



TRACE. TROPE. TRANSCEND.

A HISTORY OF DESTRUCTION AND A VISION OF HOPE.

PRODUCER | ZACHARIAH MOEN

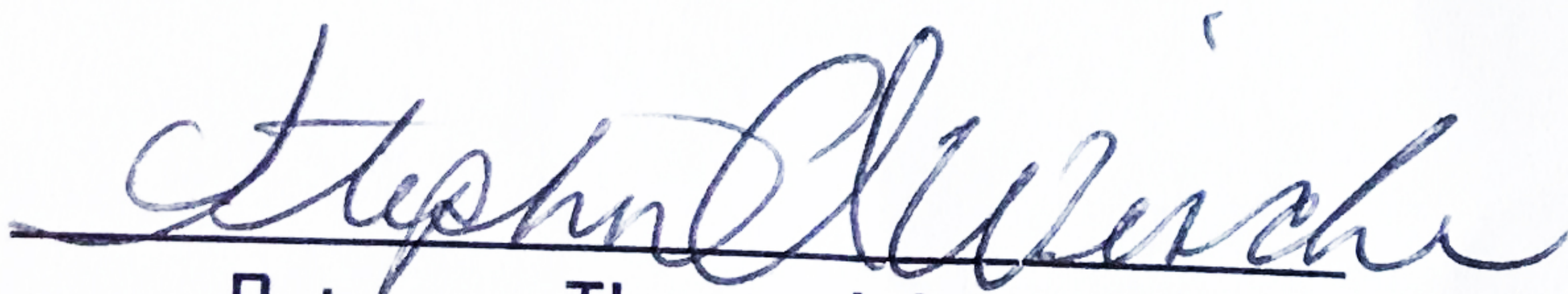
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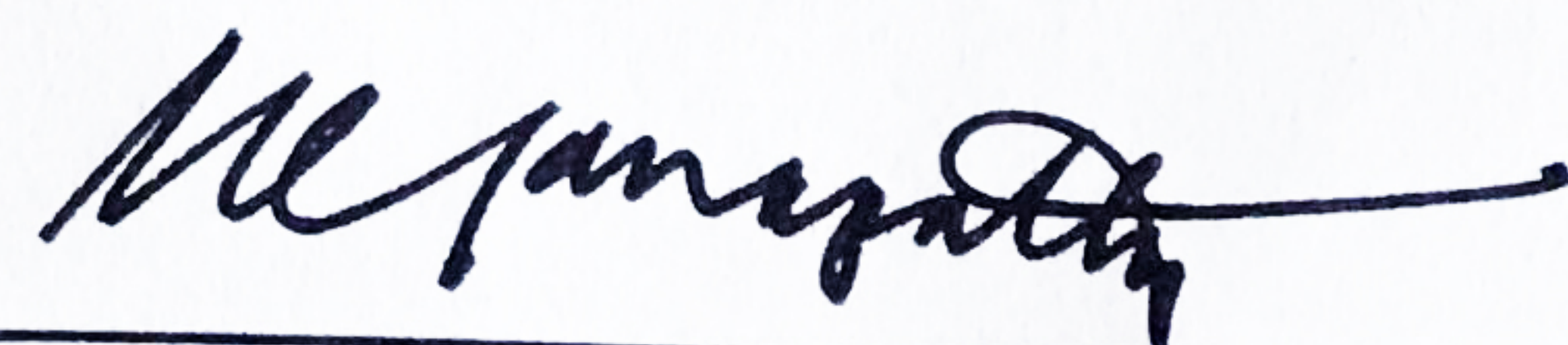
A MONUMENT TO THE MEMORY OF WHAT GLOBAL SOCIETY HAS LOST
DUE TO THE INESCAPABLE ATTRIBUTES OF WAR

A Design Thesis Submitted to the
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Primary Thesis Advisor


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This project is a tribute to all those who have lost their lives due to the inevitabilities of war, innocent death and sacrifice both foreign and domestic, a monumental memorial to the lives of friends, families, homes, nations, ideals, soldiers, and so much more. The intent is to stitch together the memory of what we, as people of a global society, have lost in the form of multiple, internationally located monuments integral to their particular location and story within history and its culture.

THESIS ABSTRACT

HOW CAN ARCHITECTURE TRANSUBSTANTIATE INNOCENT DEATH AND SACRIFICE DURING WORLD WAR II INTO MEMORIALS AND MONUMENTS OF HOPE IN MORE THAN ONE LOCATION ACROSS THE WORLD?

The interest of this global issue into an architectural thesis was derived from my military heritage and my belief of military service as not only an honor, but a civic duty. For decades the paternal side of my family has enlisted soldiers in the United States Armed forces, and currently have every able-bodied male doing time, to include myself. Through my service I have learned that at the core of the military, there lies an ideal that we all embrace: sacrifice. Sacrifice is essential to be a part of the profession of arms not only in the United States, but around the globe. This is the origin of this issue. Sacrifice not only comes from the soldier, it comes from everyone in times of war and that ideal needs to be exploited and recognized on an international level. It is not just the soldiers that embody this idea, it is families, friends, brothers, sisters, ideals, cultures, nations, homes, etc. The list goes on and on. That list, is the global sacrifice that each individual makes when there is a conflict, both foreign and domestic, and I believe this idea is overlooked.

THEORETICAL PREMISE

MEANINGFUL BUILDING ELEMENTS

In Marco Frascari's "Monsters of Architecture" published in 1991, he talks about anthropomorphism and architectural theory. Frascari details the relationship with the built environment and humans in terms of how we relate to the built environment. He stresses the importance of the built environment having the ability to be infinitely uncertain, yet continuously available at the same time.

Frascari states, "Monster, identified as the infinitely obscure concepts, and offspring of the signs of presage and essentially related to architectural divination and demonstration...Monsters demonstrate the architectural project where the arrow of premonition is shot by the image of the body." (p.13)

In order to achieve this, the study of anthropomorphism takes root. Frascari claims the revelation of human characteristics through architecture is a key component to giving a building the ability to never age, to stand beside time and not be a part of any modern relativism. We must learn that representing human characteristics in architecture is the vehicle for understanding architecture. Architecture is the translation of life. The production of architecture is the physical framework of any metaphysical connection in a building. Frascari answers a simple question, "How can architecture be timeless?" This is extremely relevant because this memorial to those who have sacrificed anything and everything because of war must endure through the test of time. It has an obligation to relate to humans of all cultures, of all ages, forever.

Frascari also discusses fragmentary architecture, or architecture of spoils.

According to Marco Frascari (1991), "In architecture, the margins of the built environment determine the phenomenon of the spatial environment, and they are the locus where the transformation of space takes place." (p. 21)

This phenomenon occurs when pieces and details of architecture reveal and conceal themselves and human characteristics. A Russian movie director by the name of Eisenstien described this idea as fragmentary architecture, or the architecture of spoils. This is the idea of putting together bits and pieces or artifacts, or spoils, into one cohesive piece. "Buildings are cultural texts that are generated by assembling fragments, excerpts citations, passages, and quotations. Every building is both an assimilation and transformation of another building. No piece of architecture is original, each building is some sort of reflection upon another. The building elements are demonstrations of how humans inhabit the world.

Frascari states, "Humans assemble the tropes or building elements in to trophies." (p. 22).

The Greek word trope means a turn, or twist, also connecting with the word trophy because trophies were built on the site of the winner of the battles in ancient Greece. These trophies were built using spoils of war, spoils of the slain enemy. These were set up as a sacrificial measure to please the gods and not be punished for war. The enemy was then troped, or turned, from murders to sacrifices. Thus born the term architettura di spoglio, buildings partially or totally composed of fragments taken, either literal fragments or conceptual fragments, from pre-existing times or other cultures.

REMEMBERING THROUGH FORGETTING

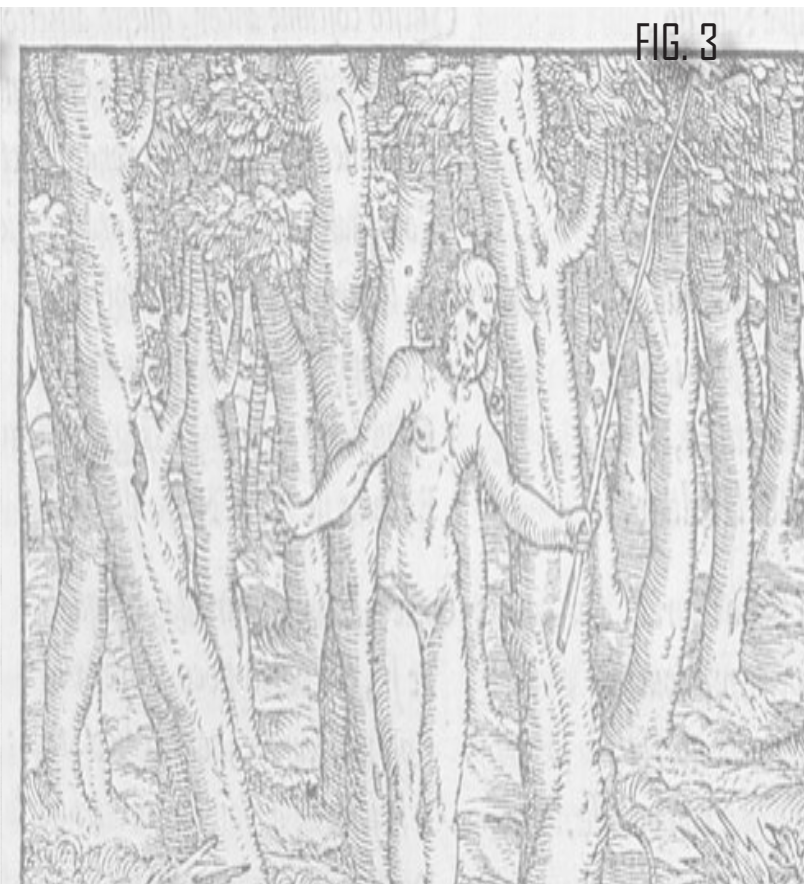
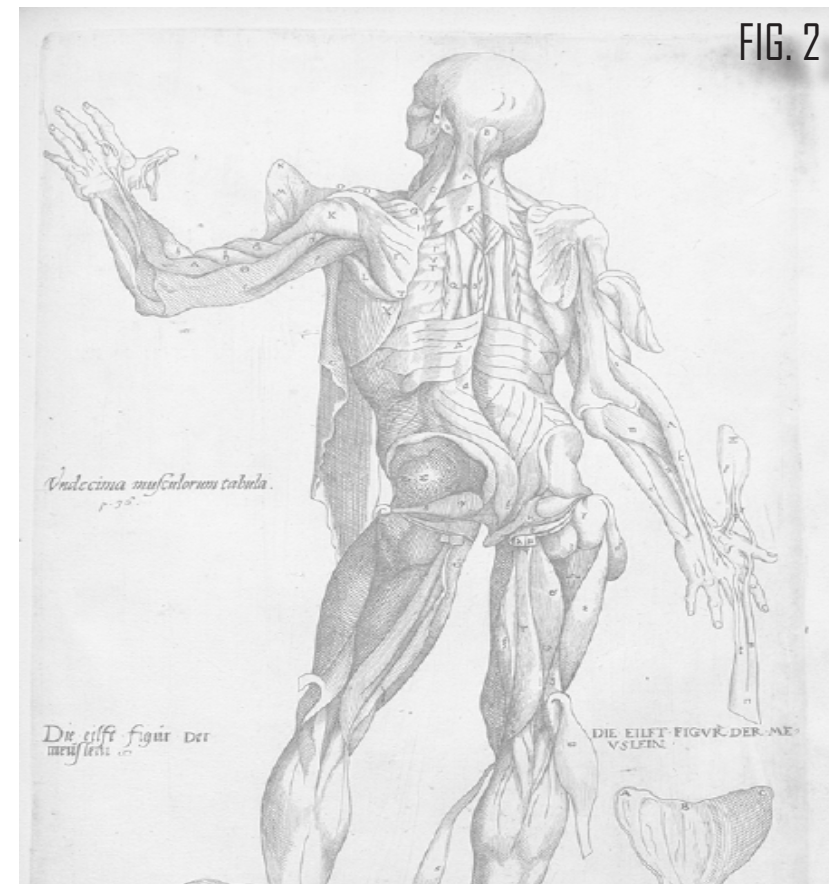
Vivian Bradford's "Public Forgetting: the rhetoric and politics of beginning again" published in 2010, outlines how memory is derived in the human body.

Bradford states, "...order is what brings light to our memory...those who would like to employ this part of their abilities should choose localities, then forms mental images of the things they wanted to store in their memory, and place them in the localities." (p. 20)

She went on to say that those who want to exercise this ability to dig into your memory, you must attach yourself to something you understand and can form mental images, and from those images you will be able to place them in your mind, and recover what you have forgotten. This idea is the going to be very important in this thesis because it needs to be understood in order to derive a connection in every individual on an international scale connection, yet all be different.

An individual by the name of Camillo dedicated his life to understanding memory. He wanted to create a machine that would essentially harness every memory throughout a lifetime in essentially a memory bank. His aim was to develop a memory system that could embody the entire universe of human thought in one machine. Dissection, a term that Camillo came to find out about, as basically the tool for contemporary architects for dealing with the problem of architectural representation. For example, the drawings present this nature scene and human anatomical scene as demonstration to dissection. The anatomical figure is not a corpse, it outlines basic anatomy and musculature and skeletal systems of the body, much like the foundations of a building. The nature scene does something similar except with seasons and details in the environment.

The landscape shows Mother Nature naked as the season changes from spring to winter, the trees are characteristic of Mother Nature in that they are bare. The layers of the scene are being peeled back until only the core is left, like the anatomical drawings are doing. This whole idea of dissection was to understand that the past, present, and future were architecturally related through memory. This idea of dissection can and will also be important in that it reaches a base layer of understand with all people, and again, an image can be derived and it can spark a memory.



SUPPORTING PREMISE

BUILDING THROUGH DWELLING

Martin Heidegger states, "Building is really dwelling. Dwelling is the manner in which mortals are on Earth. Building as dwelling unfolds into the building that cultivates growing things and the building that erects building." (p. 350)

Monuments exist in our domain which we dwell in, this is the manner in which we are on Earth.

