KAITLIN MCVEHIL ARCHITECTURE OF EXPERIENCE

Masters of Architecture
The University of Detroit Mercy School of Architecture
AR 510 & AR 520
Tom Roberts, Adjunct Professor
April 28th, 2008



Acknowledgements

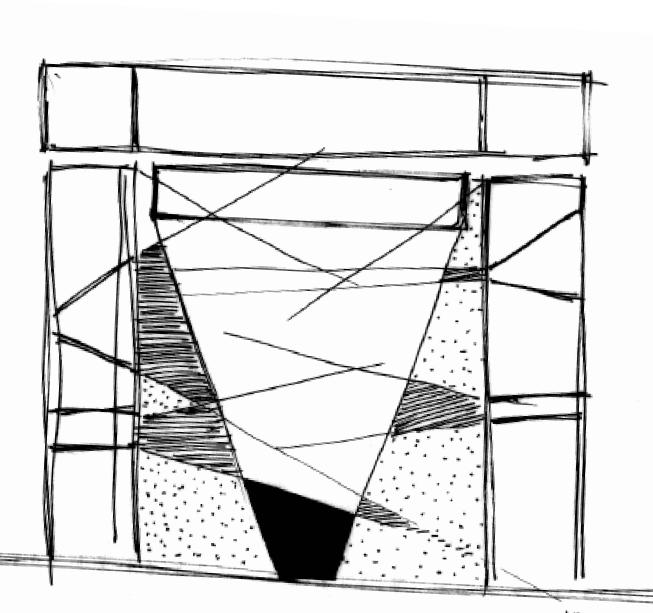
This book is dedicated to my family. Although far from home, my family has supported my desitions and emotionally available with a phone call. The past five years have challenged not only me but my entire family. Through it all the McVehil family has stayed strong and will continue to do so forever.



Table of Contents

Thesis Abstract	7
Program Description/ Summary	11
Thesis Statement	15
Precedent Analysis	27
Site Criteria : Circumstance	39
Site Possibilities	43
Engaged Site	49
Thesis Project Program	59
Quantitative Program	67
Thesis Design Process	71
Final Design: Architecture of Experience	107
Conclusion	123
Bibliography	127
Endnotes	129

Thesis Abstract



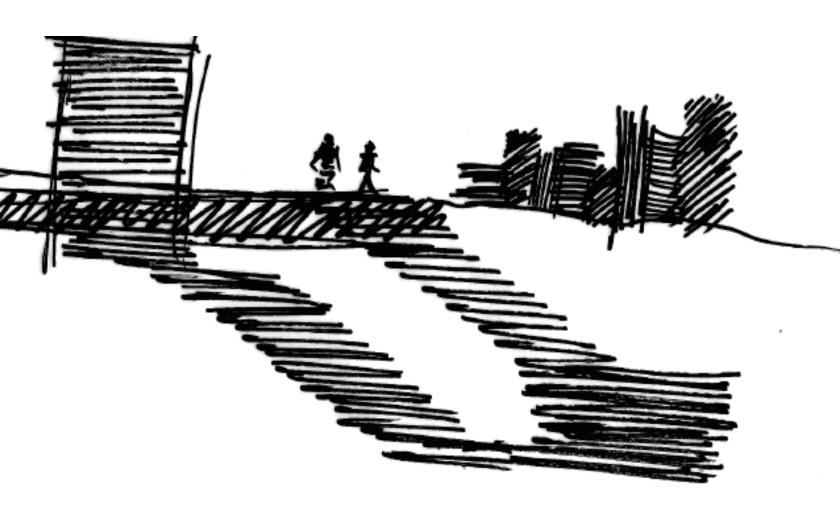
Our lives are influenced by many external forces. Many of these forces contribute negatively to the essence of what it means to be human, which causes the human experience to suffer. Through our experiences, we need to celebrate our existence and be reminded of the gift it is to be. Humans, through memories, have the ability to recall thoughts, images, smells and combinations of these senses from our mind. All memories are unique. Such memories are gathered over the human being's lifetime. Some memories help define who an individual is and others are stored away forever. The forces that lead to negative emotions and memories about our human experience harm the

This raises a question about our quality of life. Is it possible to change?

Yes. Architecture has the power to impact lives. When an employee feels inspired in their place of business, when a child is free to play in a space, and when no words are enough to express how an environment makes everyone feel the same yet different, that is the power of architecture. The design of a space has the ability to make people have the "awe" moment or recall a memory based on what the architecture gives that one person at that one moment. Spaces that subconsciously touch the human being are empowered spaces, in which it guides the human behavior to replenish the human soul.

human soul. Hence experiences need to exist that inspire the human soul.

Program Description/ Summary





Thesis Statement

Empowerment

Obtaining empowerment seems to be for many humans a difficult achievement. With the perpetual movement of life, the moments pass into minutes, hours, days and eventually years, while blurring together an endless stream of memories; but time does not yield or stop for reflection by those that are existing in these moments. When humans lose opportunities to gain empowerment through moments of life, the result is a lack of fulfillment. This poses a question. What is the greatest empowerment all humans can attain to have fulfillment in life?

The highest empowerment a human can obtain is the recognition of their existence. It is because humans exist that humans are beings. Beings are gifted with the ability to recall images and thoughts as memories from experiences that impacted them. It is through these memories that humans retain pleasant or unpleasant contributions for living. As human beings, the being element is too often overlooked or forgotten. Humans are beings whose existence is special and unique. Although plants and animals are also living creatures, they lack the ability to recall past experiences. Humans do have memories that can be remembered at any later time. However, it is a common occurrence that humans lose the luster and amazement of their existence because their lives lack the moments of awe or intuitive wonder. Instead the moments of human's lives get consumed in the everyday requirements of life. Humans take on many responsibilities that drain the human physically and mentally contributing to the loss of human empowerment. The result of forgetting the human existence is that life is no longer lived but survived. For a few beings, life is lived to the fullest; but there are too many humans that pass through life never experiencing the magnificence of their being and the power of existence available through experiences.

An ordinary experience for all humans contributes nothing towards their existence as a human. It is the experiences that heighten our senses towards what is surrounding that leave that memorable memory in the human mind, but more importantly, soul. When an experience gives the human something new that is indescribable or only understood within that individual, that experience transformed itself into a memory of recognizable existence for the human it impacted. That memory can be recalled at any time to refresh the soul and bring that sense of existence back for a human being.

There is a need for human beings to be reminded of our existence. All humans are aware that they are living beings but that does not mean that inside, the human spirit has died. People are not rewarded for existing despite the fact that it is our most precious quality. One human exists is entirely different from another human, yet our experience has in common the lack of wonder. When the human being acknowledges it's being, there is an inherent relief that takes over that experienced moment and the human soul is replenished.

There are many moments in life that humans experience. Not

all of these moments recognize or allow the human to gain empowerment. What then composes a moment of empowerment for a human? These experiences come about when least expected. There is no defined formula to make a moment occur. It just happens. In these moments, the human may cease all movement, stare, wonder, daydream, or close off the rest of the world for a second. When a human's mind and soul inherently allow for such a moment to come about, that human has gained empowerment. This empowerment frees the human for a moment from the restrains placed on all humans by the circumstances of life.

If these experiences of replenishment were to come about more frequently, then there would be a revitalization of why and how human beings exist. Once experiences are infused with empowering moments, moments would cease to pass by without constant appreciation for the value of each moment while existing. Life would consist of a refreshing outlook on existing. Once our existence breeds empowerment, the human soul will be recharged to exist forever altering humans.

Architecture and Nature

There exists two environments a human being is capable of acquiring an experience within. These two environments are: nature and the built space. Nature and the built environment are both the scenery for the human lives to be performed within. At any point during human existence,

these two settings impact our experience. These environments are entirely different form one another, except for a similar quality that is inherent to them both. Nature and the constructed space contain the power to impact the human experience. Moment by moment, a being is alive in the natural environment or the built space. It is because existence occurs in one of these environments that human experiences will always occur within the natural and/or built environment. The constructed world can never attain the attributes nature contains nor vice versa. Through the unique qualities each environment contains, humans experience moments differently and with a possibility of creating one memory that only that environment could present to a person.

Humans and nature are connected through their similar qualities of creation and the wonder of that existence on Earth. Nature and humans have both endure the changes of the world while changing as well. Survival is essential to both nature and humans expressing the need for a dependence on each other. Nature is presented to human beings with pure existence, speaking to the core of the human soul through its presence. No amount of research will ever fully understand the power and brilliance behind nature's creation or existence. Similarly to nature, human's creation and existence is unique and also require no explanation as humans exist as beings. The connection between human beings and nature stem from the power of each one's existence and the ability nature has to reveal the power of pure existence to

humans. Nature shows humans that existing is natural and easy despite challenges confronted in the human lives.

When entering into a building, the constructed environment takes control of the experiences. The built world is controlled entirely by the hands of those who designed and constructed the space. Interior spaces are constructed for purposes the natural environment could not fulfill for the human. Intended to be designed by the professionals in architecture, structures desire to serve the human needs. Although functionally these needs are met, the building is providing a disservice to the inhabitance. A building contains just as much power as nature to create an empowering experience for a human. When entering the building, the constructed world can influence the human soul positively or negatively. It is more common for an interior environment to contribute negatively to the human experience, leaving inhabitance just as wore down and consumed with life as when they entered. When a building is design to give humans the opportunity to have moments of awe or intuitive wonder, the human will leave with new thoughts to generate empowering memories of their existence.

Circumstance of the Site

If nature and the human being have an inherent connection, then the incorporation of natural elements into the constructed environment would render empowering experience to be present. There is no substitute for nature; therefore, nature should not be falsely represented. Instead nature should be given space to be present in. The incorporation of nature into architecture is challenging as nature wants to change as it was designed to do. Nature should be in the context of the site to be incorporated into the design with the purpose of being elements throughout the building.

Throughout the history of architecture, there have been and are architects that are concerned with the human experience. These architects employ their architectural design to connect with human's consciousness of existence. Tadao Ando in his book, Architecture and Spirit, explains that the forms designed acquire meaning from their relationship to elements of nature.1 Architecture is no longer just the built environment, it becomes architecture of purpose with nature. Ando believes that through a relationship with nature, architecture should be injected with a power to generate emotion from the human experience. 2 When architecture becomes a canvas for humans to emotional attachment memories, that is when humans receive empowerment. For architecture to give people a space in which their emotions are revealed there should be a relationship to nature. Ando continues his perspective of architecture's relationship to nature by explaining that water, light and open spaces are the specific elements that when joined, give life to architecture.3 It is an architecture that makes the human existence not opposing to nature that will be embedded with meaning. What Ando seeks through his architecture is a work of art that goes beyond being just an autonomous form to being primarily concerned with the enrichment of the human spirit.4 In the pursuit of such an architecture, Ando believes that it is essential to discover what human life truly means.5 In the case of this architectural investigation, the essential truth and meaning is all humans existence. Although not all sites afford a direct connection with nature, the site selected is surrounded by nature while not being disconnected from the realities of our world. The site is Belle Isle Park, the largest public park in the City of Detroit, Michigan. Sitting within the Detroit River, the park is serene as it is entirely a natural environment. The specific location of the exploration is the Apex. The Apex is the farthest down river point of Belle Isle and offers great views of downtown Detroit, Windsor (Canada) and the international border between them of the Ambassador Bridge.

Human Empowerment Through Experiencing Architecture

How do humans experience architecture? Humans are capable and desire an experience different from that of the ordinary. As physical beings, humans are able to move in an abundant range of patterns, allowing us to see every possible view. The classic architect, Le Corbusier explains the poetics of a journey through architecture when he wrote: "Forms bathed in light. Inside and outside; below and above. Inside: we enter, we walk around, we look at things while walking around and the forms take on meaning; they expand, they combine with one another. Outside: we approach, we

see, our interest is aroused, we stop, we appreciate, we turn around, we discover. We receive a series of sensory shocks, one after the other, vary in emotion: the movement comes into play. We walk, we turn, we never stop moving or turning towards things."6

Corbusier's writings express the ability architecture contains to free human beings to wonder intuitively. Corbusier explains architecture's embedded power even further when he said, "I have not experienced the miracle of faith, but I have known the miracle of inexpressible space."7 Similarly to Corbusier's conclusion of an architectural experience, Steen Eiler Rasmussen concludes that it is impossible to explain architecture because architecture is art and should not be explained but rather it should be experienced.8 When a human being experiences an indescribable moment in a space, that moment fulfills what the architecture's pure purpose should be which is to fulfill the humans need for replenishment. Architecture is an art that is of the human scale.9 Architecture is not limited to hanging on a wall or confined to a gallery space. Architecture is all around humans and is an art work for the people. In many ways, architecture is the most visible art to all humans.

