The altar in the liturgy and liturgical space: Making place and movements

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THE ALTAR IN THE LITURGY AND LITURGICAL SPACE
Making Place and Movements

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"And when churches are to be built,
let great care be taken that they are suitable for the celebration of the liturgical services
and for the active participation of the faithful."

<div align="right">*Sacrosanctum Concilium*, 124.</div>

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Introduction

The altar is the place marker of and place maker of the liturgy and liturgical architecture.

The altar has been, more or less consistently, a theological, liturgical, and visual focus in the liturgical space. The history of the development of the Christian altar and liturgical space is a long and complex one. The evolution of the altar is entwined with the ecclesiology, theology, and liturgy of the Church. It shaped by the people, culture, art, architecture from which it built. It is placed by the liturgy and the liturgical space for which it designed. Yet, the altar remains at the center of the Eucharistic liturgy and the liturgical space, despite being obscured at times. It marks the focus for the worshiping community to orient and moves toward, despite their movement and orientation have been impeded at times. The altar makes the central place where God's faithful people gathered around for the Eucharist, despite being held back at times.

In this sense, liturgy is a communal act of worship, in which the altar is a focus for the gathered community. Therefore, it would suggest that the liturgy is a dynamic ritual, in which a vibrant worshiping body participates.

At the same time, when the gathered faithful, both laity and clergy, actively and consciously participating in the liturgy, it expresses and affirms their common priesthood as baptized Christians. This is the fundamental and profound theology of the church that Vatican Council II's "Constitution on the Sacred Liturgy" *Sacrosanctum Concilium* had affirmed. It is an extraordinary and impactful document on liturgical and ecclesial reform, of which the

Church is still working to implement, despite ongoing debates on its intentions and meanings.[1]

As such, active and conscious participation in the liturgy is a priority for the liturgical reforms of Vatican Council II. It also stipulates that the liturgical space should be made suitable for the active participation of the gathered community in the liturgy. At the same time, conscious and active participation must extend beyond the individual's interior - mental prayer and contemplation, and the exterior - voice, and gestures. The liturgy is the action of the whole worshiping community. If the Church is to believe that the Triune God is active in its life and the lives of God's people, then the liturgy ought to be an expression of that living and dynamic activity, especially when the God's people gathered to worship.[2]

Therefore, this thesis argues that, by and large, the current typical liturgical arrangements are inadequate in engendering greater bodily movements of the lay faithful assembled. This is especially prevalent in many liturgical spaces designed for the pre-Vatican II liturgy, even though they have been reordered for the post-Vatican II liturgy.

Therefore, this thesis will propose two conceptual models, with the particular placement of the altar in the liturgical space, which would engender greater and more meaningful ritual bodily movements of the assembled lay faithful in the liturgy of the Mass.

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[1] For a concise and accessible summary and discussion on Vatican II's liturgical reforms and their progress, see John F. Baldovin, "An Active Presence," *America*, May 27, 2013. For further readings on the states of and debates on liturgical and ecclesial reforms of Vatican II see Marc Aillet, *The Old Mass and the New: Explaining the* Motu Proprio Summorum Pontificium *of Pope Benedict XVI* (San Francisco: Ignatius Press, 2007), John F. Baldovin, *Reforming the Liturgy: A Response to the Critics* (Collegeville: Liturgical Press, 2008); Massimo Faggioli, *True Reform: Liturgy and Ecclesiology in* Sacrosanctum Concilium (Collegeville: Liturgical Press, 2012); Kevin W. Irwin, *What We Have Done – What We Have Failed to Do: Assessing the Liturgical Reforms of Vatican II* (New York: Paulist Press, 2013); Gerald O'Collins, *Lost in Translation: The English Language and the Catholic Mass* (Collegeville: Liturgical Press, 2017); Joseph Ratzinger, *The Spirit of the Liturgy* (San Francisco: Ignatius Press, 2000); George Weigel, "The Reformed Liturgy, 50 Years Later," *First Thing*, November 27, 2019, https://www.firstthings.com/web-exclusives/2019/11/the-reformed-liturgy-50-years-later.

