence the perceptions and values of the viewer. The alterations of perceptual experience created through language and the visual representation of ideas will track the overall success of the project. Cemeteries and monuments have traditionally been located within the city limits, but as cities continue to grow so do their cemeteries. In response to this, larger cities have moved their cemeteries out of the city creating large swaths of land consumed by homogeneous underutilized space. Unlike cemeteries in Victorian times that doubled as public parks, the nature of these spaces is uninviting to inhabitants of the city. Additionally, the modern cemetery and the methods of death care associated with it consume a great deal of resources and have a negative impact on the land and surrounding area that it occupies. The cemetery is no longer integrated into the city or the natural world. My project will primarily be justified using qualitative research data as mentioned earlier. The success of the project will be measured by the experience of the occupants. Since there is not an abundance of numerical data relating to how a space affects the emotions experienced by an individual or a community, I will be considering how well the site fits into the urban context and how likely the design is to attract visitors. Through my design I will seek to embrace memories and holistic perspectives connected to the site but more extensively, the natural world. Architecture has the ability to affect how we view and experience the world, and my resulting project will attempt to do just that through the re-envisioning of the modern cemetery.

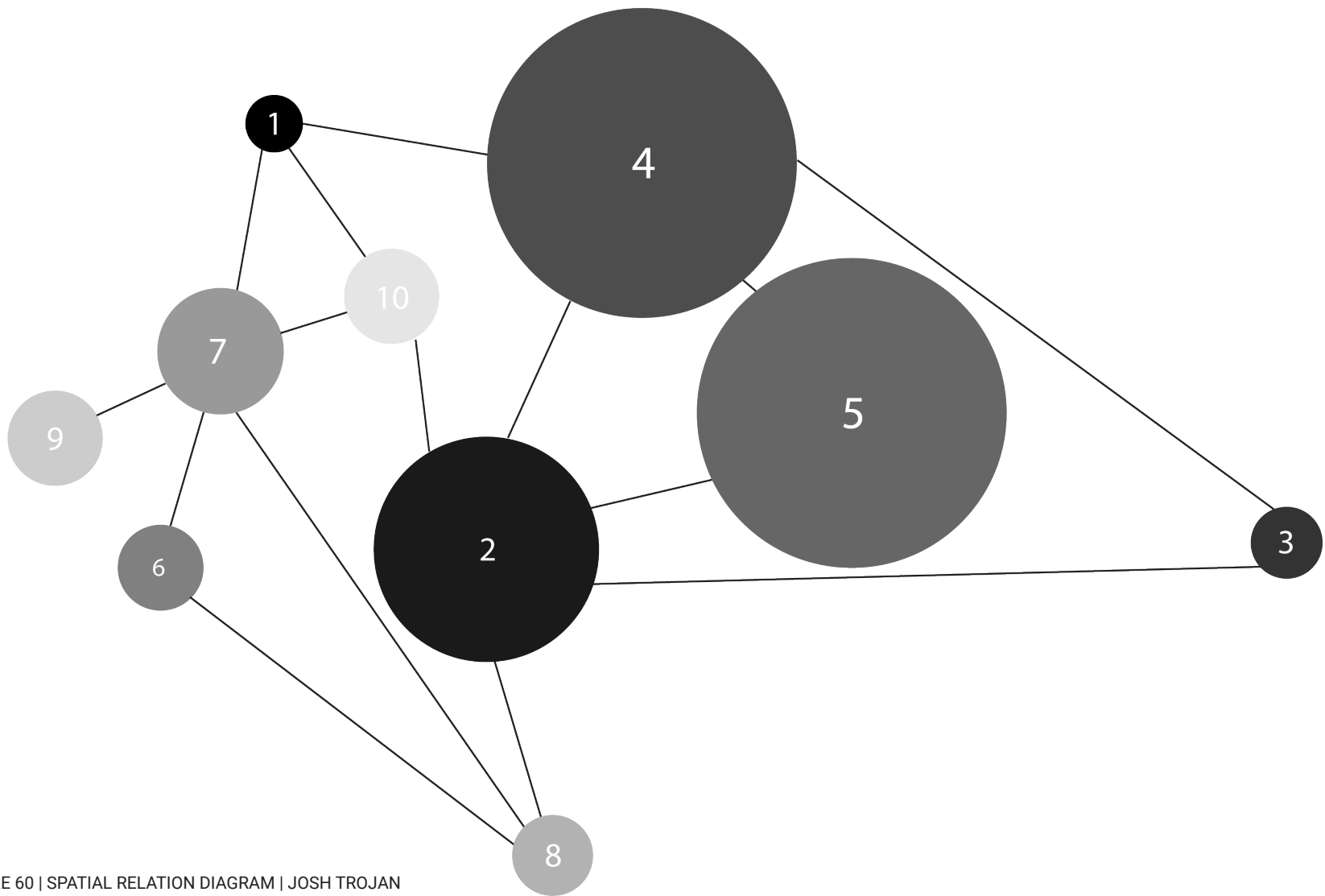
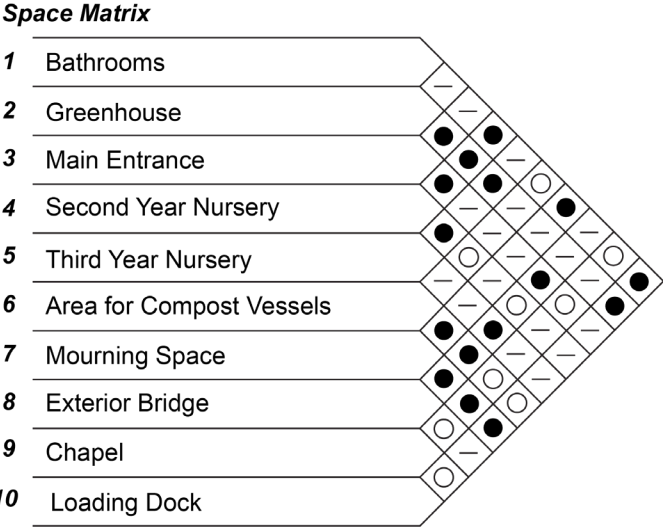


FIGURE 60 | SPATIAL RELATION DIAGRAM | JOSH TROJAN

# SPACE ALLOCATION

To get a better idea of how the spaces within the building function as a whole I created a developed a space matrix to further explore their relations. From the space matrix I created a spatial relation diagram to visually represent the direct relationships that the layout created. While the spaces aren't set in stone this serves as a good starting point to discover how different spaces might play into each other.



