STRUCTURES BECOMING SHADOWS:
EVOKING AN EMPATHETIC PERCEPTION THROUGH
THE CONSTRUCTION OF MOURNING

Megan Ward
STRUCTURES BECOMING SHADOWS:
EVOKING AN EMPATHETIC PERCEPTION THROUGH
THE CONSTRUCTION OF MOURNING

A Design Thesis Submitted to the Department of Architecture and Landscape Architecture of North Dakota State University.

By: MEGAN WARZ

In Partial Fulfillment of the Requirements for the Degree of Master of Architecture.

Primary Thesis Advisor
Thesis Committee Chair

[Signatures]

[Date: May 10th, 2013]
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ABSTRACT

Nature, Space, Memory, Burial, Time
The thesis responds to constructive thought and perception around death and the mourning and grieving processes of life. The typology being a crematorium/columbarium will emphasize this inevitable process in life and engage one’s awareness of nature, space, memory, and self. It will assimilate the rituals of history, burial and time specific to Whitefish, Montana. The unifying idea is the embodiment of nature with inevitable courses.
PROBLEM STATEMENT
Through design, how can we create an individual mourning experience that evokes one’s perception of nature, space, memory, self and time while being empathetic to the ritualistic mourning and grieving processes inevitable in life’s course?
STATEMENT OF INTENT
TYPOLOGY: CREMATORIUM / COLUMBARIUM

CLAIM
Through deliberate and empathetic processes and approaches taken in design, the resting place for ones passed can help in the healing process after death occurs.

PREMISES
As designers, it is our responsibility to question if this is truly possible and discover the answer through much research and empathetic reasoning. Through these practices we allow the discovery to lead us into an informed understanding of the necessary experiences.

The role of architecture becomes a collection of culture, history, memory and place. It contains many stories and over time, it presents its own story to tell. It evokes memories and begins to create new ones.

The process of mourning requires thoughtful spatial gestures and experiences. It calls for intimacy and sense of the mystical.

THEORETICAL PREMISE / UNIFYING IDEA
Through knowledge-based discoveries and design processes, we are able to invite and evoke a participation with spaces created.

PROJECT JUSTIFICATION
Death is an inevitable process in the cycle of life. Remembrance is inherent to our human needs. Being able to design an empathetic spatial experience is crucial to the way we remember and the way we keep moving forward.
NARRATIVE

“What life you left, if any, is imprinted on me, your shroud fused with me and refuses to be sorted out… this life which is: your smell, your taste, the feel of you.” – Jacques Roubaud
Upon preliminary research and discoveries of the subject, a new understanding of mourning, remembrance and healing emerged in an empathetic sense. The beauty of human life is within our differences. But also lies in the deeply woven fabric of our nature. We desire to love and be loved, to remember and be remembered.

The thesis examines the psychology of mourning and design methods taken when considering the affects and anguish of death. Birth and death are two inevitable processes in life. It unites all people and is a sense known and felt by all. The laments of death interrupt our daily lives. It physically, mentally and emotionally overcomes the body and tires the spirit. Death interrupts our perception of time and obstructs the flow from past to future. It unravels the “living fabric of our lives, our enfleshed sensitivities (Merleau-Ponty, 2000).”

Architecture and design have the incredible power to evoke particular emotions and sensitivities. It contains historical knowledge and can transform past into present. Each construction tells a story of place and time. It connects us with memories and give birth to new ones.
“Architecture has its own realm. It has a special physical relationship with life... as an envelope and background for life which goes on, in and around it, a sensitive container for the rhythm of footsteps on the floor, for the concentration of work, for the silence of sleep.”

-Peter Zumthor in Atmospheres

When death occurs, life is transferred from the body of the deceased to the body of the mourner in the form of memory. Memory is a living and moving entity of the mind. In order for memory to remain, it has to involve elements of life. Architecture is able to provide this through the dancing shadows on the wall, the movement of feet tracing the grooves of wood floors and the niche that holds the relics and ashes of the loved one. When our perception of time is obstructed by pain, these elements of life become an indication of memory, time and healing.

The thesis intends to help in the healing process after death occurs. Through deliberate and empathetic design approaches, the construction provides a home for loved ones passed and offers a continuation of their stories.
Why is it important to have a place for memorializing?

It provides a focal point for memorializing the deceased. Remembrance is entwined in our human nature. Throughout history, remembrance and memorialization of the deceased has been a key ritual of all cultures and groups of people. Having a permanent memorial serves an important emotional function to help bring closure and allow the healing process to begin.

