Encompassing Spirituality	
An Exercise In Formal Gathering	
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Encompassing Spirituality

an exercise in formal gathering

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	a design thesis submitted to the department of architecture and landscape architecture of North Dakota State University
	christopher john heidrich
of of	in partial fulfilment of the requirements for the degree of master of architecture
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/	Market Cambonne 05/12/10

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September 2009 Fargo, North Dakota

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abstract

This thesis project is an exploration of the built environment and how it is affected by the way people of different religions gather together. Bound by a familiar belief in a higher power based in the certainty of a beginning, the present, and an inherent end to a given period of time, the places in which believers gather are related to one another. An architecture that recognizes and is sensitive to these ties is essential to providing harmony to its gatherers.

Day in and day out people are surrounded by the gathering and practices of different religions. Bahai, Buddhism, Shintoism, Taoism, Judaism, Sikhism, Christianity, Islam and countless other sects have worked their way into our societal fabric. Each presents its own way of worship, and at first may appear different; the traditions, language, and names used by their followers seem strange and foreign to those with a different set of beliefs.

However, if the ideas are pulled out of this narrow perspective and examined in a broader scope there are striking similarities among the sets of beliefs and ways in which these groups gather together.

Groups have begun to form that have established the possibility of uniting the world's religions. Headed by the Parliament of the World's Religions and the United Religions Initiative, the interfaith movement encourages harmonious interaction and dialogue between different religions.

Through the study of divine proportion, it can be found that the spaces in which different religions gather are similar. Each pays respect to the spirituality of site, light, and proportion in regards to a time continuum upon which a community of believers exists.

problem statement

How does a people's religion affect the way they worship and gather within the built environment?

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typology:

The typology of this thesis project is a building/gathering space, in which the different religions of the world gather. The space will encompass religion in a broad scope focusing on what it means to live and worship through the stages of life as a group of people who believe in a higher power regardless of their declared formal religion.

claim

Religion is a culmination of a specific set of beliefs developed from human spirituality which has established itself and created a bond among the people of the world who believe in a higher power and a granted, finite period of time, and by its nature demands decisions concerning how its followers gather.

premises:

Believers are bound by a higher power that is based in the certainty of a beginning, the present, and an inherent end to a given period of time.

Historical ties and human spirituality in societies have given people the ability to establish and practice their own religions and faiths, many of which are recognized and accepted by others.

Religions, while different in practice, are established on the similar belief that life and what follows is located in a higher power, thus creating a bond among the different sects and denominations of the world.

The gathering spaces in which the believers of the world worship are therefore inherently related to one another.

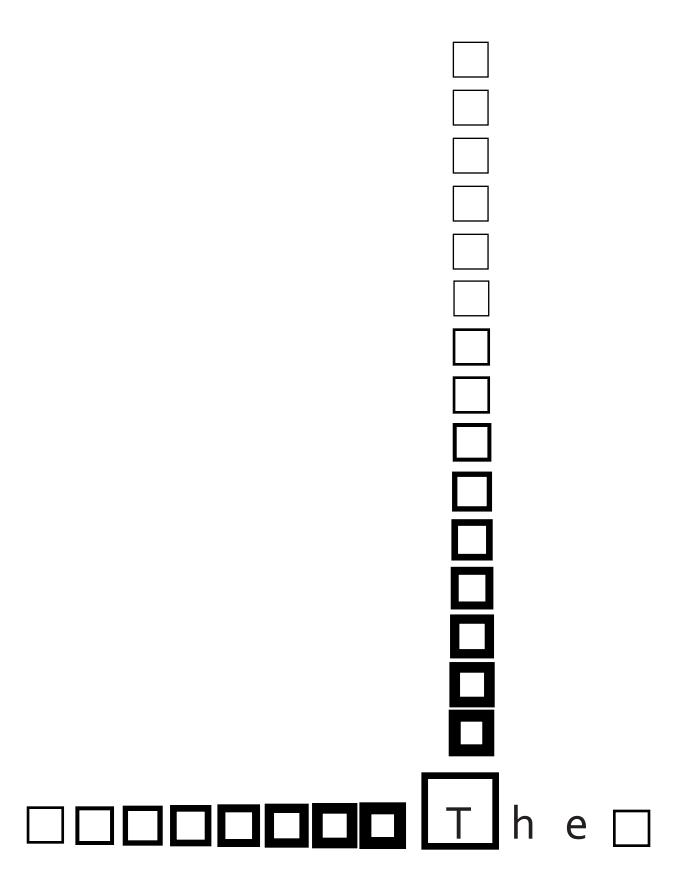
theoretical premise | unifying idea

Despite a people's established religion, the places in which they gather can be adapted to serve a larger community of people because they are bound by the idea of a higher power and a continuum of time in relation to their lives.

project justification:

A religion is a formal gathering of people who have within them a degree of spirituality. It is this spirituality, the belief of a higher power in a given time continuum, that binds these people to one another. An architecture that is adaptable and recognizes these ties among the different religions is essential to providing harmony to its gatherers.







Encompassing Spirituality: An Exercise in Formal Gathering

Christopher Heidrich

Day in and day out people are surrounded by the gathering and practice of different religions. Bahai, Buddhism, Shintoism, Taoism, Judaism, Sikhism, Christianity, Islam and countless other sects have worked their way into our societal fabric. Each presents its own way of worship, and at first may appear different; the traditions, language, and names used by their followers seem strange and foreign to those with a different set of beliefs.

However, if the ideas are pulled out of this narrow perspective and examined in a broader scope, there are striking similarities among the sets of beliefs and ways in which these groups gather together (Gabriel, 2004).

At the most basic level, people who worship are bound by a higher power that brings them into the world, are granted a finite period of time to live, and face an inherent end to that period of time. They gather to celebrate their existence beneath this higher power. It is the existence as a group in this time continuum that allows a wide range of religions to be viewed as a larger community of believers rather than specific religious sects (Council, 2009).

As a believer, I have bound myself to this continuum beneath a higher power. I am among a body of people with common ideas and practices. Yet, there is a lack of designed space to accommodate the unifying ideas of believers.

Large cities have begun to view their diverse populations as an opportunity to bring harmony to the world's religions by gathering them together. Chicago is at the heart of this movement, and is in need of a permanent space that can provide a broad scope on worship (City of Chicago, 2003).

This thesis will examine the practices and gathering spaces of the world's religions. It will embrace the basic spirituality of these beliefs and create a space that is adaptable to the diverse and ever changing community of the city of Chicago.

The City of Chicago, in correlation with the United Religions Initiative, will be the owners of the gathering space and will be responsible for meeting and maintaining the needs of the affiliated user groups. The gathering space will encompass an extremely wide range of users and will be designed to accommodate the needs of the groups as a whole.

Community of Believers

The community of believers will be the most important users of the space. Therefore it must be designed to meet the sensitivities and needs of different ages, demographics, and most importantly, faiths.

Representatives from the city's populous including families, children, students, professionals, religious leaders, and the elderly will all be attendants in the gathering space.

Amount

The community will be the majority of the users associated with the gathering space. The number of attendants is not fixed and will fluctuate with the fluid nature of those who are not permanent residents in the city. Thus, the space will be designed to accommodate a large community. At max capacity the main gathering space will be able to seat 300 people.

Peak Usage

The moments of peak usage will occur during the gathering of the community. Official times will be decided upon by the owners in accordance to meeting the specific needs of the represented body of faiths.

Parking

Because of the proximity to the downtown area, public transit is available to residents and visitors of the city. The automobile will not be the primary means of transportation for most of the users and parking design will be limited. Spaces will be provided for people who have physical limitations or no other means of transportation.

Physical Restrictions

Aside from the very young and elderly, few physical restrictions will limit the users. The space will, however, be accessible for all who wish to visit.

Medical or Mental Health Issues

Due to the spiritual nature of the space it is possible that a small number of users may be afflicted with medical or mental issues. The space will be sensitive to these needs and be designed such that these people will have the opportunity to worship among their community of believers.

Special Needs

The community is a collection of people who are at different points in their life journey. Depending upon the stage in life the user is at, special accommodations need to be made to meet their needs.



Students, families, and children using the space may require specialized time and spaces for meeting as smaller groups. The proposed structure will meet these needs such that the idea of a larger religious community can be instilled across multiple age generations.

The space will also encompass rich ethnic and cultural diversity. Arrangements will be made so that the space is open and welcoming to all visitors.

Religious Leaders and URI

Having religious leaders from multiple faiths becomes imperative to achieving a harmony among different religious sects. These leaders will establish themselves as the most permanent users of the gathering space.

They require spaces in which meetings can be held, classes can be taught, and smaller gatherings can be conducted.

The leaders need access to the space at all times of the day in order to best facilitate the needs of the community.

Number

The number of leaders present at any time in the facility will be related to the religions represented within the community. Approximately ten people will represent the United Religions Initiative.

Peak Usage

Religious leaders will be in most demand during official gatherings. Outside of these times leaders will be present within the facility in accordance with the activities taking place.

Parking

Due to the semi-permanent attendance of the leaders and URI, parking will be provided. Spaces will also be allocated for a portion of the community to meet with leaders outside of official gathering times.

Physical Restrictions

Depending upon the age of the leaders, they may experience physical limitations. The design of the space will accommodate any special needs the users may have.

Medical of Mental Health Issues

Most of the leaders will be experiencing few medical or mental health issues. Should there be a special case the issue will be dealt with at an individual level.

Special Needs

Because the leaders are the head of the community they may have to meet at irregular hours of the day.



The focus of this project is to create harmony by bringing together the world's religions as a group of believers regardless of one's declared religion. It will view religion in a broad scope, focusing on what it means to live and worship through the stages of life as a group of people bound by a higher power. The major project elements that will make this gathering possible are defined below (Ramsay, Council, 2009; Barrie, 1996).

Main Gathering Space

This space is the main focus of the project. It is where groups of believers will come to worship through their life's journey. It will be flexible and embrace the basic ideals of human spirituality through the use of light and a connection to its users and surroundings (Barrie, 1996; Mirsky, 1965).

Subsequent Gathering Spaces

Smaller gathering spaces will accommodate the need for the community to meet in a more private manner. Like the main gathering space, these spaces will embrace the basic ideals of human spirituality (Barrie, 1996; Mirsky, 1965).

Offices and Meeting Rooms

In order to facilitate the success of the space, an understanding and harmony must be achieved among the faiths represented within the community of believers. The offices and meeting rooms will be available for group meetings so that progress towards a better understanding of life as a believer can be achieved.

Open and Natural Spaces

As believers, the users of this space have a strong worldly connection in relation to their life journey. Open and natural space will encourage the connection to the time continuum on which the community exists and facilitate interrelationships among its members.

Entry and Sense of Path

The idea of entry and a sense of path is what defines the beginning and ongoing journey that the users of this space are experiencing. Exhibiting a strong sense of path through the space will encourage an understanding of the journey that the community is on.

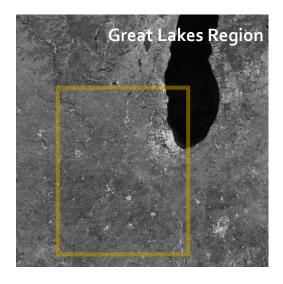
Parking

As stated, the primary mode of transportation of the users will not be the automobile. It should be recognized, however, that the automobile is a part of the city and needs to be addressed in the design of the project in accordance with meeting the needs of the users.

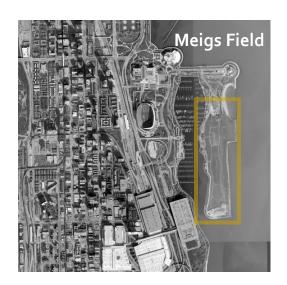
Secondary Spaces

Lobbies to facilitate interaction of users Storage Mechanical Space





Chicago, Illinois



Macro - Region

Regionally, the site rests in the southern portion of the Great Lakes Region which includes Ontario, Quebec, New York, Pennsylvania, Ohio, Michigan, Indiana, Wisconsin, Minnesota, and Illinois. Specifically, the site rests on the shore of Lake Michigan in the state of Illinois (Manninen, 2009).

Home to four seasons, the region experiences extreme temperature swings with hot summers and harsh, snowy winters (Manninen, 2009).

The Great Lakes region is a diverse ecosystem that is home to great wilderness, rich agricultural land, as well as countless small bodies of water. Because of glacial effects on this region, the area supports a rich agricultural industry (Manninen, 2009).

The area also boasts a multi-billion dollar recreation and tourism industry, extensive maritime transportation, shipping, and production (Manninen, 2009).

Macro - City

Chicago, Illinois is situated on the banks of Lake Michigan and boasts a rich cultural history. The city is home to a multitude of different races, classes, and religious distinctions (City of Chicago, 2003).

In the late 1800s Chicago was the fastest growing city attracting residents from rural areas as well as European immigrants creating a diverse community. Because of the diverse population, the city attracted many cultural events including the World's Fair of 1893 (City of Chicago, 2003; Council 2009).

Since then, Chicago has established itself as one of the richest cultural hubs in the United States and attracts people from all over the world.

Micro - Site

The location of the site is just outside the heart of downtown Chicago on the shoreline of Lake Michigan. Situated on Northerly Island (Meigs Field) off of Lake Shore Drive, the site is in one of the most culturally diverse areas of the city (City of Chicago, 2003; Bold New Plans, 2009).

The skyline of the city presents itself to the west, while Lake Michigan borders the eastern portion of the site. East Solidarity Drive is currently the main access to the northern sections of the island, with potential for future access provided by East Waldron Drive (City of Chicago, 2003; Bold New Plans, 2009).

Meig's Field has close proximity to all services provided by the Chicago Transit Authority. The rail line runs past the site, the elevated trains are within one block's walking distance, and bus routes run continuously by the site. The site is also accessible by automobile (City of Chicago, 2003; Bold New Plans, 2009).

The airstrip on the site measures 1,200,000 square feet. However, only a small fraction of the available site will be used for the gathering space and the rest will be treated as park space (City of Chicago, 2003; Bold New Plans, 2009).

Site Importance

In 1893 the City of Chicago was home to the World's Columbian Exposition, better known as the World's Fair. It was at this exposition that the first steps were taken toward finding a more universal gathering space for the greater religious community (Bold New Plans, 2009).

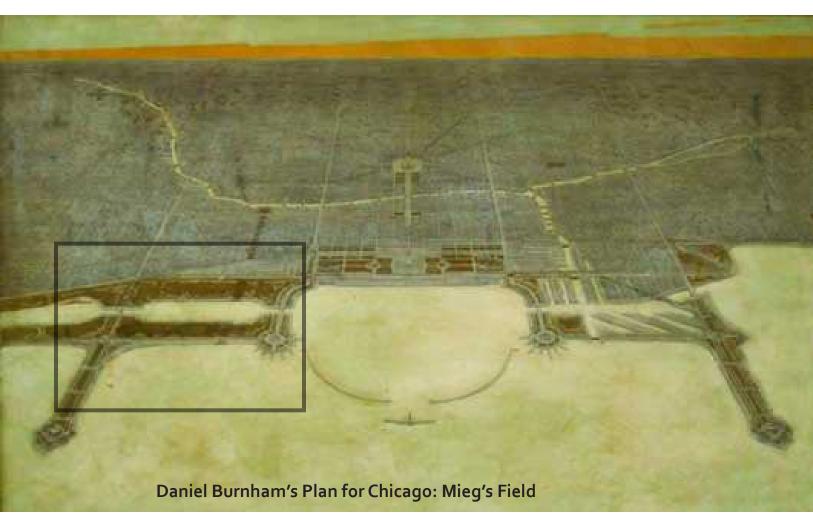
Headed by a council titled The Parliament of the World's Religions, the religions of the world were called to gather together along the shore of Lake Michigan. This event marked the beginning of interreligious dialogue (Bold New Plans, 2009).