**Adjacency Matrix Key**

- Adjacent
- Nearby
- Not Adjacent

FIGURE 61 | SPACE MATRIX | JOSH TROJAN

<b>Space Allocation Table</b>	<b>FT<sup>2</sup></b>	<b>%</b>
Bathrooms	600	1%
Greenhouse	30,000	23%
Main Entrance	2000	2%
Second Year Nursery	40,000	30%
Third Year Nursery	40,000	30%
Area for Compost Vessels	6,000	2%
Mourning Space	10,000	5%
Exterior Bridge	2,200	2%
Loading Dock	800	2%
Chapel	3216	3%
<b>Total</b>	<b>134,816</b>	<b>100%</b>

FIGURE 62 | SPACE ALLOCATION TABLE | JOSH TROJAN



FIGURE 63 | ARCHITECTURAL ATHANOR | JOSH TROJAN

## ARCHITECTURAL ARTEFACT

To explore the cyclical relationship between life and death, I designed an architectural artefact. The artefact like the resulting architecture attempts to open a space of participation and realization through embodiment of a cyclical process. The artefact functions as an athanor, a furnace used by alchemists throughout the ages. To the alchemists, the athanor is not just an oven to melt metals, but a place for the transformation of the spirit.

The performance of the artefact takes the form of a funeral procession, beginning with a brief, ambiguous eulogy recited around a patch of earth. The ambiguous nature of the eulogy allows for meaning to be read into the work. It does not tell you who the deceased is, but lets you decide for yourself. Following the eulogy participants are invited to inscribe on a length of paper, a memory of the dearly departed, whoever it may be, and contribute it to the athanor. Transitioning outside, the athanor is ignited. As the parchment inside burns, the memories which had manifested in the physicality of written language, are metamorphosed once again into a memory of the dearly departed, as well as a new memory of the experience that unfolds. Like the furnaces of the alchemists, mindfulness is reflected in the formulaic transformation of the physical elements which represent it. The resulting ash is collected and deposited onto the patch of earth that rests in the room. As the athanor continues to be experienced, the cyclical processes of

nature, human life, and memory are revealed in the makeup of the soil. While the soil maintains a presence within the room, it points towards the earth as a whole. The makeup the earth's soil is a physical representation of humanities transformation through time and our journey through history.

During the reading of the eulogy and the lighting of the athanor, there was an observable silent reverence for the dearly departed. Heads were bowed as people stood in a circle, first around the patch of earth, then around the burning athanor. As the eulogy was read, one could feel the lump in their throat, as they simultaneously perceived the same sensation in the ones around them. It was apparent that even after death, a loved one could continue to be felt physically through bodily responses to grief. Following the theory of reversibility and the idea of the chiasm put forth by Merleau Ponty, Suzanne Cataldi suggests that, "When memories blur and blot our vision, when we swallow that "lump" in our throat, or hear that "crack" in our voices, we can emotionally perceive that loved ones are behind it, that they are still there still intermingled, intermingling with us, as they must have been-all along" (p.200). Through a mindful recognition of the other, the chiasm is kept open, and the dead are able to exist in the here and now.