The urn becomes a frame of memory in honoring the lives of the deceased. Through providing a place for the deceased, we give them life. We give our memories a permanent home. This home becomes a continuation of their story, offering a safe-haven to both the living and the dead.
USER/CLIENT DESCRIPTION
The primary users of the construction will be the deceased, mourners and visitors of the deceased and caretakers of the facility.

The clients include citizens of Whitefish, Montana and those who are arranging services or choosing memorials.
MAJOR PROJECT ELEMENTS
OUTDOOR PARKING
Separated from construction and approached from pathway

MEMORIAL GARDEN
Outdoor commemoration space connected by path

OUTDOOR COLUMBARIUM

THRESHOLD
Point of entry

RESTROOMS

FACULTY SPACES

GENERATOR/BOILER/FAN

MAINTENANCE ROOMS

SERVICE LOADING

SILENCE ROOMS

PLANNING OFFICES

CREMATOR/Y/COMMITTAL ROOM
Space where bodies are exposed to flame

URN PREPARATION

REMEMBRANCE SPACE
Space for ceremony

MOURNERS POINT
Space for reflection and remembrance

MEMORIAL RECORDS
Index gallery of deceased

SKY ROOM COLUMBARIUM

PATHS
“How shall we respond to man and his objects affixed to the surface of the earth? Everything we build must be adjusted in relation to the ground, thus the horizon becomes an important aspect of architecture. My interest has always been where to put man in relation to the horizon in a built environment. What qualities shall he draw out of the landscape?”

-Sverre Fehn (Fjeld, 2000)
SITE INFORMATION

WHITEFISH, MONTANA
FLATHEAD COUNTY
Outside Glacier National Park
WHITEFISH, MONTANA
FLATHEAD COUNTY
Outside Glacier National Park
2420 East Lakeshore Drive
This particular site sits North of Downtown Whitefish and begins the more private and residential area of the town. It allows for a more intimate relationship with its surrounding typology and land while still being connected to the rest of the town through Whitefish Lake. The site sits directly east of the lake and is located in a small cove, making the experience even more intimate.

On arrival, there is no sign, no mailbox and no visible parking. The threshold is canopied by tall pine trees making the site seem smaller than it truly is. The tree provide a shadow that gives it its sense of intimacy and privacy. After entering, a hill drops down to a clearing in the center of the site. The trees brush off to the sides and rays of sunlight are revealed.
There is a small hooded path to the North and South of the site, barely noticeable that one could imagine is visited by the occasional cross-country skier or wanderer. The ground holds a vibrant light brown dirt with pines and leaves fallen from trees above and small colorful rocks. The sound of birds whistling and squirrels playfully roaming fills the site with a sort of distant echo. The sound of the lake nearby swishes as the a small gust of wind lightly caresses a hand. The smell of pine and fresh air are evident year-round. All sounds of traffic disappear.

Snow lightly dusts the branches of trees and lands on the clearings of the site. While walking toward the lake, the trees become more dense as to mimic the threshold of the site. A full story. The water greets the land with small gestures, each more welcoming than the last. The sight of open space and quaint lodging fills the mind with peace and a connection with the community.

Glacier National Park is only a 5 minute drive from the site and is filled with so much life and beauty. Whitefish is filled with things to do, places to see and people to meet.

There is a sense of community in the presence of Big Mountain Ski Resort above on the East mountains. The image of laughter and family fill the mind with ease while fixated on thoughts otherwise. The people of the town are respectful while still being friendly.

Whitefish exudes a sort of charm that is found nowhere else. This charm is displayed in the people, the lakes and forests, the historic buildings of downtown as well as its nearby attractions. This site is ideal for celebrating life even in times that are less ideal.
PROJECT EMPHASIS

Mourning and Loss

Death and the Perception of Time

Giving Death Life and Memory Through Shadow

Redirecting the Horizon
PLAN FOR PROCEEDING
RESEARCH DIRECTION
Extensive research is crucial through all phases of the design process as well as empathetic thought and reasoning.

DESIGN METHODOLOGY
The research for this particular thesis is most effective through a qualitative approach. Initial design approaches will be thoroughly influenced by the psychology of the mourner and a participation with the site and its atmosphere.

