
EXPERIENCING MEANING IN TWO PRESBYTERIAN CHURCHES: A QUALITATIVE ANALYSIS

A Thesis presented to the Faculty of the Graduate School

University of Missouri – Columbia

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science

by

DIANA L. INGHAM

Dr. Ruth Brent Tofle, Thesis Supervisor

JULY 2005

© Copyright by Diana Ingham 2005
All Rights Reserved

The undersigned, appointed by the Dean of the Graduate School,
have examined the thesis entitled.

EXPERIENCING MEANING IN TWO PRESBYTERIAN CHURCHES:

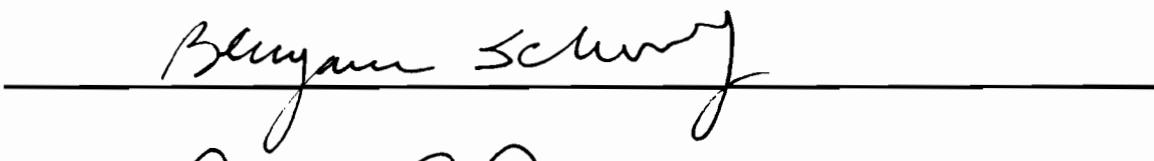
A QUALITATIVE ANALYSIS

Presented by Diana L. Ingham

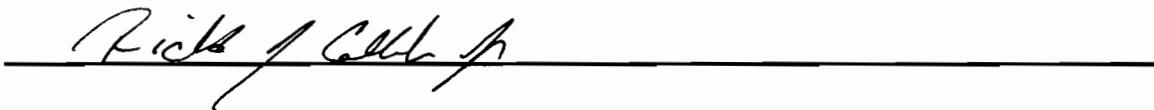
A candidate for the degree of Master of Science

And hereby certify that in their opinion it is worthy of acceptance.









ACKNOWLEDGEMENTS

I have been very fortunate to have so many colleagues who believed in me and in this research and I wish to take this opportunity to extend my thanks to them. Jan Cummings, facilitator of the Interior Design program at Johnson County Community College and Marsha Alexander, Housing Specialist for the University of Missouri – Columbia Extension have consistently encouraged me and shown faith in my abilities. It is because of their encouragement that I began the graduate program.

I must also mention several faculty who have been instrumental in my learning. Dr. Ruth Tofle, Architectural Studies chairperson and my thesis supervisor, has been a huge support to me in this research. Her encouragement gave me faith in myself that I could complete this thesis in a timely manner. Dr. Ronn Phillips, Dr. Benyamin Schwarz, and Dr. Richard Callahan were also instrumental in the development and direction this research took. I appreciate their guidance and suggestions.

However, this research could not have been completed without the support of the institutions and individuals that were interviewed along the way. My thanks go to the senior ministers, staff, and congregation members of the “Blue Church” and of the “Green Church” as well as to the interior designers and the architects who allowed me to speak to them about their feelings and thoughts regarding these spaces.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	ii
LIST OF TABLES.....	v
LIST OF FIGURES.....	vii
DEFINITIONS.....	viii
ABSTRACT.....	xi
DEDICATION	
Chapter	
1. INTRODUCTION.....	1
Research Questions.....	4
Personal Views and Experiences Relating to Sacred Architecture	7
2. CONTEXT: LITERATURE REVIEW.....	12
Role of Architecture in Sacred Places.....	12
Place Attachment.....	13
Role of Nature in Architectural Spaces.....	14
Importance of Religious Symbolism.....	18
3. RESEARCH METHODS.....	20
Phenomenological Heuristic Inquiry.....	22
Hermeneutic Interpretivism.....	23
Case Study.....	24
Validation.....	25
Site Selection.....	27
Selection of Participants.....	30
Data Collection.....	32
Data Analysis.....	41
4. FINDINGS: MEANING EXPERIENCED IN CHURCH SANCTUARIES.....	49
The Sites.....	49
The Participants.....	62
The Experience.....	64

5. SUMMARY.....	128
Limitations.....	136
Further Research.....	136
Conclusions and Recommendations.....	137
APPENDIX.....	143
Preliminary Concept Map.....	144
Revised Concept Map.....	145
Consent Form.....	146
Basic Interview Questions.....	147
Architect and Interior Designer Questions.....	148
BIBLIOGRAPHY.....	149
VITA.....	154

LIST OF TABLES

Table	Page
1. Research Methods.....	21
2. Question and Method Matrix.....	34
3. Concepts Identified in Interview with Church Member.....	47
4. Themes Identified in Study.....	47
5. Physical Comparisons of Churches.....	61
6. Comparison of Age of Participants.....	63
7. Themes Identified with Concept Categories.....	65
8. Matrix of References to Connections with Nature.....	72
9. Architect's and Interior Designers' References to Light in the Church Sanctuaries.....	77
10. Architect's and Interior Designers' References to Nature in the Church Sanctuaries.....	85
11. Matrix of Religious Symbols.....	87
12. Architect's and Interior Designers' References to Religious Symbols..	92
13. Matrix of References to Architecture.....	95
Architect's and Interior Designers' References to Architecture.....	104
14. Architect's and Interior Designers' References to Acoustics.....	112
15. Architect's and Interior Designers' References to Volume.....	115
16. Matrix of Place Attachment.....	118

17. Matrix of Meaning at the Green Church.....	126
18. Matrix of Meaning at the Blue Church.....	127
19. Matrix of Findings.....	129

LIST OF FIGURES

Figure	Page
1. Salisbury Cathedral, England 3/04: Photo by Diana Ingham.....	9
2. Thorncrown Chapel, Eureka Springs, AR 10/04: Photo by Ingham.....	9
3. Doi Suthep Temple, Chiang Mai, Thailand 6/05: Photo by Ingham.....	10
4. View from Doi Suthep Temple Grounds, Chaing Mai, Thailand 6/05: Photo by Ingham.....	11
5. Green Presbyterian Church Sanctuary: Photo by Ingham.....	28
6. Floor Plan of Green Church Sanctuary: Provided by Green Church.....	28
7. Blue Presbyterian Church Sanctuary: Photo by Ingham.....	29
8. Floor Plan of Blue Church Sanctuary: Provided by Blue Church.....	29
9. Blue Church Sanctuary Featuring: Skylight, Gothic Arches, Intersecting Beams, Hanging Cross, & Organ Pipes: Photo by Ingham.....	46
10. Green Church Sanctuary Featuring: Palladian Windows and Painted & Stained Pews: Photo by Ingham.....	52
11. Green Church Sanctuary Featuring: Raised Pulpit and Painted & Stained Pews: Photo by Ingham.....	53
12. Interior of Blue Church Sanctuary Featuring: Intersecting Beams, Skylight, and Wood Ceiling: Photo by Ingham.....	56
13. Blue Church Sanctuary Featuring: Stained Glass Windows and Stained Pews: Photo by Ingham.....	57

DEFINITIONS

Normally definitions are found at the end of a book before the index. It has been placed at the beginning of this study because for this study to be fully understood, it is important to recognize and define keys words that will be used to discuss this research.

Architecture, Furnishings, Accessories

Antependia – Cloths that hang at the front of the pulpit, lectern, or communion table (Merriam-Webster, 1999). The colors of or on the cloths will denote the church season or liturgical calendar. Green is for ordinary time. White is for Easter and Christmas. Red is for Pentecost. Purple is for Advent and Lent. (Wittich, 1996)

Baptistry – “The place where baptism takes place, the rite of entry into the Christian Church” (Roberts, 2004, p. 291).

Cathedral – “The major church in an archdiocese...It is the seat of the bishop” (Roberts, 2004, p. 291) in the Catholic denomination.

Chancel – The part of the worship space located at the front of the sanctuary that specifically is used by the minister and those assisting him during the service (Rose, 2001 and Roberts, 2004).

Chapel – “An alcove in a large church, or a separate building dedicated to a special use” (Roberts, 2004, p. 291).

Choir – “Part of the church set aside for the singers” (Wittich, 1996, p. 8).

Communion Table – The table in a church “which represents the table where Jesus shared the last supper with his disciples” (Roberts, 2004, p. 291).

Font – “The receptacle for the water used in baptism” (Roberts, 2004, p. 291).

Lectern – “The reading desk from which the Gospel is proclaimed” (Roberts, 2004, p. 291).

Liturgical Art – Those items displayed in a church that symbolize the belief of the church. These include but are not limited to altar cloths (antependia), tapestries, crosses, Christian flags, stained glass windows, and other such items that carry a Christian symbol or a

representation of scenes from the Bible. (Lingle & Kuykendall, 1988; McKim, 2003; Mann, 2002; Roberts, 2004; Smylie, 1996; and White, 2003)

Narthex – “The foyer or entryway of the church” (Roberts, 2004, p. 292).

Pew – Benches with backs in the Sanctuary upon which the worshipers sit.

Pulpit – “A raised structure made often of wood or stone, from which a sermon is delivered” (Wittich, 1996, p. 16).

Rose Window – “large circular windows in church facades” (Rose, 2001, p. 231).

Sacred Architecture – “...a building or monument which has a religious function or uses the vocabulary of forms consistent with religious practice” (Mann, 2002, p. 13).

Sanctuary – “In Protestant churches the word is...used to signify the entire worship space” (Roberts 2004, p. 292).

Steeple – “A tall structure usually having a small spire at the top and surmounting a church tower” (Merriam-Webster 1999, p. 1151).

Transept - “Arm-like extensions of the interior of a cruciform church on either side of the” sanctuary (Rose 2001, p. 230).

Beliefs

Christian – “One who professes belief in the teachings of Jesus Christ” (Merriam-Webster 1999, p. 203) and believes in the “life, death, and resurrection of Christ” (Lingle & Kuykendall, 1988, p. 11).

Presbyterian – “A church with a representative form of government by elders elected by the people” (Lingle & Kuykendall, 1988, p. 12) which has its roots in the teachings of Martin Luther, John Calvin, and John Knox (Lingle & Kuykendall, 1988; McKim, 2003; and Smylie, 1996).

Protestant – “A member of any of several church denominations denying the universal authority of the Pope and affirming the Reformation principles of justification by faith alone, the priesthood of all believers, and the primacy of the Bible as the only source of revealed truth; *broadly*: a Christian not of a Catholic or Eastern church” (Merriam-Webster, 1999, p. 938).

Trinity – “The unity of Father, Son, and Holy Spirit as three persons in one Godhead according to Christian dogma” (Merriam-Webster, 1999, p. 1263).

People

Associate Minister – Assists the senior pastor in the duties of leading the individual church including assisting in worship and education. (Smylie, 1996).

Deacon – Those elected by the individual church to be “responsible for the care of the poor, indigent, and sick in congregations” (Smylie, 1996, p. 24).

Denomination – “A general name for a category...a religious organization uniting local congregations in a single legal and administrative body” (Merriam-Webster, 1999, p. 309).

Elder – Those elected by the individual church to be involved in the governance of the church and to be “responsible for discipline” (Smylie, 1996, p. 24).

Senior Minister- Leads the individual church and is “responsible for church administration” (Smylie 1996, p. 112) and is “responsible for worship and education” (Smylie, 1996, p. 24).

Practices

Baptism – “A Christian sacrament marked by ritual use of water and admitting the recipient to the Christian community” (Merriam-Webster, 1999, p. 91).

Communion – “The sacrament of the Lord’s Supper, the consecrated bread and wine” (Roberts, 2004, p. 291).

Eucharist – “The Sacrament of the Lord’s Supper” (Roberts, 2004, p. 291).

Liturgy – “The performance of the work of worship in his [the Christian’s] new citizenship as one of the people of God” (White, 2003, p. 23) and “...a rite or body of rites prescribed for public worship” (Merriam-Webster, 1999, p. 681).

Worship – The act of meeting together in church to praise and honor God and to listen to the interpretation of His word (White, 2003).

Specific to this Research Only

Meaning –The layers of emotional feelings that one has experienced and the significance they attach to it. “Implication of a hidden or special significance” (Merriam-Webster, 1999, p. 720). Meaning is created by an accretion of experiences (Frankl, 1985) and is expressed through one’s feelings and emotions.

EXPERIENCING MEANING IN TWO PRESBYTERIAN CHURCHES: A QUALITATIVE ANALYSIS

Diana L. Ingham

Dr. Ruth Brent Tofle, Thesis Supervisor

ABSTRACT

Worship has changed through the centuries (Jones, 2000 and White, 2003). In the mid 1800s, the feelings and emotions of the individual worshiper became an important consideration in church service (White, 2003). Little research has been conducted to ascertain the role architecture plays in this experience (MacDonald, 2002). Using a qualitative research format, this is a case study of two Presbyterian Churches in the Kansas City metropolitan area. The overall goal of this study is to understand what creates feelings of meaning on Sunday mornings in these churches' sanctuaries. Five recurrent themes were discovered that seem to be necessary for these feelings: 1) large quantity of natural light, 2) feeling a connection with nature, 3) visible symbols of the Presbyterian faith, 4) optimal acoustics for music as well as the spoken word, and 5) architectural volume.

DEDICATION

A lot of time and energy were poured into creating the final product of this thesis. My son Joe has been a trooper through this entire process. He has supported me and encouraged me in this endeavor and never once has complained about the time it took away from him. He has been and will continue to be my rock.

CHAPTER 1

INTRODUCTION

There are many books written about the different aspects of Presbyterian's beliefs and participation in worship, and on the architecture of the Protestant church (Lingle & Kuykendall, 1988; MacDonald, 2002; McKim, 2003; Smylie, 1996; White, 2003; and Williams, 1997). Much less information and very little research have been found regarding how the architecture of the church will help to create and enhance the meaning experienced by the congregation (Jones, 2000). Meaning, as it applies here, relates to the layers of emotional feelings that one has experienced and the significance attached to it. "People's responses (to built and natural environments) depend upon the meaning which they attach to stimuli, which is associated and, in turn, depends on past experience, and culture influencing standards and environmental evaluation – Amos Rapoport, 1977" (Jones, 2000).

MacDonald (2002) states that "While geographers have conventionally "grounded" religious behavior through a research emphasis on sites, locales, and places, there has been little specific attempt to relate the practice of worship and the production of space" (p. 64). People may not go to a church just because of the architecture; however, buildings create first impressions. Not only is there a first impression, but an ongoing impression that can enhance or detract from the experience of the worshiper. Identifying the architectural elements that help to create the feelings of meaning and inspiration can

have implications in the creation of new Presbyterian churches as well as other Protestant churches.

During the Middle Ages and the Renaissance, great Catholic cathedrals were built of the natural materials found near the site. These cathedrals had elements of soaring height (Rose, 2001), natural hard surfaces (Schwarz & Brent, 1997 and Watson & Kucko, 2001), quantity of light (Schwarz & Brent, 1997 and Watson & Kucko, 2001), and stained glass windows (Sheldrake, 2001 and Rose, 2001). As the Protestant Reformation created a split from Catholicism in the 1500's, the Reformers were careful not to incorporate any aspect of worship that was dominant in the Catholic form of worship such as stained glass windows, altar tables, and liturgical art (Lingle & Kuykendall, 1988; White, 2003; and Williams, 1997).

The roots of the Presbyterian Church can be traced back to Martin Luther, John Calvin, and John Knox (Lingle & Kuykendall, 1988). "The predecessors of the New England Puritans in Zwingli's Zurich and Calvin's Geneva generally had made do with the conversion of older Catholic structures into halls appropriate for preaching by iconoclastically removing all artwork – banned by Calvin on Old Testament grounds as idolatrous – and replacing altars with pulpits as the central fixture for worship" (Williams, 1997, p. 6). Most of the new structures contained no stained glass, no statues of saints, and simple crosses. The interior resembled nothing more than a large room in which to meet – what is known as meetinghouse style (White, 2003 and Williams 1997). The reformed Protestants felt that any form of liturgical art would be idolatrous and take attention away from the worship of God (White, 2003). In the mid 1800s there was a movement by the Cambridge Camden Society to revive the gothic architecture found in

the Middle Ages because it was felt the church had achieved its highest form during this period and that the architecture helped to enhance the individual's experience (White, 2003 and Kilde, 2002). Before this time the important aspect of worship was on the community level. Now the individual's emotions and response to worship were acknowledged and became an important factor in the new churches that were built (White, 2003). On the subject of gothic churches built during this time, White (2003) says

The gothic churches built under the influence of the Cambridge Camden Society were usually splendidly decorated. They used abundant stained glass, colored floor tile, wall paintings, and carved woodwork. This was natural since the leaders of the Movement thought of worship largely in terms of individual response. It was not strange that they should place such importance on the emotive factors of the buildings, for providing an atmosphere was a means of cultivating the aura of awe and mystery that they associated with worship (p.136).

The ideas of Protestant architecture had swung 180 degrees from the time of the Protestant split.

Today, all types of architecture and liturgical art are found in all denominations of Protestant churches (Crosbie, 2000, Giles, 2004, Howe, 2003, White, 2003 and Williams, 1997). However, not all architecture will add or enhance the meaning to be found in the worship service. In Presbyterian Churches that lend themselves to feelings of meaning, there seems to be some connection to nature, either through materials used or the actual view of nature, and natural light. There is a strong two-way connection between the design of the space and the emotions experienced by people in the space including the "sense of other" or "higher power" (Tuan, 1977). Volume of the space and the acoustical characteristics enhance this feeling. According to Jones (2000), in order for these

emotions to attain the level of meaning and inspiration, there must also be some form of ritual or religious symbols attached to the place. There are unspoken expectations about inspirational spaces that they are sacred/holy ground and that they are a place where people are able to meditate and commune with their god(s) (Schwarz & Brent, 1997 and Jones, 2000). I believe to enhance this ability for Presbyterians to meditate and commune with God, there will be a strong relationship to the connection with nature including light created in the space, the use of religious symbols, good acoustics, and architectural volume.

Research Questions

The goal of this research is to understand the role various elements of architecture and architectural symbolism play in creating and enhancing sacred spaces and to understand how two Presbyterian Church sanctuaries evoke feelings of meaning for Sunday morning services. Are there emotional reactions or connections to the sanctuaries? What causes this and what is the most recognized cause? Are there liturgical accoutrements, religious symbolism, used in the sanctuary? Does this add an unseen layer of meaning to the sanctuary? What kind of connections with nature do the sanctuaries have? Can these connections be looked at in an equal manner? These questions and others will help to answer the following research questions.

What emotions are experienced in the sanctuary?

What role do architectural elements play in this experience?

What architectural preference do people have for sanctuaries?

How does architecture help to create and enhance meaning in sacred places?

This research is a case study of two Presbyterian Churches in the Kansas City metropolitan area. These prominent churches were selected based upon numerous observations of other Presbyterian Churches. To protect their identities their names have been changed. The Blue Presbyterian Church has utilized an extensive amount of wood, stained glass windows, wrought iron, liturgical art, and religious symbols such as crosses. The Green Presbyterian Church has utilized limestone tile, natural light via large windows of clear glass, and very few items of liturgical art. These churches are found in the same geographic and demographic area defined by the national Presbyterian U.S.A. headquarters. The members of these churches share the same traditions, beliefs, and culture. This allows the information from each church to be more easily compared and the elements that help to create meaning in these churches to be more easily identified.

A search for existing documents occurred by interviewing the administrative assistants and members of the church about any documentation the church had archived. This included archived minutes of church meetings and other recorded church history. A search was also conducted at the local library and on the internet using various search engines including Lexis/Nexis. Observations, readings, and measurements were taken at both sanctuaries. Architects at the architectural firms who built these churches had either retired and moved or died. It was impossible interview them. Both churches did have possession of all the blueprints and these were able to be viewed. Interviews were conducted with the ministers and key people of both churches. The purpose of these interviews was to try to establish if there were emotional reactions or connections to the sanctuaries? Is it possible to identify the cause of these reactions? What were the original ideas and thoughts behind the selection of the different elements used in the sanctuaries?

All the interviews were audio-tape recorded, transcribed, concepts identified and analyzed. Focus groups were created from the Building Committee and Worship Committee of the churches and were interviewed to discuss their thoughts and ideas about the sanctuaries. The focus groups' conversations were transcribed, concepts identified, and analyzed. A separate group of people from the architectural and interior design community were selected to view both spaces and to be interviewed about their views of the sanctuaries. They were asked about the feelings the sanctuaries inspired in them and why they believe they felt the way they did. It is believed that the formal design education that architects and interior designers have undergone will allow them to interpret the architectural elements of the sanctuary in a more objective manner than the church members.

Since some very important information could easily be overlooked when conducting interviews and questionnaires, it was important to ask open-ended questions that focused on what the individual felt was important to them in the sanctuary. The information gathered from these interviews and focus groups was analyzed as it occurred. The data were identified according to the categories that reoccurred consistently and to information that seemed to lie outside of the popular categories. The information from the interviews of each group was first compared to each other within their own church and then to the other church. Finally the information from the interviews of the architects and designers was compared to both churches' information. Data were then organized into matrices so that any patterns or outliers would stand out. The analysis of this information created the data needed to answer the research questions. An understanding of how the reactions and emotions can be manipulated by the spatial arrangement and by the types of

materials and furnishings used can be helpful in the design of other churches and other buildings where people expect to and want to have meaningful and inspirational experiences.

Personal Views and Experiences Relating to Sacred Architecture

I feel there are direct connections between the architecture of the church, the religious symbols utilized in the church, and the connection to nature as to the feelings of meaning felt within the church. As an infant, I was baptized in a rural Presbyterian Church in Illinois. After moving to a farm in mid-Missouri, it was discovered there were no Presbyterian churches close by. Our church attendance became sporadic and almost non-existent. In 7th grade, a minister started preaching at an old rural church one-quarter mile down the road from the farm. Advertised as non-denominational, it was really a southern Baptist influenced non-denominational church in the middle of Missouri farmland, miles from a town. The church had clapboard exterior, wooden floors, plaster walls, a tall ceiling, and large clear glass windows on the sides that looked out onto the fields. There was a preaching platform that was raised by two steps with the piano and three rows of seats for the choir to the right side. There was no center aisle, but two aisles down either side of the center and two aisles down the side. I have a memory of the hard, non-cushioned pews being slightly curved and the entire floor angling gently down toward and focusing on the platform. One of the first actions taken by the minister and the congregation was to have a large eight foot cross made and hung on the wall immediately behind the pulpit that was centered on the platform.

When I went to a much larger city to attend college, the opportunity arose to attend the denomination in which I was baptized. This church was much different from the rural church. It was made of brick, was larger and taller, had a center aisle and side aisles, used stained glass in the windows, and was darker overall in the interior. It was such a different experience for me that I was in awe of it. This church had a large choir and a pipe organ. The music was exquisite. The tall volume of the space lifted my spirits. In the rural church at home, everyone knew everyone else. I always felt like I was under a microscope. In this large church, I felt welcomed and not pressured. I discovered that I liked the traditional ritual of this church.

I have since had many occasions to experience services in other churches, in other cities, and in other denominations. I have attended several Baptist churches. I have attended Methodist churches that utilized stained glass. I would stare at the windows and the stories they represented during the service. I have attended Catholic services in an older church and marveled at all of the statues that were placed in the church. Being raised a Protestant, the statues made me uneasy. They felt wrong. I have also attended other Presbyterian churches in many different cities. It has always been interesting to discover the different feelings one experiences from one church to another. Why does this happen? The feelings experienced in one church seem to be the same type of feelings always experienced in that same church. There were occasions of high religious significance that brought a different and a special meaning to the sanctuary, but overall, the feelings were consistent with the church. As a member of a Presbyterian Church in Kansas I have felt a sense of meaning in that sanctuary. I continue to be struck by the architecture and the amount of light that streams into the sanctuary. As a visitor to

another Presbyterian Church in Kansas this researcher felt a “Presence” and a meaningful experience in that sanctuary. This sanctuary was darker and utilized wood and stained glass. This feeling has remained consistent in the subsequent visits to these churches.

Again a “Presence” was felt while visiting the Salisbury Cathedral in Salisbury, England and the Thorncrown Chapel in Eureka Springs, Arkansas. The Salisbury Cathedral in Salisbury, England is built entirely of stone. The floors and the walls are stone. The soaring height of the cathedral is accentuated by the vaulting and draws the eye up. The amount of light streaming in through the clear and the stained glass windows is breath-taking. It is special to walk through the cathedral, to see the choir stalls that face each other, to see the cloisters, to see the

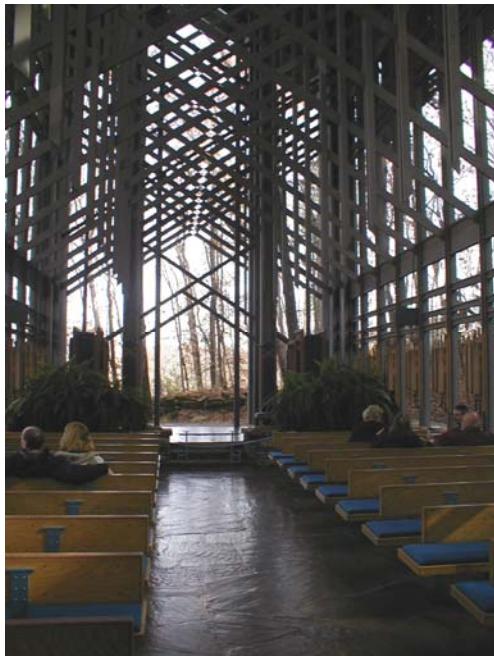


Figure 1: Salisbury Cathedral, England 3/04
chapter house with one of the originals of the Magna Carta. Halfway through the visit to the cathedral, everyone was invited to participate in the Lord’s Prayer. It left me moved, with tears in my eyes.

The Thorncrown Chapel in Eureka Springs, Arkansas is smaller than the Salisbury Cathedral’s gift store. It is built into the landscape of the hillside. Thorncrown isn’t very large, but inside

Figure 2 : Thorncrown Chapel
Eureka Springs, AR 10/04

you feel like it is enormous because the only barrier between you and the outside is very large windows. The interior is very tall and the architecture emphasizes the height with the placement and angle of the beams that are used.

The floor is flagstone and the pews and other architectural features inside are of wood. There is a center aisle with no side aisles because of the narrowness of the space. At the end of the chancel, the wall is again glass. You see through the glass to a cross that is planted in the ground.

As I sat in the pew, I grew very calm and felt great peace. It was a reassuring feeling to feel what seemed like the

“Presence” of God. These feelings aren’t felt in every sacred space. One’s own culture and experiences factor into these feelings. After visiting several of the most holy Buddhist temples in Thailand, called Wats, I did not come away with the same feeling that I had experienced in Christian buildings. Wats are very special and sacred to the people of Thailand and you can see the reverence as they removed their shoes before entering and the emotion of their faces. The Wats had volume and space. Most were extremely decorated inside with lots of pattern and glitter from gold or glass tiles. Some were partially outdoors so that you could see natural light and the outdoors. All of them were quiet. I did not feel any special presence in any of them. Again, because of my Protestant culture and background, the large Buddha statues made me uneasy. I appreciated the statues for their beauty and the history they represented, but I wasn’t as

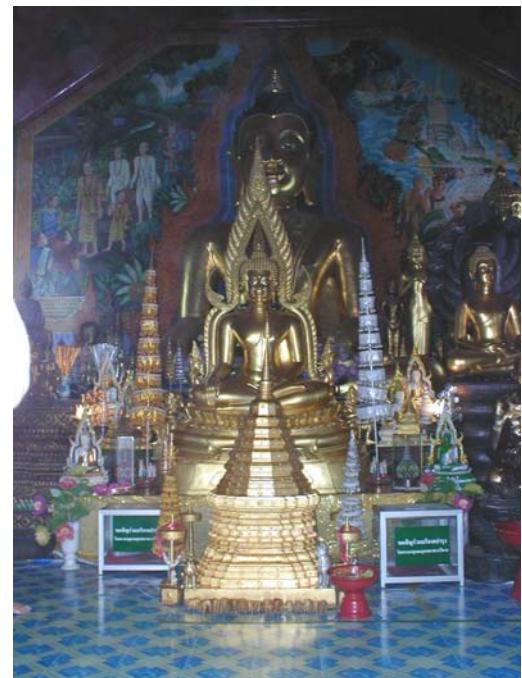


Figure 3: Doi Suthep Temple
Chiang Mai, Thailand 6/05

moved by the Wats as I was by the grounds. I was moved by the grounds and the views from the Doi Suthep Temple. This temple was located on the side of a small mountain outside of Chaing Mai, Thailand. The view from the stone railing down the mountain and



**Figure 4: View from Doi Suthep Temple Grounds
Chiang Mai, Thailand 6/05**

onto the city was breathtaking. It had been raining and from time to time the sun would break through the clouds. From the mountain looking down, the cloudy areas and sunny areas could be viewed at

one time. For me, it was the immensity of the outside space, the connection to nature,

and the people I was with that held a special meaning to me.

What creates the difference in feelings? There are several characteristics that I believe Presbyterian churches have if one is to have this feeling of meaning as they experience the sanctuary on Sunday morning. These characteristics include a dramatic sense of space, a connection to nature either through natural light, views of nature, or natural materials, acoustics that allow the spoken word to be understood and the music to live in the space, and the use of religious symbols familiar with the worshiper. It was beneficial studying these characteristics in these two Presbyterian Churches in order to compare and contrast them to feelings of meaning.

CHAPTER 2

CONTEXT: LITERATURE REVIEW

Existing Literature on the Role of Architecture in Sacred Places

Limited research has been done on the role of architecture in creating spaces that are meaningful in sacred architecture (MacDonald, 2002). The role of architecture influences a person's perceptions and behaviors in non-secular space (Tuan, 1977). It follows that architecture would play a role in the perceptions and behaviors of secular space. A recent study comparing Thorncrown Chapel and the Mildred B. Cooper Chapel in Arkansas, both designed by the renowned architect Fay Jones, seems to be one of few studies found that deals directly with the role that architecture plays in the feelings of meaning in sacred architectural spaces (Watson & Kucko, 2001). Watson & Kucko (2001) believe that "Sacred architecture reflects society's awareness of its relationship with the divine – and is thus a powerful expression of the human quest for spirituality" (p. 14).

