an architectural thesis
by
Jay A. Bieszke

SACRED PLACES

“A Place for Meditation and Introspection”

Indianapolis, Indiana

Ball State University
College of Architecture and Planning
1996-1997
an architectural thesis
by
Jay A. Bieszke
completed and submitted as a requirement for
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Thesis Committee Chair: Professor Andrew Seager
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"The question is not, How can we make art religious? Nor is it, When or how does art become religious? This would be too external, as though holiness and beauty were two ingredients which can be mixed together according to certain principles."

-Van Der Leeuw

The sacred has been described in many different ways, but is most accepted as separation and the inability to become profane. It is the order in the world of chaos. The occasional experience of "the sacred" gives focus to our lives. When we look at how the space affects the individual, it is clear that "the sacred" has a close relationship, with what psychologist consider a "heightened state of awareness." The following is a search for the universals of "sacred space." It downplays religious affiliation in search for those things common to all humanity.

Part I. is a look at how architectural constructs might play a role in creating our experience. Through study and analysis of existing examples of "sacred space" and development of abstract studies, I attempted to find spaces and ideas that were universal in nature. Part of this included studying nondenominational spaces and nonreligious facilities. Remaining in the abstract, it seemed completely possible that architecture could create the sense of the sacred.

Part II. is the program that I laid out for the "Sacred Spaces" facility. The program was a look on a large scale at how the experience of "the sacred" could be part of the everyday environment. The facility would use the idea of sacred space as a mode of healing for the individual. This resulted in a proposal of a 39, 790 square foot living/learning facility for downtown Indianapolis, Indiana.

Part III. gave context to the exploration. Instead of working in an abstract manner, I now gave site and context to the studies. For development, a small part of the facility was selected. Here, a range of sacred space was explored including: an individual space, a small group space, and a large group space. This was an attempt to look at different scales and different materials as a means of experiencing "the sacred."
this book is dedicated to my wife
who waited patiently for me to
come home...
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The light is only allowed to trickle through the branches. Most of your day is spent within the depths. Your surroundings are visible, but left without detail in the half-lit air. Your movement is constricted between the trees and downed branches. The inner forest is a labyrinth creating a spacial sense of confusion. You make your way through indistinguishable amounts of forest growth. Suddenly, you find your surroundings transformed. With only two steps, you have removed yourself from the forest. The sun beats down on your tired body. You can see farther now, and things here are familiar. The thick growth of the forest has yielded to allow this space. The space has become a womb: it is your protection and your warmth.

Sacred spaces are among the oldest within human existence. Some of the very first structures built were monuments and memorials to the deceased. In the ever-changing world of the nomad, these monuments were one of the first constants. The builder of such a structure would have created it out of love for the deceased. The monument also marked the human ability to create.

As technology made advances, it became possible to put a roof on the structure, add ornamentation, and build it bigger and better. This monument evolved, becoming a house of God. The creation of the space was modeled after what the builders had experienced before. They were very much like the clearing in the woods.

The human race has constructed a "world" that is completely foreign to the 'natural.' These structures have an impact on our conscious and subconscious states of mind. But, does the architecture invoke the experience, or does the human fabricate the emotion through his own "soul, heart, and being" (Bachelard xviii)? This is a little like asking which came first, the chicken or the egg? The answer would have to be that both are correct. Since architecture has become an integrated part of our lives, there are no true boundaries between what is solely architectural and solely "natural thought." Architecturally, it is possible for a human to enter a space that he knows nothing about, and still experience the sacred within. The human mind can create the "sacred" experience through mythology, but the closeness of architecture to our lives makes it almost impossible to separate the emotion from the forms themselves.

In some ways, we have unconsciously developed responses to the built forms. Architecture that does not have a sacred sense may develop this sense
"Architecture is a primal element of human existence; it has deep connections to the sacred powers of life. Except in the most benign climates, we need a roof for shelter from the sun and rain, walls to insulate us from the cold, and windows and doors to gain light and air. Most of us spend our entire lives interacting with architecture and designed landscapes. We are born in hospitals, we live in houses and apartments, study in schools, play in parks, work in offices, worship in churches, and are buried among the neat rows in cemeteries. Because of the essential role that buildings and cities play in shaping human experience, architecture can be embraced as a basic constituent of mind/body wholeness, a fundamental aspect of dwelling in sacredness."

-Lawlor

over time. The activities within are a major part of the experience. A gym that serves as a worship space on Sunday can, over time, develop a sense of sacredness. Perceptions are related to human sentiment. The result being; what we view as sacred becomes sacred. This "sense" is less desirable because it exists only as a mental construct and it does not involve the physical experience.

Sacred space can also be created by the events that take place. Although this is not the primary focus of the thesis, it should be acknowledged as an additional way of creating a sacred place. The differences between this, and the architecture created the sense should be considered in the creation of a space. It is the goal to create "the sacred" through the architecture where the experience and mental constructs are derived from the forms.

Gerardus Van der Leeuw said, "He who sees beauty experiences beauty." Likewise, I propose that he who experiences sacred space experiences "the sacred." Entering a space with such a definition, man is overwhelmed with a sense. The exact sense created by the sacred is mysterious; for some, it cannot be described except by the feelings of fear and attraction. If man can create the sacred, then he can create it to serve a purpose. An architecture based on the principals of the sacred combined with the human consciousness can help the individual discover his inner self.

Sacred spaces give a release for emotional imbalance. Through architecture, we can use the impact of "the sacred" to positively influence the subconscious. It is within this space where we can get in touch with our inner feelings. The sacred space allows us to leave the physical world and enter a world that is beyond materiality. In this place we are awakened in spirit. The intent of the architecture is to help the individual
"Thus arose those miracles of skill and worship, that great art, out of the deepest need for worship; thus arose those houses of God which wanted to comprehend the entire world, in which everything was symbol, beginning with Adam and Eve at the portal, and going to the Last Judgement at the far end. Therefore, architecture, which freezes motion as no other art is able to do, can hold fast the lines and forms of many cultures: "The art which was once called a symphony in stone gave innumerable centuries a clearly comprehended form. Therefore, architecture in that century which knows no fixed forms, no pure lines, in that century in which we were born, was doomed to break down completely."

-Van Der Leeuw

discover an altered state of consciousness. Although traditionally connected to the religious "the sacred" is about the human awareness and can be used to create a space that is meditative; a healing space.

"The sacred" will involve a space which aids in the discovery of the state of "objective consciousness." The space will evoke the sense on the sacred; giving the individual a path to examine and understand "self."

Architecture can use the idea of sacred space to radically change the conscious state of the individual. According to Daly C. King, psychologists theorize about a state of consciousness where the view of the cosmic world is understood the same as we understand "self." He feels that in this state, events are viewed "actively, directly, and correctly, not through mental constructs, or hypothetical abstractions." This is viewed as the optimal state for human experience. To an extent, we achieve this through experience of the sacred.

The human body is constantly at odds with itself, and the emotional experience is in continuous flux. The mind runs through streams of thoughts; each having limited relationship to the preceding one. Although we may never have complete understanding how each thought evolves, the environment has an influence on these "streams." Sometimes, a direct connection with the architecture is established, and the mind is at ease. It is at this point, which architecture can transcend the physical boundaries and create a sense of otherworldliness.

In Places of the Soul, Christopher Day said, "Healing is a process that can only take place within ourselves, but this process can be triggered and supported by things and actions outside us." When a structure is able to help the person block out the "noise" of the profane world, it ventures into the sacred. It is
"Sacred space is a space that is transparent to transcendence, and eberthing within such a space furnishes a base for meditation. When you enter through the door, eberthing within that space is symbolic, the whole world is mythologized.
To live in a sacred space is to live in a symbolic environment where spiritual life is possible, where eberthing around you speaks of the exaltation of the spirit.
This is a place where you can simply experience and bring forth what you are and what you might be. This is the place of creative incubation. At first you might find that nothing happens here. But if you have a sacred place and use it, something eventually might happen. Your sacred space is where you find yourself again and again."
-Joseph Campbell

when the chaos of the outside is removed that the mind can focus on the inner being. In this way, the sacred is experienced as heightened awareness. The otherworldliness benefits the mind and soul. This sort of environment is not created completely by accident. Many designers can accomplish it on command, and do so repeatedly. They combine the right materials to create forms that reach the soul and most inner human feelings.

