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PRESENTED BY:	Courtney Douglas	
ACCEPTED BY:		
Will Wittig Assistant Professor, I	Vesters Studio Instructor	Date
Stephen J. LaGrassa Assoc. Dean, Directo School of Architectur		5/6/05 Date

APPROVAL:

Stephen Vogel

Dean, School of Architecture

6 May 05 Date



COURTNEY DOUGLAS

Masters of Architecture
University of Detroit Mercy
School of Architecture
Assistant Professor Will Wittig
AR 510 & 520 Section 02
2 May 2005

	Abstract	3
	Project Summary	4
unite in diversity	Thesis Paper	5
ullic	Precedent Analysis	
Manager of the second s	St. Ignatius Chapel	13
in diglorcitu	Kol Ami Temple	18
ii uiveisity	New York Cultural Center	23
2	Laban Center	28
	Cranbrook Institute of Science	34
	James Carpenter	36
	Archaeological Museum	40
	Sketch Problem	42
	Site Analysis	43
	Program	
	Program Statement	51
	Quantitative Summary	54
	Space Detail Sheets	56
	Technical Systems Summary	87
	Design Process	
	Springboard	88
	Schematic	91
	Development	94
	Final Presentation	95
	Conclusion	112
	Endnotes	115

Annotated Bibliography

TABLE OF CONTENTS

117

Humans are inherently spiritual beings. As humans we have found ways to express our spirituality, mainly through religion. The number and diversity of religions in the world has repeatedly sparked conflict. Many wars have been fought on religious grounds. This thesis explores the possibility of creating a community space that will bring people of diverse spiritual backgrounds together. Bringing people together will create opportunities for people to interact which will allow people to understand those things that are common to every person. Through this understanding people could begin to understand other people better and begin to understand their own spirituality better. A community space that accomplishes this will need to be designed for common spirituality. This will require asking the question, "what are the characteristics of a spiritual space?"

ABSTRACT

Urban spaces, according to Christian Norberg-Schulz, have traditionally been "the stages where people meet...that is...come together in their diversity." In the midst of that diversity, local communities often have a common religious or ethnic heritage, which can have the effect of segregating a diverse population. Many community organizations, for example, are based on a particular religious affiliation, and some neighborhoods are organized around a common faith tradition.

This project will investigate the revitalization of religious diversity at the local scale. More specifically, the project will examine the possibility of creating a *spiritual* community that will bring people of diverse faiths together, and will attempt to create an urban institution that allows and encourages people to celebrate their diversity. This will require asking the question: what role can architecture and urban design play in the development of an interfaith community?

In order to create a space for a spiritual community it will be necessary to design for common spirituality rather than specific religious traditions. Spirituality does not have the ritualistic tradition that religions do. Spiritual spaces will therefore be the main focus of the investigation, with reference to religious spaces as well.

In order to understand the spirituality of religious spaces the project will include an in-depth study of the relationship between faith and worship space. How do people of different religious backgrounds interact with and interpret space? Is it possible to create a space that celebrates common spirituality while allowing diverse religious beliefs to coexist?

In order to create a space that celebrates our common spirituality, which comes through our humanity, it is necessary to study the qualities of spiritual space. Is there a set of qualities that makes a space spiritual? Do these qualities relate to the architecture of worship spaces? How do these qualities relate to each other?

The project will attempt to create a space where community is encouraged. The common spirituality of the people who use the space will be celebrated. The project will include functions that are extensions of worship, and are found in many faith communities. These functions include education of children and adults, outreach programs, and general community activities. These activities will be included to encourage meeting and communication between the people using the spaces.

PROJECT SUMMARY

Community groups are often arranged around a common ethnicity, religion or a simple geographic proximity. This organizational method has the effect of segregating a diverse population such as the population of Detroit. This project focuses on creating a more diverse community based on the common spirituality of all people. This diverse community will allow people to share their beliefs and their spirituality. By sharing knowledge and beliefs, the people in the community will be able to come to a fuller, more complete understanding of themselves, their beliefs and others. The creation of this community will require asking multiple questions. What is the role of architecture in the search for our common spirituality? Is it possible to create a space that celebrates common spirituality while still allowing people from diverse religious backgrounds to flourish as themselves? What architectural characteristics are instrumental in creating spiritual space?

In order to determine the relationship between faith and worship space it will be necessary to examine a number of different faith traditions and the architectural traditions that stem from them. This paper will examine Jewish, Christian and Islamic faith and architecture.

Each Jewish synagogue is a reflection of the congregation that uses it. Because of this practice synagogues "have had no dominating architectural tradition to maintain." Because there is no dominant tradition in the architecture, synagogue forms are many and varied. Quite often they follow the ideas of their times and locations. While the forms of the buildings are varied, the ornament inside the buildings has had more structure. Because the "second commandment proscribes the 'making of graven images," the ornament in synagogues has traditionally been either "floral or geometric." 5

The synagogue must house all the necessary equipment for a worship service. These furnishings include Torah, Ark, Eternal Light, Tablets of the Law (above the Ark), Bimah, reading desk, sanctuary, and choir. There must also be a candelabrum to the right of the Ark and paroches. The Ark is traditionally covered by a curtain. In order to further facilitate prayer, the main prayer hall must face Jerusalem. The synagogue should be a center not only for prayer, but also for community gathering. It should be not only a "functional community center, but also a focal point of the community's aspirations."

Despite the fact that there is no accepted architectural tradition in Jewish architecture, a number of common qualities emerge. A synagogue is energetic. This energy is directly related to the Jewish faith which is very energetic in itself. There are no mysteries in the Jewish faith, so the Synagogue is always bright and light.⁷ Because the teachings of Judaism are so straightforward, straight lines and simplicity are favored in the architecture.⁸ These simple lines give many Synagogues an austerity that commands respect from the people using them. All of the words used to describe a Synagogue could easily be used to describe the Jewish faith as well. Overall, many Synagogues have a restrained, but compelling intensity, as does the Jewish faith.

Christianity sprang forth from Judaism. Jews believe that a messiah will come to cleanse the world and save the chosen people from their sins. Christians believe that the Messiah has come in the form of Jesus of Nazareth. Christianity has been practiced since 33 ad. Until the 16th century the Christian church operated as one church throughout the world. In the late 16th century the Reformation began, thereby severing the Christian community. The community was split into two main groups, the Catholics and the Protestants. Many churches fall under the heading of Protestant, all with slightly different ideas. "With the emergence of Protestantism, the unity of spirit within the Christian church, with its finite expression was severed." Despite this separation all Christian churches accept Jesus as the Messiah.

Christians hold common prayer meetings at least once a week, some denominations hold multiple meetings. The purpose of these meetings is to listen to the word of God as given in the Bible, and to consume the body of Christ as Jesus taught. There are five parts of a liturgy: Procession, Liturgy of the Word, Presentation of the Gifts, Liturgy of the Eucharist and Closing. Christians also celebrate special days in the church calendar known as Holy Days of Obligation. The days themselves vary according to faith tradition and location, but each parishioner may also attend services on these days.

Christian architecture is most commonly thought of as Gothic architecture. These cathedrals were made to soar above the congregation. The attempt was made to make the structure of the building as light as possible and therefore to let as much light into the building as possible. God's presence was thought to be in light, so the makers of Gothic cathedrals attempted to bring in as much light as possible. More specifically, these early churches were made to be dark on the bottom and much lighter on top. This effect was generally achieved through vaulting and the use of clerestory windows. The builders used these techniques to show the relationship between earth and sky.9 These cathedrals were always highly decorated. The decorations were meant to be used to tell stories of the faith. Many people misinterpret the works of art in Christian architecture to be idols, or pieces that were worshipped as gods. However, the art was mainly meant to inform a largely illiterate group of people of the story of Jesus. The art was also used, and still is today when a much larger portion of the population is literate, to assist people in lifting their "minds to God." 10 Many denominations have abandoned these techniques in favor of more contemporary styles of architecture, though some, such as some Episcopalian churches, use this style because it has ties to their heritage. The contemporary styles, while not employing the same methods as Gothic architecture still attempt to show the important points of the congregation's faith and bring God into the church.

The Christian church must not only be a center for worship, but a center for many other activities as well. There are six main parts of any church: the church proper, the narthex, the baptistry and confessionals, the chapels, side altars, shrines, and way of the cross, the sacristies and general utilitarian spaces.¹¹ In addition to these items a church often includes a fellowship hall

and classrooms for religious education. By including these 'accessory' spaces the church becomes a center for the community; it gives point and purpose to the community. Through all of these functions the church becomes a "visible expression of the event which creates (it)." ¹³

Though there are many different beliefs within the Christian community, some common architectural qualities can be found. Many Protestant faiths are organized around the individual as opposed to a prayer leader. This practice has led to centrality becoming a main point in the architecture of the church.¹⁴ While Catholic architecture does not express centrality as openly as many Protestant faiths, it is still a theme that arises on a fairly regular basis. In Christian churches, like Jewish synagogues, light plays an important architectural role. In many Christian churches light is used to create tension, it can be described as "arresting" and "engaging."¹⁵ It is used to express the mysteries of the Christian faith, which are plentiful. Christian churches often are built to express an ideal or belief of the congregation that uses them.¹⁶ This may be that God is present in light, as in the Gothic, or it may be simply expressing spiritual contemplation. There are many different ideas that churches attempt to express, each having a very significant value to the congregation trying to express it.

Islam is the third of the world's religions that claims its ancestry from Abraham. Muslims believe in one God named Allah. Allah sent Muhammad as his prophet. Muhammad is not considered divine as Jesus is in the Christian faith, in fact it would be blasphemous to consider any man divine. Jesus is considered one of the great prophets of God, Muhammad however remains the greatest prophet, the prophet who transmitted the Qur'an, which was "dictated to him by the Archangel Gabriel." Allah is believed to control the universe and to practice Islam one must peacefully submit to Allah.3

Muslims accept five pillars of faith. These are the prescribed ways that one submits to Allah. They are Shahada, a basic affirmation of faith; Salat, prayer; Zakat, almsgiving; fasting during the month of Ramadan; and Hajj, pilgrimage to the Ka'aba in Mecca. Muslims also practice Salah, common prayer. There are many requirements for common prayer. It must be performed in parallel rows so that everyone is an equal distance from Mecca, anyone who participates in Salah must be called at an appointed time, and bodily purification is required before prayer.

Islamic architecture has traditionally stayed much in the same category as the middle eastern architecture of its beginnings. There are very specific requirements for an Islamic mosque. First and foremost a wall of the mosque must face the Ka'aba in Mecca. Every Muslim must face Mecca while praying, so it is imperative to a mosque design that there be a wall, called the qibla, facing Mecca. As a result of medieval street patterns Muslim architecture has traditionally been very inward-looking. Inward-looking design was used as a protective device for the people in the mosque. Undoubtedly, this inward-looking tradition was "borrowed" from another

religion or architectural style. Because Islam made many conquests and took over many different communities, the architecture has many borrowed traditions. Muslims took the best of the architecture in a region that they conquered and integrated it into their own style. The result was the Islamic architecture that is know today. Though the Islamic architectural style was a result of much foraging and piecing together, today it is a very strong architectural statement. Muslim communities often prefer to keep their architectural traditions in tact rather than attempt newer more contemporary buildings. Because of this borrowing and mixing tradition, a "mosque is... by definition, a building type which transcends regional boundaries." Through transcending regional style, and using one architectural style at all times Islamic architecture remains "profoundly religious in its intent."

A mosque must contain all the furnishings necessary to hold a common prayer meeting, called Salah. These include a minbar, a platform reached by stair, where the true prophet, Muhammad is said to stand, and a dikka, a wooden platform reached by steps where the respondents repeat the ritual postures and speak the responses so the congregation can hear them. There is also a pool for ritual washing, a portal that separates interior from exterior, and a minaret, sometimes used for ritual calling to prayer.²¹ In addition to the prayer function a mosque usually also includes subsidiary functions such as educational facilities, retreat spaces, dhikr, and notary public services. The mosque becomes the main social building for the surrounding Muslim community. The architecture of the mosque is seen as a support space for worship. It is the "resulting growth of the legitimate action of each individual to encounter God."²²

Since Islamic architecture generally has one style, many common qualities emerge. The first is a connection to nature, even while having an innerlooking building. The purpose of a mosque is not to cut off a person from the exterior world, but rather to provide a space for that person to pray. If that space has a roof, that roof should not cut the person off from the natural world.²³ The person should however, be cut off from the built world. This is one of the reasons for inner-looking buildings. Islamic tradition has answered the need for a connection to nature with domes. The many cupolas on the tops of mosques are the way that builders have tried to connect the mosque's interior with the sky above, while still building a roof for protection. By using domes to connect to the sky a mosque may be thought of as a "clean and quiet place for the prayers under the sky."24 The decoration of a mosque is also very distinctive. There are strict rules governing the decorations in mosques, so much Islamic art has a distinctive flavor. The art in a mosque is not a static expression, but rather a means of "dissolving matter, to deny substantial masses and substitute for them a less palpable reality, whose forms change even as they are examined."25 The decorations could do this on their own, but often light plays an important role in highlighting decorative features in a mosque. Light plays an important role in a mosque, it is used to define spaces, it is used to connect the worshipper with the sky, but above all it is used to highlight certain important elements of the mosque. Light may

be used to highlight the qibla wall, which everyone must face to pray, or it may be used to highlight a decorative element, to show that the element is meant to dissolve matter. Since Islamic life and prayer are significantly intertwined with each other it is important in a mosque to have smooth transitions between spaces. It may be that in one area light is being used to illuminate the prayer space and in another area light is being used to highlight a specific decoration. These two areas cannot stand on their own in Islamic tradition, there must be a smooth transition between the two. The mosque embodies many beliefs of the Islamic faith, through connection, light, and carefully controlling transition spaces.

Many faiths share a common history. For example, Judaism, Christianity and Islam all trace their roots back to one man, Abraham. Christianity is an extension of the Jewish faith. Jewish faith says that a messiah will come to save the world from sin. Christians recognize that Messiah in Jesus. There are many traditions that are common to multiple faiths also. For example, pilgrimage is an integral part of Christianity, Hinduism, Islam, Buddhism, and Taoism.²⁶ While some of these faiths have historical connections to each other, most of them come from completely different backgrounds. Something about the idea of pilgrimage must have drawn these very diverse traditions to it; what is that something? There are connections between African cosmic religiousness and Christianity through the idea of triangular prayer and the Christian Trinity.²⁷ These religious ideas again have nothing to do with each other historically, but similar ideas have surfaced in both.

One idea that surfaces repeatedly in western religions is a Tabernacle. This idea started with the Jewish tradition and has carried on through parts of Christianity and Islam.²⁶ The Tabernacle is the place on earth where God is supposed to be. In the Jewish faith this place was the Holy of Holies in the Temple in Jerusalem. In modern Judaism God is considered to be present in the Torah scroll. Many traditions used in the Jewish worship service stem from this belief. In Christianity, especially Roman Catholicism, God is believed to be present in the consecrated communion wafer. The consecrated wafer is kept in a small box, which is marked by a light that always burns. Similarly in the Jewish faith the Torah scroll is kept in the Ark of the Covenant, which is lit by the eternal light. This one example shows how important it is for one faith to understand the beliefs and practices of other faiths.

Religion is one way that people attempt to explain the reality of the world. While no one person or group of people could ever understand completely the reality of the world, each group or person may understand a small part of reality.²⁹ By understanding that each faith is not only an approximation of reality, people can move towards understanding the world in a much clearer way. By sharing beliefs and knowledge each person could come to understand not only the world but themselves better. A person could eventually come to understand where religion comes from, and why people are so drawn to it.

