ABSTRACT

Title of Document: CONTEMPORARY SPIRITUAL RE[IMAGE]

INATION: RELATING THE TRADITIONS OF

THE EPISCOPAL CHURCH TO MODERN

SOCIETY

Patrice Michelle Bennett, M. Arch, and 2015

Directed By: Professor Peter Noonan, School of Architec-

ture, Planning and Preservation

In the American colonial era, Anglicans associated with the Church of England founded parishes and built churches throughout the colonies. After the Revolutionary War, many of these Anglicans refused any sort of loyalty toward the Church of England, and thus established the Episcopal Church. Early churches were often central within individual settlements and central to the lives of its inhabitants. Over the centuries, however, the Episcopal Church has migrated to the peripheries of communities and has diminished in importance to much of the populace. Over the last decade membership in the Episcopal Church has decreased by nearly twenty percent, despite progressive attempts by church leadership to evolve with an ever-changing society. Utilizing the canon and cus-

toms of the Church as a guide, this thesis will explore how the Episcopal Church can respond and relate to a diverse contemporary society while maintaining its rich history and traditions so vital to its tenets, and explores what role innovative architectural thinking can play to support that evolution.

CONTEMPORARY SPIRITUAL RE|IMAGE|INATION: RELATING THE TRADITIONS OF THE EPISCOPAL CHURCH TO MODERN SOCIETY.

Ву

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University of Maryland, College Park, in partial fulfillment
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Table of Contents

Acknowledgments	ll
Table of Contents	jji
List of Figures	V
Chapter 1: Introduction	1
Chapter 2: History of the Episcopal Church in the United States	3
Origins	3
Growth, Decline, and Diversification over the Centuries	6
Taxonomy of Episcopal Church Form through Time	8
Chapter 3: Architectural and Programmatic Components of the Episcopal	
Church	12
Definition of Terms	12
Diagramming of Components	13
Diagramming of Episcopal Church Taxonomy	15
Analysis and Trends	15
Chapter 4: Precedents	17
Notre Dame du Haut Chapel	17
MIT's Kresge Chapel	18
Otaniemi Student Chapel	20
Church of the Light	22
Chapel of St. Ignatius	24
Chapel of Silence	26
Chapter 5: Site Selection and Analysis	29
US dioceses and membership statistics and trends in growth and de-	
cline	29
Selection Methodology	33

City Analysis	33
Site Selection	43
Site Analysis	45
Chapter 6: Program	55
General Program Requirements	55
Chapter 7: Design Process	65
Urban Form Strategies	65
Ritual of Place	67
Building Form Strategies	70
Chapter 8: Design Proposal	72
Chapter 9: Conclusions	81
Fellowship Hall	81
Interior Spaces	81
Beyond the Site	82
Bibliography	83

List of Figures

Figure 1	Genealogy of the Episcopal Church	3
Figure 2	One of the first women ordained after the the Ceneral Convention	
	of 1976, archive.episcopalchurch.org	7
Figure 3	Taxonomy of Episcopal churches in the US. This table compiled	
	multiple architecturally significant US Episcopal churches with	
	data about their date built, location, photos, plans, architects, site	
	context, and other notes	9
Figure 4	Taxonomy of Episcopal churches in the US. This table compiled	
	multiple architecturally significant US Episcopal churches with	
	data about their date built, location, photos, plans, architects, site	
	context, and other notes	10
Figure 5	Taxonomy of Episcopal churches in the US. This table compiled	
	multiple architecturally significant US Episcopal churches with	
	data about their date built, location, photos, plans, architects, site	
	context, and other notes	11
Figure 6	Diagram of basic church components	13
Figure 7	Diagram of the narthex	14
Figure 9	Diagram of the nave	14
Figure 11	Diagram of the pulpit	14
Figure 13	Diagram of the chancel	14
Figure 8	Diagram of the baptistry	14
Figure 10	Diagram of the transept	14
Figure 12	Diagram of the lectern_	14
Figure 14	Diagram of the altar	14
Figure 15	Le Corbusier, The Chapel of Notre Dame du Haut,	
	plansofarchitecture.tumblr.com	17

Figure 16	Timothy Brown, Int South Wall, flickr.com	18
Figure 17	Wladyslaw, Notre Dame du Haut (ws), de.wikipedia.org	18
Figure 18	Daderot, MIT Chapel, Cambridge, Massachusetts – interior,	
	en.wikipedia.com_	19
Figure 19	Daderot, MIT Chapel, Cambridge, Massachusetts – exterior,	
	en.wikipedia.com_	19
Figure 20	Jisis, Otaniemi Chapel interior, architects Heikki and Kaija Siren,	
	commons.wikimedia.org_	20
Figure 21	Felix O, Otaniemi Chapel, architects Heikki and Kaija Siren in	
	1987, commons.wikimedia.org	20
Figure 22	Edwin Heathcote, View from interior, Church Builders	21
Figure 23	Edwin Heathcote, View of enclosure and transparent vestibule	
	containing four crosses, Church Builders	21
Figure 24	De Appel, Church of the Light, flickr.com.	.22
Figure 25	Rudolf Stegers, View From the North, Sacred Buildings: a Design	
	Manual	22
Figure 26	Rudolf Stegers, Site Plan, right the chapel, left the Sunday school,	
	Sacred Buildings: a Design Manual	23
Figure 27	Steven Holl, St. Ignatius Chapel, architectureacademia.wordpress.	
	com	.24
Figure 28	Joe Mabel, Seattle U St. Ignatius, commons.wikimedia.org	25
Figure 30	Mary Ann Sullivan, Plan, bluffton.edu	.25
Figure 29	Joe Mabel, Seattle U St. Ignatius, commons.wikimedia.org	25
Figure 31	Matti Mattila, Kamppi Chapel, flickr.com	.26
Figure 32	Helio Dias, Chapel of Silence, flickr.com.	26
Figure 33	Parish: St. Peter's Episcopal Church, google maps	29
Figure 34	Parish: St. Peter's Episcopal Church, google maps	30

Figure 36	Episcopal Diocese of North Carolina, google maps	30
Figure 35	City, Charlotte, NC, google maps	.30
Figure 37	Province of Sewanee, google maps	.30
Figure 39	Province decline. This table shows percentage changes in church	
	membership over between 2003 and 2013 and percentage	
	change in number of active parishes between 2012 and 2013	31
Figure 38	Provinces of the Episcopal Church of the United States	.31
Figure 40	Dioceses with indications of growth. This table shows percentage	
	changes in church membership over between 2003 and 2013 and	
	percentage change in number of active parishes between 2012	
	and 2013	32
Figure 41	Dioceses of North Carolina and Tennessee	32
Figure 43	Charlotte, NC, Hispanic population, US Census	34
Figure 45	Charlotte, NC, Population density	.34
Figure 42	Major Cities within Growing Dioceses, author	34
Figure 44	Charlotte, NC, African American population, US Census	.34
Figure 46	Charlotte, NC, Episcopal church locations	34
Figure 47	Charlotte, NC, Hispanic and African American populations,	
	population density, Episcopal church locations, and potential	
	focus areas	35
Figure 49	Charlotte, NC, Focus area with identified potential site location	35
Figure 48	Charlotte, NC, Identified focus areas	35
Figure 50	Charlotte, NC, Potential site location	.35
Figure 51	Nashville, TN, Hispanic populations	.36
Figure 53	Nashville, TN, Population density	.36
Figure 52	Nashville, TN, African American populations	36
Figure 54	Nashville, TN, Episcopal church locations	36

Figure 55	5 Nashville, TN, Hispanic and African American populations,					
	population density, Episcopal church locations, and identified					
	focus areas	37				
Figure 57	Raleigh, NC, Hispanic populations	37				
Figure 59	Raleigh, NC, Population densities	37				
Figure 58	Raleigh, NC, African American populations	37				
Figure 60	Raleigh, NC, Episcopal church locations	37				
Figure 56	Nashville, TN, Identified focus areas	37				
Figure 61	Raleigh, NC, Hispanic and African American populations,					
	population density, Epsicopal church locations, and identified					
	focus areas	38				
Figure 63	Raleigh, NC, Focus area with identified potential site	38				
Figure 64	Raleigh, NC, Potential site location	38				
Figure 62	Raleigh, NC, Identified focus areas	38				
Figure 65	Greensboro, NC, Hispanic populations	39				
Figure 67	Greensboro, NC, Population densities	39				
Figure 66	Greensboro, NC, African American populations	39				
Figure 68	Greensboro, NC, Episcopal church locations	39				
Figure 69	Greensboro, NC, Hispanic and African American populations,					
	population densities, Episcopal church locations, and potential					
	focus areas	40				
Figure 71	Greensboro, NC, focus area with identified potential site	40				
Figure 72	Greensboro, NC, Potential site location.	40				
Figure 70	Greensboro, NC, Identified focus areas.	40				
Figure 77	Durham, NC, Hispanic and African American populations,					
	population densities, Episcopal church locations, and potential					
	focus areas	41				

Figure 73	Durham, NC, Hispanic populations	41
Figure 75	Durham, NC, Population densities	41
Figure 74	Durham, NC, African American populations	41
Figure 76	Durham, NC, Episcopal church locations	41
Figure 78	Winston-Salem, NC, Hispanic populations	42
Figure 80	Winston-Salem, NC, Population densities.	42
Figure 79	Winston-Salem, NC, African American populations	42
Figure 81	Winston-Salem, NC, Episcopal church locations	.42
Figure 82	Winston-Salem, NC, Hispanic and African American populations,	
	population densities, Episcopal church locations, and potential	
	focus areas	.43
Figure 84	Winston-Salem, NC, Focus area with identified potential site	43
Figure 85	Winston-Salem, NC, Potential site location.	43
Figure 83	Winston-Salem, NC, Identified focus areas.	43
Figure 86	Site selection rubric	.44
Figure 87	Regional churches, schools, and quarter-mile walking radii	45
Figure 88	Building typologies diagram	46
Figure 90	Site photo of clock tower in central roundabout of shopping center	47
Figure 89	Site circulation	47
Figure 92	Existing buildings, roads, hydrology, and topography	48
Figure 91	Site photo of vast parking lots as viewed from the clock tower	48
Figure 93	Site photo of change in topography from main boulevard down to	
	the site	49
Figure 94	Site photo of retention pond at south end of site	49
Figure 96	Site photo of landscaped buffer between site and main boulevard	50
Figure 95	Site photo of shopping center entrance along main boulevard	50
Figure 97	Existing buildings, roads, hydrology, and topography	51

Figure 98 Site sections through existing buildings and topography	52
Figure 99 Public open spaces diagram	53
Figure 100 Site photo of vacant store, formerly a grocery store	54
Figure 101 Urban site design process diagrams	65
Figure 102 Urban site design diagrams	66
Figure 103 Baptism Cleansing Font	67
Figure 105 Wedding Joining	68
Figure 106 Funeral Mourning	68
Figure 104 Ringing of the bells Bell tower Call to prayer	68
Figure 107 Prayer Service Sanctuary	69
Figure 108 Sunday school Learning	69
Figure 109 Healthfulness Eating well Market	69
Figure 110 Building design schemes	70
Figure 112 Sanctuary form study	71
Figure 111 Building design scheme	71
Figure 113 Urban scale site plan	72
Figure 114 Places diagram	73
Figure 115 Site section through plaza	73
Figure 116 Site plan, first floor	74
Figure 117 Enlarged first floor plan, school and community center	74
Figure 118 Enlarged first floor plan, sanctuary and community outreach	75
Figure 119 Site plan, second floor	75
Figure 120 Enlarged second floor plan, school and community center	75
Figure 121 Enlarged second floor plan, sanctuary and community outreach	76
Figure 123 Entry perspective	76
Figure 122 North elevation	76
Figure 124 West elevation	77