Countless times throughout architectural history, we have proved that we can use architecture to create awe. I propose this as just one element in the creation of "the sacred." I began this project very curious about two things. First, what are the limits of architecture in the creation of sacred space? I wanted to explore the ideas of architecture alone as a means of reaching "the sacred." Second, assuming that architecture has the ability to create "the sacred," what elements are important in creating this?
It has been my desire to create a space that is sacred to anyone entering it. There need not be any understanding of the space to experience the sacred. I feel that this is possible because sacred space is able to connect with our inner selves. I believe that this connection extends beyond our physical selves and into a world where we are all very similar. In creating a space that will connect with the soul of the individual, it becomes important to understand how that individual will be perceiving the space. Some potential problems to be expected are cultural and physical biases because Man has few universals. What one culture finds meaningful, another may find ordinary. With this in mind, the space should affect the greatest number of people by removing itself from the "mythology" of the space. The space itself should have meaning. By lacking previous connections and connotations, the space will be able to
"Objects around are perceived, and from them the individual proceeds to contemplation of his own inner being... then inactive meditation is quitted for activity; by the close of the day, man has erected a building from his own inner skin."

-Hegel

create "the sacred" for a broader group of individuals. Historically, churches have been the place for the human to experience the sacred, however the once great architecture has been lost. The current trend is to create a multipurpose space; the result is more like commercial architecture than sacred spaces. User friendly spaces are the concept; places that are inviting, instead of inspiring reverence. As was stated earlier, fear is an essential emotion of the sacred; thus, we have removed it from the architecture worship space. Apparently, money has won the battle over quality of space. The congregation may be out of debt in a shorter amount of time, but do they have the same worship experience? The new church does give the community a place to gather, but it has lost something. By bringing the design of the space into the realm of man (scale, commercialism, multi-functionalism) the sacred is being lost. The members of the congregation must now synthesize the emotions of the sacred through human presence, and do so without the assistance of the architecture.
“Every life needs an altar. It may be in a church or quiet nook, it may be a moment in the day, or a mood of the heart... but somewhere the spiritual life must have its altar. From there, life gains its poise and direction.

-Esther B. York

“Schools began with a man under a tree, who did not know he was a teacher, discussing his realization with a few, who did not know they were students. The students aspired that their sons also listen to such a man. Spaces were erected and the first schools became. It can also be said that the existence-will of school was there even before the circumstances of the man under the tree.”

-Louis Kahn

There is a spectrum of sacred spaces. On one end of the spectrum, there is the space that is completely connected to an experience or mythology. This includes things that have meaning to a culture, but alone may carry no meaning. I believe that these represent a large portion of what we consider “sacred.”

As I already noted, I want the space to speak to everyone. To do this, it is important that the space not rely on myth or the teaching of others. It is my intention to use light, material and form to manipulate the spacial experience. Being in the space creates the experience.

Many cultures educate their young with stories that give meaning to certain items or places. An example is the meaning that a cross has to a Christian. Without education about the object, it would not have the same meaning.

At the other end of the spectrum there is the space that does not require the occupant to understand or know the mythology to experience the sacred. At this end, the space could become almost universal. The experience depends only on the individual’s ability to respond to the elements in the space.

The St. Louis Arch for instance, is much nearer to this end of the spectrum. A visitor to the arch can experience the power of the structure without understanding why. This might be felt by standing under the arch or riding to the top and feeling the sway.

The Statue of Liberty is closer to the mythology end of the spectrum. Understanding why a huge statue of a woman with a torch and a tablet stands in the harbor relies on “knowing.” The size of the statue, and the climb to the top may impress, but the impact depends on knowing the myth.

When recalling a spacial experience, it is difficult to differentiate between what is there in a purely
"Heaven is high, the earth is low; thus the Creative and the Receptive are determined. In correspondence with this difference between low and high, inferior and superior places are established.

Movement and rest have their definite laws; according to these yield firm and yielding lines are differentiated.

Events follow definite trends, each according to its nature. Things are distinguished from one another in definite classes. In this way, good fortune and misfortune come about. In the heavens, phenomena take form; on earth, shapes take form. In this way, change and transformation become manifest."

- I Ching

physical sense, and what is there on a metaphysical level. I attempt to explain this through a model. When you approach the structure, it is purely physical. The observer is then affected by what is experienced within the structure. Upon leaving the structure, a myth or "story" about the experience is developed within the conscious. This myth then affects the experience of any later visits.

We, as humans, can not help constructing these myths because they are our way of understanding what we experience.

Often, we use the myth or experience to make the shift from the profane to the sacred. Experiences within a space have the power to transform a space. To illustrate this, I present four different worship services in Muncie, Indiana. The sacred space of these services is very similar. They rely on what has happen in the space to create a sacred sense. In these spaces, the "sacred space" is less concentrated in a specific part of the space. The sacredness exists throughout the space. All four are using spaces not intended for a worship service, but each one obtains a sense of sacredness.

The first one is "Worship in the Round" at College Avenue Methodist Church. The service is held in a multipurpose space that is, for all intents and purposes, a gymnasium. The seating is folding chairs. Sometimes it faces west and sometimes south. The "altar" consists of a microphone and a small wooden cross on a table. These items only provide the direction of focus. The actual focus of the space is what is happening in the space. It seems as though the emphasis has been placed on what is being said, and not on what is there symbolically. I don't think any less of this service compared to one in a traditional space. It has been transformed by the spirit and emotion of the event. During the service, the space is no longer the gym; or maybe
“The great fire at the beginning of the dawn has sprung aloft, and issuing forth from the darkness has come with radiance. Agni, the bright-bodied, as soon as born fills all dwellings with shining light.

When born, you, O Agni, are the embryo of heaven and earth, beautiful, born about in the plants; variegated, infatine, you disperse the nocturnal gloom; you issue forth roaring loudly from the maternal sources.

...You have ever sustained, Agni, both heaven and earth, as a son supports his parents; come, youngest of the gods, to the presence of those desiring you; Son of strength, bring the gods here.”

-Rig Veda

it is, but it doesn’t really matter.

The second is Abundant Life which is held in Pruis Hall. This service focuses on the college students. There isn’t a church except for the students. Pruis Hall is normally a lecture hall, so the service is like being in an auditorium. The seating arrangement is fixed, and the only additions to the space are the musical instruments placed on the stage. This space seemed less transformed than the others, but I didn’t feel a connection with this particular service. I would guess that it does work well for many people because it has a large congregation and is where many Ball State students choose to attend on a regular basis.

Third is the Muncie Alliance Church. This is an older church that has chosen to become more contemporary in its teaching. The space has pews facing a raised altar. Alterations have been made to make the church less traditional. The baptismal is covered by a projection screen and the altar is jammed full with musical instruments. It seems that the traditions have been given up for the importance of what happens in the space. The service puts a great deal of emphasis on music as well as the preaching of the Word.

The last example is a church that I visited in Cowen. The church was temporarily having their service in a school gymnasium while their church building was being constructed. The space was much more formally laid out than the other three examples. Attempts were made to make it more like a “traditional” space. These consisted of a carpet runner down the aisle, candles on an altar table, banners hung on the wall behind the altar, and a lectern. These adductions helped to detract from the folding chairs used in place of pews. The people were not using the space along with a non-traditional service. The people there seemed to function as a family. Attending the service, I saw the love
“The secret of the idea of a blessing to be found in the holy places lies in this principle, that the holy place is no longer a place; it has become a living being.”

-Hazrat Inayat Kahn

and caring that was expressed for each other. What seemed important to me was how they came together. It was the act of gather that made this space work.

Except for the last, all of the services are contemporary. Because of this, they attract a younger crowd of mostly college-aged students. It seems that the college student are more ready to accept any space as their sacred space for worship. They are not so aught up in the traditions that they cannot let the space transform on its own.
I have attempted to illustrate the concept of creating sacred space in the three illustrations to the left. The first is the space for religious assembly. In this space, there is little or no connection to the "spiritual" world. The architecture itself is focused on utility. In the house of prayer, the actions and myth aides in the creation of "sacredness." There is a stronger connection in this space to the "spiritual," but it depends on the actions. The transformation to "sacredness" takes place within this space. The final diagram represents the goal of the thesis project. A space that has a direct connection between the spiritual and the physical. This space invokes the transformation to "sacredness."