DOCUMENTATION
Process and information will be gathered through research, sketches, models, and most importantly, intuitive perception and intrinsic quality.
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PREVIOUS STUDIO EXPERIENCE
SECOND YEAR

FALL 2009
Instructor: Stephen Wischer
Teahouse, Boathouse

SPRING 2010
Instructor: Phil Stahl
Montessori School, Chair, Dwelling

THIRD YEAR

FALL 2010
Instructor: Cindy Urness
Food Co-op, Wellness Center

SPRING 2011
Instructor: Ron Ramsay
Shaker Barn, Korean Consulate

FOURTH YEAR

FALL 2011
Instructor: Frank Kratky
Highrise

Instructor: Kent Kapplinger
Printmaking Studio

SPRING 2012
Instructor: Ron Ramsay
Agincourt Crematorium

Instructor: Jason Moore
Woodcut Printmaking Studio

FIFTH YEAR

FALL 2012
Instructor: Ron Ramsay
Christ the King Chapel
PROGRAM DOCUMENT
THEORETICAL RESEARCH
Death is an inevitable part in the cycle of life, a universal phenomenon. It is one fact we cannot deny. However, the experience and perceptions of death are dependent on the individual. Many subjects relating to death are difficult to define because of its uncertainties and questions. Why is this happening to me? Why did they have to die? What happens after we die? Georg Simmel expresses, “Death appears to most humans as a dark prophecy that hovers over their lives, but which only effect them when it becomes a reality. In reality, however life and death are from the outset and inherently conjoined.”

(A Western depiction of deaths as a skeleton carrying a scythe.)
DEFINING DEATH

Defining death is an incredible challenge and often needs to be categorized into different fields of subject such as medical conclusions, cultural rituals, etc. Birth and death tie all humans together yet the beliefs, practices, and mourning processes all seem to differ for all.

The most widely accepted definition of death is the loss of brain function that holds thoughts and perceives through the senses.

“Understanding death doesn’t necessarily take away our anxieties or fears about our own death or our sadness about other people’s deaths. But it does help find ways to continue on with our lives.”

-Penny Colman in Corpses, Coffins, and Crypts
When the body dies or loses life, it becomes slowly unrecognizable. We relate to others through a give and take, through a sensual embodiment and through the language of our bodies. We are able to perceive another’s hora or essence incredibly quickly. When the life has left the body, surrounding elements take on that life evoking particular memories. But this phenomenon occurs in our daily lives. When we are parted from a loved one, we begin to recognize them in the melody of a song, in a piece of clothing left behind, through a certain smell. It is through a particular artefact or relic that we are able to live on. In order for memory to remain, it has to involve elements of life.

When a body is placed in a coffin and buried beneath the earth’s surface, all that remains is the outline of disrupted earth and a personalized rock emerging from the ground. It is a place to visit but it doesn’t necessarily become a home or safe-haven to either the mourner or the deceased. All life is buried in a fixed position below the earth’s surface.
“We have attacked the ground. We have cut into the surface of the earth and forged rooms with no shadow... And, so came the great offer: Give the earth back to itself...

Bringing the object up to the light gives it a new life with an ever-moving horizon... The moment it is again offered to its horizon, it also finds it’s shadow.”

-Sverre Fehn in The Pattern of Thought

THE CONTINUATION

The urn becomes the focal point in the columbarium. The niche provides a frame to house it. Through providing a place for the deceased, we give them life. Memories are given a permanent home. This home becomes a continuation of the memory, writing another chapter in their story. It offers itself as a safe-haven to both those residing in it and those who visit.
The role of architecture has continually been to serve the masses and help people. The construction is a spatial participant in this event, allowing a story to unfold.

This construction is the ultimate opportunity to celebrate life; it’s history, rituals, experiences and relationships. But this doesn’t come without extensive research to be done.

How can we construct a space for the shadow of death when it no longer has its place?

How are we able to materialize death into a particular experience?

How can we create a respectful experience for mourners and help with their healing process?

Death is a deconstruction of life, of experience, or memory, thought and time. But in designing the crematorium/columbarium, we are able to give death life through construction.
BONES AND ASHES

“In order to relax we must burn”

- William Bryant Logan in Dirt: The Ecstatic Skin of the Earth

When our bodies die, dead muscles contract. William Bryant Logan explains it as an effort for our living muscles to relax. There are many options for the memorializing of the dead including burial, cremation and embalming.

Cremation is to reduce to ashes by burning. In the cremation process, “the body is placed in a wood coffin, slid into the cremation chamber, and the fire is turned on that can heat up to 2,500 degrees F. First the coffin is burned and then the body, which, like every human body, contains water, carbon-based soft tissue, and burns the bones into fragments. The whole process takes somewhere between 2.5 to 3 hours and yields somewhere between 6 to 9 pounds of bone fragments. Today most cremated remains are processed into smaller pieces. According to some state laws, cremated remains have to be processed to almost a powder if they are going to be scattered.”