Figure 125 Church courtyard section elevation	77.
Figure 127 Longitudinal section through sanctuary	77
Figure 126 Cross section	77
Figure 128 Sanctuary wall section	78
Figure 129 School courtyard section elevation	79
Figure 130 Fellowship hall perspective	79
Figure 131 Sanctuary perspective	80

Chapter 1: Introduction

The Episcopal Church developed a rich and defined sense of place since its tumultuous beginnings after the Revolutionary War. In the 18th and 19th centuries it has experienced periods of enormous growth, reaching even beyond the national borders, but it is currently in a state of precipitous decline. Over the past decade church membership has decreased nearly twenty percent, despite progressive attempts by church leadership to remain relevant to contemporary society. Investigations into reasons why Episcopalians are leaving in droves lead to a few basic theories. First, they are generally unsatisfied with the spiritual direction of the church. This can be either they are upset over the rejection of biblical authority (acceptance of gay marriage and ordination), they feel there is a general weakening of the spiritual conviction, or they simply desire a more nourishing spiritual food. Second, people's lives are moving at a faster pace and becoming more complex and complicated, with attending church ranking low on the list of priorities. This can speak to people saying they have no time to devote to services, that services are held when they have other more important obligations, or even a shift towards individual autonomy and away from institutional restraints. A corollary to this theory is the idea that the drop in church attendance has nothing to do with changes in membership, but is simply a reflection of a drop in frequency of attendance. While this tends to lend support to the busy lives theory, it does not actually address changes in membership numbers. The third theory about decline in church membership is ethnically centered, and speaks to the historically white demographics of the Episcopal Church. This theory includes reasons such as the failure to sufficiently reach beyond ethnic barriers in an increasingly diverse society, and the low fertility rates prevailing among the predominant ethnic groups traditionally belonging to the church.

While some of the more theologically driven reasons for departure may require doctrinal changes on the part of the General Convention of the Episcopal Church in order to reach some sort of resolution, I am interested in and will explore how design can play a valuable part in rebuilding church membership by means of reprioritization and diversification of the church. In essence, I will explore how attention to architectural and urban scale design can bridge the ever-growing gaps between the Episcopal Church and its changing membership. An understanding of the history and architectural elements of the church, as well as how those elements have changed over time will provide a foundation for planning and designing a contemporarily relevant Episcopal worship space.

Chapter 2: History of the Episcopal Church in the United States

Origins

Anglicanism is a term associated with forms of worship, doctrine, and structure that developed as a result of the English Reformation. While stirrings of reform were present before, the official separation did not occur until 1534 C.E. when King Henry VIII of England removed the pope of Rome as the head of the Church in England and replaced himself in the position. Over the next 130 years, a struggle between various factions of Protestantism and Roman Catholicism continued in England, with a unique form of Protestantism finally winning out. The result was a distinct blend of mainly Reformed Protestant doctrinal positions with Catholic-influenced forms, such as a highly liturgical worship and an episcopal (that is, bishop-led) institutional structure. Thus Anglicanism became to be thought of as the via media or the middle way between Catholicism and Protestantism.

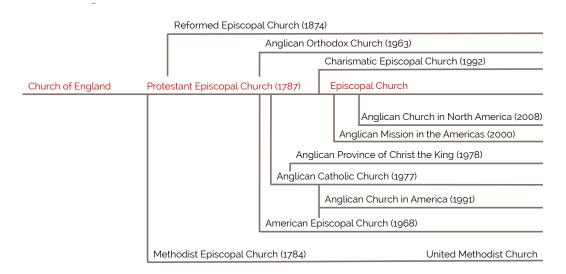


Figure 1 Genealogy of the Episcopal Church

When England set its sights on colonizing the what would later be know as North America, part of the colonials' official directives was to spread Christianity to the natives there. Thus one of the earliest English settlements in the new world, Jamestown, Virginia, was colonized by Anglicans and contains one of the oldest surviving Anglican church structures in the United States. Multiple other religious factions also saw opportunity for religious freedom in the new world, so Anglicanism was not universally accepted across the colonies. After a slow start in the colonies, Anglicanism began to take a strong hold on the populace, finding designations as the official church of Virginia in 1609, of New York in 1693, of Maryland in 1702, of South Carolina in 1706, of North Carolina in 1730, and of Georgia in 1758. Because there was no American bishop in the colonial era, tax money in those colonies who had designated the Church of England as the official religion was paid to the local parish by the local government, and then the local parish handled several civic functions. On the eve of the American Revolution, several hundred independent congregations were established throughout the American colonies.

More than any other denomination, the War of Independence internally divided both clergy and laity of the Church of England in America, and political opinions varied widely from patriots to conciliators to loyalists. Through its acceptance of the symbols of British presence in the American colonies, such as the monarchy as head of the church, the episcopate, and even the language of the Book of Common Prayer, the Church of England put itself in a precarious position during the upheaval of the American Revolution. Many clergy remained loyalist as they took very seriously their ordination oaths, for allegiance to and prayers for the king, the royal family, and the British Parliament. However, starting July 4, 1776, Congress and several states passed laws making prayers for the king and the British Parliament acts of treason. While some of the patriot clergy in the

southern states were able to find reasons to transfer their oaths to the American cause and keep their churches open, many of the New England churches were closing.

After the Revolution, the Anglicans within the newly formed states were faced with the task of preserving the hierarchical church structure within a society imbued with republican values. When clergy of Connecticut elected Samuel Seabury as their bishop in 1783, he sought consecration in the Scottish Episcopal Church, were he was ordained in 1784, thus becoming the first American bishop of the American Episcopal Church. In 1787, the Archbishop of Canterbury and three other English bishops consecrated William White as Bishop of Pennsylvania and Samuel Provoost as Bishop of New York. Thus there became two branches of Apostolic succession for American bishops: through the non-juring bishops of Scotland that consecrate Samuel Seabury and through the English church that consecrated William White and Samuel Provoost. All American bishops can trace their succession back to those three. Once America had three ordained bishops, they were not longer reliant on outside countries for consecration. In 1789 an assembly of the American Church met in Philadelphia to unify all Episcopalians in the United States into a single church. During the assembly, they adopted a constitution, a set of canon laws, and a revision to the 1662 English Book of Common Prayer known as the American Book of Common Prayer. The new constitution provided for annual diocesan conventions with the bishop of each diocese as presiding officer. A national General Convention was also established, composed of two legislative houses, the House of Bishops and the House of Deputies, modeled after the newly formed United States Congress. A system of checks and balances similar to that of the new federal system was also incorporated into the Church's constitution.

Growth, Decline, and Diversification over the Centuries

As the United States began its westward expansion, the church followed with missionary bishops ministering to the far away and sparsely populated western parishes and congregations. During the Civil War, the South formed their own Protestant Episcopal Church, which was never officially recognized, and by 1866 the southern dioceses had rejoined the national church. In the years following the war, the church grew from 160,000 communicants in 1866 to 784,000 in 1890 and expanded into all parts of the United States.

In the years since 1890, growth and expansion patterns of the Episco-pal Church have been mixed. By 1952, the total number of adherents had risen above 2.5 millions, a number exceeded only by four other US religious communities: the Catholic Church, the Methodist Church, the Southern Baptist Convention, and the Jewish population. However in the period from 1952 to 1990, the church experienced a period of relative decline. Although it continued to expand its territory with new parishes, the number of adherents had declined by over 100,000 resulting in a thinning of the distribution.

Conventions of the 1950s and 1960s tended to ignore the increasing pressure from women to petition for ordination as deacons and priests in the church. Finally in 1970 the General Convention granted women ordination to the diaconate. In 1974, eleven women presented themselves for ordination to priesthood in Philadelphia, but the House of Bishops declared their ordinations invalid, and insisted they would remain deacons. However, those eleven ordinations were accepted after the 1976 General Convention allowed for women to be eligible for both the priesthood and the episcopate. Since then, all 110 diocese of the Episcopal Church in the United States have women as ordained priests and Katharine Jefferts Schori has been elected as Presiding Bishop in 2006, the first and only woman to become a primate in the Anglican Communion. While advances

have been made in furthering the ordination of women within the church, the selection of Bishop Schori was controversial as not all of the Anglican Communion recognizes the ordination of women.



Figure 2 One of the first women ordained after the the Ceneral Convention of 1976, archive episcopalchurch org

Another decision coming out of the General Convention of 1976 was the affirmation that homosexuals are children of God and deserving of acceptance and pastoral care from the church and equal protection under the law. Despite such affirmation of gay rights, the General Convention affirmed in 1991 that physical sexual expression is only appropriate within the monogamous, lifelong union of husband and wife. The first openly homosexual priest, Ellen Barrett, was ordained in 1977, and the first openly homosexual bishop, Gene Robinson, was elected in 2003. Robinson's election caused crisis within the church and resulted in a moratorium on ordaining gay bishops in 2006. This was overturned, however, in 2009 when the House of Bishops voted that any ordained ministry is open to gay men and lesbians. In 2012 a provisional rite of blessing for same-gender relationships was authorized, and discrimination against transgender persons in the ordination process was officially prohibited.

Particularly since Robinson's election as the church's first openly gay and non-celibate bishop, some members of a number of congregations and six dioceses left the Episcopal Church. Many of those have realigned with churches of the Continuing Anglican movement. The church has initiated litigation against the departing dioceses and parishes, largely centered around church properties, with the Episcopal Church asserting ownership of buildings occupied by separatist congregations. However, when the South Carolina diocese voted to withdraw, the 2015 court decision ruled in favor of the local diocese, citing that the diocese and its parishes are the owners of their real, personal and intellectual property and that the national church has no legal interest in the properties.

Taxonomy of Episcopal Church Form through Time

In order to better understand the physical manifestations of the Episcopal Church in the United States, it is necessary to look closely at what forms the
church has taken, what styles have been most prevalent, what relationships the
church has had with its exterior environment and context, and how the buildings
and their context change over time. The following taxonomy examines some of
the architecturally significant Episcopal churches through the years, looking at a
variety of categories: date built, location, photos, plan, architect, site context, and
additional descriptions or notes.