Some years later in 1909, Daniel Burnam, an architect and planner who was present at the fair, proposed a plan for city of Chicago that focused on six developmental strategies. The strategies included development of a highway system, improving freight and passenger systems, acquisition of an outer park system, arranging systematic streets, creation of a civic center of cultural institutions and government, and improving the lake front. It is the latter two categories in this exhaustive list that influence the importance of the site (Bold New Plans, 2009).

Meigs Field was Burnham's proposed solution for a cultural hub that would improve the shoreline of Lake Michigan. The field was originally an airstrip that brought a diverse crowd to and from the city. In 1933, the airstrip was transformed to host another World's Fair in Chicago. The airstrip was closed in 2003, and the southern portion of the field lies empty (Bold New Plans, 2009).

Now in 2009, on the plan's centennial, the city of Chicago is looking to reestablish the vision of the Burnham plan for Chicago. Shedd's Aquarium and Adler Planetarium currently serve the northern section of the island providing a pivotal location for a new cultural hub (Bold New Plans, 2009).

A gathering space bringing harmony to a larger religious community that occupies the southern portion of Meig's Field would compliment the city's history with the Parliament of the World's Religions, World's Fair and fit into the centennial of Daniel Burnham's plan for Chicago (Bold New Plans, 2009).



http://burnhamplan1oo.uchicago.edu/history/_future/plan_of_chicago

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As the site currently exists, nothing occupies the southern portion of the island. The location provides close proximity to parks, museums, the Shedd Aquarium, and the Adler Planetarium.

Immediately to the east the vastness of Lake Michigan provides a strong connection to water and the life of the city and its people.



http://www.panaramio.com/photo/5695590

Views and Landmarks

Meig's Field looks back west into the city providing excellent views of major landmarks. The Sears Tower, Shedd Aquarium, Adler Planetarium, Soldier Field, and Millennium Park all provide excellent ways to navigate one to the site.

The proximity to major roadways and, body of water also provides excellent navigational tools. All of the mentioned landmarks fall on a path to the field.





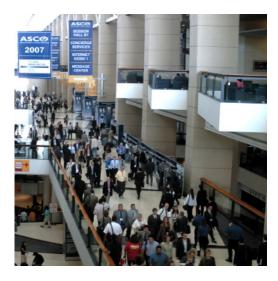


Top: Shedd Aquarium **Middle:** Adler Planetarium **Bottom:** Sears Tower

http://www.panaramio.com/photo/2301484 http://www.panaramio.com/photo/4116449 http://www.panaramio.com/photo/1218700







Top: Soldier Stadium
Middle: Millennium Park
Bottom: McCormick Place

http://www.panaramio.com/photo/2301484 http://www.panaramio.com/photo/4948062 http://www.panaramio.com/photo/2691466

23	project emphasis		

Focus

This thesis will focus on the idea of one higher power that serves a larger community of religious believers. Attention will be paid to the practices of a non-exhaustible list of the world's religions and how the unifying idea of one higher power relates to their sects.

The project will focus on the ideals set forth by the Parliament of the World's Religions and the interfaith movement by discovering what it means to worship as a whole.

The project will focus on the cultural benefits that the City of Chicago seeks. Using Burnham's Plan as a reference, the project will focus on providing a diverse cultural experience as well as the improvement of the shoreline of Lake Michigan.

Lastly, the project will focus on sustainable practices. It will focus on harnessing the potential energy of the surrounding lakeside environment to better the environment in which the users will interact.

Definition of Research Direction

Research for this project will be conducted in a holistic manner, embodying both quantitative and qualitative data to ensure thoroughness. The research will be conducted in the proceeding fields: unifying idea, project typology, theology, historical context, site analysis, sustainability, and programmatic requirements.

Plan for Design Methodology

Research will be conducted using a mixed method quantitative, qualitative approach. Interviews will also be conducted regarding current religious practices.

All data collected will be used implement a concurrent transformative strategy guided by the unifying idea. This strategy will guide my research so that quantitative and qualitative data will be gathered concurrently in regards to the unifying idea. The data will be analyzed at intervals throughout the project and design process to ensure the final solution stays within the bounds of the original unifying idea. The final product will be presented in both text and graphics.

Documentation of the Design Process

All work conducted for this project, including research and the design process, will be compiled and documented digitally. This includes, but is not limited to: writings, sketches, computer analysis, photographs, and models.

I will compile the information so that it follows a clear and concise chronological order in regards to the date in which the document was found or created and the category that it satisfies.

The final presentation will embody all findings and graphics created in a holistic manner and will be made available to future scholars through a thesis book.

First Year

spring semester - Professor Stephen Wischer 2005 - 2006

- -form and spatial studies
- -hand graphics
- -dwelling for introspection

Second Year 2006 - 2007

fall semester - Professor Joan Vorderbruggen

- -tea house -Fargo, ND
- -Mississippi River rowing club Minneapolis, MN
- -mountain dwelling Colorado

spring semester - Professor Bakr Mourad Aly Ahmed

- -Montessori school Fargo, ND
- -Dance studio Fargo, ND

Third Year 2007-2008

fall semester - Professor Steve Martens

- -Inuit school Alaska
- -AIAS Kawneer children's hospital Minneapolis, MN

spring semester - Professor Ron Ramsay

- -Dowtown rehabilitation NDSU housing Fargo, ND
- -Chicago design firm Chicago, IL

Fourth Year 2008-2009

Fall semester - Professor Darryl Booker

- -hybrid highrise tehama garden towers San Francisco, CA
- -KKE life in a cigar box competition

Spring semester - Professor Darryl Booker

- -Dominican Republic urban design Dominican Republic
- -Dominican Republic design solution Dominican Republic
- -Marvin Windows competition Africa

Fifth Year 2009-2010

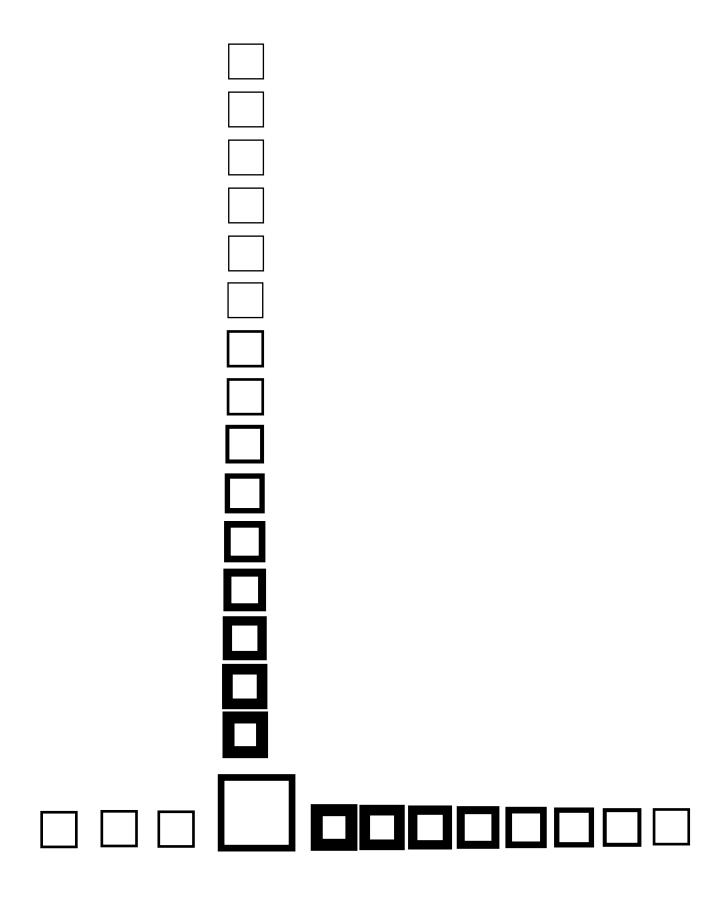
Fall Semester - Professor Mark Barnhouse

-Water resource experimentation station - Linton, ND

previous studio	experience				
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Theoretical Premise - Unifying Idea

Despite a people's established religion, the places in which they gather can be adapted to serve a larger community of people because they are bound by the idea of a higher power and a continuum of time in relation to their lives.

Religion - Providing Definition

To discover what being a body of believers is, one must first understand the underlying ideas that tie them to one another. While religion has no pure definition it embraces a group of people interacting with one another (Wade, 2009).

Religion is the practice of existing along a time continuum with a community of believers with the same ideals. Wade (2009) states that on the most basic level, "Religion is a system of emotionally binding beliefs and practices in which a society negotiates..." with a higher power.

A Global Ethic

Religion has established itself across the world. While individually each religion contains a specific set of beliefs, there are common ideals that bond them together into a larger community (Kung/Kuschel, 2006; Armstrong, 2009).

Religion provides the framework for believers. Its intention is not to provide people with scientific answers, but rather to help us transcend and discover life as a group as we exist on the time continuum. Karen Armstrong (2009) states, "Religion's task, closely allied to that of art, was(is) to help us live creatively, peacefully, and even joyously with realities for which there were no easy explanations and problems that we could not solve: morality, pain, grief, despair, and outrage (p.319)..."

theoretical premise					
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It is the feelings and issues that are demanded by a higher power to which all believers are tied. The Parliament of the World's Religions has set forth four ethics that encourage successful interreligious dialogue and a common understanding. They are as follows:

- a) "Commitment to a culture of non-violence and respect for life" (24-26)
- b) "Commitment to a culture of solidarity and a just economic order" (26-29)
- c) "Commitment to a culture of tolerance and a life of truthfulness" (29-32)
- d) "Commitment to a culture of equal rights and partnership between men and women" (32-34)

(Armstrong, 2009; Kung/Kuschel, 2006):

Dialogue

The vision of The Parliament of the World's Religions is that of a community interacting, relying upon, and believing with one another. It's these practices that define the society of believers and maintains the well being of the group (Kung/Kuschel, 2006; Seager, 1995).

Taken at an individual level, traditional religion becomes very personal. However, if viewed as a social function it can be a catalyst for a group's collective will. Wade (2009) states, "People may pray alone, but religious services and rituals are communal." The rituals define life stages and processes that we as humans mature through and accept (Kung/Kuschel, 2006; Seager, 1995).

These rituals, or rites of passage appear different on the surface but all celebrate common stages in spiritual development. Typically they embrace birth, maturation and life process, and passage to a higher power.

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Understanding Origins

The interreligious dialogue that is sought after by the Parliament of the World's Religions and the United Religions Initiative is based on a communal understanding. To achieve this understanding it is vital that groups interact with one another and be aware of the traditions and rituals that representative religions have practiced. From these, patterns may be developed that show how they can harmoniously interact with one another to celebrate the common belief in a higher power (Parliament, 2004).

The following analysis will be of the major representative religions acting as a part of the interreligious movement: Islam, Judaism, Buddhism, Christianity, and Hinduism (Smith, 1995; Wenner, 2001).

Islam

Islam is the dominant religion of non-Western religions. It follows the life of the prophet Muhammed who used his life journey to proclaim the religion that God created (Smith, 1995; Wenner, 2001).

To first look at the religion of Islam, it is necessary to understand its roots and definition. The most basic understanding of Islam is derived from the Arab root s-l-m. This simple phrase breaks down to mean, "peace," "surrender," and more completely, "the peace that comes when one's life is surrendered to God." The practice and rituals of the religion define the culture and nature of its followers (Smith, 1995; Wenner, 2001).

Islam, like other religions, is founded on the principles of a life journey. Divided into sections, four ideals present themselves as the most important: God, Creation, the Human Self, and the Day of Judgement (Smith, 1995; Wenner, 2001).

"God," the term given to their higher power ,is defined as a single divine entity. From God stems Creation, the second Islamic concept. Islam proclaims that everything was created under God, even the Human Self. The Human Self is brought into the world to interact with God's creation and give gratitude for the time given as well as to surrender and believe in a higher power. The final principle is that of the Day of Judgement, which states that eventually the life granted to the believer will inherently end (Smith, 1995; Wenner, 2001).

Islam presents itself upon this time continuum, and rituals are held to celebrate the passing of each stage (Smith, 1995; Wenner, 2001).



Judaism

Judaism is a Western monotheistic religion. Its followers believe that a single, all-knowing power which they define as "God" created all things to have a purpose in a divine order. God grants Creation, Human Existence, and a Revival of the Dead (Smith, 1995; Wenner, 2001).

The Jewish faith exists along a time continuum in which the believer seeks understanding of God through creation, human existence, history, morality, justice, suffering, and eventually an inherent end to life (Smith, 1995; Wenner, 2001).

Jews are brought into the world by God. They are granted a period of time to seek the meaning of life and existence under a higher power. This path is defined as Human Existence through which they rely on one another for understanding (Smith, 1995; Wenner, 2001).

Their faith is defined through social interactions and understanding of one another in relation to the human condition and life cycle. The first stage is birth followed by two coming of age ceremonies. After these ceremonies, followers are believed to have an understanding of God and will follow his commandments on their own terms. The last stage of life is the return to God. It marks an inherent end to the life journey and a completion of understanding. It is embraced and the life of the follower is celebrated as an asset to understanding the teachings of their higher power (Smith, 1995; Wenner, 2001).

Buddhism

Buddhism is an Eastern Faith based in the worship of a man who had a divine spiritual awakening. Much like western faiths, Buddha was seen as infallible and provided a standard by which people should live their lives (Smith, 1995; Wenner, 2001).

Buddhists believe that the Buddha set forth a path defined by Four Noble Truths. The first is the most important in the series as it describes the journey and experiences that every human will go through. Broken into six parts, Buddhists define life through the trauma of birth, the pathology of sickness, the morbidity of decrepitude, the phobia of death, to be tied to what one dislikes, and finally the separation from what one loves (Smith, 1995; Wenner, 2001).

The path is set out to understand a higher power through human trials as a group of people following the same doctrine. All are brought into the world, suffer together to find understanding, and are returned to that from which they came (Smith, 1995; Wenner, 2001).

Buddha defined humans as social creatures who need to be among people on the same journey as themselves. Together they define their path and problems (Smith, 1995; Wenner, 2001).

While Buddhism isn't as driven by defined ideals as other religions, it still maintains a sense of life path by which people maintain their spirituality (Smith, 1995; Wenner, 2001).



Hinduism

Hinduism is the main religion practiced in India. It is a more diverse religion worshiping the existence of multiple deities. However, the religion embraces the belief in Brahman, the life force that defines existence. This force defines a being in a karma life and death cycle (Smith, 1995; Wenner, 2001).

This karma cycle is defined by four main stages: student, marriage, retirement, and finally sannyasin. First, followers are born into the world and maintain themselves as students. The mind is surrendered to learning of their existence from teachers. Upon completion the students graduate into marriage where they are household owners. Here they define their own lives and choose their path. In retirement the followers turn inward in hopes of reaching the final stage of sannyasin. The final stage is not a physical transition, but rather a state of being. It is the ultimate goal of Hindus in which they are broken of the karma life cycle and return to that which they came (Smith, 1995; Wenner, 2001).

Hindu is the least traditional of the major representative religions, but still follows an order and the idea of a higher power. The believers celebrate entrance, life, and exit from the human world (Smith, 1995; Wenner, 2001).

Christianity

Christianity has its roots in Judaism, and thus shares nearly identical characteristics. Christians believe in one higher power named Jesus. Through him they define how they live their lives (Smith, 1995; Wenner, 2001).

The Christian faith defines life as a journey through stages: birth, existence, and death. Human life is shaped in the image of God. At birth people are brought into the world by God. They are cared for by their parents who use the teachings of the faith to raise their children until they are accepted into the faith community. They are then deemed responsible for their own actions and expected to follow the path that the church presents to them. Their journey concludes in death, through which they are returned to their creator (Smith, 1995; Wenner, 2001).