- Penny Colman in Corpses, Coffins, and Crypts
“Prehistoric people practiced cremation, and by the early Stone Age it was commonly used in northern Europe and the Near East. During the next thousand years, cremation spread into the British Isles, Spain, Portugal, Hungary, northern Italy, and Greece. Around 600 B.C. E. cremation was adopted by the early Romans, and as the Roman Empire expanded, the practice of cremation spread. Jews, however, continued to practice their ancient tradition of inhumation, or in-ground burial. Several centuries later so did the early Christians, who viewed cremation as a pagan practice of the Greco-Roman cultures. As Christians multiplied, so did the practice of inhumation, and by C. E. 400 in Europe it had completely replaced cremation, except during times of plagues and wars when dead bodies piled up. Eventually, however, in the late 1800’s cremation was revived because rapidly growing populations had resulted in overcrowded cemeteries that were creating terrible odors and hazardous health conditions. While cremation went in and out of favor in Europe, it has been in practice without interruption in other countries such as Japan and India, where most corpses are cremated. In the United States cremation didn’t take hold until the mid-1900’s. Since then the number of cremations has steadily increased.”

-Penny Colman in Corpses, Coffins, and Crypts
THE SACRED EXISTENCE

“Human life is not felt as a brief appearance in time, between one nothingness and another; it is preceded by a pre-existence and continued in a post-existence.”

-Mircea Eliade in *The Sacred and the Profane*

Pre-existence and post-existence are two stages of human life that remain concealed, yet hold much fascination to many. Even historically, the dead body is of much concern. In many cultures and religions, death is perceived as a rite of passage into a further development of existence.

In modern Western culture, the body is no longer seen significant after death. The body is but a simple vessel but its treatment of disposal still deserves much dignity and respect. The importance of the body and its “sacredness” is a significant part of many religious beliefs and cultural traditions.
(Grave of Edwin George Baejter Sculpture by Hans Shuler in Green Mount Cemetery in Baltimore, Maryland)
One of the most difficult experiences in life is the process of mourning after the death of a loved one. The stages of this process coincide with particular situation, time and place. All mourning processes are unique yet patterns reveal as these moments arise.

A series of factors are included in grieving processes: The relationship to the deceased, type of death, time and place, religious beliefs and our own personalities. The similarity is that we all go through these feelings at one point or another and there are ways to help each other cope through these hard times.

Each society has its own rituals and traditions for dealing with this process. For example, in Judaism, mourners sit for seven days (Shivah) where they refrain from all activity to focus on grief and moving forward. In some places, grief involves a whole community and becomes a public process. In other situations, grief is conveyed symbolically and becomes a more quiet and personal process. In either of these processes, architecture has historically shown its helpful nature in using design to honor the dead.
Architecture and design have been directly connected to the passing of loved ones through memorials, cemeteries, coffins, urns, mausoleums, columbarium and much more. The particular way we honor the dead is also unique to all of the series of factors in grieving, each situation unique.

Therefore, as we begin the process to design and build meaningful constructions, a certain empathetic knowledge and intuition must be prevalent.
Mourning is an exceptional circumstance that requires a very empathetic translations and sensual perception into spatial experience. The typology itself goes far beyond the usual shelter necessary for living. Architecture gives form to what we most deeply value in life. Memorialization is the chance to create beauty in response to death.

It is of our human nature to fell the need to honor the dead and create memorials to those we love. Remembrance is crucial in these times and architecture has its own unique way of helping those through this process.

This process of designing for remembrance takes on the ultimate responsibility of researching the psychology and sociology of mourning, the history of burial and cremation, economic solutions, site analysis and much more.
TYPOLOGICAL RESEARCH
CASE STUDY ONE: KOSHINO HOUSE BY TADAO ANDO
CASE STUDY TWO: THERME VALS BY PETER ZUMTHOR
CASE STUDY THREE: BRION VEGA CEMETERY BY CARLO SCARPA
KOSHINO HOUSE

TADAO ANDO

Project Type:  Private House

Location:  Ashiya, Hyogo, Japan

Years of Construction:  1980-1984

Size:  794 sq. ft.
circulation  geometry  circulation to space
CASE STUDY ONE

plan to section/elevation

structure

hierarchy

natural light

massing
KOSHINO HOUSE
TADAO ANDO

CASE STUDY ONE
Elements:
-Made up of two parallel, rectangular concrete boxes, connected together by an underground passageway
-Fan shape structure (added three years later)

Program:
-Atelier
-Dining Room
-Living Room
-Court
-Closet
-Private Rooms (5)
-Tatami Rooms (2)
-Entrance
-Study
-Master Bedroom
-Void