FIGURE 64 | MEMORIAL UNION DISPLAY | JOSH TROJAN



FIGURE 65 | SILENT REVERENCE | JOSH TROJAN





FIGURE 66 | MIXTURE OF DIRT AND MEMORIES | JOSH TROJAN



FIGURE 67 | DESIGN SECTION | JOSH TROJAN

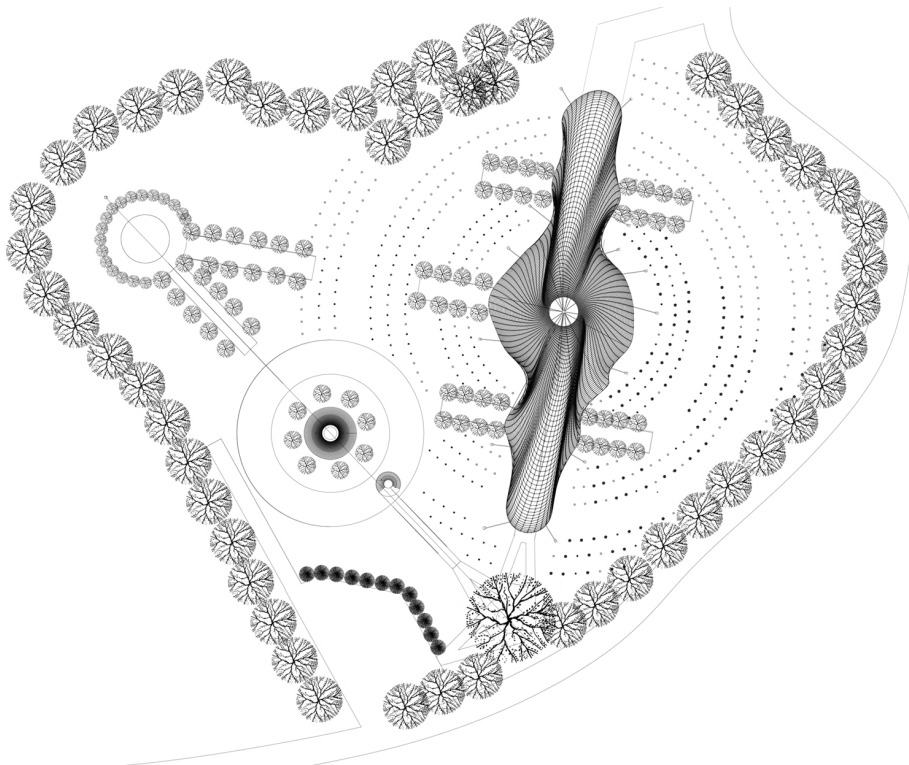


FIGURE 68 | DESIGN PLAN | JOSH TROJAN

## THESIS BROCHURE ABSTRACT

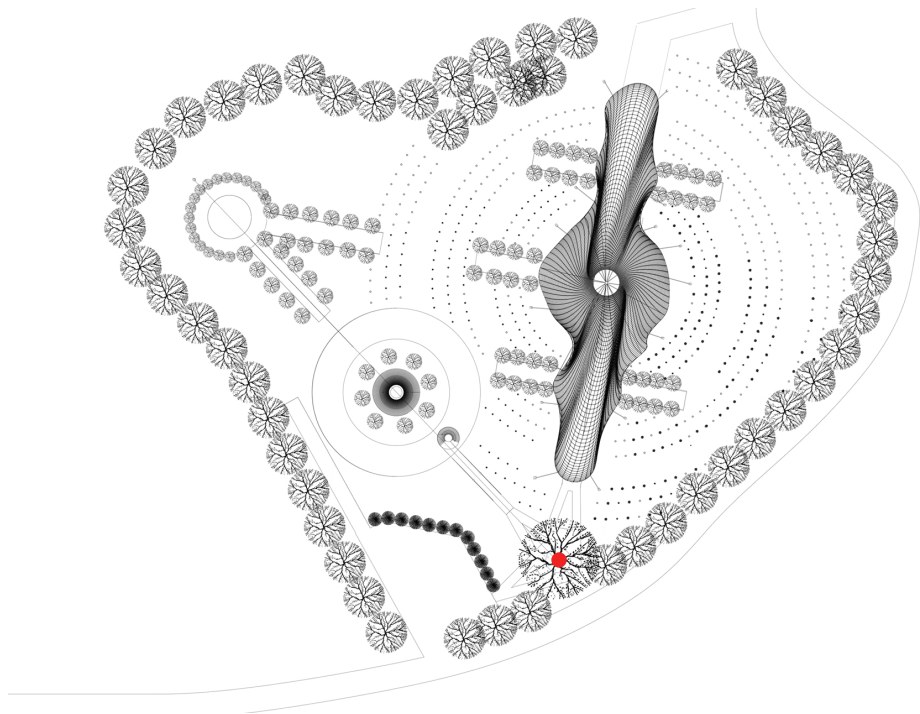
As a contemporary society, we pursue sustainability to mitigate environmental unbalance. However, we rarely reflect on the temporal and cyclical nature of our existence, which exposes the premise of sustainability; continuance through mindfulness and stewardship.

Like much of the world, cities such as San Francisco have evicted the dead from the city. The displacement of cemeteries from the urban fabric threatens to conceal our temporal nature, condemning us to mindlessly dwell in the present with little concern for the wellbeing of the future. This project seeks to reverse this trend by making room for a dynamic urban cemetery that reveals the cyclical essence of our existence, emphasizing a vocation towards community in time.

Located within Golden Gate Park the program embraces a new form of death-care not only as a more ecological method, but as a medium through which to recognize the continuity of Culture through Nature. By bridging the mortality of the body with the growth of the Redwood Forest, this thesis aims to reestablish connections between individual loss and collective life to enhance the profundity of sustainability.



FIGURE 69 | SITE ENTRANCE | JOSH TROJAN

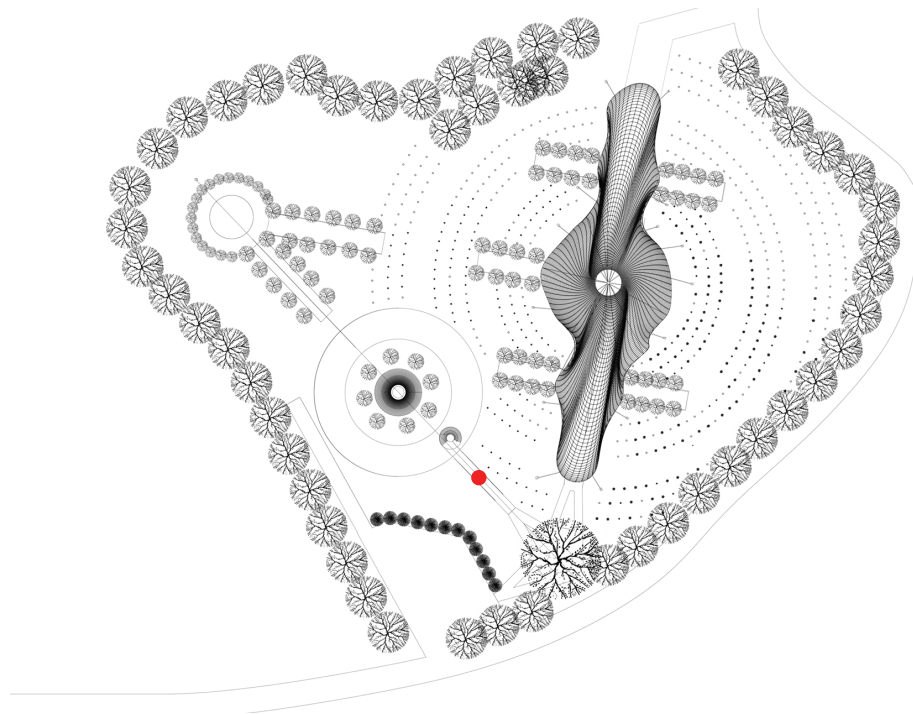


## ENTRANCE

Arriving on the site, one is greeted by the majesty of a single Coastal Redwood towering 300 feet in the air, indicating the beginning and the end of the cyclical journey at hand. Proceeding along the boardwalk at the base of the tree, the path begins to separate from the ground and guide you upwards along an axis pointing towards the final destination.