The derivation of monuments comes from our dwelling on this Earth. Dwelling is the way in which humans are on the Earth, it means to cherish and protect, to preserve and care for, to cultivate. And the foundation of our dwelling is made possible by what Martin Heidegger calls the fourfold.

The fourfold consists of four things – Earth, Sky, Divinities, and Mortals, yet they all are co-responsible for the existence of each other, never having one without the other.

- Earth- Earth is the bearer of all it serves.
- Sky- The sky is the sun rising and setting, seeing the stars, the seasons, the weather, the infinity of the blue above us.
- Divinities- The idea of something coming over us, something transforming us or strikes us in an immaterial way – not like divinities as gods.
- Mortals- Us, those who are capable of death.

Mortals dwell in a way that we safeguard the fourfold - we save the fourfold, we set it free; we let it be the essence of what it is. We dwell in that we save the Earth; we do not master it, we do not bound it, we let the Earth be its being. We dwell in that we receive the sky as sky; we watch the sun and moon rise and fall, the stars come out at night, seasons change and await the next one's arrival. We await the divinities as divinities; we await the arrival of their signs and embrace the absence of them, not a particular god, but a divine power. We dwell in that we initiate our own essential being; we embrace death as death, not pursuing nor trying to achieve, embrace the capacity to be a part of death.

In saving the Earth, receiving the sky, awaiting the divinities, and initiating our own being we preserve the fourfold – we take it under our care, our care as mortals. And dwelling preserves the essence of the fourfold by preserving it in things(objects)- by bringing the essence of preserving in what we do, we dwell, and to build is to dwell – we bring the fourfold in to building. Building is dwelling. Dwelling is the manner in which mortals are on the earth. Building as dwelling unfolds into the building that cultivates growing things and the building that erects buildings.

We do not dwell because we have built, but we build and have built because we dwell. The safeguarding of monuments, as well as the building of monuments and safeguarding their historical significance gets its origin from the core of Martin Heidegger's ideas. It is crucial to understand and apply this concept to memorialize those and that which once dwelled on this Earth, but are not more due to the impacts of conflict on a global level.

In what way does building belong to dwelling? What is Building through dwelling? What is a built thing? I will use Heidegger's example of a bridge to bridge this gap and connect the essence of the fourfold into dwelling.

The bridge gaps the distance between banks with ease, it does not just connect the existing banks, it makes the two banks emerge only because the bridge crosses the stream. It causes them to lie next to each other, it brings the banks, stream, and land from both sides into each other's neighborhood. The bridge gathers the Earth as landscape around the stream, and it guides the stream through the meadows of the landscape. The bridge embraces the weather and the nature of the sky. It allows mortals to come and go from shore to shore, from meadow to meadow, it's an initiation of mortal's movement. It allows cities to connect, transportation of goods, and the rise and fall of new cities on new meadows. Whether mortals know it, the bridge gathers them and embraces the new and old divinities. It sets free the earth, sky, mortals, and divinities. A new location for building arises from the bridge. Without the bridge, there would be no site for a building, the site is created through the bridge and only by the existence of the bridge. The bridge provides for the fourfold. The space that the bridge provides allows space which the fourfold exist. The spaces through which mortals resides are from these locations provided by the bridge. If we understand the relationship between these spaces, the spaces between spaces, it helps our understanding of man and space.

Spaces are within the stay of mortals. To say that mortals are is to say that in dwelling we persist through space. And because mortals exist through space, through these spaces mortals dwell. The relationship between man and space is dwelling. And the things that fall before these spaces that humans dwell are buildings.

STORIES OF SOCIETY

I am going to share with you three stories, three stories told around the world that bring to the surface forgotten victims of war, stories of loss.

Maria Weinstein, a girl no older than 10 years old, was born to a Jewish family before the start of the Second World War. Maria lived a normal life, a life of learning, friendship, and memories. She lived a happy life. Then the Germans came. The Germans rounded up Jewish families like cattle, throwing them in pens, starving them. Maria, her sister, and father managed to escape leaving their mother and brother behind in the fenced prison they harbored Jews in, making them dig their own graves day after day. They began to wonder, asking families to hide them, none would do so. They met a young Ukranian boy who recognized their last name, he told them that the Jews that were in the fences were lined up, stripped of their clothing, and the Germans brought death upon them all. Moments later, they had been discovered by more Germans, running across a large expanse to flee from the Germans wrath. Maria and her sister managed to hide in the forest. Maria asked her sister where her father was. Her sister looked at Maria with dismay on her face, "Over there, they killed him." The two girls finally met a family that took them in, gave them shelter and safety, and preserved their story. Maria married 6 years after the war ended, had six children, grew old and shared her story.

A Japanese child, Masaaki Tanabe, was part of the noble class of Japan during the Second World War. His father was once a samurai warrior who once ruled Hiroshima. He lived near the industrial promotion hall, the best playground for the children in the area. Masaaki would ride his tricycle, and play with his friends on the playgrounds and fields. Little did they know that the bomb dropping of 'Little Boy' from the Enola Gay in 1945 would be just meters away. Masaaki went visiting his grandparents outside of the city, then the Americans brought the B-29 bomber upon them. Masaaki returned to what was once beauty turned to ash. His parents were incinerated in the explosion. What was once a blue sky overhead and a shimmering city below is now but ash, a memory. A landscape devastated in a matter of seconds.

I have a similar story, one that holds less magnitude than Maria and Masaaki, yet still formed inspiration. Like Maria and Masaaki, I once had to watch my father separate from me as a child and never know when would see each other again. My older brother and infant little brother watched as our father walked out the door to be a part of the global picture, to fight the war on terrorism. We, along with our mother, were opened to a world of answerless questions, always wondering when or even if he would return. We went to school, we made new friends, we did our homework, we made new memories, all without the comfort of a father. For 13 months we waited, for 13 months we wanted to ask the question that never came from our mouth, for 13 months we worried.

These stories will be used as a guide in the fabrication and cultivation of research on the theoretical premise and unifying idea. They act as the foundation of the research and inspiration to continue to bring the this history to the surface through this project.

Historical, cultural, and societal context are integrated into the research of the theoretical premise in this thesis. Considering the foundation of history involved with this theoretical premise, I do not believe separated research from the context of history, culture, and society is appropriate. Therefore, the combination of research into history and culture in the development of this thesis is pertinent.

"Trace. Trope. Transcend: A history of destruction and a vision of hope." Three museums in Berlin, Hiroshima, and Chicago, are all tied together through the story of the Second World War. Through the encounter of traces and erasures, these sites construct a memorial for both the inconceivable destruction of war and the possibility of a hopeful future. It is no longer about the direct representation of death, rather a labyrinthine experience where visitors transport historical meanings between spaces and objects.

I am a Soldier in the United States Army. As are both of my brothers, my father and his father before him. The patriarchal side of my family has 9 generations of continuous military service from every abled bodied man that could serve. When I ask my heritage the reason for our continual service to our country, we all seem to have the same reply, "we do it for those who cannot." This project is an inspiration from that fact alone.

Marco Frascari once said, "We are more mostly tied to the invisible than to the visible." (Frascari, 1991). It is not the items or objects passed down from times of war that we cherish, it the memory of what once was, the memory of our loved ones. The scheme of this thesis is founded on the personal commitment I have to the resurrection of this history through memory and experience. It is intended to recognize the lives of hundreds and hundreds of thousands of people that go unnoticed and unrecognized. War breaks families, disintegrates brotherhoods, burns homes, ignites hatred among peoples, crushes ideals; it feels no remorse. Three museums carefully placed at 3 different locations in 3 different countries around the world, to bring together the realization that we cannot allow history to repeat itself.



"We are more mostly tied to the invisible than to the visible."

FIG. 5

HISTORY, CULTURE, SOCIETY

Berlin, Germany, Chicago, IL, and Hiroshima, Japan are the 3 site locations I have chosen. The first of the three proposed locations, Berlin is the capitol of the nation that created a divot in the history of humanity. More specifically, the site is on the Southeastern corner of Tiergarten Park, West of the Memorial to the Murdered Jews of Europe done by Peter Eisenman. We all know the devastation and destruction Nazi Germany brought, but that suffering was mutual.

Home to more than 300 hundred bombings throughout the war, Berlin knew the feeling of burning metal raining from the sky, looking up and seeing clouds of planes flying above. There was no cover. There was no shelter from this rain.



FIG. 6

The aftermath of the war brought the Zero Hour, stunde null, when all of Germany froze and gazed at their city in rubble.

The trummerfrau became the caretakers of German ash, picking up the rubble after the rains. They were just as much a part of the war as the soldiers in arms; their patriotism, their loss, must not be forgotten.

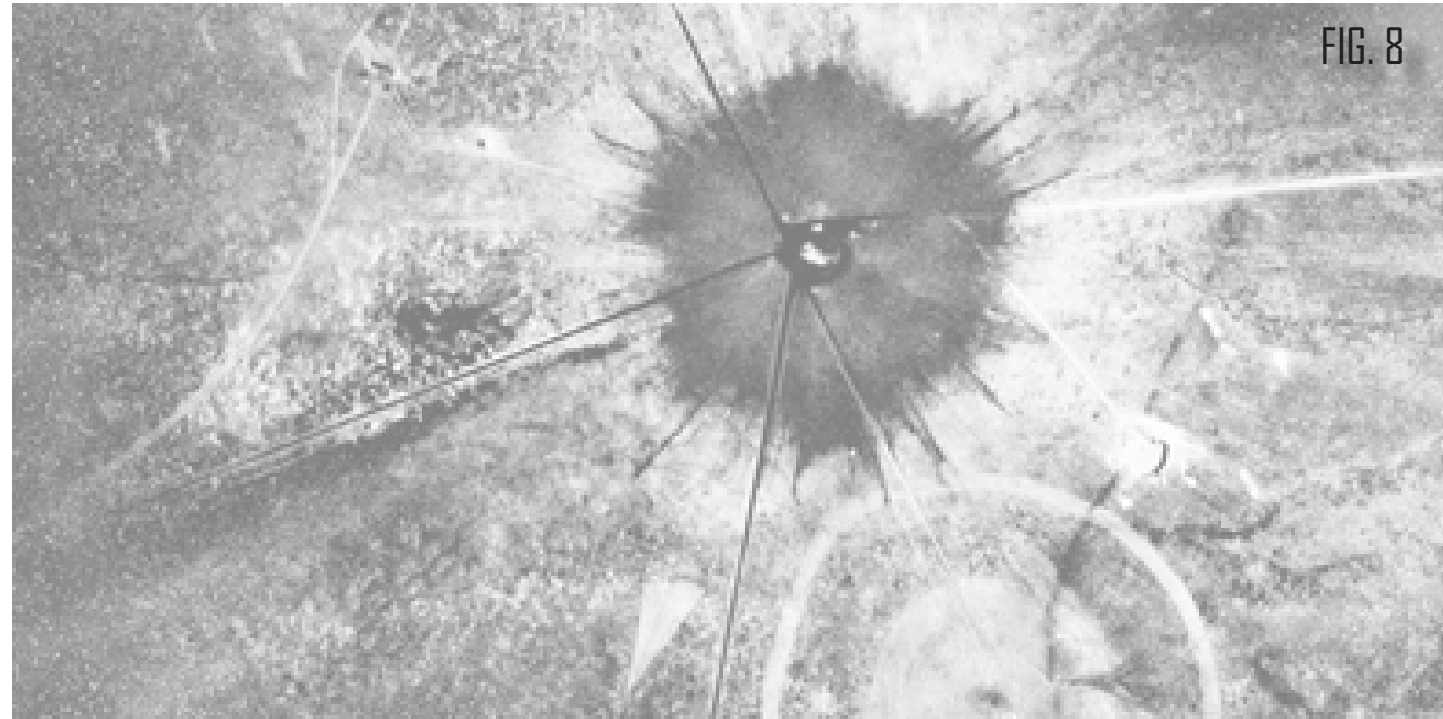


FIG. 7

RESEARCH

The second international location is Hiroshima, Japan. The proposal is in Central Park, the park located just North of the site of the atomic bomb dropping that ended World War II.

Hiroshima is home to the first atomic bomb to ever dropped on a civilization in the history of the world. This bomb brought 90% of the city of Hiroshima to the ground, killing about 80,000 people upon explosion. This moment brought an end to World War II instantaneously.



The radiation from the blast not only left a material imprint in Hiroshima, but it continued to take lives years later. The thermal radiation bleaches to the surface that it touches, so where anyone was standing at the time of the explosion left a print where their body took the mass of the radiation, an atomic bleach on the earth.



Ironically, these shapes of humans can be related to the origins of the shadow drawing. An individual by the name of Pliny the Elder, provides an example of the origins of shadow drawing through his painting. It was said that a man was leaving her woman to go abroad, and the tracing of his contour on the wall would preserve his memory as he was gone, a sign of hope.

The human desire for the preservation of those we love is embodied in the origins of the shadow painting, the door of absence it creates on the wall.



Thirdly, Chicago, IL – at the University of Chicago, Stagg Field. Just south of Millennium Park, a location where public is at play, looking to the future and never recognizing what the past harbors beneath them.

The city of Chicago held a vital role in preparation for global destruction. Chicago was second to only one city, Detroit, in terms of war production at \$24 billion.

Anything from field rations, to parachutes, to torpedoes and aircraft engines were produced in Chicago, employing hundreds of thousands of people to join in. Little do they know, they fell victim to war. Boot camps, training facilities, universities, and generations of people came together to be a part of the devastation of hundreds of thousands of people.

The creation that derived from Chicago came from the Metallurgical Laboratory at the University of Chicago. This scientific laboratory, located underground at Stagg Field, studied the chemical element plutonium to harness its destructibility. On the 2nd of December, 1942, Met. Lab created the first controlled nuclear chain reaction.

Little did they know this laboratory was the beginning to the end of a World War. Their development eventually led to the creation of the atomic bomb that destroyed Hiroshima.

Ironically, under the grand stands of Stagg Field, where the development of death started, was where the celebration was had when the Soldiers came home following the war.

The people of Chicago, and the city of Chicago, has pushed aside the memory and causality of their creation, instead they claim it as an 'achievement.' Chicago buries their past, hoping the public forgets their responsibility of their global impact, but rather moves the community to celebrate what they call their success.