Description	atlached cemelery, original belltower cropped and moved closer to church		Sde pulpit and sounding board from 1946s restoration	Originally a private chapel, but expanded in 1857 to a parish church	from 1855 to 1857 Jacob Hott added a stoople from the Williage Drunk Hoselfin is smarred Stoar's Nordel Architect, in 1927 Blotmy, edesigned the church into prick and transformed style to Cohinc Revival though Respirations and style to Cohinc Revival though	Church added more elaborate Gothic Rewal details over time, entrance tower in 1890, galleny in 1895, exposed beam celing in 1868, splice in 1875; attached cemetery.	Greek Revival. Gothic Revival: attached cemeleny	Gothic Rewial: addition built in 1851	Dudley design truss roof of 1871 and chancel and transect of 1885, Upjoin added great hall in 1923, first accelentic use of Gothic Revival in the state; attached cemetery.	one of few Gothic Revival antebeilum churches in western NC
Architect Des	atlach movec		Side p	Origina Charles Pettigrew parish	from 1 Thomas Bragg: Village Jacob W. Holt: Architu William Lawrence brick a Bottomly keepir	Church ac over time: exposed k William Nichols cemetery	Greek	Gothio	. Ustick John S. Henry C. Hobart	one of William Gries weste
Community Site Arc	Rural- Suburban	Rual	Rural	Rural Char	Thor Jaco Suburban- Willis Rural Bott	Suburban- Rural Willia	Rural	Urban	Thomas Walter. Norris H Outley. Urban Upjohn	Suburban- Rural Willis
Churchyard Co Context Co										
Plan				0.00 m						
Photo										是
State	Maryland	Maine	North Carolina	North Carolina	North Carolina	North Carolina	Pennsylva nia	Ohio	North Carolina	North
City	Fort Washington	Dresden	Williamsboro	Washington County	Warrenton	Hillsborough	Narvon	Portsmouth	Wilmington	Wilkesboro
Location	9801 Livingston Fort Road Washington	534 Gardiner Road	112 Stagecoach Rd		127 North Main Street	Saint Mary's Road	2099 Main St	610 Fourth Street		200 W Cowles Wilkesboro
Date Built	1692	1770	1773	1803	1824	1826	1830	1833	1840	1849
Church	St. John's Episcopal Church	St. John's Episcopal Church and Parsonage	St. John's Episcopal Church	St. David's Episcopal. Church	Emmanuel Episcopal Church	St. Matthew's Episcopal Church	Bangor Episcopal Church	All Saints Episcopal Church	St. James Episcopal. Church	St. Paul's Episcopal Church

Figure 3 Taxonomy of Episcopal churches in the US. This table compiled multiple architecturally significant US Episcopal churches with data about their date built, location, photos, plans, architects, site context, and other notes

t Description	Richad Ugjohn and Gothic Revival: modeled on Saint Andrews in William Henry Deecy Benefron. England:	board and batten Gothic Revival of Richard Upjohns Rural Architecture's Sylve	Greek Revival pilasters	in 1885, belltower was added and church was refaced: pan shows original church and later additions.		formed from St. Augustines Church which was formed in 1868 name change occurred in 1895, one of first African American churches in Raleigh		artist and priest J. A. Oerteis design influenced by Richard Upjonn's "Rural Architecture"		Carpenter Gothic
Community Site Architect Context	Richard Upjoh Rural William Henn	uequnqns	Urban	Urban John W Priest		Urban	Rural	Urban	Suburban	Suburban- Rural
Churchyard Context								U		
State Photo Plan	New York	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina
Date Built Location City	201 Scarborough Briarcliff 1854 Road Manor	Halifax	1857 Ann Street Beaufort	201 N James Goldsboro	1859 St Mary's Road Hillsborough	503 South Wilmington 1868 Street	1880 Highway 52 Ansonville	300 East Webb 1880 Avenue Burlington		1885 Trenton
Church Br	All Saints Episcopal Church	St. Mark's Episcopal Church	St. Paul's Episcopal Church	St. Stephen's Episcopal Church	St. Mary's Episcopal Church	St. Ambrose Episcopal Church	All Souls Episcopal Church	St. Athanasius Episcopal Church	St. John's Episcopal Church	Grace Episcopal Church

Figure 4 Taxonomy of Episcopal churches in the US. This table compiled multiple architecturally significant US Episcopal churches with data about their date built, location, photos, plans, architects, site context, and other notes

Architect Description		Gothic Revival.			2003 expansion
Architect			Cass Gilbert		
Site	Urban	Suburban	Urban	Suburban	Suburban- Rural
Community Context					NE TELL
Churchyard Context					
Plan					
Photo				4	
State	North Carolina	North Carolina	Minnesota	Maryland	Maryland
City	Franklin	Battleboro	Virginia	s Lexington Park	Damascus
Location	Church Street		231 Third Street Virginia	21641 Great Mills Lexington Road Park	25100 Ridge Road
Date Built	1888	1891	1895	1954	2003
Church	St. Agnes Episcopal. Church	St. John's Episcopal. Church	St. Paul's Episcopal Church	The Church of the Ascension-Patuxent Parish	St. Anne's Episcopal Church

Figure 5 Taxonomy of Episcopal churches in the US. This table compiled multiple architecturally significant US Episcopal churches with data about their date built, location, photos, plans, architects, site context, and other notes

Chapter 3: Architectural and Programmatic Components of the Episcopal Church

Definition of Terms

Altar: table in the chancel that clergy use for Communion

Ambo: in lecture-hall floor plan, single speaker stand in center of front of the church, serving function of both lectern and pulpit

Apse: if wall behind altar (east wall) is curved, it forms a semicircular area called an apse

Baptistry: water basin, tank, or pool that is the source of water for baptisms; located inside the doors, in the nave at the front of the congregation, or behind the chancel

Chancel: front part of the church in which the service is conducted, often an elevated platform three steps up from the nave

Chancel Screen/ Rood Screen: partition that separated the nave from the chancel; not a complete visual barrier

East Wall: wall behind the altar, as viewed from the nave (not matter what direction actually facing)

Lectern: in historic floor plan, speaker stand on the right (as viewed by the congregation) used by lay people to epistle lessons, lead congregation in prayer, and make announcements; lectern side of the church called the epistle side

Narthex: foyer or entryway of the church

Nave: part of the church where the congregation sits

Oratory: room or portion of a room set aside for an individual to conduct personal

devotions

Pulpit: in historic floor plan, the speaker stand on the left (as viewed by the congregation) used by clergy to read gospel and preach sermon; pulpit side of the church called the gospel side

Sacristy: room or closet in which communion equipment, linen, and supplies are kept; usually equipped with a sink

Sanctuary: in lecture-hall floor plan, includes both the chancel and the nave, when not architecturally distinct; in historic floor plans, synonymous with chancel

Transept: space between the chancel and the nave that extends beyond the side walls, giving the church a cruciform floor plan

Undercroft: church basement under the chancel and nave (and transept if there is one)

Diagramming of Components

In order to understand the basic concepts, positions, and relationships of the basic architectural components, each component can be diagrammed within the context of a very basic, or ideal, church.

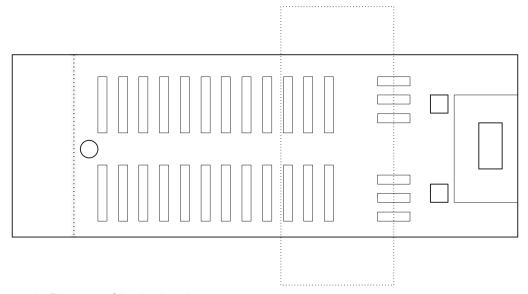


Figure 6 Diagram of basic church components

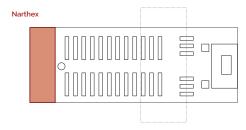


Figure 7 Diagram of the narthex

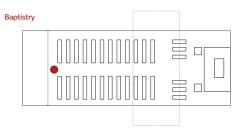


Figure 8 Diagram of the baptistry

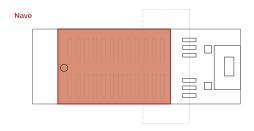


Figure 9 Diagram of the nave

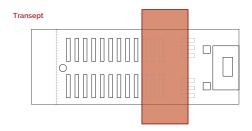


Figure 10 Diagram of the transept

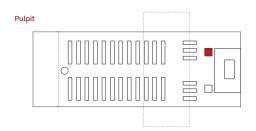


Figure 11 Diagram of the pulpit

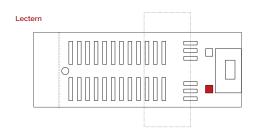


Figure 12 Diagram of the lectern

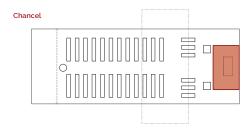


Figure 13 Diagram of the chancel

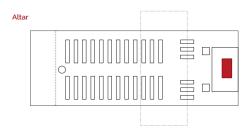


Figure 14 Diagram of the altar

Diagramming of Episcopal Church Taxonomy

The previous general diagrams about basic components can be utilized as a tool for further analysis. Each of these diagrams can be applied to the catalogue of Episcopal Churches to understand how each of the churches utilized the basic idea of a programmatic element in a unique and site-specific way. Not only does the application of the diagrams to the catalogue show how each church is able to interpret its basic components in a variety of ways, but it also shows how certain elements of the church change and adapt over time. Sometimes that change is simply a change in location. Other times it is a merging of elements or even an elimination or replacement.

Analysis and Trends

The overwhelming majority of Episcopal churches studied exhibit a more traditional rectilinear internal arrangement, in which pews or chairs are aligned in rows facing a singular direction toward the altar. Even more recently designed parishes hold true to this formal arrangement. Some variations of sanctuary design, though limited in popularity, have made their debut in recent years. Lecture hall and auditorium type arrangements are similar to the historic plans, but focus on a singular focus point at the altar, instead of the historic lectern and pulpit. These variations also allow for seating to fan out in a less rectilinear arrangement. A more dramatically different sanctuary plan carries the fanned seating all the way around the altar to create a radial plan. Contemporary proponents of this plan type extol the personal nature of services because parishioners have no choice but play a more active part in the services.

While changes can be seen in the internal sanctuary plans through time, potentially more dramatic changes have taken place outside the sanctuary walls. Episcopal churches have grown from small, singular buildings for the sole pur-

pose of Sunday morning services to large, sprawling complexes with purposes reaching beyond the bounds of church walls. Churches initially expanded with homes for rectors or fellowship halls, but it is not uncommon for contemporary churches to include schools, athletic facilities, community outreach facilities or coffee shops.

Chapter 4: Precedents

Notre Dame du Haut Chapel

Architect: Le Corbusier

Location: Ronchamp, France

Year Completed: 1955

Religious Denomination: Roman Catholic

Size: approximately 8,100 sqft

Site/Context: Rural, Hilltop

Le Corbusier designed the chapel at Ronchamp as a remote pilgrimage site perched atop a hill outside the small village. The chapel was built as a dynamic sculpture in the round, creating an interior space intensified by light and shadow. Thick curved walls and a concrete shell roof give the building a massive, sculptural form. Small, irregular windows painted bright colors punch through the thick

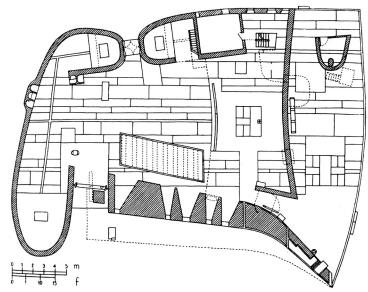


Figure 15 Le Corbusier, *The Chapel of Notre Dame du Haut*, plansofarchitecture tumblr.com

walls to give a colorful play of light on the interior. Programmatically, it is a simple, oblong nave, two side entrances, an axial main altar, and three side chapels beneath towers.

The major takewaways from examining this precedent were the idea of the sacred as an object in space and the playful use of light. While Ronchamp is literally a singular object standing on an otherwise empty parcel of land, this thesis utilizes materiality and orientation to differentiate the sacred as a unique object among the profane. In addition, the thesis attempts to make playful the use of light and dark through slatted glazing and clerestories along the interior courtyard edges of the sanctuary.



Figure 16 Timothy Brown, Int South Wall, flickr.com



Figure 17 Wladyslaw, Notre Dame du Haut (ws), de wikipedia.org

MIT's Kresge Chapel

Architect: Eero Saarinen

Location: Massachusetts Institute of Technology, Cambridge, Massachusetts,

USA

Year Completed: 1955

Religious Denomination: Non-denominational

Size: approximately 2,000 sqft

Site/Context: Urban, University Campus



Figure 18 Daderot, MIT Chapel, Cambridge, Massachusetts – interior, en wikipedia.com



Figure 19 Daderot, MIT Chapel, Cambridge, Massachusetts – exterior, en.wikipedia.com

The cylindrical brick volume of the chapel breaks up the campus's orthogonal grid and is surrounded by a round, shallow moat. The windowless interior surfaces are composed of detailed undulating brick walls low hidden glass panels to bring light reflected off the water in the moat. In addition, light streams down over the altar, which is located opposite the entrance.

The major takewaway from this precedent is its use of water at its base to reflect light into the chapel. This thesis similarly utilizes a rill of water along the base of the sanctuary but does this less for the light reflection properties and more for the understanding of personal and spiritual connections with water and natural stewardship.