FIGURE 70 | BRIDGE CROSSING | JOSH TROJAN



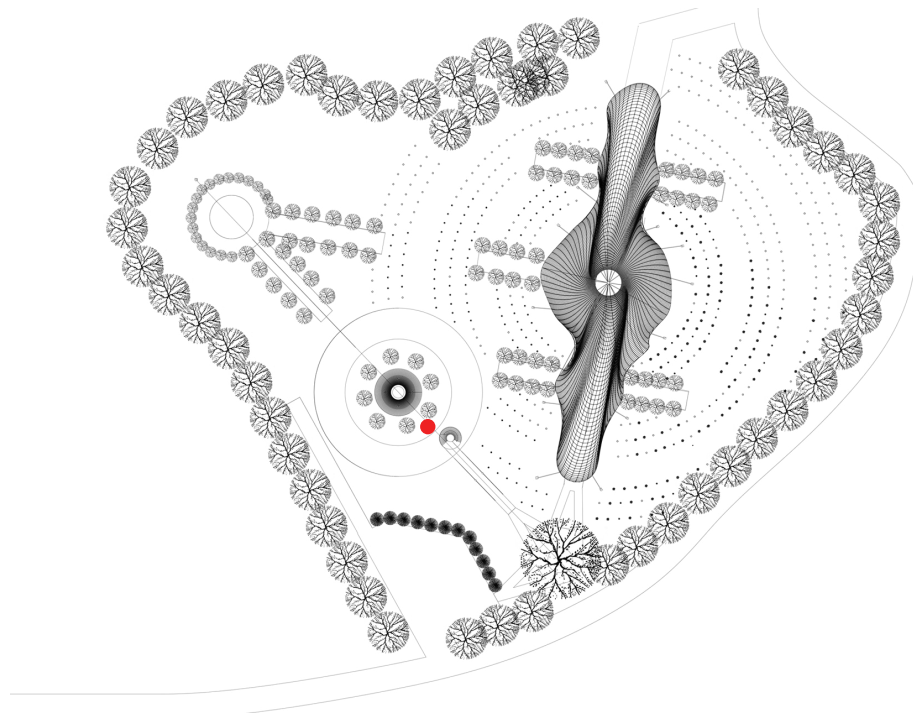
## BRIDGE

Continuing along the pathway, one's view is obstructed as the heat generated within the capsules is redirected over the surface of the cool water below generating a fog and revealing what is yet to come. Reaching the climax of the vertical journey, a circular stairway leads you down into the fog and through an opening in the water below. Reaching the bottom of the stairway you pass under an arch and into an open area in which your view is no longer obstructed.



FIGURE 71 | CENTRAL MOURNING SPACE | JOSH TROJAN





## MOURNING SPACE

The view of the treetops and the cool air emanating from the concrete wall make it evident that you are now below grade. Elliptical capsules protrude from the circular concrete wall that envelops the space. To your left you notice a shrouded corpse and a family paying their last respects before committing a body to a capsule. From the space before you, grows a concrete form, previously concealed. Moving forward, the path begins to guide you further below grade, winding counterclockwise around the central space. Reaching the bottom of the path, you pass beneath the floor that had once supported you, and into the chapel.

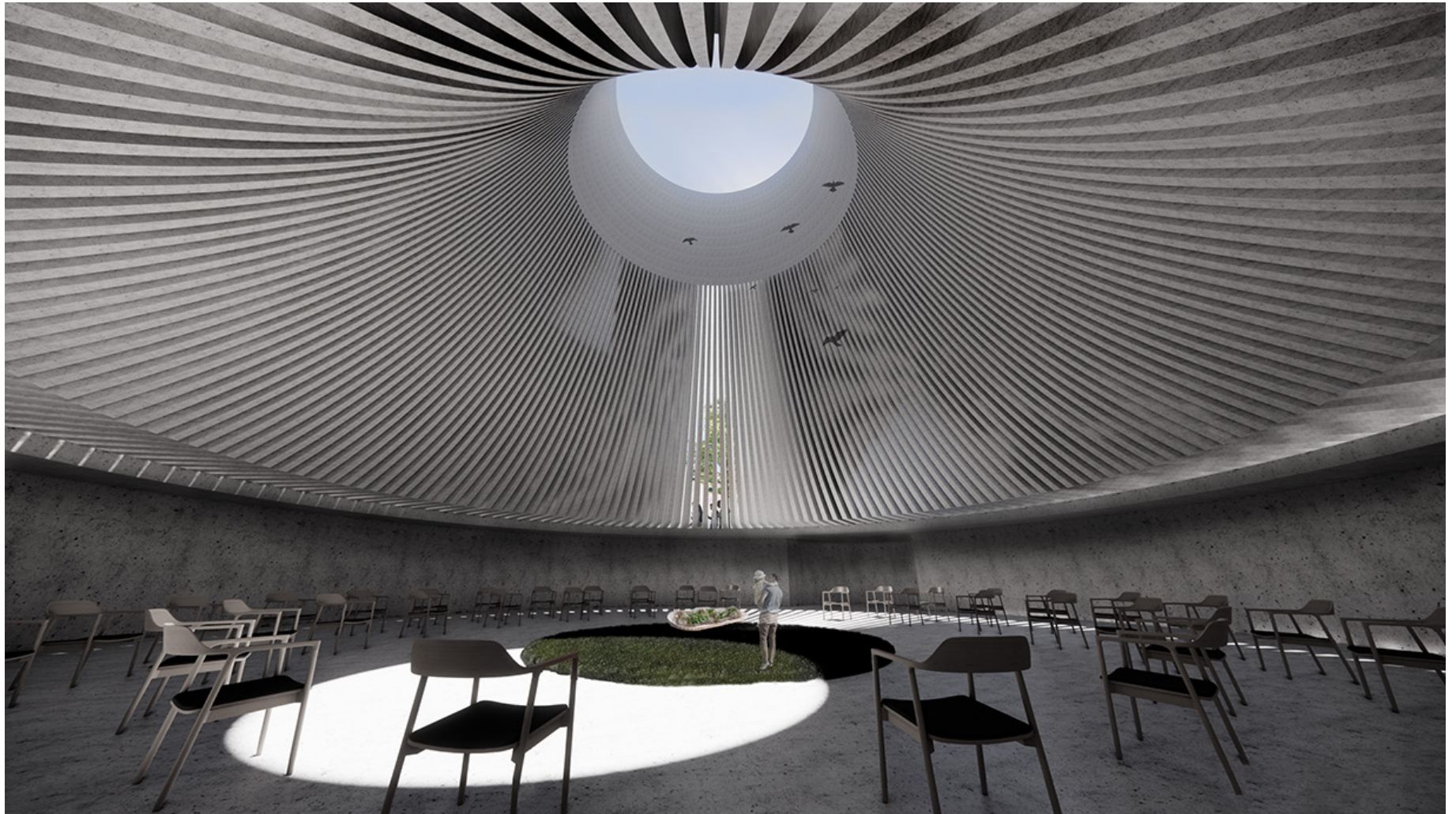
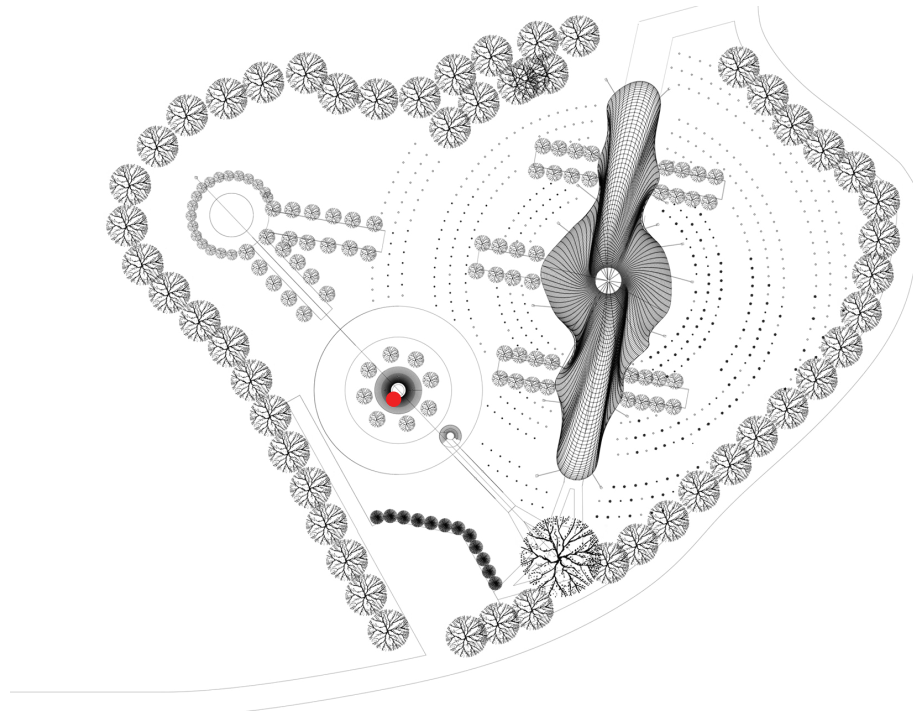