Sacred space has two primary characteristics: separation and the inability to become profane. Its separation draws our attention. Its inability to become profane makes it of another world. By standing out from the rest of our understanding, it seems to be of a greater world. When we can understand something, and participate with it on the same level, it becomes ordinary. When we are touched by something, but are unable to bring it into "terms," we have experienced the sacred. This sacred means is that of which we have little or no relative understanding. No matter how many times we experience it, these qualities are maintained.

Man could easily miss the greatness of a moment in our profane world. We sometimes fail to gain the focus required to experience. In The Sacred and the Profane, Eliade describes the sacred world as having a fixed point as a focus; accomplished by attaching ones self to the "center of the world." For religious space, this is most often done by looking to the heavens, the beginning of the world. The Profane is ,in Eliade's words, "homogeneous, and neutral." In contrast with the sacred, there is a lack of focus. Each space is lacking differentiation from the last, each has no orientation with the beyond: in effect, becoming chaos.
The hospital chapel studies where an attempt to define sacred space, and how it is created. Hospital chapels were chosen because they, (for the most part) attempt to be nondenominational. This is important in establishing the universality of the spaces. These spaces rely less on the iconography in creating “sacred space.” Although hospitals with a religious affiliation such as Methodist and St. Vincent Hospitals have chapels that are focused on one religion, there are still some elements that any individual can relate to as being sacred.

I tried to look at the space purely in its physical manner and tried to disavow any knowledge I had about the spaces’ intended use. I did this by taking an inventory of the space and making sketches of the layout. For this reason, some portions of the study may seem more like an inventory. This is a result of trying to separate myself from what I have been taught is sacred. I found it more important to be precise in the content of the space without subconsciously creating any myths. I then attempted to project how the space itself implies use. I looked for the architectural clues that make the space feel sacred.

The Hospital Study seems to show that it is not necessarily desirable to occupy the actual “sacred space.” For the purpose of discussion, I will refer to this space sacred primary. The space that is adjacent to this has some sacred qualities and is directly affected by the sacred primary. This space is referred to as sacred secondary. The difference between these two spaces became very clear in the Methodist Chapel. In this space, I almost immediately felt as though the sacred space was within the columns. This was a stronger space than the illuminated wall that contained the
accomplished with the HVAC. This “white noise” is actually soothing in the space. The quieter the space is, the more conscious of “self” you become. It is good when the space slows down time. All urgencies disappear in the space. 

Focus: In is necessary to attract attention to a limited area. This makes sure that the person does not get lost in the space since you are actually guiding them. The focus can have the shape of an icon, or just be an area in a space that is different from the rest. This is the space that is usually considered to be the most sacred. 

Contrast: Lighting contrast is important in the creation of a focus. This effect helps to create bright spots and dark corners. These elements add to mystery of the space. It is desirable to remain in one area while having attention.

icons. While I experienced the space, and took notes, I sat within this space (sacred primary). This is where the seating for the space is. I did not like this space, and did not find it enjoyable. It was not until I left the sacred primary, and moved to the seating in the rear that I found the space to be appealing. From the sacred secondary, the sacred primary was before me, but not occupied. The ceiling above me was darker. This made high contrast to that above the sacred primary. The second major effect was the change in the heights of the ceilings. The ceiling above the sacred secondary was lower. When you occupy the sacred primary, it is not as obvious. The difference in sacred primary/secondary can also be seen in the other chapels included in the study. For Borgess Hospital, the sacred primary seems to be a thin sliver that is in front of the wall. The sacred secondary is the area within the columns at the perimeter. For some of the chapels, you cannot occupy the sacred primary at all. In Bronsen Hospital, the most sacred is the wall covered in wood paneling. The only part of the sacred that pulls away from the wall is the small altar with a cross on it.

This illustrates that “sacred space” may have more power when you are in the presence of it. This can be explained by the disillusionment of the “sacred space.” From the outside, the space seems to be otherworldly. It seems to transcend the physical world. Once you step inside, you bring the space into human (physical) terms. It can no longer be separated from our world.

In a sense, you fail to experience anything significant within the sacred primary. This doesn’t mean you can’t be within the “sacred space” in order to experience it. The sacred secondary is also very important.
tion focused on a "contrasting" area. Differences in the space can become the nonphysical boundaries of the sacred space. The "contrast" is a literal interpretation of sacred and profane space. Beauty: A subjective matter, but none the less important. There needs to some sense of the "beautiful" in the space. Beautiful things appeal to the human mind. Typically, stained glass has been used to promote this, but is not the only possibility.

Order/Disordered: This construct can help to create beauty, but can also help a person to understand the space. Hierarchy of the space can help to put the individual in relation to the sacred. Most important in this are the connections, physical and implied, between the individual and the sacred.

It is what we most commonly refer to as sacred space. Both must exist for the space to be successful. First, there must be the separation. This is achieved by the sacred primary. The visitor remains in the physical world of the sacred secondary.

This study shows that some architectural constructs may exist. It is important to acknowledge that I executed the study expecting to experience sacred space. The presence of these architectural qualities may, in another setting, not produce any sense of "the sacred."
Notes:

some chairs have kneelers. column seems to be a part of the structure that is unable to be moved or incorporated. the seating is movable. stained glass is an abstract design. there are twice as many lights at the front of the room as in other areas.

materials: wood base, quarry tile, wood, carpet, painted gyp. board, stained glass, brass figures

The artificial lighting has four pre-programmed switches:
1. General Lighting: all areas are bright
2. Dim, with the figures in spot lights; front wall washers are on
3. Dimmed front lights; the atmosphere relies mostly on natural light; it is very cool and soothing
4. No front lights; spots only: this seems to emphasize one-half.
The chapel is much lighter toward the front. This creates a good impact when entering. From the outside, the stained glass can be seen. Light from the inside illuminates the glass. This differentiates this space from the rest of the building. Passing through the door, you find yourself facing a cabinet and counter displaying information, and books of prayers. Turning to the left from this point, your attention is pulled to the icons on the front wall. This wall is washed with natural light from the skylight. Additional light is provided by downlights. The floor of the aisle is tile, which continues up the wall behind the icons. The seating area is separated by changing the floor material from tile to carpet. The ceiling effectively opens up toward the area of attention. Each receding ceiling level is darker. You are then find yourself standing in a dim location, with a bright area ahead. The changing levels of the ceiling hide the lights when you first enter. This makes it so that you can not tell where the light comes from, you only see the illuminated front. The chapel becomes multi-denominational by placing a “main” focus for Christianity, an a secondary focus for (alternate) religions. The Chapel is separated from he entry by making the person enter first, then turn ninety degrees to the left to enter the chapel. The helps to remove the door from the experience of the chapel making it a bit more formal.
Notes:
stained glass depicts Jesus healing a woman: both windows are exactly the same.
icons at front are gold colored plastic.
movable chairs: most have kneelers.
entry doors are typical hospital doors: no attempt was made to differentiate.
noise could be heard from the hall.
the cafeteria could be smelled from across the hall.
From the outside, the only clue that this is the chapel is the sign stating “Chapel.” The front wall as well as the front portion of the recessed ceiling is washed with light. The overall feeling of sacred in this space is low. The stained glass windows are located on both sides as you enter. These have very little impact. They don’t stand out and draw attention. The one to the left, as you enter, could be better located. It seems to be stuck in the corner. This chapel seems to lack the warmth of the others. This may be caused by the thin appearance of the materials. With gypsum board as the main material, the space does not have much strength. The four columns create a boundary of the sacred. This is reinforced by the recessed ceiling and a change in floor materials. The lighting is very low in contrast. The light attempts to illuminate the entire front of the room. In doing so, a high percentage of the room is brighter than desirable. There is also too wide an area of the wall illuminated. The focus area is too big and can’t be differentiated. I feel like an object in a space, instead of becoming a part of an experience. This space is more like a collection of objects in space. A more desirable condition would be the space as the womb, being the protector, and the carrier of the subject. The space should carry the subject into the desired emotional state. The altar and lectern are constructed of wood. These two pieces have the strongest feelings. Unfortunately, they seem out of place here. They just don’t fit in with the atmosphere. They are as disconnected here as myself and the other objects. The space feels better when sitting in the very back of the room. From this point, you can see the darker ceiling above and the illuminated ceiling ahead. This is much more desirable than being within the space.
St. Francis