Figure 20 Jisis, Otaniemi Chapel interior, architects Heikki and Kaija Siren, commons. wikimedia.org



Figure 21 Felix O, Otaniemi Chapel, architects Heikki and Kaija Siren in 1987, commons.wikimedia.org

Otaniemi Student Chapel

Architect: Heikki and Kaija Siren

Location: Aalto University, Otaniemi, Finland

Year Completed: 1957

Religious Denomination: Lutheran

Size: approximately 3,400 sqft

Site/Context: Suburban, University Campus

The sanctuary is entered from a small, walled court within a woodland glade. From the courtyard, one enters a simple wedge-shaped box with a mono-pitched roof. The triangular, rough wooden trusses that fill the upper part of the building volume are representative of the heavily wooded surroundings and direct attention toward a glass wall at the east end of the chapel. Beyond the glass wall lies a large steel cross before a backdrop of thick forest.

The major takeaways from this precedent are the use of trusses to focus attention and light upon the altar and the use of a walled courtyard to demarcate the sacred from the surrounding areas. This thesis utilizes a system of trusses that not only add volume to the sanctuary, creating a feeling of grandeur, but also

direct attention to the placement of the altar. The height created by the trusses also allow the inclusion of clerestories into the sanctuary. While the Otaniemi Student Chapel uses literal walls to establish a forecourt, this thesis utilizes a book of trees and implied boundaries such as pavement patterns and separated walls within the same plane to establish markers to the sacred spaces.



Figure 22 Edwin Heathcote, View from interior, Church Builders



Figure 23 Edwin Heathcote, View of enclosure and transparent vestibule containing four crosses, Church Builders

Church on the Water

Architect: Tadao Ando

Location: Tomamu, Hohhaido, Japan

Year Completed: 1988

Religious Denomination: Non-denominational (hotel chapel)

Size: 3497 sqft

Site/Context: Rural

The plan consists of two squares that overlap at a corner, with a general slope downward toward an artificial pond. On approach one reaches first a transparent box with four concrete crosses, and then descends into the main chapel by way of a curved stair. A movable glass wall that spans the length of the main chapel,

allowing the space to be opened up completely to views of the water with a large cross rising from the calm waters of the pond. Ando replaced the front wall of the chapel with nature itself, a representation of the Creator.

The major takeaway from this precedent was its visual connection with nature. This thesis similarly locates a pool of water beyond the altar wall with trees surrounding the pool in the distance. However, while the precedent is overt in the natural relationship, this thesis establishes a more veiled visual connection to allow worshipers to have a more focused personal reflection.



Figure 24 De Appel, Church of the Light, flickr.com



Figure 25 Rudolf Stegers, View From the North, Sacred Buildings: a Design Manual

Church of the Light

Architect: Tadao Ando

Location: Ibaraki, Osaka, Japan

Year Completed: 1989

Religious Denomination: Presbyterian

Size: 1216 sqft

Site/Context: Urban

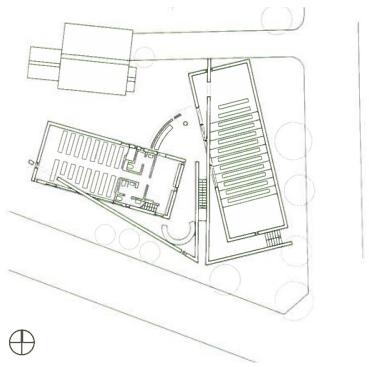


Figure 26 Rudolf Stegers, Site Plan, right the chapel, left the Sunday school, Sacred Buildings: a Design Manual

The church is rectangular in form and compact in response to its urban environment. An additional wall slices the west side of the building at 15 degrees and continues through the rectangular space piercing the back wall. The interior of the church is austere with the major focus at a cruciform aperture that allows light into the dark worship space. The altar and lectern are located in front of the cruciform aperture and rows of pews are positioned uniformly on either side of the center aisle aligned with the cross.

The major takeaways of this precedent are the sloping of the worship space to focus attention to the altar wall and the use of void and light in the altar wall. This thesis also slopes the main worship space downward toward the altar to have a focusing effect, but does so in an effort to engage the sloping site as well. In addition, the altar wall in this thesis is subtly marked by a cruciform of the mullion patterning, and reinforced by a stream of water behind the major vertical element coming from the scupper in the butterfly roof.

Chapel of St. Ignatius

Architect: Steven Holl

Location: Seattle University, Seattle, Washington, USA

Year Completed: 1997

Religious Denomination: Jesuit/Roman Catholic

Size: 6100 sqft

Site/Context: Urban, University Campus

Architect Steven Holl designed the new university chapel to reflect the Jesuit spiritual exercises in which different methods help different people to achieve a similar goal. The underlying concept for the chapel was seven bottles of light in a stone box, in which each of the lights represents a different focal aspect of Catholic worship and specific physical and spiritual spaces within the building.

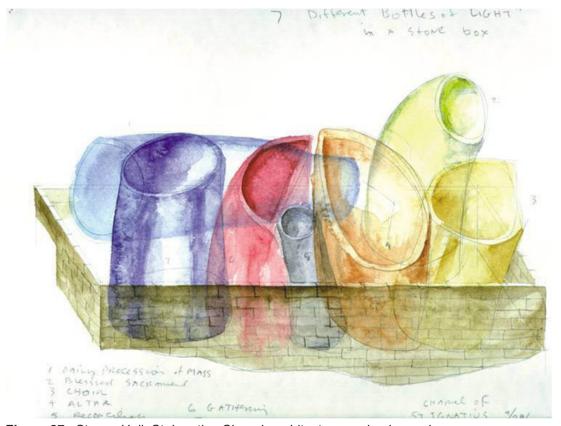


Figure 27 Steven Holl, St. Ignatius Chapel, architectureacademia.wordpress.com



Figure 28 Joe Mabel, Seattle U.St. Ignatius, commons.wikimedia.org



Figure 29 Joe Mabel, Seattle U St. Ignatius, commons.wikimedia.org



Figure 30 Mary Ann Sullivan, Plan, bluffton.edu

The major takeaway from this precedent was how its placement within an already existing campus served to organize the spaces around it. While parking lots and green spaces existed as an amorphous void before the chapel was built, the siting of the chapel allowed those spaces to be formalized and organized. Similarly, the siting of this thesis creates more formalized public and pastoral spaces, though it also proposes a good amount a development of the surrounding context in order to better define those spaces.



Figure 31 Matti Mattila, Kamppi Chapel, flickr.com



Figure 32 Helio Dias, Chapel of Silence, flickr.

Chapel of Silence

Architect: KS2 Architects

Location: Helsinki, Finland

Year Completed: 2012

Religious Denomination: Ecumenical

Size: 3229 sqft

Site/Context: Urban

The chapel is meant to be a place where people can have a moment of silence in the middle of one of the busiest areas of Finland. The main chapel is an alder lined rounded space that blocks out everything from the outside except the light coming in from above. Furnishing on the interior are simple and made from ash trees. The curved shape of the building allows the space and views to flow in the urban setting as well as making the chapel approachable form all directions.

The major takeaways from this precedent are the distinction of the sacred as a unique object in space and the ability of the chapel to organize the surrounding spaces. The general rounded form and material nature of the Chapel of Silence are distinct from the character of the surrounding buildings, and distin-

guish the chapel as a sacred space. Similarly this thesis utilizes a material palette and unique form and orientation to set it apart from its profane environment. In addition, like the last precedent, this one organizes a series of voids into distinct plazas. This thesis attempts to similarly organize space, creating specific zones for civic use and other zones dedicated to reflection and the natural environment.

What makes a space sacred?

In the Christian tradition, making a space sacred is as simple as following the instructions of Jesus, "For where two or three are gathered together in my name, there I am in the midst of them" (Matthew 18:20). This implies that everything else is nonessential. However, the creation of sacred spaces is critical for humans and a human construct, built not for the gods as we might protest, but for ourselves. As philosopher and theologian Jonathan Smith noted, an object becomes sacred when attention is focused on it in a highly marked way. If such is true then certain elements or markers serve to enhance the sacredness of the worship environment. Great minds, to include Rudolph Otto, Mircea Eliade, Jonathan Z. Smith, and Eugene Walter, have posited on the nature of such elements, though each has a different approach to what makes a space sacred. Generally the markers of sacred space are organized into three major categories: architectural, archetypal, and atmospheric.

The three physical aspects of the architecture of sacred space are the gate, the pathway, and the place, each mirroring the pilgrim's progress in a spiritual quest. The gate represents the desire, the path repsresents the journey, and the place represents the attainment of spiritual insight. This can be further broken down into both exterior and interior elements, with the interior elements as portal, path, and place.

Archetypal elements are symbols of a cosmic order and an unconscious

link to the realm of the sacred. This study explores universal, religious/mythic, and geometric archetypes. The universal referes to an ancient concept of the fourt primary elements: earth, air, fire, water. Each element can be represented in multiple ways: gardens representing earth, clerestory windows representing air, flickering candles representing fire, and fonts representing water.

Religious/mythic refers to those archetypes most commonly associated with cultural identification to religious beliefs. These harken back to Eliade's study of the history of religion and are identified as axial pillar, tree, stone, and sacred mountain. The axial pillar is the symbol of passage from one cosmic region to another. The tree represents human origins, growth, renewal, and knowledge. The stone is often used as a marker, to have magical powers to heal, guide, house divinity, and mark places of burial. Lastly the mountain is often considered the dwelling place of the gods.

Geometric archetypes refer to the use of sacred geometries, or pure geometric forms such as squares, circles, triangles, and composites of these. While the circle represents the divine, the square represents man, or the manifestation of the divine. In addition the square symbolizes the four elements and the four cardinal directions. The triangle connotates the trinity of the Father, Son, and the Holy Spirit.

The third major category of sacred space markers is atmospheric ambiguities in which the meaning lies not in the final state but in the transition zone between. The state of becoming, the transitioning between light becoming dark, emptiness becoming profuseness, humility becoming monumentality or noise dimming to silence are the portals to the sacred experience.

Chapter 5: Site Selection and Analysis

US dioceses and membership statistics and trends in growth and decline

Because most data gathered about the growth and decline in membership and the number of active parishes are given in terms of provinces and dioceses, it is important to understand the basics of how the church organizes itself geographically. The basic component of the Episcopal Church is the parish or congregation (Figure 33) which often refers to the church building itself, but is actu-

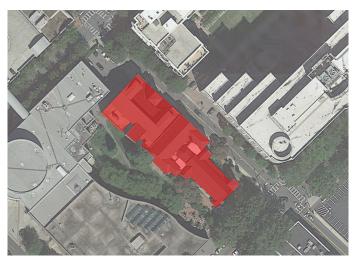


Figure 33 Parish: St. Peter's Episcopal Church, google maps

ally representative of the community of the church (Figure 34). The parish has no geographic boundaries, however, and is led by either a rector, priest, or deacon (ordained leadership) and either a warden or a vestry (lay leadership). While cities often have a collection of parishes within their borders, there is no official city-level organization or leadership (Figure 35). That being said, there are some cities that have so many parishes that the city warrants designation as a diocese. Official associations of a number of parishes into a specific geographic boundary

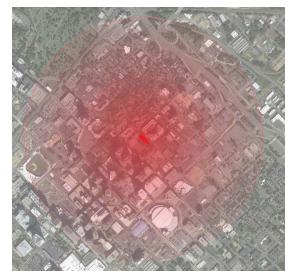


Figure 34 Parish: St. Peter's Episcopal Church, google maps

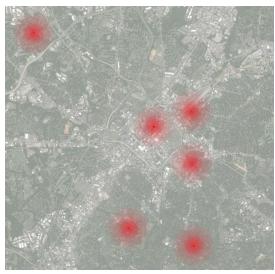


Figure 35 City, Charlotte, NC, google maps

are dioceses (Figure 36). Typically a diocese is composed of a state or a part of a state, and is headed by a bishop and a diocesan convention. Regional associations of a number of dioceses are called provinces (Figure 37), and are headed solely by lay leadership, called a president. The Episcopal Church is geographically divided into nine provinces, the first eight of which, for the most part, correspond to regions of the United States (Figure 38).