Materials:
-Smooth Concrete Frame
-Glass Openings
Tadao Ando’s, Koshino House displays a wonderful minimalism, relation to its particular site and topography and a playful manipulation and exhibit of light. Ando uses two concrete masses to express the most crucial and fundamental elements of its surrounding site. Centrally located is a courtyard that allows light to penetrate to all areas of construction and topography. Areas of traffic within the building are delicately designed with small apertures of light peaking from the exterior to interior of the building. The recta-linear forms are subtly grazed with a curved addition. This space gracefully contradicts the straight lines and gives the atmosphere are new rhythm.
The house is located in a small town near Osaka and is built within the hills of the city. It is located on a densely wooded mountainside and is imbedded in the ground with sharp geometric shapes. Its deep connection to the earth allows for a more private atmosphere. The light strikes all surfaces, outlines the architecture and gathers shadows giving the space much depth. This allows visitors to discover how spaces relate and how infinitely linked and connected we are to the land, the construction, the atmosphere and to other people.

Tadao Ando’s brilliance in designing minimal constructions that display light continues to inspire my way of designing and thinking. His spaces elude to the fundamental elements of nature and life. In designing a site for the mourner, light plays a crucial role in connecting spaces, memory, time and being. His designs prove that architecture can create meaningful and lasting impressions on its inhabitants. This particular study, as well as Zumthor’s Therme Vals, are lasting design that will always relate to the being.
**THERME VALS**

**PETER ZUMTHOR**

Project Type: Thermal Bath/Spa

Location: Graubunden Canton, Switzerland

Years of Construction: 1990-1996

Size: 35,000 sq. ft.
CASE STUDY TWO

plan to section/elevation

structure

natural light

massing
THERME VALS
PETER ZUMTHOR

CASE STUDY TWO
Elements:
- Series of Pools, Baths, Fountains, and Stones

Program:
- Entry/Exit
- Utility
- Make-up Room/Changing Room
- Rest rooms/Showers
- Sweat Stone
- Indoor Bath (32 Deg. C.)
- Outdoor Bath (36 Deg. C.)
- Stone Terrace
- Spring Grotto (36 Deg. C.)
- Fire Bath (42 Deg. C.)
- Cold Bath (14 Deg. C.)
- Shower Stone
- Flower Bath (30 Deg. C.)
- Rest Space (3)
- Outdoor Shower Stone
- Massage Space/Spa

Materials:
- Stone
- Water
Peter Zumthor’s Therme Vals are widely known for its intimate atmosphere, strong relationship to its local site and topography and its unique ritual and celebration of the act of bathing. The design process of the Therme Vals was regarded with much praise due to its poetic narrative and overall embodiment of understanding materials and rituals. Zumthor developed the baths through a series of rectangular stone masses that sit within the site of a mountain in Switzerland. The atmosphere serves a full sensual experience due to its many elements.
There is an intentional absence of excess features that are closely correlated with bathing or a bathhouse. Zumthor’s sensitivity to the fundamentals as well as details proves a most empathetic design. Ultimately, the buildings succeed a sense of tranquil meditation, which is most necessary to the particular building typology and site. Zumthor reinvigorates and awakens the sensual history and meaning of bathing through architecture and design. The Therme Vals approach an experience that is most ideal in the practice of design, which most buildings strive to reach. The construction goes far beyond its preliminary goals and exudes its own presence.

In my quest to achieve a most intimate level of experience and atmosphere, Peter Zumthor’s Therme Vals prove an inspiration that no other construction can provide. As I read descriptions, plans and executed studies of this design, I became entranced with it overwhelming beauty. It holds a close relationship to the power of remembrance and in particular, my design goals for the crematorium/columbarium. They are similar in the fundamental goals I would like to achieve, the minimalist view on excess and the beauty in details that give the atmosphere its tranquil exuberance.
BRION VEGA CEMETERY
CARLO SCARPA

Project Type: Cemetery
Location: San Vito d’Altvole, Italy
Years of Construction:
Size:
CASE STUDY THREE

structure

hierarchy

natural light

plan to section/elevation

massing
BRION VEGA CEMETERY
CARLO SCARPA
Elements:
- Series of Tombs, Chapels, Rivers

Program:
- Proploeum
- Meditation Platform
- Tomb of the Brion Couple
- Tomb of the Brion Family
- Chapel Passage
- Chapel
- Village Entrance to the Chapel
- Carlo Scarpa’s Tomb