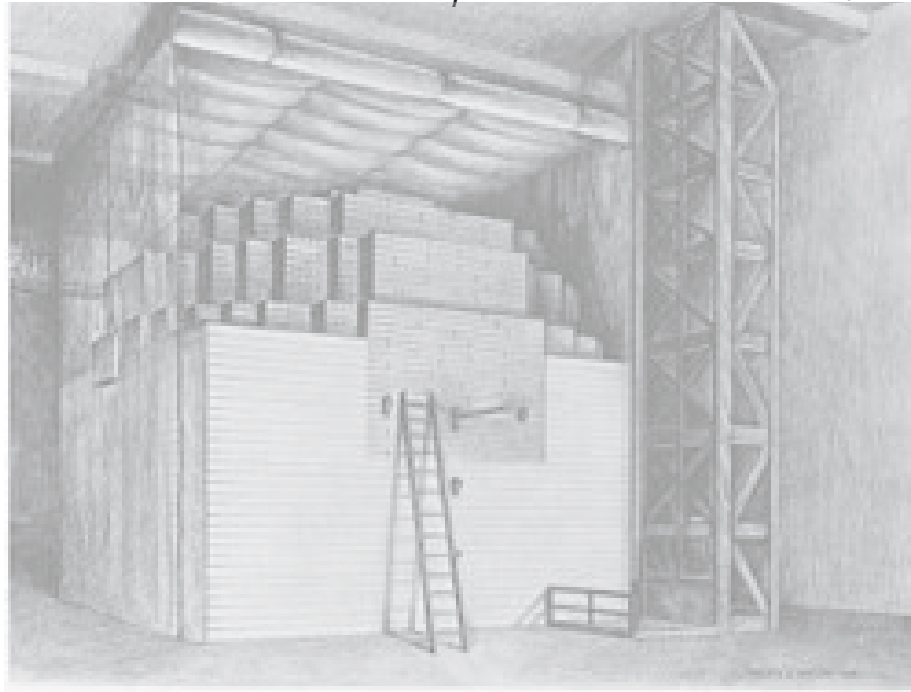


FIG. 13



FIG. 14

A modern example of fragments of history and spoils of war that has inspired me and has allowed me to understand through is the Jewish Museum, designed by Daniel Libeskind. The complexity of his design cannot be justified by explanation alone, nor by images. His relentless effort to poetically and metaphorically connect the past to the present is indescribable, but a brief introduction to his work is critical.

Mr. Libeskind's design is commemorative to the German-Jewish history during the Second World War. The zig-zag structure, symbolizing a broken Star of David, attempts to disorient so you can begin to create a fictitious historical world as you experience the museum

His design details create a historic presence and a poetic connection that begin to inform you of the past through the present. This idea is paralleled to a symbol that dates back to the 4th century AD, the Janus Head.

Janus is ancient in Roman myth, said to be the god of beginnings, time, passages, and endings. He is depicted have two faces because he simultaneously looks from the past to the future.

This constant motion between past and present and disorientation to reorientation in the Jewish Museum is synonymous with the Janus Head ideals and it is what I strive to portray in these 3 museums.

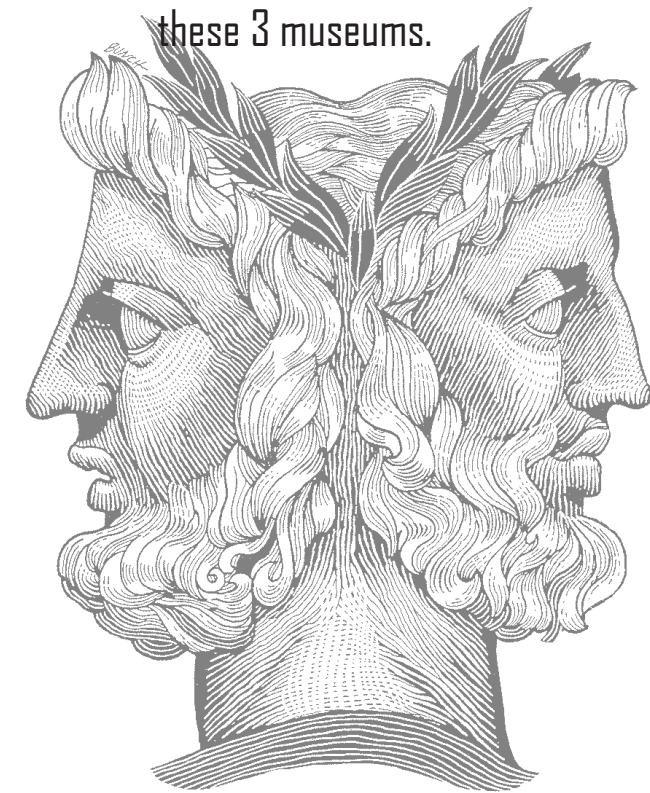


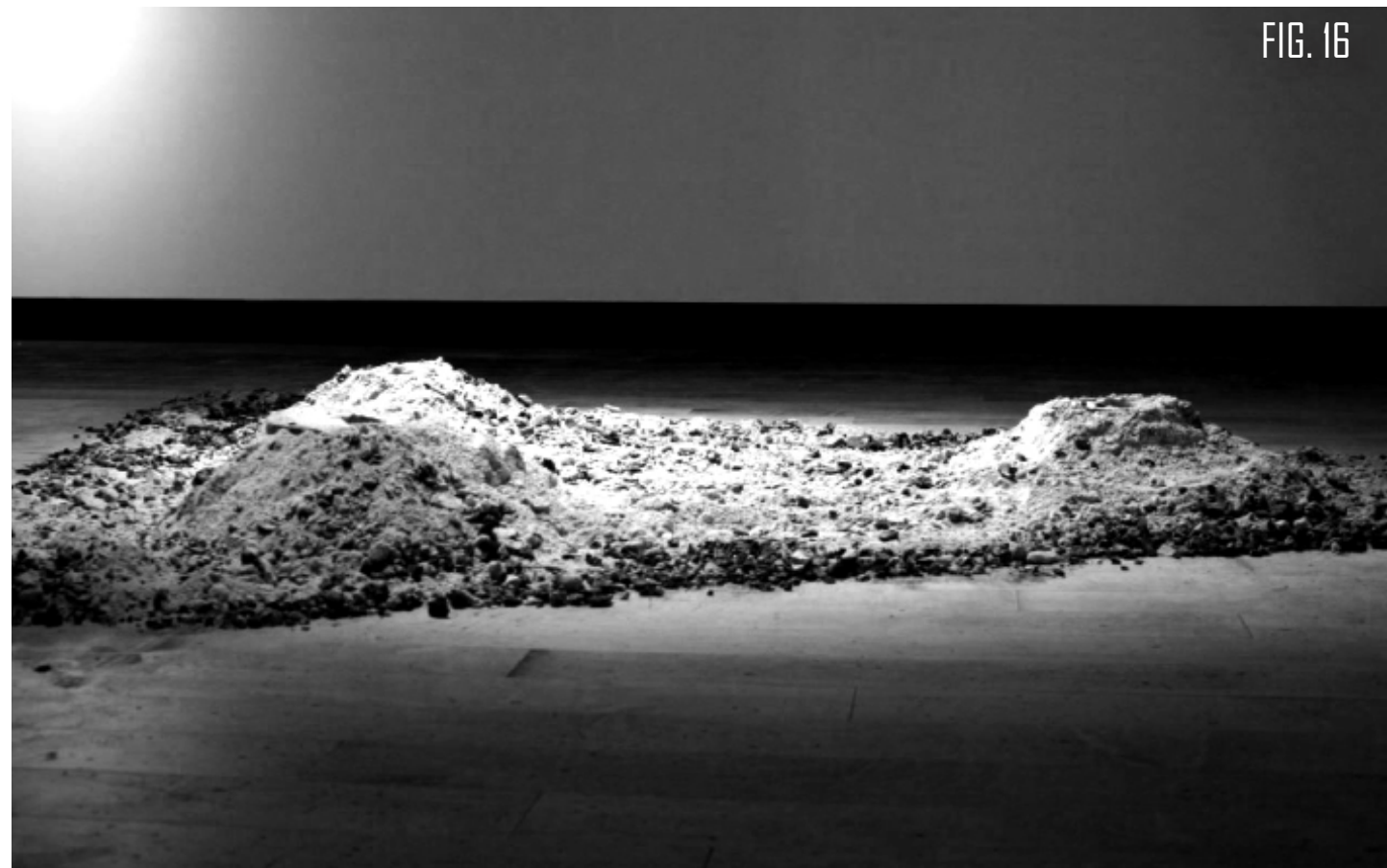
FIG. 15

Marco Frascari states in his book *Monsters of Architecture*,

"Buildings are cultural texts that are generated by assembling fragments, excerpts, citations, passages, and quotations. Every building is both an assimilation and transformation of another building. No piece of architecture is original, each building is some sort of reflection upon another. The building elements are demonstrations of how humans inhabit the world."

This statement is at the core of my design, attempting to assimilate and design three separate museums at three different locations all evoking the same meaning.

The artifact speaks to this experience. Three concrete pylons, representing three war torn sites around the world, together evoke a sense of loss while instilling remembrance and a hopeful future.



HISTORY, CULTURE, SOCIETY

Hiroshima, a city silenced by the mushroom cloud. Berlin, reduced to rubble from a sky of falling metal. Chicago, the city that paraded on the grounds that sent tens of thousands of people to their instantaneous death. These 3 cities, representative of the 3 towers of ash and concrete in the artifact, are the pillars on which their histories will surface and represent the unrepresentable through a creation of fiction. These portraits and fictions created are the new reality the artifact is intended to embody.

The artifact has 3 mounds of heaping ash cradling an open void in a concrete block.

Concrete is undoubtedly heavy, there is a permanence and a chill to its quality. Concrete harbors the secret the artifact must reveal when a presence displaces its absence of the void. Once concrete is formed, it is no longer gelatinous to its touch, it is now permanently fixed. The only way to fill the absence in the concrete is to replace it with your hand. What was absent, becomes the present. The truth of the artifact lies through your imagination. Even lifting the concrete from the ground creates a divot that is irreplaceable.



RESEARCH

A fiction can begin to be created through the subtlety of the artifact. We can never experience what they experienced, but we can re-imagine that history. Hiroshima, the sound of the crunch from the ash below your feet as you walk around, what is left of Hiroshima.

Every step taken weighs your mind into that history with the sound of the crunch, placing a fictitious life at the exact moment in Hiroshima after the bomb was dropped and all those present becoming an atomic bleach upon the ground.

Berlin faced devastation from burning metal, all to see their possession dwindle to rubble. It all at once, stood still. One moment, nothing moves, stunde null.

At another, the trummerfrau are picking up the rubble from the destruction. The crunches of ashes on the ground from an atomic bomb instantaneously troped into the sound of broken rubble and a city brought to its knees. The trummerfrau became the janitors of Berlin's city brought to trash. A new meaning created for the sounds and disturbances below your feet, you are now the janitors of Berlin.

Stagg Field in Chicago becomes a weight of presence through the absence they created - the absence of tens of thousands of lives, of ashes, of atomic bleach. The remoteness around the world of their physical actions in Hiroshima is precisely what makes thousands of miles seem like one. The atomic bleach, the crunching on the ground, and the stillness of life altogether trope that history into a reality in the present.

By using history as a material, these three museums allow the past to emerge, bringing present what has been forgotten. Through the superposition of pathways, fragments, spaces, and historical quotations, the buildings function like Russian dolls, nesting one space into the next.



FIG. 19

Berlin is the capital of Germany, and the capital of the country that created a divot in the history of a culture. Nazi Germany, from 1933 until the end of World War II, was governed by a dictator that created not only a destruction of a particular kind of culture, but a global devastation. They brought suffering to innocent people both from within their nation and around the world. The Nazi party used their power to seize control over all aspects of life in Germany, all in the hands of one person. This nation was in search for power, aiming to eliminate all that stepped in their way in achieving global dominance. Germany was a strong piece of the Axis powers, as they fought against the Allies during the Second World War.

A monument in the heart of this powerful nation, a nation known for destruction and loss, would be ideal. Their power left a dark mark on the history of the world, and this site would help unify the theoretical premise.

FIRST SITE

FIG. #20



BERLIN, GERMANY

All three sites were chosen based on their specific site context, and at the same time relating to the other sites across the world. They all have very specific elements that make them individual and stand-alone in their respective locations, but as you look at this project as a synthesis of historical and geographical context – they become one. A culmination of site information is revealed throughout the remainder of the document, providing a more integrative approach to presenting the site analysis.

Every site is located inside a city park – immediately addressing the fact that the museum is, among many other things, a tribute to the city, its people, and the people of the nation it resides in. The city park also allows for a futuristic dimension added to the project, allowing for any additions, explorations, or growth of the project in general.

Tiergarten Park is located in a geographically intimidating location as it sits across the street from the Memorial to the Murdered Jews of Europe Memorial, next to a memorial promoting world peace, and the Trajan Column, as well as many other historical references to Berlin and Germany as a whole. The intention is to address a serious issue that has been ill-addressed by previous artists and architects from the past to address the issue at hand.

TIERGARTEN PARK

FIG. #21

FELIX Club Rest

Denkmal für die ermordeten Juden

Ottobock Science Center Berlin

AMRIT Berlin

FIG. 22

Hiroshima is home to the first atomic bomb to ever dropped on a civilization in the history of the world. This bomb brought 90% of the city of Hiroshima to the ground, literally, killed about 80,000 people upon explosion. This moment, and adding the second dropping on Nagasaki three days later, brought an end to World War II instantaneously. The bombing site of this city would begin this memory of sacrifice in the right direction.

SECOND SITE

FIG. 23



HIROSHIMA, JAPAN³⁵

Central Park sits just North of the exact location where the 'Little Boy' atomic bomb was dropped over the city of Hiroshima on the 6th of August, 1945. Aside from that monumental piece of global history, memorials and museums surround this site full of treasured information dealing with the Second World War, world peace, and many tributes to all who died from radiation poisoning.

Central Park has allowable space for the continuation of museum and ritual space outside of the museum itself, again allowing the city of Hiroshima to take an active role in the development of this project in the future – instilling a civic duty upon the civilians and for future generation to be a part of.



CENTRAL PARK

FIG. 25

Chicago, Illinois, United States of America incubated the beginning to the end of the Second World War. With their contribution to war production and the scientific development of the destructibility of plutonium leading to the development of the first atomic bomb, it strings together the beginning and the end to the histories of Hiroshima and Berlin back to the United States.