By looking at the statistics on growth and decline, one can see that all provinces

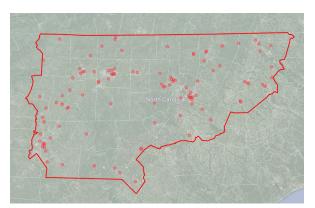


Figure 36 Episcopal Diocese of North Carolina, google maps



Figure 37 Province of Sewanee, google maps

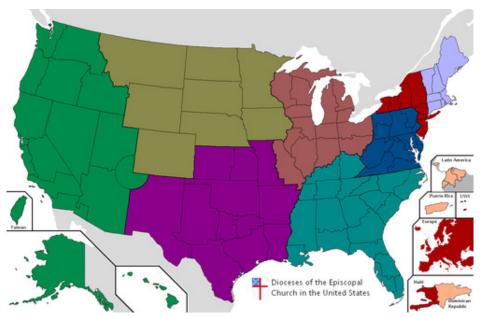


Figure 38 Provinces of the Episcopal Church of the United States

	% Change in Membership, 2003-2013	% Change in number of open parishes, 2012-2013
Province 1	-19.73%	-1.15%
Province 2	-14.35%	+0.78%
Province 3	-17.85%	-0.79%
Province 4	-10.53%	-0.75%
Province 5	-25.21%	-1.03%
Province 6	-20.85%	-0.20%
Province 7	-19.79%	-0.42%
Province 8	-22.99%	-0.80%
Province 9	-11.89%	-0.87%

Figure 39 Province decline. This table shows percentage changes in church membership over between 2003 and 2013 and percentage change in number of active parishes between 2012 and 2013.

have experiences net losses in membership over the last decade and net losses in active parishes from 2012 to 2013 (Figure 39).

However, by looking at individual dioceses within each province, there are still instances of growth in membership and in numbers of active parishes within

the dioceses. Interestingly, no diocese showed growth in both membership and active parishes, and often there were wide swings with growth in one category and severe decline in another. However three diocese demonstrated growth in one category and only mild decline in another (Figure 40). Of those three, the Diocese of South Carolina recently dissociated from the Episcopal Church and joined the global Fellowship of Confessing Anglicans.

		% Change in Membership, 2003-2013	% Change in number of open parishes, 2012-2013
Province 1	Rhode Island	-29.30%	*2%
Province 3	Pittsburgh	-56.22%	+2.77%
Province 4	North Carolina	+2.14%	-1.73%
	South Carolina	-2.73%	*1.38 %
	Southwest Florida	-17.86%	*1.31%
	Tennessee	+3.92%	-2.17%
Province 5	Chicago	-19.39%	+7.69%
Province 6	South Dakota	-20.09%	+2.98%
Province 7	Dallas	-19.17%	+6.25%
	Rio Grande	-28.53%	+1.85%
Province 8	Alaska	*3.47%	-2%

Figure 40 Dioceses with indications of growth. This table shows percentage changes in church membership over between 2003 and 2013 and percentage change in number of active parishes between 2012 and 2013.

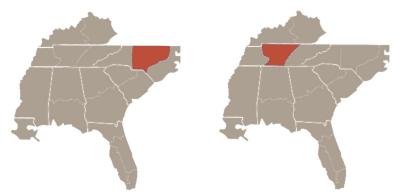


Figure 41 Dioceses of North Carolina and Tennessee

The Episcopal Diocese of North Carolina comprises over 49,000 members and 117 congregations, covering 38 counties in the central part of North Carolina, from Iredell County to Edgecombe County, and from Caswell County to Scotland County (Figure 41). The Episcopal Diocese of Tennessee extends between the northern and southern borders or Tennessee, the Tennessee River to the west, and approximately the Eastern Timeline. It has approximately 15,000 members and 51 congregations (Figure 41).

Selection Methodology

The growing dioceses of Tennessee and North Carolina indicate potential need for additional Episcopal worship spaces and narrow the field for possible sites. Because this thesis attempts to make a case for collocating worship space with spaces of heavy community use and access, a more urban environment would more readily provide the necessary density and supporting infrastructure. Thus, each of the six largest cities within the growing dioceses were analyzed to locate potential sites. To address specific issues of ethnic diversity and urban character, I explored each city through the lens of Hispanic and African American populations and population densities. By overlaying ethnic population maps with current locations of Episcopal churches, I was able to select focus areas where populations of Hispanics and African Americans were high and under-served by local Episcopal churches. Each of these focus areas provided a search radius to help identify specific possible sites. Once several potential sites were identified, I applied a selection rubric based upon desired site criteria.

City Analysis

The six largest cities in the dioceses of Tennessee and North Carolina were analyzed in order of their populations (Figure 42).

Major Cities within Growing Dioceses

Charlotte, NC	Pop. 798,862
Nashville, TN	Pop. 612,000
Raleigh, NC	Pop. 431,746
Greensboro, NC	Pop. 279,639
Durham, NC	Pop. 245,550
Winston-Salem, NC	Pop. 236,441

Figure 42 Major Cities within Growing Dioceses, author

Charlotte, NC, had concentrations of Hispanic populations both southeast and southwest of the city center (Figure 43), and had concentrations of African Amer-

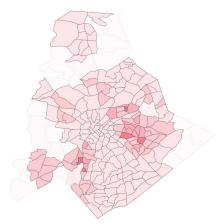


Figure 43 Charlotte, NC, Hispanic population, US Census

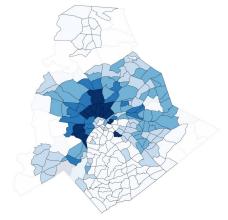


Figure 44 Charlotte, NC, African American population, US Census



Figure 45 Charlotte, NC, Population density

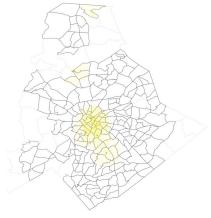


Figure 46 Charlotte, NC, Episcopal church locations

ican populations northwest and west of the city center (Figure 44). Episcopal churches were generally more centrally located (Figure 46).

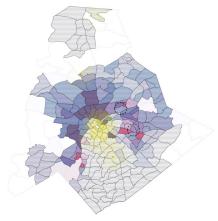


Figure 47 Charlotte, NC, Hispanic and African American populations, population density, Episcopal church locations, and potential focus areas



Figure 48 Charlotte, NC, Identified focus areas



Figure 49 Charlotte, NC, Focus area with identified potential site location

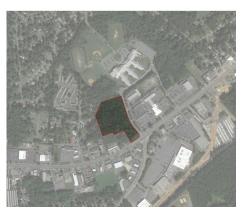


Figure 50 Charlotte, NC, Potential site location

Two focus areas were identified east and northeast of the city center (Figure 47), and within one of those a potential site was identified (Figure 48).

The Charlotte site is located along a major road, and is adjacent to a school, a car dealership, and several hoes and small businesses. The site is currently heavily wooded, so the nature of the ground plane and drainage on the site is unclear (Figure 49 and Figure 50).

Nashville, TN, had concentrations of Hispanic populations to the southeast of the city center (Figure 51), and had concentrations of African American populations to the northwest of the city center (Figure 52).



Figure 51 Nashville, TN, Hispanic populations

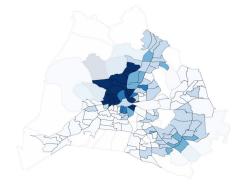


Figure 52 Nashville, TN, African American populations

Episcopal churches were general located in Nashville's central core, with some dispersal to the north, southeast, and southwest (Figure 54).



Figure 53 Nashville, TN, Population density



Figure 54 Nashville, TN, Episcopal church locations

Two focus areas were located north and east of the city center (Figure 55), but neither of those areas contained opportunities for a potential site (Figure 56).

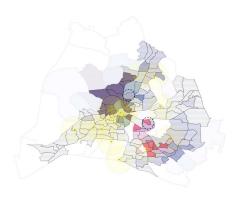


Figure 55 Nashville, TN, Hispanic and African American populations, population density, Episcopal church locations, and identified focus areas



Figure 56 Nashville, TN, Identified focus, areas

Raleigh, NC, had concentrations of Hispanic populations to the northeast, east and west of the city center (Figure 57), and had concentrations of African American populations to the east of the city center (Figure 58).

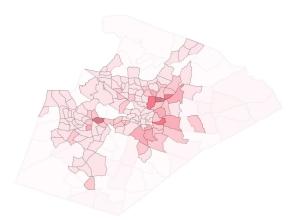


Figure 57 Raleigh, NC, Hispanic populations

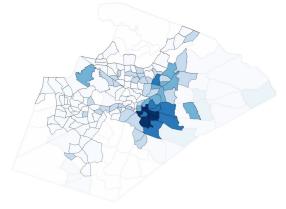


Figure 58 Raleigh, NC, African American populations



Figure 59 Raleigh, NC, Population densities

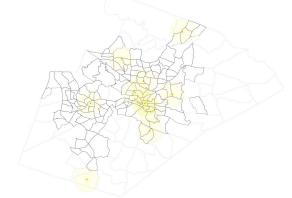


Figure 60 Raleigh, NC, Episcopal church. locations

Episcopal churches were located both in the city center and along the peripheries of the city (Figure 60). Two focus areas were located to the east and northeast of the city center (Figure 61) and within one of those a potential site was identified (Figure 62).

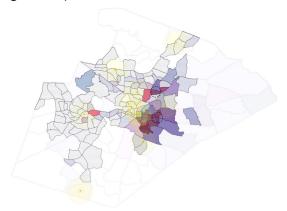


Figure 61 Raleigh, NC, Hispanic and African American populations, population density, Epsicopal church locations, and identified focus areas



Figure 62 Raleigh, NC, Identified focus areas

The Raleigh site is located within a large shopping center, adjacent to several residential neighborhoods (Figure 73 and Figure 74). The property contains several big box stores and ample parking lots, creating potential for either adaptive reuse or new development. A collection pond exists at the south part of the site and serves as the head of a series of hydrology flows. In addition, the site is situated along a heavily traveled boulevard, and consistently is populated with shoppers throughout the day.



Figure 63 Raleigh, NC, Focus area with identified potential site



Figure 64 Raleigh, NC, Potential site location

Greensboro, NC, has concentrations of Hispanic populations to the southwest and northeast of the city center (Figure 65), and has concentrations of African American populations to the southeast and east of city center (Figure 66).

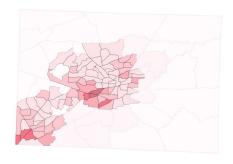


Figure 65 Greensboro, NC, Hispanic populations

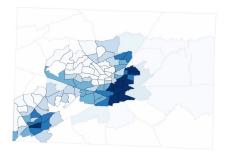


Figure 66 Greensboro, NC, African American populations

Episcopal churches are generally located within and to the north of the city center (Figure 68).



Figure 67 Greensboro, NC, Population densities

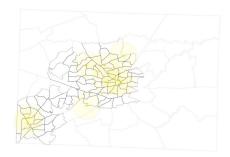


Figure 68 Greensboro, NC, Episcopal church locations

Two focus areas were located to the southwest and east of the city center (Figure 69), and within one of those a potential site was identified (Figure 70).