America is a nation made up of people from all different backgrounds. People may come here from any part of the world, and when they come they may hold any kind of belief structure. The ideal behind American society is to take all the people that come to America and meld them. The idea is not to create one monolithic culture, where everyone is the same. The idea is to create a culture that celebrates the differences between people while unifying them. America is considered a melting pot. If Americans use that idea to create a unified culture with distinct backgrounds people can learn from each other to make themselves better. If people can meld their backgrounds to create something better, surely they can also share a diversity of religious backgrounds.

Within the architecture of various religious buildings there are already common elements. Within the Jewish, Christian and Islamic architectural traditions it becomes very important that each worship space reflect the community that it serves. Each building attempts to make a statement about the beliefs and knowledge of the people who will be using it. In each case "the architect must know the congregation's 'raison d'etre' which each congregation must discover for itself."31 Each building is also much more than a worship space. Religious architecture typically includes some type of education area and usually many other 'accessory' spaces. The specific 'accessory' spaces are not important, what is important is that each different tradition recognizes that something other than worship is necessary to have a complete spiritual life. Each tradition also recognizes something spiritual in the use of light. Light is used in Judaism, Christianity and Islam to better the architectural quality of the worship space. Each tradition has recognized a slightly different use of light, but all are reasonably similar and each tradition recognizes a spiritual quality in the use of light.

Architecture can be thought of in many ways as a spiritual practice. Since architecture is a result of people's experiences and thoughts, in many ways it cannot escape being a spiritual practice. Every building has the potential to evoke some kind of response. The response may not be a positive one, but there will be a response. The entrance sequence becomes very important because of this. First impressions are key and the entrance sequence in a building is an important part of the first impression. Many architectural styles have attempted to reach the sky. Gothic cathedrals and skyscrapers for example, attempt to bridge the gap between earth and sky. This is part of humankind's attempt to reach higher beings and to discover the ultimate reality of the world. People, consciously or unconsciously, use architecture to express their spirituality. Architecture becomes a "way of being in the world through its standing, rising and opening."32 When constructed carefully, architecture creates a sense of mystery through the use of light and shadow, solid and void, texture and color. Architecture becomes a moving experience that people involuntarily react to. 33 People are influenced by their environment, which architecture is instrumental in providing. Architecture is created by people, who are effected by their environment. This cyclical pattern is one of the things that allows architecture to hold its mystery.34 Even while people do

not always overtly understand architecture, buildings are always able to express their intentions to people. If people are open to 'listen' they can 'hear' the "sayings of works of architecture." This saying usually stems from the environment created by the work of architecture and surrounding works. This environment is a built expression of the "spiritual values and beliefs which are intimately related to the acknowledged cosmic order of the world." For centuries people have been attempting to express their spiritual beliefs through architecture.

Religion is the organized and corporate expression of spirituality. It is not necessary to be religious to be spiritual. All people are spiritual beings. Many people do not practice any religion or consider themselves to be religious in any way. Spirituality in a religious context naturally lends itself to unity. By recognizing that all people are spiritual beings and treating all people with the respect that spiritual beings deserve people can begin to form a more complete understanding of the world. Many religious organizations are attempting to "discover the unity which is higher and deeper than the differences" among us.³⁷ By recognizing spirituality in religion it is possible to understand multiple philosophies and remain aware of the differences involved. A person can then use the philosophies to come to a more universal point of view than the one they had before they considered multiple ideas.³⁸ Through this, people can come together and form communities.

Urban spaces are the stages where people meet, that is, come together in their diversity. They are a place of discovery.³⁹ By providing a place that allows people to come together people are allowed to discover things about themselves and others. The places become environments where people can express themselves freely. People are not forced to enter these spaces, they are simply able to enter. Urban spaces should not be overly imposing. People who are not familiar with the space should not feel that they are not able to use it. People should be able to recognize that the place is part of the whole experience of the world, not a world in itself.⁴⁰ Locating a building in an urban environment will allow the building to do three things: allow collective life to take place, express a common mode of being between earth and sky, and allow a more comprehensive world understanding through an organizing element, the diverse urban environment.⁴¹

In order to expect that a community will flourish a building must be designed with community in mind. The building must be connected to the community in several ways. A connection must occur between the ideas of the community and the ideas of the building. This is most directly expressed when a building attempts to embody the beliefs of a certain community. If the community has limited beliefs in common it may be slightly more difficult to find the commonalities, but they are there. A building may also physically connect to the community. This can be done through material choices or architectural form. A building may pull people in to its center, or it may lead people to the place they want to be.

Leading people through the building is done using inclusive spaces. Spaces that are cut off from others do not feel like they should be entered. Inclusive spaces are generally flowing spaces that a person feels they could enter at any time. Inclusive spaces can do a lot to help people feel that they are accepted members of the community. Inclusive spaces, such as courtyards help make a community rather than "merely an aggregate of individuals." The spaces must be accessible to all so that people feel that they are part of the community.

An outreach program can be a great asset in this instance. By providing services such as a soup kitchen and a resale shop people who may not feel comfortable using the building are encouraged to come to the building for a very specific purpose. Once the people have used the outreach programs in the building they may feel more comfortable using the other areas of the building as well.

Many characteristics could be said to be necessary in designing a spiritual space. In a spiritual building there is a complexity in the overall form which contrasts with the simplicity within individual spaces. This contrast creates a tension that is often expressed by using light or differing materials. The light within a spiritual space is used to define differences in spaces or purposes of items in the space. A sense of mystery is expressed through the architecture of the building. For example, a room may have a particular quality of light, but this may be achieved in such a way that the source of light is not apparent. This would be a mystery as expressed through the architecture of the building. Often the mysteries that are expressed become objects for reflection. These reflection objects often include intangible architectural elements such as water or light. Life is celebrated in a spiritual space, this is sometimes done through a connection to the natural world. The natural world expresses life, which is then celebrated in the connection. There is an implied focus of attention. This does not need to be an actual architectural element, it may be the absence of an element. Spiritual spaces also require smooth transition spaces. Since there are many different types of spiritual spaces it becomes necessary, if one wants to connect them, to make the transition as smooth as possible.

Many faith traditions have architectural traditions based on the practice of their faith. These traditions are as many and varied as the faith traditions themselves. There are, however, large numbers of similarities between various faith traditions. There are some traditions such as pilgrimages that are shared between large numbers of groups. Through recognizing these similarities people can come to understand themselves better. They can reach out for greater understanding on many levels. Though this project celebrates diversity, it will rely on similarities as a catalyst for meeting. Similarities already in place an be a powerful tool in helping understand spirituality. These tools can also be used to come to an understanding about the ways common spirituality relates to architecture.

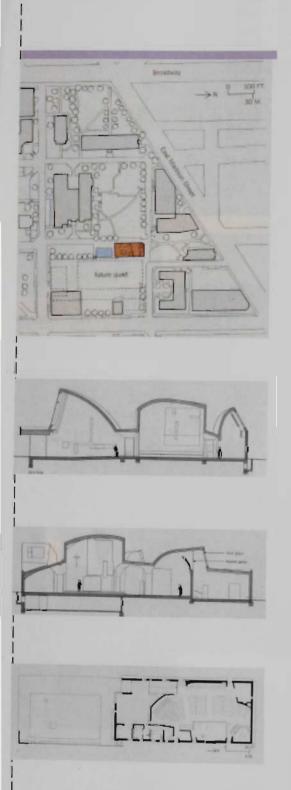
St. Ignatius Chapel Seattle University Steven Holl 1997

The St. Ignatius Chapel by Steven Holl was conceived of as seven "bottles of light." The building was thought of not only as a Christian worship space, but as a community space for all people. This is a good example of how a space can be spiritual instead of religious. Holl used the elements of a Catholic mass to create a space that is spiritual in nature. "Each 'bottle of light' symbolizes a particular element of the Catholic liturgy." By doing this Holl uses symbolism in a very understated way. Anyone visiting the chapel would not even notice the symbolism, they would only notice the effect it has on the space. The idea for using light in the chapel came from an Ignatian belief about light and its importance in spirituality. Holl took the idea beyond a simple reading that light is important in a space. The light defines the spaces of the St. Ignatius Chapel. As one moves from space to space, one is literally maying from light to light.

The building is literally bathed in multicolored lights, each with its own purpose. The "light-admitted, shaped and coloured by a myriad of means com ments the formal intricacies of the space."2 The light in the main chapel is admitted, for the most part, through a series of light scoops on the roof. Each scoop has a different exposure and each has a different colored lens. The light is brought in through the lens, it then is reflected off a painted baffle suspended beneath each scoop. The result is a newly colored light that defines a space for each separate part of the Jesuit, Catholic liturgy. The ocession is represented by natural sunlight, as is the narthex. The nave has a yellow field with a blue lens to the east and a blue field with a yellow lens to the west. The Blessed Sacrament is bathed in light from a purple lens reflecting off an orange field. The Choir has light neutralized by a green field and a red lens. The reconciliation chapel has a purple field with an orange lers. The bell tower and reflection pond have a projecting and reflecting might light that acts as a beacon to call people to night time services.³ Because the light in the space is created by natural sunlight, the quality of the light is not constant. The "...effects are not fixed but transitory, fluctuating in intensity with changing conditions of weather and shifting across the rough white walls and the polished concrete floor as the sun moves through its daily and seasonal cycles."4

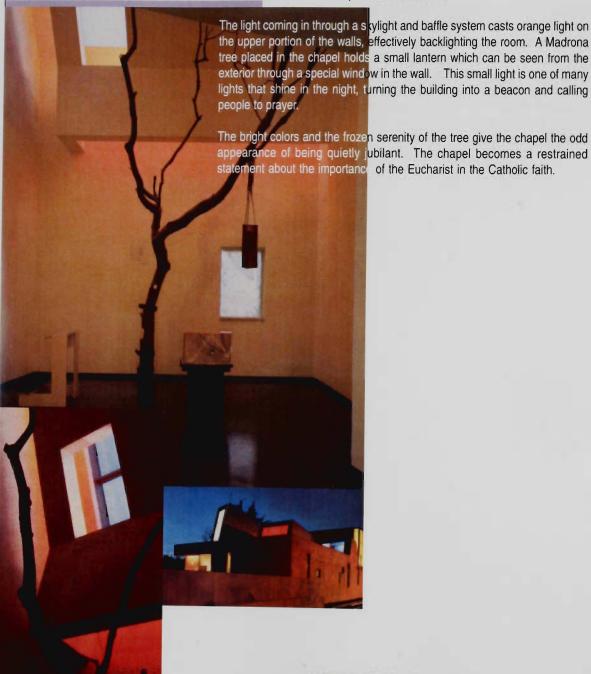
As a spiritual space, I think this chapel is a success. One man is quoted as saying, "I am not a believer, but this is my third visit to the chapel in two days." The chapel exists as a spiritual and a religious space. The quality of the spaces created by light is what makes this building such a spiritual place. For some the spirituality will remain a mystery. Some people will even want it to remain a mystery, seeing that as an important part of any religious belief. Others may visit the space only to see "...the human potential to create beauty with imperfection" which is "surely an inspiration to all who enter." For every-

one who visits however, the chapel will remain "moving and intimate," a unity of differences gathered into one." 8



Blessed Sacrament Chapel

The Blessed Sacrament Chapel within St. Ignatius Chapel is bathed in deep orange light. The chapel was commissioned to a Seattle area installation artist for finishing. She covered the walls in gold leaf prayer texts. Beeswax was then dripped over the texts giving the chapel walls a warm, golden hue, and the smell of beeswax permeates the room.



Surrounding Context

The chapel is located on the campus of Seattle University in Seattle, Washington. The administration of the school was adamant about having a free standing chapel. The school had not had a free standing chapel before, and donations made it possible to build the chapel the school had always

The chapel will form the center of a new quad unit being built on the campus. community center even more than it does presently.

The reflection pond in front of the building lends itself particularly well to this tuation. A natural courtyard is formed around the pond, which retains its despite and surrounded by roads on all sides at present. The located right in the heart of the campus, making it a good stopping e campus. The reflection pond is also a great ause it provides a quiet place to sit and rest. From the beginning apel was considered to be a community space as well as a chapel. The building of the new quad unit will allow the chapel to function as a

Light

Light is an important concept in the Jesuit, Catholic worship services. The St. Ignatius Chapel was conceived as seven "bottles of light" to correspond to the portions of the Catholic mass. The light is used to differentiate parts of the building. Each space is defined by a different quality of light.



CEDE

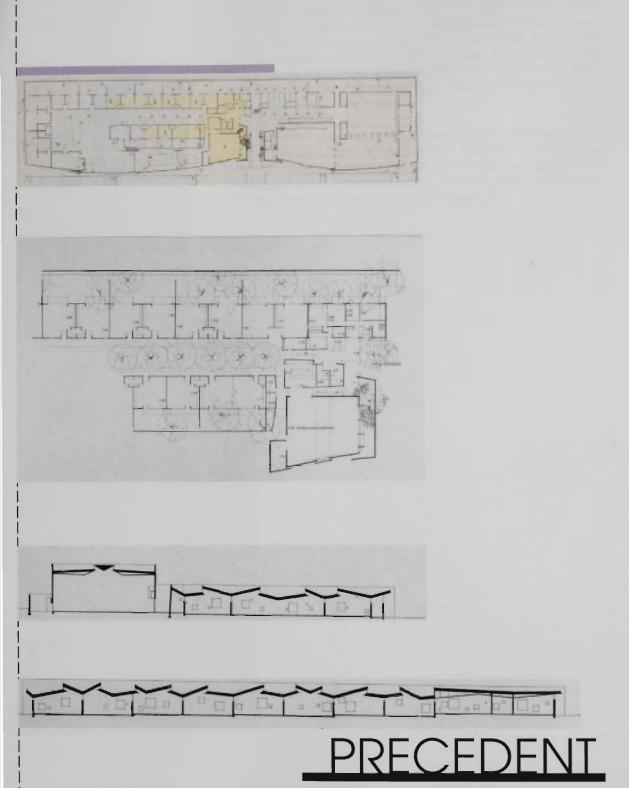
Kol Ami Temple Scotsdale, AZ Will Bruder 1993-1994

When designing the Kol Ami Temple in Scotsdale, local architect Will Bruder drew heavily on local building tradition. He attempts to create a space that gives the congregation a sense of community.¹ Toward this end, the complex contains a number of different functions, such as an education wing, and a garden. The building has the feel of a structure that has stood in its place for many years, as has the Jewish religion.

Because the building was built in phases the sanctuary is not complete. The space being used for a sanctuary was actually designed to be a community meeting room. The space, while housing the Ark of the Covenant and other religious symbols is readily thought of as a sanctuary. It is easy, however, to see that a community meeting could take place there, without any sort of religious affiliation. The current sanctuary is a spiritual space in itself, without becoming a sacred space.

The entire complex, using the same restraint that is displayed in the sanctuary becomes a true spiritual space. The sanctuary room has the feel of a town meeting hall. While it is hard to separate the sacred from the secular with religious symbols present, Kol Ami suggests that it is in fact possible to





Material

Given the location of the Kol Ami Temple, it was very important that conscious choices were made about materials. Bruder used large concrete blocks to form much of the exterior facade. The blocks were purposefully laid imperfectly. The imperfections in the wall surface "give the wall a texture that changes continually with the light, creating shadows on the facade that vary throughout the day." The variety in the facade is kept in check by the uniformity of the materials. The concrete block gives the facade a solidity that inspires confidence in the building.