FIGURE 72 | CHAPEL | JOSH TROJAN

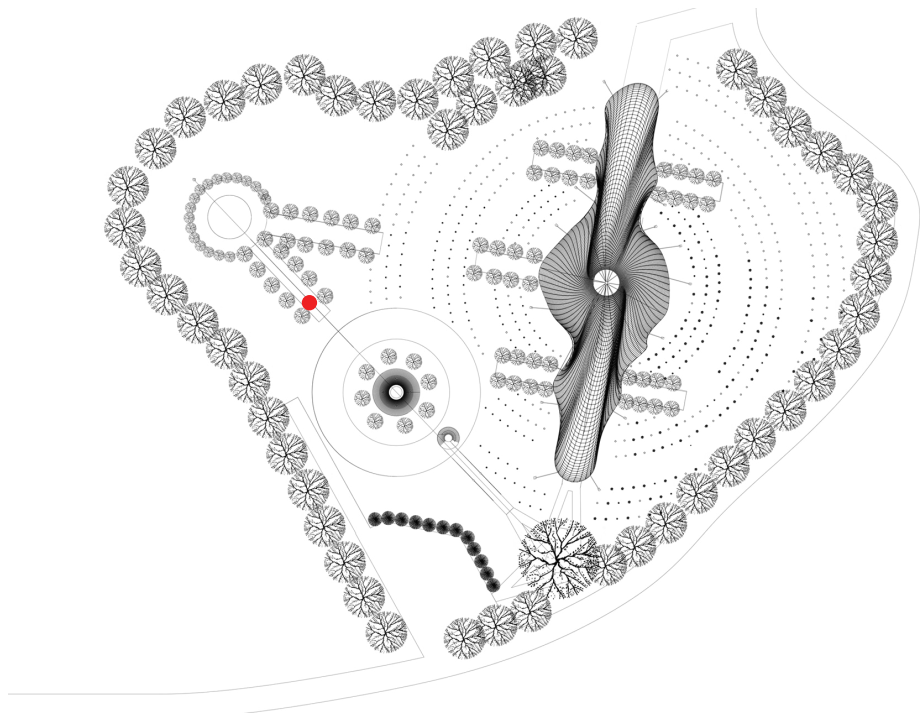


## CHAPEL

The fragmented concrete structure directs your attention to the center of the space where the dearly departed rests in a shroud of white. From above, the sky is made present through a circular opening. Across the vertical expanse lies a patch of earth rising up from the floor. Looking ahead through the fragmented structure you perceive the movement of those around you as they briefly pass by. Moving towards the center, you notice a family member gently sprinkling a mixture of organic matter over the body. Reaching into the container before you, you perform the same action. Following religious or spiritual ceremony, the procession transitions outside as the body is committed to a capsule.



FIGURE 73 | SUBTERRANEAN BRIDGING | JOSH TROJAN



## ENTRANCE

Exiting the centralized space, the sky is concealed and reintroduced as the path guides you towards the surface where a reflection pond that awaits your arrival. Continuing along the path, you pass beneath the redwood you had seen earlier, as you leave the site.

After a month, the site beckons again. Arriving, you proceed down the path that you had taken a month earlier. As you arrive at the reflection pond the path leads you below grade, returning to the surface in the center of the greenhouse.