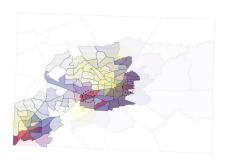






Figure 69 Greensboro, NC, Hispanic and African American populations, population densities, Episcopal church locations, and potential focus areas

Figure 70 Greensboro, NC, Identified focus areas

The Greensboro site is located within a residential neighborhood, adjacent to housing, churches, and a large cemetery (Figure 71 and Figure 72). The property is currently underutilized park land and has a stream running through the southern portion of the site. Near this site is a housing development with a variety of housing types.



Figure 71 Greensboro, NC, focus area with identified potential site



Figure 72 Greensboro, NC, Potential site location

Durham, NC, has weaker concentrations of Hispanic populations to the northeast and southwest of the city center (Figure 73), and concentrations of African American populations to the north and south of city center (Figure 74).

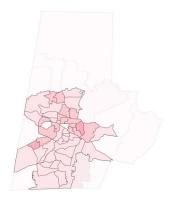


Figure 73 <u>Durham, NC,</u> <u>Hispanic populations</u>

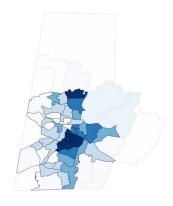


Figure 74 Durham, NC, African American populations



Figure 75 <u>Durham, NC, Population densities</u>



Figure 76 <u>Durham, NC, Epis-</u> copal church locations

Episcopal churches are concentrated around the city center (Figure 76). No focus areas were identified to pursue further (Figure 77).

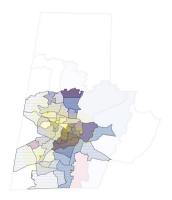


Figure 77 Durham, NC, Hispanic and African American populations, population densities, Episcopal church locations, and potential focus areas

Winston-Salem, NC, has concentrations of Hispanics to the southeast of the city center (Figure 78), and concentrations of African Americans to the east of city center (Figure 79).

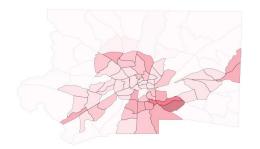


Figure 78 Winston-Salem, NC, Hispanic populations

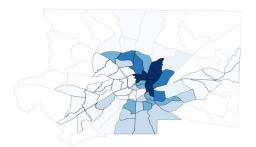


Figure 79 Winston-Salem, NC, African American populations

Episcopal churches are generally located within and to the east and west of the city center (Figure 81).



Figure 80 Winston-Salem, NC, Population densities



Figure 81 Winston-Salem, NC, Episcopal church locations

Two focus areas were identified to the east and southeast of the city center (Figure 82), and within one of those a potential site was identified (Figure 83).

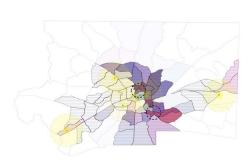


Figure 82 Winston-Salem, NC, Hispanic and African American populations, population densities, Episcopal church locations, and potential focus areas



Figure 83 Winston-Salem, NC, Identified focus areas

The Winston-Salem site is located within a residential neighborhood, adjacent to housing and several churches (Figure 84 and Figure 85). The property is currently underutilized park land and houses a community center and community pool. The site is removed from the main commercial road and resides within the quiet neighborhood.



Figure 84 Winston-Salem, NC, Focus area with identified potential site



Figure 85 Winston-Salem, NC, Potential site location

Site Selection

Each of the four identified potential sites were evaluated using a rubric of pertinent desired characteristics. The criteria of access to park, community center, and schools were all evaluated in terms of distance from the site, with closer

distances receiving higher point values. The criteria of distance from Episcopal churches was evaluated using the opposite criteria, with greater distances receiving higher values. The criteria of urban character, diversity of housing, how anchored the site is within the community, the conditions of the current site, and amount of bustling activity were all qualitatively evaluated with better conditions receiving higher point values. Finally, the size of the young adult population was evaluated by giving higher point values to higher percentage populations of persons under the age of 35 (Figure 86).

1= 8 + blocks away 2= 3-7 blocks away 3= 2 blocks or less CRITERIA	Charlotte, NC SITE 1	Raleigh, NC SITE 2	Greensboro, NC SITE 3	Winston-Salem, NC
access to park	3	2	3	3
access to community center	1	2	3	3
access to schools	3	2	3	3
urban character	1	3	2	1
diversity of housing	2	3	3	2
anchored in neighborhood	2	2	3	3
current conditions	2	2	2	2
size of young adult population	2	3	2	1
distance from Episcopal church	2	3	1	1
bustling activity	1	3	1	1
total	19	25	23	20

Figure 86 Site selection rubric

The site with the greatest total was the Raleigh site, although the Greensboro site was also very close in point totals. The deciding factors between the two leading sites rested decidedly on the quantity of activity already on the Raleigh site and on ethnic populations, with Raleigh's having strong but balanced Hispanic and African American populations, and Greensboro's having a more definitive African American population. By choosing the Raleigh site and anchoring a church within a strip mall, I am able to take full advantage of collocating the church with active areas of work and community. Not only could this idea refer to the Hispanic cultural vestige of the plaza and community gatherings that take place there, but it could also address issues of how the sacred might exist within the profane.

Site Analysis

The site, located within Capital Crossing Shopping Center in Northeast Raleigh, rests upon approximately 63 acres of commercially developed land along the heavily traveled Capital Boulevard (US Route 1). The region relies almost entirely on automobiles and public transportation, as evidenced by the low densities of built form and the large gaps in walking radii between community institutions such as churches and schools (Figure 87).

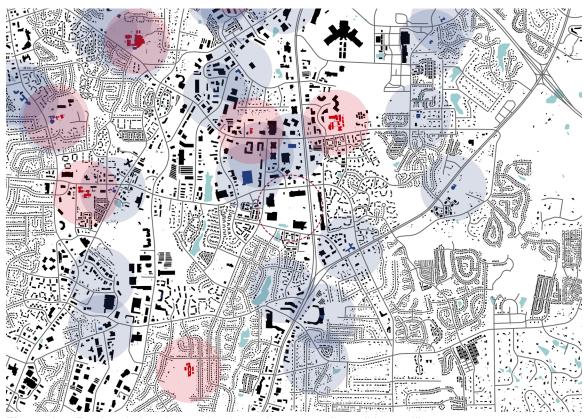


Figure 87 Regional churches, schools, and quarter-mile walking radii

The site itself is a collection of big box stores and small fast food type restaurants. Clockwise from the east entrance of the site is a Chick-fil-A restaurant, a Lowe's Home Improvement, a Sam's Club, an At Home and a Pet Smart sharing the northwest building, a Steak 'n' Shake, and a vacant property (formerly a grocery store) sharing the northeast building with a Staples and an A. C. Moore Arts & Crafts (Figure 88). A sizable retention pond is located to the south end of the site and serves as the head of system of hydrology flows moving southward into the surrounding neighborhoods. The remainder of the site is wide expanses of parking lots and site circulation (Figure 91). The existing circulation is organized around a central roundabout, with four main entrance roads to the cardinal directions, thus dividing the site into four quadrants (Figure 89). A central clock tower located in the roundabout serves as a landmark and monument within the site (Figure 90).



Figure 88 Building typologies diagram

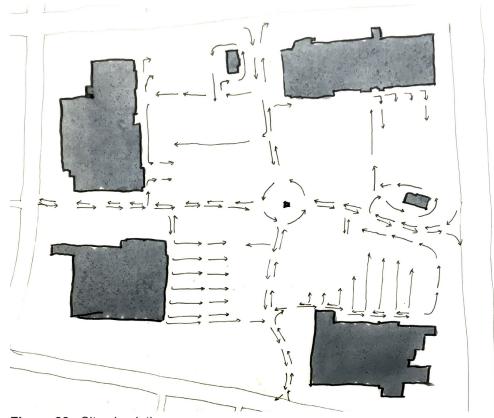


Figure 89 Site circulation



Figure 90 Site photo of clock tower in central roundabout of shopping center



Figure 91 Site photo of vast parking lots as viewed from the clock tower

Currently the activity levels on the site are concentrated around the Lowe's Home Improvement, the Sam's Club, and the two restaurants. The amount of parking was vastly underutilized, though some portion was used at Lowe's for storage of large outdoor items and a another was used for a fireworks tent set up between the main entrance and the roundabout. This illustrates the potential for the parking lots to act as something more than simply places to park cars.



Figure 92 Existing buildings, roads, hydrology, and topography



Figure 93 Site photo of change in topography from main boulevard down to the site



Figure 94 Site photo of retention pond at south end of site

A challenge of the site is the grade changes, both across the site, sloping downward towards the retention pond at the south end of the site, and into the site, sloping down from surrounding roads into the site itself (Figure 92 and Figure 93). With the majority of the site being impermeable surfaces, water will

essentially be funneled from the surround roads, across the site, and into the retention pond along Calvary Drive (Figure 94). Thus any design must be mindful of the existing nature of how water moves into the system of hydrology flows.

A consequence of the topography of the site includes the odd inward facing character of the existing buildings. While the shopping center resides along a major boulevard, the only building to actually address Capital Boulevard is the Chick-fil-A, and even in that case, the restaurant is set back from the road, only visible because of its placement at the main entrance (Figure 95). The other



Figure 95 Site photo of shopping center entrance along main boulevard



Figure 96 Site photo of landscaped buffer between site and main boulevard

restaurant also faces outward to the significantly less traveled East Millbrook Road, and is similarly positioned as set back from the entrance. All other buildings on the site address the interior of the site, turning their backs and side to the surrounding roads. Perhaps such a move was done to avoid addressing the potentially problematic topographic changes. To compound the problem, a land-scaped buffer exists between the surrounding roads and the site, not only discouraging the walk-ability of the site, but also preventing any visibility of the site from the main road (Figure 96).

The site is bordered on the west and south by residential neighborhoods, and to the north and east by commercial and small office buildings. Additional residential neighborhoods lie immediately east of the commercial strip across Capital Boulevard (Figure 88). These neighborhoods consist of both detached single family homes and small scale, garden-type apartments. The character and density of the residential communities starkly contrast the large scale buildings and open, unused space on the site (Figure 97 and Figure 98). Potential designs



Figure 97 Existing buildings, roads, hydrology, and topography

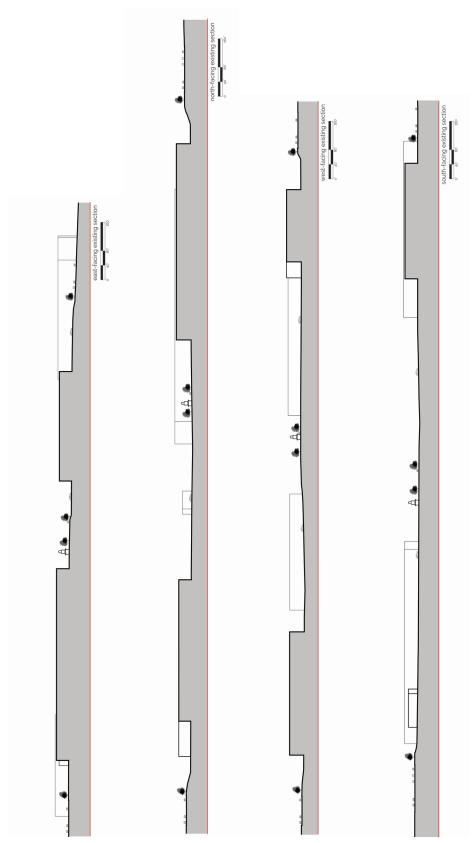


Figure 98 Site sections through existing buildings and topography.

could attempt to better transition between the two zones through multiple scales of built form, and creating connections from neighborhood streets, thus densifying the site and making more interesting and walkable paths from the surrounding communities.