The unevenness of the facade texture recalls the wailing wall in Jerusalem, an extremely spiritual place in Jewish tradition. Bruder works to create these moments without overwhelming the building occupant. Due to the careful material selections by Bruder and his team, the building "has a restrained but strangely compelling material and spiritual intensity."³



<u>PRECEDENT</u>

Suppport Spaces

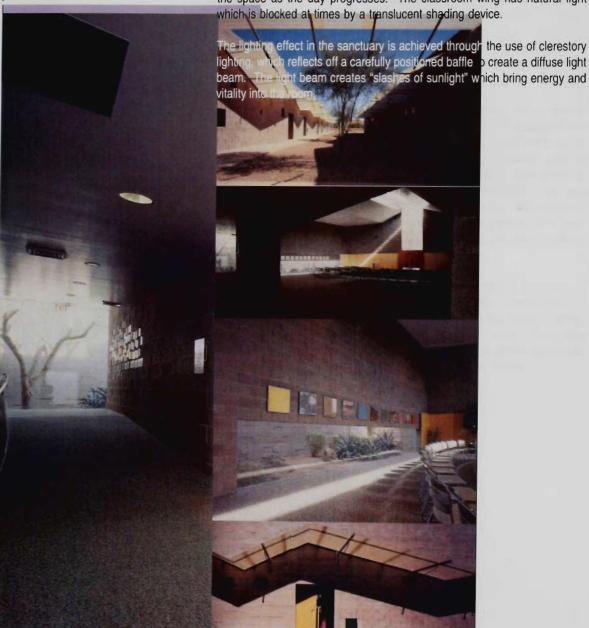
Kol Ami Temple was conceived as a community center as well as a synagogue. For this reason Bruder included many distinct functions in the building. "The program comprises the Kol Ami temple, an educational center with 24 classrooms, library, multipurpose rooms, administrative offices and a garden." These support spaces, which are important in any religious community.

a more complete understanding of the Jewish faith. These are where people can learn about their faith, about each other and about

world ground them.

The support spaces for the temple were designed as carefully as the temple itself. This enhances the feeling of being in a spiritual space.

Light is a very important element in the design of the Kol Ami Temple. Different qualities of light are used to distinguish between different spaces in the building. Each separate space has a distinct type of lighting that occupies it. The sanctuary, for example, has a single beam of light that moves through the space as the day progresses. The classroom wing has natural light which is blocked at times by a translucent shading device.



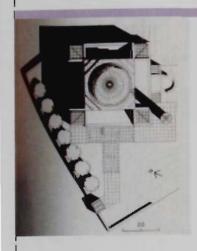
Islamic Cultural Center New York Skidmore, Owings & Merrill 1991

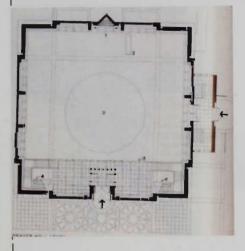
While designing the Islamic Cultural Center of New York the architects attempted to fuse the traditional architecture and practices of Islam with contemporary design practices. The result is quite breathtaking. There is a wonderful layering of elements in the main prayer hall, and the space could not be mistaken for anything but a contemporary building. The mosque, as per tradition, has "smooth transitions between prayer and daily life which characterize Islamic customs."

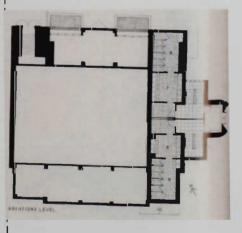
The exterior of a building in traditional Islamic architecture is not considered to be as important aesthetically as the interior. The mosque turns inward so that passersby do not interrupt the prayers inside the mosque. This practice, of inward turning exterior facades, was a tradition used by SOM in their design. The exterior facade of the building, while obviously given consideration by the architects, looks a bit like a fortress. This does not have an accessible feel to it, in fact it is quite imposing. The building is quite tall, and the facade does not vary until well above eye level. This gives the building a massive feel, that could be intimidating to a person walking by.

The interior space, quite unlike the exterior has a very spiritual quality about it. This is accomplished through the use of lighting and ecclesiastical art. These two elements combined give the spaces a delightful feeling of purity, which echoes the Islamic tradition of cleansing before prayer. This space contrasts greatly with the exterior which seems to focus almost exclusively on religious tradition rather that spiritual quality like the interior.



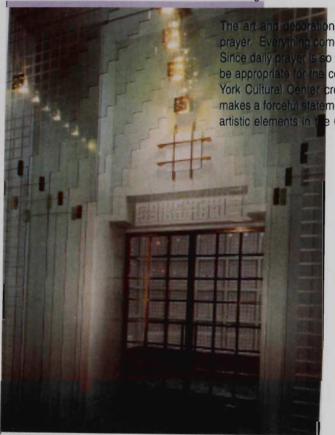






Art/Decoration

Within the Cultural Center each piece of furniture is deliberately designed to be a spiritual piece. The art is extremely important in this building. The making of beautiful objects is combined with the attempt to create a spiritual statement. The effect is quite breathtaking, as seen in many examples in the building.

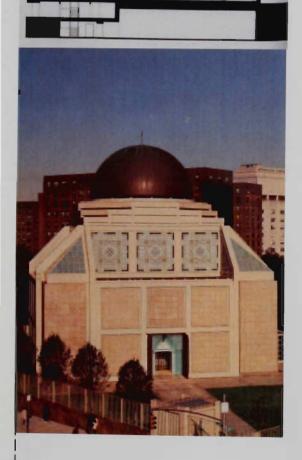


The art and decoration in the building is used as a means of assisting in prayer. Everything comes together to create an atmosphere for daily prayer. Since daily prayer is so important in Islamic life it is important that the setting be appropriate for the completion of prayers. In a building such as the New York Cultural Center creating the appropriate atmosphere requires art that makes a forceful statement.² Through the combination of art and religion the artistic elements in the Cultural Center accomplish this task quite well.

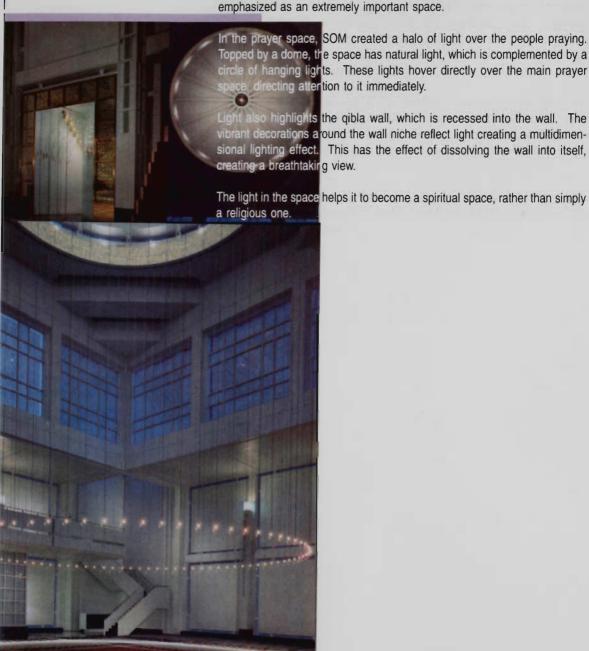
Support Spaces

In the Islamic tradition a simple prayer space is called a mosque. A cultural center consists of much more than a simple mosque. A cultural center becomes a center for all aspects of Islamic life. Traditionally the cultural center "consists of a mosque, social space, classrooms and a library."³

These 'accessory' spaces allow the congregation to function as a complete community. All of the support spaces needed for a complete Islamic life are contained within one building. By providing these spaces people are given the opportunity to learn more about themselves, their religion, and others.



Light plays an important role in the Cultural Center. Here it is used to highlight important features. The qibla wall, the wall facing Mecca, is one such feature, as is the minbar, a platform reached by stair, where the true prophet Muhammad is said to stand. In the Cultural Center, the prayer space is emphasized as an extremely important space.



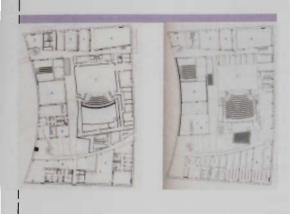
The Laban Center London Herzog and de Meuron 2003

The Laban center, a modern dance school, was designed with movement very much in mind. On first glance, the building looks like a large shed, placed in the middle of other large sheds. But "as you get closer, it dawns on you t at something more interesting than just another shed now inhabits" this spac. 1 The colors scattered across the facade are meant to catch the eye. As the light hits them they seem to dance.

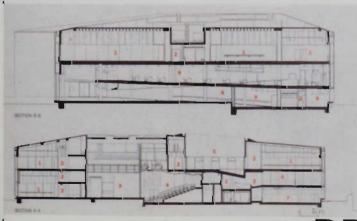
In order to engage the context, the building curved along one side in response to a nearby church, St. Paul's.² This curved facade becomes an exciting entrance hall.³ It is this that moves the building from being a mere shed to being an exciting piece of architecture in an otherwise drab neighborh od.

The facade was inspired by principles of contemporary art.⁴ The simply colored panels, the plays of light, and the gently sloping floors of the structure all show these influences.







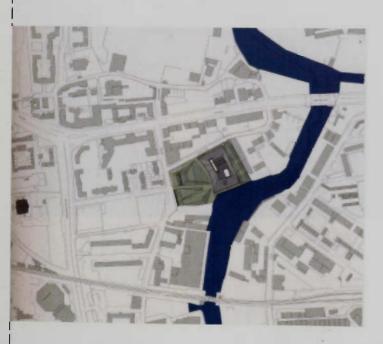


Surrounding Context

While the placing of the building along the banks of Deptford Creek was more the result of site constrictions than anything else, some decisions were made that provide the building with a sense of spirituality not necessarily connected with the function of the building. The northwest facade of the building, for example, curves in response to a nearby church. The curve also considers the Laban Garden which in connection with the facade gives the entrance hall an exciting flavor. The curve of the building embraces the zigzag pathways around the building and the recycled earth berms that are planned for future landscaping.

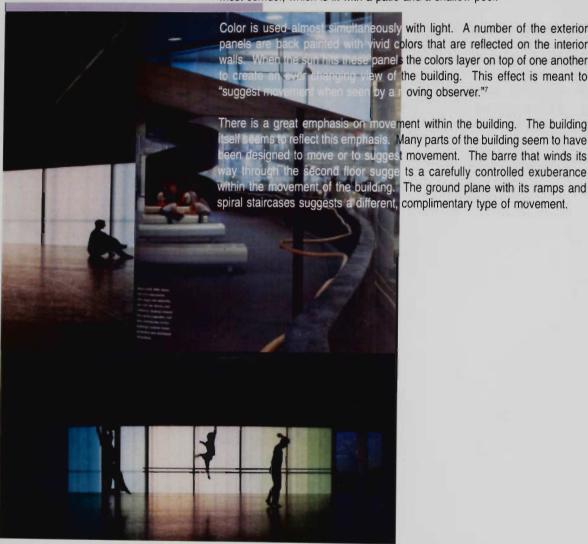
The public spaces in the building are located next to the entrance, with the smaller, less public dance studios located on the second floor. This has the effect of providing a transition space for people using the building. It allows the dancers to achieve the correct frame of mind for dancing. The guests are also allowed to adjust their mind set before they attend the performance.

The theater is located in the heart of the plan, giving it the place of honor. It is down-played on the exterior of the building by adjusting the roof lines of the surrounding parts of the building. A series of "streets" or corridors serve to separate the theater as the main space within the building.



Light

The light in the Laban center is used to frame movement. The exterior panels of the building shield the inhabitants from view during the day, but at night, the panels become translucent, showing the shadows of the movement inside.5 Every part of the building is lit by exterior light, even the innermost corridor, which is lit with a patio and a shallow pool.6

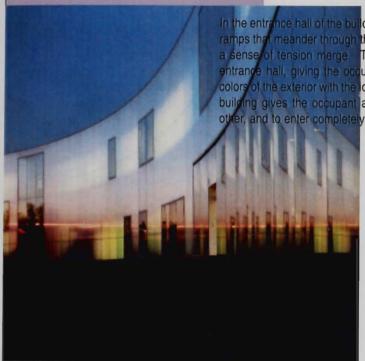


eously with light. A number of the exterior ivid colors that are reflected on the interior panels the colors layer on top of one another w of the building. This effect is meant to by a roving observer."7

iself seems to reflect this emphasis. Many parts of the building seem to have een designed to move or to suggest movement. The barre that winds its through the second floor sugge ts a carefully controlled exuberance

Merging/Shifting

The shifting in the building is subtle and sudden. As the ramp slopes toward the upper floors a courtyard bursts through the ceiling creating a moment of shifting. The corridors also separate the theater from the smaller rooms around it. This provides the occupant an opportunity to shift their viewpoint and to be shifted along with the building.



In the entrance hall of the building the two types of circulation converge. The ramps that meander through the building and the spiral staircases that give it a sense of tension merge. They create a new point of interest within the entrance hall, giving the occupant the opportunity to merge the ideas and colors of the exterior with the ideas and colors of the interior. Through this the building gives the occupant a chance to transition from one space to the other, and to enter completely into the world of movement and dance.

Layering

The building skin provides the opportunity for layering. The translucency and reflectiveness of the skin acts as a canvas for showing the surrounding context. At any given point on the exterior facade a myriad of images can be seen, indeed the person viewing the facade could even be included, thereby adding another layer to the mixture that already appears.



thin the fullding acts as partition walls in many cases. The placement of individual pieces of transforms a simple partition into a delicate d compare action in the walls have

Cranbrook Institute of Science Bloomfield Hills, Michigan Steven Holl 2002

The Cranbrook Institute of Science addition by Steven Holl is a testament to exploration. The multitude of materials within the building gives the patron a sensarof "unique encounters with eccentric, well crafted details." Different materials and details are used to provide subtle transitions spaces within the building. These spaces define the change from Holl's contemporary addition to the original building by Saarinen, providing a smooth transition from new to old.

The addition's "basic structure is formed of steel truss frame spanned in pre-cast concrete planks." This system allows for services, such as ductwork, to be carried in the hollow cores of the planks.2 This system also allowed Holl to experiment with a number of varied materials, thus creating an "equilibrium between handmade particulars and abstract universals."3 The material palate for the institute includes concrete, steel, glass, stucco and water providing a large range of materials to merge.

especially exploited.

the exterior of the building is used to open the building to the exterior.

reals is used in a way that promotes the educational The scientific, educational aspects of water are nce garden defined by the old and new building is used to teach the various properties of water. Glass, both clear and transdicent, is used to create lighting effect within the building. The ight is used as a means of defining different spaces. Each of the different spaces has a quality of light that defines it. The light is defined by the use of lights and glass. The glass, interacting with natural and artificial light quality of light that is unique. Glass is also various views. Clear glass, usually used on

Much of the glass provides views into the science garden. Creating exterior views allows regular stopping, resting places within the building. from the musuem interior while still being in keeping ng. Stucco is used throughout the building highly colored. Highly colored stucco contrasts nicely with the original Saarinen

The addition to the Institute of Science was part of a large addition to the Cranbrook campus. This renovation project included the Institute of Science, a new natatorium, an addition to the Academy of Art and a new entrance off of Woodward Avenue.