Notes:
stained glass depicts saints; one to each window. Candles are $2.00 each: located in the niche at the rear of the chapel.
there is a balcony for the sick.
there is a clock located above the main door; it clicks loudly each minute.
there is wiremold run in some places.

materials: wood, terrazzo, acoustical tile
The apse is illuminated brighter than the rest of the church. The lights are located behind the wing walls that protrude slightly in front of the apse. The light shines horizontally, washing the wall with light. The direction of light accentuates the vertical lines of the ripples in the wood wall. The total effect draws attention when you first enter the chapel. The lighting is soft, so the space is not in high contrast to the remaining space, but it is just enough to create a soft glow in the space. The ambient light in the remaining part of the sanctuary seems a little bit brighter than it needs to be. Contrast is low. The large stained glass windows (approximately six feet by twenty feet) are artificially illuminated from behind. The chapel was designed to look just like a full church. It would not be until you exited the church that you would realize that you were in the interior of a greater structure. There is a long corridor leading up to the main entrance of the chapel. This "empty" corridor creates a preparation for the space. It divides the material world from the world inside. In addition, there is a vestibule that acts as the final initiation. The materials consist of wood and terrazzo. The wood is very warming, and highly detailed. Each of the two statues at front has candles on either side of it. This highlights the figures, marking them as important. The candle niche at the rear seems to have a presence of its own. There is a book of prayers for the sick and each candle is dedicated for an individual. The support arches have a great strength to them. Along with the windows, they add rhythm to the space. The arches themselves seem to wrap all the way around the space, floor included. They are like ribs; and have protecting qualities. There is not a sharp line where the wall meets the ceiling. Instead, the designer added a radius with a step detail. This softens the transition and keeps the space from becoming a box.
Notes:
- stained glass has no pattern-colored pieces.
- floor is carpeted, with pattern at main aisle as shown.
- there is a table open in front of the stone wall at the back; with a bible open upon it and a chair on each side of it.
- there is no base molding: the stone extends to the floor and the grid wall stops 3 1/2" above the floor.
- this chapel is only designed for Catholic worship.

materials: gypsum board ceiling, carpet, granite, wood
Each ceiling level is a little bit brighter becoming the brightest at the skylight. This helps to draw attention to the altar, and creates the "sacred" by creating a contrast between the light level you occupy and the most sacred space. The chapel is effectively separated into two rooms (entry and chapel proper) by a stone partition. This partition is a visual barrier, and allows the transition into the space. Entering the chapel proper, the eye is drawn to the light shining down from the skylight. The natural light mostly accents the surface of the skylight sides. The circular orientation of the seating also places the focus to the altar. The floor pattern points attention toward the altar like an arrow. There isn't a change in floor materials, but a sharp contrast is made with the pattern in red on a blue back ground. The stone partition becomes the back of the room, helping to create a feeling that the room is pie shaped. The stained glass faces the altar rather than the congregation. The intention may have been to cast some colored light upon the front of the chapel; however, the back lighting of the stained glass is very dim and does not accomplish this. Overall, there is no benefit of the stained glass. The detailing is very simple, yet very adequate. The stone is very solid and sturdy, while the rear walls are a bit softer (wood grid). The material change in the walls divides the room into from and back. The two materials contrast significantly. Alone, there may not be one that draws more attention than the other, but along with the other elements of the room, the stone is obviously the front. The ceiling is stepped in a circular pattern reinforcing the pie shaped feeling of the room.
This chapel is very small. It is comfortable for a single person, but it is doubtful that two or more people would find this space desirable. The question do you occupy the sacred space, or sit outside, and look at it is difficult to answer in this space because of its size. There isn't enough space to break down into separate uses. The location of this chapel is nice, being right off of the main lobby. However, this can also be a problem because some noise enters the chapel. Being that it wasn't busy at the time of this visit, if the lobby had more than a couple of people the noise entering the chapel could be a problem. The front wall is constructed of wood paneling, and washed with light from above. Secondary lighting is near the door, and has no control regarding brightness. It seems to be present for safety reasons. The problem with this is the light bleeds into the rest of the space distracting from the (focus). The stained glass next to the door is visible from the outside, and helps to show "chapel" location. When this chapel was approached, the door was found open. It seemed inviting, but it was nearly impossible to sit in the space without the door closed. This is partially due to the size of the chapel (there is no escape). Sitting in the second row, farthest from the door seems to be a desirable location. This seat puts you far from the entry, and not too close to the "sacred". Sitting in this spot is actually very close to the actual "sacred" space in comparison to other chapels. This is made possible by the modest size of this chapel. The space is not overwhelming, and while there is a noticeable effect, the scared is not overwhelming either. No matter where you sit, the outside seems very close. This is the greatest drawback for this design. The ceiling seems to be cluttered with fixtures and such. It could benefit from a reduction in the amount of protrusions and possibly changing to gypsum board.
Notes:
wood panel of the front is reflected in wood/fabric at the back.
the lights at the front and back are a single strip of T8 bulbs.
the ceiling reflects the plan with bulkheads.
carpeting has a light border that follows the exterior of the oval.
the columns are constructed of fabric wall covering and wood trim.
the chapel is specifically marked as being multi-denominational.

materials: wood, carpeting, fabric wall covering, acoustical tile, gypsum board
The entry is definitely a space of its own. Before you are two statues and to the left is a small fountain and topiary. The space is used for information purposes. In this space there are collections of prayers and also times and addresses of local worship services. Entering the "chapel proper" is unique. You find yourself off-center and approach the seating from the side. The lighting at the front and back is brightest. With light at the two extremities, the center of the room is left dark which creates good contrast. Although the light output is exactly the same at the two walls, a couple of things make the front wall the focus. The material at the front wall is lighter, thus it reflects more of the light making it appear brighter. The wall at the back is a blue-gray carpet that absorbs more of the light. Second, the front wall is more detailed than the rear. The grid pattern on the front wall is constructed from contoured molding. The rear wall uses flat trim for the grid. The way the light shines down the wall makes the "sacred" appear to be a thin slice of the room just away from the wall. The two door niches on the sides of the chapel are lit. These spaces are secondary, but seem to have a sacred sense in the way that they contain light. This isn't distracting to the space, it is actually enhancing. These spaces have a mystery about them. The way this entire chapel is laid out keeps the visitor moving and looking. You just can't see every part of the space from any one spot. This is what the two door niches are about. One of the hidden treasures of the chapel is a niche in the rear wall. This niche has a stained glass design hanging in front of it depicting a piece of wheat. Behind the glass is a vase with wheat in it and light shining down upon it. By creating these interconnected spaces, there are dark corners as well as bright spots. These combined make the space very mysterious.
Notes:
noise is heard from outside.
front wall is covered with a contoured paneling colored plum.
there are no icons present—all pictures are nature scenes.
two light controls (dimmers) one controls the front, the other is for the middle.
the chairs are movable, and have armrests.
most chairs have kneelers.
it smells new.
ceiling tiles are rotated at 45 degrees.

materials: acoustical ceiling tile, vinyl wall covering, carpet, 6" carpet base

This chapel just wants to be a very quiet room for thinking and praying. There is no real attempt to place any religion here. There is a slight emphasis on the front of the room created by the ceiling tile pattern. The ceiling tiles above the front center are bordered in wood. The change of wall material draws slight attention to the front wall. Although the wall material there is detailed when compared to the rest, the material and color just doesn’t imply elegance or a sacred feeling. The lectern suggests the focus should be there. The decor reminds me of a funeral parlor. This is partly due to the absence of any type of altar. The best feature of this room is its emptiness. There isn’t really anything here, and no strong focus. This leaves the occupant alone in the room with only thought occupying the space.
The shrine room is entered via a long set of stairs. On these stairs, you are introduced to the foundation of the memorial: the names of the men from Indiana are listed on the walls of the stairs. The list goes on and on and on... reaching the top of the stairs. When you finally stop climbing, you find yourself in an entry space to the shrine room. This space is lower than the shrine floor with about six steps upward. Large columns divide the entry space from the shrine room. These columns break up the view of the space and frame the objects within. One such view is that of the oversized United States flag over the shrine. The effect of this is a sense of mystery. Most of the light is to the exterior of the room. The center of the space, where the flag and shrine are, is very dim.