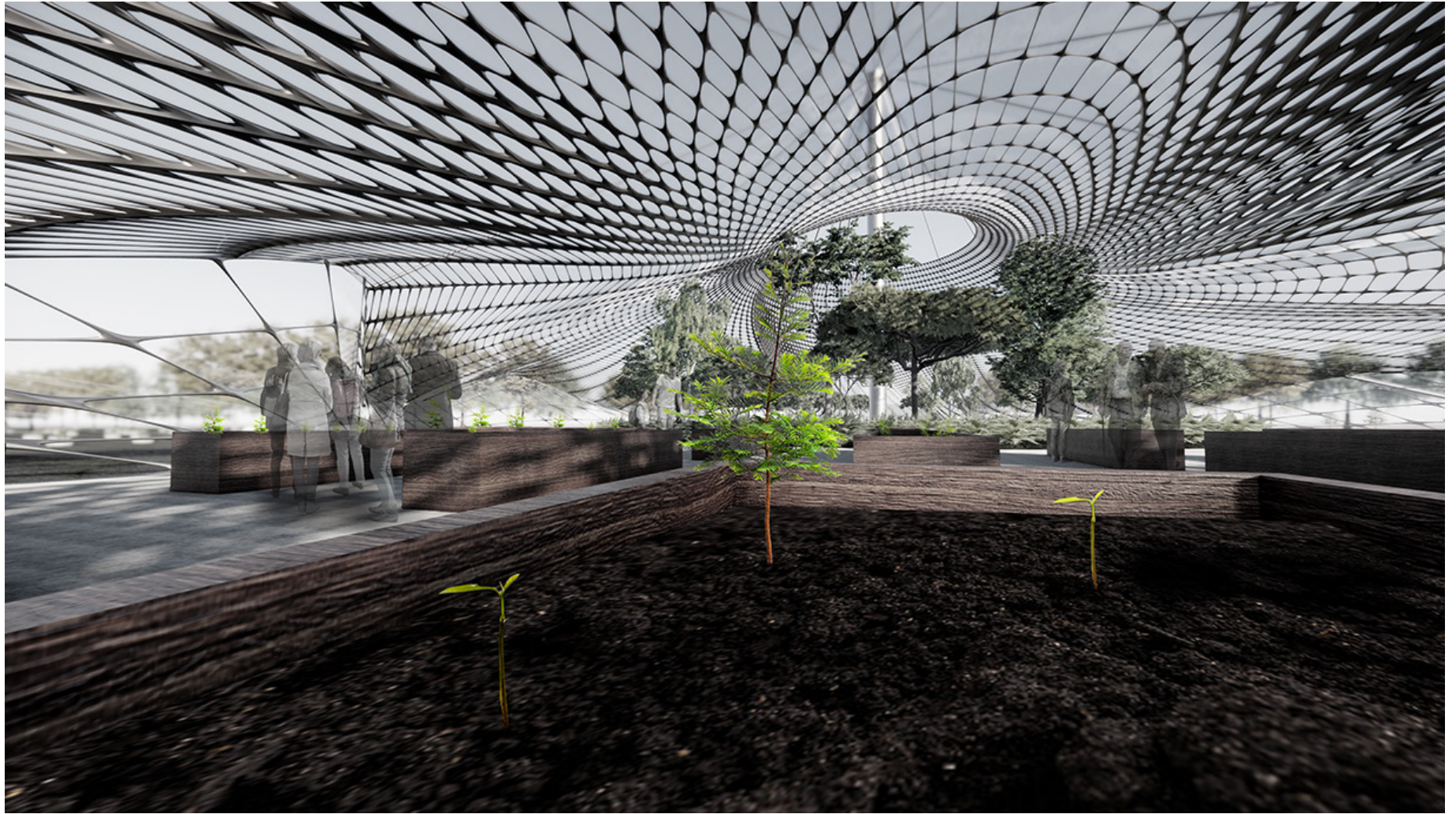
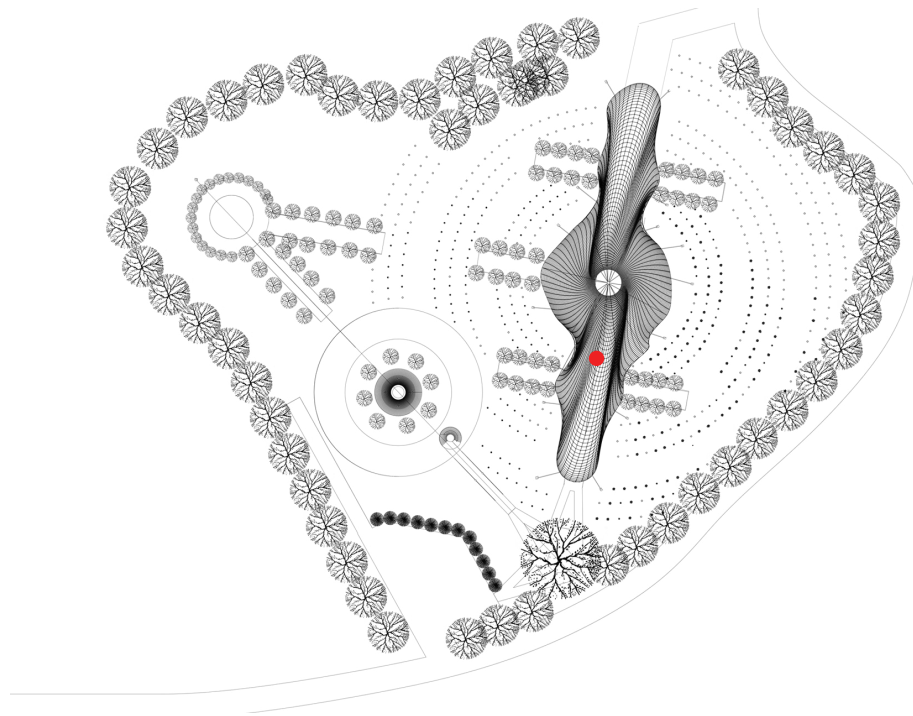


FIGURE 74 | GREENHOUSE | JOSH TROJAN



## GREENHOUSE

Family and loved ones are directed to a planter box beside a container of dirt; the result of the transformation within the capsule.