One big concern at the beginning of the renovation was how new buildings and additions would interact with the original Eliel Saarinen buildings of the campus. This concern was met by careful selection of architects for the various projects. The additions, now complete, all fit subtly into the context of the campus.⁴

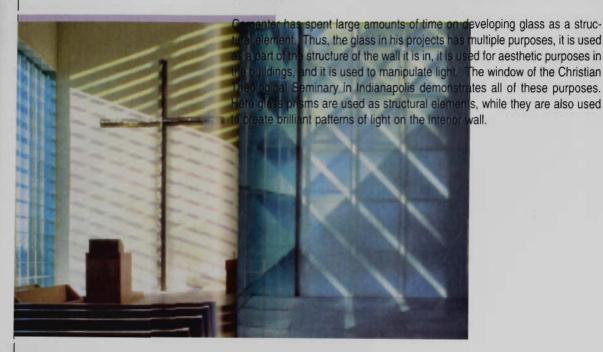
Holl, in keeping with the Saarinen traditions, allowed the building itself to "bracket and shape" the exterior spaces of the building, most notably the science garden. His choice of material range also echoes a Saarinen tradition; everything in a building from the structure to the doorknobs, beauty."6

While some critics argue that the additions, by Holl and others, should stand out more, should be objects in themselves, I disagree. Cranbrook was built on the tradition of Eliel Saarinen, something that should not be forgotten or ignored. Each of the buildings, through careful material selection and creative interpretation of Saarinen's tradition, has integrated itself into the Cranbrook campus without creating a new focus of attention.



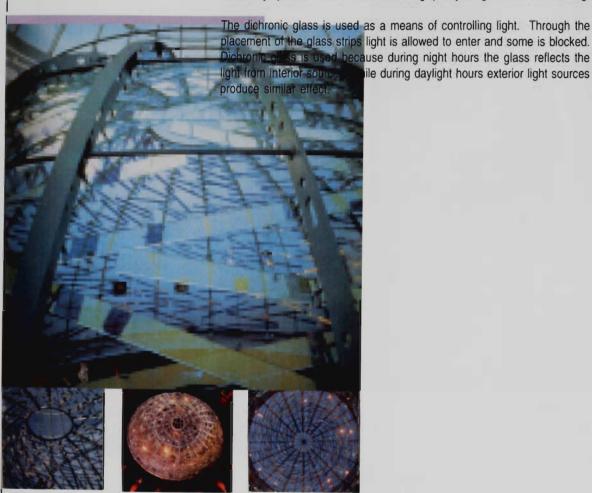
James Carpenter Various Projects

James Carpenter has made his career working with glass. In recent years his projects have shifted from installations to some designing of building envelopes.

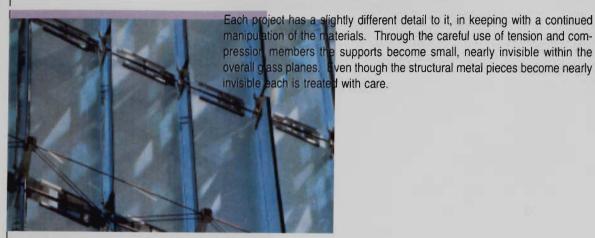


The Spectral Light Dome in Portland, Oregon was created to reference historical open-air theaters in the lobby of a contemporary theater complex.

The dome was created by suspending dichronic glass from a steel cast clip substructure.² The pieces of glass are arranged to be an abstraction of the "heavenly sphere." The result is a shifting quality of light within the building.



Carpenter has invested large amounts of time in developing structural glass. He has focused on ways to "[pare] down metal supporting structures and glass-making techniques that enhance the materials ability to mould light." Carpenter, rather than focusing simply on aesthetics, has focused on manipulating his chosen material. The aesthetics come naturally, he says, from an understanding of how the material behaves. 5







The dichroic light field in New York was created to respond to "the planar nature of the setting by capturing the ambient light on the surface while creating an illusion of depth." Carpenter uses a perfectly flat glass grid with perpendicular fins to accomplish this.

The ideas from this project can be used in treating large expanses of glass, especially if space is constricted.



Archaeological Museum Peter Zumthor Chur. Switzerland 1983

The archaeological museum in Chur, Switzerland was created as a shelter for Roman ruins. The shelter, made of timber lamella, is not thermally sepa-

Slits between the timber pieces allow light and air to

still providing some protective shelter.

oes the original forms of the Roman architecture it simple gesture that allows the visitor a more complete Roman architecture.







The technique used in this building has a very spiritual feel. This feel comes from the "experience of textures, the play of light, the celebration of craft, and the kinesthesia of [the] spaces."²

The techniques used in this building, which together create a spiritual space, will be explored in the project. This technique will also be explored as a way to regulate light in the building.



The task in the sketch problem was to construct, in a natural setting of choice, a 'room' that allowed the visitor to experience the setting. The experience was to be different from the normal way a visitor would experience the setting, and the room was to 'mediate' between the visitor and the setting. A minimum of four such rooms were required, each mediating in a different way, though not necessarily in a different setting.

The rooms created were able to coexist, but it was not necessary to them that they coexist. All were located in a forest near Jackson, MI. Five of the 'rooms' wind through the forest, creating walking paths for the visitor. One winds a piece of fabric through the tree trunks. This obstructs the view of the whole tree and forces the visitor to see only the trunk or only the canopy. The second installation puts slats from tree trunk to tree trunk. The slats filter the light that reaches the ground, creating a striped pattern that overlays the spotted pattern created by the leaves. This causes people to see the light in the forest in a different way. The third room creates a wall through the forest which has strategically placed holes in it. Through the holes the visitor can see only one specific thing. This causes the visitor to focus solely on that piece of the forest for a short time. This creates a better understanding of the individual pieces of the forest. The fourth 'room' is a handrail that winds through the forest. The handrail has the texture of leaves embedded in it. This causes the visitor to feel the pattern of the leaves, thereby experiencing them in a different way than usual. The fifth room does not wind through the forest. It is a circular space with a metal basin in the center. When it rains in the forest the water hits the metal basin, making a new noise, one that is not often heard in the forest. The purpose of this room is to allow the visitor to experience the rain in a new way.

Together these rooms attempt to change a person's view of the forest, as the thesis project attempts to alter a person's view of religion and spirituality.



The site is located on Palmer St. between Brush and John R in Midtown Detroit. The site is located in a residential neighborhood. The neighborhood itself is run down, with many abandoned and condemned buildings. There is however, some redevelopment happening in the area. This redevelopment is bringing people back to the area, providing the beginnings of a community. The site is located within the redeveloped residential neighborhood to take advantage of the emerging community.

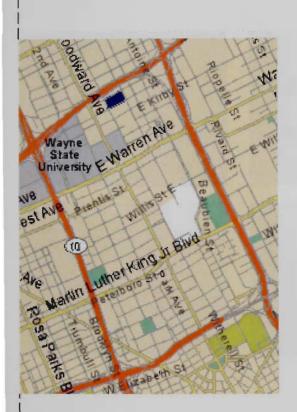
The cultural context of the site is excellent for a cultural type of installation, such as this one. The site is within walking distance of the Detroit Institute of Arts, the Detroit Public Library, the Detroit Historical Museum and Wayne State University. This context provides a welcome place for inquiries into spirituality.



Religious Institutions in the Midtown Area By Faith Tradition

Christian Jehovas Witness Islamic Buddhist Jewish





Shifting and Layering on Site

This site has numerous examples of layering and shifting qualities. In this study layering was created at points of refuse on the site. A piece of garbage was located and a picture was taken of the piece and of the view out of the site at that point. The images were then sliced at shifting points, straight lines within the photos. Each photo half was then placed with a corresponding photo half from another photo. This created the moments of layering and shifting seen in the drawings.













Merging and Layering on Site

This site has numerous examples of layering and merging qualities. In this study layering was created at all points of refuse on the site. A piece of garbage was located and a picture was taken of the piece and of the view out of the site at that point. Each image was then cut into strips and woven together with its corresponding photo, thus creating the moments of merging and layering seen in the drawings.







Shifting

Originally there were three sites considered, each with its own unique characteristics. All three sites showed examples of shifting. In this study shifting was seen as the meeting of the horizontal (ground) plane and the vertical (building) plane. The images were sliced along shifting lines and put together in a way that created a completely new view of the sites.





Merging

The three original sites all showed examples of merging. In this study merging was seen in the abandoned buildings that were prominent at each site. The images of these buildings were cut into strips and woven together to show the merging of emptiness and building. The woven images were then woven into a map of the site area to show the connection between merging and the sites.





Layering

The three original sites all showed examples of layering. In this study layering was seen in the adjacency of occupied buildings to abandoned buildings. The images of the buildings were displayed on top of each other. The images were then layered with an image of the site area to show the prominence of layering in the area.





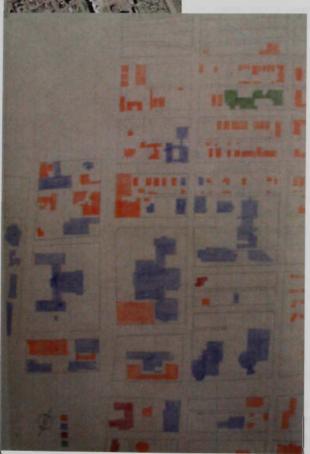
Detroit, Michigan Latitude: 42° 14'N

Average Monthly Temperature: 48.6°F

Temperature Range: January 15.6°F-July 83.3°F

Relative Humidity (1pm): 60% Yearly Precipitation: 32.62 inches Wind: SW-WSW 10.4mph

During the 1920s this area was a full residential neighborhood. This neighborhood was interrupted by the introduction of I-94 along the northern border of the site. The introduction of the freeway disrupted the neighborhood structure, separating neighbors from each other. Since the introduction of the freeway the residences in the area have slowly dwindled and fallen into disrepair. There is currently redevelopment happening in the area, filling in open spaces left by the decline of the neighborhood. This project would be part of this redevelopment.



Project Identification

This project will attempt to create a space where community among people from varying faith backgrounds is encouraged. In order to accomplish this the project will include activities such as education of children and adults, outreach programs, and general community activities such as picnics. These activities will be included to encourage meeting and communication between the people using the spaces.

Articulation of Intent

This project will attempt to provide a context for people to form a broader community by creating a space where people are encouraged to come together in their diversity. By providing spaces for certain activities, such as individual and group reflection spaces, people are encouraged to use the space for their own spiritual purposes. By providing spaces for other activities, such as teaching and learning, people may be encouraged to use the space for purposes that are not specifically religious, but are still spiritual in nature. Combining these two different purposes allows people the opportunity to form a community based around the ideas of common spirituality rather than a community based solely on one common religion or a simple geographical proximity.

In order to welcome people of all spiritual perspectives the design of the building will not be based on any one specific religious tradition. The spaces incorporated in the project will be designed as spiritual spaces rather than religious ones.

This project will ultimately be welcoming to people of all religious and spiritual backgrounds. People with no religious or spiritual background would also be welcome in this place. It is important that people feel comfortable sharing this space with others, and also being alone in the space. It is important that people understand more about themselves when they leave than they did when they arrived. This project will be a success if people of differing backgrounds all feel that they are able to share their beliefs with others in the space. It is also important that people are able to celebrate their common spirituality while still appreciating their diversity.

Enumeration of Actions

A number of different spaces will be devoted to teaching and learning about oneself and others, about the world and about religion. There will be spaces for the education of children and adults, each with its own qualities. All of the spaces will be light, while having the ability to become dark. There will be spaces for the education of children and adults, each with its own qualities.

There will be a space for celebrations within the project. The space devoted to celebration will be large so that it can accommodate functions such as wedding parties, bar/bat mitzvah receptions and any other large social gathering. There will also be intimate spaces devoted to celebration so that diversity as it relates to spirituality will be celebrated on a large and small

PROGRAM STATEMENT

scale.

Within the project there will be spaces for meeting. People will come together in their diversity, they will come together as a congregation and they will come together as a community. Also meetings will occur with the purpose of transacting business. The spaces will be neutral in form so that no particular viewpoint is asserted over another. However, the space must have some interest, visual or otherwise, that is all its own, so that people are encouraged to come to the space to interact.

The project will provide a space for proclamation. This space will allow the community to inform others what the purpose of the community is. This space will also allow the community to recognize excellence within the community. This space will have large amounts of wall space so that pictures and recognitions may be displayed. There will also be a large quantity of floor space so that many people may use the space at one time.

Spaces for the welcoming of all will be provided within the project. The welcoming space will be large so that it can accommodate all of the people who will use the space. The sound absorption qualities of the room will be sufficient to block the noise from entering into other spaces.

Within the project there will be spaces provided for reflection on spirituality, faith and life. There will be a number of individual reflection rooms to allow people to reflect on topics of their choice at whatever time they choose. There will also be a large exterior reflection space so that many people may reflect at the same time. An exterior space will have a direct connection to nature.

There will be a space for mourning coupled with the celebration of life. This space will be private and intimate. It will be somber, small and quiet in order to allow for mourning to take place.

There will be a space dedicated to the making of music. Music is an integral part of many faith traditions and is considered spiritual by many. A room for the making of music will be relatively large so that a number of people and instruments may use it at the same time. This space will not be designed to have good sound absorption qualities, which will allow sounds to filter from this space to the whole building.

There will be spaces devoted to outreach. These spaces will help connect the spiritual community with the larger community of Detroit. The spaces devoted to outreach will be open to all. They will be warm and inviting so that anyone from the greater Detroit community or the spiritual community will feel that they are able to use the spaces.

Site Criteria

The project will be located in an urban area, specifically an urban area with a good mix of people with differing religious backgrounds. The site must be

PROGRAM STATEMENT

of sufficient size to accommodate all of the functions that will be included in testing the hypotheses. There may be existing buildings that remain on the site while other spaces are added or renovated. The site should be located in a cultural neighborhood, since the nature of the question is cultural. There should be a residential neighborhood nearby so that the community in the neighborhood is able to create a base for the spiritual community.

There should be no religious institutions in the immediate vicinity, as this may create a distinct imbalance in the community. There should be some sort of commercial area in the vicinity of the site. The site should be located in a (re)developing area that has a moderate population density. There should also be green space or the opportunity for green space on the site or in the area so that children are encouraged to use the area.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Welcoming	500	1	2500	2500
Office	2	1	600	600
Proclamation/Circulation		1	6890	6890
Celebration				
Hall	400	1	5500	5500
Kitchen		1	1000	1000
Storage	•	1	1500	1500
Outreach				
Soup Kitchen	75	1	2750	2750
Resale Shop		-1	3000	3000
Counselling		1	2000	2000
Welcoming		1	500	500
Teaching/Learning				
Children's Classrooms		2	1200	2400
Adult's Classrooms		5	600	3000
Storage	_ 11 1 - 14	1	1500	1500
Office	5	1	900	900
Library		1	6000	6000
Music		1	3100	3100

QUANTITATIVE SUMMARY

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Reflection				
Group Reflection	50	1	2500	2500
Individual Reflection	3	6	300-600	1800-3600
Large Movement	15	1	2250	2250
Small Movement	2	1	850	850
Mourning Room	20	1	900	900
Meeting Room	18	1	850	850
Exterior Reflection				
Reflection Pond	20	1	1200	1200
Garden	* *	4	2000-4000	8000-16000
Exterior Miscellaneous				
Picnic	200	1	5400	5400
Storage		1	1000	1000
Parking	180	1	32400	32400
Miscellaneous				
Toilets		8	600	4800
Mechanical	2	1	3216	3216
Janitorial	2	2	300	600

QUANTITATIVE SUMMARY

Public Spaces	Private Spaces
Classrooms	Offices
Library	Meeting Room
Celebration Halls	Reflection
Proclamation	Mourning Room
Welcoming	Movement Rooms
Picnic	Counselling
Reflection Pond	
Garden	
Meeting Room	
Soup Kitchen	
Resale Shop	
Music Room	
Servant Spaces	Served Spaces
Storage Rooms	Celebration Halls
Library	Meeting Rooms
Kitchens	Picnic
Welcoming	
Parking	
Mechanical	
Janitorial	
Toilet	
Individual Spaces	Collective Spaces
Reflection	Classrooms
Storage	Library
Counselling	Meeting Rooms
	Proclamation
	Welcoming
	Community Reflection
	Mourning Rooms
	Picnic
	0 0 0

Group Reflection

SPACE DETAIL SUMMARY

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Welcoming	500	1	2500	2500

This will be the first space people enter from the exterior. It will serve as a transition space for the spaces adjacent to it.