THIRD SITE

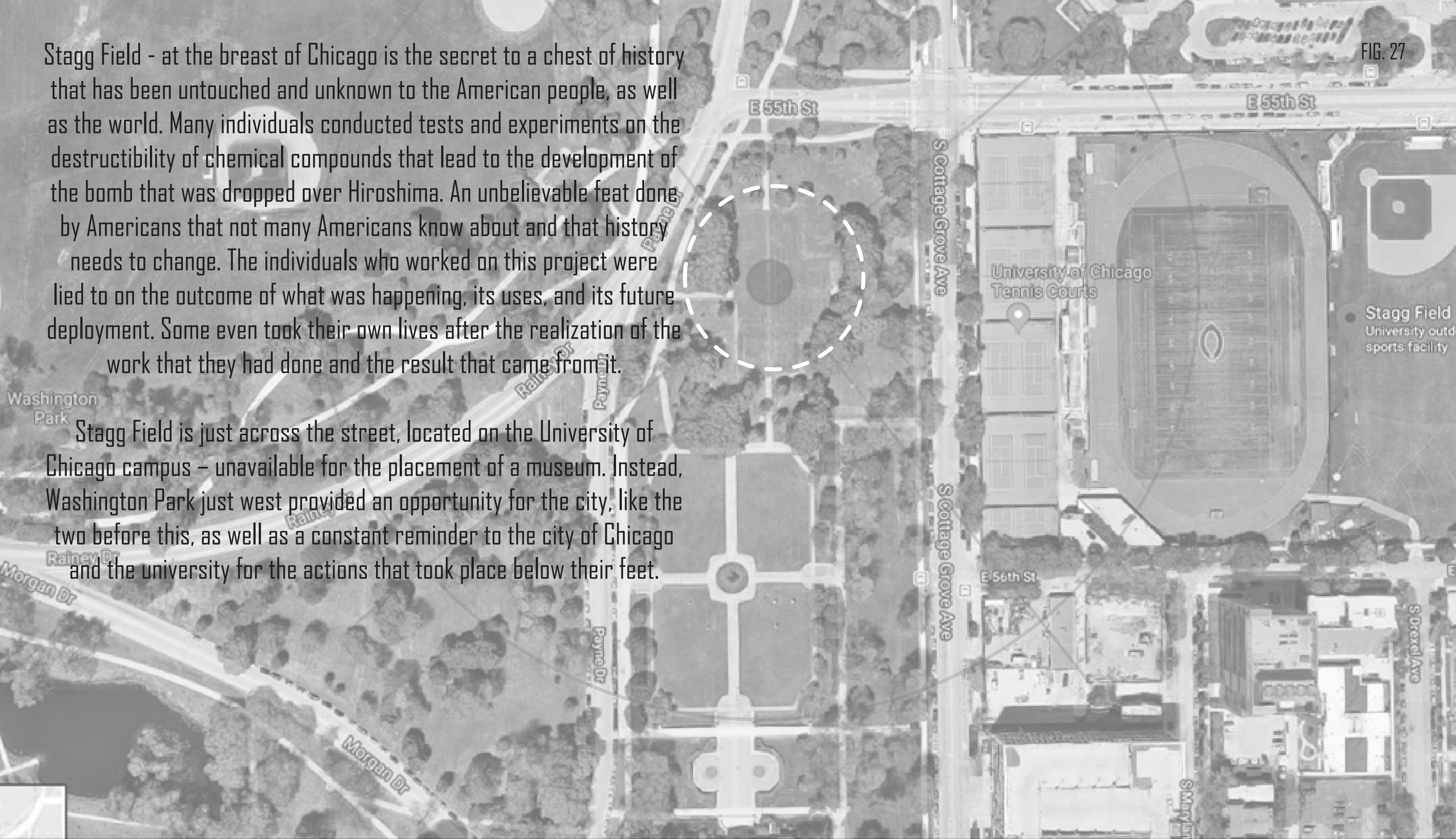
FIG. 26



CHICAGO, IL³⁹

Stagg Field - at the breast of Chicago is the secret to a chest of history that has been untouched and unknown to the American people, as well as the world. Many individuals conducted tests and experiments on the destructibility of chemical compounds that lead to the development of the bomb that was dropped over Hiroshima. An unbelievable feat done by Americans that not many Americans know about and that history needs to change. The individuals who worked on this project were lied to on the outcome of what was happening, its uses, and its future deployment. Some even took their own lives after the realization of the work that they had done and the result that came from it.

Stagg Field is just across the street, located on the University of Chicago campus - unavailable for the placement of a museum. Instead, Washington Park just west provided an opportunity for the city, like the two before this, as well as a constant reminder to the city of Chicago and the university for the actions that took place below their feet.



STAGG FIELD

This project's importance is derived from my family's dedication to the armed forces of the United States of America for multiple continuous generations. We believe it is our civic duty to make a commitment to this country to give back to those before us, and to provide a service for all those incapable of doing so. For this reason, every able-bodied male in our family has given their time and service for over 90 years, including myself currently. As soldiers we understand one thing more than others, sacrifice. But, what makes this project different is that it is not the sacrifice of soldiers, it is the sacrifice of all of those people around the world that soldiers sacrifice for. If it weren't for the citizens around the world, the culture of this world, sacrifice from soldiers would not be necessary. All of those victims of war that have their families shattered and their homes taken because of conflict, that is who this project seeks out.

Currently in our culture, there is not a monument around the world that does this. There is not a monument that aims to bring back the history of the civilian victims of war in order to raise that awareness on a global level. It provides a great opportunity to bring together countries around the world to inform future actions based on the past. This project is exceptionally relevant to our current world politics as well. Our culture is on the verge of another erasure of peoples, this project aims to bring back that history around the globe between cultures, so the victims of war can be no more.

MONUMENT ARCHITECTURE

FIG. 1

Part of the intent to this thesis design is to create something that embodies a culture. It is a celebration of life through the sacrifice of many, both inanimate and animate objects. It is obliged to have the ability to be visited by people all over the world, yet embody the type of culture that it resides in. Because this project has a lot at stake, becoming monumental in its typology is a key to success.

MEMORIAL TO ALL THAT IS LOST

The idea that being monumental accompanies the essence of the project, a memorial to what is lost. This is going to be at the core of the ideas showcased in this thesis. The project will embody history, people, languages, and ideas all in one monument, yet still appealing to the individual as they perceive it. Memorials hold on to what is lost in the past, but at the same time it informs the future and that is the soul of what is at stake in this project.

PUBLIC RITUAL SPACE IN AN URBAN CENTER

Having the ability to be versatile in its function for the public is also very important. It gives the users the ability to experience this monumental memorial in a way that they perceive is the right thing to do. They may utilize this opportunity as a place to place flowers on and weep like that of a cemetery. It may also be utilized as a space of silence, of refuge from current life situations and a remembrance of what was lost. It could also be used as a celebratory space for the future, and what is to come because of all those who have been lost for the survival of the future.

VIETNAM VETERAN'S MEMORIAL

Location: Constitution Park, Washington D.C.

Typology: Memorial

Designed: March, 1982

Completed Construction: October, 1982

Architect: Maya Lin

Client: City of Washington D.C.

Context: The elements that made up the memorial consisted of four things: be reflective and contemplative in character, harmonize with its surroundings, contain the names of those who died in the conflict or who were still missing, make no political statement about the war. The design was chosen through a national design competition, an 18 year old won the design.

Case Research: Maya Lin's concept of the memorial was to create a park within a park. In this case, it was in the National Mall in Washington D.C. It was within the Constitution Gardens, so making a site plan that was cohesive with the already existing gardens and the creation of a new artifact was essential to the design. The black granite possesses a mirror-like surface in that it creates this gap of history that you fill in as you read the names and see yourself in the reflection. The Wall contains 58,272 names on the memorial, dedicated to all that have lost their lives or could not be found in the Vietnam War. This memorial makes no political statement, but it fills a cultural gap in the history of America through this war. It allows every American and those who are not of America descent, to engage and interpret the monument how they would naturally. It brings together people on not only a national level, but a global scale as well.

Conclusion: This memorial to the soldiers that lost their lives or went missing in action is a statement to the world. It brings together all races and ethnicities and allows them to make this interpersonal connection. The geometry of the memorial makes a direct connection with the Washington Monument and the Lincoln Memorial, stitching together history with geometry.

This study contributes to the theoretical premise in many ways. It displays solutions to timeless architecture, relating on a global scale, connecting people of all races and ethnicities, bringing history forward by interpretation of the individual.