The most challenging element of architecture is its need to be timeless. How do we experience or see a twenty or one hundred year old building? When a building stands the test of time, the age ceases to exist and instead the architecture stands to show humans its presence. This pres-

ence of timelessness is found in all human beings. Every being is able to see the amazement of existence through the architecture and recall how accidental their life is making their existence most valuable. Louis Kahn explains that the 5th Symphony was not needed until it was created and heard for the first time, then after that you know it. "The 5th Symphony presents itself with a feeling that you know it," says Kahn.10 When you hear it again you remember it. When you experience architecture, do you feel it and remember it? Timelessness of architecture gives architecture presence that humans see and feel.

For an exploration of an architecture that contributes to human empowerment, there should be no precious meaning attached to the building. When a building is inherently special and valued the architecture becomes secondary. If a program is pure and presents itself purely as what it is intended to be, that is a building injected with possibilities of empowerment for people. When considering the possible programs there also needed to be consideration of the site. What does a public park need? The solution for a program of purity was a natatorium. A public bath house serves the citizens in several ways. A natatorium provides access to the act of swimming while giving citizens an interior and exterior environment that experiences are capable within. A natatorium does not need to be explained to the humans but instead speaks to them as a sculptural entity in which wonder and enjoyment of life's preciousness breeds empowerment.



Precedent Analysis

Meditation Space: UNESCO

Architect: Tadao Ando

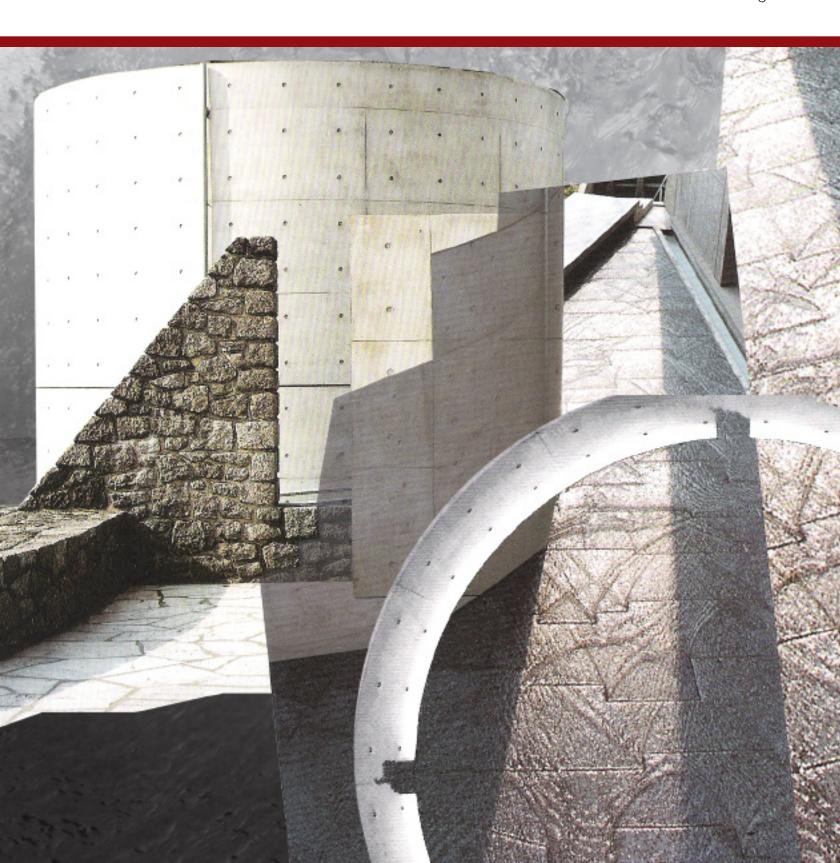
Location: Paris, France

Date: 1995

Typology: Temple

Material: Reinforced Concrete, Granite

Natural Elements: Water + Light





Architecture of spirit is concerned with man's communion with consciousness, time and reality. Human's goal is to unite with nature. The reality is not literal about the things constituting the building, but instead is brought about by endowing the space with meaning through nature. Acquiring meaning evolves from a relationship with light to indicate the passing of time and the changing of the seasons. For this reason, architecture should be injected with emotions man is capable of feeling. It is through these feelings that humans achieve imbedded thoughts called memories. Tadao Ando believes that architecture has a duty to offer people places in which they can become aware of their bodies, of their own emotions in the presence of nature. The specific elements of nature include: water, light, wind and open space. Pure elements of nature do not require elaborate building shapes. Pure, geometries will speak of true meaning, giving life to the architecture.

The Meditation Temple expresses the purest meaning of human existence and the fundamental elements of nature as a marriage. When the relationship is broken, the architecture has no truth and is reduced down to functional usefulness.

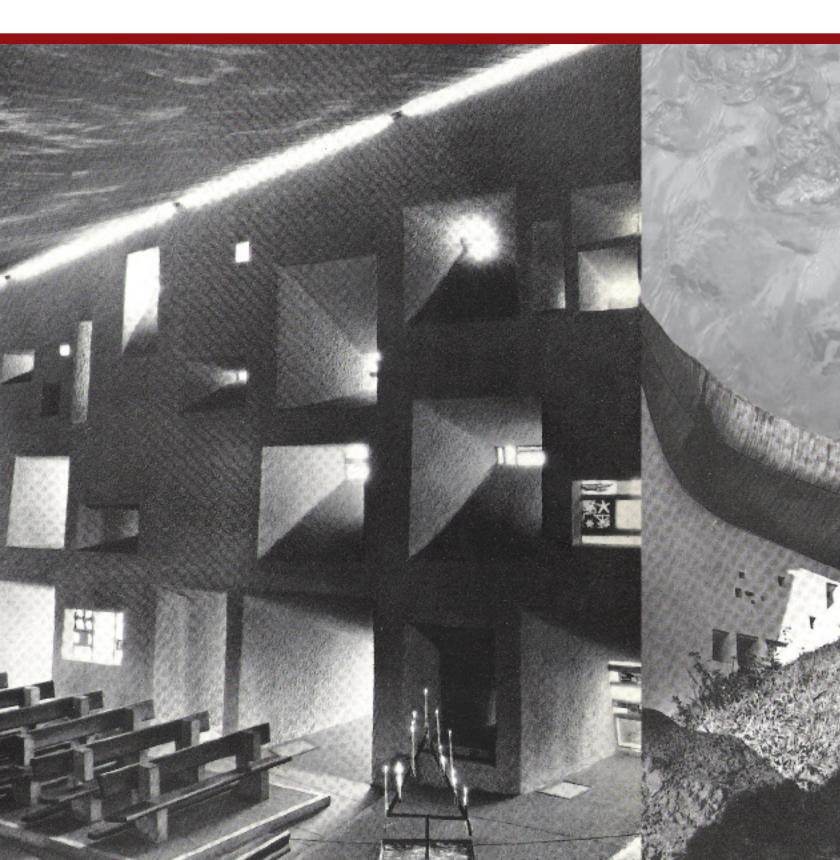
The Chapel at Ronchamp

Architect: Le Corbusier Location: Ronchamp, France

> Date: 1954-1955 Typology: Chapel

Material: Concrete

Natural Elements: Light + Landscape



Ronchamp was Le Corbusier's work of art that manifested his belief in the integral relationship between architecture and nature. Corbu wrote about the poetic experience at Ronchamp, "Forms bathed in light. Inside and outside; below and above. Inside: we enter, we walk around, we look at things while walking around and the forms take on meaning; they expand, they combine with one another. Outside: we approach, we see, our interest is aroused, we stop, we appreciate, we turn around, we discover. We receive a series of sensory shocks, one after the other, vary in emotion: the jeu come into play."

Architecture should be understood intuitively. The tendency is to complicate the simplest element until all meaning is lost. Corbu produced "the key," which he believed constituted architecture.

The Key

The key is light
And light illuminates shape
And shapes have an emotional power.

By the play of proportions By the play of relationships Unexpected, amazing.

But also by the intellectual play

Of purpose:

Their authentic origin,

Their capacity to endure,

Structure,

Astuteness, boldness, even temerity, the play

Of those vital abstractions which are the essential qualities

The components of architecture.

Gipsoteca Canoviana

Architect: Carlos Scarpa Location: Possagno, Italy

> Date: 1955- 1957 Typology: Museum

Material: Concrete, Glass, Steel

Natural Elements: Light + Water





Carlos Scarpa was inexhaustibly captured by the beauty of the seen world, that his life reflected the happiness all around him. Scarpa believed that there is a large disparity between looking and seeing. The ability to see was revealed to us through light. Darkness is the harshest of afflictions for a human, for nothing will be revealed. Nature reveals meaning to the human soul.

Light is introduced into the space by means of cutting out the blue of the sky. The gallery is for the plaster molds from a sculptor are given new language with the direct light. Curves, forms and textures come to life. The exterior elements transcend the walls to the interior through views to a water feature and vegetation. Stimuli, beckons the movement of the human experience of the gallery. The atmosphere leaves the miracle of intangible memories.

The Gates, Central Park

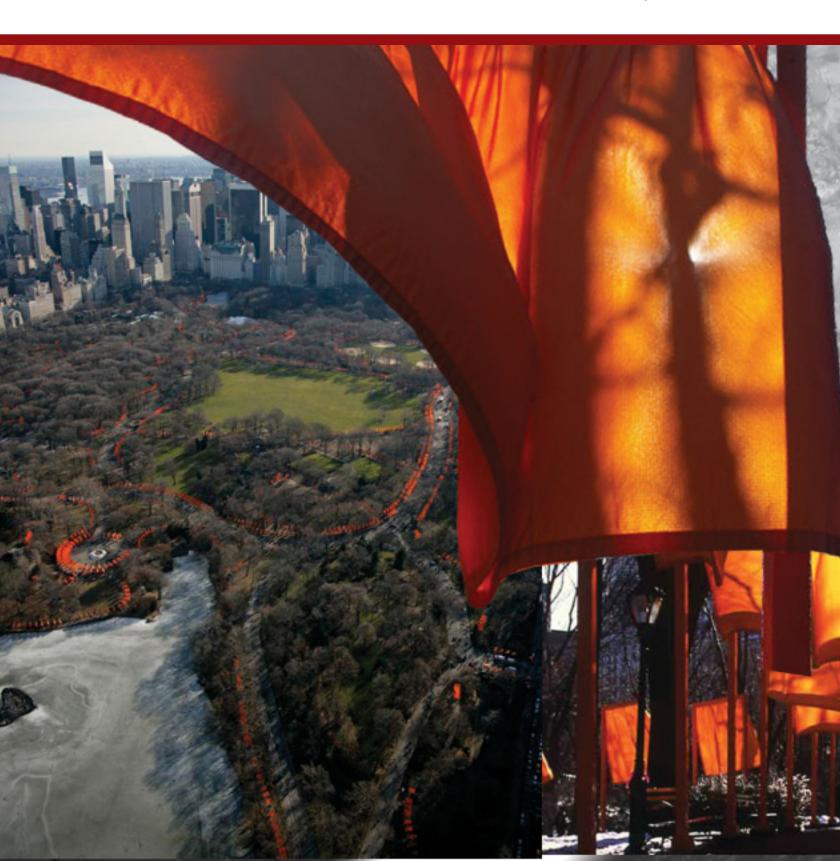
Artists: Christo and Jeanne-Claude Location: Central Park, New York

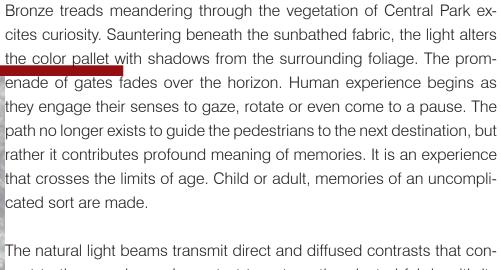
Date: 2005

Typology: Temporary Work of Art

Material: Fabric + Steel

Natural Elements: Light, Water + Nature





The natural light beams transmit direct and diffused contrasts that connect to the experience. In context to nature, the pleated fabric with its bronze tones warms the surrounding setting, iridescent like a fire against the trees and lakes.