Activities.

This will be the place of entrance into the building. It will be an expressed part of the entry sequence. People will meet here. They will gather and they will come together in their diversity.

Spatial Relationships.

Since this is the main entrance into the building it will be accessible from the parking. In order to make visitors more comfortable with the project this space will be located near the proclamation area.

Special Considerations.

Access from the exterior will be an integral part of this space.

Equipment/Furnishings.

There may be a space for coats to be hung, but overall no furniture is required for this space.

Behavioral Considerations.

This will likely be a loud space. It is therefore important that no sound escape from this space into any other space as it may disturb the activities of another space.

SPACE DETAIL

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Office	1	2	300	600

This space will serve as office space for the people who run the building.

Activities.

This will be a space where people make plans regarding the use of the building. They will be able to copy, type, research, telephone and receive notices.

Spatial Relationships.

This space should be located near the main welcoming space.

Special Considerations.

This space should be easy to navigate so that persons using the space will be able to move in and out quickly and easily. The space should be uncluttered so that the people using it can use it easily.

Equipment/Furnishings.

In order to facilitate planning building activities the room will include a computer, a fax machine, a printer and a photocopier. There will also be a telephone and mailboxes so that the worship leaders can receive messages.

Behavioral Considerations.

People will move in and out of the space quickly. The lights should be easy to access, especially in the dark. The electronic equipment should also be easy to access to facilitate quick movement.

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Prodamation		1	6890	6890

This space will showcase the achievements of the members of the community. The news of the community will also be displayed for all to see. The space will also serve as an introduction to the community for anyone who does not know about it.

Activities.

People will be making displays and dismantling them. People will browse the displays and read them.

Spatial Relationships.

This space will wind through the entire building. It will act as a connecting element as well as a transition space. This will allow people to discover the community as they discover the building.

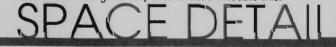
Special Considerations.

Equipment/Furnishings.

There will be display boards in this space. There may be larger areas within this space that can accommodate tables for display purposes.

Behavioral Considerations

People will stop to read display items, so the space will be wide enough at all points to accommodate this.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Hall	400	1	5500	5500

This space will accommodate social/religious gatherings such as weddings and bar/bat mitzvah receptions. The space will also be a space for the gathering of the whole community.

Activities.

This will be a space for celebration. Parts of the celebrations in the space may include dining, dancing, singing and speech giving.

Spatial Relationships.

The space will be near the kitchen so that those cooking have easy access to the space. This space will also be near the picnic area so that activities happening inside this space may spill out to the picnic area. There will also be access to the music storage area so that tables and chairs may be removed if the celebration calls for large amounts of open space.

Special Considerations.

Natural light will be used as a way to celebrate the space. Also a variety of artificial lights will be required so that the room can change mood according to the celebration that is taking place.

Equipment/Furnishings.

The space will require tables and chairs to seat all the occupants. There will also be serving stations in order to facilitate the dining portions of any celebrations. There will be a dance space and a space for musical accompaniment. There will be electronic acoustical equipment such as microphones and speakers to allow everyone assembled in the space to hear the person(s) speaking or singing on the stage/performance area.

Behavioral Considerations.

People will stay in this space for long periods of time. The space should have access to the exterior so that fresh air is available to those who need it.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Storage		1	1500	1500

This room will hold all the equipment used for music and celebration spaces when it is not being used.

Activities.

The main activity in this space will be storage. People will enter the room in order to place objects in storage or to retrieve objects from storage.

Spatial Relationships.

This space will be accessible from the music room and celebration spaces so that objects from those spaces may be stored in this space.

Special Considerations.

It is not necessary to have windows to the exterior in this space. There will be access from the music and celebration area to facilitate the retrieval and storage of equipment. There will be a large open area on the floor of the room for storage of furniture such as chairs and musical instruments, which are large and heavy and should not be placed on shelves.

Equipment/Furnishings.

There will be shelves within the room for storage of small items used in various activities. There will also be dividers so that the equipment does not get mixed between the different groups using the space. By keeping all the equipment separate the setup process for each lesson or celebration will take less time than if all the equipment were mixed together.

Behavioral Considerations.

There will be many large items moved in and out of the space on a regular basis, so the room should have ample door space to facilitate this.

SPACE DETAIL

SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
 Kitchen		1	1000	1000

This space will be used to prepare food that will be served in both celebration/meeting halls and in the soup kitchen.

Activities.

Food preparation will be the main activity that takes place in this space.

Spatial Relationships.

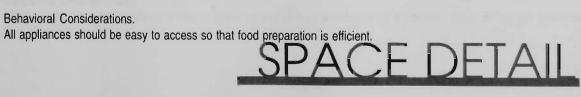
One space will have direct access to the celebration/meeting halls, one will have direct access to the soup kitchen.

Special Considerations.

This space will be on a separate ventilation system from the surrounding spaces. There will be direct access to the serving area in each celebration hall and in the soup kitchen.

Equipment/Furnishings.

All normal commercial kitchen appliances will be included.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Soup Kitchen	200	1	2750	2750

This space will function as a soup kitchen. This space will provide some members of the community with some things they badly need. It will also draw people to the community because something is offered that they need. This space will also function as a community meeting space.

Activities.

The main activities in this space will be serving and eating. People will stand to serve and sit to eat. When the space is used for meetings there will be people presenting and groups listening to the presenters.

Spatial Considerations.

This space will be located near the kitchen to facilitate cooking and serving food. It will also be located near the classrooms so that people using the classrooms are able to help in the soup kitchen. People will also be able to learn about the soup kitchen while they are using the classrooms.

Special Considerations.

This space will be located near the street on the site, within easy distance from the sidewalk. Many people using this space as a soup kitchen will not arrive on the site in a vehicle.

Equipment/Furnishings.

There will be tables and chairs for this space so that people are able to sit down and eat. There will also be a serving area located near the kitchen so that food may be served in the most expedient manner. The chairs will be used for meetings, while the tables may be moved out of the space.

Behavioral Considerations.

Most people using the space as a soup kitchen will not remain for long periods of time. They will remain just long enough to eat a meal.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Resale Shop		1	3000	3000

This space will function as a resale shop. This shop will provide some members of the community with some things they badly need. It will also draw people to the community because something is offered that they need.

Activities.

The main activities will be shopping, selling and talking. Most people will stand in this space.

Spatial Considerations.

This space will be located near the classrooms so that people learning in the classrooms are able to volunteer in the shop. People will also be able to learn about the resale shop while they are using the classrooms.

Special Considerations.

This space will be located near the street on the site, within easy distance from the sidewalk. Many people using this space will not arrive on the site in a vehicle.

Equipment/Furnishings.

This space will require racks and shelves to put merchandise on. A desk will also be required so that purchases can be tracked.

Behavioral Considerations.

Most people using the space will not remain for long periods of time. They will remain just long enough to pick out an item from the shop and say a few words to the people running the shop.

SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
Counselling		2	500/1000	1500

This space will be devoted to the counselling of people. This function will be associated with the other outreach programs in the building. The counselling will be available to anyone who feels they need it.

Activities.

The main activity in this space will be one on one conversation. Other activities may include drawing, dancing, yelling, reading and listening.

Spatial Relationships.

This space will be located near several reflection rooms so that anyone needing to reflect privately before, during or after counselling may use one of the rooms.

Special Considerations.

The things discussed in this space will in many cases be very private. The space will therefore be acoustically separated from the other spaces in the building. The space will have the ability to separate into smaller spaces dependant on the users needs.

Equipment/Furnishings.

There will be places to sit within the space so that people may sit while they are conversing. There will also be small storage spaces within the space so that supplies such as paper and pencils can be stored within easy reach of the places they are needed. There will be surfaces on which to write so that people may draw as part of their counselling and so that ideas may be written and illustrated.

Behavioral Considerations.

The entrances of the individual counselling areas will be separated from each other so that there need be no embarassment when entering or leaving the space.

SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
i I Storage		1	1500	1500

This room will hold all the equipment used for the outreach spaces when it is not being used.

Activities.

The main activity in this space will be storage. People will enter the room in order to place objects in storage or to retrieve objects from storage.

Spatial Relationships.

This space will be accessible from the soup kitchen and the resale shop so that objects from each of those spaces may be stored in this space.

Special Considerations.

It is not necessary to have windows to the exterior in this space. There will be access from the outreach area to facilitate the retrieval and storage of equipment. There will be a large open area on the floor of the room for storage of furniture such as chairs and tables, which are large and heavy and should not be placed on shelves.

Equipment/Furnishings.

There will be shelves within the room for storage of small items used in the soup kitchen and resale shop. There will also be dividers so that the equipment does not get mixed between the soup kitchen and resale shop. By keeping all the equipment separate the setup process for each space will take less time than if all the equipment were mixed together.

Behavioral Considerations.

There will be many large items moved in and out of the space on a regular basis, so the room should have ample door space to facilitate this.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Welcoming		1	500	500

This will be the main welcoming space for the outreach programs. It will serve as a transition space between the street and the outreach spaces.

Activities.

This will be a place of entrance into the building. It will be an expressed part of the entry sequence. People will meet here. They will gather and they will come together in their diversity.

Spatial Relationships.

This will be a welcoming space for the outreach programs, it will therefore be located near the soup kitchen and the resale shop. It will be located in an area of the site that is likely to get the most foot traffic.

Special Considerations.

This space will be a courtyard. Access from the street will be an integral part of this space.

Equipment/Furnishings.

There will be no furniture in this space.

Behavioral Considerations.

This will likely be a loud space. It is therefore important that no sound escape from this space into any other space as it may disturb the activities of another space.

SPACE DETAIL

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Pionic	200	1	5400	5400

This will be a main gathering space for all involved in the community.

Activities.

The main activity will be picnics and community gatherings. There will generally be food served in this space. There will usually be a large number of people in this space.

Spatial Relationships.

This space will be located near the celebration space so that people in the celebration space are able to use it and people in the picnic area may use the celebration space in the event of inclement weather. There will also be a storage space located close to the picnic area so that tables and chairs can be stored.

Special Considerations.

This will be an exterior space.

Equipment/Furnishings.

There will be picnic tables in this space so that all can sit to eat.

Behavioral Considerations.

This will be a loud area, it will be separated from any area that needs to be quiet.



SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
 Storage Room		1	1000	1000

This room will hold all picnic tables from the picnic area when they are not in use.

Activities.

The main activity in this space will be storage. People will enter the room in order to place objects in storage or to retrieve objects from storage.

Spatial Relationships.

This space should be near the picnic area to facilitate moving the picnic tables.

Special Considerations.

It is not necessary to have windows to the exterior in this space. There will be access from the picnic area. There will be a large open area on the floor of the room for storage of picnic tables which are large and heavy and should not be placed on shelves.

Equipment/Furnishings.

There will be shelves within the room for storage of small items used in the picnic area.

Behavioral Considerations.

There will be many large items moved in and out of the space on a regular basis, so the room should have ample door space to facilitate this.

SPACE DETAIL

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Classroom		3	1200	2400

These rooms will be devoted to teaching and learning about oneself and others, about the world and about religion. They will be the main space where multi-faith religious education takes place.

Activities.

In order to learn about themselves and the world, the people using the space will read, talk, listen and sit. They will be attentive to their surroundings and to the people around them.

Spatial Relationships.

The classrooms will be adjacent to each other. This will facilitate mixing between people in different classes. The classrooms will have access to the storage areas so that the equipment that is stored there is accessible.

Special Considerations.

Natural light will be very important in these rooms, therefore the main light source will be natural light. In order to facilitate teaching the rooms will have the ability to become dark so that it will be possible to show slides or to contemplate the darkness.

Equipment/Furnishings.

The room will have tables and chairs so that the 'students' using the space will have a place to sit and write. There will also be cupboards so that materials used for multi-faith education can be stored.

Behavioral Considerations.

The entrance to the room will be positioned so that a person entering the room will not disturb the people already in the room, particularly if the people already in the room are engaged in a specific learning activity.

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Classroom		5	600	3000

These rooms will be devoted to teaching and learning about oneself and others, about the world and about religion. They will be the main space where multi-faith religious education takes place.

Activities.

In order to learn about themselves and the world, the people using the space will read, talk, listen and sit. They will be attentive to their surroundings and to the people around them.

Spatial Relationships.

The classrooms will be adjacent to each other. This will facilitate mixing between people in different classes. The classrooms will have access to the storage area so that the equipment that is stored there is accessible.

Special Considerations.

Natural light will be very important in these rooms, therefore the main light source will be natural light. In order to facilitate teaching the rooms will have the ability to become dark so that it will be possible to show slides or to contemplate the darkness.

Equipment/Furnishings.

The room will have tables and chairs so that the 'students' using the space will have a place to sit and write. There will also be cupboards so that materials used for multi-faith education can be stored.

Behavioral Considerations.

The entrance to the room will be positioned so that a person entering the room will not disturb the people already in the room, particularly if the people already in the room are engaged in a specific learning activity.

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Library		1	6000	6000

This space will accommodate religious and spiritual books from many different faith traditions.

Activities.

Storage of books will be the main activity within this space. People will walk through the space in order to select books. They will read books in this space. All books will be accounted for.

Spatial Relationships.

This space will be located near the classrooms so that people using the classrooms have easy access to the books. There will be direct access to the office space so that the librarian is able to use it as an office. This space will also be located near the reflection spaces so that writings may be used by people doing reflections.

Special Considerations.

Light should be diffuse so as not to damage any old or precious books. The reading area should be quiet. In order to facilitate this, the reading area may need to be physically divided from the other library spaces.

Equipment/Furnishings.

There will be a desk and chair for the librarian. There will be bookshelves to hold all the books. There will also be a number of tables and chairs in the reading area so that people are able to sit and read in the library.

Behavioral Considerations.

Some people will remain in this space for long periods of time; some people will remain for short periods of time. The room should be set up so that anyone staying only a short time does not disturb anyone staying a long period of time. Therefore, the reading space should be separated from the book storage space. No sound should reach the reading space from any other part of the building. This will help ensure that it remains quiet in the reading space.

Space Name	Capadily	No.Units	NSF/Unit	Total Net Area
i I Music		1	3100	3100

This space will be for the making of music. There will be lessons given in piano and several other instruments, including voice. This space will also be used as a reflection space for people who are moved to reflect through music.

Activities.

The main activity in this space will be music making. This may include playing the piano, cello or any number of other instruments. This will also include singing. Most of these activities will be performed without moving around large areas of the room. It may, however, be necessary to learn or practice movements that go with a certain type of music.