FIG. 28

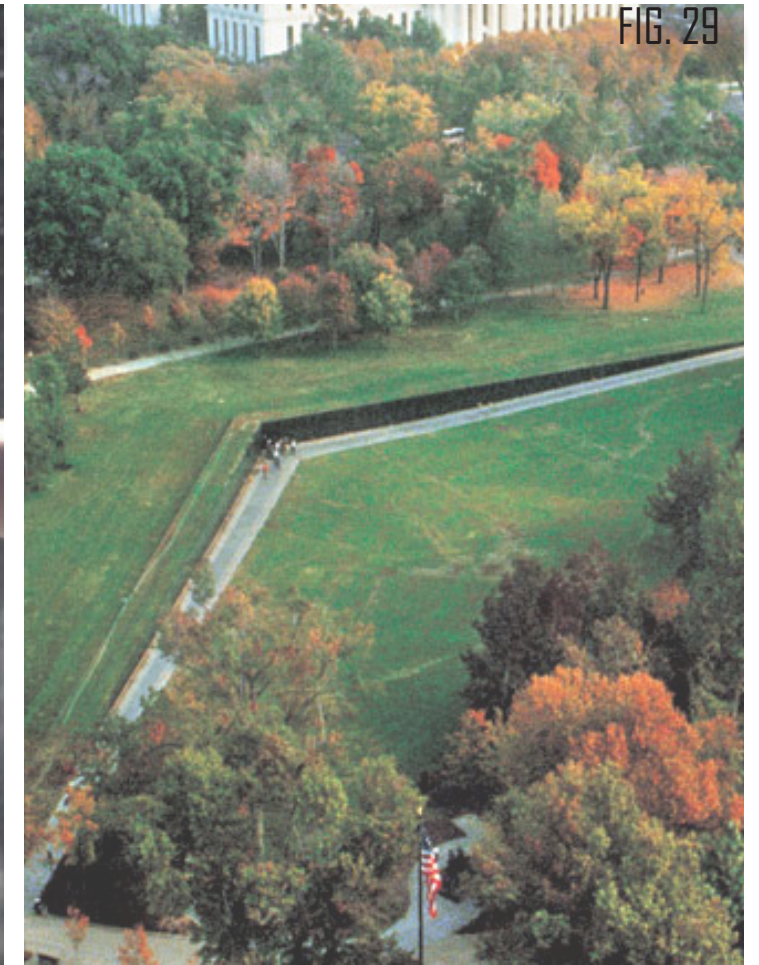


FIG. 29



FIG. 1

JEWISH MUSEUM

Location: Berlin, Germany

Typology: Memorial/Museum

Designed: 1989

Completed Construction: 2001

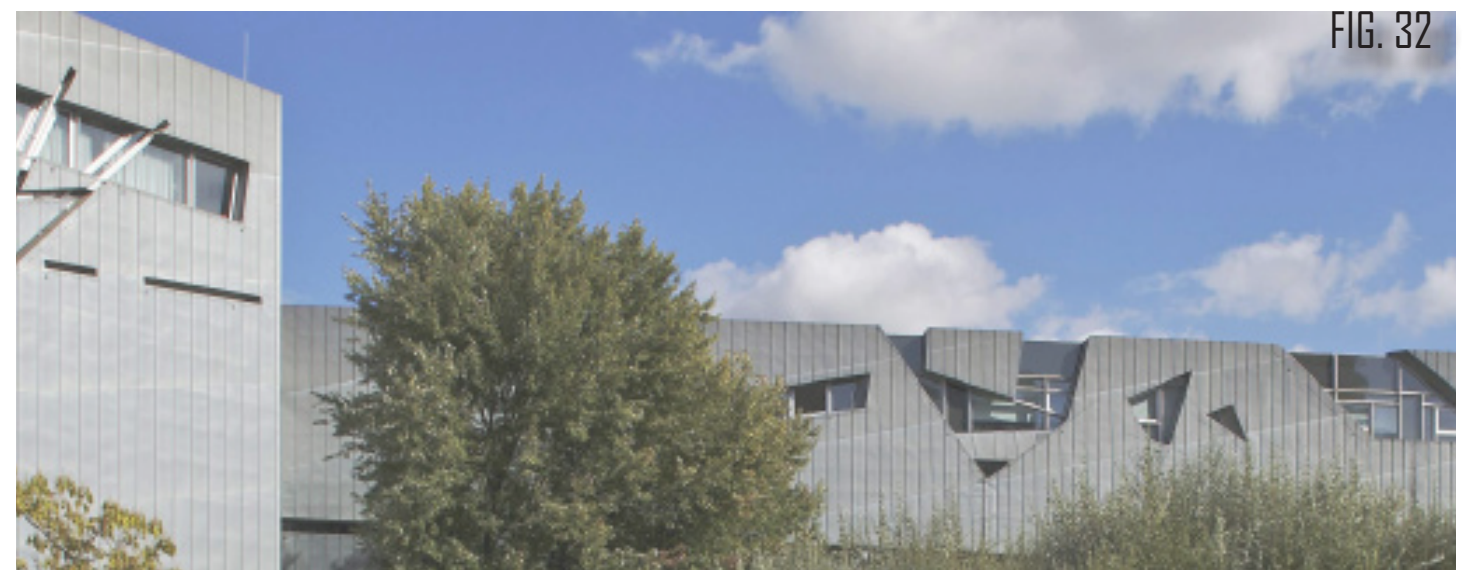
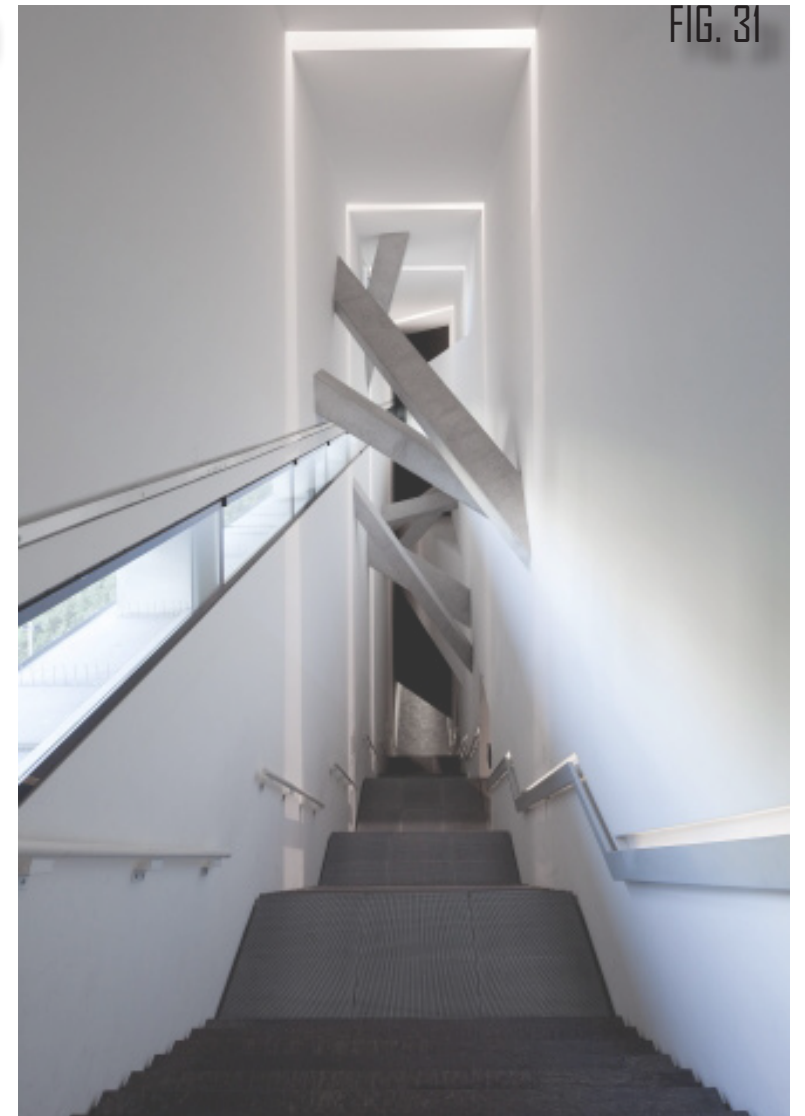
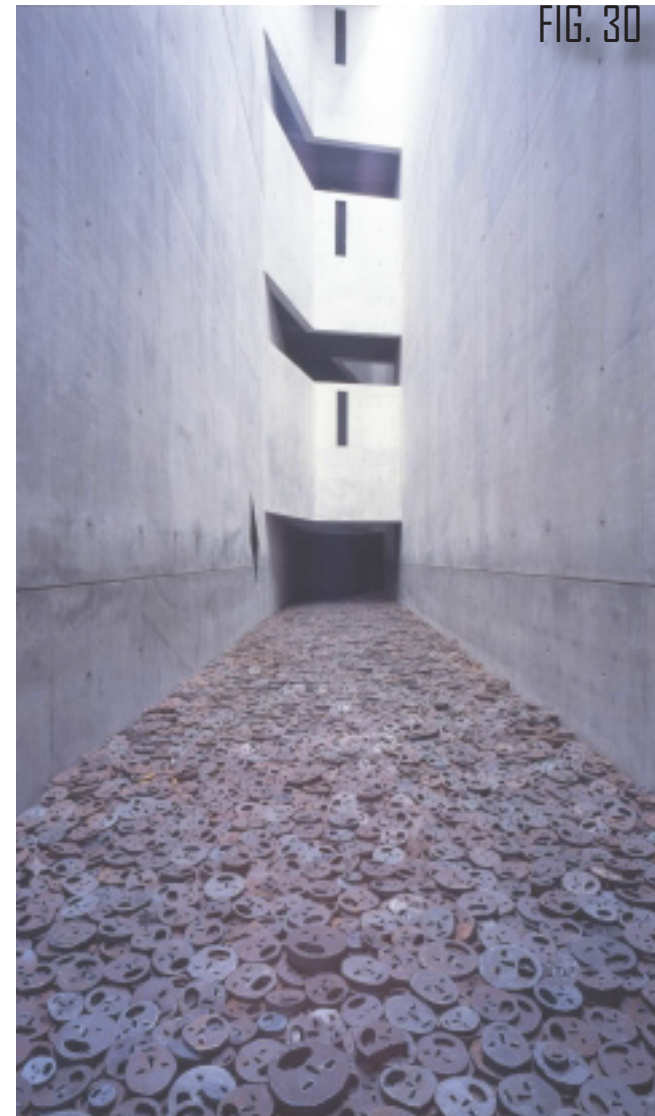
Architect: Daniel Libeskind

Client: Jewish Museum Berlin

Context: The Jewish Museum is home to many exhibits throughout the building, available through renting individual spaces. The intent is for education purposes in the exhibition sacs, with a permanent exhibit dedicated to the history of the Germans and the Jews. Multiple floors take you through this museum, allowing for a different interpretation of its exhibits dependent on the user.

Case Research: The building is zig-zag in nature, derived from plotting addresses from important Jewish and German cultural figures, and the result is the zig-zag shape of crossing patterns in their addresses. The creation of voids at intersections allow spaces of interpretation to occur, leaving some people feelings of disorientation and insecurity. At the same time, it allows them to make this connection in the history of the Jews and the Germans, and bring it back to themselves. The disorientation makes the user get lost in the tragic history of this culture, but reorients them by allowing them to make the connection with themselves and re-create the feeling, that despair in history.

Conclusion: This project is also very important in the theoretical premise because it adds program to a memorial, enhances the history of a loss of people and culture, makes a metaphysical connection in each person that experiences the space, relates to people on an international level.



WASHINGTON MONUMENT

Location: National Mall, Washington D.C.

Typology: Monument

Designed: 1848

Completed Construction: 1884

Architect:

Client: City of Washington

Context: The monument stands in the heart of the National Mall in Washington D.C. It stands 555 feet tall, towering over all of the historical monuments and memorials already within the National Mall, as well as the city of Washington D.C in general. It was built to commemorate George Washington, the first commander in chief of the Continental Army, and the first president of the United States. It is made out of marble, granite, and bluestone gneiss. It is the world's tallest stone structure, and the world's tallest obelisk.

Case Research: "It is proposed that the contemplated monument shall be like him in whose honor it is to be constructed, unparalleled in the world, and commensurate with the gratitude, liberality, and patriotism of the people by whom it is to be erected ... [It] should blend stupendousness with elegance, and be of such magnitude and beauty as to be an object of pride to the American people, and of admiration to all who see it. Its material is intended to be wholly American, and to be of marble and granite brought from each state, that each state may participate in the glory of contributing material as well as in funds to its construction. " This quote from the board of managers does the monument its justice.

Conclusion: This monument is a great example to follow. It embodies a large group of people, a history that will never be forgotten, and an ideal to apply to in the future. Its meaning goes beyond the person it represents, it embodies a nation, an ideal, and a sacrifice.

TYPOLOGICAL RESEARCH



HISTORICAL RECORDS AND RETRIEVAL

This element describes a space that will allow anyone to look through historical records based on wars to find lost personnel. It will also provide information on the global conflicts that have happened to the day. It will allow people to fill in lost information they may have never retrieved from the war dealing with any soldier or civilian involved in conflict.

PUBLIC UTILITARIAN OUTDOOR SPACE

A designed located around and adjacent to the monument. The culture within this monument would have the ability to perform and type of ritual or celebration they see fit for the memorial and those it memorializes. It will also provide the city the opportunity for holding a multitude of public events.

MULTIPLE EXHIBITION SPACES

Located within and around the monument, multiple exhibition spaces would be available to feature whatever it is that needs to be featured. It could be artwork from local artists, competition work, etc. This space is intended for continual learning and celebration of culture.

MEMORIAL CONTEMPLATION

Meant to be at the heart of the monument, this space is more intrinsic than them all. It is intended for the most intimate space of the memorial.

BERLIN, GERMANY

Population: 3.5 million
Number of potential users: Thousands/Day
User Requirements: None
Peak Usage: Varies
No Parking Restrictions
No Health Issues
No Social/Economic Issues

CHICAGO, IL

Population: 2.75 million
Number of potential users: Thousands/Day
User Requirements: None
Peak Usage: Varies
No Parking Restrictions
No Health Issues
No Social/Economic Issues

HIROSHIMA, JAPAN

Population: 1.2 million
Number of potential users: Thousands/Day
User Requirements: None
Peak Usage: Varies
No Parking Restrictions
No Health Issues
No Social/Economic Issues

ANTHROPOMORPHIC DESIGN

Architecture is the translation of life. The built environment is what humans interact with throughout their life. Recognition of human characteristics through architecture helps humans make a connection, through their particular experiences, within architecture. This relationship will be emphasized in this thesis because it is key to its success. If anthropomorphic design is weak, then different people may not achieve the desired result and feel the impact of what is at stake through this design, the loss society has taken in order for war to overcome us and move us through history.

DESIGNING FOR CONTEMPORANEITY

Understanding that this design must withstand the test of time and not be subject to modern relativism is another key component. If the design is caught in the time it was produced, and then the meaning is forgotten as decades pass, the architecture is worthless. It must stand beside time, not with time.

ARCHITECTURE THROUGH METAPHYSICS

Without architecture, buildings would have no interrelation meaning with the built environment at all. It is because humans make a connection through metaphysics, through a meaning that is greater than themselves, that architecture is relevant at all.

DESIGNING A SUPERPOSITION ACROSS THE WORLD

Designing three buildings in three different locations, all meant to bring to life specific events that happened at each specific site, yet relate those three sites to the rest of the world simultaneously will be the true emphasis of this project.

LANDSCAPE DESIGN AND ASSESSMENT

Assessing and designing around different site locations will also be important. In order to make a connection not only between nature and the monument, but connecting monument to monument across the globe on these different sites, it is important to understand each site and what it says to the design and how that relates to other sites.

ACADEMIC

A main goal for the thesis project is to uphold and raise the standard for North Dakota State University students. Compiling research, utilizing knowledge learned from previous schooling at NDSU, and presenting a final product that NDSU can showcase on a national level is ideal. On an academic level, I believe in outperforming the best performer, that is what makes programs excel and motivates others to achieve the same standard. If that standard can be held every year, NDSU will begin to be known well on a national level with ease.

Along with performance, laying the fundamentals of architecture and the design process during presentations is essential. I think it is important that students make known their competence in the foundations of what architecture is and what North Dakota State University has aimed to educate their students on.

PROFESSIONAL

Producing work that meets and exceeds the expectations of the current profession of architecture is very important. I want to be able to display my design process at a comprehensible level, and at the same time producing a poetic meaning that all professionals can relate to. Performing to beyond a graduate level project in terms of presentation and documentation is another main goal. As the project finalizes, the finished work should embody the skillset and competence professionals look for after graduation and I plan to exceed

PERSONAL

Developing my thinking to encompass broader ideas on a global cultural level, rather than be constrained to the here and now is my main personal goal. Reading into architectural theory and its relevance with ancient philosophy and the connections through the modern times add to the arsenal of ability to solve complex architectural issues today.

Being able to convey such a complex, poet and philosophical story through architecture that is comprehensive to virtually all people will be another driving point. I understand that, because only I have been doing the study and research on difficult ancient architectural theory, it may be difficult for others to understand a complex issue. Making that idea plausible to understand at all levels is very important.

DEFINITION OF RESEARCH DIRECTION

Theoretical Premise/Unifying Idea

1. Anthropomorphism in architectural theory
2. Precedent study in memory and forgetting
3. Study in monumentality and contemporaneity
4. Metaphysics in relation to reasons for existence
5. Architecture in the senses of the human body
6. Origins of fragmentary architecture
7. Origins of a memorial
8. Origins of war
9. Monuments throughout history

Goals: To create a background of information in history of monuments, the human body, memorials, and architectural theory to ground my ideas and create meaningful architecture.

Project Typology

1. Identify Client
2. Needs/wants of community and urban development

Goals: To understand each individual site and create for the future needs of that community in relation to the history of the community.

Historical Context

1. Uses of memorials in history
2. Who/why created memorials?
3. Are monuments intended to be monuments?
4. What community needs a memorial to the sacrifices they have made throughout history?
5. Is there anything at stake?

Goals: To understand why the idea of a monument and a memorial derived and how they have endured throughout history.

Site Analysis

1. How does the site inform the memorial?
2. How does this monument impact the rest of the site?
3. Pedestrian movement/nodes in transportation
4. Sun, wind, light study
5. Culture, social, economic, demographic interpretations

Goals: To understand the form the architecture will take, the cost and price of material applications, scale of the application.

Programmatic Requirements

1. What does the community need?
2. Can added benefit come from adding complexity to the program?
3. Is simple better?

Goals: To understand if doing too much with the programming will take away from the memorial or monumental experience of the user. Understand the balance between culture, economic, and social needs of the community.

DESIGN METHODOLOGY

- 1. Theoretical Premise – What is at stake?
- 2. Historical research leading to new ideas to reform unifying idea
- 3. Present findings, conclude and reform theoretical premise
- 4. Creation of an artifact – symbol of unifying idea
- 5. Translate artifact into design ideas
- 6. Test results, reduce and refine
- 7. Propose a solution

THROUGH

QUANTITATIVE DATA: GATHER

- 1. Understand/Study data and information through archival study and statistics
- 2. Design decisions derived from analytical measures from study

QUALITATIVE DATA: INTERPRET

- 1. Does each memorial on each site produce an offering to the international community as well as the local community they reside on?

DESIGN APPROACH: EXPLORE/INFORM

Integration of all information at all points of study will continue to inform the design decision based on the theoretical premise throughout the project.