The gates were not made to be seen from above or from outside. In the same way that nature was no meant to be observed but rather experienced. The gates need to be experienced on the ground, at eye level, where, as you move through the park, they crisscross and double up, rising over' hills, blocking your view of everything except sky, then passing underfoot, through an underpass, or suddenly appearing through a copse of trees, their fabric fluttering in the corner of your eye. Christo and Jeanne conceived of the gates in a means to complement Frederick Law Olmstead's vision for Central Park. Olmsted spoke about the park as an environment to influence "the minds of men through their imaginations." There is a simple eloquence to the gates that does not take away from nature but instead disburses reference to its beauty.

Thermal Baths Vals

Architect: Peter Zumthor Location: Vals, Switzerland

Date: 1996

Typology: Baths

Material: Concrete + Wood

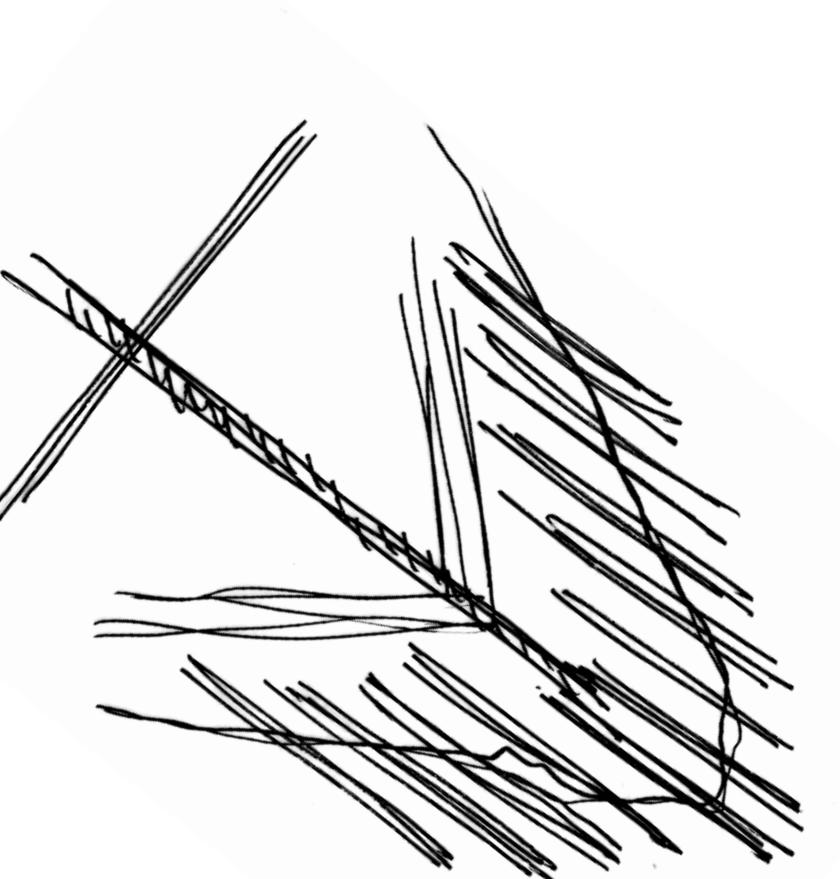
Natural Elements: Water, Light + Nature



Located in a remote region of Switzerland, the architecture is embraced by the mountainous surroundings. Conceived from images of quarries and water flowing spontaneously from beneath the ground the atmosphere is charged with life. The primal use of water and light are given vibrancy in the space by means of the material backdrop. Textures and tones are accentuated by the light penetrating into the interior, while water ungulates, scattering the light. The power and tranquility of water are revealed simultaneously as water streams corrode metallic element, staining materials on the path while calming the atmosphere with a soft trickling noise. Light gives volume to the space to allow the experiences begin. The architectural language beckons the experience to arise from fundamentals of darkness and light, for light reflections on the water, unique acoustics and the ritual of bathing. The quiet, primary experience of bathing, cleansing, relaxing in the water, the feeling of water all round the body contribute to the basic experience of replenishing the human soul.



Site Criteria : Circumstance



An empowered space does not just refer to the contained space created through the architecture. The environment surrounding the contained space, play a vital role in revealing or presenting elements of the space for individuals to experience. No site exists without a building, but like wise, no building can exist without a site. There is a fundamental relationship.

A human truth that is undeniable is that we are beings and therefore exist. The same can be said about nature. Nature exists all around. Examining this truth, it becomes apparent that humans need nature in their lives. Nature conveys to the human the wonder it is to be alive and exist. Humans are beings that can become consumed by life and forget living. It is for this reason that the building context connect with the natural surroundings.

Precedent studies of architecture and works of art that base their design on the human experience draw on nature to eloquently speak to the human. A space comes to life when light, a natural source (sun), penetrates the darkness and gives shade and shadow to the inner elements. Site selections for a building that inspires humans to live while giving them that empowerment to do so are located where the natural elements come through to the interior. It is the building to site relationship that can ultimately replenish the human soul.

NATURE – connection

A location that possesses natural elements is essential to affect the human experience.

Nature exists; therefore it should not be avoided but rather incorporated into the architecture.

Humans and nature are forever linked through their existence. The site needs nature to help convey the truth about both of their existence.

WATER – proximity

Water is a natural element that can be tranquil or destructive. These qualities are also attributes of humans. Water is a fundamental source of life for many creations including humans. There is a cleansing through water that humans can experience.

HUMANS – experience

If the proposed thinking behind the architectural expression is the human experience, a site not possessing humans fails. The site does not have to be dense with inhabitants. Accessibility to the site needs to be available to every person. It must be a location that has the capability to accept what the architecture may bring. LIGHT – effect

Light brings a space to actuality. The whole atmosphere is in the darkness until light shows the volume with shadow. Natural light gives context to the surrounding environment and passing of time. Light allows us to see what otherwise would be missed.



Site Possibilities

Belle Isle Park



Master Plan Architect: Frederick Law Olmstead
Location: Detroit, MI
Date: 1845-Present
Typology: Island City Park

Area: 982 acre





Detroit's island park, originally known as Hog Island, is lush with history and natural landscape. Purchased by the City of Detroit in 1879, Belle Isle took shape as a natural escape for city dwellers. The famous landscape architect, Frederick Law Olmstead, designed the master plan for Belle Isle in 1883. The two-and-a-half-miles-long and a half-mile-wide, is a low, flat island rising just 2 feet above the level of the Detroit River. The island was always popular with Detroiters for hunting, fishing, bathing, and picnicking. Originally forest and marsh, Belle Isle was a setting for urban recreation. The island includes a nature conservatory, a maritime museum, a police station, an aquarium, a memorial fountain and a casino. Also contributing to Belle Isle's character are the many picnic pavilions, footbridges, and public statues that dot the island. Most of Belle Isle's facilities are located on the western half, as the island's eastern end remains mostly forested and in a nearly natural state. Though the island is tranquil in nature, Belle Isle offers magnificent views of the Detroit River, Ambassador Bridge and the international boarder between Detroit and Windsor, Canada.

Throughout the years, Belle Isle has lost it's luster as being a beautiful landscape for city dwellers. Trash, damaged facilities and major thoroughfares have left the Island park in unsatisfactory conditions. Despite this degradation to the park, it is still a beloved place to the local community for recreational activities throughout all the seasons.

Site Proposals

1. APEX

- + Views of Detroit, Windsor
- + Ambassador Bridge
- + At waters edge
- Lack of vegetation

- 2. Fishing Pier/ Beach
 - + Views of Detroit
 - + Vegetation
 - + Activities
 - + Edge of water

- 3. Lake Muskoday
 - + Full with vegetation
 - + On the lake
 - + Wildlife
 - Inland

- 4. Livingstone Memorial Lighthouse
 - + Between two bodies of water
 - + Light element
 - + Beckon
 - Remote on island







Engaged Site

The Apex site location offers views of its natural landscape while also allowing for views of the urban landscape of Detroit, MI and Windsor, Canada. The view down river also provides a view of the international boarder connection of the Ambassador Bridge. At times visitors can watch freighter or small water crafts slowly float by or enjoy the wildlife that frequently visit. This serene site is at the water edge of the Detroit River and is flat to allow for leisure activities. This natural environment is the perfect location to focus human's views on what matters the most in life.



View down river of Detroit, Windsor and the Ambassador Bridge.

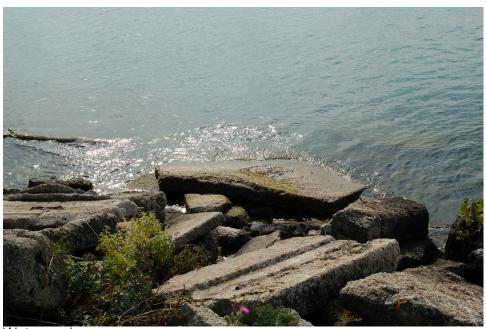


Photograph showing Canada in the distance.



Watercolor of Belle Isle's context to it's surroundings and water.

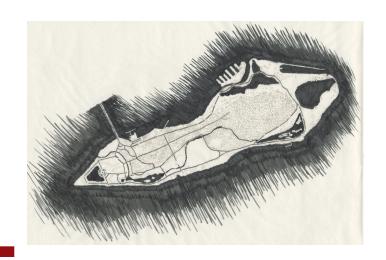
These photographs taken of the Apex show the site in it's current state. The site lacks a luster of its beauty. With a gentle breeze and the sun on your face, this location is the most amazing spot in Detroit. With fresh water all around the water calms and quiets the inner noises of life's rushed plans.



Waters edge.



An image of the Apex past the tree line.





From the water edge looking back into the Apex.



This photograph shows the existing tree line and the flat terrain.

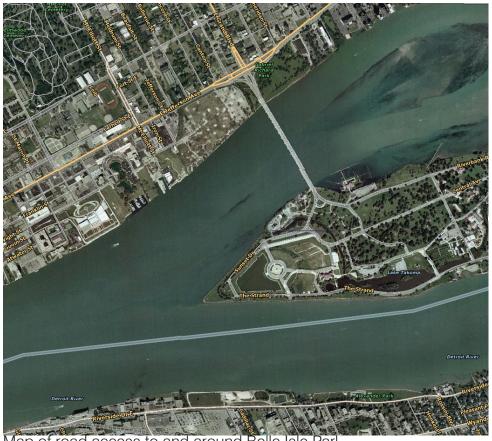


Site Data:

1. Coordinates: 42°20'25"N, 82°59'12"W

2. Site:143,251 square feet Belle Isle Park: 2.42 sq mi

- 3. The topography of the site is completely flat. This condition is a result of manmade alterations as plans developed.
- 4. Soils: The site is grass covered with existing tress. The soil is firm and dry despite the water table being only 2.5' to 3' below grade.
- 5. Access: Belle Isle Park can be accessed by foot, bike, car or boat. The Douglas MacArthur Bridge is off of East Jefferson Avenue of East Grand Boulevard which is the main point of entry onto the island. The park is open year round as a municipal park for the City of Detroit.



Map of road access to and around Belle Isle Parl.



James Scott Memorial Fountain up river from the Apex.



Existing picnic tables and benches within the lush trees on the Apex.







Road access to the site.



Photograph of the existing restroom on the Apex.





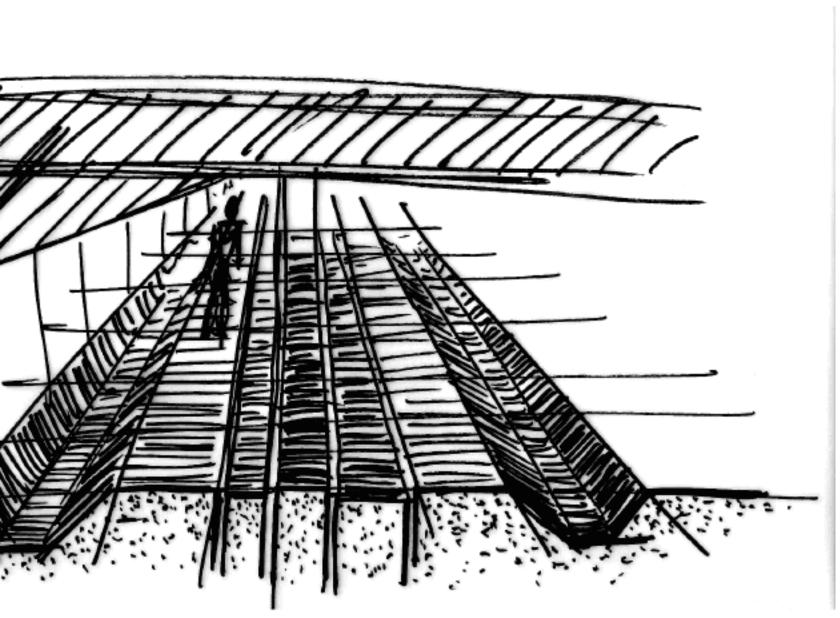
Image of the existing landscape on Apex.