The Christian faith, like others mentioned, relies heavily upon the social interaction of its believers. While the path that people choose is their, they are influenced and learn through a group of believers (Smith, 1995; Wenner, 2001).

Sacred Path and Spirituality

The most basic and elemental belief instilled within a religious believer is spirituality, the belief in a higher power. It is this belief that ties the religions of the world together on a given time continuum/spiritual path (Barrie, 1996).

As seen from observations made in studying the main representative religions of the world, there is a belief in a beginning, given period of time, and an inherent end to the spiritual path. As believers move through their paths they achieve milestones by which they attain a higher understanding of their spirituality, all reaching for the common goal of being reunited from that which they came (Barrie, 1996).

It is this belief and common tie that allows the world's religions to exist among one another in a harmonious way.

Divine Proportion

The elemental nature of religious belief has created a common tie among the world's religions, and it has also created similarities in the proportion and construction of their gathering spaces. This relationship hints that even the way in which people gather and worship are similar regardless of differences in established faith (Hemenway, 2005).

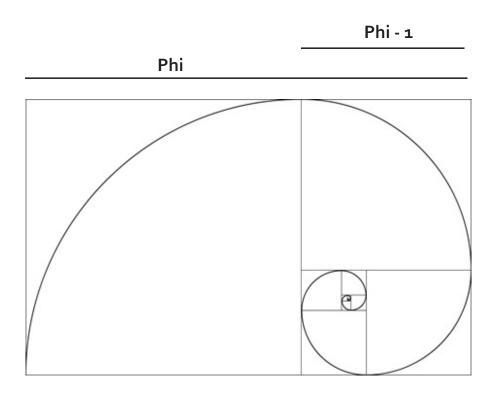
The belief that proportion can be harmonious has attained the names Divine Proportion, Golden Mean, Golden Proportion, Golden Section, Golden Ratio, and the Sacred cut. Simply understood, it is a relationship in which the parts together are the proportion of the whole. Hemenway (2005) quotes,

"The power of the golden section to create harmony arises from its unique capacity to unite different parts of a whole so that each preserves its own identity, and yet blends into the pattern of a greater whole" (p. 11-12).

It is within these words that the vision of the interreligious movement could be instilled. The way in which we understand the time continuum, existence among one another, and proportion are defined within divine proportion so that each piece is a sum of the whole working together in harmony (Hemenway, 2005).

Divine proportion can be understood in mathematical definitions in ratios of thirds. In its purest form, the relationship is divided using phi. The long edge (whole) is the length phi, and the square (part) is a single unit. The rectangle representing a third of the whole is equal to phi -1 (Hemenway, 2005).

This proportion has been understood through various cultures since the beginning of time as it speaks to us at an elemental level. Given a series of rectangles proportioned differently, it has been found that most people prefer the one that is proportioned in accordance to divine proportion. This can be seen from studying the architecture and gathering spaces of the world's religions. Divine proportion is consistently projected throughout the design regardless of the given faith (Hemenway, 2005).



Theoretical Premise Research Summary

The preceding research was gathered and analyzed so that it supports the body and claims of the theoretical premise/unifying idea:

"Despite a people's established religion, the places in which they gather can be adapted to serve a larger community of people because they are bound by the idea of a higher power and a continuum of time in relation to their lives."

Research was directed to provide ample evidence that the world's religions are based upon the idea of a higher power and thus the spaces and manner in which believers gather are similar. Evidence was collected providing a definition of religion at the most basic level, the practice of interreligious dialogue, analysis of a cross section of the world's religions to establish validity that common ideals exist, and in the practice of divine proportion to give direction to further analyzing design methods established in religious gathering spaces.

Believers of the world's religions can harmoniously exist and gather together as a larger body because they share common ideals and beliefs. Stated by Wade (2009), "Religion is a system of emotionally binding beliefs and practices in which a society negotiates." The most basic of these ideals is the existence under a higher power upon a finite time continuum.

From these ideals we have seen the emergence of an interreligious movement. These groups, the URI and The Parliament of the World's Religions have unified the faiths into a group of common believers, establishing that harmonious interaction is achievable.

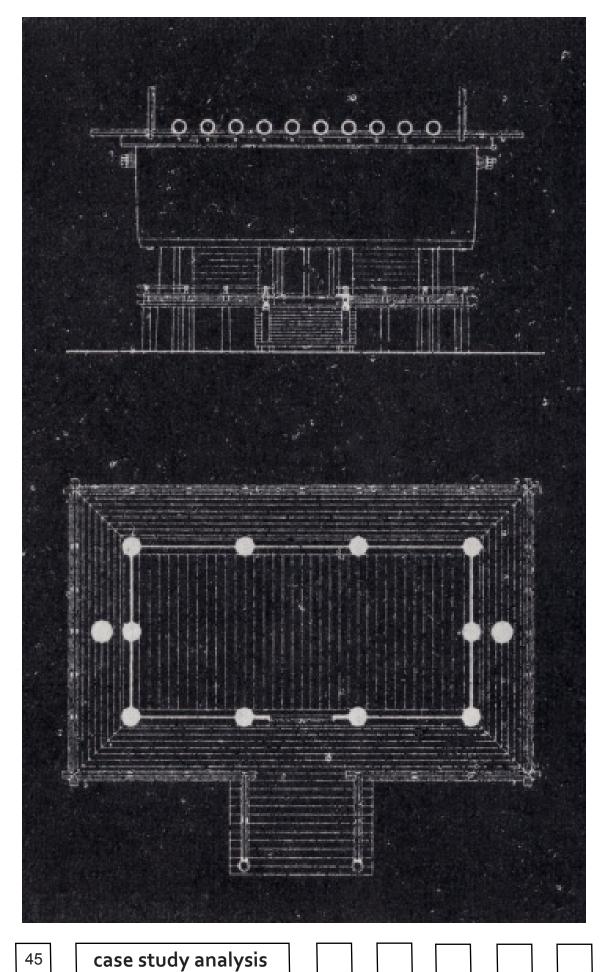
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Upon establishing the validity of religion as a whole as opposed to individual faiths, it became important to understand the common origins that tie a group of believers to one another. The six main representative religions of the world (Islam, Judaism, Buddhism, Christianity, Hinduism) were analyzed in relation to believers on a time continuum. It was found that the lives of believers, despite the specific religion, is based upon a series of significant events celebrated in their practice. While the specific names varied, they can be classified into three milestones; birth, life/acceptance of role, and an inherent end. Because of these events and beliefs it can be established that believers exist together as a whole.

The final research path was defining how the spaces and ways in which faiths gather are similar. A study of divine proportion was used to establish spatial relationships as they relate to the premise. Hemenway(2005) states,

"The power of the golden section to create harmony arises from its unique capacity to unite different parts of a whole so that each preserves its own identity, and yet blends into the pattern of a greater whole" (p.11-12).

It is in these words that the research paths established triangulate themselves. The common ideals and definition of religion, the interreligious movement and dialogue, and the creation of space are bound by assembling pieces of a whole to interact as a larger body harmoniously united by space.



case study analysis

Shinto - Ise Temple Complex

The Ise Shrine Temple Complex is a series of temple structures in the city if Ise, Japan. The two main shrines, Deku and Naiku, are built in accordance to the depicted plan and elevation (Blaser, 1963; Kisheda, 1953).

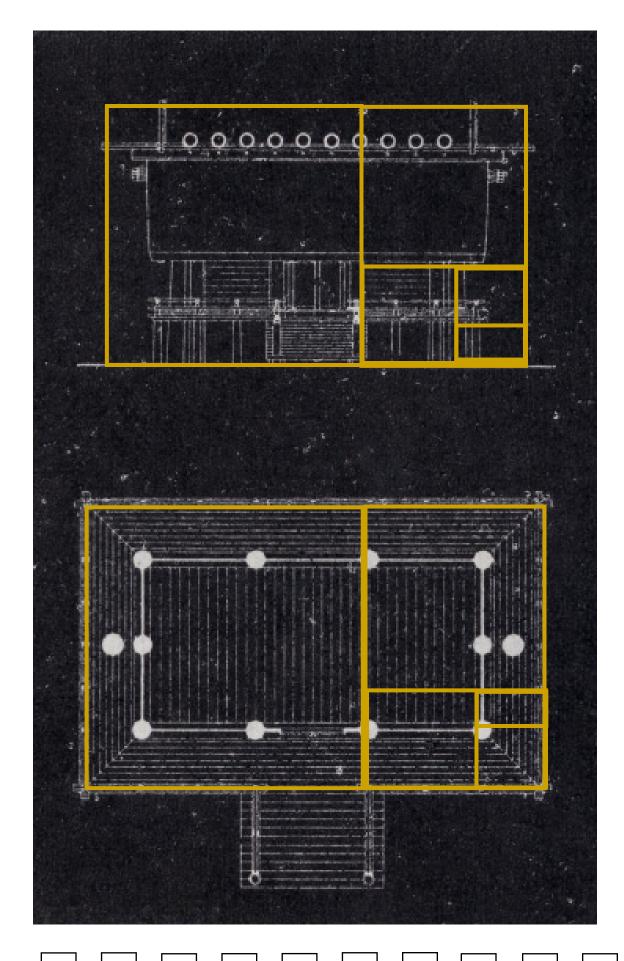
This complex is considered to be the most sacred place in Japan. Nature and architecture harmoniously unite projecting visitors into an elevated state of being. The architecture is the purest form of Japanese form and proportion (Blaser, 1963; Kisheda, 1953).

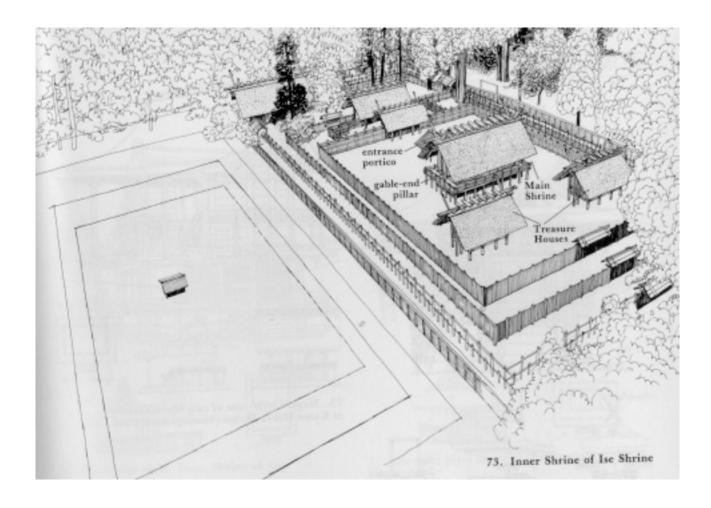
A clear grid defines the plan of the simple building which contains only one meditative space per shrine. Professor Hideto Kishida (1953) states, "the architectural treatment is quite simple and rather primitive throughout; the form is perfectly clear cut and the whole structure is without any curve or application of colors" (p.43).

The Shinto shrines of Ise act as pieces of a whole, each communicating with them beautiful proportion and sensitivity to their surroundings (Blaser, 1963; Kisheda, 1953).

Existing Programmatic Elements:

- 1. architecture as exploration : approach
- 2. one large meditative gathering space





Proportioning

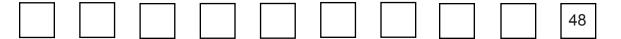
Shinto shrines, especially those located at Ise, are renowned for their sense of proportioning. The main temple is depicted with the grid work for divine proportion superimposed on it. The elevation and plan of the shrine are in perfect accordance with the ratios projected by Phidias for harmonious relationships (Blaser, 1963; Kisheda, 1953; Hemenway, 2005).

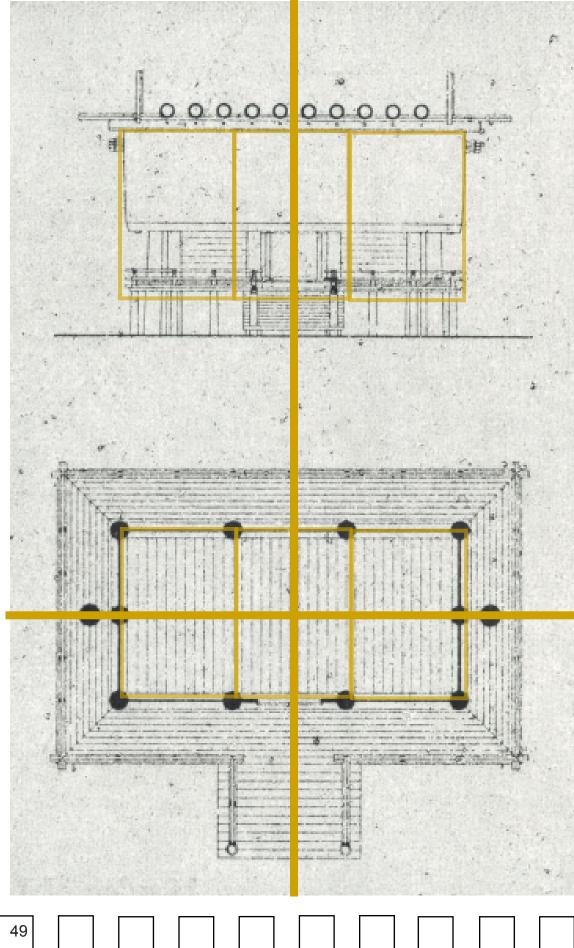
Each aspect of the structure from form as a whole to elevation changes can be understood through the golden section.

Approach

Ise displays itself as a series of temples. The visitors' journey to the main structure is symbolic of the time continuum that he or she exists upon (Blaser, 1963; Kisheda, 1953).

As seen in the above image, the complex is built adjacent to a large rock garden. Every twenty years the temple deconstructed and switches places with the adjacent lot. It is this constant interchange that reminds visitors of the path they are on (Blaser, 1963; Kisheda, 1953).





Structure

As is typical of early Japanese architecture, the shrines at Ise are simple wood construction. Timbers create elegant clear span spaces for the visitors to use to appreciate their surroundings (Blaser, 1963; Kisheda, 1953).

Natural Light

Much like other spiritual places, Shinto shrines embrace the use of natural light. The entry to the structures are on an east to west axis utilizing the rising and setting of the sun to illuminate the space.

Massing

The form of the building can be understood as a single mass elevated above the earth. The simple nature of the existing elements creates a space that directs attention to the surroundings.

Plan to Section/Elevation

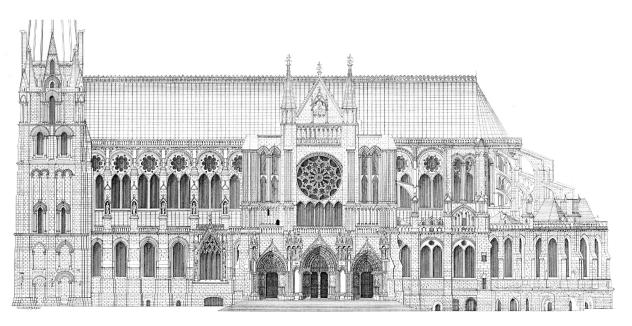
The grid that composes the plan defines the proportion of the height of the structure as depicted in the image to the left.