DOCUMENTATION OF DESIGN PROCESS

INFORMATION PRESERVATION:

Backup files on GoogleDrive
Backup files on OneDrive
Images credited in bibliography when utilized
Thesis book weekly updated
Research material credited/stored
Photograph models/artifacts and document
Present findings and update accordingly
Hand sketches/notes documented in sketchbook

INFORMATION PRESENTATION:

Adobe Illustrator
Adobe Photoshop
Adobe InDesign
SketchUp
Lumion
Maxwell Render

INFORMATION PUBLICATION:

NDSU Institutional Repository
Hard copy of material

SOFTWARE USAGE:

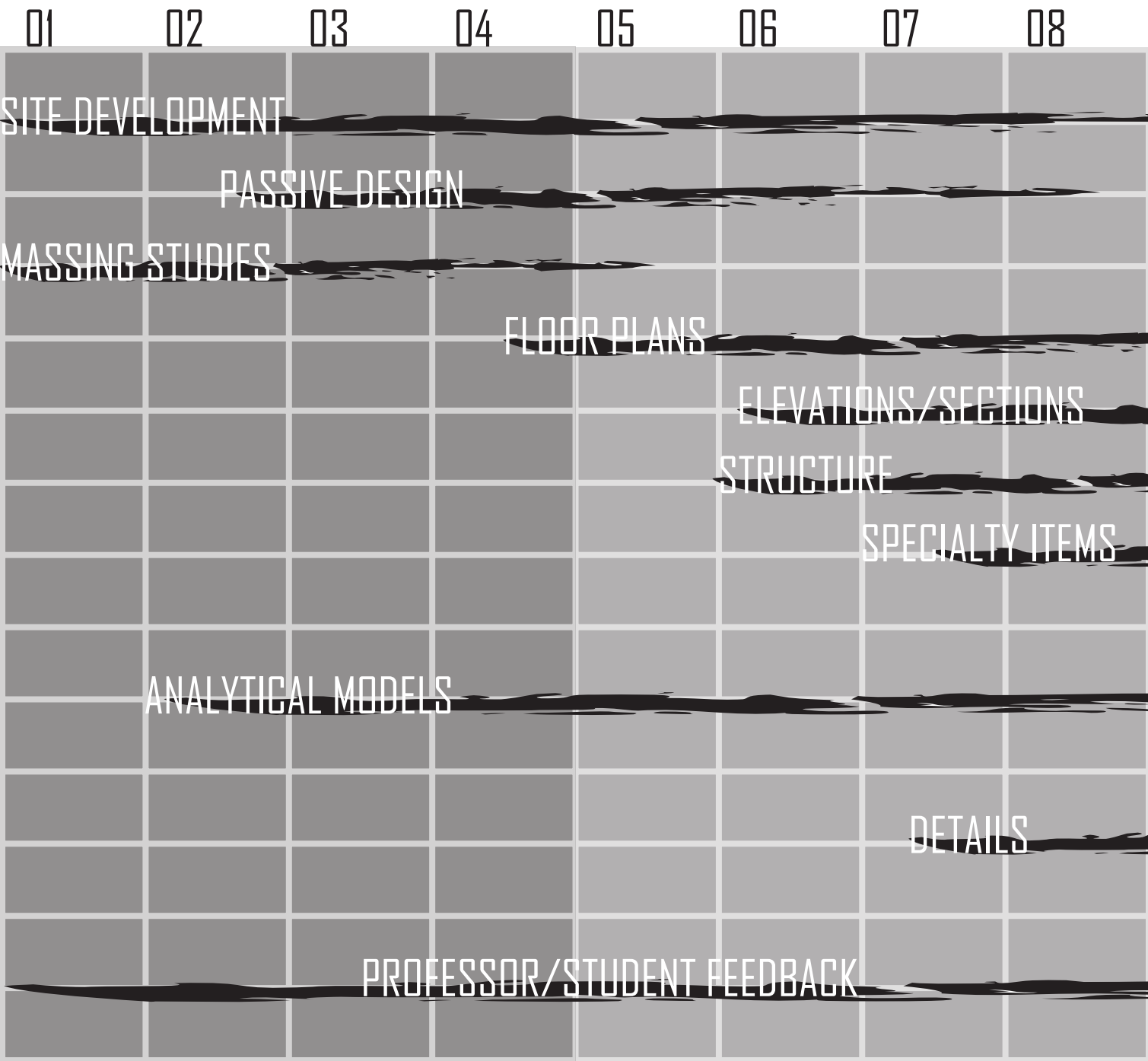
Revit
AutoCad
Rhinoceros
Grasshopper
SketchUp
Lumion

COLLECTING INTERVAL:

Name_Phase_Date
SitePlan_Conceptual_16Oct2017

WORK PLAN

WEEKS 01-08

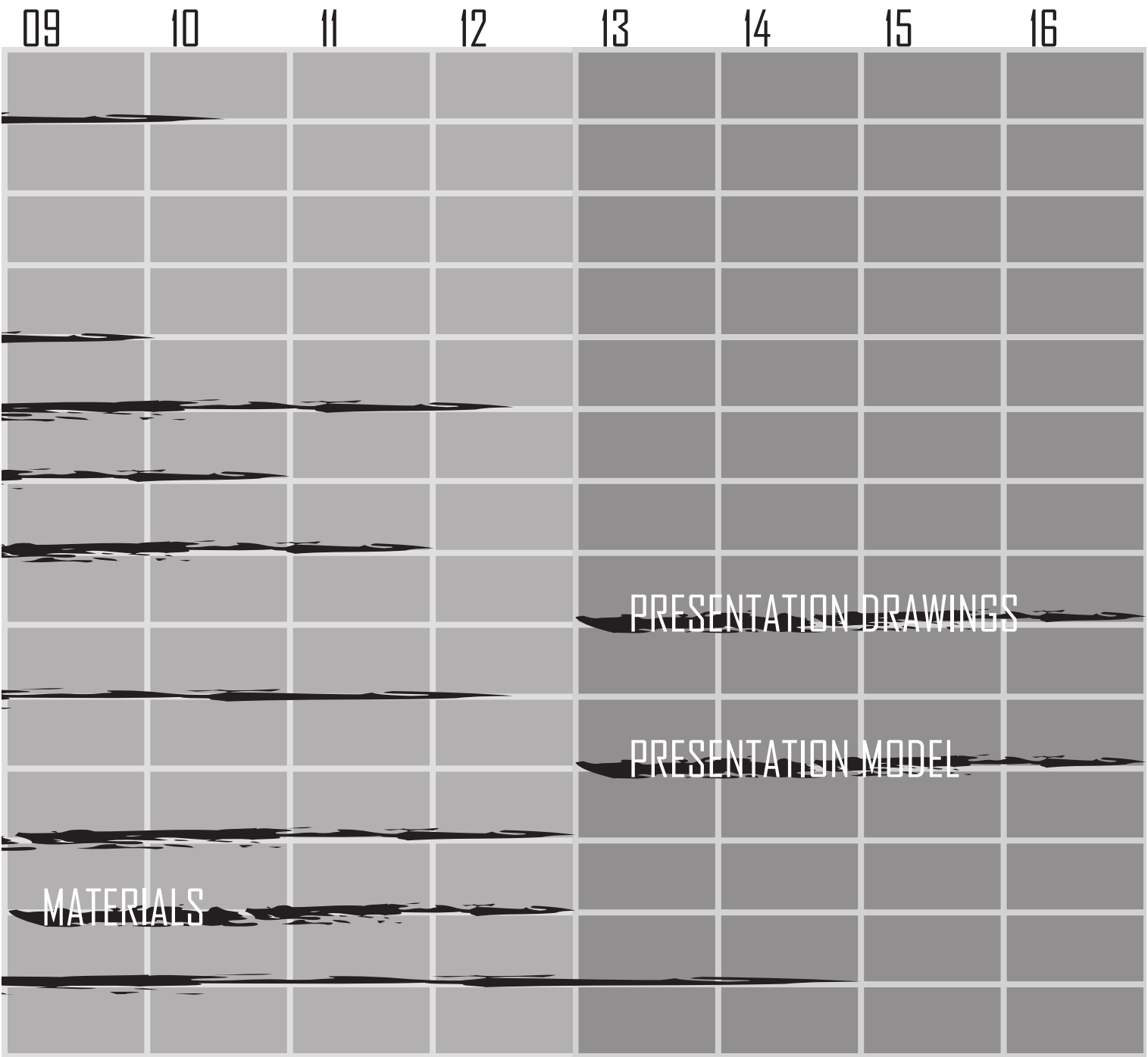


SCHEMATIC

DEVELOPMENT

WORK PLAN

WEEKS 09-16



DEVELOPMENT

PRODUCTION

Due to the nature of the project and the culmination of history melded with the present, project solution documentation, performance analysis, and the digital presentation will all be include in the 'Design Solution.'

Similar to how the Orion's Belt aligns with the 3 largest pyramids of Giza, all three museums were aligned on the same datum to point directly to history. The datum does not change from site to site, but the historical and cultural connections do. At all three sites, these pathways are the vessel that visitors travel up, down, and through in the museums. They all have separate exhibit spaces that display artwork and historic memorabilia from the Second World War.

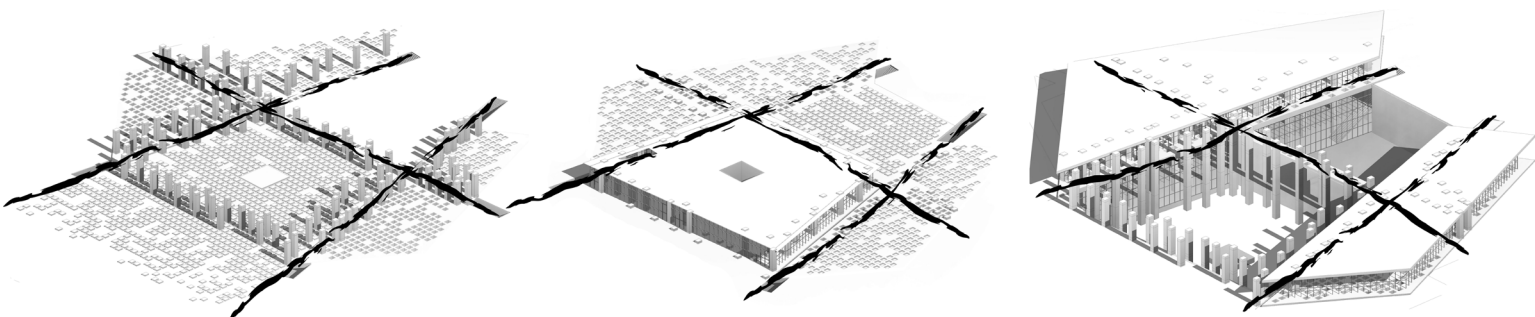
Aside that, each museum has reception spaces, along with a caretaker's quarters that stays, remains, and cares for the museum every single day.

FIG. 33

HIROSHIMA

BERLIN

CHICAGO



DESIGN SOLUTION



Hiroshima, running from West to East, points directly to the 'Atomic Bomb Victims Memorial. Tracing this line back to the museum, another pathway looking straight south recognizes the Atomic Bomb Dome.

The Atomic Bomb Dome, which stands today as a reminder and a memorial to those who died due to the explosion, is a ruin of Hiroshima – it used to be the Prefectural Industrial Hall of Hiroshima.



FIG. 5



FIG. 34

BERLIN, GERMANY

TIERGARTEN PARK

BERLIN VICTORY COLUMN

MEMORIAL TO
THE MURDERED
JEWS OF
EUROPE

GLOBAL STONE PROJECT

CHICAGO, UNITED STATES

STAGG FIELD

STAGG FIELD: UNIVERSITY OF CHICAGO

Berlin's pathways stares directly at the Memorial to the Murdered Jews of Europe, while simultaneously looking back at the Global Stone Project and the Berlin Victory Column.

The Global Stone Project is an attempt at promoting world peace and making that connection with 30 tons of rock taken from each of the 7 continents around the world and placed in one location. The Berlin Victory Column is a celebration of victory of war during the 1800's in a series of wars and battles known as the unification wars. The Memorial to the Murdered Jews of Europe is a memorial to the Jewish victims of the Holocaust.

Chicago goes face to face with the one event in Chicago's history that does not want to be talked about, the Metallurgical Laboratory underneath Stagg Field at the University of Chicago. Again, the location where the development of death began, the atomic bomb.



FIG. 35

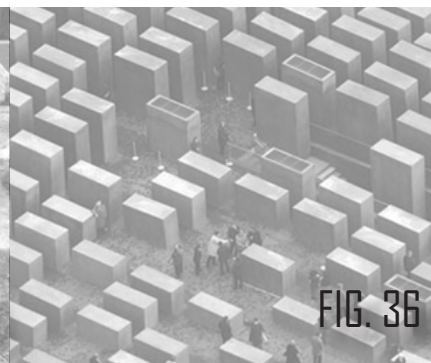


FIG. 36



FIG. 37



FIG. 11

DESIGN SOLUTION

To mimic the massive weight of history these three museums carry, the structure that holds them up would need to parallel its strength. The structure is simply called 'The Grid.' – a massive alignment of reinforced concrete cradled just below the Earth with supporting concrete columns.

A grate of concrete etched into the Earth, revealing and concealing as the foliage around grows around and it stretches out into the site. It's massive structural columns around the entire building go unnoticed until you are immersed in their monumental presence, carrying our historical and cultural secrets at its core.