View of topograph change to the water.

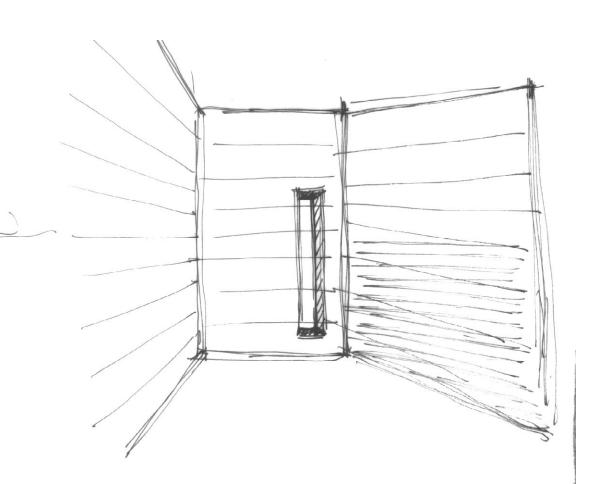
Thesis Project Program

Program Statement



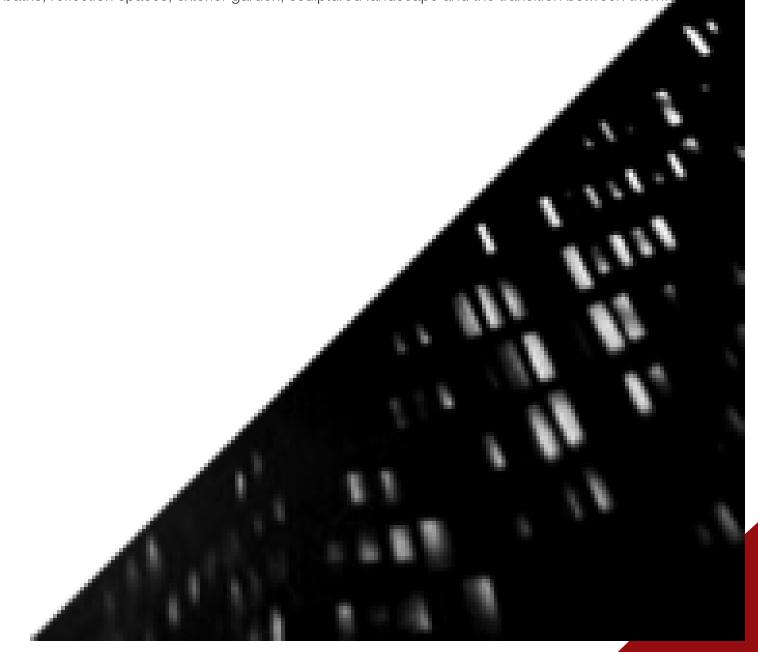


Project Identification

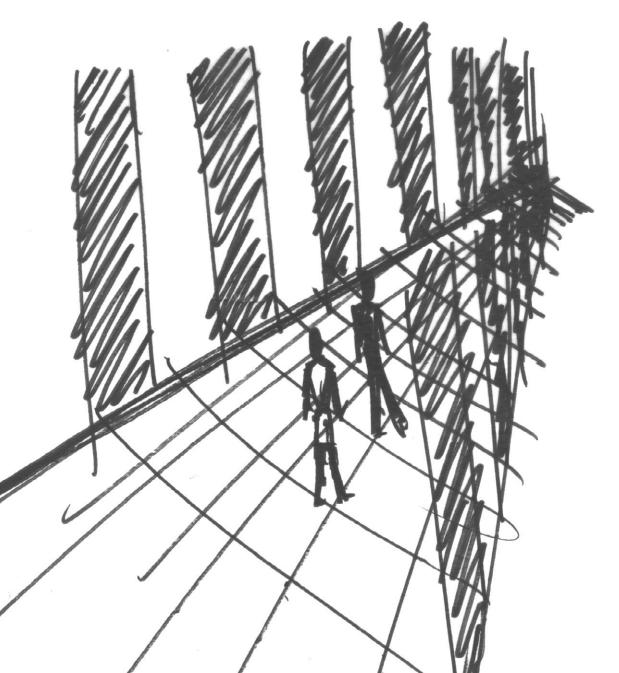


1. The project is an exploration of the built environment as a means of recognizing the gift of existence humans have through experience. The space is to be a blank canvas for human to intuitive wonder on. With the architecture as the stage of human lives, the pure artistic design and sculptural quality of the exterior and interior, will speak to humans on a conscious or subconscious level to heighten the human awareness of their existence. As the architecture speaks to the individual, the moments of quite wonder or intuitive thinking with make a memory, forever leaving the human empowered to recall their value as being.

2. The major components of the program include non-swimming baths, swimming baths and diving baths, reflection spaces, exterior garden, sculptured landscape and the transition between them.



Articulation of Intent



Through the experience of architecture, the visitor will acquire a moment that empowers them. The empowerment will be specific for each human while being the most empowerment all humans can receive. That empowerment is recognition of their existence. Once the moment has occurred, the human being will inherently make a memory of that moment to recall later in life when living is an ordinary activity instead of the gift that it is.

Quantitative Program

Although there is a distinction between interior to exterior environments in the building program, the intent is that the building breaks or blurs the boundary between the inside and the out. The program is submerged in the ground with moments of penetrating light from above.

Interior Environment

Entry Area/ Front Desk: 416 s.f.

Administrative Offices: 152 s.f.

Reflection Areas: 1,988 s.f.

- 1. Resting Area = 780 s.f.
- 2. Siren Area 01 = 584 s.f.
- 3. Siren Area 02= 584 s.f.

Non- Swimming Baths: 5,580 s.f.

- 1. Bath 01 = 930 s.f.
- 2. Bath 02= 930 s.f.
- 3. Bath 03 = 930 s.f.
- 4. Bath 04 = 930 s.f.
- 5. Bath 05= 930 s.f.
- 6. Bath 06= 930 s.f.

Swimming Baths: 12,150 s.f.

- 1. Lap Bath = 2,900 s.f.
- 2. Warm-up Bath = 750 s.f.
- 3. Competition Bath= 8,500 s.f.

Diving Baths: 3, 690 s.f.

- 1. Platform Bath 01 = 1,230 s.f.
- 2. Platform Bath 02= 1,230 s.f.
- 3. Board Bath = 1.230 s.f.

Public Restrooms: 500 s.f.

- 1. Men's Restroom = 250 s.f.
- 2. Women's Restroom = 250 s.f.

Locker Rooms: 6,610 s.f.

- 1. Men's Locker Room= 2,260 s.f.
- 2. Women's Locker Room= 2,260 s.f.
- 3. Family Locker Room= 2,090 s.f.

Transition Spaces (Circulation): 7,095 s.f.

Mechanical/ Storage Space: 1,827 s.f.

- 1. Mechanical Room/ Filtration System= 1,077 s.f.
- 2. Storage Room= 750 s.f.

INTERIOR TOTAL: 40,008 s.f.

Exterior Environment

Exterior Environment

Reflection Garden: 4,480 s.f.

Transition Area to Interior: 5,415 s.f.

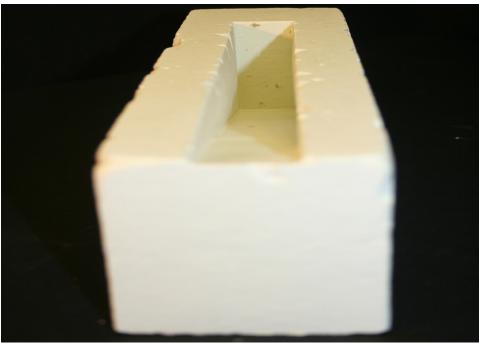
EXTERIOR TOTAL: 9,895 s.f.

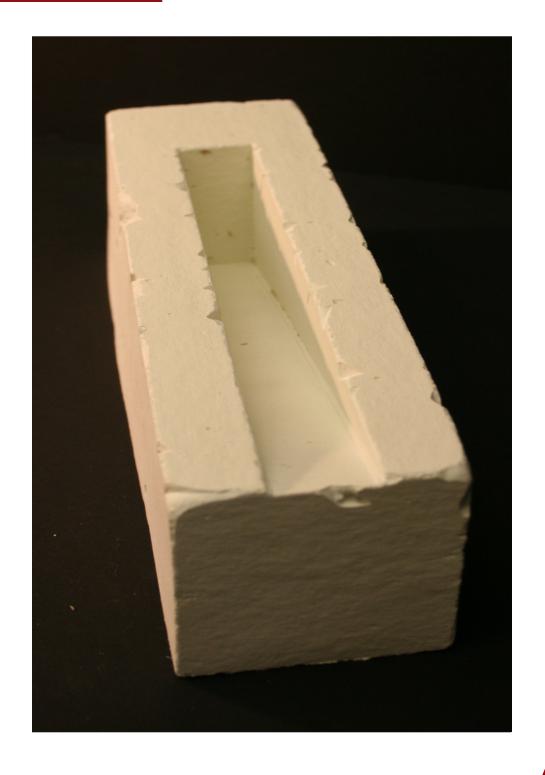
Thesis Design Process

Poured Plaster/ Concrete Studies

The design process began with a series of explorations of poured plaster into models. Through constructing these tests, the mass and bulk of the plaster conveyed the ability to contain water. In the same way that Belle Isle has to resist the water that surrounds its location, the water could be brought back into the site in canals cut out of the land.

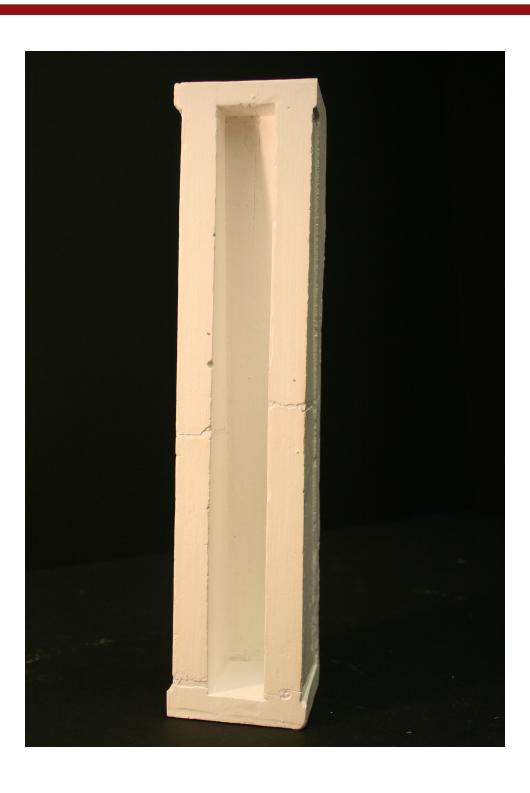




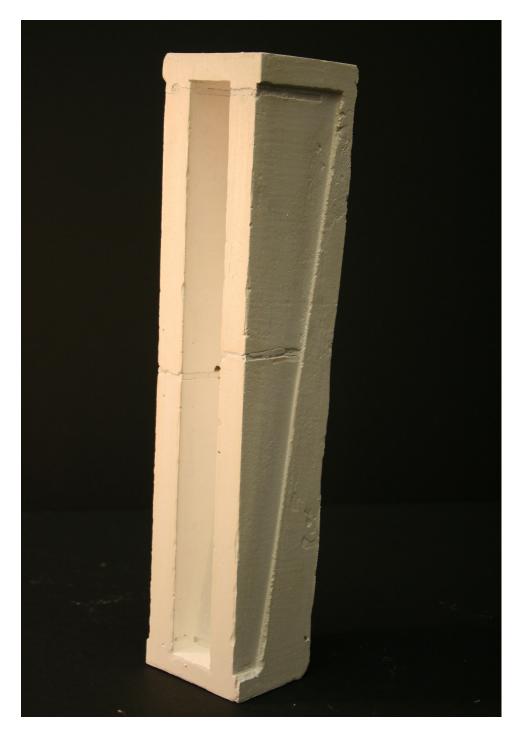


Presence of Time

The process of building the mold and then the time duration after the plaster or concrete was poured showed that time is associated with every activity of life. Once the plaster or concrete cures and the mold is removed, the form is presented and exists. Through the process of exploration of these molds, the thoughts of how amazing one's existence is was reinforce.