The War Memorial in Indianapolis is a good study because it lacks much of the traditional iconography of religious sacred spaces. I think this is successful because it doesn’t over emphasize the shrine by lighting it. In a sense, it doesn’t need any additional lighting because it is powerful enough without it. The space seemed very cold and empty to me. It was only occupied by myself and one other individual at the time. I tried unsuccessfully to imagine what it would be like if it was full of people. I think the emptiness was a plus for the “sacredness” of the space. The few number of occupants could not compete with the immense power of the shrine. In short, it is beyond human scale. I think one of the things that I find incredible about a space like this is that someone felt it important to spend the resources on it. It is there for all of the world to see, yet I am the only one there. I think about this like I am intruding on the space. It wants to be filled with people so that I don’t feel out of place, yet that is an important part of its power.

There is a very well developed threshold for this space. First, you are led along a path to reach the space. It is a journey through the names of the men who served in the war. Reaching the top, you are still separated from the “sacred space.” The entry space allows your to view and remain separate. This is a very good example of the sacred primary vs. sacred secondary. I think that the entry space is powerful itself, and important to the emotion of the space, but the true sacred space is the floor around the shrine. The visitor cannot see all of the space from the entry. There is a desire to step into the space to get a better view, yet a strong feeling against any such occupancy of it. It is important that this space is about three feet lower than the main floor of the shrine itself because it places an emphasis on the shrine by making the visitor look up to it.
In the first study, the experience exists around the cube. The cube here is the most elemental. There is just a cube and a pit. This maintains the experience as purely external. The visitor can experience the size of the cube, but is then presented with the mystery of its levitation (or the question of why there is a large cube here). The visitor can circle the cube for the answer, but never actually answers the questions. The mystery remains. Two things are important here; first is the mass of the cube (without it you wouldn’t wonder how it levitated) second is this mystery of its existence.

The path here is primarily a circular one, with the individual entering and leaving from a radial.

The cubes study is based on the writings of Van Der Leeuw in The Idea of the Holy. The question that I was intrigued by was: how is mystery attached to the experience of the massive and monumental? The cube represents this experience. The exploration involved looking at how this was experienced. While I present four studies, I feel that the study is not exhausted. There are other possible explorations of how the cube could be experienced. One such might be passing over the cube, with the cube below grade. While it is completely possible to explore more solutions, I felt four was enough to get the point.

I used the cube as a representation of this mass. The cube itself was not something that would be interpreted as something else. I wanted it
In the second study, the visitor is allowed to venture beneath the cube. This was an attempt to dispel the mystery of what lies beneath the mass. On the approach, the size of the cube is presented. Once the visitor is beneath the cube, the unsupported ceiling presents enormous emotional weight. The light filters in from the edges, giving the sense of a free floating structure. Most important here is the shift from the mystery of the suspension to the experience of the weight (mass). The mass itself is most powerful in this study.

The path here is primarily linear, with a node lying beneath the cube. One might explore the outside in a circular fashion before venturing below.

to read primarily as mass and nothing else. Likewise, the material of the cube is rendered as newsprint. This was done to eliminate any preconception about the nature of the object.

At the end of creating the models, I asked myself, "which of these spaces feels more sacred?" It did not take me long to realize that I could not answer this question. I might feel as though one was more sacred, but I could not be certain that anybody else would agree with me. This is one of the obstacles of the project. The space must fit into several different definitions of "the sacred." I cannot ask the question which one is more sacred? Instead the question is, "does each space have sacred qualities, and the ability to been seen through different eyes?"

The major benefit of this study is
In the third study, the visitor is allowed to penetrate the cube. This was an attempt to dispel the mystery of the mass contents. One possibility is that the cube is just a shell. If this was true, then the experience of the mass on the outside would contrast with the "emptiness" of the interior. Upon entering, the mystery would have been dispelled. In another possibility, the cube is solid, or made to appear so. Then, the visitor would venture into the cube to find the walls are extremely thin. In that case, the massiveness of the structure is stressed.

The path here is linear, approaching the cube, rising up and into it. There are actually several experiences because the mystery of levitation remains.

the realization that the space needs a path. Part of labeling the space as sacred is understanding how the space is experienced. This means understanding how the user engages the architecture and how this engagement is in any way special. It is also very important that the path of experience be somewhat flexible so that the architecture can be interpreted by the user. As an example, consider the first cube study. It would be just a large cube in the landscape if I did not define the circular path that involves exploration. It must not be forgotten that sacred space is about how the user experiences the space.

As an additional study, one might manipulate the materials of the cube: allowing transparency or translucency, or the physical makeup of the cube to change. This
In the final study, the cube has been split by a narrow channel. The idea here was that the visitor would experience the "mass" of the cube first. This would develop the understanding of the "whole." Then, when the visitor enters the channel, two experiences are present. First, the knowledge that the solid cube has been split and second the narrow path through the cube. The concept is to make the individual aware that the cube has been split by some strong force. Very little light would make it all the way to the bottom of the channel.

The path here is again linear, but it is desirable for the individual to approach the space from an angle (not as picture) so that the "cube" is understood.

would start to enter the question of how the cube itself was perceived. What if you did understand what the cube was made of? In the case of transparency, this might add mystery about the inside of the cube. By allowing the individual to see the inside, occupancy of this space would become an issue. The user might start to explore possible entry points. Another abstract exploration of the material nature of the cube could involve studying the newsprint: text as transparent or paper as transparent. With each of these, the inside of the cube becomes partially revealed, allowing some mystery about its true content.
Path is important because it determines how the user engages the architecture. Moving through the space is an important part of the ritual associated with it. The architecture should allow the user to make his/her own interpretation, but the path sets out a guideline for this interpretation. This is how we lead the user through the space.

The path can be directly related to the “story” associated with the space. As you move through the space the architecture becomes dynamic and you begin to experience the object together.

Path is important to threshold because the path sends you over the threshold. Without path, we do not experience the space, we only coexist with it.

These images represent a short exploration about path. The objective was to explore the influences of the forms that define the path. The first two studies were an alteration of the boundary height. When the boundary is taller, the space begins to have a greater sense of enclosure. With the boundaries low, the space opens up to the surrounding landscape. It seems that the sacred space should utilize a little of each of these. It is not one or the other. The boundary opens up to provide partial views of the surroundings while maintaining a strong sense of its own space.
The materials of a space can have a great impact on how the space is perceived. On the left, the wall around the gateway has been finished in cast concrete, on the right a stratified makeup of block, small stone, and plants. Each side presents a different feeling for the entry.

Materiality of the space is the creation of the sensuality. It provides the texture and feeling of the space. The materials themselves tell a story. How was it made? Who made it? Where is it? A “sacred space” can reach to the innermost part of the user. For this, it is necessary for there to be many levels of the experience. Materials are an important part of this richness. The materials should shape the space and influence the design as a visual, acoustic, textile, as well as sensual experience.
Sacred Places is a 39,790 square foot living/learning facility that will be built in downtown Indianapolis, Indiana. The facility will use the idea of sacred space as a mode of healing for an individual. The living facility provides for four groupings of twelve rooms. Individuals will stay at Sacred Places to experience “sacred living.” Their stay will be guided by one of five worship leaders who reside in the facility.

The learning center provides five classrooms, a library, and two activity rooms for exploration of sacred ideas. The facility provides three separate modes of interaction with sacred space. The first is the individual experience where the every day ritual is examined. This is closely related to the second modes of experience: group experience. In this space, the individuals will interact, examining sacred spaces together. The final mode of experience is the publics interaction with the facility. There is a 1500 square foot public chapel that will be used mainly for this purpose.

This program includes all of the spaces proposed for a new “Sacred Places” facility in downtown Indianapolis. The facility itself be a retreat that provides “sacred space” as a healing medium to all individuals. This program will provide the guidelines for the thesis project executed during the Spring semester of 1997.

The design criteria provides information for the overall facility. This includes the aesthetic components and the path toward becoming “sacred.” The final pages cover the approximate costs for the outlined facility. The detail requirements for the spaces include:

- design criteria
- square footage
- specific user
- equipment requirements
- time of use

- acoustics
- lighting
- thermal conditions
- relationships
The day-to-day activities of the facility will be run by an elected "director." This individual will make all decisions, however any decisions that may impact the effects of the facility must be reviewed by the board of elected officials before implementation. The board consists of eight men or women of varying beliefs. These people will meet twice a month to discuss the effectiveness and activities at the facility.