Finally, the researchers believe that certain elements found in the sacred structure of Thorncrown and the Mildred B. Cooper Chapels – the building materials; the sacred geometry of the construction; the use of light, color, and sound - contribute directly to the generation of spirituality. These elements and others contribute indirectly by acting as carriers and focalizers of human intention. Intention allows and establishes an individual's spiritual connection with the power and magic of the divine (Watson & Kucko, 2001, p. 25).

Several books have recently been published that touch on this subject of sacred architecture and inspiration (Jones, 2000; Rose, 2001; Sheldrake, 2001; and Williams, 1997). Jones (2000) has written a two volume book that speaks directly to the experience of, the hermeneutics of, sacred architectural places. Jones (2000) believes that it is a layering of the architecture with the religion's symbolism and rituals that will bring meaning to the space. Rose (2001) bemoans the fact that many new churches built today are intended for a multi-functional use instead of being devoted to the experience of worship. He feels that this trend must be reversed. Eliade (1957) believes that

The church shares in a different space from the street in which it stands. The door that opens on the interior of the church actually signifies a solution of continuity. The threshold that separates the two spaces also indicates the distance between two modes of being, the profane and the religious. The threshold is the limit, the boundary, the frontier that distinguishes and opposes two worlds – and at the same time the paradoxical place where those worlds communicate, where passage from the profane to the sacred world becomes possible (p. 25).

The information from these writers and researchers shows a correlation to the feelings of meaning and inspiration that are experienced because of the building's spatial arrangements and the building's materials and furnishings.

Existing Literature on Place Attachment

Much literature has been written on place attachment (Cooper-Marcus, 1995; Gallagher, 1994; Mazumdar & Mazumdar, 2004; Ponzetti, 2003; Sheldrake, 2001; and Tuan, 1977). There is a probability that place attachment can factor into the meaningful feelings worshipers feel in the sanctuary, especially if this is a church they have attended for several years or even over the course of their lifetime. “Place can acquire deep

meaning for the adult through the steady accretion of sentiment over the years” (Tuan, 1977, p. 33). Some people will spend their lives with one church. In this church, they will have experienced the life stages of baptisms, communions, weddings, and funerals. The people of the church may have supported them through various distressing times during their life such as death and divorce. These experiences strengthen place attachment (Alexander, 1977). In their study on religion and place attachment, Mazumdar & Mazumdar (2004) explain, “...attachment to place is learned through the process of socialization involving rituals, use of artifacts, story telling, and place visits...there is an active socializing component to religious place attachment in addition to the experiential one” (p. 385). This explains place attachment as a process not as a result of a single event. Sheldrake (2001) states, “Theorists are now much more inclined to say that, if it is appropriate to speak of priorities, a sense of *place* actually precedes and creates a sense of space” (p. 7). A church one has attended over a lifetime can accrue a strong place attachment. Symbols and traditions within the church denomination can also account for a strong place attachment (Mazumdar & Mazumdar, 2004 and Sheldrake, 2001) and create a familiarity even when it is a church being visited for the first time.

Existing Literature on the Role of Nature in Architectural Spaces

The natural elements of light, sound, space, and nature each play an important role in architectural spaces and especially in sacred architectural places. Natural light is an important element in churches. The King James version of the Bible states in Genesis chapter 1 verses 3 and 4, “And God said, Let there be light: and there was light. And God saw the light, that *it was* good: and God divided the light from the darkness”. “Light is

used...as a metaphor for the Holy Spirit, for enlightenment, and for learning" (Roberts, 2004, p. 7). White (2004) explains that "Light is a most important "building material" in a well-designed church" (p. 113). In Presbyterian churches today we find two different types of natural light (White, 2004; Jones, 2002; and Roberts, 2004). Light that streams in through clear glass is thought to symbolize purity. Williams (1997) states "Clear rather than stained glass was indicative of the values of the Enlightenment; clarity rather than mystery was the quality most prized" (p. 104). Light filtered through stained glass is thought to be more mysterious, alluding to the mysteries of God. Stained glass was originally used to teach the illiterate the stories of the Bible (Sheldrake 2001 and Jones 2000). Jones (2000) explains "...some commentators...credit the [stained glass] windows with fostering a much more profound and mysterious contemplative process of "anagogical illumination" wherein worshipers are magically transported from the material world to a realm of ethereal bliss" (p. 96). It is not hard to find Presbyterian Churches today that use both clear glass and stained glass in the sanctuary to allow light to enter (Jones, 2000; White, 2004; and Williams, 1997).

Sound is not immediately thought of in relation to architecture; however, the way in which the building is designed and built has an effect on the acoustics inside. Hard surfaces will make an interior echo. The acoustics of sacred architecture also plays an important role on the worshipers' experience. Sound can be used to enhance not only the sacred feel of a space, but also to enhance the meaning of the worship service. Roberts (2004) says

The reverberant sound quality created by the proportions and materials of religious buildings sets them apart from the ordinary...The change in sound quality from the cacophony of the

street to ...the resonant silence of a baroque church, signifies entry into a sacred space (p. 10).

There are problems inherent in creating good acoustics in a church (Cullum, 1949 and Ballou 1987).

Few factors are as invisible as acoustics and yet have such massive influence on the character and quality of worship celebrated in a building. Acoustics can enable and enhance congregational singing or almost destroy it. Bad acoustics can make even the best preaching inaudible or ruin the majesty of a pipe organ... (White, 2004, p. 95).

Before the Reformation there wasn't a concern for the spoken word to be heard and understood since the church service consisted more of a ritual to be observed than an involved congregation (Ballou 1987 and Kilde 2002). The Reformation, among other things, put the emphasis on the Word of God and on participation of the congregation. It became important to be able to hear what was said clearly.

The design of a modern church is most challenging because of the variety of acoustical needs occurring in rapid succession during a single service...If the reverberation time is too low, congregational participation will be depressed and weak; organ and choir music will also be uninteresting. On the other hand, with a music-supporting reverberation time, speech will have to be reinforced [with microphones] (Ballou, 1987, p. 183).

"As emotive factors, proportions can be used in a variety of ways. Perhaps none of them are quite as forceful as excessive height" (White, 2003, p. 28). The volume of space makes a difference with the feelings of sacredness within a space. The height of the building from the outside created "a landmark...to signify the presence of the sacred" (Roberts, 2004, p. 10). "But in the cathedral his imagination need not soar unaided. The beauty of space and light that he can perceive enables him to comprehend effortlessly another and far greater glory" (Tuan, 1977, p. 116). The excessive height of a sacred

space is meant to cause the worshiper to lift their eyes to heaven and toward God and to free them from earthly concerns (Mann, 2002; White, 2003; Rose, 2001; Eliade, 1957; and Tuan, 1977).

Using materials from nature in a sanctuary creates an important connection to the natural world. Materials such as stone, wood, iron, water, and plants, as can be seen in the Salisbury Cathedral and Thorncrown Chapel, help to create this connection. Schwarz and Brent (1997) noted in their study of the Eero Saarinen Firestone Baars Chapel that “Perhaps more than any other building material, stone symbolizes the human need to secure the most important values by anchoring them in time” (p. 42). Speaking directly to the restorative role nature plays in the lives of humans “What we are calling quiet fascinations do not totally dominate one’s thoughts. They permit reflection; they make it possible to find out what is on one’s mind” (Kaplan, et al, 1998, p. 69). The aforementioned study of two chapels designed by architect Fay Jones also show a very strong relationship with the honest use of natural materials, the use of light, the connection of nature to the site, and a sense of meditation and inspiration (Watson & Kucko, 2001). Recent research by horticulturist Charles Lewis has found “Contact with green nature is essential to well-being and offers peace and assurance” (Lewis, 1996, p. xviii). Lewis (1996) continues along this line,

We are creatures who evolved in an environment already green. Within our cells live memories of the role vegetation played in fostering our survival as a species. Plants reconnect that distant past, calling forth feelings of tranquility and harmony, restoring mental and physical health in a contemporary, technological world. Whether in pots, gardens, fields, or forests, living plants remind us of that ancient connection (p. xix).

Even a glimpse of nature through windows can help with a restorative feeling (Lewis, 1996). This seems to be an important component that churches should include to enhance the component of contemplation.

Existing Literature on the Importance of Religious Symbolism

Part of what sets a sanctuary apart from other rooms in a church is the religious symbolism that is found in the sanctuary. Each denomination has its own unique symbols. Some symbols are shared by all denominations. Some of the important symbols within the Presbyterian Church include the cross, the communion table, the baptismal font, and the pulpit (Roberts, 2004; White, 2003; and White & White, 1998).

The cross symbolizes the cross Jesus died on (Roberts, 2004; White, 2003; and Wittich, 1996). It represents the Christians' hope, faith, and belief in God's grace (Foote & Thornburg, 2000).

Grace is God's love and acceptance freely given and not earned. Grace is a gift not to people who deserve it or to people because they are particularly special. It is a gift given out of the generosity of God's love for all creation (Foote & Thornburg, 2000, p. xvii).

The table from which the sacraments of communion are taken is called a communion table. The communion, also known as the Lord's Supper, is the symbolic sharing of the consecrated bread and wine which Jesus shared with his disciples (Roberts, 2004). The importance of the communion table is generally seen by its location, front and center, on the chancel. The baptismal font is as important a symbol as the communion table because it signifies the "community of those baptized into the death and resurrection of Jesus Christ" (White & White, 1998, p. 53). It represents the community of faith that is very important to Presbyterians (Foote & Thornburg, 2000 and Lingle & Kuykendall, 1988).

The location of the baptismal font is very telling even within each Presbyterian Church. A baptismal font that is located in the midst of the church points to its importance in that community of Christ (White & White, 1998). The pulpit holds great significance as the place from where the sermon is given. The sermon is seen as the presentation of God's message (White, 2003). The pulpit is located to the front of the sanctuary, though it can be placed to the center or to either side of the center (Roberts, 2004; and White & White 1998). Greater importance can be shown by it being raised on the chancel. The use of these symbols in a sanctuary represents an area that is sacred. The presence of the same symbols used throughout the same denomination from church to church can create a comfort level for the worshiper as they visit a new church (Mazumdar & Mazumdar, 2004 and Sheldrake, 2001).

CHAPTER 3

RESEARCH METHODS

Several different types of research methods were utilized in this study. All of these methods were based on qualitative research methods. Qualitative research is used in order to get a more in-depth understanding of the subject's point of view (Silverman, 2004). Qualitative research is concerned with the subject's knowledge and the understanding of the research information from that knowledge (Groat & Wang, 2002; Patton, 2002; and Silverman, 2004).

Qualitative methods permit inquiry into selected issues in great depth with careful attention to detail, context, and nuance; that data collection need not be constrained by predetermined analytical categories contributes to the potential breadth of qualitative inquiry (Patton, 2002, p. 227).

Maxwell (1994) suggests the use of a concept map to help to understand the phenomena in question. This map links all ideas that you believe will have some impact on the phenomena studied (Maxwell, 1994). The initial and subsequent concept maps used for this study are shown in the appendix. After the concept map, a research diagram is drawn explaining the purpose, the conceptual context (or what you think is going on), the actual research questions, the methods, and the validity of the research (Maxwell, 1994). This research diagram creates the overall big picture of this study and allows the researcher to determine the feasibility of the study.

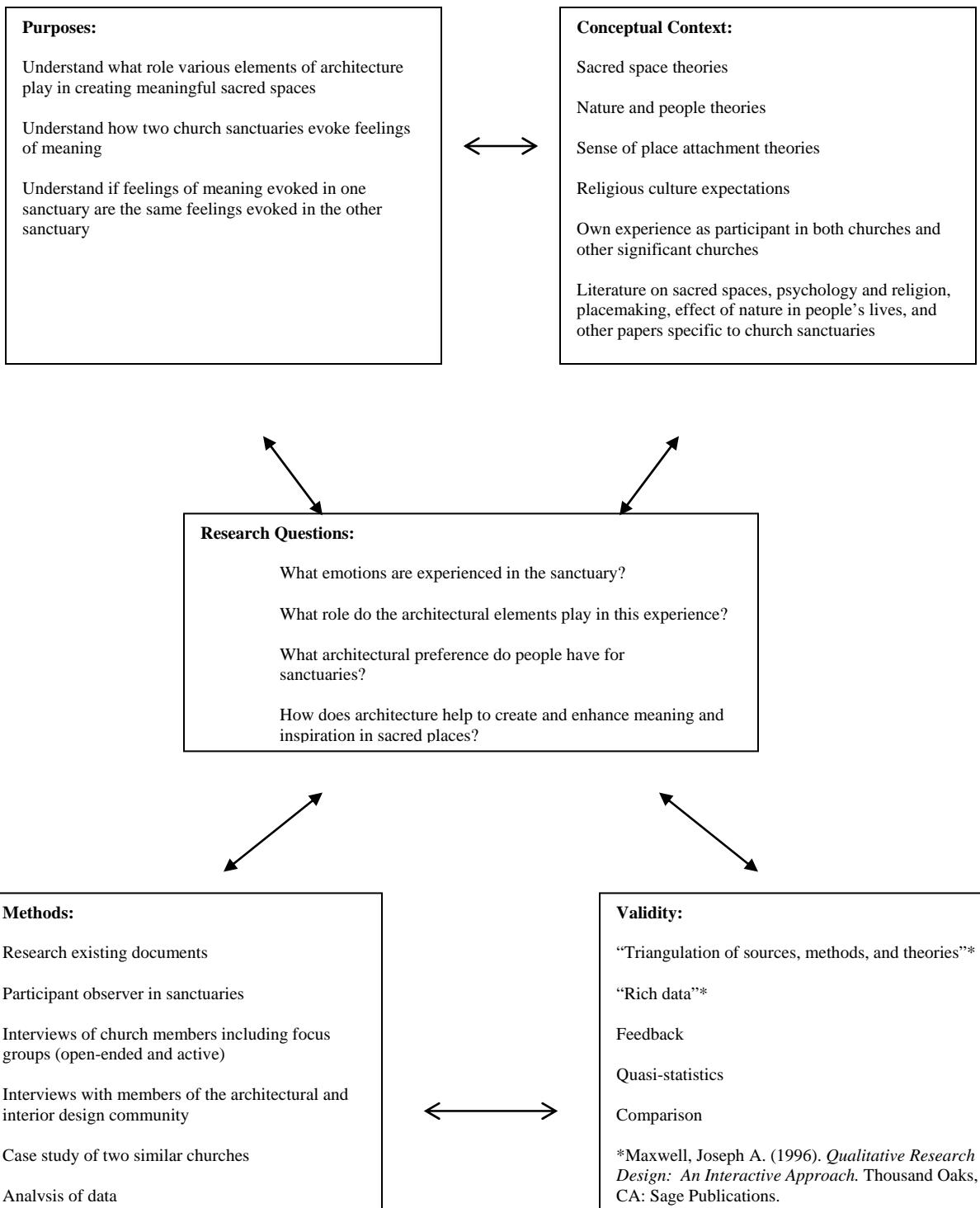


Table 1: Research Methods

This research was based on grounded theory where the questions were open-ended, interactive, and the end result was not predetermined. The information from the data created the conclusions (Creswell, 2003; Denzin & Lincoln, 1994; and Groat & Wang,

2002). In this study a phenomenological heuristic inquiry was used as well as hermeneutic interpretivism.

Phenomenological Heuristic Inquiry

Patton (2002) defines phenomenology as asking the question, “What is the meaning, structure, and essence of the lived experience of this phenomenon for this person or group of people” (p. 104). Phenomenology deals with how people understand, describe, and know different experiences (Patton, 2002 and Creswell, 2003). Heidegger (1962) explains “The word [phenomenology] merely informs us of the “*how*” with which *what* is to be treated...” (p. 59). The phenomenon that was studied was meaning as experienced in two Presbyterian Church sanctuaries on Sunday mornings. What were the feelings these sanctuaries created and were they consistent among a broad group of people? How did different people experience these feelings? “There is one final dimension that differentiates a phenomenological approach: the assumption that *there is an essence or essences to shared experience*” (Patton, 2002, p. 106). It is this essence that I have looked for in this study.

Heuristic inquiry is used when focusing on “intense human experiences” (Patton, 2002:107). Meaning in a sacred space can be an intense experience to people. Heuristic inquiry is used when it is important to know the “experience and insights of the researcher” (Patton, 2002:107). Patton (2002:109) describes an approach to “qualitative heuristics” that is based on four steps or rules. The first step involves the researcher being open to new information that wasn’t originally anticipated and being able to adapt to it. The second step insists on the researcher realizing the chosen topic may change through

the course of the research and after all the research has been done, the final topic may be totally different from the original. The third step relies on data being collected in various and different ways so the information is not one-sided and unreliable. The fourth and final step is implemented by analyzing the information with an eye toward the similarities, looking for the pattern created by the same responses to the feedback.

Heuristic inquiry and phenomenology are focused on the meanings of the experience, not on just the behaviors (Patton, 2002). These meanings are discovered through observations and discussion with self and others and through in-depth interviews. Since it was the meaning of the phenomena that I was looking for, the phenomenological approach was well-suited (Denzin & Lincoln, 1994). The phenomenological heuristic methods were appropriate for the subject of sacred architectural places since this subject can invoke strong emotions from those being interviewed and the relevant information deals with their feelings about the actual space. It was important to be able to look at all the data and extrapolate the consistencies.

Hermeneutic Interpretivism

Hermeneutic interpretivism involves understanding and interpreting the experience in the context in which it happens (Jones, 2000). Gadamer (2004) stated that it is “the art or technique of understanding and interpretation...” (p. 174). The interviewer must be active with the subject. However, it is important to know from what framework of knowing the participant is interpreting this information (Patton, 2002). Denzin & Lincoln explain that “The interpretive approach implies a relativism that eschews a nomothetic approach, while warranting the capacity of the ethnographer to interpret cultures and their local

manifestations” (1994, p. 258). Jones (2000) explains the process of hermeneutic interpretation to sacred architecture.

In hermeneutics, the interpreter of an event or building also includes the experience and process of interpretation within the scope of their reflections. The universality of hermeneutical reflection manifests itself on one of these two levels: first, in the experience of the sacred architecture by those religious devotees who interact with it in any one momentous event; second, in the long tradition interpreting those experiences on the part of cultural commentators, historians, rhetoricians, politicians, cultural artists, and scholars (p. XIV).

The reality of this research for those interviewed and for me was very dependent on our Protestant backgrounds and on our different ways of seeing the world. The information analyzed was subjective information that eventually created a pattern that was identified and understood.

Case Study

According to Yin (2003), “the distinctive need for case studies arises out of the desire to understand complex social phenomena” (p. 2). Case studies are best suited when “a “how” or “why” question is being asked about a contemporary set of events, over which the investigator has little or no control” (Yin, 2003, p. 9). “The case study as a research strategy comprises an all-encompassing method, covering the logic of design, data collection techniques, and specific approaches to data analysis” (Yin, 2003, p. 14). Sommer and Sommer (2002) define a case study as

an in-depth investigation of a single instance..It provides the opportunity to apply a multimethod approach to a unique event or setting...the case study tends to maintain the integrity of the whole with its myriad of interrelationships. It represents a *holistic* approach to research, and rests on the assumption that

understanding is increased by considering the entire entity rather than breaking it into its constituent parts (p. 203).

This study is a case study of two Presbyterian Churches in the same metropolitan area: the Green Presbyterian Church and the Blue Presbyterian Church. The culture and traditions of these two churches are very similar. The layout of the sanctuaries, the types of building materials, types of symbolic, liturgical accoutrements, and the type of light and windows used are drastically different. The sanctuaries are compared according to the age of the building, the physical size of the sanctuary, and the directional layout of the sanctuary. This study researches whether these overall differences are significant to feelings of meaning, or if the mere existence of the natural materials, spatial elements, light elements, and liturgical accoutrements in whatever form help to create and enhance feelings of meaning. Findings are able to be generalized within each church and then compared to the other. It may be possible to externalize these findings to other Presbyterian churches in the United States.

Validation

Since qualitative studies deal with intangibles, such as people's subjective feelings, it is especially important to design the research in such a way so that any threat to the validity of the research is nullified. Maxwell (1996) suggests using several of eight strategies that will help to reduce validity threats.

1. *The Modus Operandi (MO) Approach* – This involves approaching the research in the same manner as a detective approaching a crime. The process involves looking for clues as to what took place and whether or not this has anything to do with what the research actually is.

2. *Searching for Discrepant Evidence and Negative Cases* – As the data is being analyzed, particular attention is paid to data that falls outside of the normal

pattern. For some this may discount the research, however, an outlier may be just that. It may be an anomaly that needs to be mentioned, but not something that will discredit the research.

3. *Triangulation* - This is gathering information from as many different types of sources and in as many different ways as possible. When the same information has been gathered from these different sources, the validity of the study is strengthened. Triangulation will help to address any validity issues in a positive, proactive manner.

4. *Feedback* – This involves letting others, familiar with the study and not familiar with the study, communicate with the researcher as to how they understand the research. They can help to point out flaws and biases in the study.

5. *Member Checks* – The researcher in this instance will be constantly garnering feedback from those involved in the research as to the correctness of the data and conclusions being drawn.

6. “*Rich*” *Data* - This is data that is detailed and full in description. Rich data from interviews occurs when the interview is transcribed and can then be studied and analyzed thoroughly. When doing observations, the notes are extremely detailed and thorough. This allows the researcher to see what was really said instead of hearing what he wants to hear.

7. *Quasi-Statistics* – Many qualitative studies have quantitative elements within it. This is the basic numerical information that can be derived from the data. Utilizing the quasi-statistics within the study can strengthen the validity of the study.

8. *Comparison* – Comparison of elements in the study with other similar information allows for more than one set of data to be analyzed and strengthens the study. (Maxwell, 1996, pp. 92–96)

The validity of qualitative studies is strengthened when multiple methods are used (Creswell, 2003; Groat & Wang, 2002; Maxwell, 1996; and Patton, 2002). Five of these methods were employed in this study: triangulation, feedback, rich data, quasi-statistics and comparison. Triangulation was accomplished through various ways of collecting data. Information was collected through observation, existing documents, interviews, and focus group interviews. The interviews were conducted with congregation members, church staff, and architects and interior designers. This information was triangulated until

it reached a saturation of the same information being given time and again with few outliers. It was important to be aware of discrepant data and analyze whether it is consistently occurring or whether it is an outlier. Feedback was solicited from colleagues and instructors along the way.

Rich data was acquired from interviews and through observations of the sanctuaries. I transcribed all the interviews and focus group sessions word for word, in a timely fashion, and took detailed notes of the spaces I was observing. I was able to listen to the interviews and focus groups several times and to read the words from the interviews. This allowed me to hear and see things I didn't hear in the first interview. This allowed an easier task of identifying the similarities of concepts. I was able to look back over my notes and read the detailed descriptions of the buildings again. Quasi-statistics were able to be extrapolated from the data allowing a fuller understanding of the research.

Finally, the study was set up as a case study of two churches. The comparison strategy was inherent in the research. I was able to compare data within each individual church, compare data to information gathered from architects and interior designers, and compare data to both churches. These different techniques have helped to ensure a valid study.

Site Selection

The site selection started with my own Presbyterian Church. I have always wondered why I felt the way I did in such a plain space. I am an interior designer and I usually appreciate more detail to my interiors than what is shown in my church, and yet I feel a profound Presence in this sanctuary. I felt it would be important to compare similar but

different sanctuaries. By selecting another Presbyterian Church with the same traditions and culture, I felt I could control some of the variables of the study. When I originally entered the second site, I felt an emotional stirring. The two sites selected will be called



the Green Presbyterian Church and the Blue Presbyterian Church. These sites are appropriate to this study since they are both Presbyterian Churches located in the Kansas

Figure 5: Green Presbyterian Church Sanctuary

City metropolitan area. These two churches are less than one mile apart, less than a five minute drive. The culture and traditions of these churches are very similar; however, their sanctuaries are very different in the architectural design, in their connections to nature, and in their use of religious symbols. Both churches have a magnificent organ, organ pipes, and choir seats at the front of the sanctuary. Both sanctuaries have a divided chancel,

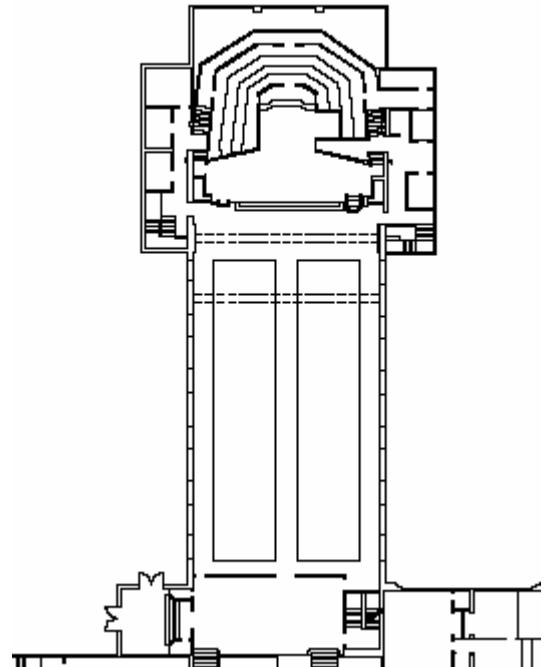


Figure 6: Floor Plan of Green Church Sanctuary

which is a chancel with the pulpit on one side and a lectern on the other side. The communion table and the baptismal font are located on the chancel in both sanctuaries.



Figure 7: Blue Church Sanctuary

located on both sides of the sanctuary. The

sanctuary is one large, long room with aisles down the center and down the sides, reminiscent of the Basilica plan that early Christians utilized (Howe, 2003). The floor slants gradually toward the chancel. There is Jurassic limestone tile on the floor and wood trim is evident on the pews. The pews are upholstered in beige and taupe fabric.

The sanctuary of the Blue Church has a darker appearance. There is art glass in the exterior windows of the sanctuary.

Not much light penetrates the art glass. There is a skylight above the chancel in the shape of a cross. When the sun is out, light flows into

This is where the visual similarities end. The Green Church sanctuary is light in color and full of light streaming in from large, clear glass Palladian windows

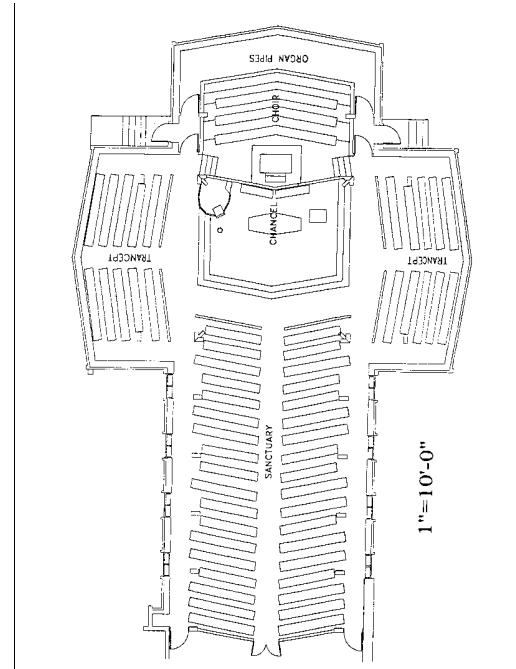


Figure 8: Floor Plan of Blue Church Sanctuary

the sanctuary; however, on cloudy days, the sanctuary can be quite dark. The sanctuary is in the shape of a cross known as the cruciform style (Howe, 2003). There is a long section looking toward the chancel with a center aisle and side aisles. Close to the chancel is where the transept is located. The transept is the cross piece that creates the cross of the cruciform style. The walls are white painted cinder block and the ceiling is a medium-colored stained wood. There are manufactured wood beams that create twelve arches. Hanging from one of the arches under the skylight is a large wrought iron cross that has wire and colored glass wound through it. The floor is covered with mauve vinyl composition tile (VCT) under the pews and mauve carpet down the aisles. The pews in this sanctuary have no cushioning. There were enough similarities and differences between these two buildings that the similar responses pointed to a pattern when they were cross-analyzed. In March 2005 I met with the senior ministers of both churches and was given permission to research their churches for this study.

Selection of Participants

Purposeful sampling of participants “involves studying information-rich cases in depth and detail to understand and illuminate important cases rather than generalizing from a sample to a population” (Patton, 2002, p. 563). It was important to speak with people within these churches who were members of the church so I could gather rich data on their thoughts and feelings. The number of people to speak with depended upon the point at which saturation of the same information occurred (Denzin & Lincoln, 1994). As saturation occurred, a broad range of participants allowed the pattern of responses gathered to be more credible. It is not uncommon for phenomenological studies to have as

few as six participants (Denzin & Lincoln, 1994). In this study, a total of thirty-nine people were interviewed.

It was essential to speak to the senior minister and other church staff of each church since they have the most intimate knowledge of the sanctuaries. It was also important to speak to congregation members to get the viewpoint from the pews. I contacted the senior ministers of both churches and they helped to provide the names of the people I interviewed. I began by calling the names I was given and setting up appointments.

The senior ministers were also instrumental in arranging for the focus group meeting. They either set it up or gave me the name of the point person to contact. The focus groups were pre-existing committees in each church. Both committees were highly involved in church planning. The committee from the Blue Church was their Worship Space Upgrade Committee. The committee from the Green Church was their Worship Committee.

In order to assure an objective, informed perspective regarding the architecture, interior designers and architects from the Kansas City area were interviewed. There was a different but similar perspective gained because of the educational backgrounds of these professionals. “To learn to see. . . . aims at understanding a formal language. The basic point is the fact that we can only perceive *order*, and that the schemata which makes this possible are not given *a priori* but have to be acquired” (Norberg-Schulz, 1963, p. 197). I felt it important that these professionals had at least ten years experience practicing interior design or architecture so that they had a design education background and a solid application background upon which to base their thoughts and ideas. Since I already knew many people in this community, I called several that I knew had at least ten years experience and scheduled interviews.