Spatial Relationships.

This space will be near the celebration space so that the instruments used in the music making may be moved to the celebration space during a celebration. This space will also be located near the movement spaces so that the people using the movement spaces may reflect on the music from this space.

Special Considerations.

This space should be located away from any spaces that require acoustical separation so that the sounds of the music do not reach those spaces.

Equipment/Furnishings.

There will be shelves for the instruments when they are not in use. There will be chairs so that people may sit when the instrument they are playing requires it. There will also be risers in the room so that a group of people such as a choir is able to practice in a formation that is comfortable to them.

Behavioral Considerations.

This space will have a definite entrance that can be sealed so that a person or group using the space is not interrupted by anyone else who wishes to use the space.

SPACE DETAIL

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
i I Office	4	1	900	900

This space will serve as an office space for all the religious education teachers and people in charge of outreach.

Activities

This will be a space where the religious education teachers can prepare their lessons. They will be able to copy, type, research, telephone and receive notices. The people in charge of the outreach programs will use the office to prepare notices or keep track of merchandise for the second hand store.

Spatial Relationships.

This space will be adjacent to the classroom spaces and the outreach space. The offices will have access to the storage room and will be directly accessible from the library, so that the librarian may use this space as an office.

Special Considerations.

This space should be easy to navigate so that persons using the space will be able to move in and out quickly and easily. The space should be uncluttered so that the religious education teachers and people in charge of outreach can prepare with a clear mind.

Equipment/Furnishings.

In order to facilitate preparation for lessons the room will include a computer, a fax machine, a printer and a photocopier. There will also be a telephone and mailboxes so that the religious education teachers can receive messages.

Behavioral Considerations.

People will move in and out of the space quickly. The lights should be easy to access, especially in the dark. The electronic equipment should also be easy to access to facilitate quick movement.

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Storage		1	1500	1500

This room will hold all the equipment used for religious education and the library when it is not being used.

Activities.

The main activity in this space will be storage. People will enter the room in order to place objects in storage or to retrieve objects from storage.

Spatial Relationships.

This space will be accessible from the classrooms and the library so that objects from each of those spaces may be stored in this space easily.

Special Considerations.

It is not necessary to have windows to the exterior in this space. There will be access from the classroom area to facilitate the retrieval and storage of equipment. There will be a large open area on the floor of the room for storage of furniture such as chairs and tables, which are large and heavy and should not be placed on shelves.

Equipment/Furnishings.

There will be shelves within the room for storage of small items used in various religious education activities. There will also be dividers so that the equipment does not get mixed between the different classes using the space. By keeping all the equipment separate the setup process for each lesson will take less time than if all the equipment were mixed together.

Behavioral Considerations.

There will be many large items moved in and out of the space on a regular basis, so the room should have ample door space to facilitate this.

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Mourning Room	20	1	900	900

This space will be used for funerals or any other instances when mourning happens. This space may also be used as a somber reflection space when it is not being used as a funeral space.

Activities.

Funerals will be the main activity that happens within this space. As part of a funeral there may be a display of pictures or a casket. There will also be reflection within this space.

Spatial Relationships.

This space will be located near the reflection spaces in order to facilitate the need for individual reflection space during a mourning period.

Special Considerations.

This room will be somber, small and quiet in order to allow for mourning to take place.

Equipment/Furnishings.

There will be chairs for the people attending a funeral. There will be a podium for a person speaking at a funeral. There will also be a table for display purposes. Occasionally there will be a casket, this will not be a permanent fixture.

Behavioral Considerations.

The entrance for caskets will be separate from the entrance for people . The entrance for people will be placed away from the casket area so that anyone coming into the room will not disturb the people around the casket.

SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
i I Reflection	3	6	300600	1800-3600

These spaces will be used for individual or group reflection. The people using these spaces will contemplate many topics. These rooms will help facilitate these contemplations by providing a context for thought.

Activities.

People may do many things during their reflections. The main activities in the space will be sitting, kneeling, standing, singing and praying.

Spatial Relationships.

These spaces will be dispersed throughout the building. One will be located near the library so that anyone wanting to reflect on a written work may obtain that work easily. One space will also be located near the mourning space because often people in mourning require individual reflection spaces.

Special Considerations.

Light will be used as a vehicle for reflection. A person using these rooms may use the light itself as an object for reflection, or the person may reflect on another matter.

Equipment/Furnishings.

There will be much open space within these rooms. There will be some reflection rooms with seats, some without.

Behavioral Considerations.

Each room will be different, so as to provide for many different types of reflections, and many different topics within reflections.

SPACE DETAIL

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Movement	2	1	850	850
Movement	15	1	2250	2250

These spaces will be used for individual or group reflection as expressed through movement. The people using these spaces will contemplate many topics. These rooms will help facilitate these contemplations by providing a context for thought and movement.

Activities.

People may do many things during their reflections. The main activity in these spaces will be dancing and bodily movement. People may also sit, kneel, stand, sing and pray in these spaces.

Spatial Relationships.

This space will be located near the music space so that a person or group of people using the movement spaces will be able to reflect on the music.

Special Considerations.

Movement will be used as a vehicle for reflection. A person using these rooms may use the movement itself as an object for reflection, or the person may reflect on another matter.

Equipment/Furnishings.

There will be much open space within these rooms. There will be no obstructions in the floor so that movement is free and uninhibited.

Behavioral Considerations.

The smaller space will be for individual reflection with the possibility of two people occupying the room. The larger space will be for group reflection through movement.

SPACE DETAIL

78

SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
Reflection Pond		1	1200	1200

The reflection pond will serve as an outdoor reflection space.

Activities.

People may do many things during their reflections. The main activities in the space will be sitting, standing, singing and praying.

Spatial Relationships.

The reflection pond will be located near the gardens.

Special Considerations.

This will be an exterior space. Water will be used as a vehicle for reflection. A person using the space may use the water itself as an object for reflection, or the person may reflect on another matter.

Equipment/Furnishings.

There will be seats around the pond to provide people places to sit and reflect.

Behavioral Considerations.

This will be a quiet reflection area. It should be removed from the picnic area as that will likely be a loud area.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
Garden		4	2000-4000	8000-16000

The gardens will be spaces for quiet reflection. There will also be a graden for childran to play in. One garden will provide a small amount of food for the soup kitchen.

Activities.

People may do many things during their reflections. The main activities in the space will be sitting, standing, singing and praying.

Spatial Relationships.

The gardens will be near the reflection pond. The gardens may be spread throughout the project. One should be located near the kitchen. One should be near the classrooms.

Special Considerations.

This will be an exterior space. Life as expressed through plants will be used as a vehicle for reflection. A person using the space may use the life itself as an object fro reflection, or the person may reflect on another matter.

Equipment/Furnishings.

There will be much open space within the gardens. There will be some spaces within the reflection gardens with seats, some without.

Behavioral Considerations.

The reflection gardens will be quiet areas. They should be removed from the picnic area as that will likely be a loud area.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Group Reflection	50	1	2500	2500

This space will be used for group reflection. The people using this space will contemplate many topics. This room will help facilitate these contemplations by providing a context for thought.

Activities.

People may do many things during their reflections. The main activities in the space will be sitting, kneeling, standing, singing and praying.

Spatial Relationships.

This space will be located near the welcoming area so that groups are able to locate it easily.

Special Considerations.

Many different topics will be reflected on in this space, so the space will have a constantly changing feel achieved through the use of natural light.

Equipment/Furnishings.

There will be much open space within this room. There will be chairs and kneelers for those who wish to sit or kneel while reflecting.

Behavioral Considerations.

Though groups of people will use this space, many reflections will be individual. Thus it is necessary for the room to provide a context for private but collective moments.

SPACE DETAIL

Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Meeting Room	18	1	850	850

This space will be used to hold small meetings on any topic.

Activities.

People using this space will generally sit around a table and speak to each other.

Spatial Relationships.

This will be located near the classrooms so that when there are no meetings this space can be used as a classroom. This space will be located near the large meeting hall/celebration space, especially the kitchen, so that light food may be prepared for the occupants of this space.

Special Considerations.

Natural light will be used in this space. The space should have a neutral form so that one viewpoint is not asserted over another through the space.

Equipment/Furnishings.

There will be one large table in the room. Most meetings will take place around that table. There will be 18 chairs, one for each person using the space. There will also be some electronic equipment such as a telephone and a projector.

Behavioral Considerations.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
l Toilets		8	600	4800

These spaces will function as normal restroom spaces for the surrounding areas.

Activities.

Any activities normally associated with restroom use will be assumed to take place in this space.

Spatial Relationships.

These spaces will be spread out by twos throughout the building. This will ensure that there is a restroom nearby when a person needs to use it.

Special Considerations.

Two restrooms will be located near the soup kitchen. There will be nothing to obstruct usage of these restrooms, or any others. Anyone may use these restrooms, including a person who is not using the other areas of the building.

Equipment/Furnishings.

Each restroom will be furnished with toilets. The restrooms designated for men will also be equipped with urinals. There will be sinks for washing up, and soap dispensers to facilitate this. Each restroom will be equipped with paper towel dispensers and hot air hand dryers.

Behavioral Considerations.

Each restroom will have at least one handicap accessible stall. These will have railings and supports to facilitate usage. Each restroom will also be equipped with a baby-changing station for the use of parents with very small children.



Space Name	Capacity	No.Units	NSF/Unit	Total Net Area
 Mechanical		1	3216	3216

This space will be used for pieces of equipment associated with the mechanical systems of the building.

Activities.

There will not be large amounts of activity within this space. When there is activity it will be repairing broken mechanical equipment.

Spatial Relationships.

Special Considerations.

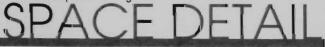
This room will likely be loud. There will be acoustical separation between this space and the surrounding spaces.

Equipment/Furnishings.

There will be mechanical equipment such as a furnace or boiler, and a water heater in this space. This space will also have the circuit breaker in it.

Behavioral Considerations.

There will be pieces of mechanical equipment throughout the building. These pieces of equipment will not be hidden from view, they will be exposed and celebrated as pieces that help the building function.



SpaceName	Capacity	No.Units	NSF/Unit	Total Net Area
Janitorial		3	300	900

These spaces will be used for storage of cleaning supplies.

Activities.

The main activities in this space will be retrieving and returning supplies and filling buckets.

Spatial Relationships.

These spaces will be distributed throughout the building so that cleaning supplies are always nearby in case of a cleaning emergency such as a spill.

Special Considerations.

Since these spaces will be distributed throughout the building they will also have first aid supplies in them. This will allow a person to locate supplies quickly in case of a medical emergency.

Equipment/Furnishings.

There will be shelves for storing supplies. There will also be a mop sink and drain so that the people cleaning are able to mop with clean water. There will also be a hand sink so that the people cleaning will be able to wash their hands before leaving the room, so that there will be no need to walk around with cleaner on their hands.

Behavioral Considerations.

People will not stay in these spaces for long periods of time, they will retrieve or return supplies and then they will leave this space.

SPACE DETAIL

Space Name	Capacity (automobiles)	No.Units	NSF/Unit	Total Net Area
Parking	180	1	32400	32400

This space will be used for the storage and access of automobiles.

Activities.

People will drive their automobiles to the building. They will drive them to this space and leave them there. The automobiles will be stored in this space until the people retrieve them.

Spatial Relationships.

This space will be located near the welcoming area. There will be access from this space to the celebration and mourning spaces so that people using those spaces may locate them easily.

Special Considerations.

There will be stairs and elevators in this space so that people are able to access the building easily.

Equipment/Furnishings.

There will be no furnishings in this space.

Behavioral Considerations.

People will not spend large amounts of time in this space. The space will have natural light so that people are not disoriented when they are attempting to locate their automobiles.

The building will be supported by a steel column and open-web joist structural system. This system was chosen because of its adaptability. Open-web steel joists offer a large range of spanning capabilities. Due to the unique nature of each space, having access to a large range of spanning capabilities was preferable. The steel system of the building was combined with a concrete system used in the lower level parking plan. Due to the location of the parking the lower level required a system that could span long distances. Therefore the lower level is a concrete single T system with hollow core slabs on the secondary spans. This system allows long spans while also providing places to create openings to floors above. It was necessary to create openings to the upper floors and specifically to the main entrance courtyard. Using this system allowed for places to create entry sequences that began at the parking level.

There are three separate mechanical systems within the building. The celebration hall, because of its main function as a banquet facility, has its own mechanical system. A small all-air system is used in this space. The space has its own mechanical room located in the lower level of the building. The remainder of the building was split into two separate systems due to its linear nature. The presence of the soup kitchen, resale shop and movement spaces made it necessary to choose a large volume all-air system for that part of the building. The remainder of the building, not having such specific requirements, uses a four pipe hot water system. The large mechanical rooms needed for this and the large volume air system are both located on the lower level.

SYSTEMS SUMMARY

One of the major themes of this thesis process has been the qualities of a spiritual space. When beginning the design process the main objective was to help define and clarify these qualities. To begin a list was created of a number of spiritual qualities including the use of light and the consideration of the materiality of a space. These qualities were many and varied, thus requiring them to be explored at a number of different levels. Accordingly a number of different methods of exploration were included in this phase of the design. These included gestural models, collage drawings and small, drafted drawings of building portions.

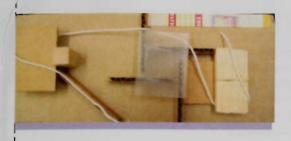
Gestural models were used as a way to consider the relationship between the building and the surrounding site. This consideration was very important because the thesis seeks to create a community. Since a community extends to many people it became quite important that the building had a connection to the surrounding site. Each of the gestural models created explored the ideas of materiality, proportion and response to site conditions. As the gestural models progress the building height comes to echo the height of the surrounding buildings. The buildings surrounding the chosen site are all of approximately the same height. For the most part the building respond directly to this, though at some points the building is much taller or much shorter than the surrounding buildings. As the question of building height was developing the question of entry was also developing. This led to another series of gestural models exploring the possibilities of entry into the site and the building.



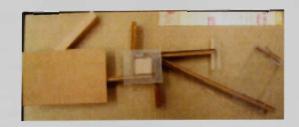


The gestural models were used to explore the site conditions as well as questions of the nature of the building. One very important question was 'should the building have an expressed center?' Through the gestural models it became apparent that due to the nature of the community involved the building should not have a center at all. A center would indicate that there was one favored view of the world, which would undermine the basis of the spiritual community being created. After this was determined there was no more attempt to create a center in the building. It was determined that a center would not be detrimental to project if one found its way in, but no expressed center would be included.

DESIGN: SPRINGBOARD









The gestural models were used to create the next step in the exploration process. As a method of further exploring the relationships set out in the gestures, a section was taken of each model. As a way of moving away from the gestural models these sections were reinterpreted. Collages were made of each of the drawings which attempted to show a quality of spiritual space. Light was a very important consideration in this stage of the design. A number of the collage drawings show the qualities of light being explored in the project. The collage drawings also show the relationships between spaces without actually showing the room that achieves those qualities. The collage drawings themselves seemed to achieve a spiritual quality that was hard to pinpoint. Becuase the spaces were not actually defined they had a myterious quality about them that led one to feel the spirituality of these spaces.







DESIGN: SPRINGBOARD

In order to understand better the architecture of the spaces created in the collage drawings another step was added to the process. Each of the collage drawings was reinterpreted into a more architectural drawing. The drawings were not representative of complete buildings, but rather were mainly views of small portions of the building which represented individual rooms or small collections of rooms. These drawings attempt to capture the qualities of the collage drawings in a different, more architectural manner. By changing the construction technique and the material palate of the drawings, a completely different type of spiritual space began to emerge.