The "varying beliefs" of the board is to insure that the decisions do not lean the facility one way or another toward one specific belief of faith.

Once each year, the committee will present to the board a description of a number of qualified persons. The committee will then pursue the individuals, and invite them to become part of the board.

Sacred Places can be divided into six areas of similar roles in the creation of the sacred experience. Each has a specific role, but none is more important than the whole: all are necessary for creation of "the sacred" experience. These six organizational divisions of the program are as follows: also ref. appendix C.

Individual Experience.

This collection of spaces represents the "individual's" daily ritual. It is in this area that the day begins and the day ends. All of the basic human needs are provided for in this space. Included in this space is the private study and meditation space. In this space, the "individual" can become completely separated. This space can also provide an "escape" from the group.

Group Experience.

This is the where the individuals gather. The group experience happens here. For example in the kitchen, the group creates and celebrates the ritual of cooking. These spaces provide human interaction. "Individuals" can come to this space seeking help, friendship, or just some good conversation.

Worship Leader.

The worship leaders and their spouses live in these spaces. They create their own rituals of living. They will live in this space for the duration of the leaders' appointments. Space is provided in each for a private office and a conference room. The leader may engage the "individuals" privately in the office or in the dining room.

Auxiliary Spaces.

These spaces are additional spaces to meet the "individual’s" needs. The activity spaces will be a major source of entertainment in the daily ritual. These
The term of the board is two years, with half of the board ending their term on odd number years, and half on even number years. The board will also have the responsibility of approving the "Worship Leaders." Their term of stay is undefined: their influence and impact will be assessed once a year to determine if they should remain a part of the facility.

spaces, except for the laundry, are accessible to the public. It is through these spaces that the connection with the outside is made.

Administration.

This area is the "programmatic" space. The financial, scheduling, planning, and organizing is all run out of these offices. Although this is the "brain" of the facility, it is important that the guiding force comes from the people's needs not what seems to be most logical. The facility exists for the people.

Public Chapel.

This represents the major connection with the public. This space gives the everyday individual a chance to experience "the sacred." This space is the most visible, and will makeup a major part of the perceived character at Sacred Places.
"For religious man, space is not homogenous; he experiences interruptions, breaks in it; some parts of space are qualitatively different from others. "Draw not nigh hither," says the Lord to Moses; "put off thy shoes from thy feet, for the place whereon thou standest is holy ground" (Exodus, 3:5). There is then, a sacred space, and hence a strong, significant space; there are other spaces that are not sacred and so are without structure or consistency, amorphous. Nor is this all. For religious man, this spatial nonhomo-genity finds expression in the experience of an opposition between space that is sacred—the only real and real-ly existing space—and all other space, the formless expanse surrounding it."

-Eliade

Sacred space has two primary characteristics: separation and the inability to become profane. Its separation draws our attention. Its inability to become profane makes it of another world. By standing out from the rest of our understanding, it seems to be of a greater world. When we can understand something, and participate with it on the same level, it becomes ordinary. When we are touched by something, but are unable to bring it into "terms," we have experienced the sacred. This sacred means is that which we have little or no relative understanding. No matter how many times we experience it, these qualities are maintained.

Man could easily miss the greatness of a moment in our profane world. We sometimes fail to gain the focus required to experience. In The Sacred and the Profane, Mircea Eliade describes the sacred world as having a fixed point as a focus; accomplished by attaching oneself to the center of the world. For religious space, this is most often done by looking to the heavens, the beginning of the world. The Profane is, in Eliade's words, homogeneous, and neutral. In contrast with the sacred, there is a lack of focus. Each space is lacking differentiation from the last; they have no orientation with the beyond: in effect, becoming chaos.

In his book Sacred and Profane Beauty, Gerardus Van der Leeuw said, He who sees beauty experiences beauty. Sacred space can greatly affect man. Entering a space with such a definition, man is overwhelmed with a sense. Countless times throughout architectural history, we have proved that we can use architecture to create awe. The exact sense created by the sacred is mysterious; it cannot be described except in the feelings of fear and attraction. If man can create the sacred, then he can create it to serve a purpose. An architecture based on the principals of the
"The best of artists never makes creation. That is not hid already in the stone, In marble fixed; and yet the work is done. By hand, which follows mind and meditation."

-Michelangelo

"It may be that our space bears a relation to space in its totality analogous to that which the images cast by a magic lantern bear to the wall on which these images are made to appear- a wall with solidity, thickness, extension in other and more directions than those embraced within the wavering circle of light which would correspond to our sense of the cosmos. In other words, perhaps that which we think of as space is only so much of it as our limited sensuous mechanism is able to apprehend."

-Bragdon

sacred combined with the human consciousness can help the individual discover his inner self.

In creating a space that will connect with the soul of the individual, it becomes important to understand how that individual will be perceiving the space. Man has few universals. What one culture finds meaningful, another may find ordinary. With this in mind, the space should affect the greatest amount of people possible by removing itself from the "mythology of any given culture or belief". By lacking previous connection and connotations, the space will be able to create "the sacred" for a broader group of individuals.

Sacred spaces give a release for emotional imbalance. Through architecture, we can use the impact of "the sacred" to positively influence the subconscious. It is within this space where we can get in touch with our inner feelings. The sacred space allows us to leave the physical world, and enter a world that is beyond materiality. In this place we are awakened in spirit. The intent of the architecture is to help the individual discover an altered conscious state. Although traditionally connected to the religious, "the sacred" is about the human awareness and can be used to create a space that is meditative; a healing space.

In creating the sacred, the chaos of the exterior can be heightened. Then, the person must be brought into the ordered world of the Sacred. This would give the human a slightly better understanding of the difference between the two worlds. The world outside may have a focus, but of the wrong orientation to create feelings of otherworldliness. When this is true, the space fails to produce the emotions associated with the sacred. Continuing through the transition, the space then transforms into one which breeds the solemnness and the quietness that reaches the soul. Reaching the sacred, the person naturally recognizes the cha-
"Architectural forms do not carry universal or innate connotations apart from their perceptual and significant appropriations within the conventions of given cultures... Our somatic, perceptual, or cognitive responses to given formations are as much the product of our acculturated learning as they may be due to 'innate' perceptual dispositions."

Preziosi

"And this could not justly be asserted, as it often is, of religion as a whole and in general, for in religion there is very much that can be taught that is, handed down in concepts and passed on in school instruction. What is incapable of being so handed down is this numinous basis and background to religion, which can only be induced, incited, and aroused."

-Otto

otic state of the world in which we live, based on the absence of this element and the sense of knowing.

Sacred Places will involve a space which aids in the discovery of the state of “objective consciousness.” The space will evoke the sense on the sacred, giving the individual a path to examine and understand “self.”

Circulation spaces can be a very important part of the design and experience to “the sacred.” Circulation represents the movement true to a ritual as well as the transitions between rituals. This is very important in the design, because an object is just an object, until we create an experience through our movement. As we begin to interact with the object (circulation) we develop a type of ritual associated with the space and the objects within. The way the circulation space directs motion can have a considerable effect on the way we see and understand.

ref appendix C. for Architectural Constructs
Individual Experience

- cell: 125sf
- bathroom: 65sf
- kitchen/dining: 150sf
- study: 100sf
- total: 440sf

Space Relationships
It is time to sleep, and the room becomes quiet. As I drift off to sleep, the beat of my heart becomes louder. I drift into a less conscious state, yet I become continually more aware of my own self.

Part of the individual’s daily ritual, the cell is the place of rest. Each day, this space symbolizes the end of the daily routine. The space is used for rejuvenation of the senses. From birth to death this space is one in which we spend most of our time, yet we may be least familiar with. Occupation of this space involves an exit from consciousness.