THE GRID

FIG. 38

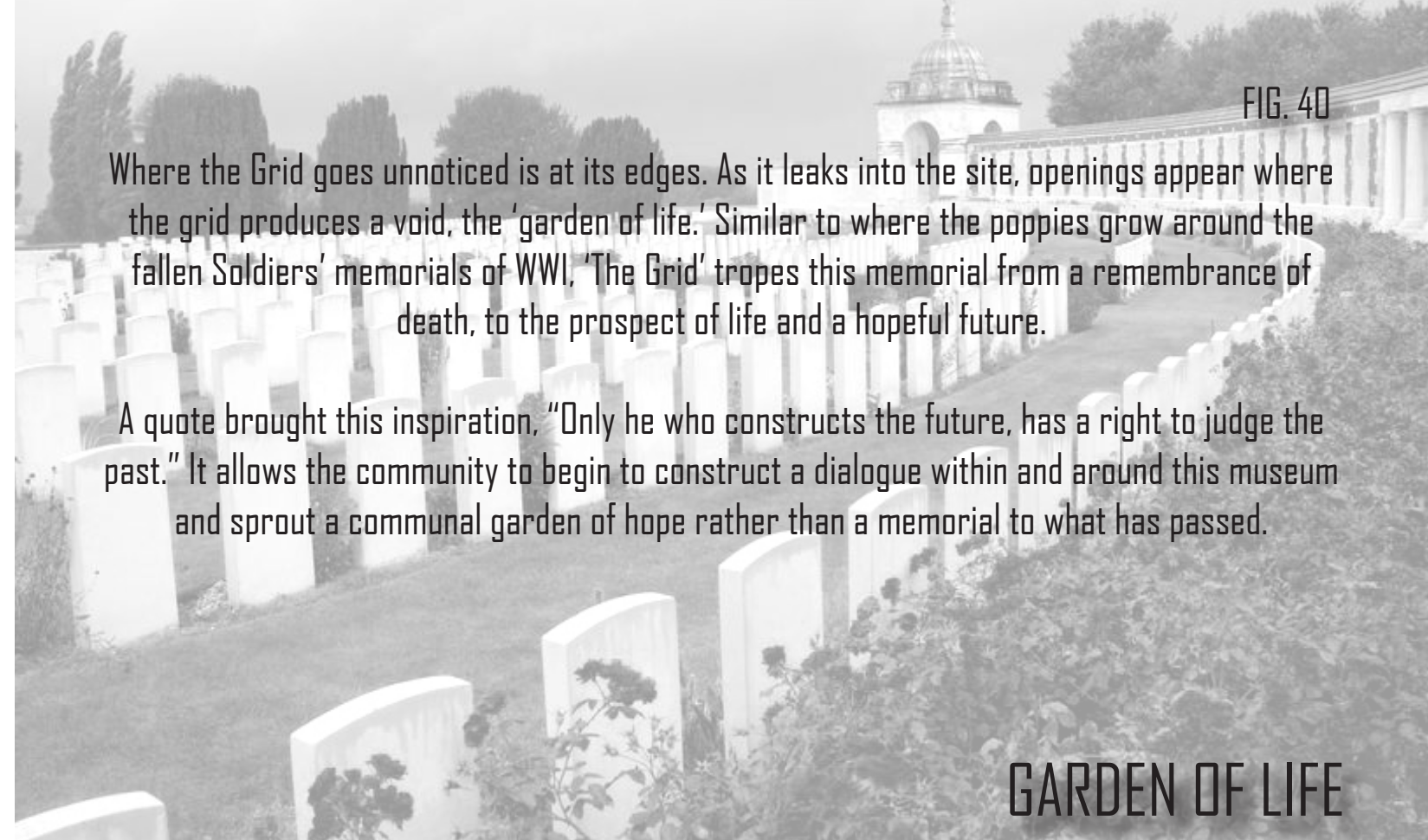


FIG. 40

Where the Grid goes unnoticed is at its edges. As it leaks into the site, openings appear where the grid produces a void, the 'garden of life.' Similar to where the poppies grow around the fallen Soldiers' memorials of WWI, 'The Grid' tropes this memorial from a remembrance of death, to the prospect of life and a hopeful future.

A quote brought this inspiration, "Only he who constructs the future, has a right to judge the past." It allows the community to begin to construct a dialogue within and around this museum and sprout a communal garden of hope rather than a memorial to what has passed.

FIG. 39





FIG. 41

BERLIN FROM ABOVE

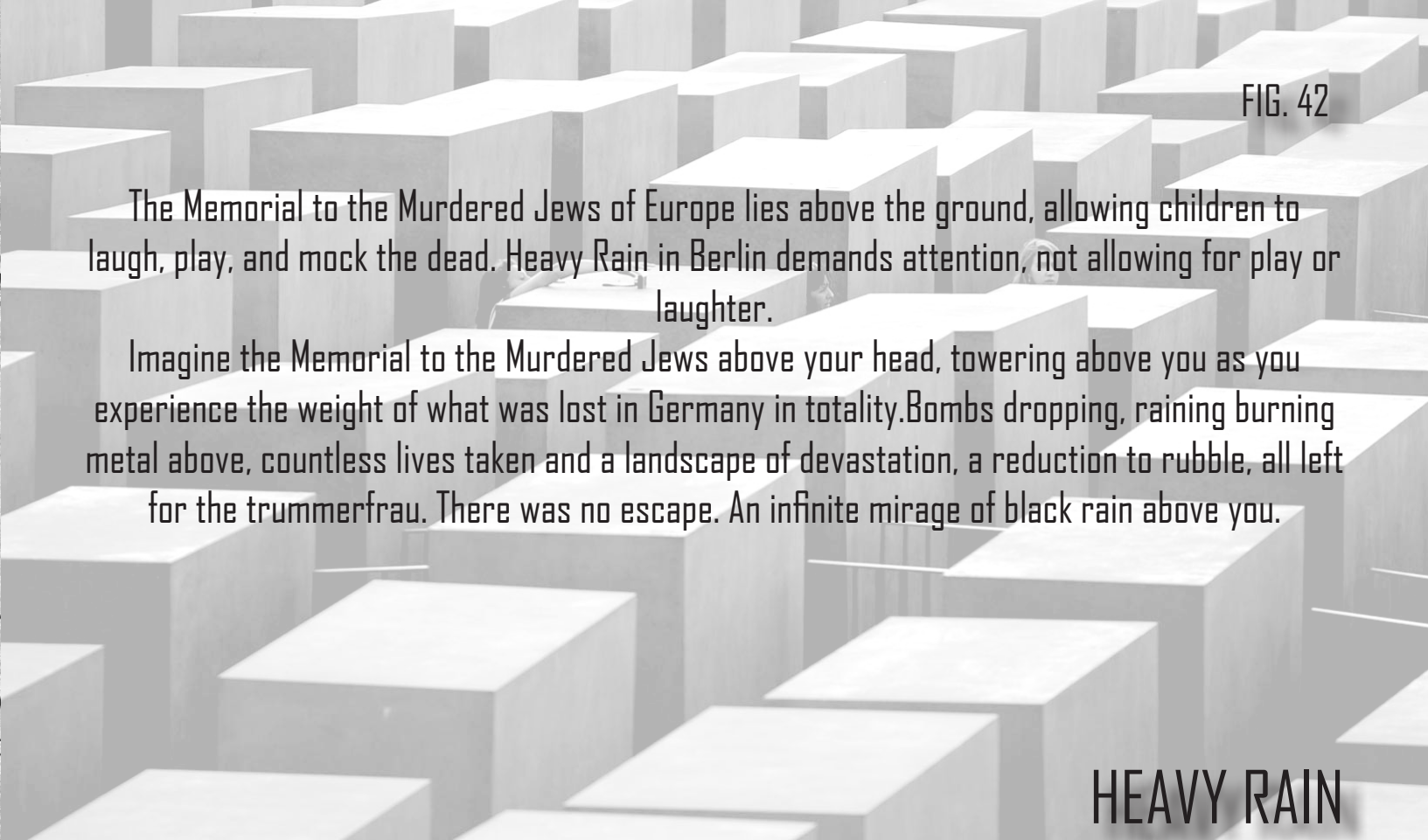


FIG. 42

The Memorial to the Murdered Jews of Europe lies above the ground, allowing children to laugh, play, and mock the dead. Heavy Rain in Berlin demands attention, not allowing for play or laughter.

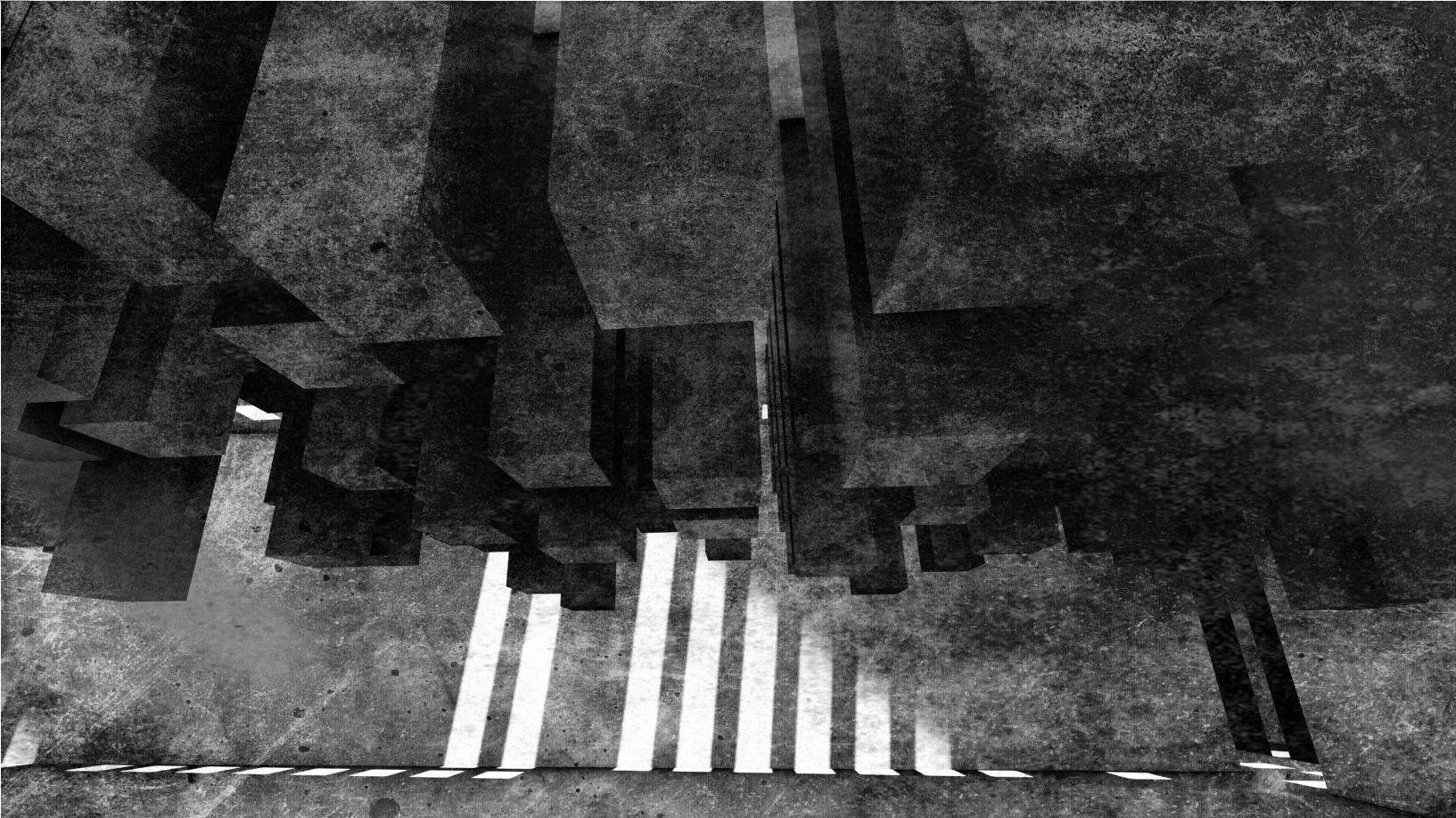
Imagine the Memorial to the Murdered Jews above your head, towering above you as you experience the weight of what was lost in Germany in totality. Bombs dropping, raining burning metal above, countless lives taken and a landscape of devastation, a reduction to rubble, all left for the trummerfrau. There was no escape. An infinite mirage of black rain above you.

HEAVY RAIN



BERLIN SECTION

HEAVY RAIN



DESIGN SOLUTION

FIG. 43

HIROSHIMA FROM ABOVE



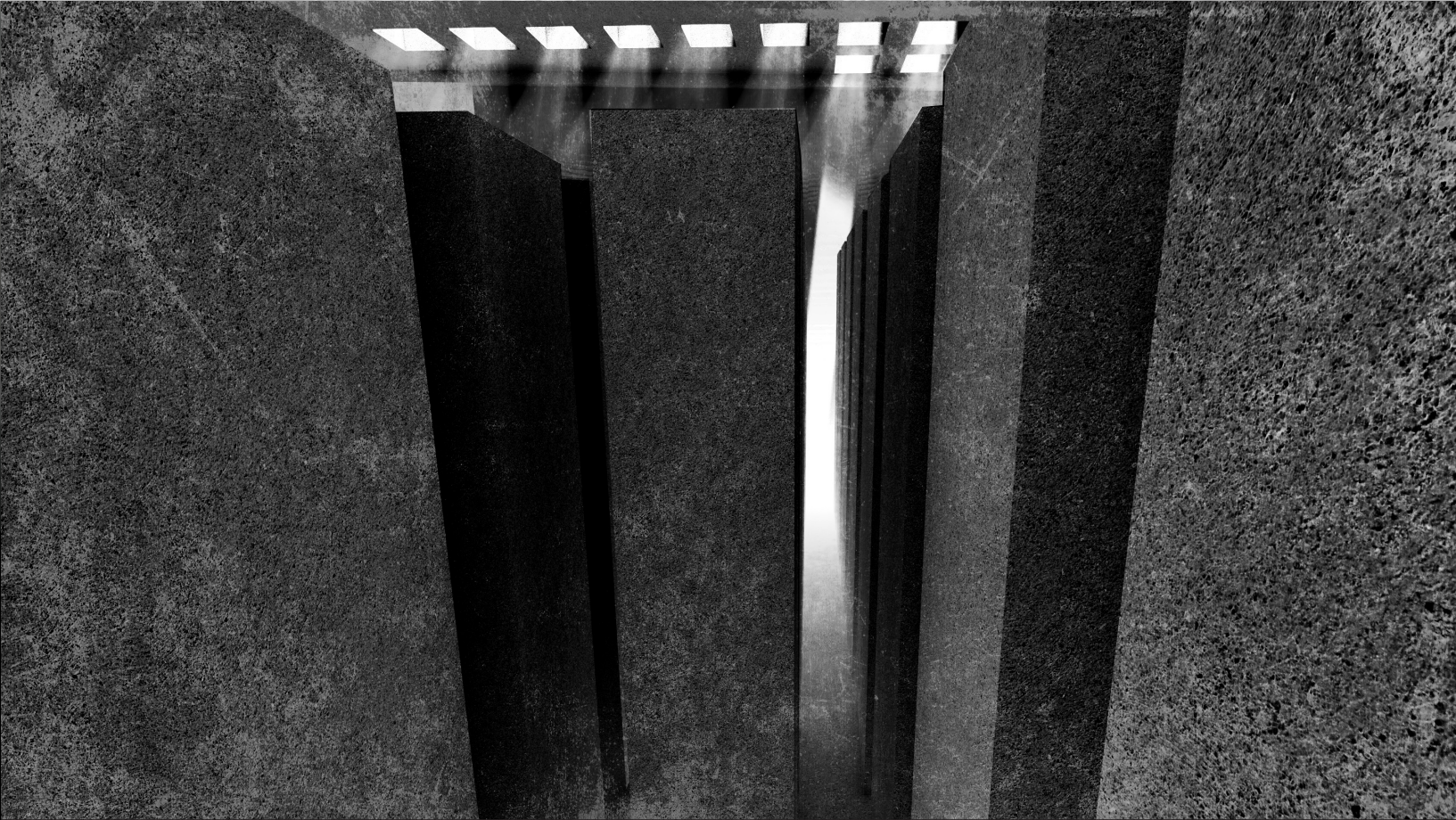
FIG. 44

Similar to the 'Garden of Exile,' where Mr. Libeskind disorients visitors with slanting ground and plantings of Berlin and Jerusalem above, this space recognizes a city that once reigned, now below the ground, never again experience the light of day or a growth from its ash – with the only light shining through The Grid above—a memorial to the city of Hiroshima. Not only does this recognize the city brought to ash, rows and rows of towering columns bring forth the memory of those who died during the Holocaust, as well as the Flanders Field fallen Soldiers below the ground— a complete culmination of many historical instances during the Second World War.