Materials:
- Concrete
Brion Vega Cemetery is known for its astonishing detail and incredibly use of concrete. He uses elements such as water to help direct visitors to certain spaces. It emanates a sense of formal poetry. He explains that the place for the dead is essentially a garden. He displays different ways to approach death in beautifully social way. The movement of this construction allows the mourner to keep moving, to notice details as well as the bigger picture of life.
The spaces are broken up using a segmented path. The cemetery is enclosed from the city and exists as its own village. It abandons the grid, which allows a journey to be created. Scarpa uses texture in the concrete forms to symbolize the path and nature. They step back to reveal the upper skylight as the brick paths lead to new findings. He uses two intertwined circles at the threshold of the construction symbolizing life and death, together and apart, male and female. Light is directed into the building through a series of differing skylights at the end of certain pathways. This construction proves to show an empathetic understanding of the mourner.

Brion Vega Cemetery is a wonderful example; not only in the fact that it celebrates life and death, but also with the elements he chose to display and the way he did this. He honors the dead but creating a story through his architecture. The pathways lead to water and nature. The light penetrates through to showcase certain space. The shade gives a respectful sense of mourning and remembrance. Much like Zumthor and Ando, Scarpa utilizes the elements and characteristics of the land surrounding their constructions. The designs are filled with much poetic meaning and stretch beyond their building typologies.
Throughout preliminary design research and initial design processes, I felt inclined to seek typological case studies and aids that were of the some philosophical and psychological nature this thesis presents. Death and mourning were among the top searches inquired. The subject and typology seemed to be tiptoed around especially when it came close to the realm of the incinerating of dead bodies. Without this initial trouble, it would have taken me more time to ask myself what its feels like to really mourn. This feeling is not one unknown even if it does not directly correlate with the death of a loved one. We have all felt this, and this is why we have felt the need to remember through memorials, statues and other personal relics. It took a while for me to sit down and write the claims because I didn't want to assume. But once again, this mourning and need for remembrance is all too common and felt on a daily basis.

Tadao Ando is the master of minimalism. His attention to light is one that transcends any empathetic reasoning. His designs seem to rid of the clutter that gets to the point, the important things, only the necessary.

Peter Zumthor is the most empathetic thinking I’ve encountered. His attention to detail and intuitive awareness creates such mindful and awe-inspiring spaces.

Carlo Scarpa’s methods and decisions are less obvious to me than Ando and Zumthor. His ability to incorporate such delicate subtleties with the weight of its materiality is more than impressive.
I chose these three particular case studies not only for their overall design quality and experience but also for the constant empathetic and thoughtfulness executed within the works of these three known designers.

It shows that humans ultimately feel a lure to the spirit, the essence and hora of a living being. Without these people, I would not be able to imagine through their designs. Without Peter Zumthor’s Bruder Klaus Chapel, I don’t know that I would have truly known what great architecture is yet or that a true architectural experience existed.
HISTORICAL CONTEXT
The roads and trails that currently exist throughout Whitefish, Montana and Glacier National Park trace the routes taken by Native peoples, such as the Blackfeet tribe, that have lived there for millennia. Campgrounds take the place of where these natives rested, hunted and gathered.

The colonization of western North America meant replacing old traditions with new waves of change. The realization of resources such as gold, silver and oil brought prospectors all over the Rockies.

In the late 1800’s, ranchers and farmers began to claim their surrounding land and a growing number of people began to realize the true beauty of the area.
The Great Northern Railway was built in 1892, which opened the gates to discover beauty to many tourists. After only 40 years, success struck the small town of Whitefish due to its many waters and its high mountain peaks.

The new town of Whitefish, Montana was dedicated in June of 1903. Immediately, land was acquired and rail yards were constructed. Most materials for initial construction were hauled-in from Columbia Falls.

Whitefish got its name from a group of trappers who came upon a group of natives pulling native fish species with white colored flesh.
Ranching, farming, railways and timber were the main attributes of town’s culture and economy for the next 50 years. Timer and lodging was necessary due to the location’s climate. Soon, changes were on the horizon for this land. In 1950, clubhouses and golf courses were built.

In the 1930’s and 1940’s, hikers began to reach the upper parts of nearby mountains. In 1947, the town’s first lift was built at what became Big Mountain Ski Area, now known as Whitefish Mountain Resort.
Whitefish is now a destination point due to its adjacent location to ski resort, Big Mountain and the beautiful Glacial National Park. Tourism has always been the thriving lure to this charming getaway.

Within the last 20 years, Whitefish’s accelerating attention is now resulting in a place of the “trophy home” due to the amount of ski lover’s wanting to stay year-round.
While the preservation of wilderness is shrinking around the world, Whitefish and Glacier National Park residents strive to protect and restore the natural processes, such as fire, to its beautiful landscape.