Geometry and Hierarchy

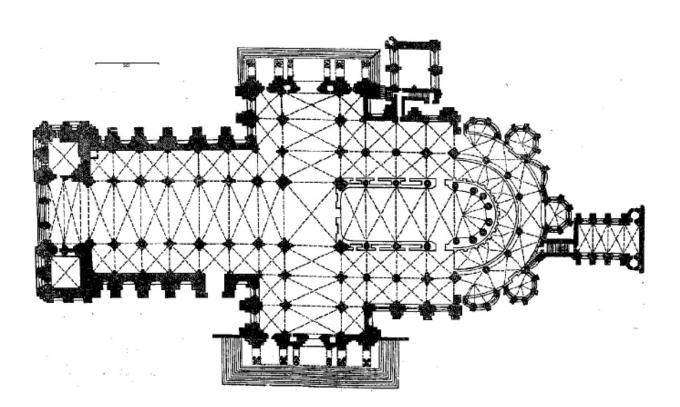
The shrines at Ise use simple rectangular geometry based off of a rectangular grid. Similar to other spiritual gathering spaces, the layout is simple and defined by a series of columns.

Conclusions

The shrines at Ise adhere to the principles set forth in the theoretical premise/unifying idea. Grids and divine proportioning project an aesthetic harmony to its users. A sense of path is established through the use of the structure. Entry, stay, and exit all speak of the time continuum on which a community exists.



3. CHARTRES: KATHEDRALE. 1:400.



Christianity - Chartres Cathedral

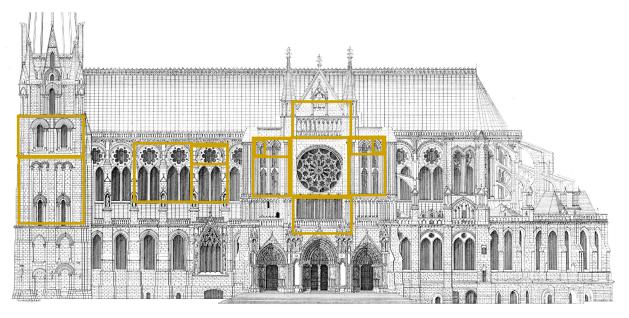
Chartres Cathedral, located in Chartres, south of Paris, was constructed under the careful eye of medieval builders. Much like other gothic cathedrals from its time, Chartres approached design as the Greeks did through the use of columns to create communal space. The final image produced through harmonious structure and grace is achieved through divine proportioning (Hemenway, 2005).

A clear grid defines the structure of the building with successively smaller elements based upon the dimensions of the last. The cathedral works harmoniously as a whole, but also functions as a logical set of parts (Hemenway, 2005).

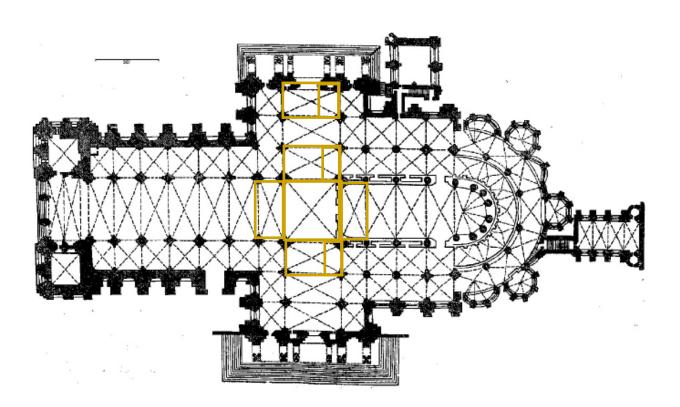
The scale of the cathedral is clearly far bigger than that of the small Shinto shrines of Japan, but if broken down into smaller parts, a nearly identical grid can be established between the two. Like other religious gathering spaces, the cathedral employs the basic ideals of divine proportioning to create a harmonious structure (Hemenway, 2005).

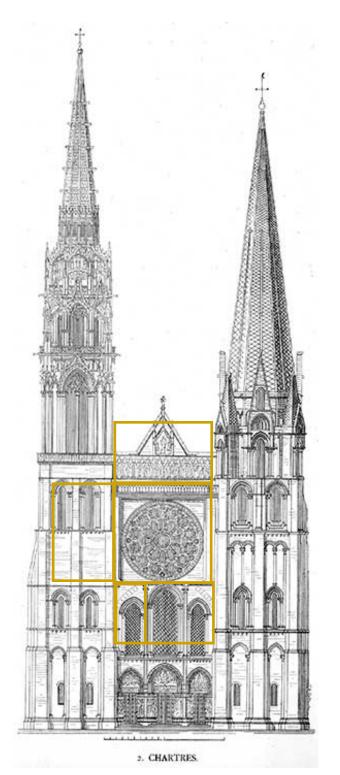
Existing Programmatic Elements

- 1. Apse 5900 ft sq
- 2. Transcept 5900 ft sq
- 3. Nave- 4000



3. CHARTRES: KATHEDRALE. 1:400.





Proportioning

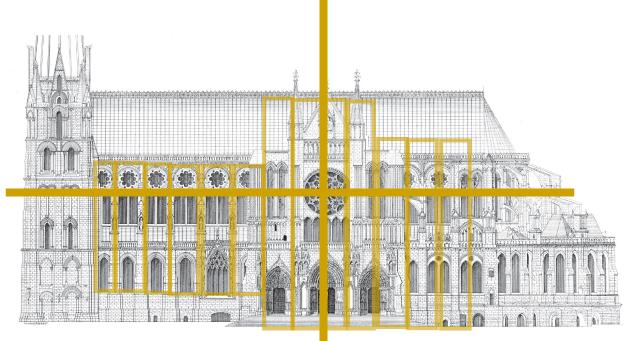
While the proportions used within the cathedral are not as simple and elegant as those of the Shinto shrines, a direct relationship is established between plan and elevation (Hemenway, 2005).

The grid set up using divine proportion in the plan is translated to the exterior of the building. The proportion of the central unit of the transcept is the size of the exterior rose stained glass window. From this dimension the next grid size is determined using divine proportioning successfully creating smaller and smaller units in the grid (Hemenway, 2005).

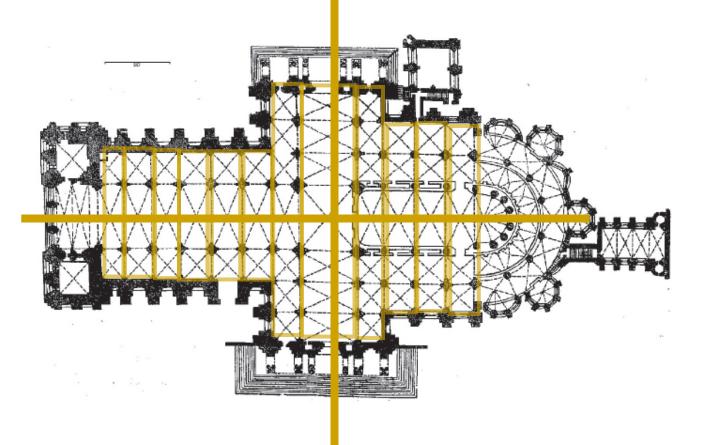
Approach

The use of the structure, like other religious structures, is defined along a time continuum. As visitors approach the structure they are brought in through the nave, their journey continues linearly through the trancept, and finally they reach the apse.

The use of the structure can be defined through birth (entry), life, and an inherent end.



3. CHARTRES: KA HEDRALE. 1:400.



Structure

Chartres Cathedral presents itself as a large monolithic structure like many other gothic cathedrals. Stone arches and buttresses create strong architectural forms.

Natural Light

A sensitivity to natural light is established in the cathedral through the use of an east to west main axis. Light is filtered through large stained glass windows creating a spiritual glow on the interior of the structure.

Massing

The form speaks from the inside out and vice versa. From the exterior the building reads as three pieces and is translated into the nave, transcept, and apse on the interior.

Plan to Section/Elevation

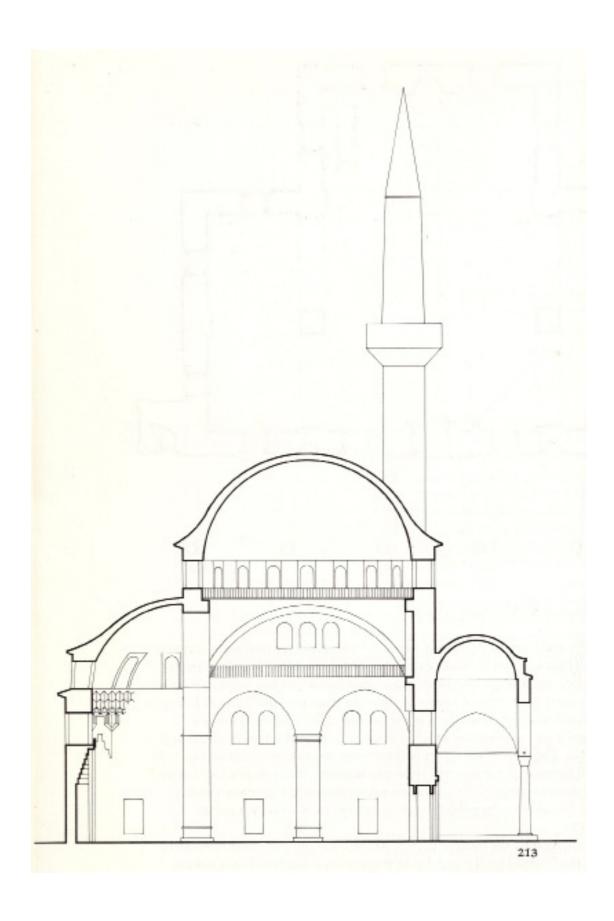
The grid that composes the plan defines the proportion of the height of the structure as depicted in the image to the left.

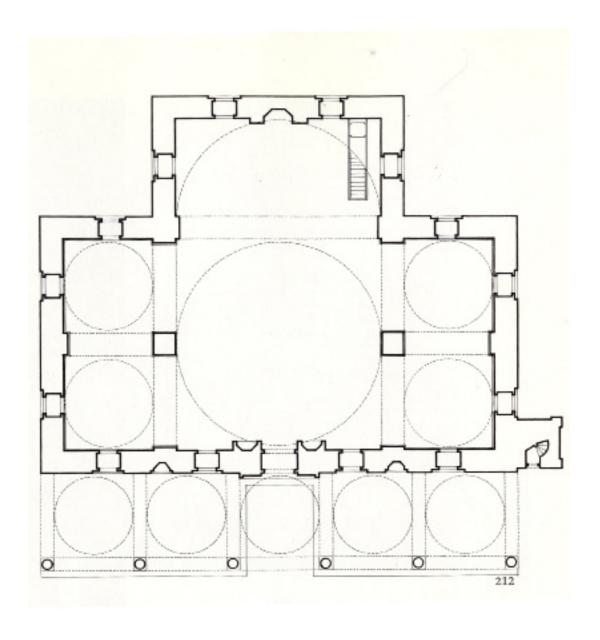
Geometry and Hierarchy

The Chartres Cathedral uses a rectilinear grid to establish its geometry. By translating this grid through plan and elevation an understand is achieved through the hierarchy of the three main spaces.

Conclusions

The Chartres Cathedral adheres to the ideas set forth in the theoretical premise/unifying idea. Through an extensive study of divine proportion it can be found that the structure is derived using a series of grid lines that gradually decrease in scale. These are then translated throughout the building to create a sense of time continuum through the use of the structure.

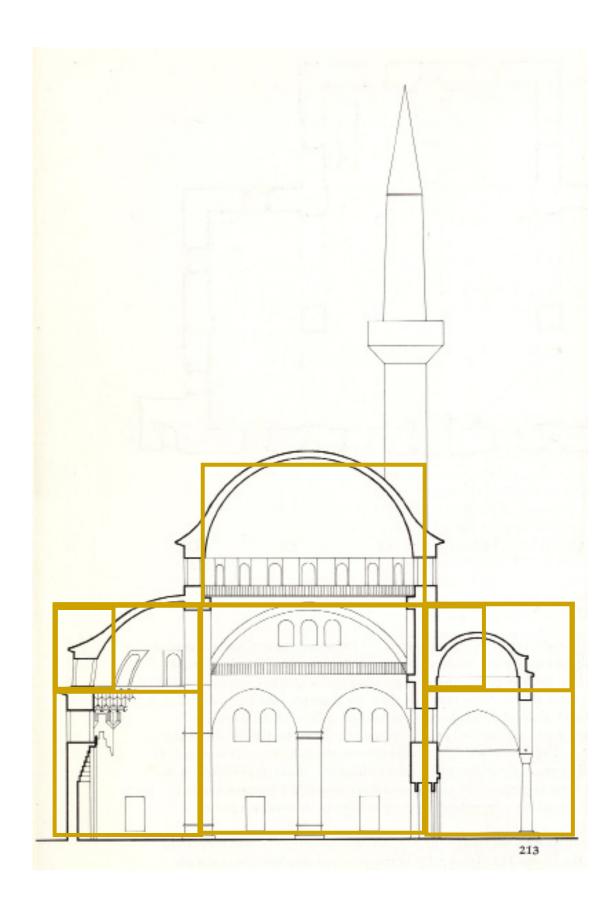


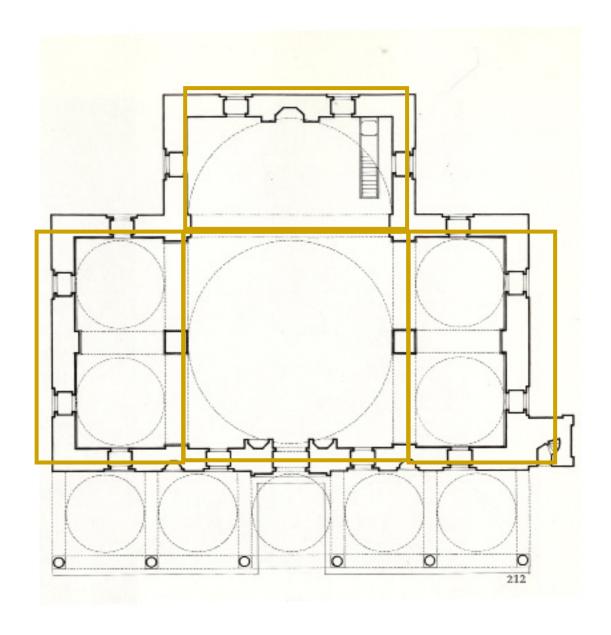


Islam - Atik Ali Pasa in Istanbul

Atik Ali Pasa is a mosque in Istanbul dating from 1496. The mosque follows the design guidelines of typical Muslim architecture and is composed of the main structure (prayer hall with a central dome), two side units, and a front unit containing a half dome. The domes are supported by corbels and pendentives (Kuran, 1968).

Atik Ali Pasa is considered to be one of the most refined of the Bursa Type mosques. It shares a similar grid and proportioning system as eastern and western architecture of different religions. Mosques are, however, set apart by their highly detailed interiors (Kuran, 1968).



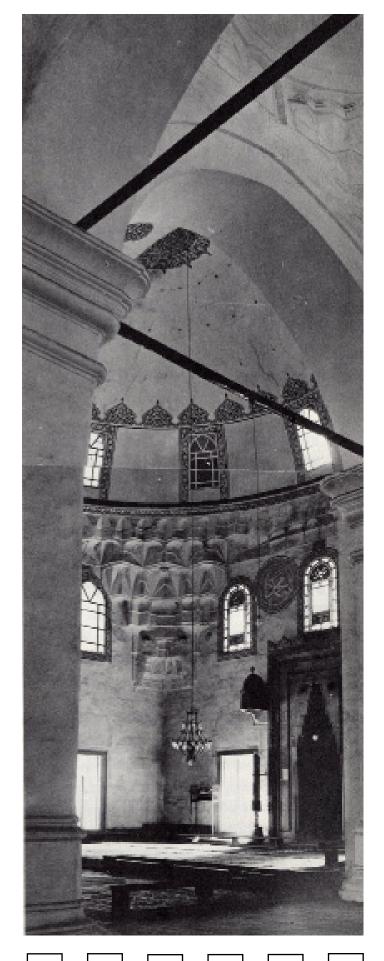


Proportioning

Mosques, like many other early religious structures, adhere to divine proportioning. Based off of a central square, the secondary spaces in the structure are determined in accordance to the golden section. Proportions in elevation are also determined in accordance to the golden section (Kuran, 1968; Hemenway, 2005).