CITY BELOW

HIROSHIMA SECTION

In Hiroshima the idea of Heavy Rain is transformed again in 'The City Below.' From what was above you in Berlin, you now walk through in Hiroshima below the light of 'The Grid'.



DESIGN SOLUTION

FIG. 45

CHICAGO FROM ABOVE

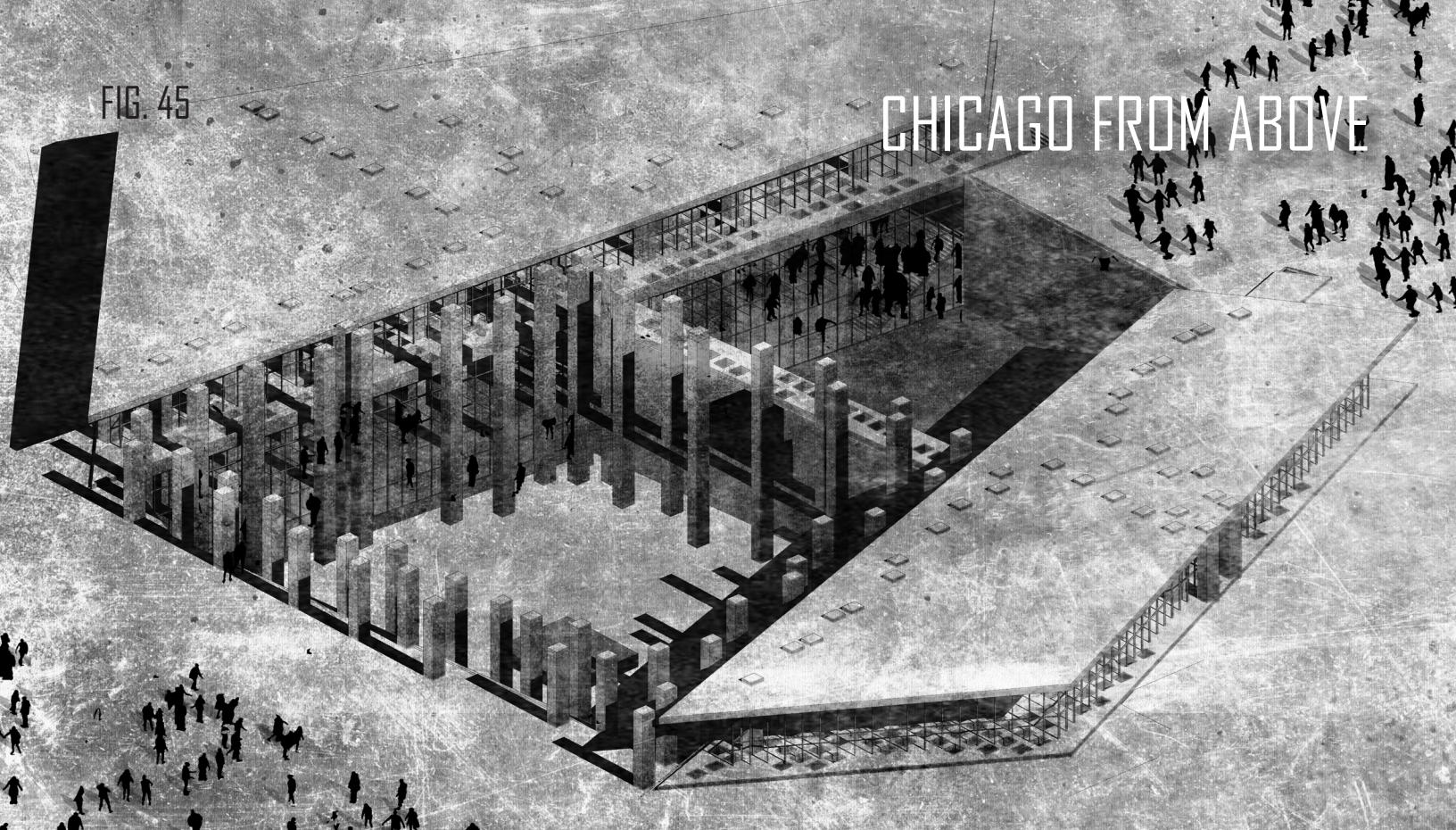


FIG. 46

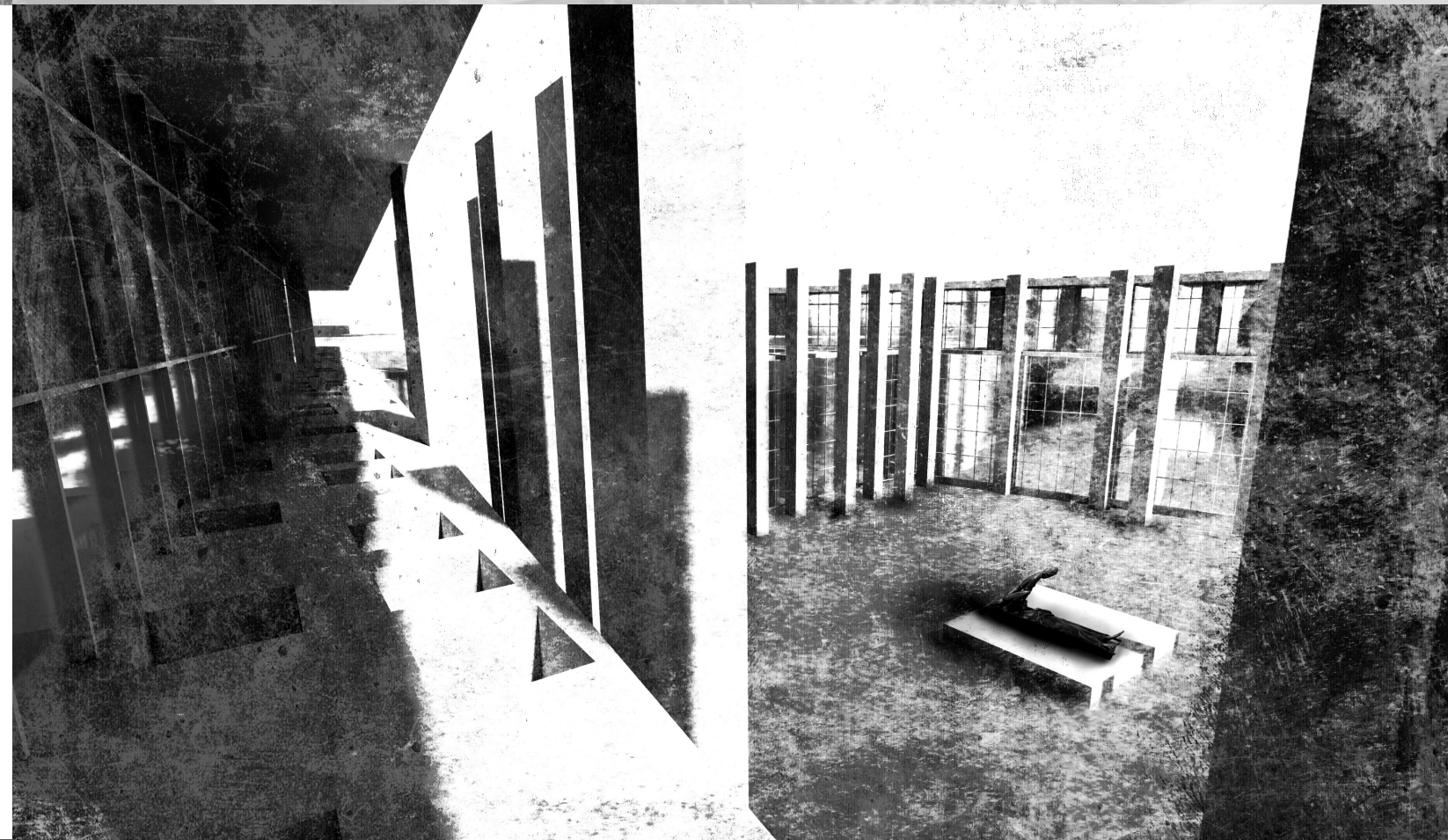
Similar to the World Trade Center Memorial in New York avoid in the ground centering the museum, surrounding by a mass of water, reflects the actions that Chicago can never veer from. It is as if stunde null was brought to Chicago, directly to the Metallurgical Laboratory below the ground. – our society shall never forget those who lost their lives.

CITY BELOW



CHICAGO SECTION

DOE OF REFLECTION



DESIGN SOLUTION

As a recognition of stories lost, families members forgotten, memories disintegrated –rather than ‘The Grid’ allowing for the community to plant in its void,

Like the lines of concrete in the Memorial to the Murdered Jews of Europe, to the countless gravestones in Flanders Fields, and back to the falling reign brought from above, this allows those memories to be brought back from community members etching on the surface of the museum with whatever they thought was necessary for the preservation of their heritage. it creates a presence above the ground donated to the community.

These three museums, using the Second World War as a medium, aim to ignite our society’s tendency to overlook the innocent death of hundreds of thousands of civilian people during war. When, in fact, they are the only reason for war.

ETCHING STONES



Bradford, Vivian. Public forgetting the rhetoric and politics of beginning again. The Pennsylvania State University Press, 2010.

Allows me to understand memory and how humans use memory. It talks about the art of forgetting, and it explains how forgetting is crucial to remembering something, it just takes a means to allow you to forget what you remember. Then, through sensory experience some interaction, hopefully more than just external, will happen with a monument.

Frascari, Marco. Monsters of architecture: anthropomorphism in architectural theory. Rowman & Littlefield, 1991.

This book has an enormous relation to this thesis. Dealing with anthropomorphism and mending that with architectural theory, it provides insight in to how humans analogize their bodies with architecture. It explains how architecture can withstand the test of time culturally, not based on the which era it endures in. It also talks about the histories of 'spolia' of war, a fragmentary approach to architecture connecting culture with history by using literal pieces of the past, preserving through memory and experience rather than coating history with something new.

Gómez, Alberto Pérez, and Stephen Parcell. Chora. McGill-Queens University Press, 2016.

Described the difference between being 'of one's time' and aging as time passes. It bridges the gap between the temporal and the eternal an monumentality and contemporaneity. It gives background to what it means to think and produce artifacts of modern relevance, rather than being a timeless piece that will endure.

Heidegger, Martin. Building, dwelling, thinking. 2000.

Great resource for understanding how man lives and interacts with the world. It essentially grounds the argument on what it means to be a part of this world and how everyone co-exists and is co-responsible for each other, and the world as a whole.

Juhani, Pallasmaa. The eyes of the skin: architecture and the senses. Wiley, 2014.

Explains how the body takes in sensory information and how that might have an impact of the mind. It explains that each sense has the ability to influence the other senses simultaneously, hinting at different memories and understanding architecture, preventing us from getting lost in the artifact.

Libeskind, Daniel, et al. Daniel Libeskind: the space of encounter. Thames & Hudson, 2001.

This is a great resource for studying how someone has done similar projects in the past with different contextual difficulties. It is great insight of studying outcomes of war and how they directly affect the city they are in, and what architecture can do to enhance that.

Riegl, Alois. The modern cult of monuments: its character and its origin. MIT Press, 1982.

This allowed me to study the means of monuments and their historical development. It beings to discuss the difference of art-value and historical relevance and importance of monuments.

Pérez-Gómez, Alberto. Architecture and the crisis of modern science. MIT Press, 1994.

This helped me understand the meaning of functionalism and how modern science has reduced architecture to this as its rational theory. It also explains how perception is our primary form of knowing, and knowing does not exist apart from the body and its engagement with the world, crucial in the foundation of understanding how to relate a monument to all people and how people perceive it.

"The Vietnam Veterans Memorial Wall Page." The Vietnam Veterans Memorial Wall Page, thewall-usa.com/.

"The Libeskind Building." The Libeskind Building | Jewish Museum Berlin, www.jmberlin.de/en/libeskind-building.

"Washington Monument." National Park Foundation, 16 Oct. 2017, www.nationalparks.org/explore-parks/washington-monument.

Average Daily Traffic Counts - Map | City of Chicago | Data Portal. (n.d.). Retrieved December 8, 2017, from <https://data.cityofchicago.org/Transportation/Average-Daily-Traffic-Counts-Map/pf56-35rv/data>

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2ND YEAR:

FALL 2014: Japanse Tea House - Darryl Booker
Boat House - Darryl Booker

SPRING 2015: Montessori School - Joan Vorderbruggen
Green Home Design - Joan Vorderbruggen

3RD YEAR:

FALL 2015: Mid Rise Flagship Retail - Adam Beck
Community Arts - Adam Beck

SPRING 2016: Manufacturing - Mark Barnhouse
Same-Day Clinic - Mark Barnhouse

4TH YEAR:

FALL 2016: High Rise - David Crutchfield
SPRING 2017: Urban Development - Don Faulkner

5TH YEAR:

FALL 2017: Three Global Cultural Museums - Stephen Wischer
SPRING 2018: Three Global Cultural Museums - Stephen Wischer

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"One of a Kind"