I felt it important to preserve the anonymity for those involved. I wanted everyone to be able to talk freely and without reservation so that what they said would be their true feelings and thoughts. They did not have to worry about what someone else in the congregation would think about what they said. I also didn't want this research to become a statement about one particular church over another but to focus on the information from these churches. For this reason, the names of the churches were changed to provide anonymity. Each person interviewed was assigned an identification number. The document which connects the identity of each person with the identification number assigned to them has been kept in a locked drawer separate from the rest of the research and will be destroyed at an appropriate time.

Data Collection

There were many ways of gathering data. Before the data gathering could start, questions and methods had to be identified that would best find the answers to the research questions. Following a format suggested by Maxwell (1994), A matrix was created (see table 2) with columns designated for the following questions: what do I need to know, why do I need to know this, what kind of data will answer the questions, and where can I find the data? The rows were designated for the questions I felt were essential to answer in order to get the appropriate data. The following information would be important for this study: the demographics of each church, the church's history, the physical similarities of the two sanctuaries, any emotional reactions or connections to the sanctuaries, the cause of these reactions, which emotional reactions or connections were most prevalent, what elements do other worshipers identify as important to them to feel

they are in a more inspirational space, did each sanctuary have a connection with nature and if so what, was a connection with nature important, and did the traditions of the Presbyterian faith have an impact on inspirational space?

This matrix helped to clarify the tactics needed in order to gather the necessary data. It is not uncommon for data to come from many sources in case studies. This is preferable in qualitative studies in order to provide verification and triangulation of the information (Creswell, 2003; Maxwell, 1996; Patton, 2002; and Yin, 2003). In this case study, data came from existing documents, participant observation, interviews, and focus group interviews.

QUESTIONS AND METHODS MATRIX			
What do I need to know?	Why do I need to know this?	What kind of data will answer the questions?	Where can I find the data?
What are the demographics of each church?	To assess any differences in age, wealth, & background	Data on age, income, & residence. Interviews for background information	Church offices, possibly library, and individuals
What is the church's history?	To discover dates of building and any other relevant information	Church archives and published documents	
What are the physical similarities of the two sanctuaries?	To assess the physical characteristics of the sanctuaries	Observation of the two sanctuaries, floor plans, and site measurements	Sanctuaries and Church Office
Are there emotional reactions/connections to the sanctuaries?	To discover any emotional reactions to the sanctuaries	Interviews and focus groups	Church members, ministers, church staff, architects, interior designers
What causes these reactions/connections?	To discover if the individuals can identify why	Interviews and focus groups	Same as previous
Which emotional reactions/connections are most prevalent?	To assess the strongest/most reoccurring reactions	Interviews and focus groups	Same as previous
What elements do other worshipers identify as important to them to feel they are in a more inspirational space?	To discover any other variables that might be overlooked	Interviews and focus groups	Same as previous
Does each sanctuary have a connection with nature? If so, what?	To determine the impact nature might have on an inspirational space	Observation and interviews	Same as previous
Is a connection with nature important?	To assess the importance of nature to the participants	Interviews and focus groups	Same as previous
Do the traditions of the Presbyterian faith have an impact on inspirational space?	To identify which traditions the participants feel are important to inspirational space.	Observation, interviews, and focus groups	Same as previous

Table 2: Question and Method Matrix

Existing Documents

Existing documents can “corroborate and augment evidence from other sources” (Yin, 2003, p. 87). Yin identifies three ways that this can happen. First, documents can verify correct spellings and names of organizations the researcher may come across. Second, documents can corroborate or contradict information gathered from other sources. If the information is contradicted by the documents, further research is necessary in that area. And third, inferences can be drawn from information found in the documents leading to new questions (Yin, 2003).

The demographics, the history and the physical layout and attributes of each church would show similarities and differences between the churches. A similar culture base would ensure comparisons of similar experiences. I went to the Internet web sites of both churches and of the Presbyterian Church (U.S.A.), of which both churches are members and found more information regarding age, income, ethnicity, and educational background of the areas surrounding the churches. The demographic area of these two churches is the same.

The church staff at both churches was asked if there were any books or pamphlets related to the church or to the architecture of the church. The Blue Church didn't have any published books about their church, but they did have extensive history documented in a large binder displayed in the hall outside the offices. This binder included outlines of each year's activities from the Church's conception. There were church bulletins of very special occasions, information regarding gifts to the church, synopsis of meetings where large expenditures were recommended, and other information meaningful to the church. The demographics for the Blue Church were available from the church office in

documents that were prepared in 1999 for the national Presbyterian Church (U.S.A.) located in Louisville, KY.

The blueprints for the Blue church were also available through the church office. There were complete sets of blueprints from the initial church building to the subsequent additions. The actual sanctuary in use today wasn't built until 1962. I contacted the architectural firm of the sanctuary, Hollis-Miller, to ask them for further information or architectural notes of the project. Since church design is not an aspect that is common for them, they gave all their information to the Blue Church in 1962. The principal in charge of the project David Miller had since retired and I was unable to locate him.

The Green Church had published a book in 1994 telling the history of the church from the 1940s through the 1990s. This book was full of pictures, facts, and anecdotes. The Green Church provided age demographics of their membership from February 2005.

Blueprint documents were available from the Green Church offices. I was able to look at complete sets of plans from the initial church plan to the latest renovations. The current sanctuary used at this church wasn't constructed until 1954. The last addition to the sanctuary space occurred in 1981. The developer of the land was the same developer as the Country Club Plaza in Kansas City, MO – J. C. Nichols, Co. There were many stipulations regarding building on any J. C. Nichols, Co. land. One stipulation was that a church couldn't hold services until the physical architecture of the church was completed. The architectural firm, Tanner and Associates, was one stipulated by J. C. Nichols, Co. This firm is no longer in existence. I was able to interview the minister who founded and built the Green Church so I was able to obtain data regarding why they built as they did.

Observations

Observation used as a method of research has a long history. It is one of the “earliest and most basic forms of research” (Denzin & Lincoln, 1994, p. 377). These observations “guide us in forging paths of action and interpreting the actions and reactions of others” (Denzin & Lincoln, 1994, p. 377). Observations, often used in conjunction with other methods of research, also allows the researcher to better understand the culture of the environment they are observing (Denzin & Lincoln, 1994).

My purpose for doing initial observations was to gather data about the physical structures and to get a sense of the involvement of the two churches. I wanted to understand how it felt to be in the two sanctuaries during church services. Initially as a participant observer (Creswell, 2003), I jotted down information during the church services regarding the architecture of the sanctuaries, the finishes and materials used in the sanctuaries, apparent acoustical qualities, lighting observations, comfort level, and the overall feelings I had during the service. This also helped to get a feeling for the involvement and the participation of the congregation.

Both churches were observed more than 14 times each over the course of this research. On March 5, 2005 services at both churches were attended on the same Sunday by attending the 9:30 a.m. service at one church and the 11:00 a.m. service at the other church. Some of the interviews occurred within the sanctuaries. Photographs of the interior of the sanctuaries were taken on several different occasions. Measurements of both sanctuaries were taken including light meter readings on June 15, 2005. The information from these observations was placed into a table (see table 5) for comparison.

Interviews

Where “observations provide a check on what is reported in interviews; interviews, on the other hand, permit the observer to go beyond external behavior to explore feelings and thoughts” (Patton, 2002, p. 306). Yin (2003) explains interviews are one of the most important sources of information for case studies.

They [interviews] also can provide shortcuts to the prior history of the situation, helping you to identify other relevant sources of evidence. . . . they are subject to the common problems of bias, poor recall, and poor or inaccurate articulation. Again, a reasonable approach is to corroborate interview data with information from other sources (Yin, 2003: 92).

The purpose of these interviews was to discover what feelings there were about the sanctuary, whether there were feelings of meaning felt in the sanctuary, and how it was believed that these feelings were created for the interviewees and the rest of the congregation. All questions asked were active and open-ended. This allowed for rich data and for those being interviewed to give a more thorough and in-depth answer to the questions.

The first preliminary interview took place October 4, 2004. After Institutional Review Board approval in April 2005, all other interviews occurred from April 18, 2005 through May 17, 2005. The interviews normally lasted 15 – 20 minutes, although interviews with church staff lasted from 30 minutes to one hour. A total of 39 people were interviewed for this study. In a preliminary stage of this research, one senior minister from a different Presbyterian church was interviewed. This interview helped me to understand the types of questions I needed to ask and the time commitment involved for each interview. From the Blue Church, fifteen people were interviewed. From the Green Church, eighteen

people were interviewed. And from the architectural and interior design community, six design professionals were interviewed.

I interviewed people where it was convenient for them. Some came to the church to talk to me, some I met in their home or office, and others I met at coffee houses. I interviewed young and old, new members and lifetime members, men and women. Early interviews helped me to refine not only the way I presented the questions, but also the actual questions.

The senior minister and the director of music at both churches were interviewed. Since the Green Church was a much larger church than the Blue Church, I was able to conduct interviews with other members of the church staff at the Green Church. Interviews with members of the congregation followed. People from each church were initially identified by the senior minister. I called or e-mailed these people and scheduled appointments to speak with them.

Before the interview began, I would explain who I was and that I was studying the meaning found in sacred places. I would give them a copy of the Informed Consent form and then explain it. One of the important aspects of this form was that their identity would be kept confidential. After they signed the agreement, I gave them a copy, and the interview would begin. All of the interviews were audio-taped so the interview could be transcribed and the original words preserved for analysis.

Members of the architectural and interior design community were interviewed to discover what feelings and thoughts they had upon visiting these churches. Architects and interior designers have been trained to identify why and how people react to built environments. I met them individually, first at one church and then immediately

afterward at the other church. I gave each of them an Informed Consent form which we went over and they signed before the interview would begin. I interviewed them in both places after they had had time to look around the space. Half of the interior designers and architects I met at the Blue Church first and then went to the Green Church. The other half I met at the Green Church and then went to the Blue Church. I wanted to try to limit bias in the overall research that might occur from them visiting the same church first. The information gathered from these professionals in the design field will allow for a more architecturally educated opinion of these sanctuaries.

Focus Groups

“Focus groups involve open-ended interviews with groups of five to eight people on specially targeted or focused issues” (Patton, 2002, p. 236). A focus group will allow the researcher to direct questions to a group of key individuals from each church and to react to the responses. All questions will be active and open ended to allow for rich data. This allows those being interviewed to give a more thorough and in-depth answer to the questions.

Focus groups from each church were created from existing committees. The Blue Church’s focus group was their Worship Space Upgrade Committee. The senior minister gave me the name and the e-mail address of the Chair of this committee. I contacted him and scheduled a meeting for the evening of April 25, 2005. At that meeting, I introduced myself to the five people who were in attendance and explained my research was about meaning as found in church sanctuaries. I gave out the Informed Consent form, explained it, and proceeded with the focus group interview after the form was signed.

The Green Church's focus group was their Worship Committee. The senior minister of this church set up a date for the focus group session with this committee on the evening of May 16, 2005. There were ten people involved in the Green Church's focus group session. The same procedure was followed with the Informed Consent form.

These two groups brainstormed about the feelings the sanctuaries inspired in them and the congregation and why they felt this happened. There were positive dynamics in each focus group. Not only was I able to get rich data from the sessions, but the committees were able to get information they could use from these sessions as well. These sessions were audio-tape recorded so there was an accurate record of the proceedings. I transcribed this information promptly in order to analyze it. Both churches asked for a transcript of their session and I delivered it to them when the transcription was done.

Data Analysis

The main strategy for data analysis in this study relied on theoretical propositions and cross-case synthesis (Yin, 2003). The theoretical propositions of this study were based on the idea that the architecture plays a role in creating feelings of meaning and inspiration. It was also based on the belief that the use of architectural materials from nature or views of nature will enhance these feelings. The final theoretical proposition being used was that the use of religious symbols in the architecture, in addition to the others stated, adds another depth of dimension to the feelings of meaning and inspiration (Yin, 2003).

Cross-case synthesis is the idea that more information can be discovered and understood by comparing at least two different studies to find their similarities and

dissimilarities (Yin, 2003). The transcriptions from the interviews were typed with a very wide right margin in order to take notes and to identify concepts. Transcripts were read and reread. Words and phrases that had significance to this study were underlined. Each underlined phrase or word was identified, with a concept assigned to it in the margin. This information was then placed in a table format in order to see the bigger picture. This allowed for any discrepancies or outliers to be identified and inspected and for consistent themes to be recognized.

To understand the process of analysis that was used, the following excerpt is taken from an interview with one of the members of the congregation. The key words and phrases were underlined. At this point, there was no attempt to identify the concepts that these words and phrases suggested.

Interviewer: What feelings or emotions do you have about the architecture of the church or of the sanctuary?

Church Member: The sanctuary makes me feel really peaceful, um, and there I think something about the high vaulted ceilings um really creates a quiet that even when it's filled with people, it's really very, it can be very um peaceful and and I like the fact that we have the skylight over the top because it really does affect the lighting in the room. We have some days where it's a little bit darker, it may be overcast outside, then we have those wonderful moments where a light breaks through the clouds and all of a sudden the light comes down over um over where the, kind of, the minister is standing and up around the choir and that's always kind of nice. So I would say peaceful.

Interviewer: And you've kind of already explained a little bit about why you believe you have these feelings between the height and the skylight and the light. What type of meaning does the space of the sanctuary have for you?

Church Member: I, um...the sanctuary is...to me is like being at home...and I, I really am not, I mean I come to church regularly. I spend a lot of time outside of the sanctuary during church service time because I do a lot with younger children, so, my times in here are pretty valued to me because I don't always get to be in here every Sunday. But, um, I know that the the feeling that I have when I'm here is being at peace, being ready to listen and open myself...so I think that it's very hard for all of us when we're so busy in our lives to you know slow down, stop and listen. And I

think it's something to do with the quality of sound in this sanctuary but also just obviously with it the religious experience that you go through when you're here that I just um I come in, I sit down, and I'm ready to listen.

Interviewer: What are your favorite things about the architecture?

Church Member: I love the wood; I love the vaulted ceiling with the arches. I love the pipes of the organ that we have. I mean they're very prominent but uh I know the music that comes out of them is beautiful and um and so I think that's what they've kind of become to me. Um, I like the, we have kind of a burgundy wood up at the front which sort of matches the carpeting and I like that and I like the color of the woodwork that we have um. It's a you know a lot of people say that it's a great church to get married in because it has the nice center aisle that goes right down the middle. I uh I can see why people would think that. My home church that I grew up in was a colonial style and so to me that was traditional and this this space to me is much more um contemporary. But I also like the stained glass we have on either side. It creates really nice light in the mornings when you're here.

Interviewer: Okay. Um what elements are important for you in the sanctuary to feel that you're in a special sacred, inspirational space? There's certainly a difference from when you're in the space outside, the narthex, to when you come in. So what elements in here make it so for you or would be important for you?

Church Member: Elements is hard for me. To me a lot of it is the scale. I think. There's very few times in our lives that we enter a space this size. And if you do enter a space of this size in our everyday lives, generally it's something like an auditorium or for me it might be a school gymnasium and that's not a place for quiet and that's not a place for peacefulness and so I I think that just the um the size of the space is something that really immediately kind of makes you aware that you are in a kind of a special room and you know, that this is a place set apart for you.

Interviewer: Is there anything else besides the size? Other elements that make it special and sacred?

Church Member: Well, like I said, I love the woodwork. I have to admit that the cross which is probably one of the most prominent things in our sanctuary is not something that I just totally love. So um, I've grown to love it because you know I love the church and being here, but um, I I usually it's the people that are here. You know, I mean, while I love the general surroundings it's a the people that it's filled with a lot more. I can just look around and say there's not a specific you know I love the I guess the organ is great, but other than that, to me it's not a church that has a lot of rich trappings outside of the beautiful woodwork, or the ceiling and the arches.

After the key words and phrases were underlined, then the concepts these represented were identified in the margins. Feelings and emotions that the participants experienced was coded as meaning.

Interviewer: What feelings or emotions do you have about the architecture of the church or of the sanctuary?

Church Member: The sanctuary makes me feel really peaceful, um, and there I think something about the high vaulted ceilings um really creates a quiet that even when it's filled with people, it's really very, it can be very um peaceful and and I like the fact that we have the skylight over the top because it really does affect the lighting in the room. We have some days where it's a little bit darker, it may be overcast outside, then we have those wonderful moments where a light breaks through the clouds and all of a sudden the light comes down over um over where the, kind of, the minister is standing and up around the choir and that's always kind of nice. So I would say peaceful.

Interviewer: And you've kind of already explained a little bit about why you believe you have these feelings between the height and the skylight and the light. What type of meaning does the space of the sanctuary have for you?

Church Member: I, um...the sanctuary is...to me is like being at home...and I, I really am not, I mean I come to church regularly. I spend a lot of time outside of the sanctuary during church service time because I do a lot with younger children, so, my times in here are pretty valued to me because I don't always get to be in here every Sunday. But, um, I know that the the feeling that I have when I'm here is being at peace, being ready to listen and open myself...so I think that it's very hard for all of us when we're so busy in our lives to

- Meaning
- Volume
- Community of people
- Meaning
- Light

- Awareness of nature
- Meaning

- Place attachment
- Meaning

you know slow down, stop and listen. And I think it's something to do with the quality of sound in this sanctuary but also just obviously with it the religious experience that you go through when you're here that I just um I come in, I sit down, and I'm ready to listen.

- Quality of sound/ acoustics
- Place attachment

Interviewer: What are your favorite things about the architecture?

Church Member: I love the wood; I love the vaulted ceiling with the arches. I love the pipes of the organ that we have. I mean they're very prominent but uh I know the music that comes out of them is beautiful and um and so I think that's what they've kind of become to me. Um, I like the, we have kind of a burgundy wood up at the front which sort of matches the carpeting and I like that and I like the color of the woodwork that we have um. It's a you know a lot of people say that it's a great church to get married in because it has the nice center aisle that goes right down the middle. I uh I can see why people would think that. My home church that I grew up in was a colonial style and so to me that was traditional and this this space to me is much more um contemporary. But I also like the stained glass we have on either side. It creates really nice light in the mornings when you're here.

- Materials from nature
- Volume
- Architecture
- Music/ organ/ acoustics

- Materials from nature

- Place attachment

- Stained glass
- Light

Interviewer: Okay. Um what elements are important for you in the sanctuary to feel that you're in a special sacred, inspirational space? There's certainly a difference from when you're in the space outside, the narthex, to when you come in. So what elements in here make it so for you or would be important for you?

Church Member: Elements is hard for me. Too me a lot of it is the scale. I think. There's very few times in our lives that we enter a space this size. And if you do enter a space of this size in our everyday lives, generally it's something like an auditorium or for me it might be a school gymnasium and that's not a place for quiet and that's not a place for peacefulness and so I I think

- Volume
- Place attachment

- Scale/ Volume
- Place attachment

that just the um the size of the space is something that really immediately kind of makes you aware that you are in a kind of a special room and you know, that this is a place set apart for you.

Interviewer: Is there anything else besides the size? Other elements that make it special and sacred?

Church Member: Well, like I said, I love the woodwork. I have to admit that the cross which is probably one of the most prominent things in our sanctuary is not something that I just totally love. So um, I've grown to love it because you know I love the church and being here, but um, I usually it's the people that are here. You know, I mean, while I love the general surroundings it's all the people that it's filled with a lot more. I can just look around and say there's not a specific you know I love the I guess the organ is great, but other than that, to me it's not a church that has a lot of rich trappings outside of the beautiful woodwork, or the ceiling and the arches.

- Place attachment
- Materials from nature
- Religious symbol/cross
- Liturgical Art

- Place attachment
- Community of people
- Community of people
- Organ
- Materials from nature
- Volume
- Architecture



Figure 9: Blue Church
sanctuary featuring
Stained Glass

Once these concepts were identified, a list was made and the concepts listed as to the number of times they were referenced. This was repeated for each church. The concepts for each church were compiled and compared to other concepts within that

<i>Meaning</i>	<i>Volume</i>
<i>Light</i>	<i>Awareness of Nature</i>
<i>Acoustics – Quality of Sound</i>	<i>Materials of Nature</i>
<i>Acoustics – Music, Organ</i>	<i>Place Attachment</i>
<i>Acoustical Representation</i>	<i>Religious Symbol</i>
<i>Volume/Scale</i>	<i>Architecture</i>
<i>Liturgical Art</i>	<i>Community of People</i>
<i>Stained Glass</i>	

Table 3: Concepts Identified in Interview with Church Member

same church. The two churches' data were compared to each other. These in turn were compared to the concepts generated from the members of the architectural and design community. This list was then examined for concepts that were similar in meaning. Duplicate and redundant concepts were deleted. Outliers were examined to make sure there was no flaw in the research process. Data collection and analysis happen in tandem in qualitative research. The list of concepts reached a saturation point after 18 interviews

<i>Awareness of Nature</i>	<i>Simplicity</i>
<i>Materials from Nature</i>	<i>Stained Glass</i>
<i>Light</i>	<i>Community of people</i>
<i>Religious Symbols: font, table, pulpit</i>	<i>Architecture: windows, floor plan, ceiling, arches, vaults</i>
<i>Cross</i>	<i>Place Attachment</i>
<i>Liturgical Art</i>	<i>Awareness of dated finish materials</i>
<i>Acoustics</i>	<i>Focus on worship</i>
<i>Organ and pipes</i>	<i>Openness</i>
<i>Sound System</i>	<i>Elegance</i>
<i>Volume</i>	<i>Concern for contemporary worship</i>
<i>Feelings: peaceful, strong, safe, warm, Welcoming, relaxing, inviting, Refreshing, centeredness, renewal, Quiet, reflective, comforting, calm</i>	<i>Darkness</i>
<i>Presence of God, meditation, Worshipful, cheerful, spiritual</i>	<i>Physical comfort</i>
<i>Pews</i>	<i>HVAC awareness</i>
<i>Music</i>	<i>Accessibility</i>
	<i>Elegance</i>
	<i>Dark</i>
	<i>Sounds from nature</i>

Table 4: Themes identified in Study

had been conducted. Upon analyzing the list of concepts created from the interviews and transcriptions, several themes emerged. Those themes are a connection with nature, use of religious symbols, place attachment, and architecture.

After analyzing the concepts identified from the transcripts, it is important to read through the transcriptions again and to look at all the other data that have been compiled. From careful consideration of all the data, interpretations have been drawn. The main essence of the data are: feelings of meaning and inspiration are heightened in Presbyterian sanctuaries when the sanctuaries have connections with nature including a defined quality of natural light, symbols of the Presbyterian faith that help to create familiarity and attachment, and architecture that is acoustically friendly to music and the spoken word with a sense of immensity created by the volume and scale of the architecture.

CHAPTER 4

FINDINGS: MEANING EXPERIENCED IN CHURCH

SANCTUARIES

In this chapter I submit the findings of my research of the meaning and inspiration found in sacred architectural places. The first part of this chapter discusses the research sites. This includes the history and demographics of each church as well as a comparison of the architecture and its characteristics. The second part of this chapter describes the participants interviewed. General information such as approximate age and gender is given. Pseudonyms will be used to protect their identity. The final part of this chapter describes the experience of the participants in the church sanctuaries. I have used their own words to describe their experiences. I have edited the interviews so that the pertinent information is easy to read and the character and personality of the participant comes across. The meaning found in these sanctuaries on Sunday mornings varies from person to person; however, the overall feelings expressed are very similar.

The Sites

As stated previously in this study, the research sites were selected originally because of their similarities. The biggest similarity is that they are both Presbyterian churches that belong to the Presbyterian Church (U.S.A.) denomination and they are within the same

demographical and geographical area in a suburb of the Kansas City metropolitan area.

This similarity allows the participants to share a common knowledge base as far as region and religion. The congregations of these two churches are very active in the church.

These churches are within one mile of each other. I believe it is the differences between these churches that help to make a contribution in what is understood about meaning in Presbyterian Church sanctuaries.

The time when these two churches were founded was in the mid to late 1940s, after World War II, servicemen were coming home and starting families and businesses. It was a prosperous time. It was the start of the baby boom. Land around Kansas City, previously prairie land, was suddenly dotted by many houses being built. Not only were homes being built, but also businesses and churches. J. C. Nichols was a very successful developer in the area. He was responsible for the creation of the Country Club Plaza and many communities surrounding Kansas City. His company was responsible for the beginning of the suburb where these two churches were subsequently built. At that time, there were at least two different segments of the Presbyterian denomination. The denomination that originated out of Topeka, KS had jurisdiction over the building of the Blue Church. The denomination that originated out of Kansas City, MO had jurisdiction over the building of the Green Church. This explains the close proximity of these two churches built around the same period of time. The population of the area was exploding and in need of a local spiritual home. Both of the national headquarters for these two different Presbyterian church organizations saw the need and proceeded to fill it. Even today, the demographics show that the areas around these churches are predominately families, white non-hispanic, 14% - 21% with college educations, and incomes that range

from \$43,000 - \$69,000. These churches also pull membership from all over the Kansas City metropolitan area with a sizeable number from the more affluent southern and western areas of the Kansas side of the metropolis

The Green Church

The Green Presbyterian Church was dedicated February 13, 1949, but the first services were held November 7, 1948. The original sanctuary seated 380. It was not long before they needed to expand. The cornerstone of the first addition was put into place in the new sanctuary November 25, 1954. This sanctuary could seat as many as 1028 and was built following the basilica plan. The chancel is oriented north with the narthex on the south. Large windows face east and west. The original choir loft was divided and faced each other. It didn't allow for the many members involved in the choir to participate at one time. It was impossible to seat the choir and an orchestra for any musical events. In 1981, the last addition to the sanctuary involved adding 36 feet to the chancel area, reconfiguring the choir area so it then created a small semi-circle facing the congregation, and addressing accessibility issues. Not including the chancel, this added 96 seats for the congregation and allowed accessibility for those people who were wheelchair bound to be in the sanctuary. In 2002, the sanctuary installed a Jurassic limestone tile floor. The Jurassic limestone features fossils, some as large as seven inches in diameter. In the process, the aisles had to be widened and three more inches added between the pews in order to meet the codes set forth in the Americans with Disabilities Act. They lost approximately 150 seats in this process.

Currently the sanctuary is approximately 9,000 square feet and seats between 900 – 1000 people. As of February 2005, it has a membership of 4,855 people. Membership age

distribution is as follows:

16%	-----	< 29
40%	-----	30 - 59
15%	-----	60 – 69
29%	-----	> 70

There are three services held every Sunday morning to accommodate its congregation.

There are five large, open, Palladian style windows on each side of the sanctuary.

There is a small, clear glass, rose window over the chancel area on the north wall. The wall separating the sanctuary from the narthex has windows on the upper half. Light streams into the sanctuary even on cloudy days.



Figure 10: Green Church Sanctuary featuring Palladian Windows and Painted and Stained Pews

As stated before, it is a basilica plan (see figure 6). This is a large, open area with a center aisle and side aisles and the chancel area at the end. It has a gentle slope to the floor from the back down toward the chancel area. The ceiling height is 35 feet tall with windows that are ten feet tall. The sanctuary and chancel are 50 feet wide and approximately 150 feet long. There is an additional 29 feet in length of a balcony seating area.

The original color of the sanctuary was green, however the color was recently changed to tan with cream painted wood at the same time the Jurassic limestone floor was added. There is a very large crown molding at the ceiling that has been marble faux-finished in metallic colors. The ceiling is an elliptical vault and painted a lavender color that appears grey.



Figure 11: Green Church Sanctuary featuring Raised Pulpit and Painted and Stained Pews

The pews are painted the same cream color as the trim with mahogany stained backs. The seats are upholstered in a contemporary commercial fabric in grey, black, cream, and tan. The artificial

lighting in the sanctuary is concealed behind the crown and

relies totally on ambient reflection from the ceiling. The chancel has many different types of can lights that can be controlled for the desired effects. There is a pipe organ. Some of the pipes are seen at the back of the chancel area; others are hidden behind screens on the side.

On the chancel, the pulpit is on the right and slightly raised with the lectern on the left. Small antependia hang down the front of the pulpit and the lectern. These cloths are changed depending on the liturgical calendar. The liturgical calendar represents the seasons of the Church (Wittich, 1996). Green in the cloth designates ordinary time; white

is used for Easter and Christmas; purple is used for Advent and Lent; and red is used for Pentecost. There is a large, solid, block-like communion table in the center that holds a small brass cross and two brass candles. Depending on the use of the table each Sunday, two floral arrangements may be placed on either side of the table. The baptismal font is to one side of the chancel. On certain special occasions, there are liturgical banners hung in the sanctuary.

I was able to interview the founding minister, now pastor emeritus, regarding his original ideas about the design of the building.

Interviewer: Did you have a prototype that you had seen before that you were working from when you were designing this?

Minister: Well, I tell you what went into that design...first of all we were building across the street from [deleted] School which was an established public school and uh you know we wanted to tie in the architecture with that on the corner. Ah, we're also uh you know it's just at the end of the war and families were coming back and again the Colonial kind of seemed to...the (contemporary?) history of the moment and so that played a part in it too. And I'm pretty much of a traditionalist I think or have been certainly and so I pictured a church of that kind of design with the clear windows that you see outside as in contrast to stained glass and um

Interviewer: Did the clear glass over the stained glass, was there a particular reason? Because stained glass is also traditional as well.

Minister: Right, we didn't have any stained glass. I don't think there's still any stained glass there. Uh no, it was to let the beauty of nature come inside.

I encouraged him to continue.

Minister: Well, it just seems that it's too bad to cut the beauty of the outdoors off. While I can appreciate the stained glass it divides you from the outside. It's a curtain from the outside.

Interviewer: What aspects were essential to you in that building for it to be a sacred space? You've got the clear glass so that the outside's coming in. What other things were essential for it to be sacred, to be an inspirational, meaningful place.

Minister: Well, I was very much concerned with acoustics. I think too often that's overlooked in buildings and certainly it was overlooked in older church buildings so uh we were trying to do the general décor that would accommodate the acoustics whether it was a an organ playing, or an orchestra playing, or whether there wasn't any music in the part of the service, you could have the kind of acoustics that make for quietude but

again would at the same time highlight the music when the music is played.