Approach

The east to west axis becomes paramount in Islamic architecture. Daily prayers are conducted by Muslims throughout the day in which participants are to face eastward toward Mecca (Kuran, 1968).



Structure

Mosques have a unique structural system as they are rectilinear at their base and form into a dome at the top. To achieve this effect, the domes are held up by a series of reliefs called corbels and pendentives.

Natural Light

As seen in the photo to the left, the main spaces in mosques are bathed in natural light during gathering and prayer times. This is achieved through the east to west axis established in its placement.

Massing

The form of the building is determined from the floor plan. The grid that composes the proportion is directly relational to the elevation of the structure.

Plan to Section/Elevation

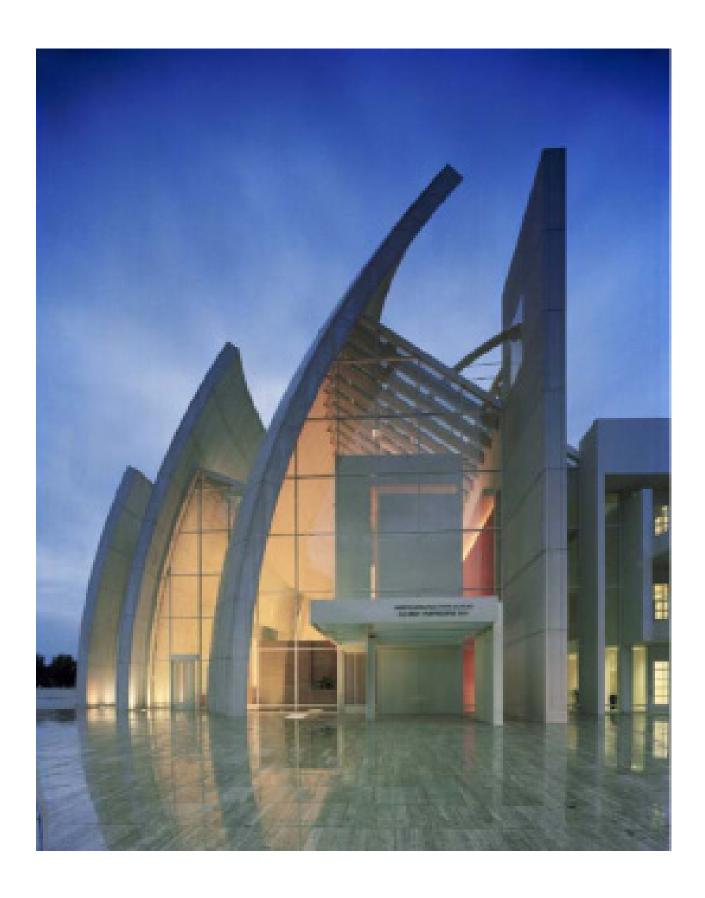
The grid that composes the plan defines the proportion of the height of the structure.

Geometry and Hierarchy

The mosque uses the same grid proportioning system as other early religious structures. The main space contains the largest grid unit and secondary spaces contain smaller spaces in proportion to the original center.

Conclusions

Atik Ali Pasa adheres to the ideas set forth in the theoretical premise/unifying idea. Through divine proportioning it can be found that the structure exists on the same grid and golden section that other eastern and western religious architecture examples do.



Modernism - Millenium Church

The Millenium Church designed by Richard Meier in Rome, Italy was designed as the focal point for Vicaiato di Roma's Millenium project (Meier, 2009).

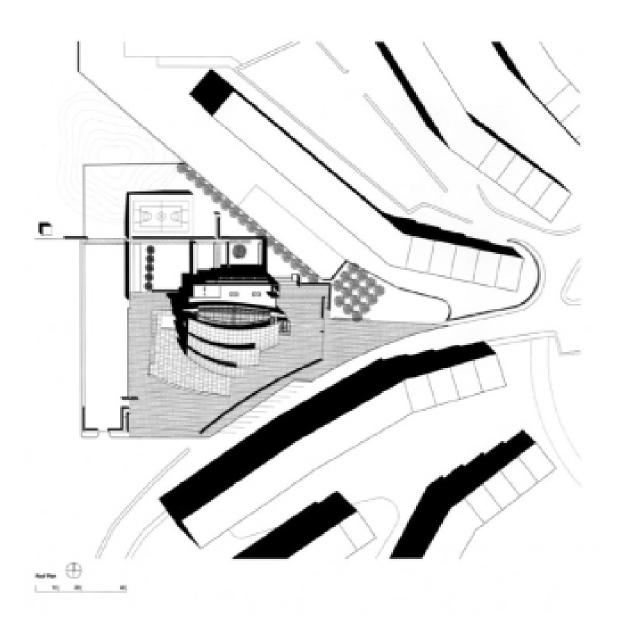
While not proportioned according to the golden section, the building maintains a strong sense of spirituality. The structure is bathed with light throughout the day and the lightness of the construction allows visitors to feel a connection to the surroundings (Meier, 2009).

The volume of the space is influenced by intricate light studies in accordance to the east-west axis (Meier).

Existing Programmatic Elements

entry
main gathering space
baptistry
community center
offices
classrooms

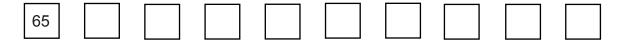


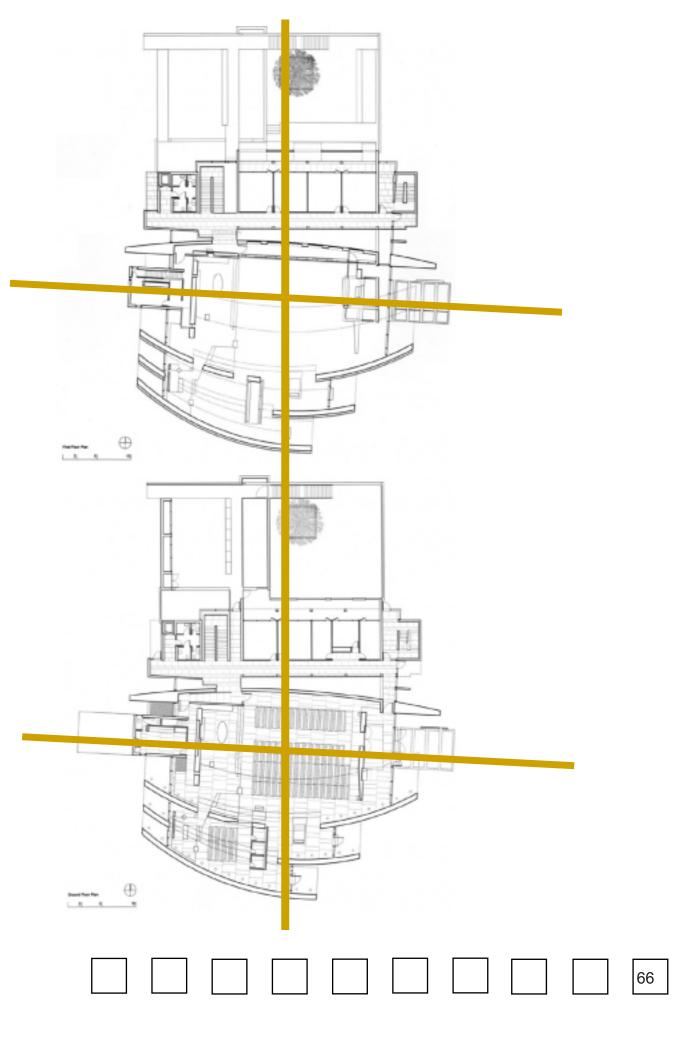


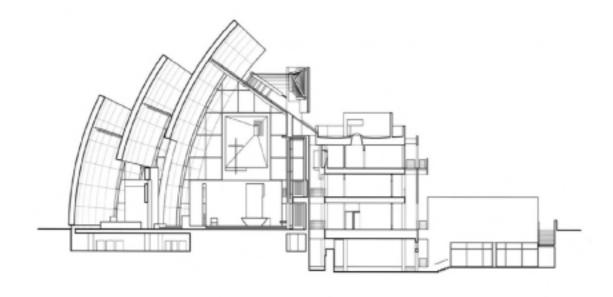
Analysis

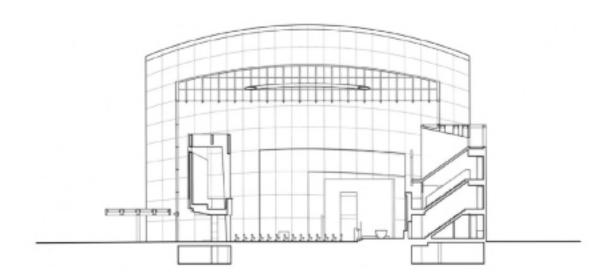
As depicted, the plan exists on an east to west axis. This allows the structure to utilize the changing light of the day to its full potential. Also, if examined closely the main sanctuary is adjusted a few degrees to the south so that it is in agreeance with the rising sun on the morning of Christmas day (Meier).

It is these subtleties that distinguish the Millenium Church as one of the most spiritual religious spaces (Meier, 2009).









Structure

The Millenium Church is a series of shell structures held up by steel framing. The individual pieces of the shell are pre cast panels.

Natural Light

Light was the inspiration behind the design of the Millenium Church. The interior of the structure is airy filled with natural light throughout the day. On Christmas Day, light will enter the sanctuary at a perfectly perpendicular angle.

Massing

The form of the building reads as a large gathering space defined by three seemingly weightless shells and a rectilinear backing which houses the administrative and communal spaces.

Plan to Section/Elevation

The grid that composes the plan defines the proportion of the height of the structure.

Geometry and Hierarchy

The three floating shells draw immediate attention to the sanctuary. Visitors enter the structure underneath the forms and light bathes them on the inside making them the spectacle of the project.

Conclusions

The Millenium Church embodies spiritual elements outside of classical proportioning. Venturing slightly away from the original premises set forth, the project is an example of how modern techniques present different solutions to religious architecture that still present spatial relationships in a harmonious manner.

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Summary - Typological Research

The series of case studies examined: Shrines at Ise, Chartres Cathedral, Atik Ali Pasa, and the Millenium Church portray the common ideals of religious gathering spaces and their construction in regards to proportion and the time continuum upon which their communityies exist. All cases examined adhered precisely to the theoretical premise/unifying idea with the exception of the Millenium Church. In this example, modernism and design techniques were examined to determine how harmony could be achieved without following the proportioning system set forth by the golden section.

To examine the given case studies an extensive examination of divine proportion was used to discover underlying design ideals across the different forms. As was expected of religious architecture the historical forms adhered to the classical method of proportioning through the golden section.

As seen in the preceding examples, by superimposing the section in plan and elevation it can be found that the projects have used the exact same proportioning system.

On the surface all of the case studies are inherently unique. The detailing and materiality are affected by the particular religion. However, all of the examples show a characteristic sensitivity to form, proportion, light, and site positioning.

As research progressed in the series of case studies, more complexities could be found. Beginning with the earliest Japanese culture, we find the simplest form in the Shinto Shrine. Progressively more complex are the cathedral, mosque, and modern day church. Through the progression, we can see the development of construction techniques and complexity of proportioning. However, these changes do not change the basic characteristics which all share.

Aside from the different cultures, all the projects shared an east to west orientation paying regards to the rising and setting of the sun. It is this axis and orientation that speaks of the time continuum on which the visitors and users of the space exist. Each project also shared functional and spatial relationships in regards to path. Entry to the space becomes an act in experiencing the space. Upon entrance there is a large gathering space enclosed in smaller more intimate spaces.

It is upon these proportioning and spiritual ideals which the proposed gathering space will be based. Sensitivities to site, path, light, and spatial relationship will define the harmonious relationship sought in gathering a community of believers.

historical context



CXXXVII, CHEAGO. VIEW OF THE PROPOSED DEVELOPMENT IN THE CENTER OF THE CITY, FROM TWENTY-SECOND STREET TO CHICAGO AVENUE, LOOKING TOWARDS THE EAST OVER THE CIVIC CENTER TO GRANT AND LAKE MICHIGAN.

Painted for the Commercial Club by Jules Guerin.

Context

Evolution of Religion Parliament of World's Religions United Religions Initiative Physical Context

- -Chicago History
- -World's Fair
- -Daniel Burnham's Plan for Chicago

Religion and faith has been a dynamic subject shaping the beliefs of the human condition since the beginning of time. It exists on its own time continuum that has the trend of repeating itself (Wade, 2009).

"The Case For God," as it has been defined by Karen Armstrong relates religions not by ideas, but by practices. It is upon this ideal that religion can be examined in a historical context (Armstrong, 2009).

Embraced by modern thinkers in 1893, the first step was taken in bringing the different faiths together to achieve understanding through broad ideals. Now in the present day, groups are beginning to emerge and formalize the ideas set forth in 1893. Led by the United Religions Initiative, more than 100 religions, spiritual expressions, and indigenous traditions are coming together in more than 65 countries to promote a strong interreligious dialogue (Seager, 1995).

Chicago is at the forefront of this movement, as it has been home to multiple world's fairs and gatherings of the Parliament of World Religions. It's rich cultural history and diversity provides the perfect setting to create a space for harmoniously bringing together the faiths of the world ("City"; Seager, 1995).

By examining these elements, an understanding of faith and religion in a historical, social, and physical context will be established.

United Religions Initiative

The United Religions Initiative (URI), was established in 1993 on the one hundred year anniversary of the Parliament of World Religions as an extension of the United Nations. Headed by Bishop William Swing, the group is one of the leading social groups in creating a harmonious interreligious dialogue ("United").

Based upon the ideals of the Parliament of the World's religions, the group has established an interfaith movement stating that, "Interfaith is a way to organize, a way to connect, commit and create community among people from different faith and religions. Its practitioners are diverse and approaches to actualizing interfaith ranging from gathering World Leaders to mobilizing grassroots communities ("United," 2009)."

The United Religions Initiative realizes the presence of a higher being, common ideals, and practices within every religion regardless of the formal name given. It uses these common ideas to create understanding across the range of different religions, enable people of a variety faiths to meet together and break religious prejudice ("United," 2009).

Working in close relation with the United Nations, the United Religions Initiative organizes events on the city, regional, and global scale to achieve understanding. These events include interfaith services, forums, and programming of social events so that people of different faiths may interact with one another ("United," 2009).

However, currently there is a lack of any formal and permanent gathering space for the United Religions Initative and the interfaith movement. The development of this thesis project will give the United Religions Initiative a home within our social context ("United," 2009).

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Physical Context

To gain an understanding of the people that will be interacting within the space it is critical to be aware of the history of the physical context in which the proposed space will exist. Chicago has a rich cultural history in relation to diversity and the development of the site (Bold New Plans, 2009; City of Chicago, 2009).

Chicago - Development of the Site

Chicago's history began in the 1670's. The area was recognized for its potential by European explorers, but didn't begin rapidly developing until the industrial movement in the 1800's "Bold New Plans, 2009; City of Chicago, 2009).

The industrial movement brought with it an enormous influx of immigration from abroad as well as national movement. Countless nationalities and sets of beliefs flooded the city creating one of the world's most diverse social fabrics. The city established itself at the forefront of the modern cultural movement. For this reason, it was selected to be the home of The World's Columbian Exposition of 1893. It was at this event that the groundwork for the interfaith movement would be laid (Bold New Plans, 2009; City of Chicago, 2009).