Whitefish, also known as Stumptown, is home to almost 7,000 people. The city has a total area of 4.4 square miles of land and 0.4 (67%) square miles of water. It sits at an altitude of 3115 ft. The nickname, Stumptown, was given because of its heavily wooded atmosphere.
Earth burial is the oldest form of handling human remains. Remains have been placed in all kinds of places including caves, vaults and in the earth. In times dating back to hunter-gatherers, burial grounds were considered sacred. Today, cemeteries are typically run-down, dark and uninviting gated cities planned to be along the outskirts of the city, where land is less expensive.

Land shortage is becoming more evident as our cities continue to grow and develop. Cremation offers a successful, feasible and economical alternative to more common earth burial.

HISTORY OF CREMATION
UNITED STATES CREMATION RATES

NATIONAL AVERAGE: 33.52%
MONTANA AVERAGE: 59.40%

0-24.99%
25-49.99%
50-74.99%
75-100%
Cremation is the burning of dead bodies to reduce to ashes. The body is placed in a wood coffin and slid into a chamber where the fire is turned up to 2,500 degrees F. The whole process can take up to 2-3 hours and yields between 6 to 9 pounds of ash and bone fragments.

Cremation is a practice dating back to the early Stone Ages most commonly seen throughout years in Northern Europe and spreading quickly to Western and Southern Europe. By the 1800’s, rapidly growing cities resulted in the overcrowding of cemeteries, which was causing terrible odors and creating hazardous heath conditions.

Cremation has been in practice in other countries such as Japan and India. In the United States, cremation didn’t take hold until the 1900’s. Since then, the number of cremations has steadily increased.
PROJECT GOALS
The academic environment has taught me to continue to question everything, to explore and discover but still be impulsive and intuitive. I've accomplished much more than I thought possible. I hope to continue exploring and seek out adventure and knowledge.

The future always seems to be a looming figure hovering over. But I welcome the chance to explore all possibilities that arise. I hope to always keep creating and be open to adventures of the “real world”. As the looming figure creeps closer, I feel more and more ready for the unknown.

Regarding my personal goals for this project as well as my thought process in many experiences, I think it's important to work hard and always keep an open mind. I think it's crucial to stay well-rounded but also to be impulsive at times. Adventure and knowledge are two things I've always sought out and if anything, architecture school has shown me just how important that truly is... I desire to keep a child-like sense of wonder in the world and be genuine to who I am. In my second year here, I was encouraged to Do, Make, Say, and Think... in that particular order. It has helped me stay sane and stuck to me like super glue.
SITE ANALYSIS
SITE RECONNAISSANCE
SITE NARRATIVE
WHITEFISH, MONTANA
SITE CHARACTER

“Glacier National Park is epic on scale. It’s one of the most vast places you could go in the United States as far as the bulk and the rise in these mountains coming up out of the ground. You could spend weeks, months, a lifetime just exploring the park and getting into the backcountry and really discover what makes it such a special place.”
— Ian Shive, Professional Photographer

Montana unravels the untamed, the wild and the natural. Yellowstone National Park and Glacier National Park are the focal points. Between these parks lie mountains, scattered valleys, and small towns full of friendly locals sharing adventures and perspectives.

Located in between the two National Parks and adjacent to Glacier National Park, is the charming town of Whitefish, Montana. The town is surrounded by hundreds of lakes and scenic rivers. The location of the valley keeps it safe from extreme climate changes encountered in other areas of Montana. This makes Whitefish an ideal year-round destination.
This quaint town is filled with small shops, restaurants, shopping and nightlife. Known for its skiing slopes and hiking mountain peaks, Whitefish provides lodging for all travellers.

Utilities include mostly green painted street lights, traffic lights, railways, and fire hydrants.

**Features & Utilities**

**Materials & Textures**

The differing textures of the historic buildings to the elegant retreat lodges along Whitefish Lake give it much charm and a sense of family. The materials include mostly wood lumber and masonry brick.

**Grids**

The East side of Highway 93 displays a grid of older homes with a few newer constructions. The East side of town is where the schools, baseball fields, and playgrounds are located. Beyond the grid are larger and newer homes with more land space. Farther out are farm and ranch properties.
WELCOME TO
WHITEFISH
Whitefish surrounds Whitefish Lake with downtown located South-East of the Lake. It also includes smaller lakes in the South-West: Sampson Lake, Lost Coon Lake and Blanchard Lake. Whitefish Lake is home to many lake places as well as resort waterfronts including this thesis site.