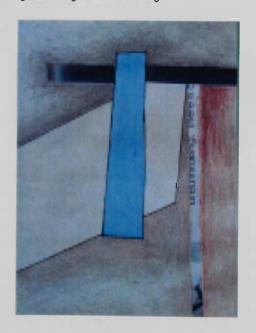




Gestural Model- Collage Drawing- Pencil Drawing







DESIGN: SPRINGBOARD

As the collage and pencil drawings began to suggest spacial qualities, the need to shift to more concrete design emerged. The collage and pencil drawings along with the list of spiritual qualities became central to the exploration of spaces in the building. The individual spaces within the building came to be recognized as the spaces where the spirituality of the building would really be expressed. To respond to this a series of vignette drawings were created to explore the individual rooms within the building. Each of the rooms drew ideas and spatial qualities from a collage or pencil drawing already created. As the rooms began to take shape it became apparent that the list of spiritual qualities would not suffice as a design tool. The list, as with many lists, tended to be restrictive. The list was neither comprehensive nor completely accurate. The question regarding the list then became, "is it necessary to include all of the qualities in order to make a spiritual space?" 'The answer to this question was no, it is not necessary to include all the qualities in a room to make it spiritual, it was however important to include each of the qualities somewhere in the building to make the overall space spiritual. This method used to create a new set of drawings and models.





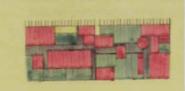


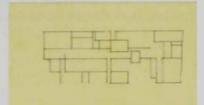
In this stage each room embodies one or two spiritual ideas in a concrete architectural manner. On a limited scale the overall building was also explored. The relationship between spaces was considered as was the relationship between interior and exterior spaces. Unfortunately, these relationships were explored mainly in plan and without considering the surrounding context a great deal. while the relationships between spaces in plan was fairly well though out, the relationship to the site and the surrounding neighborhood was not properly considered. This led to the building being considered as an isolated entity and not part of the surrounding community. This, as discussed previously, was contrary to one of the main concerns of the thesis question, namely creating community.

DESIGN: SCHEMATIC

The individual rooms, while progressing fairly well were also raising many new questions. Chief among these was the question of which qualities from the list should be applied to which rooms. There was nothing to indicate that one quality would suit a purpose better than another or that one purpose was more suited to a certain quality than another. This led in many cases to the room being arbitrary in its character. From this came the conclusion that the







qualities that make a space should not be listed. There is a more natural way to create a spiritual space.

When designing the mourning space it became apparent that designing to commonalities was really the best option. the design of the mourning space is based around ideas common to all spiritual traditions. Since the thesis addresses commonality within spiritual tradition this seems to be the best way to design the spaces. When this approach is taken each space is given a unique character that responds to the function of the room. This creates a space where function is inherent, thereby leaving the spirit of the space to make itself felt.

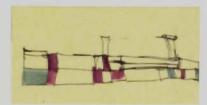
A number of room studies were completed using a new method. Previously the first design question was, "which qualities should be applied to this space?" When considering a space the first question became, "what is this space about, what is the purpose of the space?" The list of spiritual qualities had made it easy to forget or ignore the important characteristics of the space itself. By removing the list from consideration the characteristics of the rooms came back into focus. It became possible to design specifically for one function. It also became apparent, after using this method for a period, that it was not necessary to have a list of qualities in order to create a spiritual space. It became apparent that when a a space was designed to meet its specific functions the spiritual qualities came to be in the space naturally. This led to the conclusion that the spirituality of a space is expressed trough the spatial qualities present when the room has been designed specifically for its purpose.

At this point in the process the overall building was revisited. There was nothing, either literally or figuratively, holding the building together. The overall purpose of the building needed to be determined. What was it that would bring people to this building? What would cause someone to move from one space to another. At this point it was determined that the building was really about exploration. People would be exploring the building, their community and their spirituality. Because of this determination it became necessary to have an element that would move people through the building.

DESIGN: SCHEMATIC

In order to move people through the building the proclamation space expanded from one fairly small room to become the circulation system for the entire building. Since the proclamation area was essentially a display space it provided the interest that could move people through the building. Because of its increased importance the proclamation space became the center of focus in the design process. The techtonics and functional aspects of the space were considered in great detail. The result of this focused attention is that the proclamation space is fairly well thought out techtonically and functionally.











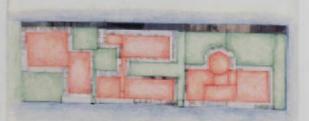


DESIGN: SCHEMATIC

When the focus of attention was on the proclamation space and its relationship to the remainder of the building other aspects of design were neglected. The relationship between the building and the surrounding context was one element that had been badly neglected. As stated above the relationship to the surrounding context was a very important part of designing for the surrounding community. Several design decisions regarding site responsiveness were made at this point. Program elements were placed in locations that responded to the road condition and the setback line used in the surrounding residential units was used. An interrupted but complete setback line was used to respond to the surrounding buildings. There were points that this line was broken by elements jutting out towards the street. This element was considered important as a means of distinguishing the community center from the surrounding residential buildings.



At this point it became necessary to focus on a number of different aspect of the building at once. Plan, section and elevation were all considered as was the three dimensional aspect of the building, which was explored through axonometric drawings and models. Using a method that switched between two and three dimensional forms of representation the building became more defined. Individual room studies were also picked up again at this point. The building progressed and because ever more defined using a variety of scales and representations. As the design development phase wrapped up some consideration such as overall window schemes were considered within the context of the overall building and the room studies.



DESIGN: DEVELOPMENT

This plan and section show the very basic ideas of the design. In the plan, the yellow area representing the proclamation space is continuous, but other programmatic elements intrude upon it at some points. The section shows how some spaces are single story, while others extend vertically through the building.

These drawings were used as a way to transfer from one design phase to another. Creating the building in collage allowed more focused attention on issues that are presented in thise drawings.



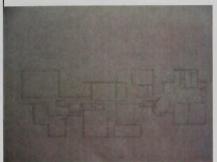
Collage Plan



Collage Section



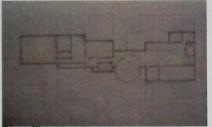
Plan-Parking



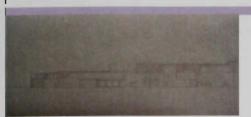
Plan-Floor 1



Plan-Floor 2



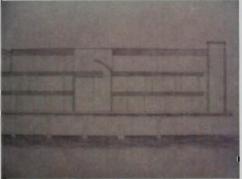
Plan-Floor 3



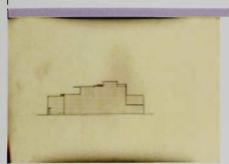
Elevation-Palmer



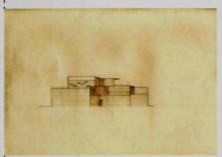
Elevation-Alley



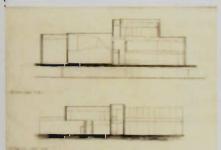
Section-John R to Brush



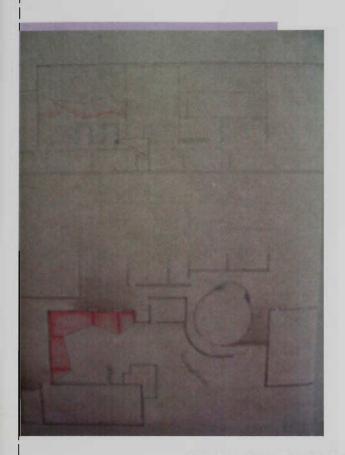
Elevation-Brush



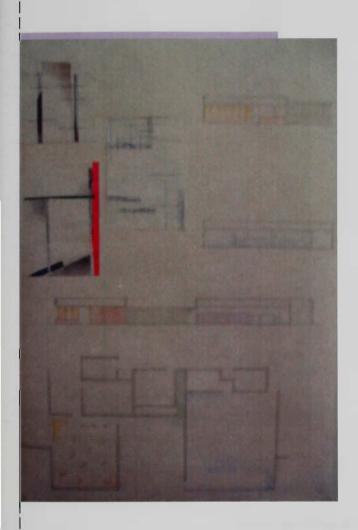
Elevation-John R



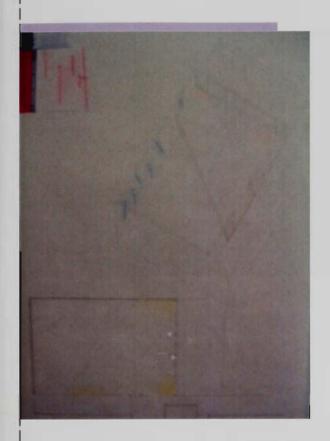
Sections-Palmer to Alley



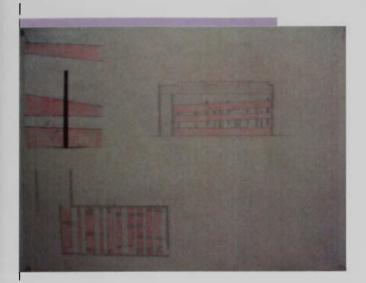
The entry sequence is very important in many relgious traditions. In some cases it represents a leaving of the old and an embracing of the new. This entry sequence begins either in the street or at the parking level below. The person enters either from the street directly into the courtyard or from the parking up a set of stairs into the courtyard. The person then has a number of options. There are spots in the main entry courtyard that are sheltered from the rest, providing quiet spots for reflection. The entrance to the mourning space is also located in this area, which gives the person more options about where to go. Should they choose to go directly into the building they will find themselves in the middle of the proclamation area. Since tey are in the middle they can choose their course. They will truly be exploring the building, and their spirituality.



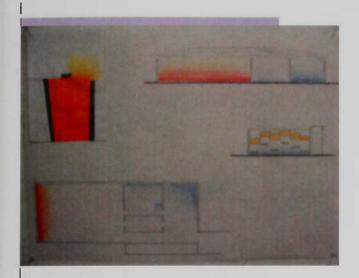
The soup kitchen and resale shop are meant to provide services to people who desperately need them. Rather than these spaces being designed as charity spaces, they are designed as a restaurant and a botique, respectively. The soup kitchen provides round tables, large and small where people can eat in groups or alone, whichever their preference. The resae ship is arranged as a botique, with well spaced racks and changing and seating areas. These spaces are meant to make people feel welcome.



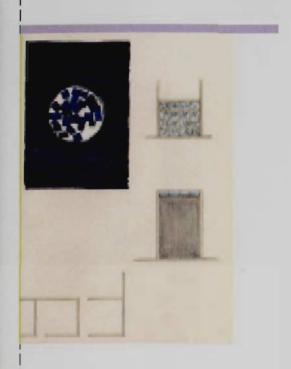
Because celebrations are so personal to people and becuase decorating is often an important part of a celebration, the Hall has been designed as a blank palatte. Two of the walls are completely glass, which allows exterior views in the space. The windows on the other two wals and the mazzanie level are cut on angles to give a sense of festivity and excitement to the space.



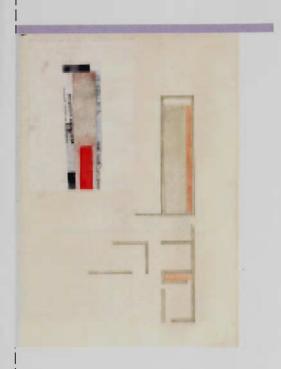
As an interior reflection space the main focus of this room is to manipulate light so it becomes an object for reflection. The walls of the space have vertical windows placed at various heights. There are diagonal panels on the interior walls that cover portions of the windows, thus filtering out portions of light while still allowing some light in. The ceiling uses an inverse concept. The skylights are cut at diagonals while the ceiling panels are straight.



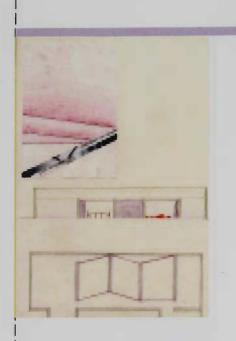
The music space was designed to express the nature of music. The design is based on the juxtaposition of the scientific nature and the free-flowing sound of music. The ease of the room is very rigid and straight. The room draws the eye up to the top with its free-flowing metal ceiling. The windows in the room echo the height of the ceiling at the edges. The walls of the space have color applied to them to indicate type and tempo of music.



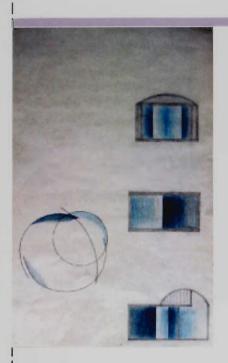
The main goal of this room is to manipulate light in such a way that it becomes an object for reflection. The walls of the room are dim, gray, almost colorless one could say. The ceiling opens up to the sky to provide light to the room. In order to mediate between the light and people a screen has been placed over the skylights. This screen will allow light to shift and change in the room.



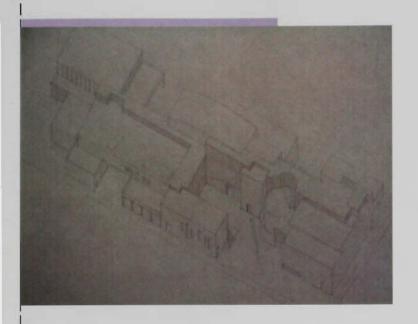
As a reflection room the main purpose of this space is to shape light into an object of reflection. The space is extremely tall and very skinny. The only light in the space, day and night, comes from the windows at the top of the walls, which cover the entire perimeter of the room. This room is meant to be dim with a splash of bright color at exactly the right time. The room is meant to be dim because in order to properly appreciate light one must experience the lack of light.



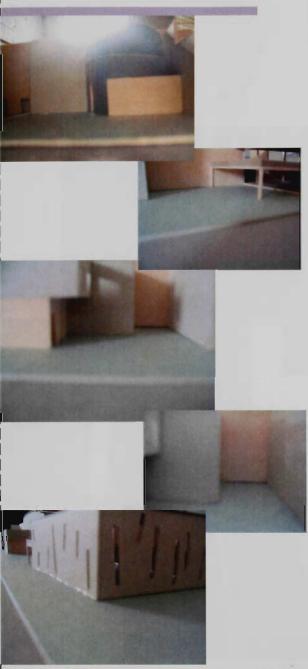
The adult classrooms were designed to be four separate spaces within one larger space. Each of the small spaces is unique from the others. Due to the possible need for privacy within the classroom there are curtains that can be stretched across the doorways in the space. The classroom area also provides a common space that looks over the reflection pond, providing the opportunity for an indoor reflection area that uses water as its driving source.