Just forty years later, Chicago would host its second World's Fair, again bringing together the people of the city to celebrate unity and progress in the city. The site selected is the exact site of the proposed interfaith gathering space ("Bold New Plans", "City of Chicago", Parliament, 2004).

The manmade island was proposed and constructed for the 1993 World's Fair by planner and architect Daniel H. Burnham (Bold New Plans, 2009; City of Chicago, 2009).



Daniel Burnham's City Plan

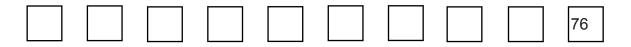
The development of Northerly Island was developed by Daniel Burnham in 1933 as a part of the Plan of Chicago in response to Chicago's rapid growth (Bold New Plans, 2009; City of Chicago, 2009).

Northerly Island was to be created with respect to development and a respect to nature. Burnham believed that the site should harbor the creation of a civic center of cultural institutions and government, and improve the lake front. It was these ideals that would shape the nature of the site and the surrounding areas (Bold New Plans, 2009; City of Chicago, 2009).

Like much of the lake front, Northerly Island was originally underwater. The current landforms were created by using fill comprised of rubble from the Great Chicago Fire of 1871. The lake front was in disarray, but Burham found hope in the pure and glimmering lake water nestled against the mess (Bold New Plans, 2009; City of Chicago, 2009).

Burham embraced the spiritual nature of the lake front and created a beautiful site that successfully implemented his ideals for the lake front, and continue to succeed his vision ("Chicago", "City of Chicago").

Every year, millions of visitors from different nationalities, each carrying with them unique sets of beliefs, arrive at this site. It was and is the cultural hub for the City of Chicago (Bold New Plans, 2009; City of Chicago, 2009).



Evolution of Religion

Just as the human has undergone miraculous physical changes over the millennia, so has the nature of human social interaction and behavior. Perhaps the deepest rooted interaction is that of religion. It has been the bonding element of human beings since the most primal phase of existence. Nicholas Wade (2009) states,

"It was those who learned to bond to each other through ritual song and dance who developed the most cohesive communities. It was those who believed that the gods or their dead ancestors were seeing into their hearts who hewed closest to their society's rules. It was those who built the most moral societies with the strongest social fabric and the resilience to outlast others."

It was these universal ideas by which people defined themselves. Enduring through time we can see these basic ideals underlying the definitions that have been given by the variety of the world's faiths (Wade, 2009).

Indeed religion has seen great changes. Changes in societal fabrics turned religions to more refined definitions. Names were given and divisions were created even within a single religion. Humans began to gravitate to the set of beliefs that represented them best or were instilled in them through authority figures. Ideals passed from culture to culture as people began to discover the farthest reaches of the world (Wade, 2009).

Now in present time there has been a decrease in definition of formal religion. The people of the world are returning to the most basic ideals of religion and are not declaring a specific division (Wade, 2009).

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Inspired by the flaws and conflict brought by established religion, people have begun to seek a harmonious relationship among religious believers. The Parliament of the World's Religions emerged in 1893 in response to the desire for cohesiveness. Since the World's Fair of 1893 in Chicago, the religious community has seen great bounds towards a harmonious relationship. (Wade, 2009; Parliament, 2004).

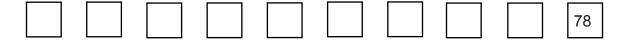
Parliament of the World's Religions

In 1893 Chicago was home to the World's Fair. It was at this cultural gathering that the groundwork for the interreligious movement would be set in place (Parliament, 2004).

The World's Parliament of Religions of 1893 was titled "The East/West Encounter." On the morning of September 11, 1893, representatives from the religions of the world gathered together on the shores of Lake Michigan. The gathering was intended to be an exposition show alongside the other momentous feats of human kind, but what stemmed from it was much greater. Seager (1995) states,

"it display(ed) the universal and transcendent truth to be found in religion, or perhaps in only one religion, one religious tradition...."

The Parliament took the first steps in addressing that we exist as a whole in the world, not self functioning individual pieces. A benchmark in social behavior and gathering, the Parliament was the first proof that believers of different religions could harmoniously gather together to recognize the underlying ideals of their beliefs (Parliament, 2004; Seager, 1995).



"Our goals can only be reached through a vehicle of a plan, in which we must fervently believe, and upon which we must vigorously act. There is not other route to success."

-Stephen A. Brennan

It is the following list by which I define the success of the production of my graduate thesis.

project goals												
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- 1. To generate a clear, unique, and thought provoking theoretical premise and unifying idea, one driven by a meaningful social issue in need of reform.
- 2. To reach a thorough understanding of the different lines of research and characters involved within the statement of intent, so that a harmonious solution may be reached.
- 3. A schedule that challenges me, and encourages thorough completion and understanding of all design elements.
- 4. Meaningful documentation in relation to the theoretical premise and unifying idea so that the information gathered and produced will be useful to future researchers.
- 5. A design solution that embraces the social and cultural needs of a changing society.
- 6. Concise and masterful graphic representation of the final design product, so that clear understanding can be reached through visual interpretation.
- 7. A clear and professional compilation of all research, documentation, and design into a final document accessible to future designers.
- 8. A demonstration and understanding that the work produced is the compilation of all the elements of my education, and defines itself as a benchmark to measure my future work.

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On the outskirts of the city of Chicago, I am overwhelmed by the calm that I feel. It is early, and dawn's light is just breaking over the lapping waters of Lake Michigan. The site begins to speak to me, and before I knew it I had spent the day taking in the spiritual nature of the manmade island I selected.

It is appropriate to tell the story of my arrival to this site, as it speaks of the nature and character of the place. It began with a walk to Northerly Island. I woke long before the city did; still in the shadows of the late night, the cool fall morning air nipping at my very being.

I crossed Michigan Avenue. Only the business men were on their way to work as the sound of the elevated trains and the Metra began to rumble through the streets. I crossed the tracks, a little uneasy with the darkness of the city, but continude eastward toward the island.

Gradually I began to slip out of the built environment, past the museums and shops that would later be filled with the hustle and bustle of tourists. I arrived at the far north end of the island, and was taken back by the view. I never imagined it to be so expansive and breath taking.

I'm greeted by the sounds of water splashing against the rocks and wave breaks and even wild birds. I thought to myself, "surely this cannot be located within the city!" Though I was quickly corrected as I turned around.; The familiar skyscraping giants of Chicago reminded me that they were ever present, watching me as I moved on.

I ventured further into the site, not knowing how long it was. I found a bike path surrounded by prairie grasses being tossed in the cold wind coming of the lake. I've never been so intrigued by a natural setting.

site analysis						
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Geese roamed about the site. They were completely and utterly comfortable with me being there. Surely this place was urban, for the wildlife had more bravery than most men. Yet again, the beauty of the natural elements fooled the senses.

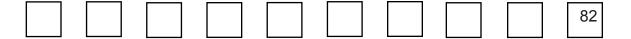
"It's rather paradoxical," I thought as I took a seat on one of the large outcropping of rock located along the shore of the lake, "that something so natural exist in a fabric that I once deemed to be purely urban." My mind knew that this island was no more than infill created by man, but it had been taken over by the native prairie grasses of the region.

I began to reflect on my theoretical ideas toward religions, practices, and the culture of a person who believes in a higher power as the sun began to bathe the site, rendering it something purely spiritual. The warm light from the east began to uncover the true beauty and potential of the site.

I finished my journey by walking as far south as the island would allow. The site had already far surpassed my expectations, but as I turned around I finally understood the site as it truly exists.

It is a bridge, between the built and the natural. A sea of prairie grasses sways, appearing to be reaching the feet of the city skyline. I understood that this was indeed the perfect spot for bringing people together because it encompasses all aspects of how people exist.

I didn't want to leave the calm that I felt, and I knew that with just a fifteen minute walk I would be back into the urban fabric; but dusk's faint light slowly fading behind the tops of man made giants bid me to return home. It is an experience I will never forget.















Views and Vistas

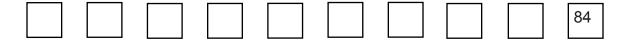
The site provides a stunning panorama of the natural and built environments juxtaposed next to one another. If one were to stand on the very center of the site they would have a vast expanse of water to the east, and a full view of the skyline to the west.



Water provides glorious views, and creates soothing light as it refracts off the surface. The constant sound of water rhythmically crashing into the wave breaks reminds you that you are surrounded.



Grasslands have taken over what was once the landing strip for Mieg's Field. Native to the land, the grasses and small prairie flowers provide unique colors for the landscape.





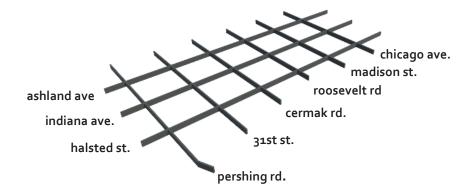


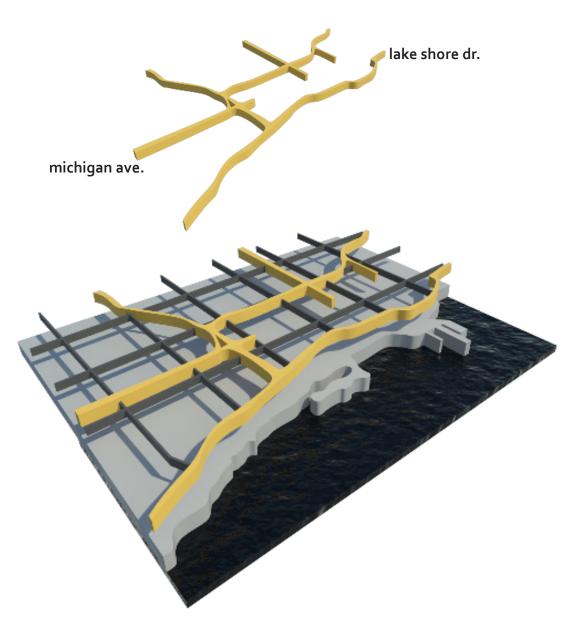
parkway

city scape - urban fabric

Existing Textures and Grid

The site exists on the outer limits of the city on the shore of Lake Michigan. The paved streets of the city begin to fade, and manmade grass lands begin to present themselves, creating a softer landscape.





Material Textures

The site, in contrast to the built environment of the city, consists primarily of natural elements.

The blue lapping water of Lake Michigan complements the green of the planted grass while the prairie land softens the manmade landform.

Earth tones dominate the color palette of the site, with the blues and reds of the city providing a backdrop to the site.



















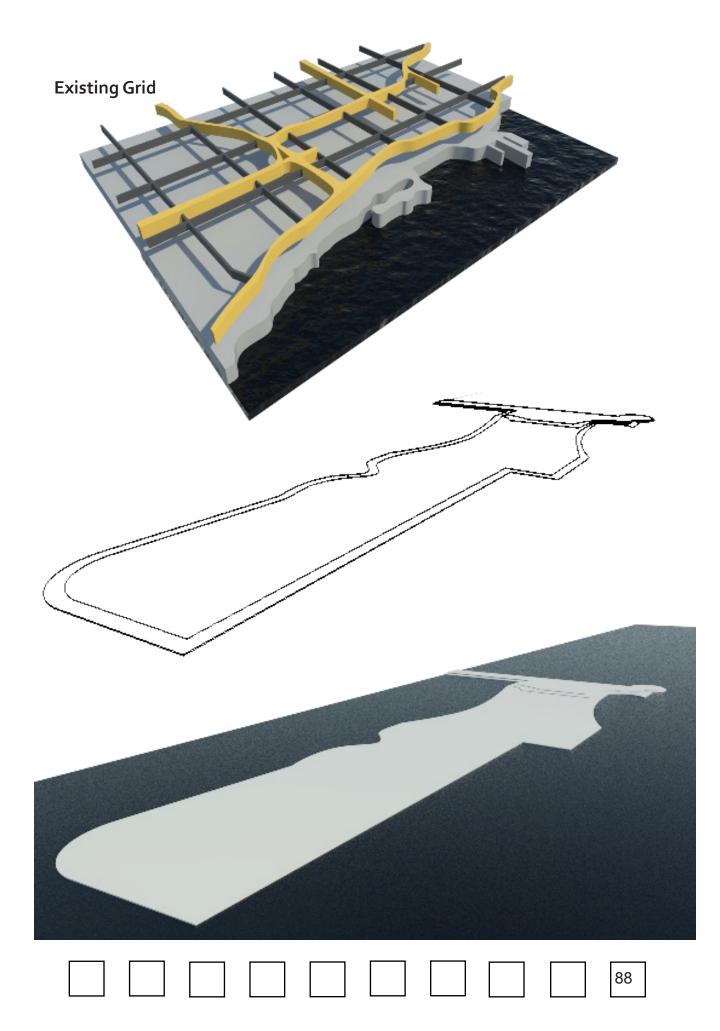


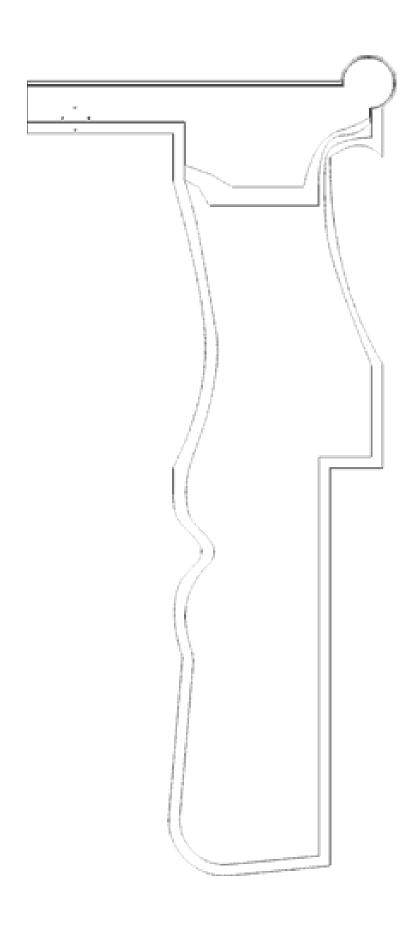


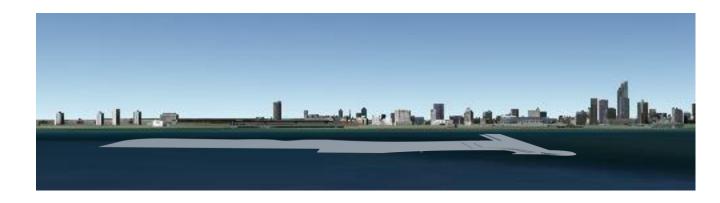


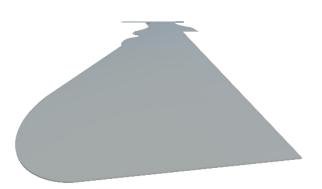










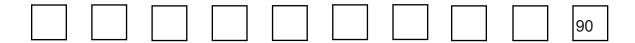


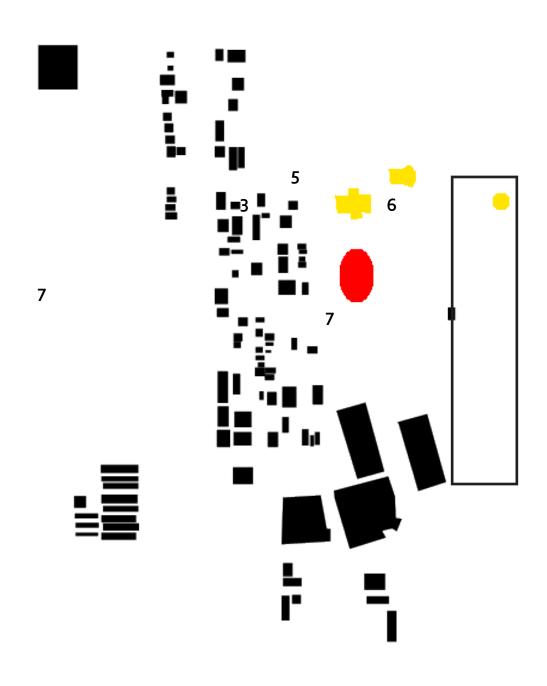
Sections and Shading

Because the site is remote from the city, it receives a constant and very even light throughout the day. It is low in profile, only differing in elevation by twenty feet from the north to the south end of the island.