Together you transfer the dirt to the planter box and plant a seed within the earthy remains. Exiting the site, the redwood reminds you of what is to come.

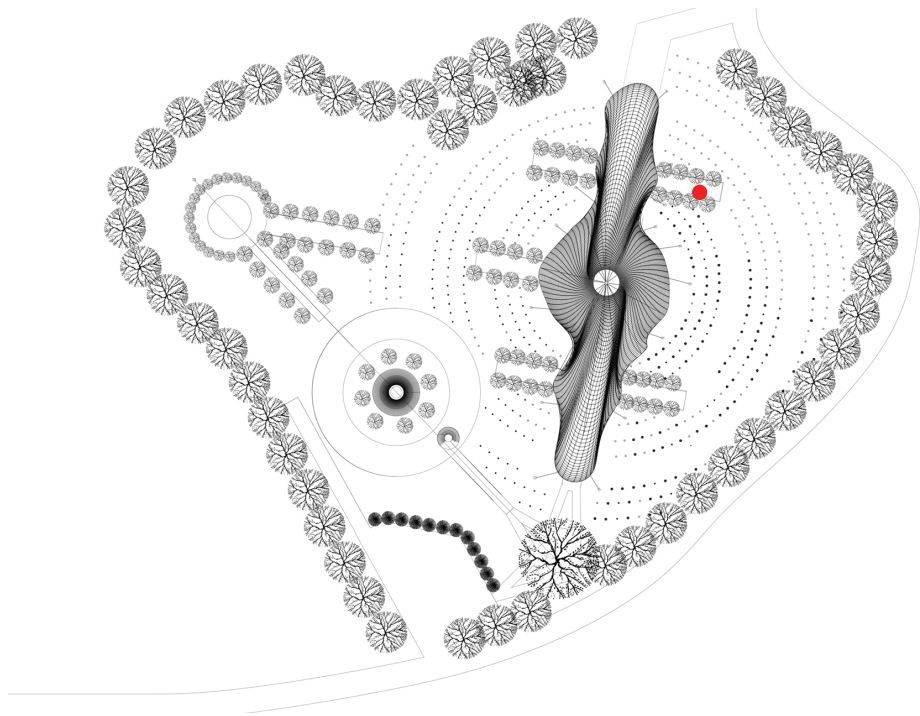
A year later the site calls again. Arriving in the greenhouse, you transfer the seedling to a pot. Transitioning outside, the potted seedling is inserted into a designed receptacle in the ground. Upon leaving the site, you once again pass beneath the giant redwood.

As another year passes you find yourself back at the site, for the next stage in the journey.



FIGURE 75 | TRANSPORTING MEMORIALS | JOSH TROJAN





## NURSERY

Three years and one month after the initial visit, the site beckons once more. Arriving you notice the memorial tree is now four feet tall. After loading the tree into a designed vehicle, you accompany it to its destination in Muir Woods where it is planted by loved ones in a designated conservation area within the National Monument. Together, the trees grow into a natural cathedral, thousands of years old.