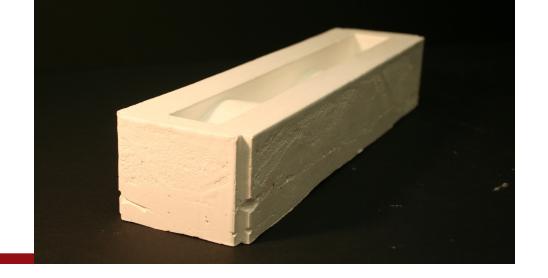


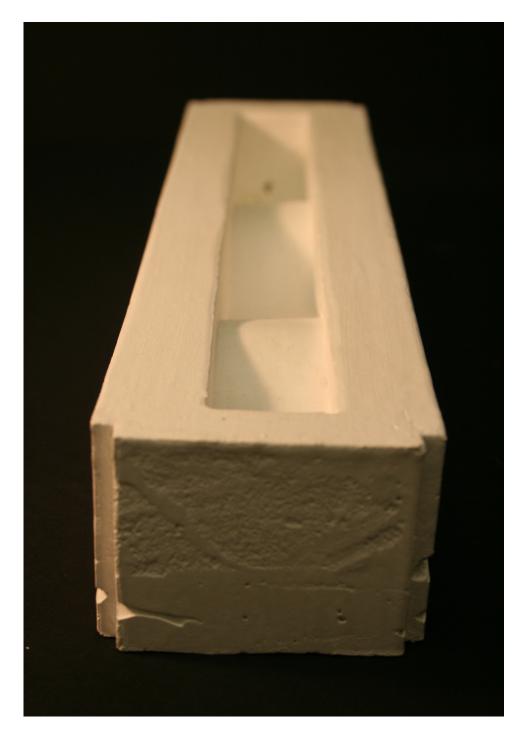


Filling the Voids

These studies show the voids left behind by the mold. In the lives of human beings, there are also voids; unfilled aspects of life. For the molds, the void is filled with water to bring life and meaning to the mold. Humans need to be filled with an empowerment that who and what they are is a wonder in itself.

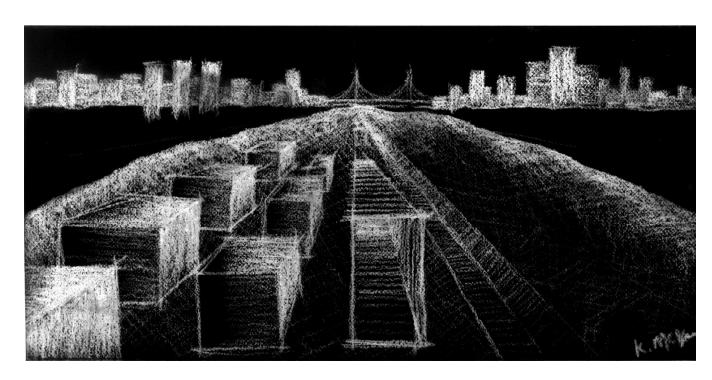


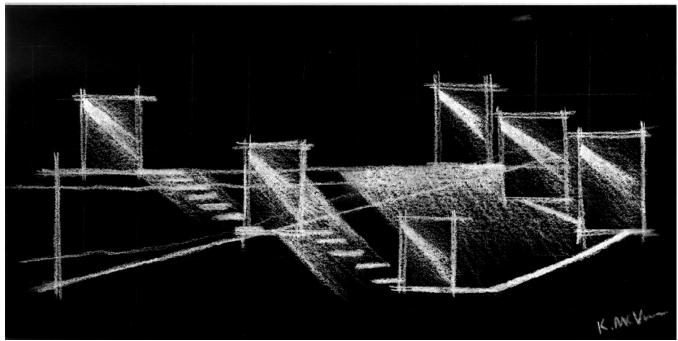


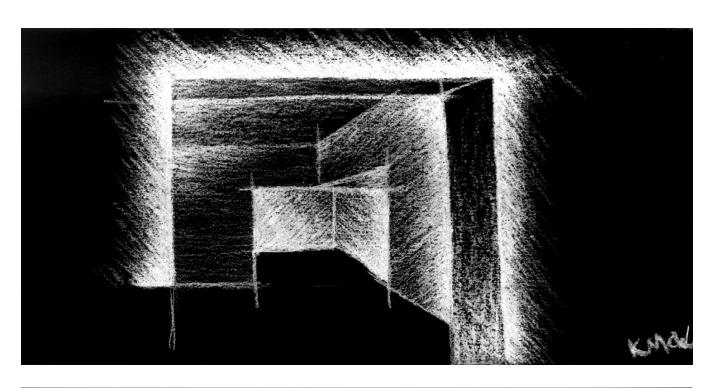


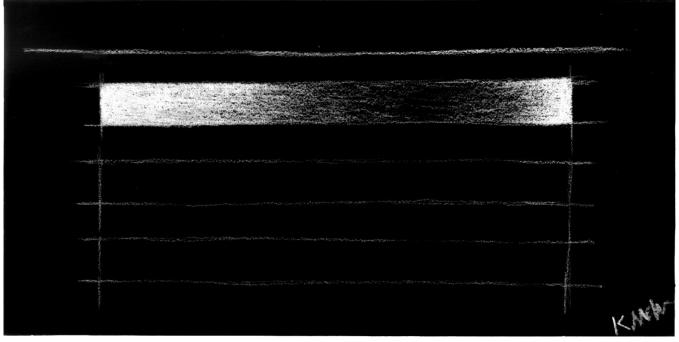
Black and White sketch Studies of Light and Form

Using white charcoal on black cardstock, sketches of thoughts and feeling about what the architecture want to be and how light comes into play on the forms. The earlier thoughts about what architecture of experience is are pure as first ideas. These first emotional representations of an architectural form are the intuitive wondering of this alive design process.



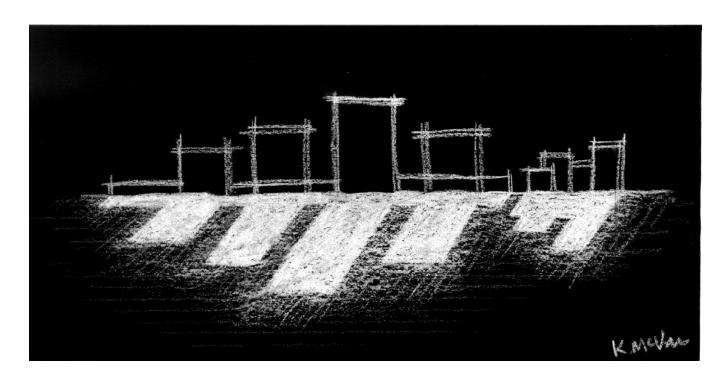


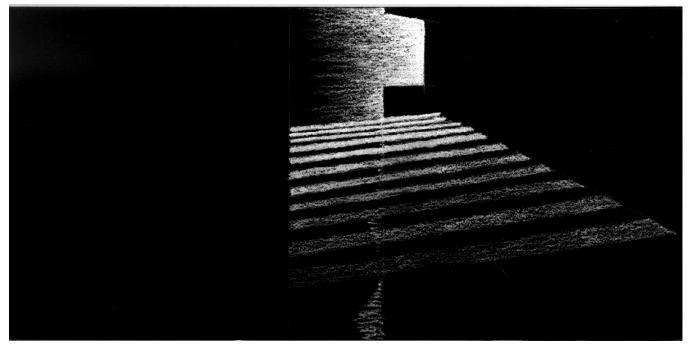


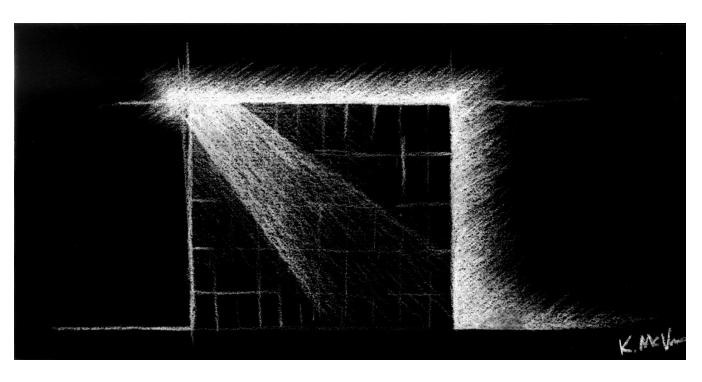


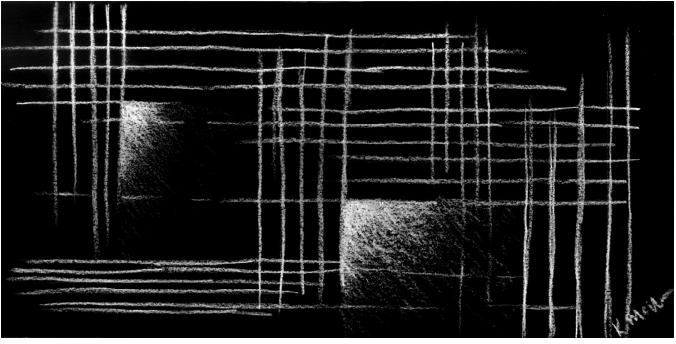
Black and White

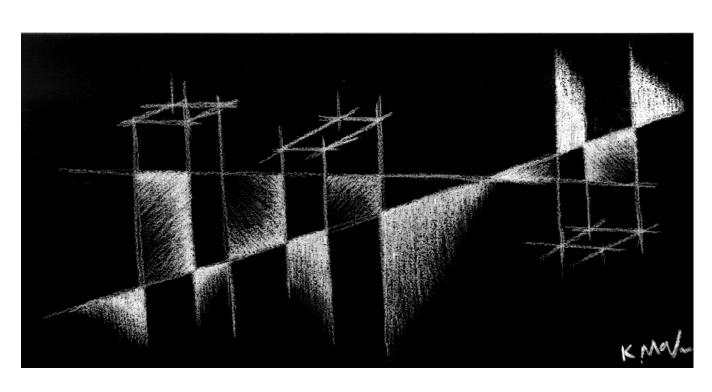
The world consists of the full range of spectrum colors. The sketches are of black and white, eliminating color. When color is eliminated, the sketch is open to possibilities of being interpreted as an observer reads and attaches meaning to the sketch. The sketch is a drawing but the sketch is meaningless until a viewer experiences the message embedded within the pencil lines.