Sleep is often done in the prenatal position, The room itself is the womb; protecting and supporting the “babe.” The bed is like a soft membrane that supports the individual during this experience.

users: guests; and individual or couple
activities: sleeping, meditation in a horizontal position, rejuvenation of the body, experience of the sacred in the living environment.

equipment Requirements: double bed, night stand, dresser

environmental Conditions:
lighting: 50 foot candles or none: optimal light levels sufficient to the function
temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable. the system should allow users to operate windows.

acoustics: the noises of the exterior should be masked or controlled. this space should be a quiet space. it can be assumed, that if a couple is occupying the space, that both individuals may not choose to “turn-in” at the same time. consideration should be made for activities happening in the suite while someone is sleeping.
time of usage: 10:00pm- 6:00am
relationships: adjacent to the study, and in close proximity to the bathroom, dining/ kitchen

approximate size: 125 square feet. ref supp. fig 5. Appendix A.
The is part of the individual's daily ritual. The shower is a tool for cleansing. It does more than just clean the body. A person fresh out of the shower feels renewed. The effect of water rushing across the skin can stimulate the mind and soul.

Throughout the day, the daily ritual involves this space repeatedly. The space is not only used for cleansing the entire body, but also cleansing of the hands before meal time. This action symbolizes the first action involved in the ritual of eating. Each time the individual goes through a set of actions that are unlike anybody else's.

The activities that occur within the bathroom are for the most part private. The effects of being alone during these activities adds to the "experience."

**users:** guests; and individual or couple

**activities:** cleaning-up before meals, showering, using the toilet, basic hygiene, experience of the sacred in the living environment.

**equipment Requirements:** sink, shower, mirror, shelf, toilet, towel bar, cabinet for storage of linens

**environmental Conditions:**

- **lighting:** 75–100 foot candles, optimal light levels sufficient to the function. Special consideration should be made for placement of the fixture to provide at least 75 foot candles within the shower. The lights at the sink should be "dressing room type" to provide extra lighting for "freshening up."
- **temperature:** should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable.
- an exhaust fan is required for the shower. The towel bar should be "fin-tube" type construction, to allow the warming of towels.

**acoustics:** the walls between the this and other spaces should have adequate sound insulation to keep the noise of the running water from becoming noise in the adjacent spaces. A vent fan is required.

**time of usage:** first thing in the morning (6:00am), just before breakfast (7:00am), just before lunch (11:00am), just before dinner (4:30pm), and before bed (10:00pm)

**relationships:** in close proximity to the bathroom, dining/kitchen, and study

**approximate size:** 65 square feet. ref supp. fig 10. Appendix A.
This space is part of the individual’s daily ritual. Part of this, for many Americans, is the ritual of morning coffee. The smells escapes from the confines of the kitchen and create a “sense” of the food throughout the adjacent spaces.

Many conversations of the home happen in the kitchen. The ritual of cooking is something that is often performed by one, but also viewed by one or more individuals. The dining space can double as a space for conversation and entertaining of small groups.

Although nobody likes cleaning-up after a meal, it represents the end of the ritual of eating. It is often is accomplished by more than one individual, and it has a bonding effect. It is just a little bit easier when somebody helps.

users: guests; and individual or couple, and any invited guest of the individuals occupying the suite
activities: preparation of meals, serving of meals, clean-up of meals, making of snacks, beverages, conversation, experience of the sacred in the living environment.

equipment Requirements: sink, oven, microwave, refrigerator, working/preparation surface, storage cabinets, table, two chairs, toaster.

environmental Conditions:

lighting: 75-100 foot candles, with high levels at work surface to aide in food preparation: optimal light levels sufficient to the function being performed.

temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable. there needs to be an exhaust fan for the stove.

acoustics: should prevent excessive reverberation: communication between the kitchen and dining areas should be easily done while cooking.

time of usage: at breakfast before morning gathering at 7:30am, during lunch (11:00am-1:00pm) and during dinner (4:30pm-6:00pm) and any time of the day or night for snacks. this space is used for the individual to have a private meal, when interaction with the group is not desired, or not possible.

relationships: in close proximity to the bathroom, cell, and study

approximate size: 150 square feet. ref supp fig. 2. appendix A.
Individual Experience

study

This space is incorporated into the individual's daily routine as a place for reflection and introspection. The use of the study gives the individual a place to retreat from the larger group events.

The space may be used as a quiet place to read or just the passing of time between other events of the day. Through the introduction of natural lighting, the passing of the day should be part of the experience. The light is a natural part of the meditation experience. Through darkness, the individual understands the beauty of light. The passing of time creates a connection with the exterior.

The individual should feel comfortable in this space. There should be a flexibility built into the space to allow each "occupant" the ability of customizing to meet his/her needs.

users: guests; and individual or couple, and any invited guest of the individuals occupying the suite
activities: private meditation, contemplation, reading, thinking, quiet discussion, relaxation, experience of the sacred

equipment Requirements: two lounge chairs, four large pillows, floor lamp, end table, table lamp

environmental Conditions:
lighting: large amounts of natural lighting is desirable, but should be able to be controlled. artificial: 35-40 foot candles ambient, with 75-100 foot candles supplemental lighting at reading locations. optimal light levels sufficient to the function being performed.
temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable. the system should allow users to operate windows.

acoustics: should prevent excessive reverberation: NIC 18 or greater, STC 40 (for all interior walls) this room should not be distracted by the presence of exterior sounds.
time of usage: morning contemplation, afternoon contemplation, evening free-time, or anytime the individual finds the need to just "hang-out" and be alone. the stay may be long, but may just for a short couple of minutes.
relationships: in close proximity to the bathroom, cell, and dining/kitchen
approximate size: 100 square feet

study

49.
Group Experience

lounge 500sf
kitchen 96sf
dining 175sf
chapel 500sf

total 1271sf

Space Relationships
This space is important for relaxation in the daily routine. The group activities may get stressful, or just overwhelming for some individuals. This space provides a group space very similar to the study in the individual’s space.

This space should be designed for flexibility. Spontaneous activities should be accommodated. It will be used for many different activities. One important function is the group meeting and discussion; when thirteen people may be in the space at once. Carpeting should be used to provide comfort when sitting on the floor.

It should be comfortable to be in the space. It should have a casual atmosphere. Special consideration should be made to allow several activities to function at the same time, and not disturb each other.

users: guests; and individual or couple, a small group of individuals, or the entire “group” and the worship leader.
activities: conversation, listening to music, playing games, watching television, eating of snacks, reading, taking a nap, experience of the sacred in the group environment.
equipment requirements: two couches, two lounge chairs, a coffee table, two end tables, one lounge table, a bookshelf, tv, vcr, stereo, table with six chairs, plants.
environmental conditions:
lighting: natural lighting is desirable, but should be able to be controllable. artificial: 40-50 foot candles ambient, with 75-100 foot candles supplemental lighting at reading/activity locations. optimal light levels sufficient to the function being performed.
temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable. the system should allow users to operate windows.
audience: should prevent excessive reverberation: NIC’18 or greater, STC 40 (for all interior walls) this room should not be distracted by the presence of exterior sounds. this space should be carpeted to provide comfort when sitting on the floor.
time of usage: during the day, for group activity, or small group discussions. in the evening during freetime. almost any time of the day.
relationship: in close proximity to the individual spaces, worship leader spaces
approximate size: 500 square feet
The product of cooking and the product of architecture both have end products that can create strong emotional responses. Good architecture can touch a person deep inside through the sense of sight; stirring up their deepest emotions. Likewise, good food produces a similar response in the individual through taste. When done poorly, "architecture" becomes little more than shelter, and food becomes no more than sustenance. It seems like we spend most of our lives settling for food that is just so-so. We rarely satisfy our "natural hunger." Architecture seems to be the same. People are willing to settle for the developer-built houses. But when we experience the successful concoctions, we usually agree it was worth paying for.

users: guests; and individual or couple, a small group of individuals, or the entire "group" and the worship leader.

activities: conversation, consuming snacks and beverages, preparation of "group" meals, serving of food, cleanup of meals, experience of the sacred in a group environment.

equipment Requirements: dish washer, oven, refrigerator, dry food storage, stove, microwave, sink, counter space for preparation of food, standard kitchen utensils (cooking and serving)

environmental Conditions:

lighting: 75-100 foot candles, with high levels at work surface to aid in food preparation and viewing of the sanitary conditions: optimal light levels sufficient to the function being performed

temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable. there needs to be an exhaust fan for the stove.

acoustics: should prevent excessive reverberation; communication between the kitchen and adjacent areas should be able to be performed without being overpowered by the "noises" of cooking.

time of usage: at breakfast before morning gathering at 7:30am, during lunch (11:00am-1:00pm) and during dinner (4:30pm-6:00pm) and any time of the day or night for snacks. this space will be used for group meals, although everyone may not always attend.

relationships: in close proximity to the individual spaces, worship leader spaces, lounge, and adjacent to the dining room

approximate size: 96 square feet ref supp. fig 1. Appendix A.
This is part of the daily ritual involving the group. In this space, the ritual of eating is celebrated. The group comes together as a family to partake of the food and join in conversation. It is a feast, but not just in the sense of the food. There is also a feast of knowledge. Each of the individuals brings something different to the table. Each has something to share. It is over a good meal that people start to open up to each other. Then, ideas are expressed, stress is relieved, and friendships are created.