Like much of the cityscape of Chicago, the site is flat. When seen from the water, it appears as though the island is simply a part of the rest of the landscape.

In the distance, the skyscrapers of the city tower over the site.





Soldier Field

Cultural



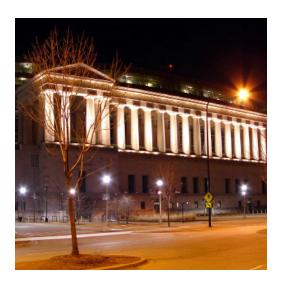
Existing Structures

- 1. McCormick Place
- 2. Soldier Filed
- 3. Field Museum
- 4. Residential and Office
- 5. Shedd Aquarium
- 6. Adler Planetarium
- 7. Old Mieg's Field Airport



The site is almost completely void of any built structure. The north end of the island has cultural centers such as museums, aquariums, and planetariums. There is also a temporary stage set up on the northern portion of the island.

Outside of the island are primarily office structures and a variety of housing types.



Light Quality and Temperature

The site is subject to constant and direct sunlight throughout the day.

At dawn, the warm tones of a sunburnt sky begin to bathe the landscape. As the day progresses the site becomes very bright and has direct solar access. In the evening the sun begins to slip behind the built structures and a warm pink light floods the site.

















Vegetation

The site is host to prairie grasslands and a few small planted trees. All of the existing vegetation was planted because the site was not natural, but rather fill.

There are also a small variety of typical freshwater aquatic plants along the lakefront.

94

Water

The site is directly on the shore of Lake Michigan. The water is consistently lapping at the edge of the site creating white noise for visitors. The water is clean with little pollution aside from litter thrown by visitors.









95



















Wind

Northerly Island is subject to very strong winds. Amplified by the lakefront, and a very low profile, wind rushes across the site. As the small planted trees mature the wind will become more controllable, but currently there is little to no protection or wind breaks.

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Human Characteristics

The site itself is a human intervention. Originally not part of Lake Michigan, Northerly Island was filled in with debris from the great fire and other construction materials.

Remnants of the old airfield still exist. Radio towers and the original airport line the western portion of the site.

After the airfield was shut down, a concert venue and bike path were created to usher new users to the site, both of which were occupied upon visitation.













Distress

The site as it currently exists is in very good repair. Aside from the unused airfield structures, the site reads as a park that is very well maintained. Wave breaks have been added to prevent erosion from the lake on the eastern side of the site.

98

Soils and Characteristics

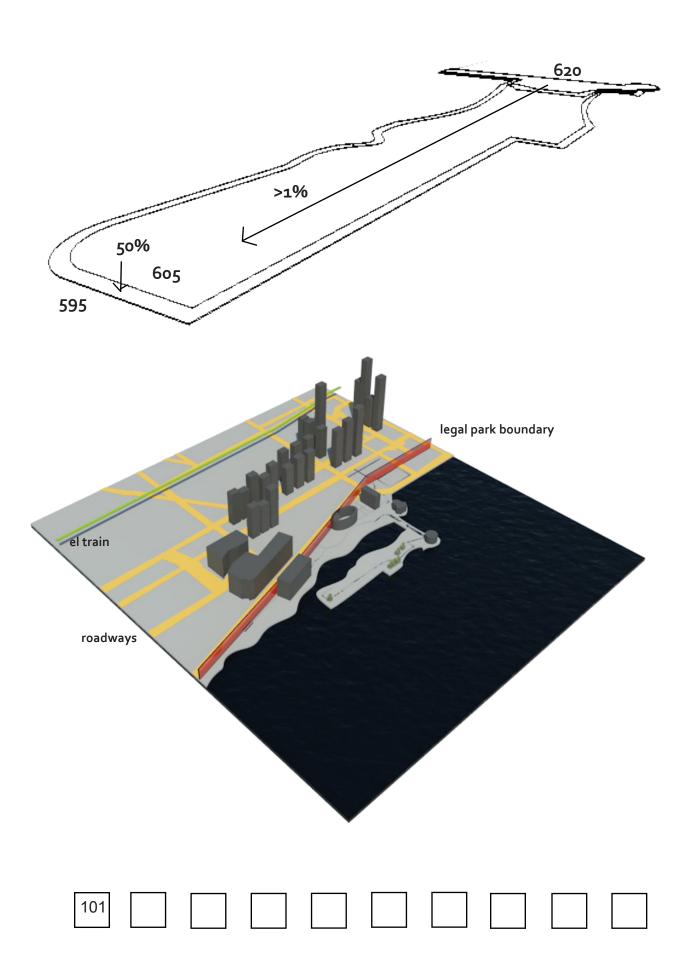
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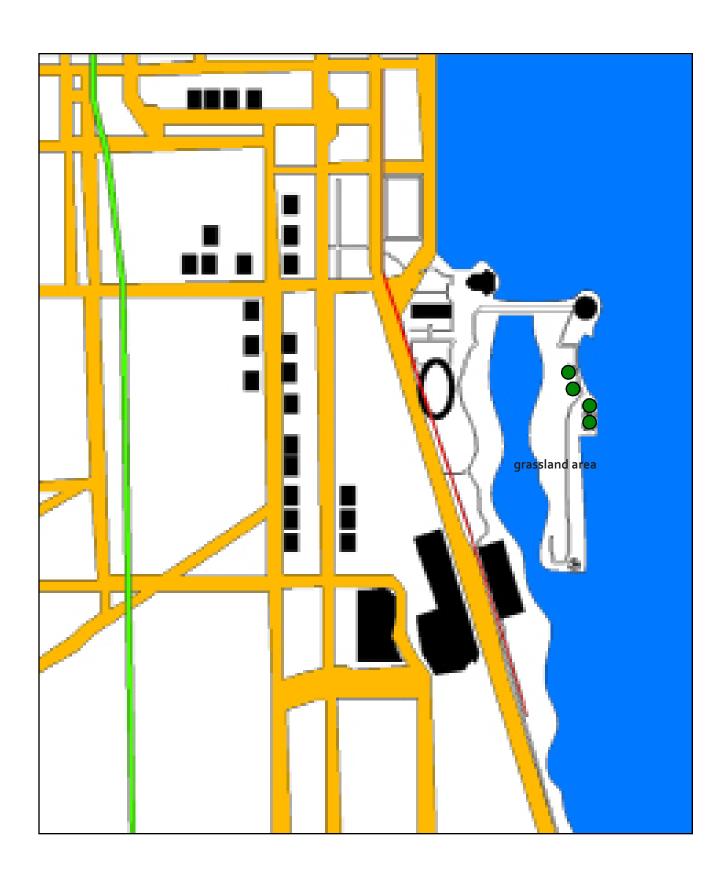
Northerly Island presents a unique case in its soil profile. Because it is man made, there are little to no natural materials within the soil profile (USDA, 2009).

The island was created using a fill method. A conglomerate of rubble from the great Chicago fire and other scrap were compiled to create the landform. These waste pieces were then covered with top soil and planted producing the grassland that exists today (USDA, 2009).

This condition produces a need for a special floating footing for the proposed structure to rest upon because drilling for bedrock would equate to displacing hundreds of feet of earth (USDA, 2009).

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Utilities

Utilities for the site are currently limited. Lines reach the Adler Planetarium, and a few electrical lines are connected to the stage, but there is no evidence of available utilities to the inner part of the island. All lines are subterrain.

Vehicular Traffic

Currently there is no vehicular traffic allowed past Solidarity Drive. Roads will need to be considered in the construction of the proposed structure.

Pedestrian Traffic

Pedestrians are allowed to enter the park within the assigned hours (daylight). A bike path runs the length of the park and is usually occupied by runners and groups of bikers. Visitors are prompted to remain off of the prairie grasses.

An extension of these walkways will need to be taken into consideration in the final design of indoor and outdoor spaces.

Topographical Issues

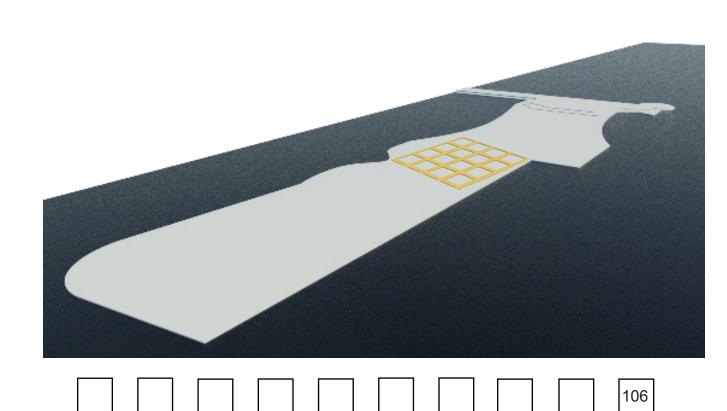
Because the site is extremely flat, special consideration to drainage will need to be addressed. Much of the site is less than 1% grade change and will need special treatment.

103]						

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North



































West

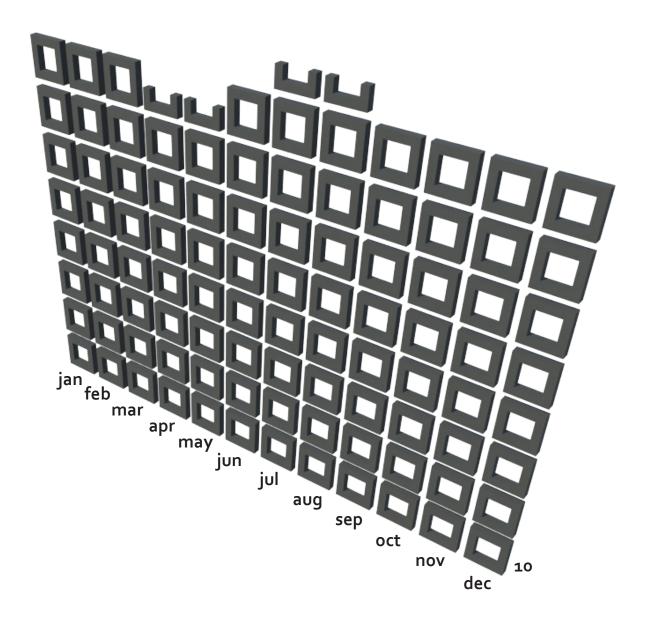


East



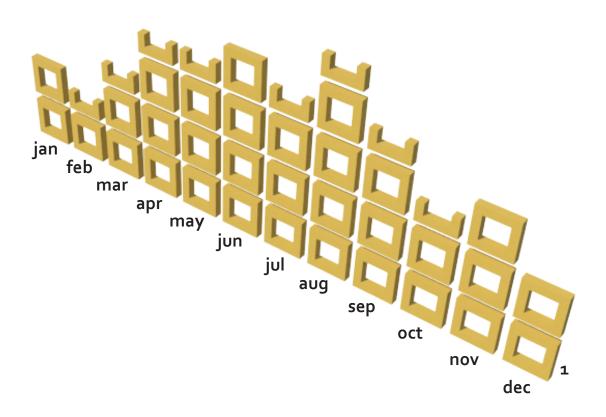
South

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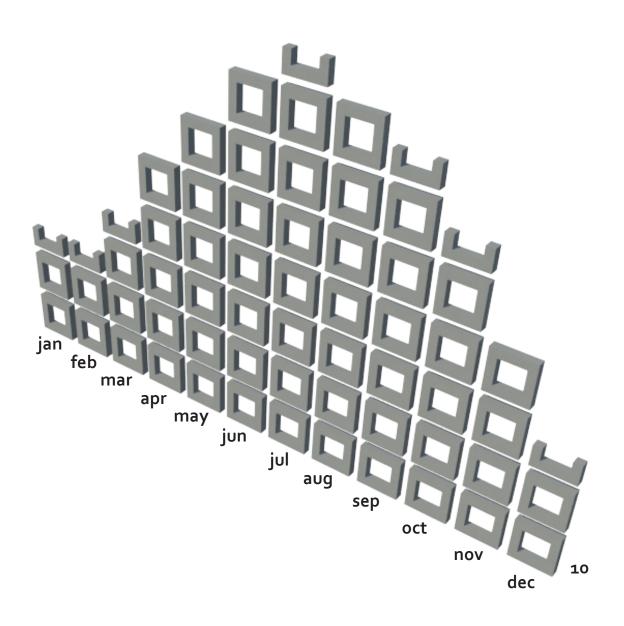


Humidity - one unit = 10 percent

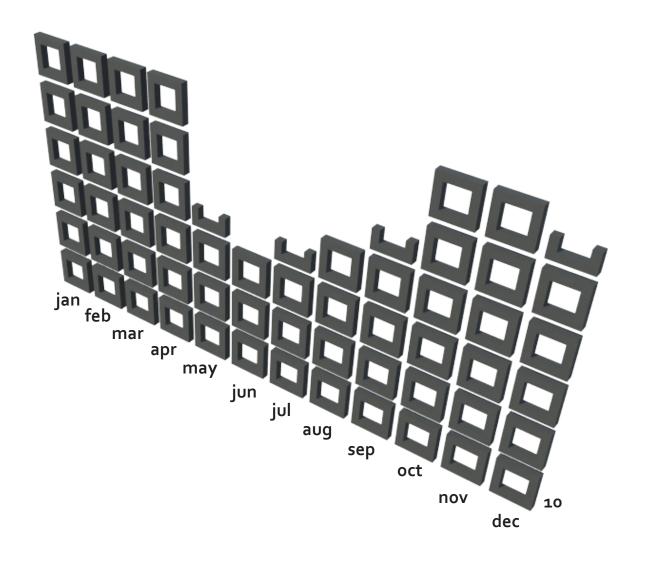
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Precipitation - one unit = 1 inch

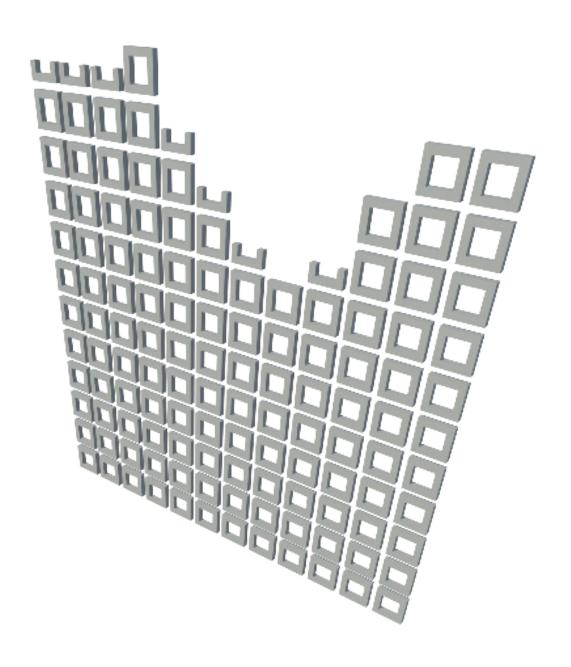


Temperature - one unit = 10 degrees farenheight

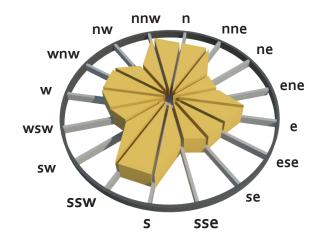


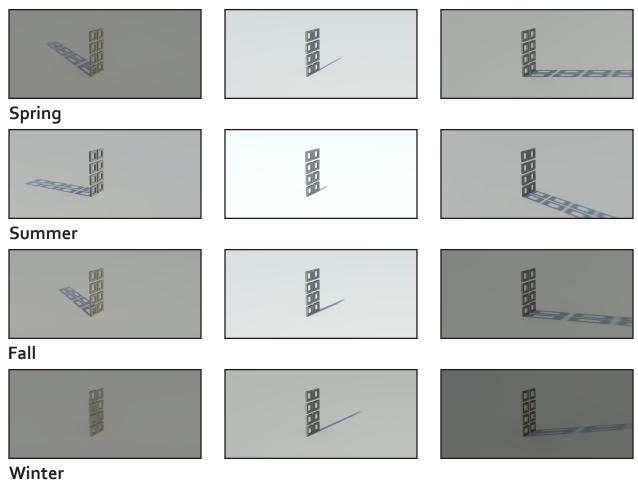
Cloudy Days - one unit = 10 percent

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Wind Speed - one unit = 1 mph





Sun Angle Study

Entry	500 sq. ft.
Lobbies and Public Space	500 sq, ft
Main Gathering Space	6000 sq. ft.
Main Gathering Storage	300 sq. ft.
Subsequent Gathering Spaces	2000 sq. ft.
Gathering Space Mechanical	350 sq. ft.
Secondary Space Mechanical	300 sq.ft.
Offices	150 sq. ft.
eight total	
Classroom	400 sq. ft.
Meeting Room	350 sq. ft
Bathrooms	200 sq. ft.
Outdoor Public Space	indefinitive
Circulation	1400 sq. ft.
Total	13220 sq. ft.