While most nearby public open spaces are concentrated adjacent to or within neighborhoods (Figure 99), those locations do not take advantage of a truly public space. Due to the large nature of the site, potentials exist for incorporating public open space into the site design. Opportunities include open green spaces, landscaped courtyards, or flexible outdoor spaces reminiscent of the plazas of the Hispanic cultural past.

The vacant store, a former grocery store, also provides some unique potential for the development of the site (Figure 100). The size of the facility is 62,181 square feet, which is similar to the proposed church program. In recent

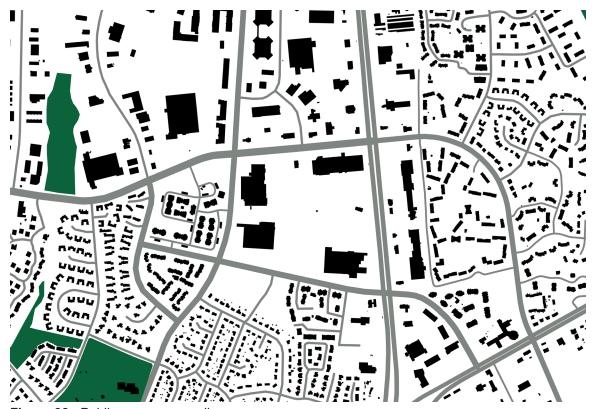


Figure 99 Public open spaces diagram



Figure 100 Site photo of vacant store, formerly a grocery store

years, many churches have opted for adaptive reuse of existing box stores instead of new construction for the obvious financial benefits. However, those adaptations are often less than successful and worshipers can feel the remnants of the building's shell. Reuse of the building could include parts of the program secondary or tertiary to worship, thus relieving potential discomfort in trying to make the once-grocery store into a sacred place.

Chapter 6: Program

General Program Requirements

The church complex houses not only the major church components, but also a community center, school, and serveral community serving elements. Those elements that are more public, such as the community outreach and the family life center, should be located along the civic plaza such that they are accessible to the public without making people travel into the depths of the complex. The school should be easily accessible, but should also feel protected. This can be accomplished through siting the school itself, or positioning school entrances so they are monitored at all times. Lastly the main worship spaces can retreat somewhat from the civic plaza, but still need to have visibilty from the plaza. This is to ensure that rituals can spill out the church doors and still make a connection with people along the plaza.

100 Worship Areas

A. General Description

Each of these areas unite to form the religious core of the church complex. The major goal of these assembled spaces is to better the spiritual well-being of each of the parishioners.

B. General Relationships

Each of these program elements houses varying levels of activity. Quiet, inactive zones should be separated from louder, active areas. Care should also be taken to examine established and traditional relationships between program elements.

101 Sanctuary

5,600 SF

SUBTOTAL: 9,900 SF

The sanctuary is the major worship space and should comfortably seat 350 people and allow for their full and active participation in liturgical celebrations. This space should include nave, a chancel with altar, and a baptistry. The sanctuary should have adequate daylighting, but not necessarily views toward the outside.

102 Narthex 1,120 SF

Also called a gathering space, the narthex would accommodate up to 120 people, most standing but some sitting. It serves as space to congregate before and after services, but also can be used for other liturgical and parish functions. Properly designed, this space can substitute for a cry room.

103 Choir 300 SF

This space should accommodate up to thirty choir members and various musical instruments. Usually near the chancel, the choir typically faces the congregation and often has tiered seating for better acoustics.

104 Sacristy 180 SF

This space is used to store and prepare the bread and wine for communion. It is also where decorations and flowers are prepared. The sacristy usually contains a sink and a basin. The sacristy is often located near the altar.

105 Chapel 900 SF

This is a smaller, secondary worship space with room for up to fifty parishioners. The chapel should include many of the same characteristics as the sanctuary but at a smaller, more intimate scale.

106 Vestry 250 SF

The vestry provides a space for rectors, deacons, and other worship leaders to vest as well as for storage of vestments. This space may also be used as a changing room for the newly baptized.

107 Bride's Room 350 SF

This room provides a changing area and lounge for a bride and her attendants. It should include a small restroom or be adjoined to a larger women's restroom.

108 Choir Rehearsal Room

500 SF

This room should provide a space for choir rehearsal and storage of musical instruments, equipment, etc.

109 Prayer Rooms

125 SF

These rooms provide places of private prayer with chairs and kneelers.

110 Bell Tower

200 SF

This place not only houses the church bells, but also is where worship leaders ring the bells during liturgical celebrations.

A. General Description

This programmed area forms the traditional social area of the church. Generally this area is available for meals after services as well as for coffee before and between services. This also serves as a multipurpose room for various other church and community functions.

B. General Relationships

Because this area is often used before and after services as well as during the week for school meals, it should be located in close proximity to the worship areas and to the school. Natural light should be available with the ability to dim the space for certain events or presentations.

201 Dining Area

4,410 SF

SUBTOTAL: 7,360 SF

Large assembly hall for church gatherings and events. This space can also act as the cafeteria for the attached school.

202 Kitchen 2,450 SF

Well-equipped kitchen for preparation of food for parish dining events and school meals and for preparation of refreshments to be served before and after services.

203 Table and Chair Storage

500 SF

This space provides for storage of tables and chairs for the fellowship hall.

A. General Description

This area of programmed space serves in essence as a community center. It provides ancillary spaces not only to parishioners, but also to members of the community at large.

B. General Relationships

Each of these program elements houses varying levels of activity. Quiet, inactive zones should be separated from louder, active areas. In addition, several of these program elements serve both the school and the community, so should be located with both audiences in mind.

301 Basketball Court

6,000 SF

SUBTOTAL: 8,700 SF

The court should have dimensions of 94 feet by 50 feet. This space is to be used not only by the attached school as a gym area, but also by the local community outside of school hours.

302 Locker Rooms

500 SF

These should provide changing and showering areas, as well as lockers for storage. Both locker rooms should be located directed off the basketball court.

303 Library

500 SF

This space includes a collection of books and media stations for use by both the school and the community. The library should have a good deal of daylighting and seating available.

304 Youth and Young Adult Area

1,200 SF

This space provides a lounge area for young parishioners and community members, separate from the more formal fellowship hall. It provides space to do homework, relax, and have informal worship groups.

400 Educational Space

A. General Description

The school serves both as a primary and secondary school affiliated with the Episcopal Church. Many of the non-classroom elements of the school are shared resources with the church and wider community. Classrooms also double as Sunday school classrooms for both children and adults.

B. General Relationships

The educational program spaces should be located near the lobby and administrative suite, with classrooms for younger children being closer than those of older students.

401 Classrooms

684 SF

SUBTOTAL: 10,260 SF

Each of the 15 classrooms provides instructional space for up to 18 students kindergarten through twelfth grade. Ideally there would be areas for gathering as a group and areas for sitting at desks or tables. Each of the classrooms needs to be able to function for Sunday school classes as well.

500 Administrative Support

A. General Description

This programmed area forms the operational core of the complex, housing offices for both church and school staff.

B. General Relationships

The administrative suite should be located adjacent to the lobby, school, and worship areas. It should be visible to visitors from the main lobby.

501 Waiting Area

200 SF

SUBTOTAL: 3,700 SF

This serves as the main reception area for the spiritual and administrative leadership of the church and school.

502 Rectors' Offices

250 SF

Both the rector's and assistant rector's offices include space for a desk, a small table for meetings, shelving and filing cabinets.

503 Staff Offices

200 SF

Each of the four staff offices provide ample space for a desk, computer work station, and visitor seating

504 Conference Area

300 SF

Meeting space for up to twenty people and other large groups. The conference room is located either within or adjacent to the administrative suite.

505 Work Station

300 SF

Each of the four work stations contain desk space and computer stations for two people.

506 Work Room

400 SF

The work room contains space for a copier, fax machine, printer/ scanner, and space for collating printed documents. The work room is located near staff offices and work stations.

507 Lobby

300 SF

The lobby serves as the entry to the school and church complex, separate from the narthex. The lobby should be in a central location, near the administrative suite, the school, and other community amenities.

600 Community Outreach

A. General Description

This area of programming is meant to reach out to community members not necessarily involved with the church. The services provided are not implicitly spiritual, but are meant to provide for unmet community needs.

B. General Relationships

Each of the community outreach services should be accessible to the community without formally entering the church.

601 Community Garden

500 SF

SUBTOTAL: 3,100 SF

This outdoor space provides a plot of land for growing and tending produce.

602 Farmer's Market

300 SF

This indoor/outdoor space provides a venue for the sale of produce from the nearby community garden or from community vendors.

603 Career Services

500 SF

600 SF

This space assists community with job and career searches. Computer workstations are available as well as private offices for one on one counseling or interviewing.

604 Café

This space provides a venue for coffee and light fare and includes an outdoor seating area.

605 Daycare

1,200 SF

These spaces allow for the comfortable and safe care of up to 30 infants and toddlers. These spaces are available to parishioners during services and to community members during the week.

700 Services and Support

A. General Description

These spaces provide the necessary support for the entire building and all its functions.

B. General Relationships

Unless noted below, these spaces do not require adjacency to any other program elements, and can be grouped in one area. Natural daylight is not required in these spaces, so they can be located below grade if necessary.

701 Mechanical Room

3,000 SF

SUBTOTAL: 5,800 SF

This space should be of sufficient size to house all mechanical equipment. Consider locating centrally in the building. It should have access to the outside.

702 Electrical Room

1,000 SF

This space should be of sufficient size to house all electrical equipment. Consider locating centrally in the building. It should have access to the outside.

703 Telecommunications Room

500 SF

This space should be located centrally to the library, administrative suite, and career center.

704 Building Engineer's Office

200 SF

The building engineer's office should be located near the mechanical and electrical rooms. It should have ample space for a desk, computer work station, and filing cabinets.

705 Custodial Closets

50 SF

For storage or custodial supplies and equipment, and includes a service sink. These are to be distributed throughout the building, typically near restrooms.

706 Bathrooms

150 SF

Toilet rooms for men, women, and family restrooms are to be distributed throughout the building. These should be located near areas of relatively high activity.

Program Summary

100	Worship Areas		SUBTOTAL:	9,900 SF
	101	Sanctuary		5,600 SF
	102	Narthex		1,120 SF
	103	Choir		300 SF
	104	Sacristy		180 SF
	105	Chapel		900 SF
	106	Vestry		250 SF
	107	Bride's Room		350 SF
	108	Choir Rehearsal Room		500 SF
	109	Prayer Rooms		500 SF
	110	Bell Tower		200 SF
200	Fellowship Hall		SUBTOTAL:	7,360 SF
	201	Dining Area		4,410 SF
	202	Kitchen		2,450 SF
	203	Table and Chair Storage		500 SF
300	Famil	y Life Center	SUBTOTAL:	8,700 SF
	301	Basketball Court	JJJIJIALI	6,000 SF
	302	Locker Rooms		1,000 SF
	303	Library		500 SF
	304	Youth and Young Adult Area		1,200 SF
	001	rodin and roding madic mod		1,200 01
400		ational Space	SUBTOTAL:	10,260 SF
	401	Classrooms		10,260 SF
500		nistrative Support	SUBTOTAL:	3,700 SF
	501	Waiting Area		200 SF
	502	Rector's Office		500 SF
	503	Staff Offices		800 SF
	504	Conference Area		300 SF
	505	Work Station		1,200 SF
	506	Work Room		400 SF
	507	Lobby		300 SF
600	Community Outreach		SUBTOTAL:	3,100 SF
	601	Community Garden		500 SF
	602	Farmer's Market		300 SF
	603	Career Services		500 SF
	604	Café		600 SF
	605	Daycare		1,200 SF
700	Servi	ces and Suppor	SUBTOTAL:	5,800 SF
	701	Mechanical Room		3,000 SF
	702	Electrical Room		1,000 SF
	703	Telecommunications Room		500 SF
	704	Building Engineer's Office		200 SF
	705	Custodial Closets		200 SF
	706	Bathrooms		900 SF
	Circulation (at 30%)		SUBTOTAL:	14,646 SF
	TOTA	L		63,466 SF
		-		

Chapter 7: Design Process

<u>Urban Form Strategies</u>

While looking at strategies for addressing built form on the chosen site, it becomes evident that attention must be given to the urban nature of the site. In order to foster better, more walkable communities with denser mixed-used blocks, that are more readily able to encourage new community churches and schools, I must do more than simply place a church on an open site. While the church may succeed without other urban interventions, it is more likely to succeed if the surrounding urban fabric and community is enriched. Because I feel I cannot address the church without addressing the development of the rest of the site, I will spend some time exploring potential site solutions. However, as the church remains at the heart of my thesis, I will focus more effort into the development of the church itself and specific moments within and surrounding the church.