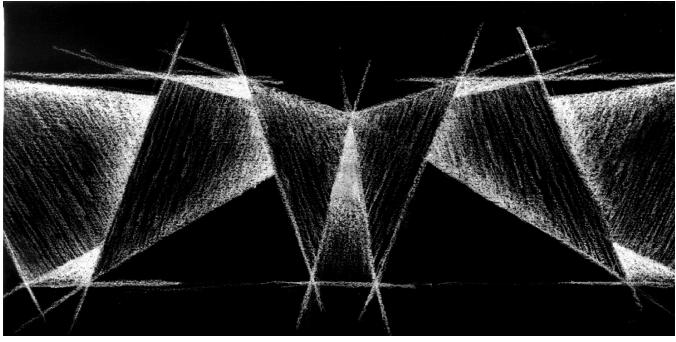








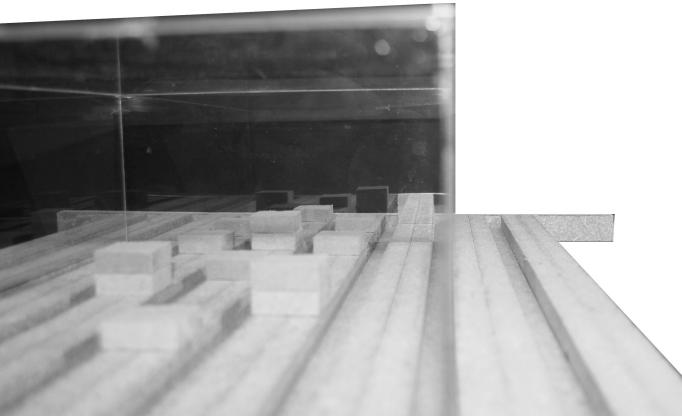


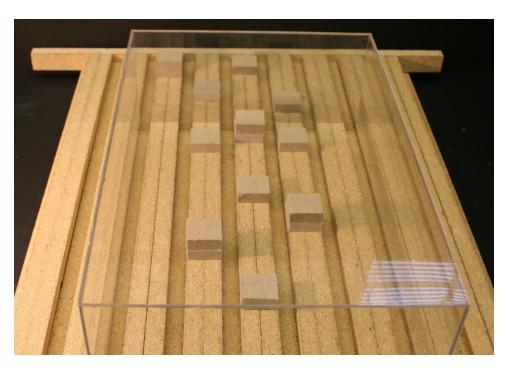


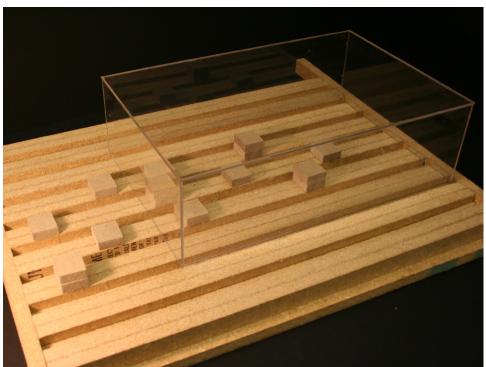
Exterior to Interior Study Model

In a studio charette, this study model was created to express the need for a smooth transition from exterior to interior. The model shows how elements can carry over from one environment to another. This is a literal reflect of these thoughts but the model helps to understand the basis of the thinking. These thoughts will later translate into an elegant exterior to interior transition.



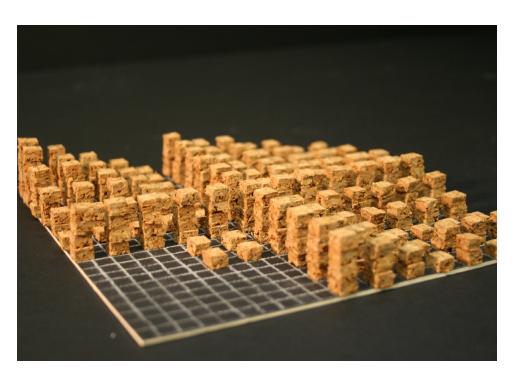




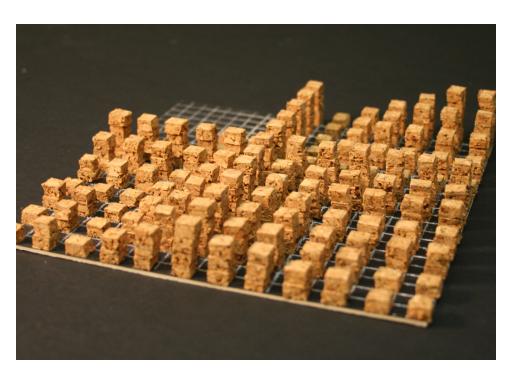


Changing Levels and Views

This study model looks at how the absence of topography change can be experienced by a human through sculptural volumes. This study model also becomes an expression of levels and how levels change our view of the world. While within these masses, the view changes as you meander through them. When the human senses become limited, our appreciation is heightened towards what was there but is now gone.



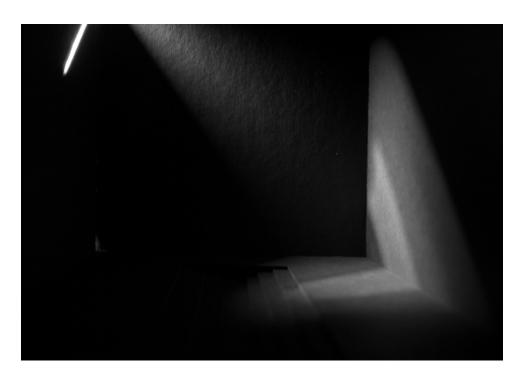






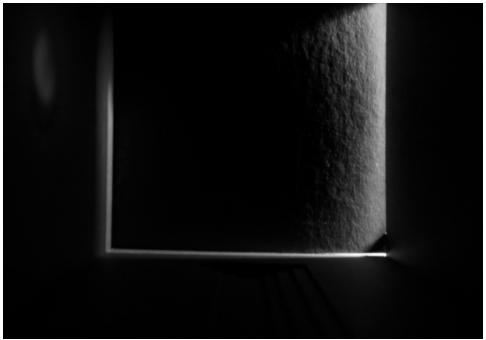
Light Box Study

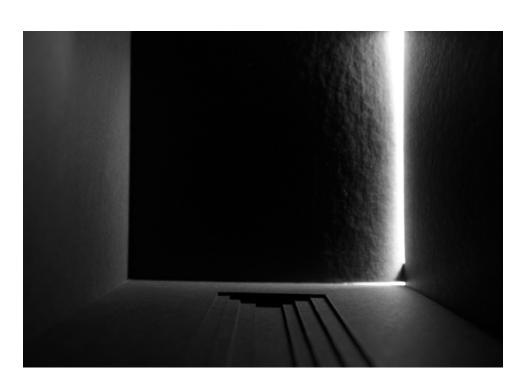
The light box studies are to experiment with how light penetrates through to the open volume of an interior space. With the opening on the boxes varying in size and shape, the light intensity altered the interior. Light brings life to a space. When light brings to life a space, human experience will follow.





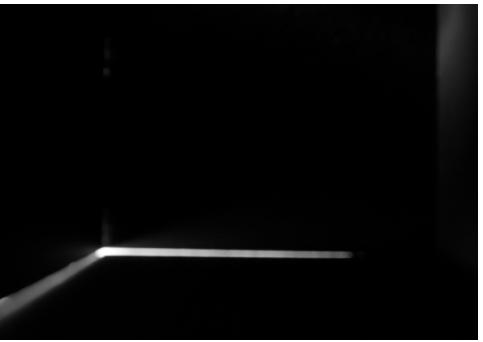








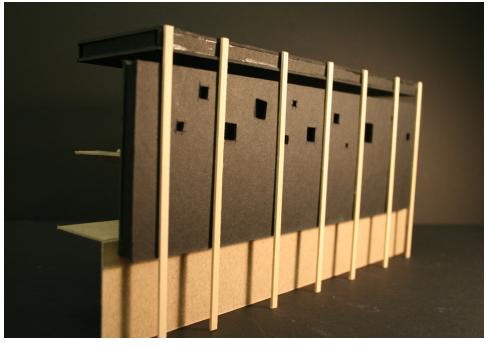


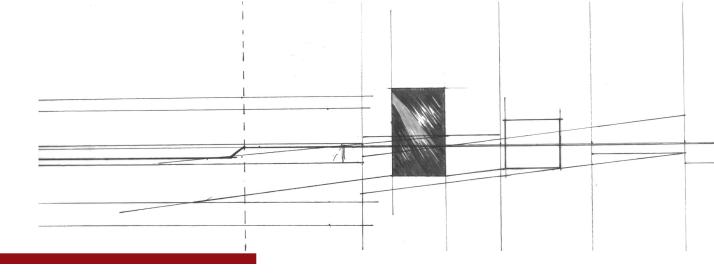


Sketch Models and Hand Sketches

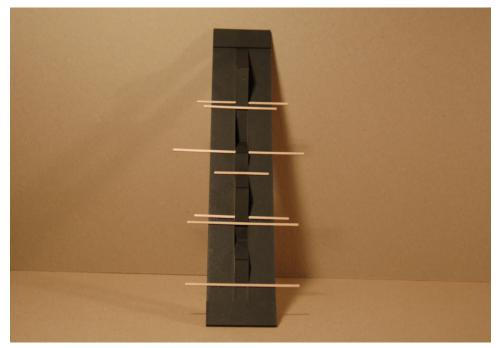
As the thought process developed, several sketch models and sketches reflected the thinking. These models and sketches are a part of the process in developing architecture of experience. After each model or sketch was completed, they were left and then returned to later. This return later allowed the intuitive design to leave so to allow a new intuitive reaction towards the model or sketches occur.