He expounded for several minutes on the issues they had in the beginning before they had a sound system.

Interviewer: What's your favorite things about the church, about the architecture?

Minister: Oh I think that I like the steeple. We moved that when we moved from the chapel into the larger sanctuary, moved that steeple and kept that, put it on a larger base, but kept the same original steeple. And I think again the openness of the church by the way of the windows and all.

Interviewer: I know that's certainly one of the things that really caught my attention when I first came to the church and so many people have mentioned that it's the light that really gets you when you first walk in.

Minister: Yeah, well it, it looks cheerful and it's got the beauty of nature coming in from outside.

I asked him about the basic design of the church.

Minister: When you when you walk in you know you weren't walking into a general auditorium. The going thing at the time was to have a multi-purpose room that you could set up for worship or then cover those up with something and then have your square dance and so forth up there. I wanted a place that was dedicated primarily for worship and with respect when they walked in, that's what they were expecting.

Interviewer: Now the one thing that's somewhat absent from the sanctuary is um...most churches have a large visual sign of the cross when you go in.

Minister: Yeah, we've always just had that simple, very simple cross on the communion table. I understand maybe they are considering something different from that now, but again it was the simplicity of it and not overpowering. While that cross is the central symbol in many respects, I would not want Christianity confined to a cross either. I want something that's presently active.

The concept of light and acoustics in this sanctuary constantly came up in the interviews.

I took a light meter reading showing 250 footcandles in the sanctuary.

The Blue Presbyterian Church

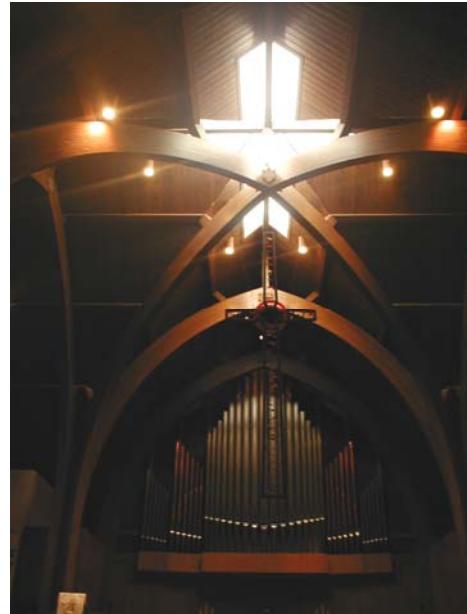
The Blue Presbyterian Church was dedicated March 21, 1954. The original sanctuary seated 200 – 250 people. They quickly outgrew their sanctuary and in 1961 began adding

a new sanctuary to the structure. The first service was held in this new sanctuary on December 23, 1962. The structure of this sanctuary hasn't changed since this time. It is approximately 4500 square feet and seats 250 – 300 people during services. As of December 2004, their current membership is 352 people. Fifty percent of their membership lives within two miles of church. In a 1999 report to the national Presbyterian Church (U.S.A), their membership by age distribution is as follows.

22%	-----	< 35
33%	-----	36 – 55
21%	-----	56 – 64
25%	-----	> 65

There are two church services provided every Sunday to accommodate their membership.

The sanctuary was built in the form of a cross, known as the cruciform style (see figure 8). The chancel is located in the east with entrance from the narthex on the west. Windows on the north and south are tall and narrow, contemporary stained glass. The windows on the south are exterior windows. An addition in 1992 to the church offices enclosed the windows to the north. They now face a hallway outside of the present offices. There is a skylight directly over the chancel area. It follows the design of the sanctuary and is also in the form of a cross. There is a wall with doors and no windows separating the sanctuary from the narthex.



The choir loft is located at the front of the sanctuary facing the congregation. It is relatively small and the choir is sometimes

crowded. There is a partial half wall separating the choir from the rest of the chancel. This wall makes it difficult to arrange choir members and orchestra members on the chancel for musical events.

Twelve exposed, wood beam gothic arches immediately make an impact upon walking into the sanctuary. Directly above the chancel, two powerful arches intersect at right angles to each other below the skylight. The ceiling is covered in narrow wood planking. It is very dramatic.

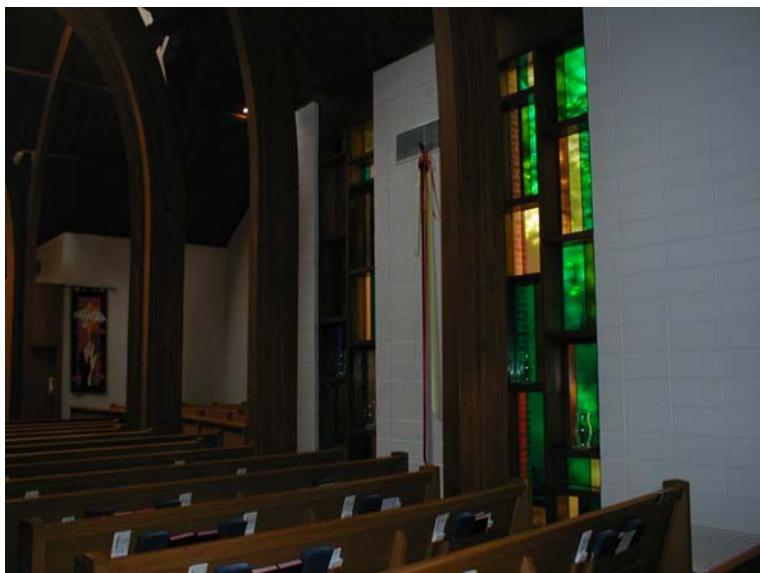


Figure 13: Blue Church Sanctuary featuring Stained Glass Windows and Stained Pews

There are four tall, narrow windows with a contemporary stained glass design on each side of the main part of the nave. The pattern in the stained glass is vertical in design. The colors used are green, blue, teal, pink, peach, and yellow. The teal and pink are the predominant colors in the glass. As

stated before, the cross-shaped skylight is centered over the chancel at the point where the transept and nave intersects. There isn't much light that comes in through the stained glass windows, but on a sunny day, light floods onto the chancel platform from the skylight. On a cloudy day, it is rather dark.

The sanctuary is cruciform shaped. The major part of the sanctuary is 33 feet 6 inches wide and 100 feet long from the back of the chancel to the start of the narthex. The

transepts, the side areas that create the crossbar of the cross, are each 16 feet long and 36 feet wide. The ceiling at its highest point is 33 feet 6 inches with stained glass windows 16 feet 6 inches tall. The floor is not sloped toward the chancel and there is no balcony.

While the original color of the sanctuary is not documented, it is likely that it was an off-white color that is present today since so many materials in the sanctuary seem to be original to when it was built. The walls are exposed cinder blocks painted the off-white color. The trim is medium-light brown stained wood, the same color as the beams and the wood ceiling. The wood ceiling has bisecting vaults with exposed wood trusses and gothic arching beams. The floor has a short, burgundy-colored, commercial cut pile carpet installed on the aisles. Under the pews are eight inch square burgundy VCT. The chancel has a wood floor that is stained a dark burgundy stain compatible with the carpet.

The pews are stained the same color as the trim and they have no upholstery or cushioning. Individual burgundy seat pads are available in the narthex for anyone wanting them. In the main part of the sanctuary, the pews are placed slightly at angles to each other which allow the congregation to be able to see each other more easily. The lighting in the sanctuary consists of large exposed can lights affixed to the wood ceiling. There is a pipe organ. The shiny pipes of the pipe organ are prominently displayed behind the choir on the east wall.

On the chancel, the pulpit is placed on the left with the lectern on the right. Antependia are hung on the pulpit and the lectern. These cloths are changed depending on the liturgical calendar. There is a long communion table in the center of the chancel. It holds a brass cross and two brass candles. Depending on the use of the communion table

on Sundays, two floral arrangements may be placed on either end of the table. The baptismal font is on the chancel and to one side.

Four or more banners are hung on the walls closer to the chancel area. However, the focus of the liturgical art is the large wrought iron cross that is suspended from the bisecting beams directly under the cross-shaped skylight. This cross was created by a local artist for this church. In the open space in the center of the cross, thin wire has been strung back and forth with large glass chunks randomly placed in the wire. The cross is not immediately apparent when entering because of all the rich detail of the wood and the arching beams. It's prominent location and detail demands attention as a focal point. During important Christian occasions such as Easter, Advent, and Christmas, women in the church decorate the deep recesses found in the stained glass windows with many little crosses and candles.

I was unable to speak to anyone who had insight into the design of the sanctuary when it was being constructed. As in the other church, the concepts of light and acoustics were consistently mentioned in the interviews. The light meter reading in the sanctuary shows 50 footcandles.

Comparison

The Green Church is open and full of light. It is easy to see the congregation at one time. The only clear, natural light in the Blue Church comes in from above and as a result, the interior has low illumination. The Blue Church has areas that are blocked from view because of the transepts and as a result, it is impossible for the congregation to see everyone in the church at one time. The Green Church has few liturgical art and religious symbols. While the Blue Church is rich with liturgical symbolism and embraces a sense

of drama, the Green Church revels in its simplicity. The Green Church has three times as many seats, twice the square footage, and fourteen times the membership of the Blue Church. The demographics of both churches are the same. The footcandles recorded in the Green Sanctuary is 250 and in the Blue Sanctuary 50. A simple matrix to compare and contrast both sanctuaries is show in table 5.

	Physical Comparison of Churches Blue Church	Green Church
Site Orientation	Pulpit to the East, Entrance to the Sanctuary from the West, Windows to the South	Pulpit to the North, Entrance to the Sanctuary from the South, Windows on the East, West, and North
Square Footage	~4500	~9000
Seating Capacity	250 – 300	900 – 1000
Floor	Burgundy-colored, cut pile commercial carpet down aisles, 8" x 8" Burgundy vinyl composition tile elsewhere	12" x 12" grey and taupe Jurassic Limestone with fossils showing
Walls	White or Off-White, medium- colored stained wood trim	Medium Taupe color with cream-colored painted trim
Ceiling	Wood paneling stained a medium- colored stain with exposed trusses and Gothic arching beams. Skylight above chancel in shape of cross. Bisecting Vaults start at 16'-6" and peaks at 33'-6".	Lt. lavender color, sheet rock and plaster. The elliptical vault starts at 22' and peaks at 35'.
Windows	Narrow, 16'-6" tall linear abstract stained glass in colors of green, blue, teal, pink, peach, and yellow. Windows on the South face outside, Windows on the North face interior corridor	Large, 10' tall, clear glass mullioned and arched windows on the East and West. Small, clear glass, mullioned rose window on the north
Pews	Medium-stained with no cushion	Mahogany stained backs with cream painted ends. Upholstered seat in shades of grey, taupe, and black
Lighting	Large can lights at the ceiling 50 footcandles	Concealed cornice lighting, 2 cans to the front of the congregational area, multiple can lights in the chancel area. 250 footcandles
Religious & Liturgical Symbols	4 Brightly colored banners, 2 floral arrangements on Communion Table, Antependia on pulpit and lectern, candle- holders and cross on Communion Table. Large, wrought iron cross with wire and glass bead detail suspended below skylight. Communion Table, Baptismal Font, Pulpit, Lectern, organ pipes	2 floral arrangements on Communion Table, Antependia on pulpit and lectern, candle- holders and small cross on Communion Table, Baptismal Font, Communion Table, Pulpit, Lectern, organ pipes

Table 5: Physical Comparison of Churches

The Participants

The participants in this study come from a number of different backgrounds. There are men and women, young and not so young. Members of the congregation, church staff, church ministers, architects, and interior designers participated in this study. A broad mix of people were interviewed for comparing and contrasting their responses. Assuming anonymity, age and professions were not requested. Some volunteered this information in the interviews and educated guesses were made as to other participant's ages. I relied on the senior minister and the church staff for names of members of the congregation. I knew enough people in the interior design and architecture community that I was able to create a list to work from.

The Green Church

At the Green Church I interviewed 18 people. This included ten people who were involved in the focus group. All but two individuals were interviewed at the church. Of the two, I interviewed one at a restaurant and one at his place of business. Of the 18 people, ten were male and eight were female. I estimated that one was in their thirties, four were in their forties, four were in their fifties, five were in their sixties, two were in their seventies, and two were in their eighties. Four were employed by the church, at least five were retired, and at least one was in business for herself. Occupations or employment status of the other eight was unknown.

The Blue Church

At the Blue Church I interviewed 15 people including the five people who were involved in the study group. All but four of these people were interviewed at the church. Of the four, one was interviewed in his office, two were interviewed in their home, and one was interviewed in a coffee shop. Of the 15 people, six were male and nine were female. I estimated that one was in their twenties, two were in their thirties, three were in their forties, four were in their fifties, four were in their sixties, and one was in their seventies. Three were employed by the church, at least five were retired, one was a homemaker, at least two work in an office, and at least one was in business for himself. Occupations or employment status of the other two participants was unknown.

Age	20's	30's	40's	50's	60's	70's	80's
Green Church	0	1	4	4	5	2	2
Blue Church	1	2	3	4	4	1	0
Architect & Interior Designers	0	1	2	2	0	1	0

Table 6: Comparison of Age of Participants

Architects and Interior Designers

To qualify to be interviewed, this group of professionals had to have been practicing in industry for at least ten years. All of the architects and interior designers were interviewed in both sanctuaries. Of this group, four were women and two were men. One was in her thirties, two were in their forties, two were in their fifties, and one was in his seventies. Five of those interviewed were interior designers. Of these, two worked in some capacity for educational institutions, one worked for an architectural firm, and two

were in business for themselves. Of the two in business for themselves, one owned a design firm with a store front and one was a commercial interior designer.

The Experience

As the different churches were contacted and then subsequently the participants, everyone expressed interest in this research. Since there were two separate sites and three different groups of people, data management was critical. Each major theme was identified. The experience of each church to that theme was described. The architect's and interior designers' opinions regarding each church were also summarized.

Most of the themes identified at the end of Chapter Three are common for both churches. After looking at these themes, there are several that can be categorized under a common heading. Several themes that are common to both but didn't occur as frequently are: community of people, focus on worship, concern about contemporary trend of audio/visual, and physical comfort. A few themes are unique to the individual church such as heating, ventilation, air conditioning (HVAC) awareness, accessibility, and awareness of dated finish materials.

The organization of the information is formatted to the major themes shown in a matrix (see table 7). As each theme is identified, the matrix will show the number of references from both churches. The references from the architect and interior designers are their references independent of the individual churches. The architect and interior designers' references specific to the churches are compared and shown in a matrix under their section in each category.

The participants were very forthcoming about their thoughts and feelings regarding the spaces. It was also provident that both churches were in the process of looking at their sanctuaries with a critical eye toward the perception of their space. Pseudonyms have been used throughout this study to protect the identity of the participants. Since the senior ministers of both churches have a unique perspective of their churches, a comparison of information from their interviews occurs first.

1. Connections with Nature	2. Religious Symbols
1A. Awareness of Nature	2A. Font, Table, Pulpit
1B. Light	2B. Cross
1C. Dark	2C. Liturgical Art
1D. Sound from Nature	2D. Pews
1E. Materials from Nature	2E. Stained Glass
3. Place Attachment	
	3A. Experience with churches
	3B. Rites and Rituals
	3C. Community of People
4. Architecture	5. Feelings
4A. Windows	5A. Peaceful
4A1. Skylight	5B. Strong/ Safe
4B. Arches	5C. Refresh/Renew
4C. Floorplan	5D. Warm
4C1. Cross Shape	5E. Centered
4C2. Basilica/Meetinghouse Shape	5F. Quiet/Meditate/Relax
4C3. Simple	5G. Comfort
4C4. Elegance	5H. Calm
4C5. Open	5I. Presence of God
4C6. Half-Round Shape	5J. Welcoming
4D. Volume	5K. Worshipful
4E. Acoustics	5L. Cheerful
4E1. Sound System	5M. Joyful
4E2. Music	5N. Spiritual
4F. HVAC	
4G. Accessibility	
4H. Dated Materials	
4J. Focus on Worship	
4K. Concern with Contemporary Worship	
4L. Sightlines	
4M. Physical Comfort	

Table 7: Themes Identified with Concept Categories

The Green Church

I meet in the office of the senior minister for the first interview at this church. The first question is what feelings or emotions he experiences in the sanctuary.

Senior Minister: It feels warm. This worship space is fairly simple. It's not intended to be elaborate at all. It's pretty simple. So most of the emotion of the space is connected to the gathering of the people who come in it.

Interviewer: And then the follow up question is why do you believe you have these feelings with that space?

Senior Minister: Well, I think this space has...has, you know, most or all the basic symbols, most of the basic symbols of Christian worship. There's a table, there's a cross, there are candles, there's a baptismal font. It's not chairs it's pews. There's a pulpit, there is light. All of those symbols have a strong history in Christian worship and so what the sanctuary becomes is a place to gather those symbols. If you took those symbols out of there it would be pretty bland. So...but that's kind of the New England Colonial feel of the room. The symbolic presence there is important.

Others answer similarly to this question. The sanctuary is warm. He identifies the connection to the people and to the religious symbols that create the feel of the space. I ask him what meaning the space has for him. Even though he had started to touch on this with the previous questions, I want him to be specific about this.

Senior Minister: I guess maybe the way to answer that is to walk through some of those symbols. The table is the place where we receive the gifts of god, the sacrament...

Interviewer: Do you refer to it as a table, as a communion table, as an altar table? How do you refer to it?

Senior Minister: We call it a communion table or the table; it is not an altar which is why it is pulled away from the back wall. That happened at the Reformation that we pulled the table away from the wall - made it a table at that point. Ours looks a little bit like an altar. It's this solid form, but most of them actually look like tables. You know with legs. It's also where we bring our gifts as a place of offering. The baptismal font, you know, baptism is a claiming the promise that we belong to God. And so that is always there to remind us of that promise. The pulpit is the place where we lift up centrally the scriptures. So it's those different symbols. In and of themselves they are not holy, they're not important, but they point to things that matter to us as a community very

deeply. Including the pews. The difference in pews and chairs is A chair is kind of one for one, the pew is more of a community place to sit.

Again, it is the symbolism of the religion in the space that helps to create the emotions felt in the space. The symbolism sets it apart from ordinary space.

Interviewer: What are your favorite things about the architecture of the sanctuary? What are some of the elements, the things you like the best?

Senior Minister: Yeah, I like that it's bright. I think that's nice.

Interviewer: Mostly natural light.

Senior Minister: It's natural light. I came from a sanctuary that had those kind of windows (pointing to story book stained glass) and so it's very different. And you know the windows are one of the things I've noticed the most. It's very bright. I like that. I like the baptismal font. It's very simple - dignified. I think that's probably what I like the most.

The light in the sanctuary is a frequent theme in both churches. This church sanctuary is full of light even on cloudy days. I wanted to know his idea of what a meaningful church will look like. What elements will be important to include?

Senior Minister: I think I would not do a long rectangular box. I think I would circle the pews, kind of half way around. So that people in worship could see other people in worship. I think it would have a stronger sense of community. There's two things that are going on in worship and architecture has to make a choice I think. I haven't seen many rooms that pull both of these off very well. There is a value of community. An awareness that worship is something that's done as a family. Another value is "awe". Sanctuaries traditionally have put all their eggs in the "awe" basket. Tall, high ceilings, significant art, stained glass, tremendous organs. All of that communicates we're in the presence of something bigger than ourselves. It's hard to have that feel and to also feel a sense of community. But one way to at least nod at that is to kind of have circle pews. I think it will do that. I've already said I like the divided chancel. I'd have the choir in front like it is here. I think I would have a table with legs rather than um uh this sort of full...

Interviewer: Plinth kind of..

Senior Minister: Yeah. I would uh, I might put the baptismal font out in the middle of the room, certainly put it centrally. I'd probably make it moveable like ours is, but have a space right down in the middle of the people where baptism could take place. I think I would do that.

Interviewer: Would you slope the aisles?

Senior Minister: I think I would do that rather than have the chancel lifted up high. Uh, I would want the space in front to make it very visible for

everybody to see baptisms, to see the Lord's Supper, to see things that happen.

Interviewer: So would you do stained glass or clear glass or both?

Senior Minister: Um, I would not do colored glass. If the glass looks like that (pointing to a picture of a past church) could tell a story and communicate its symbol ...

Interviewer: It would need to tell a story instead of just being some kind of a color.

Senior Minister: Correct. You don't improve on the colors you have outside the clear glass if you just put color in it, but if it um, if it is a collection of symbols that can feed the imagination, um, I would be attracted to that. It's hard to do. There aren't that many churches that are doing that kind of glass anymore.

Interviewer: What would you have on the floor? What kind of materials on the floors and on the ceilings?

Senior Minister: On the floor? Oh, the choir's going to want tile. You know that already. And that's fine. If I could do it the way I want, we'd probably have hard wood instead of tile.

His views about the arrangement of space are consistent with other ministers and congregation members that the focus is on the message and on the community of faith. He emphasizes the symbols of the Presbyterian religion, the use of volume, the use of stained glass to tell a story, and the use of natural wood as a preference for the floor. As he explains about using stained glass, he states that there is no way to improve on the colors of nature so the use of stained glass must be in its ability to tell a story.

The Blue Church

The interview with the senior minister of the Blue Church is the first interview conducted in this study. We meet in his office and I begin by asking him about his feelings and emotions regarding the architecture of the church or of the sanctuary.

Senior Minister: I would say that the traditional design of Blue Church in a subtle way affects my own sense of the worship space. It does have the traditional, I'm bad at the correct terminology, but cross-shaped design with the transepts and you know I think that design appeals to a certain kind of sensibility in worship. This is the only congregation that I've ever served that has had this design. There is something about, like I said, in a subtle way the cross shape, that I think does provide some kind of

reminder or visual on a kind of grand scale, visual image of the central symbol of the Christian church so that the design probably is part of what I experience. It is important for me to have the visible signs of the church as part of the worship setting...a prominent part of the worship setting so the presence of what in the Presbyterian Church we call the communion table, and the baptismal font and my sensibility is that whether there is a baptism or not, the visible sign of the font is important.

The importance of the visible symbols of the Presbyterian faith from the communion table to the very blueprint of the Blue Church is felt to be important for a meaningful emotional experience.

Interviewer: The symbolism it represents.

Senior Minister: Correct, so that as people are experiencing worship and directing their attention toward the chancel every Sunday there is a tangible sign of both of the sacraments of the church baptism and the sacrament of the Lord's Supper. It would be very rare that I would want to have those signs not present...The cross that hangs from the ceiling, uh, is probably the most dramatic part of the permanent liturgical design of the sanctuary. I appreciate its design, I like its design. I find it moving. Something about the amber beads, or whatever you would call them, that are in the...certainly you know, the kind of circular wire that is through the design of the cross.

The religious symbols are very prominent and obvious in this sanctuary. I again ask him about the emotions he feels in the sanctuary.

Senior Minister: I think that the emotion that I feel in the sanctuary... comes fromsome weaving together of the community of faith that is gathered and what is happening in the community of faith. But, you know, this community of faith is.....defined is not the right word but... the sanctuary is the holy space for this community of faith and so I would say I think that it is the gathered people of God. The emotion that accrues to the architecture has to do with the fact that for this community of faith, historically and in my present involvement here, obviously for funerals and memorial services, that's probably the place where palpable emotion is most present...The emotion that's attached to the architecture has to do with the fact that the emotion is present in the community and the community is in its holy space if that makes any sense.

Interviewer: It's kind of hard to separate isn't it.

Senior Minister: I think it's impossible to separate it, but emotion does accrue to the architecture of the space because it is the chosen holy space for this community of faith.

He explains the necessity of a community of people coming together to worship God. Without the community, there is no church. He also refers to a strong place attachment the sanctuary holds for the congregation.

Interviewer: So it is the ritual and the rites and place attachment...you get an attachment of place by the repetition of rituals and rites and things.

Senior Minister: For a lot of people the sanctuary is a comforting place and I don't know if comfort is technically an emotion but a feeling and so you know in a moment like the 9-11 moment, it was where people wanted to come to pray to be together and I think that happened in churches all over the country on that particular day.

And so therefore it is the place where the emotions of the community are expressed and if there is a way in which, you know, you can think about emotion permeating wood and a space...I would say that.

The minister uses the phrase "emotion permeating wood and space". Eliade (1957) has written about this as he discusses the sacred and the profane. Jones (2000) has also written about this as he speaks to the understanding of sanctuaries, especially in relation to the rituals that occur there. I next asked about his favorite elements in the sanctuary.

Senior Minister: Well I'd say the cross, the hanging cross is, you know, one of my favorite things. It's kind of a unique thing. I've never quite seen anything like it so it adds a kind of distinctiveness to the Blue Church worship experience. I like the skylight. The skylight is actually in the form of a cross as well.

Interviewer: I noticed that.

Senior Minister: Um I like the sky light. I like the fact that natural light is entering from above. I love the wood in the sanctuary and I think back to the question of emotion and in kind of a subtle way, I think the wood adds warmth to the sanctuary. We really need it because we've got cinder block walls which aren't very warm. There's so much wood on account of the arches. I like the arches, I like the wood. I do like the acoustical quality of the space.

He identifies the cross and the cross-shape used in the sanctuary, the skylight and the light from it, the architectural beams, and the acoustics all in one breath. I believe this

helps to point out their interrelatedness. I ask him to design a sanctuary from scratch that would be meaningful and then describe it.

Senior Minister: One thing I've learned from Blue Church and other places I've been to is the power of art. If I were in charge of the design of the sanctuary and let's say they had the resources to be able to commission some art that would be a permanent feature of the sanctuary, I think that would be great. The cross here you know is kind of that. I do like stained glass, particularly some of the older stained glass. I don't know if people can afford to you know commission that kind of stuff.

Interviewer: You prefer the stories told within the glass?

Senior Minister: Yeah. The other thing that I've seen in sanctuaries that I really like and that I think is very effective is the introduction of auditory aspects and particularly with regard to baptism and water.

Interviewer: Water that is running?

Senior Minister: You have to be careful with it because it has to be subtle. But I do like that at another Presbyterian Church they've got the drip. You don't notice it that much, but every now and then you hear it and I like that so, you know, that kind of visual and auditory design is a way that draws upon more of the senses of the worshiper, That would be something I would be interested in exploring if I were designing the sanctuary.

Interestingly, in a preliminary interview with another Presbyterian Church minister of a different church than those studied, that senior minister talked about the importance of the sound of the space and the sound of water. This aspect of water and the sound of water, sounds of nature, as a spiritual dimension was one of the findings in Watson & Kucko's (2001) study of Thorncrown Chapel and the Mildred B. Cooper Chapel.

Comparison

Both ministers point out the importance of the people of the church, the community of faith in the church. They also agree on the importance of the religious symbolism in the sanctuary that helps to set it aside and make it special. The aspect of natural light and the use of wood are mentioned by both ministers. One of the ministers goes further to explain the importance of ritual and rites in a sacred space which speaks to the layers of emotions that are experienced in the sanctuaries.

Connections to Nature

The theme identified as connections to nature has several concepts. The references to this category are shown in the following matrix (see table 8).

1. Connections with Nature	Green Church	Blue Church	Arch. & Int. Designers
1A. Awareness of Nature	38	15	11
1B. Natural Light	36	49	12
1C. Dark	0	9	0
1D. Sound from Nature	0	3	0
1E. Materials from Nature	14	42	9

Table 8: Matrix of References to Connections with Nature

Natural Light

Natural light has been an important element of Protestant worship. It is symbolic of the presence of God, and it is a symbol of goodness (Roberts, 2004). Some could argue that light is also an awareness of nature. I choose to separate it into its own category since one can have a sanctuary that is connected to nature, however, it may not have a lot of natural light.

The Green Church

This church has a total of ten large windows that open the interior to the views outside and allows light to fill the sanctuary. It is also an important element in this church.

Luke: Well, what I like about the architecture of this place is the dance of light on the pipes. The shadows that it casts. With the open windows there are shadows that are cast everywhere differently though out the day and it's sort of intriguing to watch the light on the architectural space itself. During the morning hours there's kind of a golden glow. Late at night there's a richer, as the setting sun comes through the windows, it casts even heavier shadows than in the morning. In the morning it's a soft light and in the afternoon as the sun sets there are deep shadows...

Luke's response to light touches on the aspect of nature in the sanctuary. The first question to everyone is about what kinds of feelings or emotions they have about the sanctuary or the church. The following excerpts are in response to that question. Rick mentions the colors of the sanctuary, but he then talks about the light.

Rick: I think the color palette is more soothing now than the old color palette, I like too, like Sara, the openness of the windows and just the light being there, the light colors, and the light coming through the windows.

Rick is also referencing Sara's reaction to the sanctuary, her feelings of 'calming, relaxing – attuned'.

June: I was going to say, there's a happy feeling in the church and probably the light is part of it and the openness, uh, it's just kind of joyful to come in...to me.

Joyful, bright, and cheerful are words that occur in interviews with participants from the Green Church.

Chris: I'll go back to what somebody said about us not having stained glass windows, that light coming in makes us feel so open and free...it's just really nice.

Samantha: When I was first a member here, though, the trees weren't very big. And I remember the first Easter Sunday when I came in with the choir for the early morning service and the light...that sun was just streaming in...it just felt like God was right there...it was just incredible.

She identifies the sunlight with the presence of God. The culture and teachings of the Protestant faith make this same connection. Light was mentioned by everyone I interviewed at the Green Church. In some instances, they discuss the matter of too much light at times. However, no one wants to cover the windows with anything to control it.

The Blue Church

The Blue Church has a skylight and stained glass windows. Clear, natural light comes in through the skylight. The lack of light and the drama of the light that does come in may account for the Blue Church participants' awareness of the light.

Chip: While I think the sanctuary is pretty with the wood beams and everything, I think it's a dark mood and I think a church should be one of brightness and celebration and I don't think the darkness in there uh conveys that. That's one of my concerns. I think a church should be bright and light and I think our sanctuary has a somber somewhat depressing feeling when you go into it.