WIND

The particular site is mostly protected by wind with the amount of trees surrounding it. Whitefish Lake sits at the East of the site, making it more exposed to wind. The strongest winds in the area come from the North-West with slightly smaller breezed coming from other directions.

LIGHT QUALITY

The light quality of the area depends much on if fog is present. At many times throughout the year, fog will sit at the top of the trees around Whitefish Lake making it more difficult to see sunshine and up to Big Mountain. In the summers, the fog is less common. The site gets rays of light shining through the trees and then opens up to more sunlight on Whitefish Lake.
The site’s geometry is close to symmetrical in plan view. There is a slight elevation change once walking further into the sight where it dips down towards Whitefish Lake making a more intimate area. The center of the site includes a small clearing with existing pathway access leading North and South.

SHADE AND SHADOW

The tall trees cast their shadows on the ground. The center of the sight opens to a small clearing where sunlight is passed through. On the outskirts of the site stand beautiful tall pine trees which provide shading leading to the North and South pathways. The threshold of the site holds the most shadow which gives the site much privacy.

DISTRESS

There are not many areas of great distress on the site. The buildings of downtown Whitefish, hold a larger amount of distress than the actual site itself.
The site sits along the East side of Whitefish Lake and on the West side of East Lakeshore Drive. East Lakeshore drive is a winding road headed North and is the only route to the site. There is not much vehicular traffic especially since the exit to Big Mountain is South of the site.

**VEHICULAR TRAFFIC**

There is not much pedestrian traffic since this area is more of the lodging and residential areas. There may be few cross-country skiers and boats on Whitefish Lake but rarely any pedestrian traffic along East Lakeshore Drive.

**PEDESTRIAN TRAFFIC**

The downtown area does not have much vegetation but the thesis site is dense with all kinds of vegetation, mostly being tall pine trees and smaller shrubbery. This site is directly located on Whitefish Lake, helping with the large amounts of vegetation present.

**VEGETATION**
Whitefish Lake is used more in the Summer months but Whitefish is overall more populated in the Winter months because of its proximity to Big Mountain and Glacier National Park. East Lakeshore Drive branches off one of the main roads in Whitefish, making it a more private drive.

**Parking**

There is not much public parking on the particular site since the area begins to move towards more private and residential homes. Parking for the site will have to be created. Downtown and other parts of Whitefish do possess more parking for visitors and tourists.
CLIMATE DATA
NOISE AND TRAFFIC PATTERNS

MILDLY BUSY
DOWNTOWN AREA
BUSY
TRAFFIC PATTERNS
According to the U.S. Department of Agriculture there are 12 different soil classifications evident in Montana but 5 main found all around. Some of these include Andisols, Entisols, Mollisols, Vertisols and Inceptisols.

Andisols are soils formed from volcanic ash and other volcanic materials. They keep the ground fertile and hold large amounts of water.

Entisols are know as a modern-day creation. They are on the steep rocky slopes and in the deep valley river beds of Eastern Montana.

Mollisols are found in grasslands. They are dark brown and are known as one of the most fertile soils in the world. They are rich in calcium and are found mostly in Northern Montana.

Vertisols are clay-rich soils that react to wetness. They go through cycles of being dry and cracked therefore are dangerous to build on. They are uncommon to Montana but are sometimes found near the center of the state.

Inceptisols are young soils found in the steep mountain area. They are non-agricultural and used in forest development or watersheds.
VIEWS AND VISTAS
SPACE PLANNING

INTERACTION NET & MATRIX
<table>
<thead>
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<th>Area</th>
<th>Square Feet</th>
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<tbody>
<tr>
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<tr>
<td>OUTDOOR COLUMBARIUM</td>
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<tr>
<td>THRESHOLD</td>
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<td>MAINTENANCE</td>
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35000 SQ FT TOTAL (INCLUDING CIRCULATION AND PATHWAYS)
PROCESS DOCUMENTATION
DESIGN PROCESS

Plan Development
THESIS BOARDS
STRUCTURES BEC
EVOKING AN EMPATHETIC PERCEPTION THROUGH
COMING SHADOWS

ROUGH THE CONSTRUCTION OF MOURNING
SOUTHEAST EXTERIOR PERSPECTIVE
SITE AERIAL VIEW
CEREMONY SPACE
COLUMBARIUM ROOM
MODEL IMAGES
FINAL PRESENTATION
REFERENCES


MEGAN WARD
8224 Harrison Rd
Bloomington, MN 55437
612.220.9888
Megan.Ward.1@ndsu.edu

Fargo, ND

- Unlearn the things we’ve come to accept -