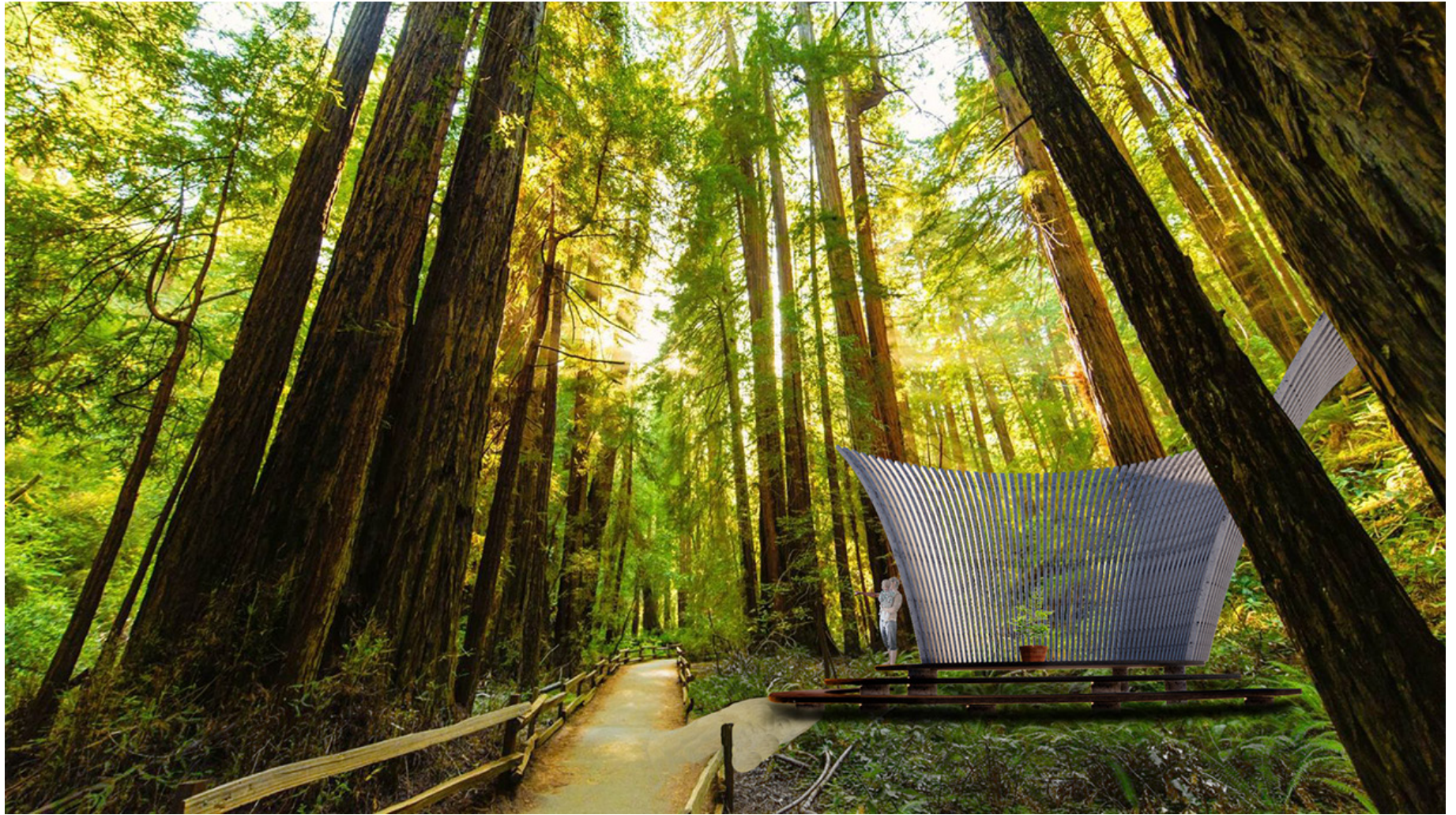


FIGURE 76 | FORREST CHAPEL | JOSH TROJAN



FIGURE 77 | SITES | GOOGLE EARTH

## FOREST CHAPEL

Like Heidegger's concept of the bridge, the program separates one from the here and now by reinstating a symbol of our temporal reality into the urban fabric. The architecture acts as a bridge causing past and future, individual loss, and collective life to lie across from each other. But bridges also bring opposing elements into each other's neighborhood. Sustainability is the bridge that spans such distances, and allows one to participate with the built and natural environment, even after death, exposing the continuum we are all involved in.

In the words of American psychiatrist Gotthard Booth, "**Nothing gives man fuller satisfaction than participation in processes that supersede the span of individual life.**"



"JUST AS BUILDINGS ESTABLISH REGIONS, WREST PLACE FROM SPACE, SO THEY ESTABLISH TEMPORAL SITUATIONS. PLACE THE INDIVIDUAL IN TIME, AND NOT JUST IN TIME BUT IN A COMMUNALLY SHARED TIME, IN HISTORY."  
-KARSTEN HARRIS

"THE RAISING OF PLACES AND THE JOINING OF SPACES"  
-KARSTEN HARRIS

**CONTINUUM: BRIDGING DEATH AND CONTINUITY THROUGH THE MINDFULNESS OF DWELLING**

AS A CONTEMPORARY SOCIETY, WE PURSUE SUSTAINABILITY TO MITIGATE ENVIRONMENTAL CRISIS. HOWEVER, WE RARELY REFLECT ON THE TEMPORAL AND CYCLICAL NATURE OF OUR EXISTENCE, WHICH EXPOSES THE PREMISE OF SUSTAINABILITY: CONTINUANCE THROUGH MINDFULNESS AND STEWARDSHIP.

LIKE MUCH OF THE WORLD, CITIES SUCH AS SAN FRANCISCO HAVE EXPULSED THE DEAD FROM THE CITY. THE DISPLACEMENT OF CEMETERIES FROM THE URBAN FABRIC THREATENS TO CONICAL OUR TEMPORAL NATURE, CONDEMNING US TO MINDLESSLY DWELL IN THE PRESENT WITH LITTLE CONCERN FOR THE WELLBEING OF THE FUTURE. THIS PROJECT SEEKS TO REVERSE THIS TREND BY MAKING ROOM FOR A DYNAMIC URBAN CEMETERY THAT REVEALS THE CYCLICAL ESSENCE OF OUR EXISTENCE, EMPHASIZING A VOCACTION TO WOODS COMPLETION IN TIME.

LOCATED WITHIN GOLDEN GATE PARK, THE PROGRAM EMBRACES HUMAN COMPOSTING NOT ONLY AS A MORE ECOLOGICAL METHOD OF DEATH-CARE, BUT AS A MEDIUM THROUGH WHICH TO RECOGNIZE THE CONTINUITY OF CULTURE THROUGH NATURE. BY BRIDGING THE MORTALITY OF THE BODY WITH THE GROWTH OF THE REDWOOD FOREST, THIS THESIS AIMS TO REESTABLISH CONNECTIONS BETWEEN INDIVIDUALS AND COLLECTIVE LIFE TO ENHANCE THE PROFUNDITY OF SUSTAINABILITY.

"MENDING THE SOULS OWNWORK, WE DESTROY IT AND HARM OURSELVES."  
-JOHN DEWEY



BRIDGING THE PAST WITH THE FUTURE IN THE THICK PRESENT, THE REDWOOD TREE MARKS THE BEGINNING AND END OF THE LIFE JOURNEY.



SAVING GODS TO THE BODY AS WE KNOW IT



AS CYCLICAL PROCESS IS REVEALED THROUGH THE PROGRESSION OF SPACE AND TIME



AS THE UNFOLDS, THE CEMETERY AND THE FOREST ARE TRANSFORMED AS THE MEMORIALS ARE OPENED AND RESPONDING CONTINUOUSLY

HEAT CAPTURED FROM THE DECOMPOSITION PROCESS WARMS WATER IN THE TRANSFORMATION WHEEL, THE WHEELS AND CIRCLES A PARTICIPATE OF A SYMBIOTIC FOOD WEB OF THE INTERIOR.

**THANK YOU**

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## PERSONAL IDENTIFICATION

# JOSHUA R. TROJAN

hometown | **Minnetonka, Minnesota**



FIGURE 63 | PERSONAL PICTURE

## PREVIOUS STUDIO EXPERIENCE

### 2ND YEAR

Fall 2017 | Charlott Greub  
Tea House | Fargo, North Dakota  
Boathouse | Minneapolis, Minnesota

Spring 2018 | Darryl Booker  
Small Dwelling | Cripple Creek, Colorado  
Birdhouse | Fargo, North Dakota

### 3RD YEAR

Fall 2018 | Regin Schwaen  
Oscar-Zero Visitor Center | Cooperstown, North Dakota  
Fjordlands Competition | Norway

Spring 2019 | Niloufar Alenjery  
Fairy-Tales Competition | San Francisco, California  
Dennis Lanz Competition | Moorhead, Minnesota

### 4TH YEAR

Fall 2019 | Cindy Urness  
Highrise Competition | Miami, Florida

Spring 2020 | Amar Hussein  
Marvin Windows Competition | Fargo, North Dakota  
Light Rail Station | Minneapolis, Minnesota