If I was doing it [designing the sanctuary], there would be a lot more light. A lot more ability for natural light to come in and then artificial lighting would be much more modern and much much better.

While he likes the sanctuary, he feels a real need for more light. The apparent dark interior bothers him. Cindy also makes reference to the light and the dark when I ask her how the sanctuary makes her feel.

Cindy: It's this strong, safe presence and there's a lot, we've got a glass cross in the middle where the light comes through and so its just very, I mean it's all dark, that's the only light in the whole room and it's right in the center and its very welcoming and comforting and
I think that the light helps, the light helps. Otherwise it would be very, very dark place...

And later into the interview she adds "I wish we did have more clear light". I ask Katie what her favorite things in the sanctuary are.

Katie: The way the...light comes off the skylight. The strength, it's so massive. And it is marvelous to be sitting there and to have the sun come flooding through or the storms come thundering through and sometimes hail and you just wonder "Okay, are you going to come through Lord? Are you trying to send us a message?"

Her experience with light is also closely related to her experience with nature. Many I interview refer to the dark sanctuary and express a desire for more light in the sanctuary.

Comparison

Natural light is an important concept for both churches. Participants from the sanctuary with a lot of light and the sanctuary with limited light both make many references to light. Too much light and too little light can greatly affect the perception of a space (White & White, 1998).

The quantity of light in a room is measurable. Light is generally measured in footcandles with a footcandle meter (Nuckolls, 1983). A footcandle is the amount of light thrown by one candle onto a one square foot white surface from one foot away (Nielson and Taylor, 2000). Lux is a comparable measurement to footcandle in determining lighting levels. It is used in the metric system (Williams, 1999) and in the Illuminating Engineering Society's (IES) lighting recommendations (Nuckolls, 1983). When converting footcandles to lux, multiply footcandles x 10.76 (Williams, 1999).

Since light was such an important element in these sanctuaries, readings were taken on a light meter at both sanctuaries on June 15, 2005. In the Green Church, a reading was taken around 3:00 p.m. on a sunny day. There was no access to turn on any of the artificial lighting. The reading was taken from a pew in the center of the room. It registered 250 footcandles. At 3:10 p.m., the reading was taken in a similar manner in the sanctuary of the Blue Church with all the artificial lighting turned on. It registered 50 footcandles.

When 250 footcandles is multiplied by 10.76, it equals 2690 lux. When 50 footcandles is multiplied by 10.76, it equals 538 lux. Giles (2004) cautions against using too much illuminance in the sanctuary. He suggests using between 100 to 150 lux. This range of illuminance matches the activity level of “working spaces where visual tasks are only

occasionally performed” according to IES recommendations (Williams, 1999, p. 3). The lighting in both spaces is more than adequate for the tasks required, however, there is still a perception of darkness at the Blue Church and cheerfulness and joyfulness in the Green Church because of the light. This moves into the area of psychological need rather than physiological need.

The Green Church has a lot of windows that allows light to pour into the sanctuary. The participants from this church are aware of the impact this light has on their experience of worship. They state that it creates feelings of calmness, relaxation, of being attuned, happiness, joyfulness, and the presence of God.

The natural light in the Blue Church comes from the skylight above the chancel. The stained glass windows don’t let much light in. Some interviewed have focused on the light that comes in and talk about how it feels safe, strong, comforting, and welcoming. However, others perceive the contrast of the light to the rest of the sanctuary and see the darkness in the areas that the sun from the skylight doesn’t touch and perceive it as depressing. Several participants feel that when there is no sun, it feels very somber in the Blue Church sanctuary. Watson and Kucko (2002), in their study of Fay Jones’ architecture, reference Stafford’s 1998 article on Fay Jones and his creations when they quote him, “Natural light establishes continuity with the outside world; the Creator God is emphasized, not the God of Mystery and Revelation” (p. 21). I believe the responses in this study agree with this statement. Participants from both churches, when asked to create a meaningful sanctuary from scratch, identify lots of large windows to see out and let light in. Both groups agree that they like some stained glass windows.

Architects and Designers

Likewise, the architectural and interior design professionals feel that natural light is important in a sanctuary. As with the Green Church and the Blue Church, they react to the presence of light and the absence of light. These professionals notice the darkness more than the light at the Blue Church. None of them reference darkness at the Green Church. All the references to darkness are negative using such words as dark, imposing, negative, and medieval. They all feel that natural light is important for a positive experience. The following matrix shows their references to natural light at both sanctuaries (see table 9).

	Green Church	Blue Church
References to Natural Light	16	4
References to Darkness	0	6

Table 9: Architect's and Interior Designers' References to Light in the Church Sanctuaries

At the Green Church, Ron describes his reaction to the lighting.

Ron: This church generally has a very clean and lighter feel. Both light in terms of weight and light in terms of light itself. The connection to daylight and to nature is very important to me. Both of these churches have it in different ways, very different ways. But for me, they're both successful at least in that sense.

Ron also expresses that because of this feeling of lightness, he feels unburdened.

Ron: It's very light and emotionally I do feel like I don't have so much baggage on my shoulders.

Susan appreciates the large glass windows for the light and the view.

Susan: I do like the windows in the space. They're nice and large and bring in a lot of natural light. That's nice. Yeah, and then it's nice to have the trees right outside.

I do like that and I think the natural light and having the outdoors come in and that's a nice aspect to. And so that is one thing I like as well.

In the Blue Church, it is the lack of light that gets the most comments.

Debbie: I was um taken in by the darkness, when you walk in; there's a darkness here that I did not see at the other church.

Probably for me it's a negative. I think that the colored glass or the stained glass in some ways is very elegant and in some ways it takes away from the outside being brought in and allowing maximum light to come in.

Again, it is difficult to separate light and aspects of nature, but light continues to be called out separately.

Susan: It's kind of dark in here isn't it?

I almost feel like this is more of a medieval type of setting...So, yeah, I think the other sanctuary seems more up to date. It feels brighter.

She agrees that the lighting coming in and the lightness of the other sanctuary has a lot to do with her perceptions.

Ron: Probably my favorite chapel space in the entire world is Corbusier's Ronchamp which is a very complicated space, but on the other hand, it's very Spartan and it's all about the light. I think that's what struck me when I walked in here...I do like the way that the light comes in from above as opposed to the sides.

I'm not fond at all of the windows. Either the configuration, the color or anything else about them. Especially the [he is referring to the stained glass windows that are located on an interior wall], at least there is some natural light coming through even though that's an interior wall.

The other comments from these professionals on light are very similar. They prefer the sanctuary that is "brighter and lighter" and feel that the Blue Church needs to improve its overall lighting.

The essence of the participants' feelings seems to come from the question asking them to describe a sanctuary they would design from scratch. The architectural and interior design professionals have no problems envisioning this sanctuary.

Debbie: I do think the lighting is something that I would put a lot of emphasis on. Natural and artificial.

Suzanne: I think the light airiness makes me feel more comfortable, more a part of things. I think lighting is very important, combinations of lighting being able to change the lighting during different parts of the worship,

just, I think that can also clue you as to when you are to be involved or when you are to focus, I think that sort of thing is really important . . . lighting and adding some drama.

Ron is emphatic about the element of light in a sanctuary.

Ron: I'll go back to one of my earlier statements...natural light is probably THE most important thing to me about the space, and the volume of the space, and how that's arranged is important.

As Elaine describes what her church sanctuary will look like, she mentions the use of a lot of windows. I question her as to how much stained glass and clear glass she will have.

Elaine: I would have large windows in it.

I love the stained glass windows at my own church [depictions of earth, wind, fire, water]. I think it doesn't matter if they would be contemporary or very traditional stained glass but I do like some of that in a church, but I think that the people would feel comfortable in it.

I love the stained glass, I love the use of it, but I think the light coming in is important to me.

An open feel [is important] because I think that [the] open feel of the light adds to the feeling that people are welcome there.

The concept of light, just like the concept of nature brings forth strong opinions from these professionals.

Awareness of Nature and Sounds and Materials from Nature

Charles Lewis (1996) mentions studies on this issue of nature that has taken place in prisons, hospitals, and space stations. The findings in these studies are very much in keeping with this study. "What has emerged is that even a brief encounter with nature can be restorative. My experience confirms this; I have found that even a momentary glimpse of trees outside my office window helps reduce stress" (Lewis, 1996, p. 111). In the context of meaning and inspiration in sacred places, a brief encounter with nature is calming, comforting, and relaxing. The other three categories of awareness of nature,

sound from nature, and materials from nature combined are the most referenced category for all three sets of participants (see table 8).

The Green Church

The large windows in this church allow trees and sky to be seen. There is no stained glass window in this sanctuary to distort the view. In my interview with the Pastor Emeritus, he openly speaks of designing the church so that there is a connection to nature within the church by the view afforded out the windows.

Pastor Emeritus: Right, we didn't have any stained glass. I don't think there's still any stained glass there. It was to let the beauty of nature come inside.

Well, it just seems that it's too bad to cut the beauty of the outdoors off. While I can appreciate the stained glass, it divides you from the outside. It's a curtain from the outside.

From the very beginning, a connection to nature is felt to be important in a sanctuary to help connect the congregation to God and to his creations. This idea of not being cut off from the outside comes up several times.

Peter: Now other things I think this room is good about. One of them is...and you get both of this in England...but here I love the clear glass windows, because you see the world. And you see the world honestly, now here we don't have 5th Avenue out there, but at least we have (deleted) Road and you have trees, you can see trees and you can be reminded that there is a world beyond these walls that matters and our concern must be for the whole world. And that whole thing about seeing the world whole...if the church has any usefulness, any purpose left in the world, you know people aren't...well...the things people needed 500 years ago, they don't need anymore. But you know the fear of health, the fear of all that stuff. But what they do need more than ever is a sense of the whole world. Especially American Christianity. We so want to just think everything's fine as long as I'm fine. And the clear glass reminds me that that I'm called to see the world whole without geographical, political boundaries. So I think that's a really good thing.

When I ask Peter what his favorite things about the sanctuary are, he again speaks about nature.

Peter: Okay, I'm going to go all over the space: clear glass windows, That they aren't colored windows. Light yes. And you can look out and see birds in trees, you can see sky.

Or snow falling or a thunderstorm coming across. You know you aren't cut off from nature so much as if they were colored glass. Um, I love looking down and seeing 165 million year old fossils.

In Sara's interview, she also speaks about nature.

Sara: This is the first church that I have been in where there's no stained glass. At first I really missed having stained glass, however over a period of years I've come to really appreciate having the openness and having God's world as our stained glass and it makes me feel in touch with nature when I'm in our sanctuary.

It's very calming, relaxing – attuned – yes!

She speaks about the sense of nature in the sanctuary and then describes the feelings she has because of it as 'calming, relaxing, and attuned'. John also links the feelings he experiences in the sanctuary with nature. I ask him what elements are important for him in a sanctuary to feel that he is in a special, sacred space.

John: A peacefulness, a serenity, making you feel calm and welcome. The warm feeling.

Interviewer: And how do you create that?

John: I think it's just created through all of these things we've just been discussing: the architecture, the nature, sunlight. It's comfortable. It's attractive. It just fits.

This sense of nature can also be accomplished by using materials found in nature to give a presence of nature.

Edward: Touching on that floor, it gives it a kind of timelessness to it because it's not just something that was run off of a mill last year. It's been around for thousands, millions of years in the ground and now we're putting it on our floor and it should hopefully be here for hundreds of years also after this so it kind of puts you in a larger perspective than just your little daily focus that we tend to have.

He speaks to the idea of perspective that nature can give us. When I ask participants to create from scratch a sanctuary that they feel will be meaningful, they respond many

times with it having materials from nature utilized in the interior. Jim talks about the use of more wood.

Jim: And....I kind of like the Green Church design but I think I would like to use more natural woods not painted...

Jennifer expresses that she “likes the use of natural stone and natural wood”.

The Blue Church

Nature and ideas relating to nature are also important at this church. Lisa likes the colorful stained glass in the sanctuary and explains her feelings about it.

Lisa: I associate color a lot with the earth and I think that goes back a little bit to Godly places. It's appropriate to me for a church setting.

She associates the earth (earth is synonymous with nature in this case) with sacred space. I ask Sue what her favorite part of the sanctuary is. In her explanation, she talks about the way nature is experienced in the sanctuary through the skylight.

Sue: The open skylight where whenever there is any kind of weather event going on, you get a feeling for the outside right above our heads. So I think probably the wood, generally having the all wood, and then those curved beams and then the skylight.

This is an important element to her experience for worship for her and for others. There is no way to experience what is happening outside or to see outside except for the skylight.

Tracy: When the shadows pass through at different times of the day or if the sun goes behind the cloud, it creates different colors in the shadows which I think is beautiful too. It's subtle but I think it um it can be very soothing.

She associates a soothing feeling with the ability to see the shadows pass and the colors change. The stained glass windows have lighter colors in places. Jean can see through them a little.

Jean: During the service I find myself looking up there, it's just very spiritual...also when the sun is shining and it shines through and you can

see the shadows of the dogwood trees out there. I just think, I just think it's beautiful. I feel very spiritual in there and especially during services, but, I've been here a long time.

Jean gets a spiritual feeling with the sun shining and the shadows of the trees evident through the stained glass. She indicates in the interview that she grew up in the church. Some of her feelings of spirituality are probably increased because of place attachment - because of the history that she has experienced there.

When I ask Cindy to design from scratch a sanctuary that would be meaningful, she did not hesitate with her answer.

Cindy: [If] we could just, you know have an open ceiling with glass. Not like the glass cathedral in California or anything or Fort God or whatever it is. Not to be distracted by things outside but more just open. You can see nature going on. I like the wood in the church but I also like darker wood too I mean to offset lighter things.

Cindy identifies a view to the outside with nature, and also materials from nature that are used in the sanctuary. To experience nature, one doesn't have to see nature in action; one can experience nature by the materials from nature that are used in the construction of the building.

John: Well I think as far as our sanctuary is concerned, the general large open space of it is inviting. It's more formal, uh the wood, the wood tones in the space tend to be a quieting factor for a very large open space.

Mark also has a great appreciation for wood. He talks about what he and his wife liked about the sanctuary.

Mark: But, what we liked about it the most is of course the wood. Course I'm a wood lover and the fact that the building, the sanctuary is built in the shape of a cross and with the arches and then you look up in the ceiling and then you see the sky light in the shape of the cross, and the hanging cross.

Mark is referencing the wood ceiling when he talks about looking at the ceiling. After seeing the ceiling and what it is made of, he then sees the skylight. This is another example of how hard it is to separate each element from the other. It is a layering of these elements that creates the whole experience.

Responses such as these are common from the Blue Church. They may not have been able to explain why they liked the things they did, but they do know what they liked. The ability to see what is happening with the weather, with nature, via the skylight and the extensive use of wood in the sanctuary seems to help create meaningful experiences for the congregation.

Comparison

The Green Church participants and the Blue Church participants identify awareness of nature, sounds of nature, and materials from nature as important elements for them in sacred spaces. The Green Church has many large windows allowing an unobstructed view to the outside. Many people identify this as meaningful to them and use the wording ‘connection to nature’. The congregation at the Blue Church doesn’t have the ability to see outside unobstructed. It is only when the sun is shining brightly that the shadows of the dogwood trees are visible. Their other way of noticing nature is the skylight. They are very aware of clouds passing by or sunshine flooding in.

The participants of the Green Church refer to the Jurassic limestone used throughout for the flooring. In some of his sermons, the minister specifically refers to the fossils found in the limestone, created in nature. Some participants have identified the limestone as giving a feeling of permanence to the building. The other material from nature identified in the sanctuary is the stained wood backs of the pews. The participants of the

Blue Church identify the wood that is used in the ceiling and the architectural exposed beams as elements they like and enjoy. No one from the Blue Church identifies the plaster or cinder block walls or the VCT flooring or the carpet as anything that is inspirational or meaningful to them. It is those elements from nature that are identified.

Architects and Designers

The awareness of nature and materials from nature are also heavily referenced by the architectural and interior design professionals (see table 10).

	Green Church	Blue Church
1A. Awareness of Nature	14	2
1D. Sound from Nature	0	0
1E. Materials from Nature	8	14

Table 10: Architect's and Interior Designers' References to Nature in the Church Sanctuaries

At the Green Church, Suzanne specifically mentions the views of nature.

Suzanne: It's got lots of windows which is good. I think it is important and I like it that there's trees in front of them on both sides because I'm not distracted by traffic going by, and I like feeling that I'm surrounded in nature. I think that's very important.

Tim: It's sort of like being outside and even the round window over the center of the back has tree leaves behind it so you get a feeling of the outdoors.

This is indicative of the observations the other architects and interior designers made regarding the Green Church. Several of them commented on the Jurassic limestone floor, but it is the ability to see nature right outside the windows that caught their attention. At the Blue Church, Suzanne experiences an "aha" moment. Her observations are very telling.

Suzanne: But for some reason sitting in here, it doesn't make me feel as comfortable. So explain that to me why I find this more interesting and yet...and not seeing the trees...so that must be something that's very important to me.

For Suzanne, it is the views of nature that are especially important for her and not the materials used from nature. I asked Ron what feelings he was experiencing in the Blue Church.

Ron: I guess, it's comfortable, kind of cozy. Lot's of wood so that uh gives you that feeling. It's a very, it's a much more intimate feeling space...

Ron identifies comfortable and cozy with the use of wood. The comments regarding the Blue Church run along this same line of thought. All of the professionals want to see more visible signs of nature. They also appreciate the wood that was used extensively in this sanctuary.

When I ask these professionals to design from scratch a sanctuary that will be meaningful, they all feel that a connection to nature is very important. When I ask Tim what the sanctuary will be made of, his comments are to the point.

Tim: Glass. [I ask him why.] Uh, I don't know except I live in a glass, predominantly glass house where the outside comes right in. And I'm in love with it, so if I was going to do something that had a spiritual feeling, I feel like I would want to have it fit with nature.

Tim understands that nature is important for him to experience spirituality. Debbie also feels that seeing nature is important and puts herself inside the sanctuary she designs.

Debbie: I love having the idea of sitting in there and looking outside and seeing the trees...and just think about it, the different seasons and how beautiful that would be.

Whether their comments have a direct correlation such as Tim's or an indirect one such as Debbie's, nature, for them, is an important aspect of meaning in sacred places.

Religious Symbols

Religious symbols can help to differentiate an auditorium space from a church sanctuary. Presbyterians feel that it is important to have visible reminders of their faith. These reminders enhance their religious experience. Eliade (1957) states

Symbols awaken individual experience and transmute it into a spiritual act, into metaphysical comprehension of the world. In the presence of any tree, symbol of the world tree and image of cosmic life, a man of the premodern societies can attain to the highest spirituality, for, by understanding the symbol, *he succeeds in living the universal* (pp. 211 & 212).

Religious symbols play an important and integral part in both of these churches to the perception of meaning. Religious symbols include the baptismal font, the communion table, the pulpit, the lectern, the cross, liturgical art such as banners and antependia or a beautiful interpretation of the cross such as at the Blue Church, the church pews, stained glass either as art glass or scenes or symbols from the Bible, and the community of people. Pews are included under religious symbols because of the number of times that they were specifically mentioned. The senior minister of the Green Church says that pews are special to church sanctuaries and are therefore a religious symbol. Stained glass is categorized under religious symbols recognizing that the initial use of stained glass was in cathedrals where it was used represent stories from the Bible and to educate the illiterate to the Bible (Sheldrake, 2001).

2. Religious Symbols	Green Church	Blue Church	Arch. & Int. Designers
2A. Font, Table, Pulpit	38	6	0
2B. Cross	17	40	6
2C. Liturgical Art	12	31	11
2D. Pews	9	7	0
2E. Stained Glass	8	27	5

Table 11: Matrix of References to Religious Symbols

The Green Church

The Green Church is aware of its simplicity. They have the basic symbols of the Presbyterian faith. As one enters the Green Church, they will notice the nature visible through the windows and see the natural light filling the room. The focus then goes to the front of the sanctuary, to the chancel, and finally, to the symbols of the faith. On the chancel there is a pulpit and a lectern. There are antependia cloths hanging on the pulpit and lectern that display the color appropriate for the liturgical calendar.

There is also a communion table which holds a small, simple brass cross. The other symbol of the faith is the baptismal font which is located toward the lectern. There aren't any banners hanging in the sanctuary. Sometimes there will be a banner displayed on a Sunday for a special purpose such as baptism or Earth Day, but there aren't any displayed on a daily basis. The participants from the Green Church have expressed strong views regarding the religious symbols in their sanctuary. Many people at the Green Church are aware of the symbolism within the church.

Alex: I'm very, very biased toward liturgical symbols in a sacred space and you know... You know walking through our sanctuary there is...it's pretty minimal...there's not a whole lot of that. But what there is...is important to me you know. There's the baptismal font, there's the cross on the communion table, there's the communion table itself, and in recent months there are antependia as well, um liturgical cloths hanging in front of the lectern and pulpit. They are of course changed periodically, seasonally through the church here. Purple for Lent, Green for ordinary time, you know things like that. Red for Pentecostal. Yeah. Things like that are really important to me.

People in the focus group also comment on how they like the antependia on the pulpit and the lectern. He isn't alone in this need for the religious symbol. I asked Luke what makes the sanctuary different from the narthex.

Luke: Well, what happens is more important than where it happens and that's certainly true, but certainly the centrality of the preached word, so you have lectern and pulpit. You have the communion table, you have the baptismal font. I have been in a space where the lectern and the pulpit were central rather than to the periphery. This is more the traditional treatment with the center with the communion table. But without those elements, you just have a space, a stage. To some degree, that's what would set us off from some of the contemporary performing arts centers being built.

He identifies the issue of the plainness of the sanctuary. The religious symbols are those things that define what it is.

Peter: The simplicity, straight-forwardness, simple beauty of it, I do find meaningful. At its best it focuses our attention on the most basic which for us, we only have two sacraments: Baptism and communion, so there's the font and the table.

However, as simple as it is, some participants want to see more obvious symbols of the faith. I asked Sandra what elements are important in a sanctuary to feel that she is in a special, sacred, inspirational space.

Sandra: I'd like to see the symbols of our faith displayed. If I were choosing, I probably would have them in a little more prominence in this sanctuary. In many sanctuaries the cross is much larger than the cross that we have and I think that could enhance our sanctuary. I'd like to see the symbolism of the Baptism and the candles that are lit. Those symbols are important to me.

This idea of a larger cross has come up in interviews with other participants.

The Green church has no stained glass in the sanctuary and some of the participants in this study would like to see stained glass. Sara responds to the question regarding the design of the sanctuary she can build from scratch.

Sara: I would put a touch of stained glass in there. [Like at the rose window?]

Yes, the round window, just to have a touch of it because I do think it's beautiful. I think stained glass is beautiful. The touch of stained glass, but I would still like the openness of nature.

Lynn: I do like stained glass windows. I grew up in a church with beautiful big stained glass windows.

Several others also referenced the stained glass.

In general, it is important for the participants to see the symbols of their faith.

Most of them express a desire for a larger cross to be displayed.

The Blue Church

The main theme of the Blue Church is obvious upon entering the sanctuary. The floorplan of the sanctuary is in the shape of a cross (see figure 8). The skylight is in the shape of a cross, and there is a large (I estimate eight feet tall) wrought iron cross suspended from the wood vaults in the sanctuary. On the chancel is found the pulpit, the lectern, the communion table, and the baptismal font. Antependia are displayed on the pulpit and lectern and there is a brass cross on the communion table. There are at least four banners that are hung in the sanctuary on a daily basis. The participants from the Blue Church also have strong opinions about their religious symbols.

Since the wrought iron cross is so large, it isn't surprising that most of the references to religious symbols involve this cross. In response to my question about her favorite thing in the sanctuary, Jean responds.

Jean: Uh probably the cross. The cross is the most noticeable thing when you walk into the space, but the cross now sits in front of the organ display pipes, the side pipes, and together they form a very special look.

Mark: I would have to say the cross and the organ are the two biggest things and I think why they stand out is because of the vertical space...It feels more like a church to me and less like an auditorium or another space ... a different space.

Jessica: So the rituals, the activities that take place there, and everything. The candles being lit, the table at the front, the table all those are parts of it that...All those things come together and it's a spiritual place. It's a place where, you know, I feel God's presence. I think that that's, you know, what it means to me. And I don't get that same feeling, you know...I have friends that go to different churches you know that are in the high

school... you know where on Sundays it's converted to a church setting and I don't have that same feeling there. For me it's still where we go for, you know, high school activities.

Jessica mentions the religious symbols, the rituals, and the fact that the space is dedicated to the worship of God. Jones (2000) also talks about this layering of ritual, tradition, and symbols creating a religious experience.

The Blue Church has contemporary art glass in their windows. Some members speak of liking the glass. Lisa talks about the stained glass affecting her feelings about the space.

Lisa: I don't know if this is what causes emotion but I really like colored glass. And I like colored glass regardless of where it is, but especially when it's kind of architectural . . . And I know that people have mixed feelings about the colored glass on the cross, but I love it, as well as what's on the windows.

Steve says, "I love the stained glass and wish there were more".

Chip: I think I like the stained glass windows on each side. I think that makes it a sacred place.

Chip identifies the stained glass as an element found in sacred space. Almost half of those who reference stained glass like the art glass as they see it in their space.

The others want stained glass that tells a story from the Bible.

The participants like their large cross. Several of them speak about staring at it and meditating on it during church services. The cross theme is so important to the members of the Blue Church that they almost overlook the other symbols of their faith, the baptismal font and the communion table. Jessica adds the element of ritual and the concept of a designated space to explain the significance the religious symbols have for her. No one mentions replacing the stained art glass with anything other than stained glass. It has become an important element to their sanctuary.

Comparison

The two sanctuaries have very different floor plan designs and liturgical art that influence their immediate thoughts on religious symbols. The sanctuary of the Green Church is so simple and understated that the symbols of the pulpit and lectern, communion table, and baptismal font readily stand out on the chancel. Many people have commented on how hard it is to find the cross. Even though the cross is on the communion table that is centered on the chancel, the small size does not create a focal point. The antependia hanging on the pulpit and the lectern are also diminutive in size. On the other hand, the sanctuary of the Blue church is rich with symbolism of the cross. This includes the floor plan, the skylight, and the wrought iron suspended cross. The Blue Church participants reflect on these prominent features. The members of the Blue Church seem to find comfort and satisfaction from their large cross, while the members of the Green Church desire to have a larger visible display of the cross. These religious symbols are important for the enhancement of their church services.

Architects and Interior Designers

This group of professionals notices the same things upon which the participants at the two churches commented.

2. Religious Symbols	Green Church	Blue Church
2A. Font, Table, Pulpit	2	3
2B. Cross	6	15
2C. Liturgical Art	6	12
2D. Pews	4	1
2E. Stained Glass	2	7

Table 12: Architect's and Interior Designers' References to Religious Symbols in the Church Sanctuaries

At the Green Church, Debbie speaks of the impression she gets of the sanctuary.

Debbie: Well, as soon as I walked in there, I had this feeling of just a simple elegance. It's really what I see.

I think that there's a real focus on the pulpits. There are actually two pulpits there. One's a little taller than the other...that plus the focus on the music which would be the organ system. I think there's a real focus here on the word and the sacrament associated with this church. And they have deliberately tried to keep this as simple as they possibly could.

I was a little surprised though by the fact that there's really no...I don't see the cross represented there, except a little tiny one over there on the far left and usually in most churches you will see the cross.

She has a hard time finding the cross in this sanctuary. She identifies the focus is all on the chancel and those things on the chancel, including the pipe organ.

Suzanne: There's not very many symbols, there's not very much ornamentation.

Elaine echoes ideas I heard from some of the Green Church participants.

Elaine: I'm really an advocate of crosses that are not just in the chancel area but pull more to the sanctuary...give a feel that the sanctuary has the cross in the center of it or at least in the front of it...where it's more out to the people as opposed being set with the ministers.

can't find the cross easily. Just coming into it during the week...if I wanted to come in and just sit for awhile, that would be a disturbing thing to me.

The architectural and interior design professionals can locate and understand the religious symbols. But like the congregation members, they feel that the cross needs to have a bigger presence in the sanctuary.

As a contrast, the professionals readily identify the religious symbols at the Blue Church. The wrought iron cross isn't noticed immediately. The wood beam gothic arches and the wood ceiling with the skylight catch the attention first. The wrought iron cross is usually seen after they sit in the pew and focus on the space. Tim connected with the suspended cross and the skylight.

Tim: I like the suspended cross in the middle under the skylight. It's very contemporary and looks like bronze and stained glass.

Ron: And I think in terms of liturgical accoutrements, as I said I was drawn to the cross and I think that that would be very important. And I very much like this one because it's very beautiful but it doesn't rely on precious metals for its beauty for instance. Which to me expresses the idea that you can be wealthy without having true dollar value.

Other comments similar to these are brought up as they talk about other issues. They seem satisfied with the religious symbols within the Blue Church.

Only two of the professionals mention liturgical/religious symbols as they design their sanctuary from scratch. Ron again talks about using a cross similar to the one at the Blue Church. This is part of Elaine's response when I ask her what the floor of her sanctuary would look like.

Elaine: You know, I'm very happy with concrete, very happy with stucco or brick or natural materials, but very neutral. All of it very neutral with the emphasis not necessarily on the chancel, but on the cross, on the liturgy for that particular season and/or time.

It is only after people have walked into the space and have noticed the architecture that they then look for the identity of the space by way of the religious symbols.

Architecture

Architectural features are referenced often as people discuss meaning in church sanctuaries. Architecture is an important aspect of the religious experience.

Jones (2000) explains the impact sacred art and architecture can have on the individual.