Figure 101 Urban site design process diagrams



Priorities for designing the site included creating a connection to the surrounding neighborhoods via the hydrology flows, creating a civic plaza reminiscent of the historic plazas of Hispanic culture, dividing the site into walkable blocks populated with mixed use buildings, maintaining ample parking for existing and proposed businesses and residences, establishing a duality of location with both a public civic side and a more private pastoral side, and developing a hierarchy of the church complex within the surrounding site.

Ritual of Place

While diagramming and developing the site plan and sections allows one to determine how to best place the church and associated program on the site, the approach to design is from the outside in, and can often feel very detached from the personal nature of the church. In order to remain connected to the very personal moments evident in everyday church rituals, I opted to simultaneously design from the inside out. This allows me to identify several rituals or events basic to church and community life, and diagram and depict the space of those rituals even before necessarily addressing where the entire building might be located on the site. By designing simultaneously both from the outside in and from the inside out, I can allow one method to influence the other and vice-versa.



Figure 103 Baptism | Cleansing | Font

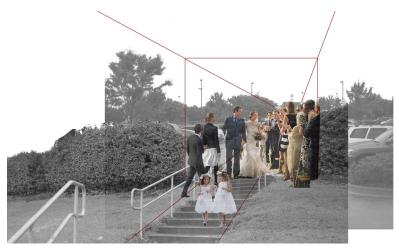


Figure 105 Wedding | Joining



Figure 106 Funeral | Mourning



Figure 104 Ringing of the bells | Bell tower | Call to prayer

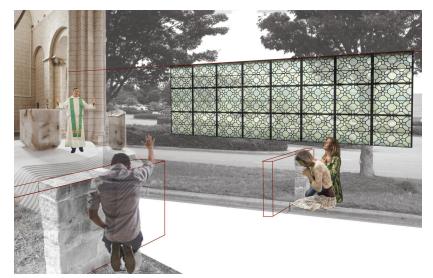


Figure 107 Prayer | Service | Sanctuary



Figure 108 Sunday school | Learning



Figure 109 Healthfulness | Eating well | Market

Building Form Strategies

In determining the design of the church complex itself, the concept evolved through a similar series of priorities. The first was to allow more public or outward spaces to edge the civic plaza. The second was for more reflective or inward spaces to be adjacent to water. The third was to create an interior or private courtyard specifically for members of the church community. The next was to create a visual connection between the civic plaza and the sanctuary. Finally was the connection of the interior courtyard to the water.

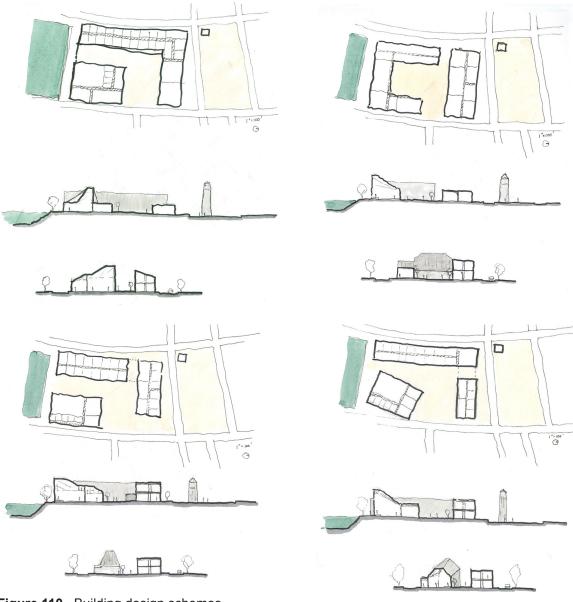


Figure 110 Building design schemes

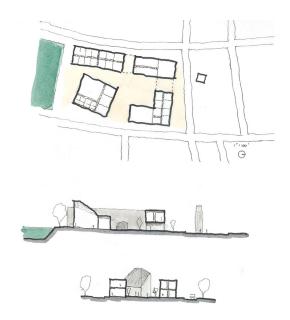


Figure 111 Building design scheme

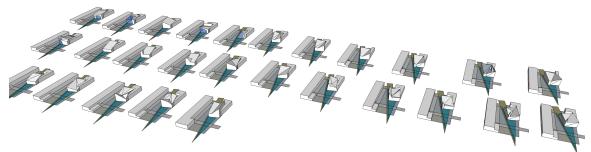


Figure 112 Sanctuary form study

Chapter 8: Design Proposal

Three neighborhood blocks were developed, each with ground level retail and apartments or townhomes above, and each contains an elevated green located above surface level parking. The church complex contains several retail and community serving establishments, a community center, and a school, in addition to the church itself. The church connects with a series of ponds flowing down into a larger retention pond which connects back into the community hydrology flows.



Figure 113 Urban scale site plan



Figure 114 Places diagram



Figure 115 Site section through plaza

The more public or outward reaching spaces, such as the cafe, career center, farmers market, daycare, and commuity center, edge the civic plaza and allow the public to engage the edge condition of the church complex. In order to connect water to the more reflective and inward reaching programmatic elements, a rill flows along one edge of the sanctuary and empties into a pool beyond the altar wall. A private courtyard allows church members to congregate outside for church functions and is in essence a series of outdoor rooms. While the sanctuary does retreat somewhat from the edge of the complex, it still maintains a visual connection with the civic plaza. This allows outsiders to understand the sacred nature of the church complex and also allows certain rituals to spill out

of the church doors and make connections with people sitting across the plaza. Finally, the interior courtyard maintains a connection with the water. This not only allows church members to realize their spiritual connection through water, but also allows them to better understand their ecological responsibilities and stewardship of the earth.



Figure 116 Site plan, first floor



Figure 117 Enlarged first floor plan, school and community center.

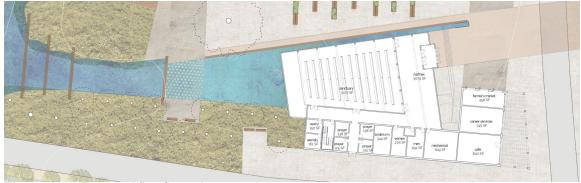


Figure 118 Enlarged first floor plan, sanctuary and community outreach



Figure 119 Site plan, second floor

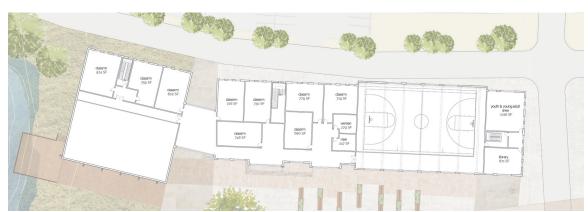


Figure 120 Enlarged second floor plan, school and community center

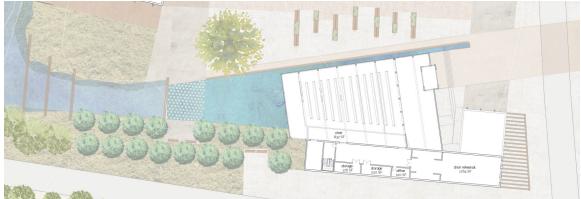


Figure 121 Enlarged second floor plan, sanctuary and community outreach

While the community elements, the school and fellowship hall attempt to maintain the orthogonal and material character of the surrounding existing buildings, the sanctuary distinguishes itself as a unique and sacred entity in both its rotated orientation, its materiality, and its upward driving force.



Figure 122 North elevation



Figure 123 Entry perspective



Figure 124 West elevation



Figure 125 Church courtyard section elevation

The sanctuary is designed with clear glazing along the base of the main aisle which creates a visual connection with the water in the rill flowing just outside. In addition, the exterior walkway emphasizes the importance of water by continuing the length of the complex from the bell tower to the retention pond.



Figure 126 Cross section



Figure 127 Longitudinal section through sanctuary



Figure 128 Sanctuary wall section

Some of the more prominent pathways on the site speak to its duality. The one outside the fellowship hall, allowing the hall to expand outside on nice days, gestures toward the water and the trees, emphasizing the importance of natural stewardship to the church. The other spans the length of the sanctuary and reaches across into the civic plaza toward the bell tower, emphasizing the importance of serving the community.



Figure 129 School courtyard section elevation



Figure 130 Fellowship hall perspective



Figure 131 Sanctuary perspective

Chapter 9: Conclusions

Fellowship Hall

During the final public review of the thesis project, some attention was brought to the location of the fellowship hall. As shown in some of the plans, it is located at the south end of the building housing the school and the community center. While it is accessible from the pass through at the west edge of the site, it is not nearly as public as the community outreach elements along the civic plaza. If the fellowship hall were located such that the community could more easily access it, the facility could be used for a variety of events to include community forums, club meetings, etc. While this is very true, the location of the hall has much to do with the relationship to the attached school. Because the hall will serve as the dining and assembly space for the school during the week, it was necessary for it to have a somewhat protected location. The current siting allows supervised access points for use by the school during the day, but also is near one of the proposed roads for easy access by the community at night.

Interior Spaces

One comment by the jurors was to the effect that most of the process work demonstrated careful examination of the external form, but not necessarily of the interior spaces. Similar exercises could have been utilized to determine those internal spaces. While this critique is well founded as it pertains to the final design, interior spaces were not completely left as the remnant of exterior forms. Earlier in the design process I utilized an "inside-out" exercise in order to visualize the interior spaces of ritual, however I placed such rituals within the context of the

existing exterior site. In this way, the lines between interior and exterior, between public and private, and between sacred and profane are blurred. Jurors seemed enthusiastic about the overlapping sensibilities which was evident not only in these ritual perspectives, but also in the plans and main ideas for the project. Some pressed that this grey zone could have been pushed even further and that my plans developed into something too neatly divided.

Beyond the Site

There was some discussion about the level of development of the civic plaza, particularly the buildings edging the plaza outside the church complex. Some jurors stated that in order to create a convincing civic plaza, the character of the buildings along the plaza really needed to be developed more. While I agree with the need for further development, the direction of the thesis drove the level of detail into the church complex itself. Because this thesis is essentially about the Episcopal Church, more attention was paid to the church than to the surrounding buildings.

Other jurors found the notion interesting about zooming out in the context of the surrounding neighborhoods and the design proposal creating a "backyard spine" through the neighboring communities. In essence the green spaces and pathways introduce public into non-public areas, which continue to break down barriers and reinforce the blurring of zones and dualities. Future efforts could be made to strengthen the connections between the proposed site and the surrounding neighborhoods to create a system of spaces along the spine.

While the Episcopal Church has struggled with declining membership over the past decade, their response needs to take into account the lives and motivations of a more modern society. To reimagine the church, one must not try to bring people to the church, but must bring the church to the people.

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