The group spaces are very important, because it needs to be stressed that we aren’t traveling the road of life alone. There are many others that can help us along the way. The expression of friendship over a meal creates unity.

**users**: guests; and individual or couple, a small group of individuals, or the entire “group” and the worship leader.

**activities**: conversation, consuming snacks and beverages, serving of food, clean-up of meals, eating, experience of the sacred in the living environment.

**equipment requirements**: large dining table with seating for thirteen

**environmental conditions**: lighting: 35-50 foot candles, with higher levels over the eating surface: optimal light levels sufficient to the function being performed

**temperature**: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees fahrenheit, but should be adjustable.

**acoustics**: should prevent excessive reverberation: communication should be clear at all times in this space. The NIC’ rating should exceed 18. During meals, this space may get loud, any adjoining spaces requiring quiet should have walls with STC rating of 37 or greater between.

**time of usage**: at breakfast before morning gathering at 7:30am, during lunch (11:00am-1:00pm) and during dinner (4:30pm-6:00pm) and any time of the day or night for snacks. This space will be used for group meals, although everyone may not always attend.

**relationships**: in close proximity to the individual spaces, worship leader spaces, lounge and immediately adjacent to the kitchen.

**approximate size**: 175 square feet
Resist
I can learn to resist
Anything but temptation
I can learn to co-exist
With anything but pain

I can learn to compromise
Anything but my desires
I can learn to get along
With all the things I can’t explain

I can learn to resist
Anything but frustration
I can learn to persist
With anything but aiming low

You can surrender
Without a prayer
But never really pray
Without surrender

You can fight
Without ever winning
But never ever win
Without a fight

users: guests; and individual or couple, a small group
of individuals, or the entire “group” and the worship
leader.

activities: private meditation, contemplation, reading,
thinking, quiet discussion, relaxation, experience of the
sacred, experience of the sacred with others

equipment requirements: those things which are
brought into the space by the user, nothing permanent

environmental conditions:
lighting: large amounts of natural lighting is desir-
able, but should be able to be controlled. artificial: 35-
40 foot candles ambient; optimal light levels sufficient
to the function being performed.
temperature: should provide for maximum human
comfort, year-round. temperature should be approxi-
mately 65 to 70 degrees ferinheight, but should be ad-
justable. the temperature may be altered to enhance to
experience. the system should allow users to operate
windows.

acoustics: should prevent excessive reverberation:
NIC 18 or greater, STC 46 (for all interior walls) this
room should not be distracted by the presence of sounds
coming from the exterior or the interior of the build-
ing.
time of usage: morning contemplation, afternoon con-
templation, evening free-time, or anytime the individual
finds the need to be within this space. the stay may be
long, but may just for a short couple of minutes. the
integration of natural light into the space may make it
more desirable to be in this space at a certain time.

relationships: in close proximity to the individual
spaces, worship leader’s space, lounge, classrooms

approximate size: 500 square feet

-Neil Peart

figure 16.
Worship Leader

individual experience

cell 125sf
bathroom 65sf
kitchen 90sf
dining 80sf
conference 65sf
office 150sf

575sf

Space Relationships
It is time to sleep, and the room becomes quiet. I lay my head upon the softness of the pillow and feel the muscles of my body relax. As I drift off to sleep, the beat of my heart becomes louder. I drift into a less conscious state, yet I become continually more aware of my own self.

Part of the individual's daily ritual, the cell is the place of rest. Each day, this space symbolizes the end of the daily routine. The space is used for rejuvenation of the senses. From birth to death this space is one in which we spend most of our time, yet we may be least familiar with.

Sleep is often done in the prenatal position. The room itself is the womb; protecting and supporting the "babe." The bed is like a soft membrane that supports the individual during this experience.

users: worship leader, spouse optional
activities: sleeping, meditation in a horizontal position, rejuvenation of the body, experience of the sacred in the living environment.
equipment requirements: double bed, night stand, dresser
environmental Conditions:
lighting: 50 foot candles or none: optimal light levels sufficient to the function
temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees fahrenheit, but should be adjustable. the system should allow users to operate windows.
acoustics: the noises of the exterior should be masked or controlled. this space should be a quiet space. it can be assumed, that if a couple is occupying the space, that both individuals may not choose to "turn-in" at the same time. consideration should be made for activities happening in the suite while someone is sleeping.
time of usage: 10:00pm- 6:00am
relationships: adjacent to the study, and in close proximity to the bathroom, dining/ kitchen
approximate size: 125 square feet. ref supp. fig 5. Appendix A.
The is part of the individual's daily ritual. The shower is a tool for cleansing. It does more than just clean the body. A person fresh out of the shower feels renewed. The effect of water rushing across the skin can stimulate the mind and soul.

Throughout the day, the daily ritual involves this space repeatedly. The space is not only used for cleansing the entire body, but also cleansing of the hands before meal time. This action symbolizes the first action involved in the ritual of eating. Each time the individual goes through a set of actions that are unlike anybody else’s.

The activities that occur within the bathroom are for the most part private. The effects of being alone during these activities adds to the “experience.”

users: worship leader, spouse optional
activities: cleaning-up before meals, showering, using the toilet, basic hygiene, experience of the sacred in the living environment.

equipment Requirements: sink, shower, mirror, shelf, toilet, towel bar, cabinet for storage of linens

environmental Conditions:
lighting: 75-100 foot candles, optimal light levels sufficient to the function. special consideration should be made for placement of the fixture to provide at least 75 foot candles within the shower. the lights at the sink should be “dressing room type” to provide extra lighting for “freshening up.”
temperature: should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees Fahrenheit, but should be adjustable.
an exhaust fan is required for the shower. The towel bar should be “fin-tube” type construction, to allow the warming of towels.
acoustics: the walls between the this and other spaces should have adequate sound insulation to keep the noise of the running water from becoming noise in the adjacent spaces. a vent fan is required
time of usage: first thing in the morning (6:00am), just before breakfast (7:00am), just before lunch (11:00am), just before dinner (4:30pm), and before bed (10:00pm)
relationships: in close proximity to the bathroom, dining/kitchen, and study
approximate size: 65 square feet. ref supp. fig 10. Appendix A.
This space is part of the individual's daily ritual. Part of this, for many Americans, is the ritual of morning coffee. The smells escapes from the confines of the kitchen and create a "sense" of the food throughout the adjacent spaces.

Many conversations of the home happen in the kitchen. The ritual of cooking is something that is often performed by one, but also viewed by one or more individuals. The dining space can double as a space for conversation and entertaining of small groups.

Although nobody likes cleaning-up after a meal, it represents the end of the ritual of eating. It is often is accomplished by more than one individual, and it has a bonding effect. It is just a little bit easier when somebody helps.

**users:** worship leader, spouse optional, and any invited guests

**activities:** preparation of meals, serving of meals, clean-up of meals, making of snacks, beverages, conversation, experience of the sacred in the living environment.

**equipment Requirements:** table with enough seating for four.

**environmental Conditions:**

**lighting:** 35-50 foot candles, with higher levels over the eating surface: optimal light levels sufficient to the function being performed

**temperature:** should provide for maximum human comfort, year-round. temperature should be approximately 65 to 70 degrees ferinheight, but should be adjustable.

**acoustics:** should prevent excessive reverberation: communication between the kitchen and dining areas should be easily done while cooking is in progress.

**time of usage:** at breakfast before morning gathering at 7:30am, during lunch (11:00am-1:00pm) and during dinner (4:30pm-6:00pm) and any time of the day or night for snacks. this space is used for the individual to have a private meal, when interaction with the group is not desired, or not possible.

**relationships:** in close proximity to the bathroom, cell, and study, should be accessible from the individual spaces to accommodate any guests.

**approximate size:** 90 square feet