It is essential to realize that, constructed and framed in the appropriate way, sacred art and architecture, particularly in the context of its ritual usage, have the power to *yank* people into movement, to *insist* upon their participation, to *coerce* their serious consideration of the meanings and messages offered by that architectural event (p.84)

4. Architecture	Green Church	Blue Church	Arch & Int Des
4A. Windows	9	12	2
4A1. Skylight	0	11	0
4B. Arches	1	13	0
4C. Floorplan			
4C1. Cross Shape	3	19	0
4C2. Basilica/Meetinghouse Shape	9	3	1
4C3. Simple	13	0	6
4C4. Elegance	2	0	2
4C5. Open	4	4	2
4C6. Half-Round Shape	4	1	4
4D. Volume	17	22	9
4E. Acoustics	23	37	4
4E1. Sound System	2	7	0
4E2. Music	7	25	1
4F.HVAC	3	0	0
4G. Accessibility	4	0	1
4H. Dated Materials	0	8	0
4J. Focus on Worship	7	0	9
4K. Concern with Contemporary Worship	6	14	0
4L. Sightlines	2	12	0
4M. Physical Comfort	7	8	8

Table 13: Matrix of References to Architecture

For some people, meaning is centered on the people in the church and the message that is delivered. However, the architecture of the sanctuary can enhance the experience and create the first impression that visitors have of that church. Two important concepts in architecture for church sanctuaries are acoustics and volume of space. They will be examined more closely later in this section.

The Green Church

The architecture at the Green Church is a basilica plan (see figure 6) with large windows. Luke speaks of the history of the basilica plan and the importance of its use at the Green Church.

Luke: Well, this particular sanctuary was intentionally designed around a simple Colonial style of architecture. I've certainly been in churches with stained glass windows, gothic style, Akron plan, all different kinds of plans. This particular style is one of simplicity. Where the focus really is

not so much on the architecture as it is on the chancel and what is going on in the chancel area. To some degree it evokes remembrance of primitive worship of the early church when the early Christian community following its earliest days in houses, when it outgrew gathering in houses, it borrowed or rented the Roman basilicas. . . . So, in a sense the simplicity of this particular style of architecture sort of returns us to an earlier day in the church.

He explains this type of architecture places the focus on the worship service. Luke also talks about the interior renovation three years ago.

Luke: One of the things we did want to do was to highlight the windows and the architectural feel. I have this feeling of peace when I come to this place. It's not busy, it's very simple. It's not elegant. It's quietly elegant perhaps in some ways.

Peter raises the issue the length this type of plan has for the minister and the congregation.

Peter: Here it's like 140 feet from the pulpit to the first row of the balcony. That's a long way to try to connect at a human level.

The issues of the length of the sanctuary are mentioned several times; however, the traditional aspect of this floorplan is comforting for other people.

Lynn: It's a very peaceful and calm design because of the plainness and simplicity of the design and the vertical lines and the arches of the windows. The simplicity of materials. . . . And the traditional design appealed to us, in fact we chose that church [Green Church] because the design reminded us of the traditional designed church that we attended in Ohio.

The familiar design of the sanctuary is what drew Lynn to the church initially. Others remark on the simplicity and elegance of the plan. Rick comments on the colors of the sanctuary by saying, "I think the color palette is soothing now." Other references to the neutral color palette indicate that it creates feelings of restfulness and peacefulness.

Many comments about the windows occur while discussing natural light. Others mention the windows specifically as they speak about the architecture. The

founding minister of the church mentions the windows when describing his favorite things about the architecture. The windows are also a favorite element for Jim and Lynn. Lynn identifies the rose window on the north wall of the sanctuary. She recognizes that the amount of light coming into the sanctuary can sometimes be a problem for the congregation.

Lynn: The windows can at times be a problem if the sun hits you in a certain way during the morning services or afternoon services, and light control of the windows can be a problem. But we went to a wedding in another church which shall remain nameless here in Johnson County a couple of weeks ago and they had great big window shades that they pulled over the big windows on the west side of the church and it just looked awful!

They don't currently use audio/visual technology in the sanctuary. There is a concern for the ability to have contemporary worship services involving audio/visual technology like some of the newer churches in the area. The main obstacles with this are the windows and the length of the sanctuary.

Luke: There are some drawbacks to this architectural style however. As we think about younger generations and their preferences for visual media. It is hard for us to find a way to put projected images in this space. Number 1 we've got so many wide open windows so that it's always very light. We don't have a feeling of darkness. It's totally different from the 15th, 16th century cathedrals in Europe that were very dark. So we have trouble from that standpoint. This was never designed for multimedia, so where do you put a screen?

I've often described this as a cigar tube. It's long and it's narrow. It is what it is. It had its purpose when it was designed. You probably wouldn't design it quite this way today. It would not be as narrow and as long. It would be wider. You may still have a chancel area that looks similar to this, but today, even in a traditional setting, you would make sure that there was enough wall space on the sides of the lectern and the pulpit so that you could do simultaneous projections and maybe eventually with the LCD screens we could do something in here. But for right now it's just very difficult. For those that are geared to a more traditional form of worship, this space is just fine.

The members of the focus group discuss the HVAC issue. It seems to be a problem with some members in the choir as the air blowing from the vent overhead turns the sheets of their music and un-tunes the instruments.

Accessibility is mentioned in two ways. The first deals with widening the aisles and creating more space between the pews to meet ADA codes when they installed the limestone floor. The second issue with accessibility addresses the problem of the short flight of steps from the Narthex into the other areas of the church building. There is a wheelchair lift at these steps, but it becomes a focus when the lift is being used. Lynn has family who must use the accessible entrances.

Lynn: On the south side of the narthex they have added a wheelchair [entrance]...there's a door on the other side of the church if you come from the south parking lot. There are elevators over there that take you up to Fellowship hall which is also nice, but there really isn't any very good way to get from the sanctuary to Fellowship Hall....
There are steps and there is a wheelchair lift, but for people who can walk but really aren't particularly keen to walk up and down steps, it's a little bit of a problem.

She mentions people in her family who have their range of motion restricted because of knee replacements or because they need knee replacements.

Lynn: But they did it, they can do it, but it's very difficult and if you have someone in a wheelchair, then you have to activate the wheelchair... complicated wheelchair thing and the person feels conspicuous riding that slide and so it's not quite as universal design as I would like to see it.

The physical comfort of the sanctuary is noticed in the comfort of the upholstered pews and the ease to get in and out of the pews since they were spaced further apart and the aisles widened.

Jim: When they remodeled the sanctuary, I think they gave more room between the pews so it's a little easier to get through.

And people can get through. I noticed...that was one of the first things that I noticed when we went to church after the remodel, that there was more room there.

As the interview gets to the question of what the sanctuary will look like if they can design from scratch, three main plans are mentioned: basilica plan, cruciform plan, and a partial round plan. The majority of those interviewed prefer the plan that they currently have, the basilica plan. Three references are made to the cruciform plan and four references are made to the partial round plan. Alex prefers the cruciform plan.

Alex: In terms of a sanctuary...the spatial arrangement that I would choose would be very traditional. You know, it would be high ceiled, it would be a cruciform shape, it would have a transept, a nave, a chancel, um it would have all these things in terms of space. The building itself however would be um, would be contemporary. You know. It would not be a reconstruction of a Gothic cathedral. It would be a contemporary structure.

Luke prefers the partial round plan also known as the Akron Plan. He describes the plan.

Luke: [It's] kind of octagonal. I was actually in a church, the First Church in Tulsa, OK has an Akron Plan with a balcony that wraps around $\frac{3}{4}$ of the space. You're never very far away from the action. There's no center aisle. It's always interesting to do weddings – to decide which aisle you're going to use for a procession. But it's truly a feeling of intimacy.

The members of the Green Church like the architecture of their church. Several mention the physical comfort of the sanctuary. The basilica plan allows for an open effect that is enhanced by the large windows. The plan also allows for the focus to be on the chancel and on the worship service. There are minor issues with HVAC and accessibility. There are drawbacks to this plan. It doesn't allow an easy integration of audio/visual technology because of the light from the windows and the openness of the space.

The Blue Church

The architecture at the Blue Church is a cruciform plan (see figure 8) with distinctive arching wood beams, a wood ceiling, a skylight in the shape of a cross, and narrow stained glass windows. The traditional shape is made of building materials popular in the 1960s such as cinder block walls and VCT flooring. The arching wood beams are a contemporary interpretation of the Gothic arch.

When focusing on natural light, the skylight was prominently mentioned. Everyone at the Blue Church likes the skylight and the layout of the sanctuary.

Cindy: We have these arched beams that go out from the side that just kind of, I don't know, it's just like an umbrella kind of over you the way it's structured and it's warm. . . . You have like the strength and the comfort and it all kind of goes together.
It's just shaped like someone covering you.

Cindy and others refer to this architectural element as strong and comforting. Her analogy of it covering like an umbrella creates an impression of protection. Sue describes her feelings for the space.

Cindy: I love the inner space of the sanctuary...with the high ceilings and the arched support and the wideness and openness of the sanctuary. I love [it] very much.
It's intimate enough; it's like a mini cathedral in my mind.

John: I like the way it's arranged. I think with side aisles and the wings of the cross are good designs.

Chip likes the functionality of the design.

Chip: I think it works pretty well for the size of our church. That additional seating on the side, when it's empty you don't notice it. I think if it was just down the middle and you didn't have it, it would not look good. So I think the seating works for our size.
The transept helps so if those are empty it's not noticeable, but if those same empty seats were in the part that goes down vertically, I don't think it would look bad.

Tracy gives a different viewpoint of functionality.

Tracy: It [the space] works very well for us. I know the side aisles are great because people can enter and exit without going down the middle and really disrupt things. Plus ushers can use them and we do like a head count during the service which you're able to be very anonymous for...so I think it works very well for us.

Some of the words those interviewed from the Blue Church use to describe their feelings of the architecture are intimacy, warmth, comfort, and strength. The comments from the other participants follow this same pattern.

Many also understand the drawbacks of this floorplan. The senior minister sees this from a unique viewpoint.

Senior Minister: From the perspective of the preacher, there are some challenges to the traditional design especially if the church is full. People who are sitting in the transepts are really on the periphery of your sight so you have to make a conscious effort to engage in different ways.

Lisa sees this same problem in the transepts from the perspective of sitting in the congregation.

Lisa: As much as I love this shape of the cross of our building, it bothers me sometimes if there's people stuck in the transepts that I can't see, you know. I can't even see the back of their heads so I don't know they're there.

I wouldn't trade it for a round church, but, it doesn't have such a great view over there sometimes. So I feel a little guilty sometimes if it's for holidays and things when guests come and they're stuck on the side where they can't see or get the good view of the cross, of the organ, and everything. Anyway, it serves a purpose and you know what? Most of the time there's plenty of space where people will sit wherever they want. So it's not a big deal...and I wouldn't trade the layout, but I'm conscious of that.

In some of the interviews, concern is expressed about the issue of contemporary worship utilizing audio/visual technology which they don't currently employ. The senior minister explains the limitation with the space.

Senior Minister: For some of the contemporary trends in worship it doesn't work all that well. I mean churches are going more toward almost a theatre design, kind of a semi-circular design with seats that are kind of in a, not in the round per se, but kind of in a semi-circular fanning out way, kind of like a theatre. That has to do I think with the introduction of different styles of music, the utilization of visual video technology in worship, the employment of dramatic aspects to worship in the so called "contemporary" worship movement. Sometimes I lament the way in which the traditional design makes that harder. I wouldn't say impossible, but harder and one of the things that the Worship Space Upgrade Committee is taking a look at is how would you provide for the potential to utilize video in a way that maintains the integrity of the traditional design of the architecture in our sanctuary space. But what it was designed for and the way it's used today, I think it functions very well.

The other issue the Worship Space Upgrade Committee is reviewing is the possibility of updating the finishes in the sanctuary. The types of materials used like the cinder block and the condition of some of the materials such as the VCT flooring, give a dated impression of the space. Some comments are that it isn't fresh. It looks old.

Tracy: We have these really large spaces of the cinder block that made up the walls. I'm not sure what went into the thinking of the way they built the church. To me it has always been a little bit of a detractor that we have these cinderblock walls that are painted white. I feel that if they could at least be a different color to pull the wood together, it would make it feel warmer. I think they are very cold, very vast.

Chip: Cinder block. I don't like the cinder block there and I particularly don't like the way it's painted. I think it's white, but kind of a cold white. I have a feeling that newcomers come in and see a church that really is 50 years old. . . . I don't think it says relevance. You know it screams we are 50 years out of date
I think it can be worked with, it just needs updating.

Those who comment on the physical comfort of the space refer to the hardness of the pews. There is a desire for cushioning.

As the interview gets to the question of what the sanctuary will look like if they can design from scratch, three main plans were mentioned: basilica plan, cruciform plan, and a partial round plan. The majority of those interviewed prefer the plan that they currently have, the cruciform plan. One reference shows a preference for the partial round plan and three references are made to the basilica plan.

The members of the Blue Church like the architecture of their church. The cruciform plan emphasizes the symbol of the cross and some say that it enhances their acoustics. There are those who want a more comfortable pew to sit on during church service. There are drawbacks to the cruciform plan such as problems with everyone being able to see because of the transepts. This plan doesn't allow an easy integration of audio/visual technology.

Comparison

The comments from the participants at the Green Church regarding their sanctuary involve words such as simple, elegant, and open. The comments from the participants of the Blue Church regarding their sanctuary involve such words as intimacy, warmth, comfort, and strength. While the members of both churches like their sanctuaries, they do realize the drawbacks. The interior finishes of the Green Church is very pleasing to them, while the interior finishes at the Blue Church causes much discussion. The Blue Church is taking actions to improve the perception of their sanctuary by looking at ways to update the interior finishes. The Green Church is addressing the HVAC issue on the chancel. Only one person from the Green Church identifies accessibility as an issue.

Architects and Interior Designers

As they visit both sanctuaries the architecture and interior design professionals comment about the specific features in each church. In the Green Church, they notice the windows and the floorplan. Words they use to describe the floor plan are open, simple, and elegant. They comment that the shape focuses the attention on the chancel and on the

4. Architecture	Green Church	Blue Church
4A. Windows	4	0
4A1. Skylight	0	10
4B. Arches	0	8
4C. Floorplan		
4C1. Cross Shape	0	3
4C2. Basilica/Meetinghouse Shape	5	0
4C3. Simple	11	2
4C4. Elegance	3	1
4C5. Open	0	1
4C6. Half-Round Shape	n/a	n/a
4D. Volume	7	4
4E. Acoustics	4	5
4E1. Sound System	1	0
4E2. Music	0	0
4F. HVAC	0	0
4G. Accessibility	0	0
4H. Dated Materials	0	21
4J. Focus on Worship	7	3
4K. Concern with Contemporary Worship	1	0
4L. Sightlines	0	0
4M. Physical Comfort	1	0

Table 14: Architect's and Interior Designers' References to Architecture in the Church Sanctuaries

worship service. Debbie responds to my question about her feelings to this sanctuary in this way.

Debbie: Well, as soon as I walked in there, I had this impression of just a simple elegance. It's really what I see.

I think that there's a real focus on the pulpits. There are actually two pulpits there. One's a little taller than the other, that plus the focus on the music which would be the organ system. I think there's a real focus here on the word and the sacrament associated with this church. And they have deliberately tried to keep this as simple as they possibly could.

Suzanne notices the ceiling, the windows, and the overall style of the Green Church.

Suzanne: With the curved ceiling, it pulls it down a little bit more. Architecturally, it could be because it's simple. It's not Gothic which to me is sometimes almost intimidating. There's really nothing intimidating about this church. It's got lots of windows which is good.

She also likes the feeling she has because of the finishes, “[It] seems more up to date. It feels brighter”. Tim comments on the windows being “arched, traditional style windows, Palladian style windows”.

Ron: I like the fact that it is very light. It's not a heavy space. It's a very simple shape so I guess from a form standpoint it's very easy to understand. You walk in and you understand the pulpit is here and the choir loft is behind and the congregation is very clearly in front.

Elaine: It has its traditional narthex and nave area. I think it's inviting. It's the chancel area that bothers me. It's not as inviting as the seating portion of the sanctuary.

I think the balcony probably adds to the Colonial feel of the piece.

I love the windows. Gives it a real sense of space, size...

I think personally the window shape - the window style is pleasing to me. I think that probably adds to the light area. The [rose] window is too small at the back for the scale of the windows in the seating area, but I love the scale of windows in the seating area.

Elaine is not the only one who comments on the scale of the rose window being too small for the space. Suzanne feels that the rose window is an opportunity to make a statement by adding stained glass.

As far as the architecture of the Blue Church, it is the skylight and the arches that draw the most references; however, the most references are made about the finish materials. The structural complexity of the space intrigues Ron.

Ron: I very much like the skylight and the structure is very dramatic which is neat about the space.

It's a contemporary version of a gothic arch. And I have to say that I've never seen anything quite like this, so it's fairly unique. I guess I'm drawn to that. I think it's a very nice design. It's a nice interpretation of a gothic

arch, and an interesting thing about the cross arches in the middle here are ...you know they're radial, rather than coming to a point really. They might a little bit, but because of the geometry of it, although they've matched the arcs, those are more circular because of the diagonal geometry. It's a fairly unique and complex design.

Elaine discusses the juxtaposition between styles.

Elaine: [There are] feelings of tradition and modernity mixed together. I think what I'm looking at is very contemporary mid-century building materials. But yet the space is in a manner that you would find in traditional churches. You have a nave, with aisles, you have a narthex just behind the nave as it should be, it comes up to the apse area. It has the wings to the transepts, but not really. So it has a feel of traditional shape, certainly the vaulting with the arches, the groin joints and so forth give it that feel of tradition, but when you look at the materials and you look at the wood itself, the structure of the columns, it speaks to the 1950's – 1960's. The skylight while it would be very typical to find a skylight or in a dome area, that oculus that the domes had, the skylight in the shape of the Latin cross still gives you that feel of tradition and the feel of modernity.

This space seems to create a lot of interest with these professionals.

Tim: The excitement of the beams, many woods put together and bent and the shapes, it's just more interesting architecturally. I'm not saying I like it any better, it's just more interesting.

After discussing the different architectural elements in the Blue Sanctuary, the professionals then talked about the finish materials. Suzanne gives her impressions of the space based on the finish.

Suzanne: When I walked in it felt very 50s to me, in some ways, and I hate to say outdated, but it didn't seem fresh. The windows I like, but they're very 50s...the color of the wood is 50s, the color of the wood because it's not dark. Then I start to think – I wonder what the age of the congregation is.

Ron: The interesting thing is that the structure is very nicely done and very expensive and the rest of the enclosure is painted CMU [concrete masonry unit] which is very cheap, you know. Kind of disturbing to me I guess. It's a terrible contrast.

The youngest of the professionals, Susan, likes the dated materials, but she doesn't care for the floor plan or the overall cold feel she experiences in this church.

Susan: This is going to sound strange, but it's rather dated, and I kind of like that.

Yeah, you kind of get the retro feeling so I do kind of like that.

The architect and interior designers like the architecture of the Blue Church more than the Green Church. However, they still prefer the Green Church because of the light and the views of nature. As this group designs their own sanctuary from scratch, some of them focus more on the feelings of the sanctuary than on the physical shape. None of them reference the cruciform plan. There is one reference to the basilica plan. The partial round plan is referenced four times as being the preferred shape of the sanctuary. For Elaine, she prefers this plan because of the sense of community it gives.

Elaine: I don't think you want to go full round circle, but even beyond 180 degrees is fine, but not a full round. I think you want that sense...I like to be able to see people when I go in, I want to know who's there even if it's across the way.

Acoustics

“Few factors are as invisible as acoustics and yet can have such massive influence on the character and quality of worship celebrated in a building” (White & White, 1998, p. 95). Just as with nature, light, and religious symbols, congregation members expect a certain type of acoustics in their church sanctuary. Roberts (2004) writes about the importance of sound. “The reverberant sound quality created by the proportions and materials of religious buildings sets them apart from the ordinary” (p. 10). It can become difficult to separate the acoustic element from the proportions of the space. Today, the quality of the music in the sanctuary is as important as the preached word and being able to understand both are vital (Roberts, 2004).

The Green Church

Many of the participants of the Green Church reference acoustics either directly or indirectly when they mention the music or the sound system. Alex talks about the changes to the acoustics since the addition of the hard surface of the Jurassic limestone flooring.

Alex: What we have is a room which is now much more resonant than it was three years ago. Clearly it doesn't have that reverberation. It was never designed for that. But it's more resonant and its better space for music making. It carries much much better.

Peter agrees with Alex and also talks about acoustics of the tile floor and the reverent quality acoustics can impart in a church.

Peter: It doesn't have to have carpeting for it to be warm and inviting. There are other things that are warm and inviting, including a friendly acoustic atmosphere. Dead dry, you walk in, you hear nothing but the sound of your own voice, you lose the sense of community of hearing the sound move in the room. And people said, "well won't it be so noisy?" Have you ever, you know, been in New York City and you step into St. Patrick's Cathedral. Suddenly everybody whispers. Everybody whispers because the sound just lives in the room. It doesn't get sucked up and so people walk more softly and speak more softly and there's a greater sense of reverence.

He also thinks about the sound quality of the space empty and full.

Peter: If I was visually impaired, I would know it's a sacred space by the acoustic. And when the room's empty like right now, you can walk in and feel that. When it's full of people, it's not live enough to resist what happens when you fill it up with people. It goes dead again – acoustically.

Luke addresses the perception of the quality of acoustics at the Green Church sanctuary.

We can do a lot of musical things. In fact the acoustics for music and instrument are so fine here that we have no trouble getting professional performing groups to come. They enjoy the space very much.

When I ask about the favorite things in the sanctuary, Jennifer mentions the tile and its relationship to the music.

Jennifer: I'm very partial to the floor...Jurassic Limestone from Germany. I think it enhances our sanctuary; it enhances the sound in our sanctuary. It's wonderful to be out in the sanctuary and singing and be able to hear others singing, likewise it's great to be in the choir and sing knowing that our sound is helped. It's beautiful and has a lot of stories and I love to take my son's children around and showing them the fossils in the floor!

Everyone seems to agree that the acoustics are good and help with the feeling of community.

Lynn: The acoustics are good in that room. And I know what it is like to attend church that does not have good acoustics because when I was in high school, we went to a church that had acoustical ceiling tile all over the ceiling and the hymns...singing was just dead...there was no resonance.

When you have good acoustics you can hear everyone in the congregation singing. We have good acoustics with microphones and also it's excellent for being able to record...and people in the balcony can hear just as well as those in the front...so acoustics are very important.

Jim: The Green Church has a pretty magnificent organ, coupled with the full choir...I feel, more involved more in the service whatever type of service it might be, the worship service and the musician that they have playing the organ now is very, very talented – he gets a lot out of that instrument. He's really wonderful and I really enjoy going to services because I know the music's going to be great.

Everyone agrees that the acoustics have been enhanced with the tile floor and feels that there are good acoustics in the sanctuary. There was one participant who feels that there is too much noise with people walking in and being restless in the pews. When I ask about the sanctuary they will design from scratch, two mention they would put carpeting in the sanctuary. This is not the majority feeling.

The Blue Church

Some of the participants reference the acoustics directly and some reference it indirectly by talking about the music and the sound system. The participants from the Blue Church are very proud of the acoustics in their sanctuary. Steve relates the time the organ was installed.

Steve: When Casavant put this organ in...this is about 1/3 the size of the one that went in out at Independence. RLDS. And the uh people that put it in, when they got all through, he said that this organ in this building actually sounds better than the big one in that big building out there. Now, you take it for what it's worth.

John agrees with Steve adding “the musicians who play it like this organ better than most”. Cindy feels that music is her favorite thing in the sanctuary of the Blue Church.

Cindy: Yeah, the way it sounds. You can tell if it sounds flat. Or if it has carpet on the floor or if it's echoy and it doesn't have any carpet on the floor. Ours has carpet so the sound is still very good in the space...it's soft I mean you hear just the feeling of soft.

Katie: The acoustics in there are almost perfect for performing, that's another thing that's great about that [sanctuary].
Tracy describes how her feelings of peace, of being at home are tied to her awareness of the acoustics in the space.

Tracy: I know that the feeling that I have when I'm here is being at peace, being ready to listen and open myself...so I think that it's very hard for all of us when we're so busy in our lives to, you know, slow down, stop and listen. And I think it's something to do with the quality of sound in this sanctuary but also just obviously with the religious experience that you go through when you're here that I just...um...I come in, I sit down, and I'm ready to listen.

There were more comments along this line. Everyone seems to love the acoustics in the sanctuary. However, on the subject of the sound system, there are evidently issues. The senior minister describes the importance of the sound system.

Senior Minister: With regard to this issue of the emotional experience that worshipers have in the sanctuary, I can't emphasize enough the importance of well functioning systems i.e. the sound system being the one that's the most prominent and the one that traditionally you have, from time to time, stupid things that happen. You know your microphone goes out in the middle of the service or something goes wrong with the sound and it messes up the experience for you.

This subject is brought up by several other participants. Cindy talks about this issue and how it affects the experience in the sanctuary.

Cindy: And so I think sound is so important. You've got to be heard to feel any meaning or understand the meaning. When it cuts in and out it really breaks up, you know, your concentration and getting into the sacred space...sound systems are probably a hassle for preachers because it has nothing, probably no sacred value about a technical sound system, but it is so important so that a congregation can hear.

The issues they have with the current sound system also point out the importance of the acoustics to the experience of meaning in the church sanctuary.

Comparison

Exact measurements of acoustics can be calculated. I contacted a professional in this field for more information. He explained that there is not one measurement that will explain whether there is good or bad acoustics in a room. When calculating acoustics, there are many different elements that must be measured: sound intensity, sound frequency, wave lengths, sound pressure level, and even the humidity (Ballou, 1987 and Mackenzie, 1964). He told me that a good general indicator of the acoustical quality in the room is whether people can hear what is being said or sung and enjoy what is being said or sung. An acoustician can discover all the intricacies with the acoustics, but for the general population this is an unnecessary expense.

Every participant in both churches enjoys the musical experience at the church. They are proud of the quality of sound in the space. The Green Church is long and wide with a

elliptical vault ceiling. This factor doesn't necessarily ensure good acoustics (Guthrie, 2000). The addition of the tile floor which helps to add to the resonance of the sound does help with the enjoyment of the acoustics in this building. The participants from the Green Church enjoy the sound of the music in their sanctuary. They can understand the words the senior minister is saying during the service. The participants from the Blue Church also enjoy the music in their sanctuary. The cruciform design of the sanctuary and the tall ceilings enhance the acoustics of the music; however, there is a noticeable echo when I spoke with participants in the sanctuary. In order for the spoken words of the senior minister in this church to be understood, the sound system must be in good working order. When it isn't, it calls considerable attention to that issue.

Architects and Interior Designers

The participants from the architectural and interior design community did not get an opportunity to experience the acoustics in the same way that the participants from the churches experience it. Most of them noticed the pipe organ. One or two commented on the possible acoustics in the space.

	Green Church	Blue Church
4E. Acoustics	4	5
4E1. Sound System	1	0
4E2. Music	0	0

Table 15: Architect's and Interior Designers' References to Acoustics in the Church Sanctuaries

As they designed their sanctuary from scratch, the acoustical presence was mentioned by only one person.

Volume

Volume is an important consideration when designing for acoustics (Ballou, 1987). Vertical volume, height, can also help to differentiate a secular space from a non-secular

space. Eliade (1957) states “Transcendence is revealed by simple awareness of infinite height. ‘Most high’ spontaneously becomes an attribute of divinity” (p. 118). Kilde (2002) finds that “While good acoustics and unblocked sightlines were crucial to congregations like Pilgrim [Pilgrim Congregational Church in Cleveland, Ohio], spaciousness also emerged as a fundamental requirement to satisfy congregational needs” (p. 115). The volume of space normally found in a sanctuary is one component that is useful in creating a meaningful space. Roberts (2004) writes, “The scale of the interior spaces, the size and weight of doors, and the exposed structural columns and beams all serve to denote the special quality of the worship space” (p. 10).

The Green Church

The Green Church is a large church. There is 22 feet from the floor to the bottom of the crown molding and 35 feet to the highest part of the ceiling. The windows are ten feet tall. It has an elliptical vault and is painted light lavender. Alex states that he finds the sheer size of the sanctuary very appealing. Luke explains they were trying to create more volume through the color of the ceiling.

Luke: The attempt really was to give a lofty, ethereal feeling. We studied the Colonial palettes and it was really in keeping with what ancient Colonial churches used to do. It was not infrequent that we found painted ceilings.

Some participants feel it is tall and others feel it is out of proportion. One participant states, “The ceiling’s too low, it doesn’t feel sacred enough”. Height in this example is connected to the feeling of sacredness.

Lynn: It’s inspiring because of the lofty ceiling height and the high windows.

Jim also feels that the high ceiling of any sanctuary has an impact on sacredness.

Jim: First of all the very high ceiling ... in school they were telling us that the high ceiling was to give you a feeling that you were in...or have a closer reach to heaven. It's higher access kind of thing I guess. However you want to say it. And I think just those very high ceilings in any church kind of gives you that whole feeling of enormity.

Even though their views are mixed regarding the ceiling at the Green Church, most of them discuss the importance of tall ceilings, of volume for a feeling of sacredness.

The Blue Church

The Blue Church has vaulted, wood ceilings. There is 16 feet 6 inches from the floor to the start of the ceiling vault. The stained glass windows are also 16 feet 6 inches tall. The highest point of the vault is 33 feet 6 inches. Everyone perceives this ceiling as tall and this space as having a lot of volume. Steve gives his opinion of the space.

Steve: The sanctuary is like any sanctuary should be; it is a big space. It's big and dominating and we should have reverence there.

He makes a connection between a big and dominating space and reverence. Herb relates the design of the space to the volume found in the sanctuary.

Herb: Uh, you know I think the features, the feature that's number one, it's this space... the sanctuary itself is a distinct and separate space from any other space. It's a big space. It's pretty natural...that is with the sky light above the center transept with the cross below it and the organ in the back uh....as you enter that space your focus is drawn in to...#1 it's quiet, #2 it's a big long space that has beautiful things at the end of it, so it's uh, immediately forces you into a meditative state of mind, a meditative state that's reverent.

As Tracy states, "There's very few times in our lives that we enter a space this size". She continues with this thought.

Tracy: I think that just the size of the space is something that really, immediately, kind of makes you aware that you are in a kind of a special room and that this is a place set apart for you.