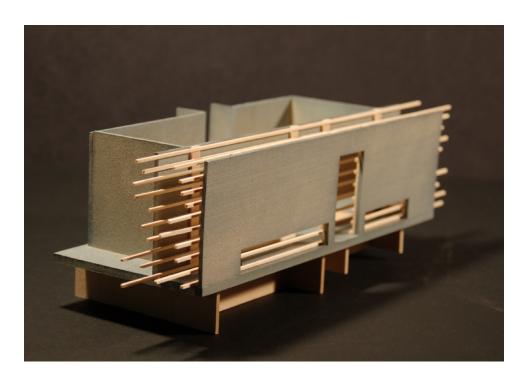


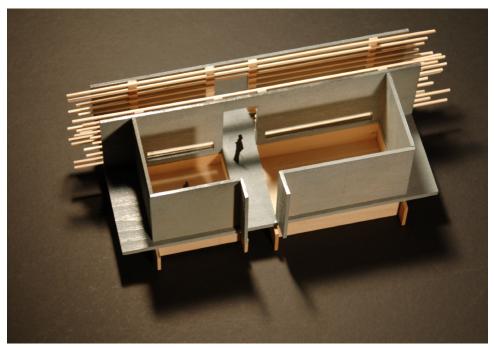


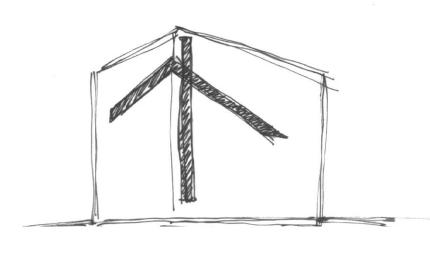




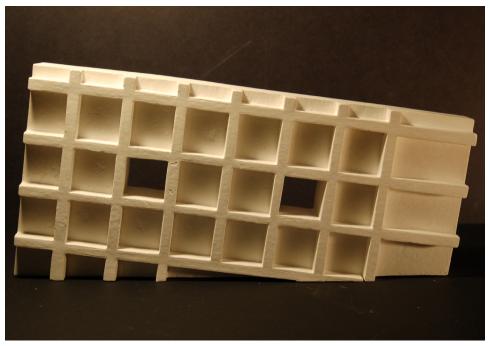


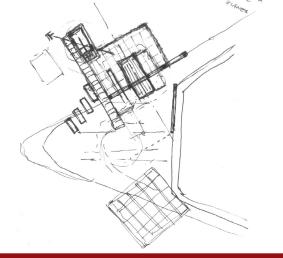


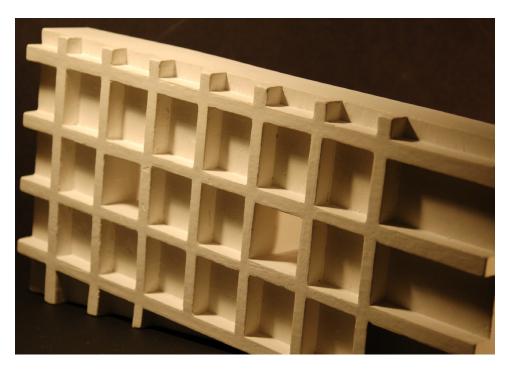


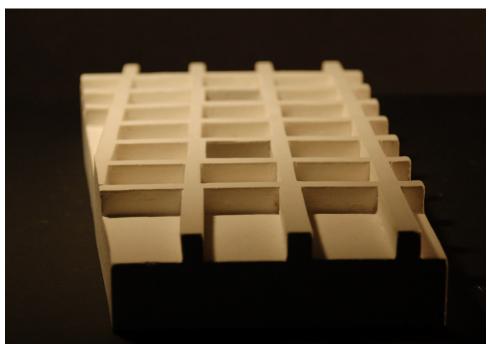


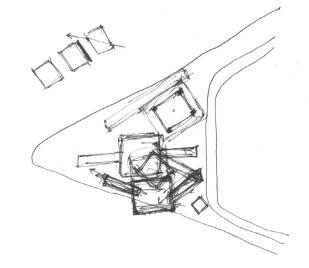




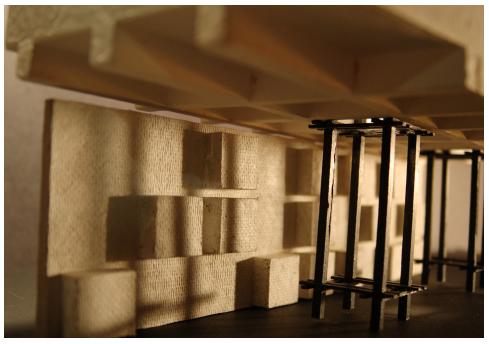












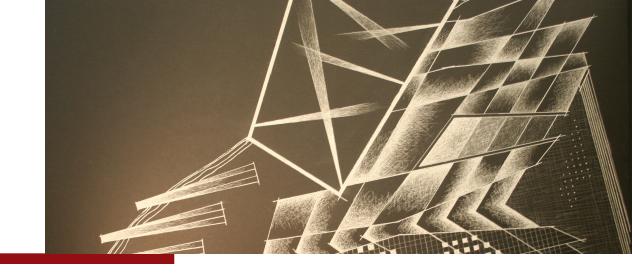
Architectural Expression of Calculation

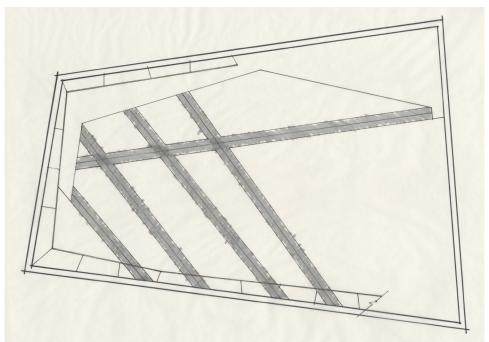
This stage of the design process revealed that the thought process was developed and clear. The architectural expression of the thoughts lacked the intuitive thinking that originally founded the thesis. The architecture contained openings that did not respond the nature and were therefore arbitrary. There are moments in this model that respond to the thought process but in a calculated manner. The calculations made the design lifeless and unable to give humans experiences.



Bath Floor Plan



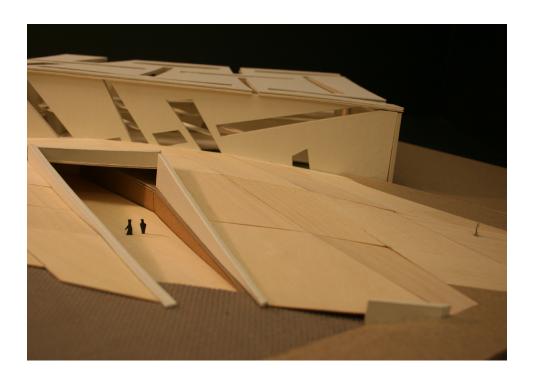




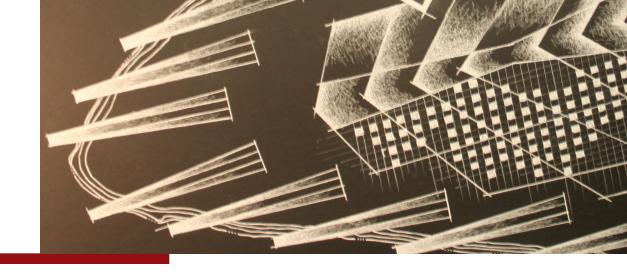
Canal Floor Plan

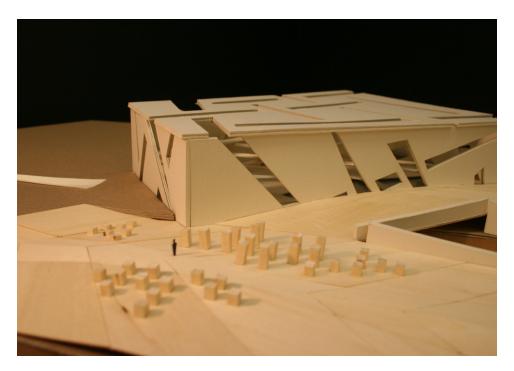








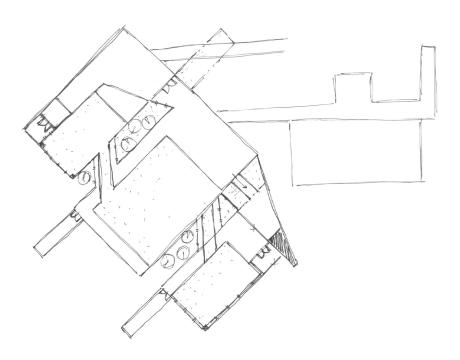


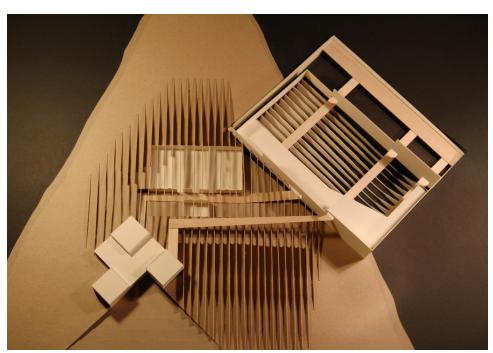


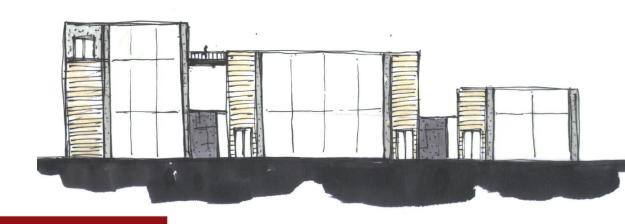


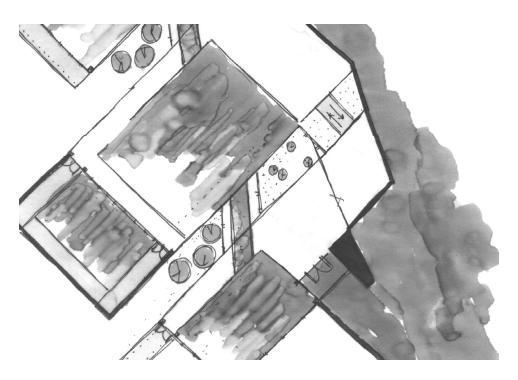
Architecture of Lost Thought

As the design process evolved, the design and thoughts became consumed with additive elements. The design was trying to be clever and precious, both of which oppose intuitive thoughts and design. The building was spread out onto the site but still maintained obtrusiveness on the site. A delicate solution was not resolved as to how a large program of a natatorium could be sited on the Apex. These models and sketches did however have the solution in them. The model demonstrated how underground spaces could become the driving force in the design.



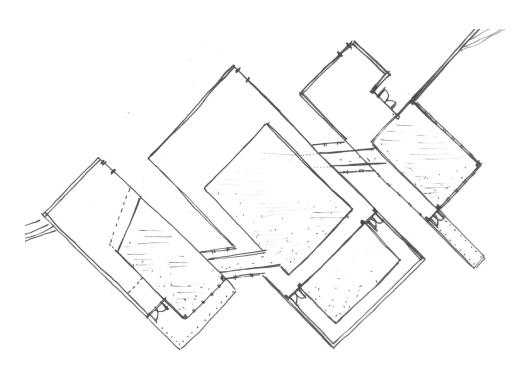


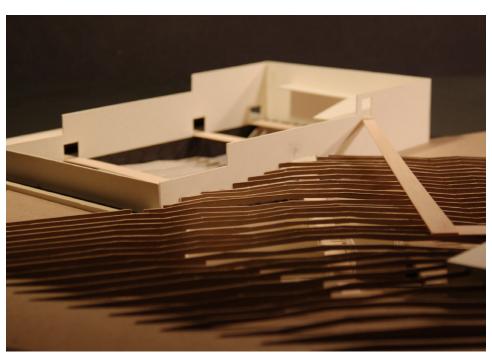


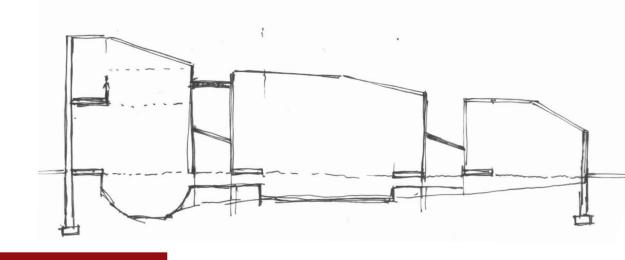


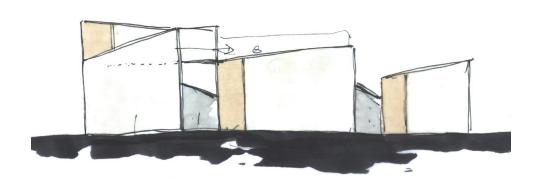


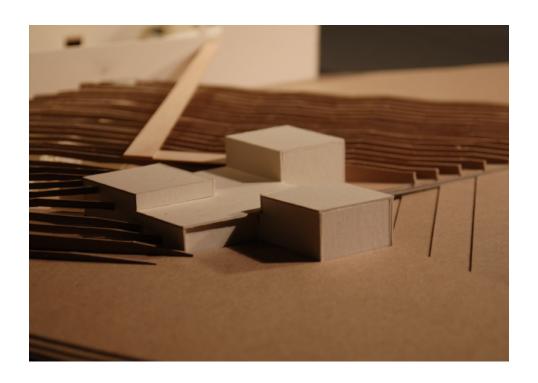








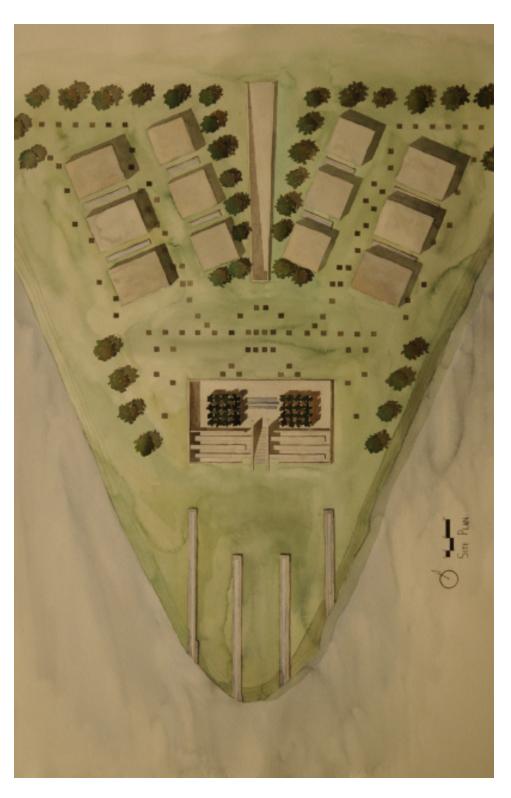


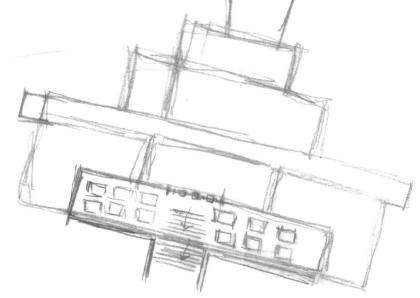


Final Design: Architecture of Experience

The final design was embedded with elements from the entire design process. The natatorium is an unpretentious program with no limits to the possible experience available to humans. With the majority of the building underground, the site remains open and tranquil for visitor. The symmetry and axial order stem from the existing condition and allow the architecture to simultaneously be sculptural and monumental. The landscape gives humans the ability to meander through the extrusions of the baths below. Once inside, the underground sensation is intruded by light from above. The light wells create the landscape above and brings light into the interior space. The interior spaces are volumes filled with life from light and humans. As human move through the architecture, experiences of the purest type occur.