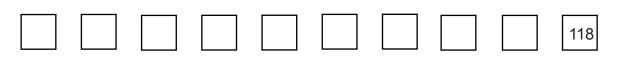
Important Spatial Issues

Because of the nature of the spaces, there is a public and private division that needs to implemented. The program will be divided into public gathering spaces, and private secondary spaces.

All spaces within the public gathering area should have adjacencies to one another with a relationship between the major gathering spaces and secondary gathering spaces.

The private portion of the program will include administrative and institutional activities. Offices, meeting rooms, and class rooms will be located in this portion of the program.

The design should take into consideration sensitivity to site and outdoor space, orientation, and proportion to create harmony between the visitors and the surroundings.

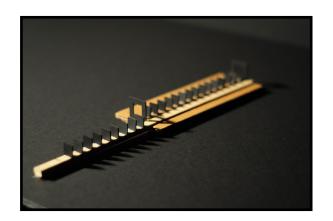


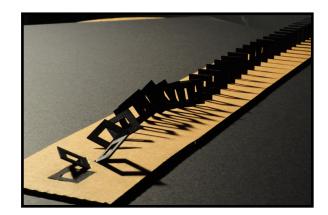


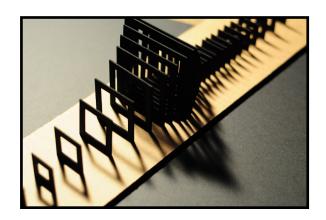
Concept

The concept for the design began as an exploration of the time continuum upon which religious believers exist and the chaos that the state of faith is currently in.

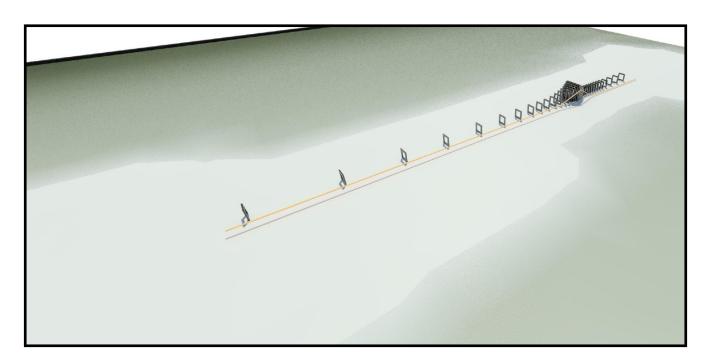
Formal religions are beginning to dissipate and organize as one larger body interacting with one another recognizing the need to mend the ruin and schism created through religious disagreements.

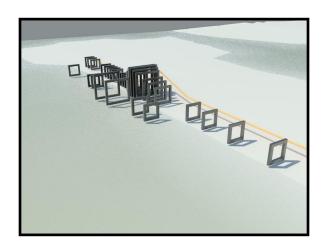






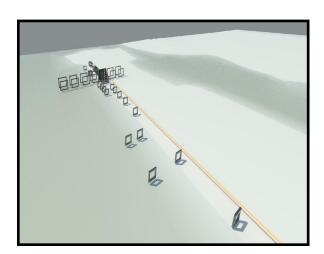
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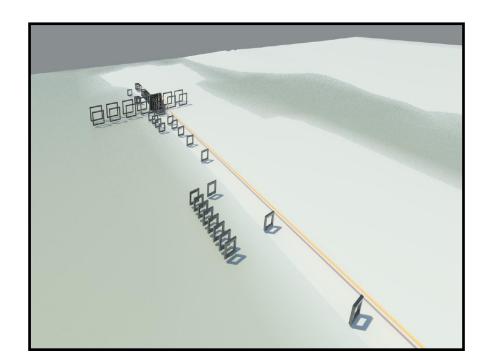


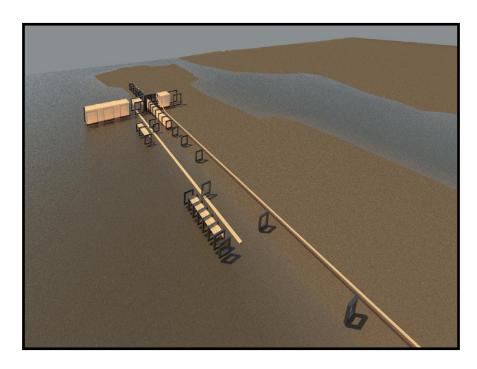
To better understand the lifecycle that a religious believer exists upon, I performed a study with the series of frames previously created that embodied the randomness of the life path taken.

This allowed me to better incorporate the site as well as strenthen the connection to both cardinal directions/orientation and water.

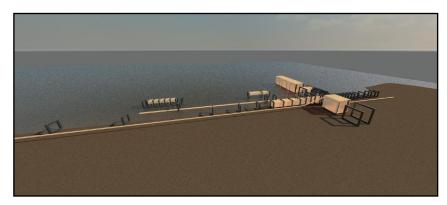


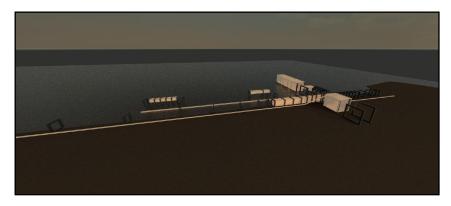




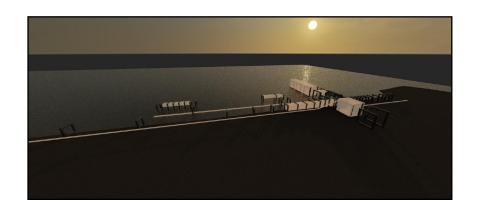


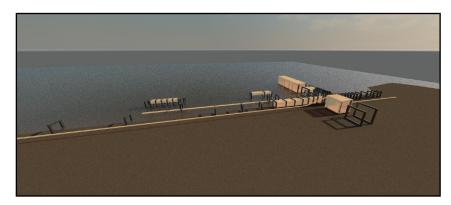


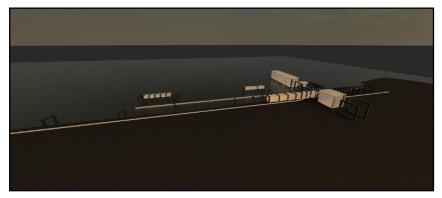




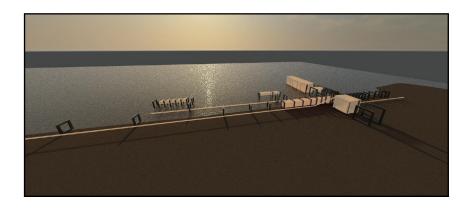
Winter

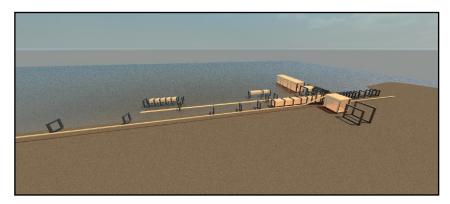


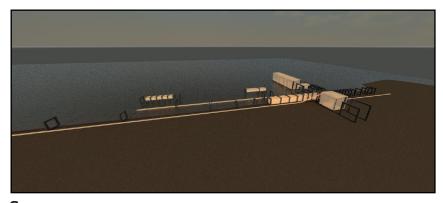




Spring







Summer







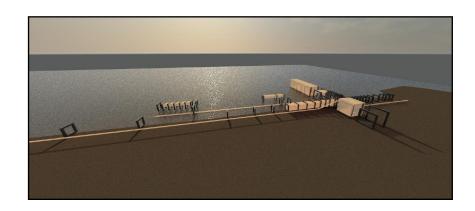


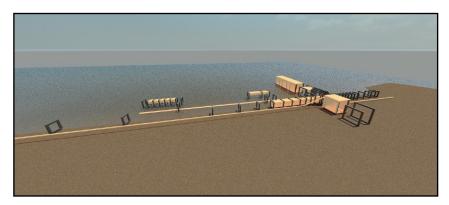


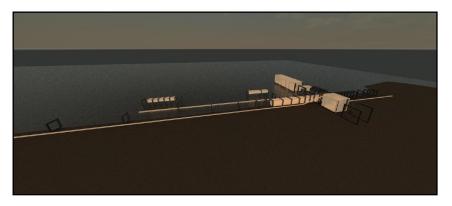




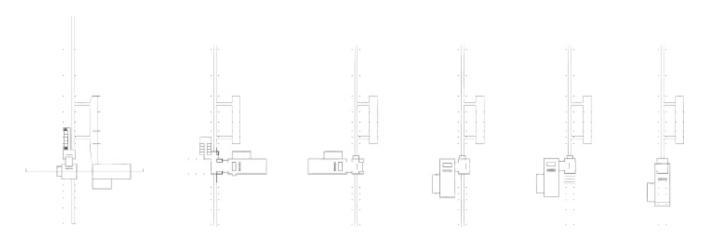


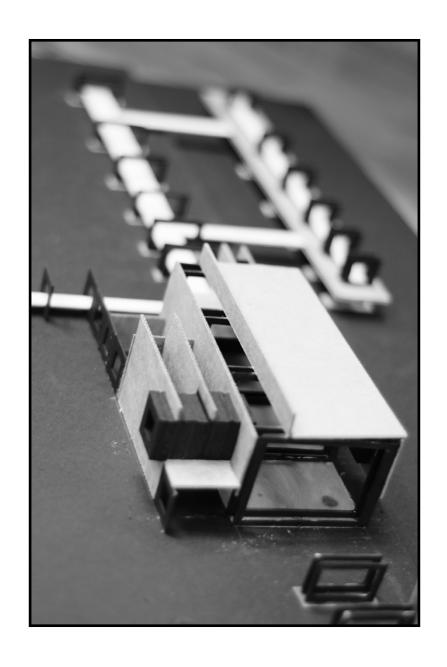


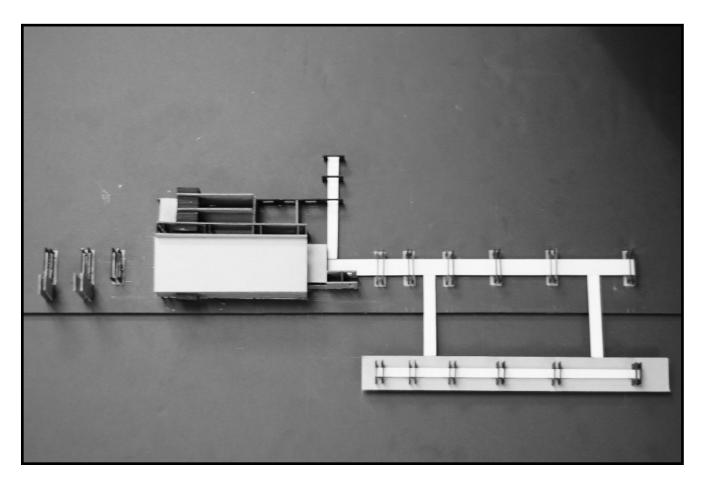




Fall







Through vigorous studies of light, proportion, and scale I created a space that embodies the basic ideals of religious belief and worship; a place of harmony where people are welcome regardless of their declared religion.

It was these studies which lead to the culmination of a gathering space for the world's religions.

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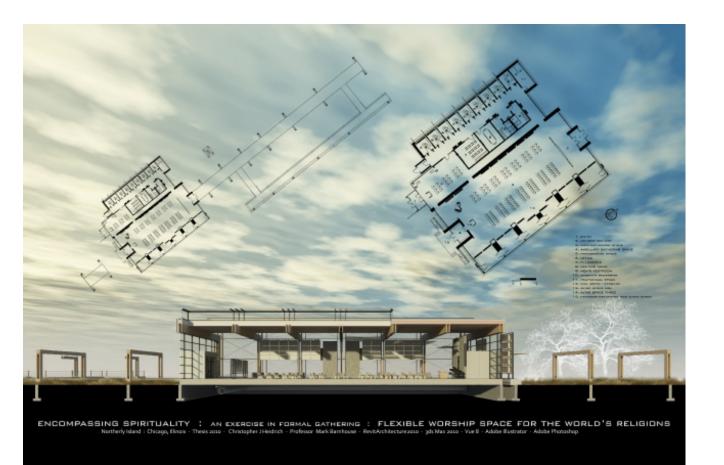


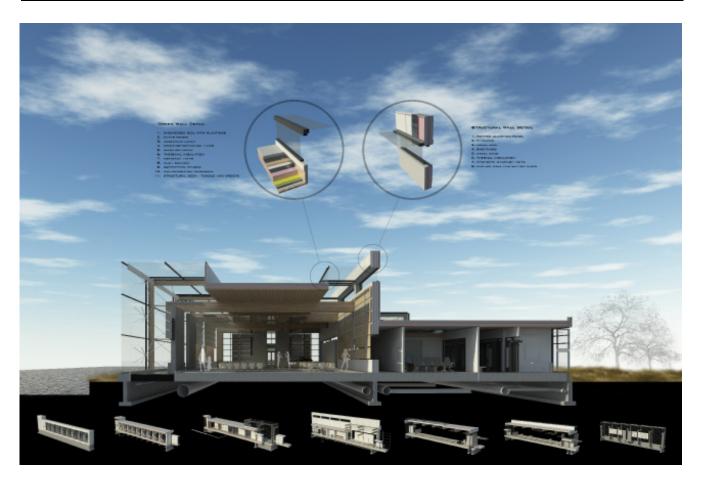


final design













"Gathering displays the universal and transcendent truth to be found in religion, or perhaps in only one religion...

...one religious tradition."

-Parliament of the World's Religions: The East and West Encounter



program appendix

		138

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In my time at NDSU I found my connection to the human condition; the great influence that I have as a designer to better the environments in which we interact as human beings.
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