Many of those interviewed reference tall ceilings in the sanctuary they design from scratch.

Comparison

The ceiling of the Green Church is 18 inches taller than the Blue Church; however, the perceptions of the ceilings are very different. The elliptical vault of the space in the Green Church de-emphasizes its height. For some at the Green Church, the ceiling is not tall enough for the space of the sanctuary. Others at the Green Church feel that the ceiling is lofty and inspiring. Everyone at the Blue Church reference its tall ceiling. The height of the ceiling is emphasized by the peak of the vaults and by the skylight that is at the center of the transept intersection. Those interviewed mention that it draws the eye upward. Several give credit to the ceiling for the acoustics in the space.

Architects and Designers

This group comments on the volume of the space in several ways.

4D. Volume	Green Church	Blue Church
7		4

Table 16: Architect's and Interior Designers' References to Volume in the Church Sanctuaries

In the Green Church, Suzanne sees the proportion as not working well.

Suzanne: The proportions to me are very short. I really like the feeling of more...the lofty feeling you get in churches...sort of the soaring height. This with the curved ceiling, it pulls it down a little bit more.

Susan feels the Green Church has a tall ceiling and speaks to how it makes her feel insignificant.

Susan: I feel like the purpose of this sanctuary is to make you feel less significant because this is a place of Godly worship so due to the ceiling height and some of the other things they've got in here, to give you that feeling of awe. So I think it is an awe-inspiring, you are less significant kind of place.

This one has a barrel vault type ceiling which gives you more of a comforting type of a ceiling than if it were a true cathedral. So that kind of brings this space a little more down to a personable level, but my

biggest problem with this type of set up is that it does make you feel insignificant.

She does agree that it is important to have the correct proportion of ceiling to the actual space. "You do have to plan accordingly. You can't have an eight foot ceiling in here. It doesn't make any sense."

There is conflict within the architectural and interior design community deciding whether the ceiling at the Green Church is tall or short compared to the proportions of the space.

In the Blue Church, few of these professionals reference the volume of the space. Ron identifies the volume and the emphasis on the height.

Ron: The light and the structure itself immediately kind of draw your eye up here.

It's [the volume] absolutely necessary partly for acoustics partly to just be appropriate for the floorplan of this space. But also the whole idea of bringing the light from above here – it would certainly be different if the window wasn't 30 feet high. So the volume of the space is very important.

Suzanne talks about the height in an indirect manner.

Suzanne: With these soaring arches and then the transept, they are trying to emulate the medieval type of church using, at the time the church was built, modern day materials.

Debbie sees a maintenance problem with the height of this sanctuary.

Debbie: Some of my experiences with a church like this, one of the biggest handicaps is when this lighting burns out, how they have to...it is a real challenge to come in and change the lights.

As the architect and interior designers describe the sanctuary they would design, half of them comment on the volume of the space.

Ron: Natural light is probably THE most important thing to me about the space and the volume of the space and how that's arranged is important.

Suzanne explains the importance of the tall ceiling in the sanctuary she designs.

Suzanne: I would definitely have arched ceilings, pointed arches because of the height. I like all of the interest up in the ceiling because when I want to be spiritual I'm thinking to look up and I want to know it's going up and sometimes that's where I focus when I'm in deep thought. So I think it's important for that to be interesting.

This group references volume and height, but not in a consistent manner.

Place Attachment

Place attachment figures prominently in this study. It underlies most of their expressed feelings. In a recent study, Ponzetti defines place attachment.

Place attachment refers to the emotional connection formed by an individual to a physical location due to the meaning given to the site as a function of its role as a setting for experience. A range of thoughts, beliefs, attitudes and behavior as well as feelings are evoked through attachment to place. Thus, place attachment involves an elaborate interplay of emotion, cognition, and behavior in reference to place (2003).

The emotions are accrued to architecture because of its use. It is through the repetition of rites and rituals and shared experiences that take place in the structure that emotional importance is attached to the sanctuaries (Alexander, 1977; Mazumdar & Mazumdar, 2004; Sheldrake, 2001; & Tuan, 1977). Place attachment is a process not a single event.

The community of faith, community of people, concept is included under place attachment since the community of people in the church is one of the important tenets of the Presbyterian faith. To some in this study, the community of people is the most meaningful aspect of the church experience. The church experience for all the participants is full of place attachment examples. Several examples from each church are given to underscore its importance to the meaning and inspiration found in these sanctuaries.

3.Place Attachment
3A. Experience with churches
3B. Rites and Rituals
3C. Community of People

Table 17: Matrix of Place Attachment

The Green Church

Experience with Churches

When the original sanctuary was built, the national Presbyterian Church, who has funded the Green Church, didn't want to spend an additional \$5,000 on the steeple. The committee of Elders made a firm stand and they got their steeple. The steeple meant so much to the congregation that when the new sanctuary was built they chose to install the old steeple on a larger base. Students were let out of the school across the street to watch the old steeple be placed on the new sanctuary (Matchette, 1996). The memories people have in this church and others helps to create meaning for some at the Green Church.

This and other examples regarding shared church memories point out the importance of this to place attachment.

Pastor Emeritus: Oh I think that I like the steeple. We moved that when we moved from the chapel into the larger sanctuary, moved that steeple and kept that, put it on a larger base, but kept the same original steeple.

Alex: My favorite aspects of the room, well first of all probably the um, the floor that was installed 2½ years ago. You know, it gives the room much more much more of a sense of permanence and it says something about the faith of the congregation I think. It says you know we're here to stay, we're here for a long time.

June: Again the church I grew up in, we used real candles and they were very still. And that was very soothing to me and meaningful to me that that flame was just still.

Samantha: I'm very partial to the floor...Jurassic Limestone from Germany. I think it enhances our sanctuary; it enhances the sound in our sanctuary. It's wonderful to be out in the sanctuary and singing and be able to hear others singing, likewise its great to be in the choir and sing knowing that our sound is helped. It's beautiful and has a lot of stories

and I love to take my son's children around and showing them the fossils in the floor!

Others find meaning in the familiar structure of the church.

Edward: That architecture makes me feel reverent because it's not the kind of architecture you see everyplace. You don't see it in office buildings, shopping malls, home, they all have a different kind of architecture. I come here and it's the Colonial Williamsburg kind of old fashioned whatever you want to call it architecture. It's different than any place else that you have. So it sets it apart from the rest of my life.

John: I like the traditional Williamsburg architectural style of the building and interestingly the church I belonged to for 37 years in NJ was very similar to this sanctuary part...had the same type of windows and whatnot. I think coming into this church makes you feel at home.

Lynn: The traditional design appealed to us, in fact we chose that church [Green Church] because the design reminded us of the traditional designed church that we attended in Ohio.

Luke: To some degree it evokes remembrance of primitive worship of the early church when the early Christian community following its earliest days in houses, when it outgrew gathering in houses, it borrowed or rented the Roman basilicas...So, in a sense the simplicity of this particular style of architecture sort of returns us to an earlier day in the church.

Rites and Rituals

The repeated rites and rituals that take place in a church will also help to create a place attachment. These rites and rituals often take place involving the baptismal font, the communion table, the cross, or the pulpit. They take place in the midst of the congregation so there are many people sharing this experience together.

Senior Minister: Those different symbols [font, table, pulpit, cross] in and of themselves they are not holy, but they point to things that matter to us as a community very deeply.

So we have a lectern and we have a pulpit both of those speaking places. That allows that center part to be used for the baptisms, the Lord's supper, and children's times and various kinds of other focal things that can be done sort of out in the open. I like that.

Luke: We talk about the remembrance of the meal that Jesus shared in community, the idea of fellowship, the idea of commonality. So what our architecture attempts to do is to gather us around the table. We bring children up into the chancel area, and as often as possible we bring the congregation forward.

Peter: When I come into the room. I see the font, I see the table, that focuses my attention on those two hugely meaningful sacraments and all the different things they represent.

Lynn: It reminds me of our son's wedding which took place there about a month ago. And now that we've had that wedding every time I attend the church I think of the wedding. And how pleasant that was.

Jim: Our scout troop has quite a number of Courts of Honor for the boys so it has a different meaning there of recognizing success, accomplishment, and so I get that kind of feeling when I'm there and think back to some of the young men that have come through that way.

Community of People

Many people referenced the community of people that they are connected to in the church. This group of people shares the experience of the worship service as well as the other events that take place in the sanctuary. This also helps to create place attachment.

Senior Minister: It's pretty simple. Most of the emotion of the space is connected to the gathering, of the people who come in it.

Luke: So that our worship is the act of the congregation before God not the act of the clergy in front of the congregation.

Peter: There are other things that worship is supposed to do. One of them, it's supposed to remind me that I'm not alone in the world and that faith is lived in community. You can't be a Christian of one. You can only be a Christian in community. I really believe that. This place does not emphasize that. Now in the choir loft, we in a sense we're our own little church. You know 150 people and when we're all there and in a horseshoe...

Luke: The choir supports the role of the congregation in offering its worship to God. We've done quite a number of pieces here. Those are some of the most moving things that we do for people. Particularly I think the participants of the choir. I can see tears in the eyes of people when they get done with it. Worship for them has come alive in a particular way. But also for the congregation.

Senior Minister: There is a value of community. An awareness that worship is something that's done as a family. There is another value is "awe". Sanctuaries traditionally have put all their eggs in the "awe"

basket. Tall, high ceilings, stained, significant art, stained glass, tremendous organs. All of that communicates we're in the presence of something bigger than ourselves. It's hard to have that feeling and to also feel a sense of community.

These are only a few of the comments made throughout this study to show examples of place attachment.

The Blue Church

Experience with Churches

The build up of shared experiences over the years builds strong place attachment.

Sue: I find it my consoling place. I'm absolutely at home there because I've been there for so long since 1980...and so walking in there all by myself...I don't feel lonesome. It's a warm place for me because I feel just all good things from that church community. The overall meaning I think is that it is a worshipful space for me, comfort space, welcoming, um...peaceful sort of place.

Senior Minister: You know something extraordinary happens somewhere and it seems devastating and people are able to experience the space in a way that in my mind is not separable from the life of the community. But the architecture and the space is part of the life of the community.

Lisa: It's a source of a lot of outreach. This church has a lot of mission and I think that's so important, and when I come here even when I'm involved in it or I just see it, it just really feeds my hope that I really need and I don't get that really anywhere else...not to that extent.

Senior Minister: One sort of extraordinary example would be like many churches had on the day of the Twin Towers, 9-11. We gathered that evening in the sanctuary and it was, you know, a scary and emotional time and for the people in this church on that significant day, that was the space they wanted to come.

Lisa: I started coming here when I was a teenager so in part now because I've been here so long; I know a lot of people. But even when I started here, it meant I could come to a safe place.

Rites and Rituals

The repeated rites and rituals that take place in a church will also help to create a place attachment. Several participants also reference the life stages they have experienced at the church.

Jessica: So the rituals, the um the activities that take place there, the candles being lit, the table at the front, the table all those are parts of it

Cindy: Well let me think about how many emotional experiences happened in that place over ...my whole life since I was three...that is 25 years and for my mom even longer, I mean baptisms of people you love, people who have died, that you've said goodbye to...the meaning is I guess just emotional.

Senior Minister: The emotion that accrues to the architecture has to do with the fact that for this community of faith, historically and in my present involvement here, many times, especially, obviously for funerals and memorial services, that's probably the place where palpable emotion is most present. Sometimes for some of the special liturgical days like Christmas Eve or Holy Thursday or Good Friday, the emotion that's attached to the architecture has to do with the fact that the emotion is present in the community and the community is in its holy space if that makes any sense.

Jean: I feel very spiritual in there and especially during services, but, I've been here a long time. I grew up here. And so I can think back on all sorts of occasions that happened in that church. I got married in that church and you know once in awhile I'll think "Whoa...I walked all the way down that aisle!" That's a long aisle!

Cindy: I think of the emotional meaning of it. I just think of emotion with everything that has happened there. I got married there, my brother got married there, you know, I think the cycle of life happens in this place in a way and it's emotional. The history is tied to the emotion I guess.

Community of People

This church feels very strongly about their community of faith, of people. It is a glue that holds them together.

Senior Minister: My more common experience is that the emotion that I feel in the sanctuary comes from some weaving together of the community of faith that is gathered and what is happening in the community of faith. But, you know, this community of faith is...defined is not the right word but...the sanctuary is the holy space for this community of faith and so I would say I think that it is the gathered people of God.

Mark: We like the fact that the people were really friendly, and the fact that they started back here in the Fellowship Hall and then moved on

through. You know it was pretty gratifying just to see what all they had gone through to get to where they were.

John: But it is the people, that is the bottom line. It is the community of faith that is here in this church. It is supportive and open and friendly and it's family.

Lisa: This is also the source of a lot of the things that are important to me because you know my job's nice and fun and everything but church is where not only do I find a lot of my community, and my parents go here so it's real family in addition to people I've known all my life.

There is a sense of strong place attachment at the Blue Church.

Comparison

The Green Church and the Blue Church have experiences that create emotions and memories for the congregation. With a few variations, the rituals and rites experienced in both churches are the same. An important aspect for both churches is the community of people, of faith that come together at the church for a common reason.

Emotional Experiences of the Participants

The participants of this study relate feelings and emotions to specific elements and features of their churches. The purpose of this study is to discover the meaning they find in their sanctuaries and to do this, the emotional reactions must be studied. Matrices have been constructed for each church to show the connections between their feelings and these elements. The matrices also identify which group of participants recognizes the element of place to which the feelings are tied.

The Green Church

The matrix for this church underscores the different feelings the participants have in their sanctuary (see table 18). They identify natural light with the following feelings: peaceful, refreshing/renewal, quiet/meditative/relaxing, presence of God, cheerful, joyful,

spiritual. Awareness of nature and materials of nature, especially the clear windows to look out and see nature, are identified with peaceful, strong/safe, centered, comfortable, calm, presence of God, and cheerful. Under religious symbols, the architecture of the traditional Colonial design of the church shows the most connections to feelings. The feelings the religious symbols inspire are peaceful, refreshing/renewal, warm, centered, quiet/meditative/relaxing, comfortable, calm, presence of God, welcoming, and worshipful. The acoustic atmosphere generates feelings of the presence of God, welcoming, joyful, and spiritual. The awareness of the volume of the space creates feelings of quiet/meditative/relaxing, presence of God, welcoming, and worshipful. The feeling and emotion referenced most at this sanctuary is comfort.

The Blue Church

The matrix of the Blue Church shows the relationship of the feelings inspired by the sanctuary to that church's participants (see table 19). They identify natural light with the following feelings: peaceful, strong/safe, comfortable, presence of God. Awareness of nature and materials of nature, especially the use of wood in the sanctuary, are identified with peaceful, strong/safe, warm, quiet/meditative/relaxing, comfortable, calm, and welcoming. Under religious symbols, the architecture of the traditional cruciform design of the church shows the most connections to feelings. The feelings the religious symbols inspire are peaceful, strong/safe, refreshing/renewal, warm, centered, quiet/meditative/relaxing, comfortable, calm, presence of God, welcoming, worshipful, and spiritual. The acoustic atmosphere generates feelings of strong/safe, comfortable, presence of God, welcoming, and spiritual. The awareness of the volume of the space creates feelings of peaceful, strong/safe, warm, quiet/meditative/relaxing, comfortable,

welcoming, and worshipful. The feeling and emotion most referenced at this sanctuary is comfort.

Comparison

These churches share many of the same feelings. Looking at the differences will be easier than looking at the similarities. The Green Church also recognizes under the category of natural light refreshing/renewal, quiet/meditative/relaxing, cheerful, joyful, and spiritual. There is more natural light in this sanctuary than in the other one. The Blue Church recognized under the category of natural light strong/safe, comfortable. The natural light from the Blue Church enters from above, from the area people look to find heaven. The category of awareness of nature and materials of nature also shows some differences. The Green Church also identifies centered, presence of God, and cheerful as important. They have an ability to see the nature outside of the sanctuary. The Blue Church identifies warm, quiet/meditative/relaxing, and welcoming in addition to those they had in common with the Green Church. They reference wood many times under this category.

Both churches have the most in common with religious symbols. The Blue Church also included strong/safe, and spiritual to the others they had in common. The acoustics of the churches shared many similarities as well; however, the Green Church adds joyful and the Blue Church adds strong/safe and comfortable. Finally, in comparing the awareness of volume of the space, the Green Church adds presence of God to this category, and the Blue Church adds peaceful, strong/safe, warm, and comfortable. Whereas, the Green Church's ceiling is higher than the Blue Church, the visual

perception is that there is more height in the Blue Church. The feeling and emotion most experienced by both churches in the sanctuary is comfort.

Green Church	How the Participants Identified Meaning and Inspiration as Supported by Place			Ministers	Church Members	Arch. & Int. Designers
	Feeling					
Natural Light	A,C,F, I,L,M,N	Big windows for light to come in		X	X	X
Awareness of Nature/ Materials Of Nature	B,G	Limestone tile gives sense of permanence			X	
	A,E,G, I	Clear windows to see beauty of nature		X	X	X
	A,E,H,I,L	Look out & see birds in trees & sky		X	X	X
	B,	165 million year old fossils in tile			X	X
Religious Symbols	A,D,F,G,J	A place set apart - contributes to Community of Faith		X	X	X
	A,C,D,E,F	Traditional colonial design		X	X	X
	G,H,I,J,K					
	G,H,I	Communion Table & Baptismal Font		X	X	X
	G,H,I	Small brass cross		X	X	X
	F	Pulpit and Lectern		X	X	X
	H,J	Rose Window			X	X
	G,J	Candles		X	X	
		Pews		X	X	X
		Organ display pipes		X	X	X
		Banners		X		
	J	Church steeple		X	X	
	G	Antepedia cloths			X	X
Acoustics	J J,M	Tile enhances sound Acoustics for music are excellent Other groups like to perform here Know it's a sacred space by acoustics		X	X X X	X
	I,N				X	X
Volume	J,I K F,I	Openness of church by way of window Like the volume - the sheer size Ceiling painted to give lofty feel High ceiling		X	X X X	X

Key for Feelings

- | | | | |
|------------------------|--------------------------------|--------------------|--------------|
| A. Peaceful | E.Centered | I. Presence of God | M. Joyful |
| B. Strong and Safe | F. Quiet/ Meditative/ Relaxing | J. Welcoming | N. Spiritual |
| C. Refreshing/ Renewal | G. Comfortable | K. Worshipful | |
| D. Warm | H. Calm | L. Cheerful | |

Table 18: Matrix of Meaning at the Green Church

Blue Church		How the Participants Identified Meaning and Inspiration as Supported by Place	Ministers	Church Members	Arch. & Int. Designers
	Feeling				
Natural Light	A,B,G,J	Natural light enters from above	x	x	x
Awareness of Nature	A	Can tell when clouds pass skylight	x	x	
Materials Of Nature	H	See shadow of dogwood		x	
	B,D,F,G,J	Use of wood	x	x	x
	F	Hear sound of rain on skylight		x	
Religious Symbols	A,B,C,F, H,J,K,N	Trad. design contributes to holy space	x	x	x
	G,J	Banners		x	x
	G,J	Pews		x	x
	B,G	Cruciform shaped floor plan	x	x	x
	D,E,N	Skylight is in the shape of a cross	x	x	x
	I	Church Arch. Contributes to Community of Faith	x	x	x
	D,I,N	Communion Table & Baptismal Font	x	x	x
	I	Hanging Cross with glass chunks	x	x	x
	B	Stained glass windows	x	x	x
		Candles		x	x
		Pipe organ display pipes	x	x	x
		Cloths on pulpit and lectern		x	
Acoustics	I,J,N	People like to sing at Blue Church		x	
	B,I,J	Promotes interaction with singing		x	
	G	The sound is wonderful	x	x	
	I	Acoustics almost perfect in there	x	x	x
		Echo		x	
Volume	J,K	Large, open space	x	x	x
	B,G	miniature of big cathedral		x	x
	B,D	Arched beams like an umbrella		x	
	A,F	Height sets it apart from the ordinary	x	x	x

Key for Feelings

- | | | | |
|------------------------|--------------------------------|--------------------|--------------|
| A. Peaceful | E. Centered | I. Presence of God | M. Joyful |
| B. Strong/ Safe | F. Quiet/ Meditative/ Relaxing | J. Welcoming | N. Spiritual |
| C. Refreshing/ Renewal | G. Comfortable | K. Worshipful | |
| D. Warm | H. Calm | L. Cheerful | |

Table 19: Matrix of Meaning at the Blue Church

CHAPTER 5

SUMMARY

The research questions asked at the beginning of this study have been answered and now the conclusions can be drawn. As stated previously, emotion accrues to the architecture from the rites, rituals, and experiences that take place (Jones, 2001 and Mazumdar & Mazumdar, 2004). The architecture can enhance this expression of emotion by its form (Watson & Kucko, 2001 and White & White, 1998). The main essence of the data are: feelings of meaning is heightened in Presbyterian sanctuaries when the sanctuaries have connections with nature including a defined quantity of natural light and an awareness of nature, symbols of the Presbyterian faith that help to create familiarity and attachment, and architecture that is acoustically friendly to music and the spoken word with a sense of immensity created by the volume and scale of the architecture.

In order to interpret the data, one must look at the elements that inspire feelings and the importance of the elements that have been referenced in the interviews. The number of times an element was referenced determined the importance of the element and if it could be categorized as a theme. The minor categories within the major themes have been eliminated in this matrix in order to see the essence of the study.

	TOTAL REFERENCES	FEELINGS
Connections with Nature		
Natural Light	$36 + 49 + 32 = 117$	Peaceful, presence of God Refreshing/renewal, quiet/meditative/relaxing, cheerful, joyful, spiritual Strong/safe, comfortable
Awareness of nature	$38 + 15 + 27 = 80$	Peaceful, strong/safe, comfortable, calm
Materials of nature	$14 + 42 + 31 = 87$	Centered, presence of God, cheerful Warm, quiet/meditative/relaxing, welcoming
	TOTAL = 284	
Religious Symbols		
Font, table, pulpit	$38 + 6 + 5 = 49$	Peaceful, refreshing/renewal, warm, centered
Cross	$17 + 40 + 27 = 84$	quiet/meditative/relaxing, comfortable, calm, presence of God, welcoming,
Liturgical art	$12 + 31 + 29 = 72$	Worshipful
Architecture	$31 + 26 + 37 = 94$	Strong/safe, spiritual
	TOTAL = 299	
Architecture		
Volume	$17 + 22 + 19 = 58$	Quiet/meditative/relaxing, welcoming worshipful Presence of God Peaceful, strong/safe, warm, comfortable
Acoustics	$32 + 69 + 15 = 116$	Presence of God, welcoming, spiritual Joyful Strong/safe, comfortable
	TOTAL = 174	
Common responses in BLACK Green Church responses in GREEN Blue Church responses in BLUE Architect & Interior Designer responses in RED		

Table 20: Matrix of Findings

Connections to Nature

There are two main sub-categories under this heading, natural light and awareness of nature.

Natural Light

This study shows the emotional connection those interviewed have to natural light. Natural light is present in both sanctuaries. The Green Church has a lot of natural light coming in from the side windows. The Blue Church has natural light that comes into the sanctuary in a dramatic fashion from a skylight. Every group participating in this study identifies natural light as important to them. There are a total of 117 direct references to the light in the sanctuaries. Both churches agree that natural light creates feelings of peacefulness and the presence of God.

The sanctuary with the most light, the Green Church, has more emotional responses to the light than the Blue Church, even though the Blue Church has more overall references to light than any other group interviewed. The large quantity of light at the Green church gives the participants feelings of being refreshed and renewed, of a quiet/meditative/relaxing space, of cheerfulness and joyfulness, and a sense of spirituality. In the darker sanctuary at the Blue Church, they feel they are in a strong, safe, and comfortable space. Participants at the Blue Church speak often of wanting more natural light in their sanctuary. Roberts (2004) and White (2003) express how important this element is to church architecture as a metaphor of God (Roberts, 2004) and therefore an important building material (White, 2003).

Awareness of Nature

The awareness of nature includes such things as being able to view nature through the window and being able to tell a change in the weather outside. Awareness of nature also includes materials from nature. Material from nature includes the wood and tile used in the sanctuaries and referenced by the participants. The data collected regarding materials from nature are shown in the findings matrix (see table 20).

The large, clear glass windows at the Green church allow unobstructed views to the outside. Direct references are made by all participants about the ability to see birds, trees, and sky from the sanctuary. At the Blue Church the minister and the congregation participants notice the skylight allows the congregation to perceive the weather changes that occur while they are in the sanctuary. Lewis (1996) found in his study that even a glimpse of nature through windows can help with restorative abilities. Kaplan, et al (1998) agreed that nature plays a restorative role in human's lives.

Both churches utilize materials from nature in large quantity. In the Green Church, the Jurassic limestone tile covers roughly 9,000 square feet of the floor. The congregation members from the Green Church identify the limestone tile as giving a sense of permanence. Schwarz and Brent (1997) noted in their study of the Eero Saarinen Firestone Baars Chapel that stone seems to have the ability to anchor "in time . . . the most important values" (p.42). In the Blue Church there is an extensive use of wood on the ceiling and in the major architectural support elements of the sanctuary. All participants identify the wood as adding warmth to the sanctuary. The use of natural building materials in a way that enhances their qualities contributes to spirituality (Watson & Kucko, 2001).

There are 80 references to the awareness of nature and 87 references to the use of materials from nature. Both churches agree that they experience feelings of peacefulness, strength, safety, comfort, and calm from these aspects of nature. Watson & Kucko (2001) stated that “materials should be used in a way that conveys their strength and best qualities, letting each material – whether it is stone, wood, or steel – express its basic nature” (p. 25). The use of the limestone at the Green Church gives a sense of permanence, while the use of the wood structural supports at the Blue Church gives a sense of strength. The participants at the Green Church are able to see nature directly and reference the awareness of nature more than the materials from nature. They express additional feelings of centeredness, presence of God and cheerfulness. The Blue Church participants are surrounded by wood and reference materials from nature more than they do the awareness of nature. They express additional feelings of warmth, quiet/meditative/relaxation, and feelings of being welcome. These connections to nature enhance the meaning congregations find in the church sanctuaries.

Acoustics

There is an awareness of the acoustics in these sanctuaries. The quality of sound in these sanctuaries can contribute to the spirituality of the space and the meaning the congregation derives from the church service (Roberts, 2004). Music is a meaningful part of the participants’ church experience and they comment on the good acoustics in their sanctuaries. Both churches express pride when they mention that other groups like to perform in their sanctuaries because of the acoustic quality. The actual design of the space and the materials used create the sound dynamics in these spaces (Ballou, 1987,

Guthrie, 2000). There are a total of 116 references to acoustics in this study. The feelings experienced in both churches include welcoming, spiritual, the presence of God. The Green Church experiences joyful in addition to the others and the Blue Church experiences feelings of strength, safety, and comfort.

Volume

As stated previously, the excess height of a sacred space is meant to cause the worshiper to lift their eyes to heaven and toward God and to free them from earthly concerns (Eliade, 1957; Mann, 2002; Rose, 2001; Tuan, 1977; and White, 2003). These churches are not excessively tall. The Green Church's ceiling height of 35 feet doesn't seem as impressive when the width and the length of the sanctuary are considered. The elliptical vault of the ceiling de-accentuates the height. The Blue Church's ceiling height of 33 feet 6 inches seems taller than it is. The width of the main part of the sanctuary and the width of the transepts is narrower than the Green Church. The wood vault ceiling with the skylight draws the eye up. The skylight increases the perception of the height as well. There are 58 total references to the volume of the space. All groups of participants recognize this theme. Both churches experience feelings of quiet/meditative/relaxation, welcoming, and worshipful. The Green Church also feels the presence of God because of the volume. Since light has been equated as having the presence of God and the volume of the space and the large windows allow for an incredible amount of light to enter, these two themes of volume and nature seem to be interrelated in this manner. The Blue Church experiences peace, strength, safety, warmth, and comfort from the sense of height. The Blue Church also has a massive amount of wood, material from nature,

within the sanctuary that participants have already connected to strength, safety, and warmth. Again, there appears to be a connection between volume and nature.

Religious Symbols

Religious symbols create another layer of spiritual meaning to the other themes explored in this study (Jones, 2000). Light, the awareness of nature, the materials from nature, volume, and acoustics can happen in any built environment, but it is the addition of the religious symbols that allows an emotional bond with the participants and helps to create place attachment. Religious symbols in this study are represented by the baptismal font, the communion table, the pulpit and lectern, the cross, liturgical art, and architectural style. One unexpected finding is the references to specific architectural designs as a symbol of religion. In the matrix that pulls the essence of these findings together, architecture is shown as a sub-category of religious symbols (see table 20).

The Green Church is a Colonial Williamsburg church design with a steeple and clear windows. The font, table, pulpit, and lectern are located on the raised chancel. Other than a small cross on the table and antependia cloths on the pulpit and lectern, there is no additional indication of the Protestant faith.

The Blue Church utilizes the cross symbolism in a variety of ways. The plan of the Blue Church is a traditional cruciform style, the skylight is created in the shape of a cross, and there is a large wrought iron cross hanging from arching wood beams. There is a font, table, pulpit, lectern, small brass cross, and antependia cloths on their raised chancel as well. Several liturgical banners are displayed on the walls of the transepts. The religious symbol of the cross is very prominent in this sanctuary.

Even though there is a slight difference in design, the same basic symbols are present in both churches. Mazumdar & Mazumdar (2004) find “there is an active socializing component to religious place attachment in addition to the experiential one” (p. 385). The baptismal font and the communion table are symbols that are important because of what they represent and their use in church worship.

In this study, there are a total of 299 references to religious symbols. Ministers, church members, and the architectural and interior design community make references to these symbols. There are 94 references to the design of the sanctuaries representing church architecture. There are 84 specific references to the cross. The majority of references to the cross come from the Blue Church participants and the participants from the architectural and interior design community. A common comment from participants at the Green Church is a desire for a larger cross. There are 49 references to the baptismal font, the communion table, and the pulpit and lectern. An overwhelming majority of the responses are from the Green Church. As those interviewed have commented, the church’s simplicity and plainness focus the attention on the chancel where these symbols are located. There are a total of 72 references to liturgical art.