Site Plan







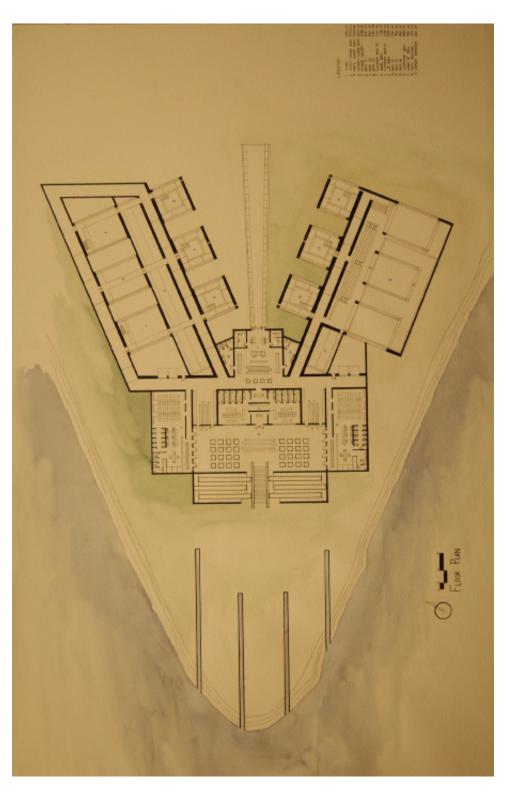
Detail of the Site Plan

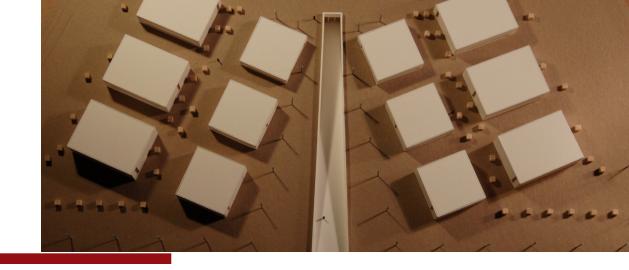


Detail of the Site Plan

Once to the site, the human can wonder through the exterior environment or make their way down the entrance ramp to the entry space. Inside, the visitor is greeted at the front desk. Beyond the entry space, a small resting space offers the human a place to stop. The locker rooms are down a corridor. After the visitors have visited the locker rooms they can continue on to the baths or exit the building again to the exterior reflection garden. The baths are located on two wings. Each bath penetrates through the ground allowing more light into the interior volumes. Throughout this journey, the architecture presents itself to the human and calls for them to experience the empowerment all around.

Floor Plan







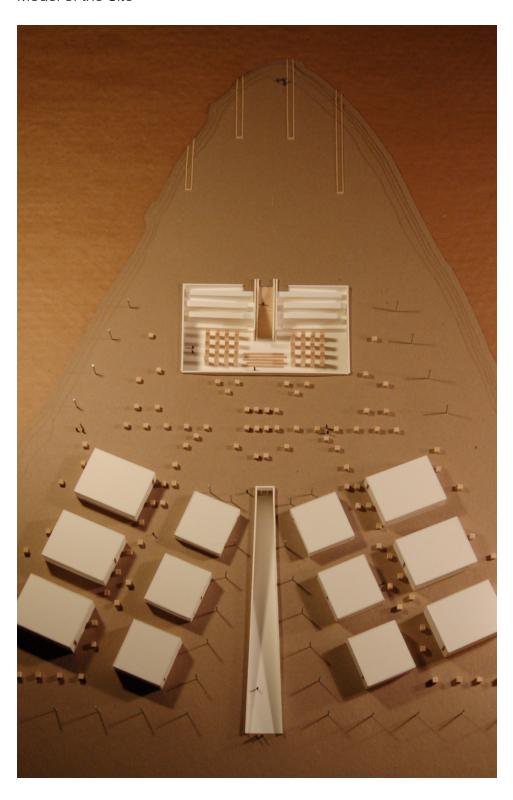
Detail of Floor Plan



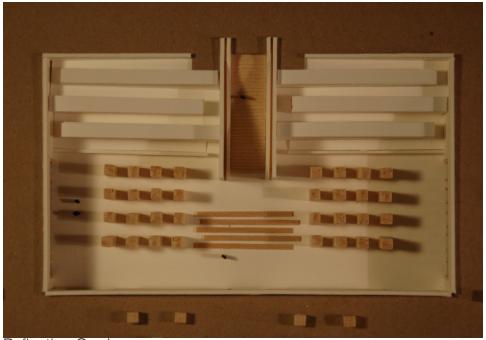
Detail of Floor Plan



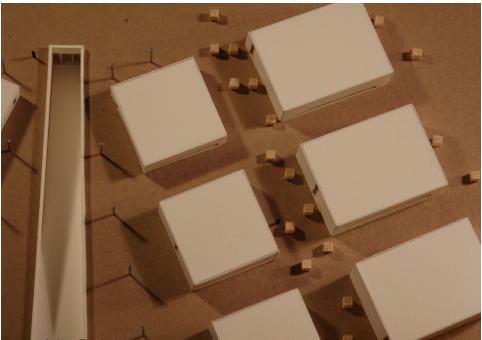
Model of the Site





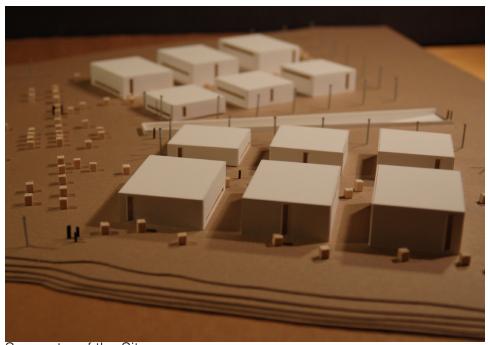


Reflection Garden

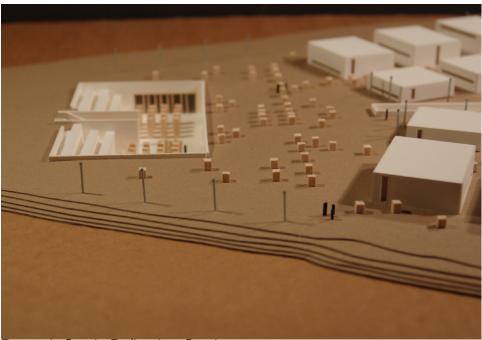


Ariel of the Bath Masses





Symmetry of the Site

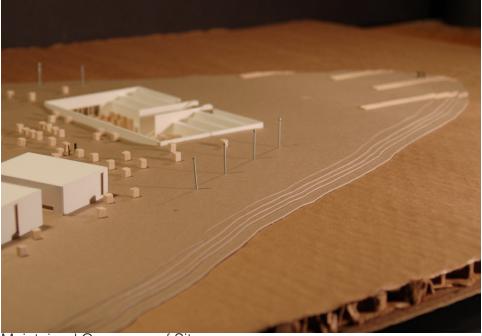


Beneath Grade Reflection Garden

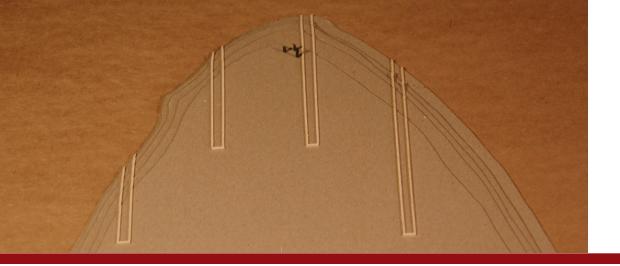


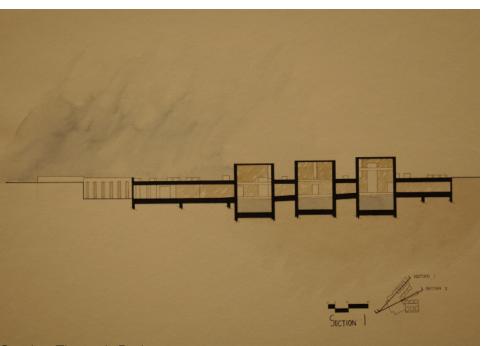


Sculptural Quality of Site



Maintained Openness of Site





Section Through Baths







Ramp to Entrance



Perspective of Detroit from Site





Perspective of the Bath Masses

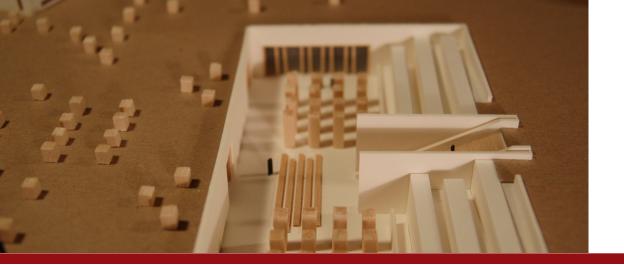






Perspective of the Transitional Space towards the Baths







Diving Bath



Non- Swimming Bath





View of Apex from Detroit River



Perspective of Reflection Garden

Conclusion

Through this architectural investigation, the intuitive thoughts developed at the beginning of the process became the underpinnings for the design. These thoughts turned into actions and created intuitive sketches and models. For architecture of empowerment, the fundamental goal is to provide spaces for human's beings to attain experiences within. These spaces are pure. The design process was turned into an architectural expression of geometry, symmetry, light, nature, and a common program. The question that begs to be answers is did the architecture respond and create experiences to empower humans? It is difficult to give a definite or indefinite answer. The elements for human to attain an experience are present in the architecture. The final design is an intuitive thought process of design that believes humans will gain empowerment once experienced.



Exterior Perspective



Bibliography

Ed. Zabalbeascoa, Anatxu, and Javier Rodriguez Marcos. Tadao Ando: Architecture and Spirit. Barcelona: Editorial Gustavo Gili, 1998.

Fare, Richard. The Colour of Light/ Tadao Ando Architecture. London: Phaidon Press Limited, 1996.

Baltanas, Jose. Walking Through Le Corbusier A Tour of His Masterworks. New York: Thames + Hudson Inc., 2006.

Corbusier, Le. The Chapel At Ronchamp. New York: Frederick A. Praeger Inc., 1957.

The Chapel At Ronchamp. New York: Princeton Architectural Press, 1999.

My Architect, dir. Nathaniel Kahn, writ. Nathaniel Kahn, VHS, HBO, 2004.

Rasmussen, Steen Eiler. Experiencing Architecture. New York: John Wiley and Sons Inc., 1959.

Brownles, David B., and David G. DeLong. Louis I. Kahn: In The Realm Of Architecture. New York: Rizzoli International Publication Inc., 1991.

Albertini, Bianca, and Sandro Bagnoli. Carlos Scarpa: Architecture in Details. Massachusetts: The MIT Press, 1988.

Ed. Beltramini, Guido, and Italzo Zannier. Carlos Scarpa: Architecture and Design. New York: Rizzoli International Publication Inc., 2007.

Los, Sergio. Carlos Scarpa. Italy: Benedikt Taschen, 1993.

Zumthor, Peter. Thinking Architecture. Second. Boston: Birkhauser, ...

Endnotes

- 1. Anantxu Zabalbeasco and Javier Rodriguez Marcos, Tadao Ando: Architecture of Spirit (Barcelona: Gustauo Gill, 1998) 56.
- 2. Anantxu Zabalbeasco and Javier Rodriguez Marcos, Tadao Ando: Architecture of Spirit (Barcelona: Gustauo Gill, 1998) 56.
- 3. Anantxu Zabalbeasco and Javier Rodriguez Marcos, Tadao Ando: Architecture of Spirit (Barcelona: Gustauo Gill, 1998) 57.
- 4. Richard Pare, The Colours of Light/ Tadao Ando Architecture (London: Phaidon Press Limited, 1996) 12.
- 5. Richard Pare, The Colours of Light/ Tadao Ando Architecture (London: Phaidon Press Limited, 1996) 14.
- 6. The Chapel at Ronchamp (New York: Princeton Architectural Press, 1999) 7-8.
- 7. The Chapel at Ronchamp (New York: Princeton Architectural Press, 1999) 10.
- 8. Steem Eiler Rasmussen, Experiencing Architecture (New York: John Wiley and Sons, Inc., 1959) 9.
- 9. Steem Eiler Rasmussen, Experiencing Architecture (New York: John Wiley and Sons, Inc., 1959) 10.
- 10. My Architect, dir. Nathaniel Kahn, writ. Nathaniel Kahn, VHS, HBO, 2004.