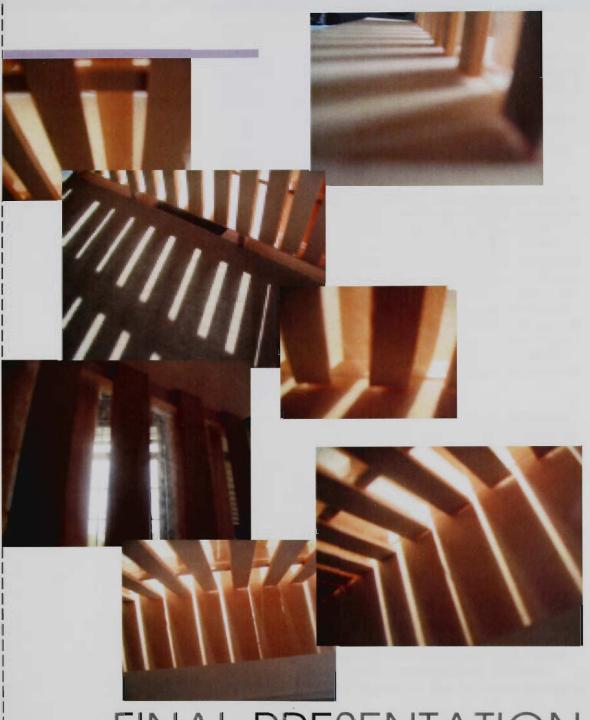
The mourning space was designed with common spirituality in mind. Almost all faith traditions that can be found in the world believe in some sort of life after death. The idea of life after death was translated into a continuum of life. Circles and arcs are used in this space to suggest the continuing journey each person is on. The intersecting of the circles shows the intersecting of all things.



FINAL PRESENTATION



FINAL PRESENTATION



FINAL PRESENTATION

This thesis explores the possibility of creating a community space that will bring people of diverse spiritual backgrounds together. Bringing people together creates opportunities for people to interact with each other which will allow people to understand those things that are common to every person. Through this understanding people could begin to understand other people better and begin to understand their own spirituality better.

The intent of this project has always been very clear. The architectural proposal would need to provide the opportunity for people to come together in diversity and celebrate that diversity. The early processes, research and thesis development, were engaged as methods of furthering the exploration. These early processes, especially the research aspect of the project was instrumental in creating the current product. Research into faith groups outside of Christianity helped define and refine the process. This research also reaffirmed that the project was possible.

During the early phases of the project there was much discussion about a program that would suit this project. Worship space figured prominently in these discussions. Originally Worship space was not included in the program because it was considered too restricted in scope. A worship space was seen as a space used by one faith group, which would exclude all other faith groups since they did not worship in the same way. However, as the project progressed the worship came to be seen as something that could be celebrated as a uniting element. If a space could be designed where any group could worship no matter their religion there may be a way to include a worship space in the project. When the time came to develop the program statement a worship space was included. Other functions were included such as spaces for education and reflection, but at that time the worship space was the center of attention.

As the research and development phases continued more programmatic elements were added to the project. An undefined outreach program was added, as were many small programmatic elements. With the worship space receiving most of the attention given to the project the other spaces remained as undefined as they had begun, and due to the complicated nature of the worship space it too remained undefined qualitatively. Interestingly, with the addition of the outreach program, the project began moving back toward one of the original ideas behind it, which had to do with religious aspects of public service. The project had been moving in a different direction, but with the addition of outreach programs, even though they were quite undefined, planted a seed for a later shift in thinking.

As the design process started there was much concern about the design of the worship space. As the springboard process progressed there was no development of that aspect of the program. There was however, much development of the relationship between building parts and the relationship between the building and the surrounding context. A number of undefined spiritual qualities were also emerging from the collage drawings



and in a more limited manner from the pencil drawings that followed them. So, while design was progressing, the determination of spiritual characteristics was coming along slowly. Finally, using research, especially precedent studies, and the design work completed at that time a list was made of characteristics of spiritual architecture.

At this time the springboard process was wrapping up and shifting to schematic design. Due to the lack of progress and definition on the worship space that part of the program was removed. Through discoveries made during the springboard process it was determined that the focus of the problem should shift. The project had become very concerned with religion, that is uniting different religious groups rather than being open to any spiritual traditions. By removing the worship space and shifting the focus of the thesis the project was able to move more towards a spiritual community rather than a religious congregation.

As schematic design progressed it became clear that the method of determining spiritual space was not adequate. While the list that was developed provided some spiritual qualities it in no way accounted for all of the qualities that can be found in any spiritual space. It also became clear that a space could be spiritual without having all of the qualities listed. This led to questions about how to deal with the list. Should it be considered the list that would be worked with on this project, or should it be considered a work in progress that changed with every new piece of information received. In either case the assignment of qualities to a given space was entirely arbitrary. There was no way to determine which space should have which qualities in order to be spiritual. Because of this and other complications, the list was abandoned as a design tool during the late schematic and early design development phases.

During the schematic design phase the individual spaces of the program were considered. A number of these spaces were designed without the context of the building, though some were in context. One of these studies, the mourning space, showed that it was not necessary to use a list to determine whether a space would be spiritual. The mourning space was, quite simply, designed to an idea that almost all spiritual traditions in the world share, that of life after death. The space took on a spiritual quality appropriate to it because the main intention of the room was met through the architecture. From that point the design of spaces, and the building itself, was based on ideas of commonality. In many cases the ideal function of a room was determined and the space was designed to reflect that purpose.

After this point design progressed fairly smoothly, though there were still some problems with site context. The surrounding context, all residential buildings, was not considered in large portions of the design work. This led to a very developed building proposal that did not seem to have any connection to the surrounding conditions. This problem was rectified



during the design development phase however. A number of changes were made so that the building responded more to the site, which was one of the important pieces of the design.

Overall the process had a large impact on the direction of the project. There were a number of times when the decision was made to move in a different direction because of knowledge gained through the design or research process. There are a number of steps that still need to be taken to further the project. First, continuing the research on the topic would be essential. There is much untapped knowledge on the topic. Had some of this knowledge been incorporated the project would have had an entirely different feel. Also, much of the investigation focused on the use of light as a material. While this was a very worthwhile topic to pursue, there are infinite other "materials" to be explored, especially in their connection to spiritual design. These steps, if taken, would not be a step backward, but would be a step forward, with the hop of gaining more knowledge and a better understanding of the topic at hand.

CONCLUSION

Project Summary

1. Norberg-Schulz 13

Thesis Paper

- 1. Christ-Janer 122
- 2. Bianca 24-25
- 3. Bianca 24
- 4. Blake 45
- 5. Shear 43
- Blake viii
- 7. Shear 42
- 8. Blake 45
- 9. Norberg-Schulz 75
- 10. Brannach 5
- 11. Thirty 29c
- 12. Mills 32
- 13. Bieler 78
- 14. Christ-Janer 123
- 15. Olson 41
- 16. Hinshaw 51
- 17. Hillenbrand 126
- 18. Kliment 93
- 19. Frishman 247
- 20. Hillenbrand 32
- 21. Frishman 40-41
- 22. Dahinden 73
- 23. Steele 71
- 24. Steele 71
- 25. Hillenbrand 128
- 26. Barrie 7
- 27. Dahinden 57
- 28. Baker 5
- 29. Bianca 23
- 30. Blake 87
- 31. Shear 4
- 32. Norberg-Schulz 72
- 33. White 27
- 34. Bianca 23
- Norberg-Schulz 111

- 36. Bianca 23
- 37. Shear 4
- 38. Lewis 114
- 39. Norberg-Schulz 13
- 40. Norberg-Schulz 31
- 41. Norberg-Schulz 70
- 42. Norberg-Schulz 60

St. Ignatius

- 1. Hinshaw 51
- 2. LeCuyer 30
- Architectural Design 47
- 4. LeCuyer 32
- 5. Olson 41
- 6. LeCuyer 32
- 7. Hinshaw 51
- 8. Architectural Design 47

Kol Ami

- 1. Lotus 99
- 2. Chow 56
- 3. Lotus 97
- Chow 56
 Chow 54

Cultural Center

- 1. Bianca 102
- Dahinden 76
- 3. Kliment 93

Laban

- 1. Ried 67
- 2. Wang 180
- 3. Ryan 132
- Ryan 130
- 5. Cohn
- 6. Ryan 132
- 7. Cohn

END NOTES

Cranbrook

- 1. Gallagher 57-58
- 2. Gallagher 57-58
- 3. Gallagher 57-58
- 4. Ingersoll 81
- 5. Ingersoll 81
- 6. Ingersoll 81

Carpenter

- 1. Carpenter 115
- 2. Carpenter 115
- 3. Carpenter 115
- 4. Carpenter 122
- 5. Carpenter 122
- 6. Carpenter 120
- Carpenter 120

Archaeological Museum

- 1. Ingersoll 91
- 2. Ingersoll 92



Antonelli, Paola. "Piu' luce colrata! James Carpenter, architetto di cristallo." Abitare. March 1993: 200-207.

Article and photos of various projects.

Arcidi, Philip. "Suspended emanation." Architecture. September 1998: 136-139.

Article and photos of various projects.

Barreneche, Raul A. "Building in Glass." Architecture. December 1996: 107-115.

Article and photos of various projects.

Barrie, Thomas. Spiritual Path, Sacred Place: Myth, Ritual, and Meaning in Architecture. Boston: Shambhala, 1996.

Investigation of the relationship between spiritual path and practice and the physical space allotted to these. Special attention to entry sequences in ancient and modern architecture.

Bianca, Stefano. <u>Urban Form in the Arab World: Past and Present</u>. London: Thames & Hudson Ltd., 2000.

Study of urban planning in the Arab (Islamic) world.

Bieler, Andre. Architecture in Worship: The Christian Place of Worship. Philadelphia: The Westminster Press, 1965.

Discussion of the relationship between the theology of worship and the physical space of the church throughout history.

Blake, Peter. An American Synagogue For Today and Tomorrow: A Guide Book to Synagogue Design and Construction. New York: The Union of American Hebrew Congregations, 1954.

Discussion of basic principles governing synagogue design.

Bosley, Edward R. <u>Architecture in Detail: First Church of Christ, Scientist, Berkeley: Bernard Maybeck.</u> London: Phaidon Press Ltd., 1994. Case study of the First Church of Christ Scientist, Berkeley by Bernard Maybeck.

Brannach, Frank. <u>Church Architecture: Building for a Living Faith</u>. Milwaukee: The Bruce Publishing Company, 1932.

Discussion of many different types of churches throughout history. Useful in discovering patterns in the architecture of the church.

Bruder, Judith. <u>Convergence: A Reconciliation of Judaism and Christianity in the Life of One Woman</u>. New York: Doubleday, 1993.

Background information on Judaism and Christianity. The ways they work together and they don't work together.

Bussel, Abby. "Will Power." Progressive Architecture July 1995: 80-89. Pictures of Kol Ami Temple.

Chow, Phoebe. "Elemental Abstraction." Architectural Review November 1997: 54-57.

Article and pictures of St. Ignatius Chapel.

- Christ-Janer, Albert, and Mary Mix Foley. <u>Modern Church Architecture: a Guide to the Form and Spirit of 20th Century Religious Buildings</u>. New York: McGraw-Hill Book Company, Inc., 1962.
- Case Studies of 40 contemporary church designs. Includes examples from the following denominations: Catholic, Lutheran, Episcopalian, Methodist, Presbyterian, Reformed, Congregational, Baptist, Christian Science Unitarian, and Disciples of Christ.
- Day, Christopher. <u>Places of the Soul</u>. Oxford: The Architectural Press, 2004. Special attention to four chapters focusing on spirituality in design and various aspects of urban design.
- Dahinden, Justus. New Trends in Church Architecture. New York: Universe Books, Inc., 1967.
- Focus on three chapters: "the church building in the community and its conformity to it," "the church building and its significance," and church building as a architectonic structural form." The church and its relationship to the city.
- Dean, Andrea Oppenheimer, and Timothy Hursley. <u>Rural Studio: Samuel Mockbee and an Architecture of Decency.</u> New York: Princeton Press, 2002.

Case Study of Yancey Chapel.

- Frishman, Martin, and Hasan-Uddin Khan. <u>The Mosque</u>. London: Thames & Hudson Ltd., 1994.
- Discussion of the form of a mosque. Also the contemporary mosque and its relationship to Muslim society today. Chapter focusing on the metamorphosis of the sacred.
- Gallagher, John. "Cranbrook's soul intact with help from Moneo, Holl, Williams and Tsien." <u>Architectural Record</u> October 2000:57-58[60]. Article and photos of Cranbrook Institute of Science.
- Gruber, Samuel D. <u>American Synagogues: a Century of Architecture and Jewish Community</u>. New York: Rizzoli, 2003.
- Example of buildings designed through cooperation between the design and decoration.
- Hillenbrand, Robert. <u>Islamic Architecture: Form, function and meaning</u>. New York: Columbia University Press, 1994.
- Discussion of different types of Islamic Architecture including the mosque, the madrasa and the mausoleum. Requirements for building each.

Hinshaw, Mark. "Holy Holl in Seattle." <u>Architecture</u> May 1997: 51. Article and pictures of St. Ignatius Chapel.

Holl, Steven. "Steven Holl: ampliamento / addition, Cranbrook Institute of Science, Bloomfield Hills, Michigan (1996-1999)." <u>Lotus International</u> 1999: 72-81.

Article and pictures of Cranbrook Institute of Science.

Ingersoll, Richard. "Between typology and fetish." Architecture March 1999: [81]-[89].

Article and photos of Cranbrook Institute of Science.

Ingersoll, Richard. "Light boxes." Architecture. October 1997: [90]-101. Article and photos of Roman Archaeological Site.

Kuban, Doðan. <u>Iconography of Religions XXII, 2: Muslim Religious Architecture</u>. Leiden: E.J. Brill, 1974.

The history of the mosque. Use for determining main ideas behind mosque.

LeCuyer, Annette. "Congregation of Light." Architectural Review 202.1206 (1997): 26-33.

Article and pictures of St. Ignatius Chapel.

Mills, Edward D. <u>The Modern Church</u>. New York: Frederick A. Praeger, 1956. Focusing on chapter entitled "The Church and the Community." Also includes discussion of church history and practical considerations of church building.

Norberg-Schulz, Christian. <u>The Concept of Dwelling: On the Way to Figurative Architecture</u>. New York: Electa/Rizzoli, 1984.

Theories on urban design. Some discussion of spirituality in design. Also some references to specific religious architectural practices.

Olson, Sheri. "What is sacred space? Steven Holl's Chapel of St. Ignatius answers with texture, light and color." Architectural record 185.7 (1997): 40-53.

Article and pictures of St. Ignatius Chapel.

Shear, AIA, John Know, ed. <u>Religious Buildings for Today</u>. New York: Examples of buildings designed through cooperation between the design team and the church officials in charge of the building process.

Sovik, E.A. <u>Architecture for Worship</u>. Minneapolis: Augsburg Publishing House, 1973.

Discussion on building of protestant churches. Discussion on history and tradition in church architecture.

Steele, James. An Architecture for People: The Complete Works of Hassan Fathy. London: Thames & Hudson Ltd., 1997.

Study of the work of Hassan Fathy. Islamic architecture, not specifically religious in nature.

Swerling, Gail. "Kol Ami Synagogue." Lotus International 2000:96-102. Article and pictures of Kol Ami Temple.

Thirty, Paul, Richard M. Bennet , and Henry L. Kamphoefner. <u>Churches & Temples</u>. New York: Reinhold Publishing Corporation, 1953.

Includes the architectural background of Catholic and Protestant churches and the Synagogue. Also includes the ritualistic requirements of each as well as examples.

White, James F. <u>Protestant Worship and Church Architecture</u>. New York: Oxford University Press, 1964.

Discussion of the basic principles involved in designing a protestant church.

"James Carpenter." A+U: architecture and urbanism. January 1997: 110-115. Article and photos of various projects.

"Peter Zumthor.". Arkitektur: the Swedish review of architecture. August 1997: 24-29.

Article and photos of Roman Archaeological Site.

"Steven Holl." Architectural Design 67.3-4 (1997): 46-49. Article and pictures of St. Ignatius Chapel.