Participants from both churches experience feelings of peacefulness, refreshing/renewal, warmth, being centered, quiet/meditative/relaxation, comfort, calm, presence of God, welcome, and worship. The Blue Church also experiences feelings of strength, safety, and spirituality. In this category church architecture registered the most emotional responses. The numerous references to the theme of religious symbols show the tremendous impact this has to meaning and inspiration in sacred places.

Limitations

No matter how thorough a study has been considered and conducted, there is always something that could be changed in order to improve the study should it be conducted again. This is true for this study as well. If this study were reproduced, there are several changes that could enhance it. Keeping track of the age and the occupation of the participants could point to another type of pattern within the study. Studying another Presbyterian Church, not in the same demographics, could provide further validation. It would be ideal if everyone was interviewed in the same environment. Some people were interviewed away from the church. Although, they didn't seem to have a problem expressing their thoughts and feelings, it would be better to be more consistent as to the place they are interviewed.

Further Research

Further research needs to be done in the area. For each question answered, several more were created. The following questions are a few of the many that can be addressed with further research.

- Will these findings create a meaningful sacred space every time?
- Will these findings apply to other denominations?
- Or even the same denomination in another country?
- What creates a meaningful experience in these sanctuaries at night when there is no natural light and possibly no view of nature?
- Are we only limited to a meaningful experience during daytime hours?

- Do people younger than 30 expect something different from their church experience?

I don't know the answers to these questions. However, the questions that have been answered will be valuable to those who design church sanctuaries in the future.

Conclusions and Recommendations

When I began this research, I believed people would identify with nature, light and natural materials, volume, and liturgical art. It became apparent through the interviews and the reading material that it wasn't that simple. There were fourteen different feelings and emotions that the participants identified as important to create a meaningful and inspirational church experience. Comfort was easily the most referenced feeling that was experienced. The majority of these references occur under religious symbols, especially church architecture. The familiar symbols of the Presbyterian faith, including the familiar structure of the architecture where people have experienced different stages of their life, create feelings of comfort.

Meaning is different for each person, each religion, and each culture. I have tried to identify meaning for two Presbyterian Churches in the Kansas City metropolitan area. Even within these churches, the meanings are different for the participants because of their backgrounds and experiences; however, certain patterns are able to be identified.

Natural light is important to the participants of both sanctuaries. The participants speaking about lighting at the Green Church speak about cheerfulness and joyfulness. This emotion is absent from the responses at the Blue Church. While the participants of

the Blue Church identify the natural light from the skylight as important, they still make comments about the interior being gloomy and dark. Both congregations are able to identify changes in weather because of the windows; however, some of the Blue Church participants express a desire to see nature. Those from the Green Church express how important the ability to see nature out of the windows is to them. The Blue Church participants speak at length about the wood used in the interior and how it creates a warm interior for them. Sounds from nature were mentioned by two people as they designed their space from scratch and by several others as they talked about nature. It doesn't seem to be a main component for anyone.

The participants from the Green Church express additional feelings of refreshing/renewal, cheerful, joyful, spiritual, and centeredness that the participants of the Blue Church did not express. In order for participants to have an optimal meaningful experience in church, a large quantity of natural light must be available as well as the opportunity to see nature outside the windows. The ability to have some natural light coming in from above like the Blue Church is dramatic and has meaning to those participants, but they still feel that something is lacking, that it is too dark. The skylight does not provide enough natural light. Adding more artificial lighting will not be enough. It is the direct connection with the light and the view outside that creates the feelings of cheerfulness and joyfulness.

The Blue Church could increase the amount of natural light into their sanctuary by adding windows at the ends of the transepts and changing the stained glass windows. The stained glass windows could be designed with a religious symbol or depiction or with a design from nature. The design of the windows on the outer wall could be done so that

there are plenty of clear glass pieces in order to see out and let light in. The design of the windows on the inner wall could match the other wall except that the stained glass used is more translucent or opaque so that the hallway isn't as noticeable. The windows at each end of the transepts could be designed with opaque stained glass at the bottom working up to more clear glass the further up it goes. By doing this the parking lot on one side isn't seen and yet the trees and birds and weather can be seen. The windows in the transepts could also be made totally clear, just starting high enough so that the view of the parking lot and the road are not seen. Another option is to use rose windows in each end of the transept. When a lot of natural light is used in a sanctuary, the congregation finds a cheerfulness and joyfulness included in their worship.

The light from the added windows in the transepts could create another problem. The participants from the Blue Church enjoy the change of light that they see from the skylight. Too much light in the chancel area will take away from the drama of the light from the skylight. If this drama is an important part of their place attachment as it seems to be, addressing natural light and views with the existing stained glass windows might be a good compromise.

Both churches have the most consensus on religious symbols. The Green Church has many references to the baptismal font, the communion table, and the pulpit, whereas the Blue Church participants barely mention it. This isn't surprising since there is nothing other than the items on the chancel for the Green Church members to focus on. From the minister's point of view, the focus on the chancel is as it should be; however from the congregation's point of view, having something to meditate upon can enhance their feelings of the presence of God.

Members of the Green Church express a desire for more liturgical art such as a larger cross and stained glass. Some of them mention adding stained glass in the small rose window, but the main interest in the liturgical art was a much larger cross on the chancel. The Blue Church does have a distinctive large cross hanging in their sanctuary and most of the responses regarding liturgical art were about the cross. The additional feelings that the participants from the Blue Church expressed of strong and safe and spiritual were referenced many times in relation to their cross. The banners that are hung in their sanctuary were mentioned as something to break up the large expanse of white cinder block, but not referred to as particularly meaningful. There were so many references to the cross that I created a separate category for it under religious symbols. The Blue Church found added meaning in their cross from the prominence it has in their sanctuary and by its connection to the community since it was created by a local artist.

The Green Church can enhance the meaningful experience their congregation has during worship by adding a large cross as a focal point on the chancel. Participants have expressed a desire for something to meditate upon. Likewise, having a local artisan design and make it can add another layer of meaning for the congregation. There is a false wall under the rose window that would be a logical location for the cross. One of the participants from the Green Church suggested suspending a cross over the communion table so that it would be visible and yet out of the way when the communion table is used for communion. Some felt that stained glass with religious significance would be appropriate in the small rose window on the chancel.

A surprise finding is the references to the architecture as a religious symbol. The architecture of both buildings is distinctive architecture of a religious style. It is

architecture generally found only in churches. The members of both churches feel strongly that the architecture as church architecture is important for their worship service. As one participant states, “A high school auditorium just doesn’t do it for me.” The familiarity of the church architecture creates a comfortable and welcoming feeling for the participants.

After several interviews, it became apparent that the quality of sound in the building is important for a meaningful experience. Both churches mention the music in the sanctuaries and the emotions they experience because of this. Several mention specific experiences in an acoustically dead environment. There is a fine line that must be achieved when considering acoustics for a church sanctuary. As an individual item, the acoustics came in second only to natural light.

Another surprise in this study is the minimal references to volume. Many books refer to volume, to height, as an important element in church architecture (Roberts, 2004; Rose, 2001; Tuan, 1977; and White, 2003). Even though these sanctuaries don’t have soaring height, they do possess volume. Possibly if the architectural volume and height wasn’t appropriate, there would be more awareness of it than there is as shown by the references to it.

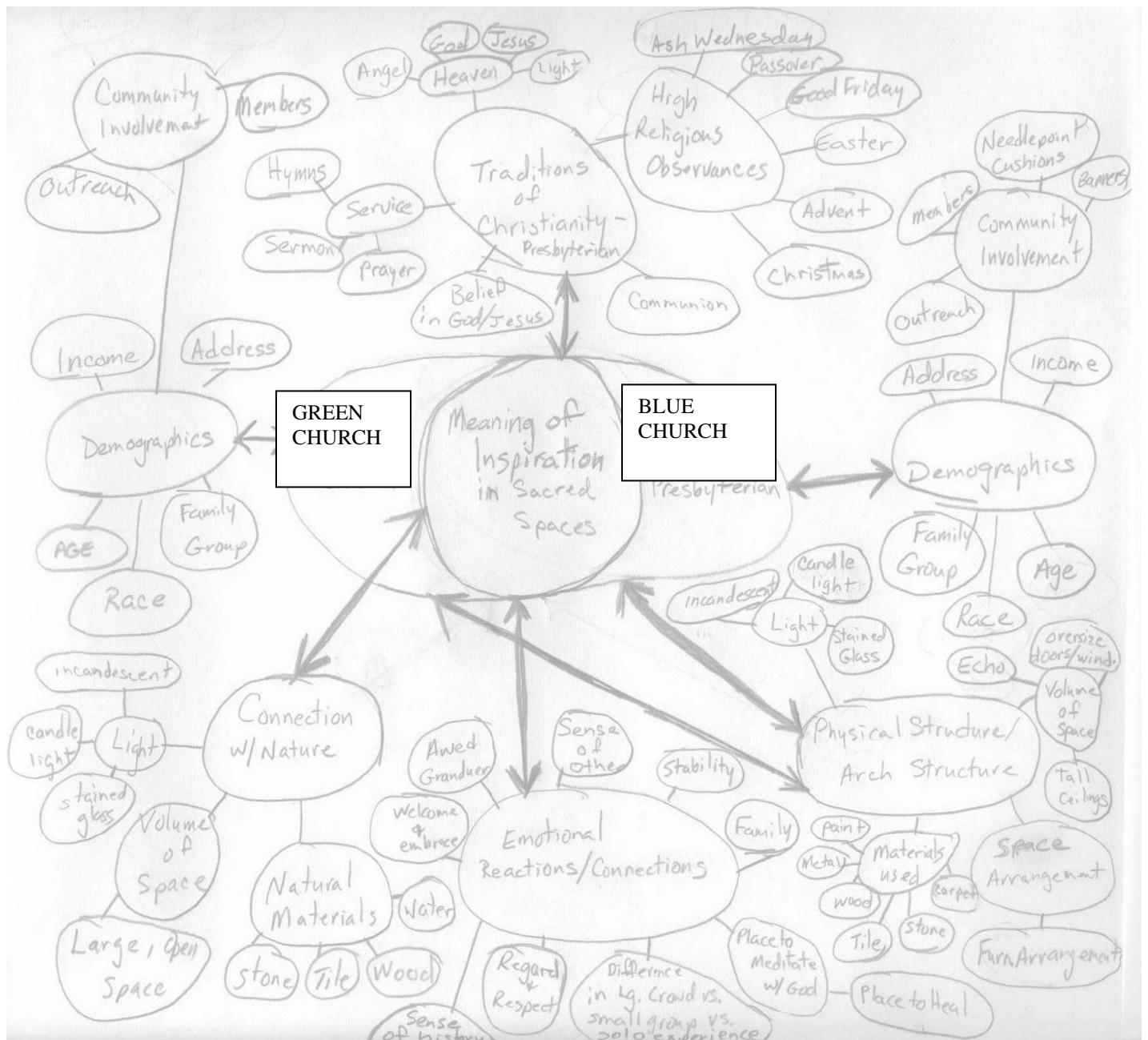
Connections to nature are vital for worshipers to feel a spiritual connection to their God. If a large quantity of natural light and views to nature are designed into the architecture of the sanctuary, the worshipers in the pews will have an easier time feeling connected to their God. If a large quantity of natural light or the views to nature is absent, the use of natural materials in a significant manner in the sanctuary creates another type of connection to nature. Architectural volume is an important factor for a special feeling

in the sanctuary. Optimal acoustics for music and the spoken word are also important. These two items often go hand in hand. If the volume and the height are missing, the acoustics will be dead. However, if the religious symbols are not present in the sanctuary, the space becomes an ordinary space and will lose its significance to the congregation.

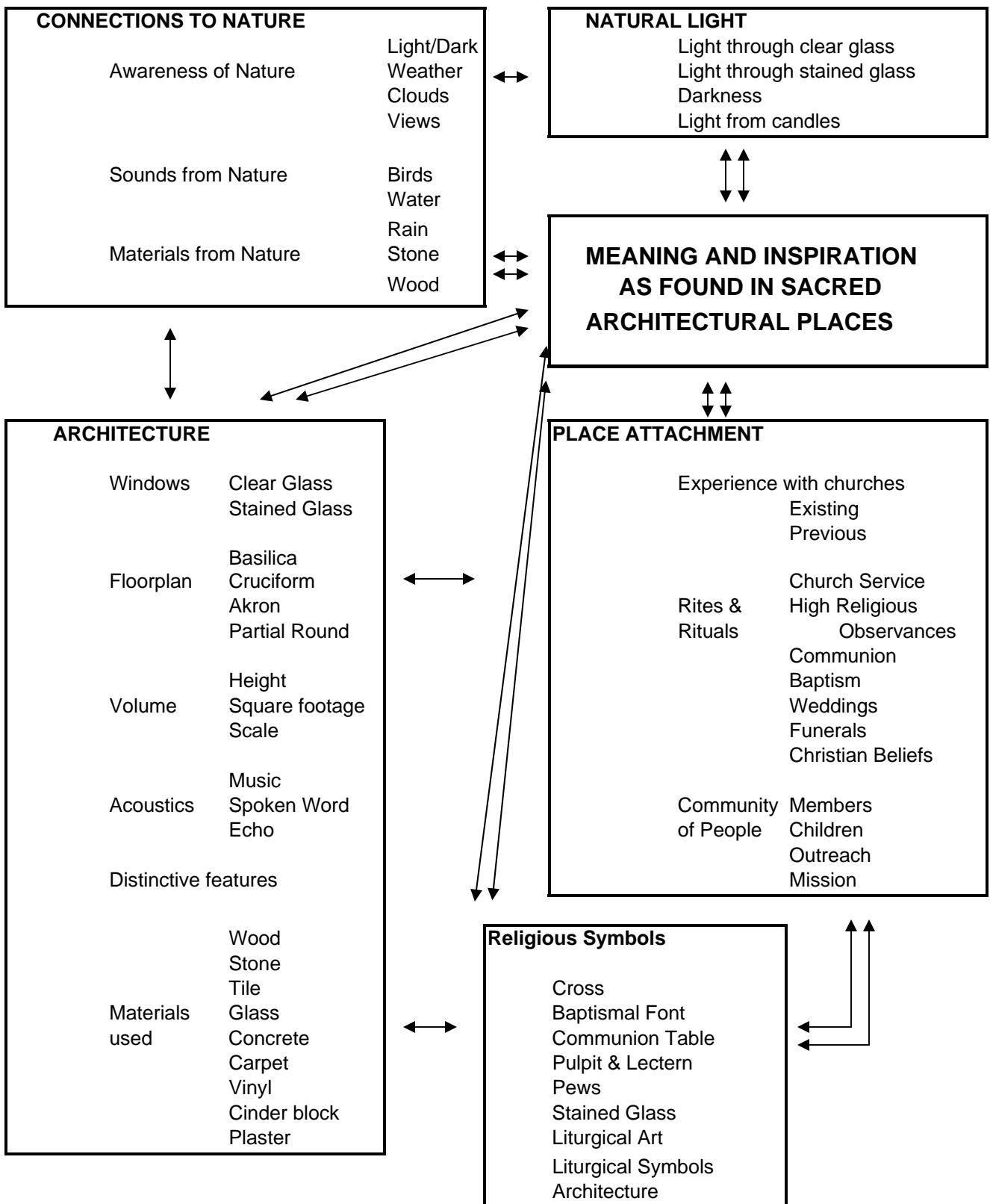
It is my hope that architects and interior designers will be able to apply the following elements to the design of other Presbyterian Churches in the United States in order to create more meaningful sacred spaces. The first element is a large quantity of natural light to enhance the perception of and the connection to the presence of God. The second element is the use of traditional architectural church features and religious symbols to enhance and strengthen place attachment because of the familiarity of these features. This familiarity creates an essential comfort level in the sanctuary. The third element is to create an awareness of nature as well as the use of natural materials to be incorporated into the sanctuary to emphasize God's creations. The fourth element is to have an acoustically friendly environment for music and the spoken word. A live acoustical environment enhances the religious experience of a sanctuary. The final element is the sense of immensity created by the volume of the architecture. The use of these elements should allow the worshiper to have a meaningful Sunday morning church experience.

APPENDIX

PRELIMINARY CONCEPT MAP



REVISED CONCEPT MAP



CONSENT TO SERVE AS A SUBJECT IN RESEARCH (for 18 and over)
MEANING AND INSPIRATION AS FOUND IN SACRED ARCHITECTURAL PLACES

1. I agree to be a part of a research project directed by Diana Ingham, Graduate Student in the College of Architectural Studies, University of Missouri-Columbia. I understand that other people may help Ms. Ingham, including University of Missouri professors.
2. I understand that:
 - a. I must be at least 18 years of age to participate.
 - b. This will be my part in the research: I will answer questions in an interview with Diana about my feelings regarding the architecture of the church and the sanctuary. The questions will take about 20 minutes to answer.
 - c. My participation in this interview is voluntary. I may withdraw from the interview at any time without penalty and I do not have to answer any questions I don't want to.
 - d. Ms. Ingham wants to know what I think about the architecture of the sanctuary and about how that is related to feelings of meaning and inspiration.
 - e. These are the good things that I can get out of being a part of the study: My answers may help researchers understand the things that contribute to meaning and inspiration in sacred architectural places.
 - f. The following steps will be taken to protect my identity and the information I provide:
 - My name will appear on a cover sheet that will have a code number. The cover sheet is the only thing that will have my name on it, and it will be kept in a locked filing cabinet in Ms. Ingham's office, separate from the interview sheet.
 - My answers (the interview) will be kept by Ms. Ingham in a separate locked filing cabinet, and no one except Ms. Ingham and her assistants will see them. The interview will have a code number but it will not have my name on it.
 - My responses will be written down by the interviewer.
 - The interview sheet will be stored for 3 years in a locked cabinet and then destroyed.
 - The results of this research may be published, but I will not be identified. Results of the research will be coded in such a way that my identity will not be attached physically to the data.
 - g. The results of this research may be published, but I will not be identified.
3. I have had a chance to ask any questions I have about the project. If I have any other questions, I can contact Ms. Ingham (913-469-8500 ext. 3317).
4. It is okay for Ms. Ingham and the people working with her to tell others what they learned from this project but I will not be mentioned by name. The information will be about the whole group and not just about me.
5. This study has been approved by the MU Institutional Review Board (IRB) (project # 1046156). You may contact the IRB office at 483 McReynolds Hall, Columbia, MO 65211, telephone 573-882-9585.

Signature: _____

Date: _____

DRAFT OF INTERVIEW QUESTIONS
MEANING AND INSPIRATION AS FOUND IN SACRED
ARCHITECTURAL PLACES
INTERVIEWER: MS. DIANA INGHAM

1. What feelings or emotions do you have about the architecture of the church and sanctuary? How does it make you feel and why do you believe you have these feelings?

2. What meaning does the space of the sanctuary have for you?

3. What is/are your favorite things about the architecture?

4. What elements are important for you in the sanctuary to feel that you are in a special, sacred, inspirational space?

5. What thoughts do you have about the arrangement of space in the sanctuary? Does it make a difference to you that it is arranged that way? Why or Why not?

6. If you could design from scratch a sanctuary that you would see as inspirational, what kinds of things/elements would it have?

7. Is there anything you would change about the sanctuary space?

8. Is there something you have thought of during the interview that I haven't asked?

**DRAFT OF INTERVIEW QUESTIONS FOR
ARCHITECTS AND INTERIOR DESIGNERS
MEANING AND INSPIRATION OF SACRED ARCHITECTURAL PLACES
INTERVIEWER: MS. DIANA INGHAM**

Since these questions are designed to be active and open-ended, the actual questions may vary slightly. There may be more questions asked than what appear on this sheet in order to follow the train of thought of the interviewee.

These questions will be asked at each church.

1. What feelings do you get in this sanctuary?

2. Can you identify why?

3. What are some of the elements or aspects of this sanctuary that you particularly like?

4. What are some of the elements or aspects that you don't like?

5. Any thoughts on the physical layout or the liturgical art?

6. Anything I haven't asked that you would like to add?

These questions will be asked after both sanctuaries have been addressed.

1. Does one sanctuary give you a more emotional pull over the other? Why?
2. What elements do you feel are important for a sacred space?
3. If you could design from scratch a sanctuary that you would see as sacred and inspirational, what would it include, what would it look like?

BIBLIOGRAPHY

- Alexander, C. (1977). *A Pattern Language*. New York: Oxford University Press.
- Bachelard, G. (1994). *The Poetics of Space: The Classic Look at How We Experience Intimate Spaces* (M. Jolas, Trans.). Boston: Beacon Press. (Original work published 1958)
- Ballou, G. (Ed.). (1987). *Handbook For Sound Engineers: The New Audio Cyclopedia*. Indianapolis, IN: Howard W. Sams & Co.
- Behling, J. (1984). *Guidelines for Preparing the Research Proposal, Revised Edition*. Lanham, MA: University Press of America.
- Cooper-Marcus, C. (1995). *House As a Mirror of Self: Exploring the Deeper meaning of Home*. Berkeley, CA: Conari Press.
- Creswell, J. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Crosbie, M. (2000). *Architecture for the Gods*. New York: Watson-Guptill Publications.
- Cullum, D. (1949). *The Practical Application of Acoustic Principles*. London: E. & F. N. Spon Ltd.
- Davis, D., & Davis, C. (1989). *Sound System Engineering* (2nd ed.). Indianapolis, IN: Howard W. Sams & Co.
- Denzin, N., & Lincoln, Y. (Ed.). (1994). *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications.
- Eliade, M. (1957). *The Sacred and The Profane: The Nature of Religion* (W. Trask, Trans.). New York: Harcourt Publishing.
- Foote Jr., T., & Thornburg, P. (2000). *Being Presbyterian in the Bible Belt: A Theological Survival Guide for Youth, Parents, and other Confused Presbyterians*. Louisville, KY: Geneva Press.

- Franck, K., & Schneekloth, L. (Ed.). (1994). *Ordering Space: Types in Architecture and Design*. New York: Van Nostrand Reinhold.
- Frankl, V. (1985). *Man's Search for Meaning*. Boston: Pocket Books. (Original work published in 1959)
- Gadamer, H. (2004). *Truth and Method* (2nd re. ed.) (J. Weinsheimer & D. Marshall, Trans.). New York: Continuum International Publishing Group Ltd. (Original work published 1960)
- Gallagher, W. (1994). *The Power of Place: How Our Surroundings Shape Our Thoughts, Emotions, and Actions*. New York: HarperPerennial.
- Giles, R. (2004). *Re-Pitching the Tent – Re-ordering the Church Building for Worship and Mission* (3rd ed.). Collegeville, MN: The Liturgical Press.
- Groat, L., & Wang D. (2002). *Architectural Research Methods*. New York: John Wiley & Sons, Inc.
- Guthrie, P. (2000). *The Interior Designer's Portable Handbook*. New York: McGraw-Hill.
- Hayden, D. (1979). *Seven American Utopias: The Architecture of Communitarian Socialism, 1790-1975*. Cambridge, MA: The MIT Press.
- Heidegger, M. (1962). *Being and Time* (J. Macquarrie & E. Robinson, Trans.). New York: Harper & Row.
- Heschong, L. (1996). *Thermal Delight in Architecture*. Cambridge, MA: The MIT Press. (Original work published 1979)
- Holy Bible, King James Version*. Cleveland, OH: The World Publishing Co.
- Howe, J. (2003). *Houses of Worship : An Identification Guide to the History and Styles of American Religious Architecture*. San Diego, CA: Thunder Bay Press.
- Humphrey, C., & Vitebsky, P. (2003). *Sacred Architecture: Explore and Understand Sacred Spaces*. London: Thorsons. (Original Work Published 1997)
- Illuminating Engineering Society of North American. (1999). *IESNA Lighting Education: Fundamental Level*. New York: Author.
- Jones, L. (2000). *The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison – Volume One – Monumental Occasions: Reflections on the Eventfulness of Religious Architecture*. Cambridge, MA: Harvard University Press.

- Jones, L. (2000). *The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison – Volume Two – Hermeneutical Calisthenics: A Morphology of Ritual-Architectural Priorities*. Cambridge, MA: Harvard University Press.
- Kaplan, R., & Kaplan, S., Ryan, R. (1998). *With People in Mind: Design and Management of Everyday Nature*. Washington, D.C: Island Press.
- Kilde, J. (2002). *When Church Became Theatre: The Transformation of Evangelical Architecture and Worship in Nineteenth Century America*. New York: Oxford University Press.
- Lewis, C. (1996). *Green Nature/Human Nature: The Meaning of Plants in Our Lives*. Urbana, IL & Chicago: University of Illinois Press.
- Lingle, W., Kuykendall, J. (1988). *Presbyterians: Their History and Beliefs*. Atlanta, GA: John Knox Press. (Original work published 1944)
- MacDonald, F. (2002). Towards a Spatial Theory of Worship: Some Observations from Presbyterians Scotland. *Social & Cultural Geography*, 3(1).
- MacDonald, W. (1962). *Early Christian & Byzantine Architecture*. New York, NY: George Braziller, Inc.
- Mackenzie, G. W. (1964). *Acoustics*. London: Focal Press.
- Matchette, P. (1996). *The Village Church Story*. Prairie Village, KS: The Village Church.
- McKim, D. (2003). *Presbyterian Beliefs: A Brief Introduction*. Louisville, KY: Geneva Press.
- Mann, AT. (2002). *Sacred Architecture*. London: Vega.
- Maude, T. (1997). *Guided by a Stone Mason: The Cathedrals, Abbeys and Churches of Britain Unveiled*. New York: I.B. Taurus Publishers.
- Maxwell, J. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, CA: Sage Publications.
- Mazumdar, S., Mazumdar, S. (2004). Religion and Place Attachment: A Study of Sacred Places. *Journal of Environmental Psychology*, 24(3), 358-397
- Merriam Webster's Collegiate Dictionary* (10th ed.). (1999). Springfield, MA: Merriam-Webster.

- Nielson, K., & Taylor, D. (2002). *Interiors: An Introduction, 3rd Edition*. New York: McGraw-Hill.
- Norberg-Schulz, C. (1963). *Intentions in Architecture*. Rome: Universitetsforlaget – Allen & Unwin, Ltd.
- Nuckolls, J. (1983). *Interior Lighting for Environmental Designers* (2nd ed.). New York: Wiley-Interscience Publication.
- Patton, M. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Ponzetti, Jr., J. (2003). Growing Old in Rural Communities: A Visual Methodology for Studying Place Attachment. *Journal of Rural Community Psychology*, E6 (1). Retrieved June 24, 2005 from http://www.marshall.edu/jrcp/E6one_ponzetti.htm.
- Prairie Village History Book Committee & Grubb, D. (2002). *Prairie Village: Our Story*. Prairie Village, KS: Author.
- Presbyterian Church Demographics. (2000). Link from Presbyterian Church (U.S.A.) home page. Retrieved June 20, 2005, from <http://ext.nazarene.org/m3/scr/pre.exe>
- Roberts, N. (2004). *Building Type Basics for Places of Worship*. Hoboken, NJ: John Wiley & Sons, Inc.
- Rose, M. (2001). *Ugly as Sin: Why They Changed Our Churches from Sacred Places to Meeting Spaces – and How We Can Change Them Back Again*. Manchester, NH: Sophia Institute Press.
- Schneekloth, L., & Shibley, R. (1995). *Placemaking: The Art and Practice of Building Communities*. New York: John Wiley & Sons, Inc.
- Schwarz, B., Brent, R. (1997). Eero Saarinen's Firestone Baars Chapel: Poetics of a Sacred Place. *Journal of Interior Design*, 23(1), 37 -47.
- Sheldrake, P. (2001). *Spaces for the Sacred: Place, Memory, and Identity*. Baltimore: The Johns Hopkins University Press.
- Silverman, D. (2004). *Qualitative Research: Theory, Method and Practice* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Smylie, J. (1996). *A Brief History of the Presbyterians*. Louisville, KY: Geneva Press.
- Strauss, A., & Corbin, J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2nd ed.). Thousand Oaks, CA: Sage Publications.

- Tuan, Y. (1977). *Space and Place: The Perspective of Experience*. Minneapolis, MN: University of Minnesota Press.
- Watson, S., Kucko, J. (2001). Thorncrown and the Mildred B. Cooper Chapels: Sacred Structures Designed by Fay Jones. *Journal of Interior Design*, 27(2), 14 – 25.
- White, J. (2003). *Protestant Worship and Church Architecture: Theological and Historical Considerations*. Eugene, OR: Wipf and Stock Publishers. (Original work published 1964).
- White, J., & White, S. (1998). *Church Architecture: Building and Renovating for Christian Worship*. Akron, OH: OSL Publications.
- Williams, B. (1999). *Footcandles and Lux for Architectural Lighting*. Retrieved June 20, 2005, from the Manitoba website:
<http://www.mts.net/~william5/library/illum.htm>.
- Williams, P. (1997). *Houses of God: Region, Religion & Architecture in the United States*. Urbana and Chicago: University of Illinois Press.
- Wittich, J. (1996). *Exploring Cathedrals: A Short Guide*. Whitstable, Kent, UK: Oyster Press.
- Yin, R. (2003). *Applications of Case Study Research* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. (2003). *Case Study Research Design and Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

VITA

Diana Ingham was born Diana Allison on August 26, 1961 in Springfield, Illinois. After moving to farm in mid-Missouri at the age of three, she attended public schools in the area. She received a B.S. in Home Economics with her major in Interior Design in 1983 from the University of Missouri in Columbia. In the course of her interior design career, she has worked for several interior design firms, has owned her own business, and has had her work published in magazines and newspapers. She was President of the American Society of Interior Designers – Missouri West/ Kansas Chapter 1997 – 1998. She is presently a faculty member of the Interior Design Department at the Johnson County Community College in Overland Park, Kansas.