[2] Liturgy and sacrament are acts of Christ and the Church. In these, the worshiping community encounters the risen Christ the Son, the love of God the Father, in the working of the Holy Spirit. The communal participation in the liturgy must reflect the dynamic relationship between the humans and the Triune God, whom they worship. See, Edward J. Kilmartin, "Sacraments as Liturgy of The Church," *Theological Studies* 50 (1984): 527-547. For some essential texts on the liturgy and sacrament also see, Louis Bouyer, *The Church of God, Body of Christ, and Temple of the Spirit* (Chicago: Franciscan Herald Press, 1982); Yves Congar, *Christians Active in the World*, trans. P. J. Hepburne-Scott (New York: Herder and Herder, 1968); Yves Congar, "The *Ecclesia* or Christian Community as Whole Celebrates the Liturgy," in *At the Heart of Christian Worship: Liturgical Essays of Yves Congar*, translated and edited by Paul Philibert (Collegeville: Liturgical Press, 2010), 15-68; Romano Guardini, *Spirit of the Liturgy*, trans. Ada Lane (London: Sheed & Ward, 1930); Edward J. Kilmartin, "The Achievement of Sacrosanctum Concilium." *Emmanuel* 84 (1978): 565-571; and, Edward J. Kilmartin, "The Active Role of Christ and the Holy Spirit in the Sanctification of the Eucharistic Elements." *Theological Studies* 45 (1984): 225-253.

Therefore, Chapter One will explore the relevant aspects of the development of the altar in relationship with that of the history of liturgical architecture since the early Church until the immediate post-Vatican Council II. Chapter Two aims to discuss the liturgical and architectural practices in a local ecclesial context as the present response to, or reception of the liturgical reforms of Vatican II. It will also discuss subjective visual preferences in a small liturgical space. Chapter Three will explore four alternative spatial models for arranging liturgical space. Lastly, Chapter Four will propose and discuss the two conceptual models. The first model is for the reordering of existing pre-Vatican II liturgical spaces to promote greater active participation in the liturgy; and the second, for new liturgical spaces to promote multi-focal, multi-directional and bodily movements, and greater active participation in the liturgy.

Before beginning the thesis properly, it would be helpful to define some terms and limitations. First, this thesis will use the terms 'liturgical architecture' and 'liturgical space' over 'sacred architecture' or 'sacred space.'[3] This thesis does not deny that liturgical architecture and liturgical space are not sacred. The relationship between the sacred and the liturgical in church architecture is a necessary one. However, this thesis focuses on architecture for the liturgy and active participation in the Eucharistic liturgy, and not architecture purely as a sacred object. Therefore, it must make a distinction between the two concepts for the sake of the topic at hand.

At the same time, as there is a lively debate on the liturgy, the debate on church architecture is also as lively. Since the Vatican II, numerous voices have been engaged in the debate, be they on the reforms of church architecture, "the reform of the reform," architectural styles, and sacred vs. liturgical architecture. Without an intention to confine any of these authors into categories too narrowly, among them Richard Giles, Peter Hammond, Richard Vosko, can be considered more progressive-leaning in their views.[4] Whereas, Philip Bess, Denis McNamara, Steven J. Schloeder, Duncan Stroik advocate for more traditional expressions of church architecture.[5] At the same time, the works of R. Kevin Seasoltz and James F. White could be

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[3] At the same time, the thesis would occasionally use 'church architecture' as a catch-all term. Perhaps, it can cover both 'sacred' and 'liturgical.'

[4] Richard Giles, *Re-Pitching the Tent: Recovering the Church Building for Worship and Mission* (Norwich: Canterbury Press, 1999); Peter Hammond, *Liturgy and Architecture* (New York: Columbia University Press, 1961); Richard Vosko, *Art and Architecture for Congregational Worship: The Search for Common Ground* (Collegeville: Liturgical Press, 2019).

[5] Philip Bess, *Till We Have Built Jerusalem: Architecture, Urbanism, and the Sacred* (ISI Books: Wilmington, 2006), Denis R. McNamara, *Catholic Church Architecture and the Spirit of the Liturgy* (Chicago: Hillenbrand Books, 2009); Steven J. Schloeder, *Architecture in Communion* (San Francisco: Ignatius Press, 1998); Duncan

considered as historical studies.[6] Furthermore, the works of Bert Daelemans, Louis Boyer, Richard Kieckhefer, Daniel McCarthy and James Leachman, Rudolf Schwarz, as well as Seasoltz can be seen as theological and spiritual in their perspectives.[7] Daelemans, Kieckhefer, McCarthy and Leachman, and Schwarz, also offer models of interpretation or ways of looking at or designing church architecture.

Second, why a Eurocentric approach? In a sense, this thesis is not exactly so as it might appear. Chapter One's historical survey of liturgical architecture includes church buildings outside of the Christian West. Nevertheless, as the thesis progresses, more and more European examples of church buildings and later those in the United States are included. This is unavoidable as it also traces the European influence on church architecture in the Archdiocese of Boston, in which the author resides during the thesis.[8] However, the only example from another continent is that in Sydney, Australia. But, this church was built in the English Gothic revival style, which was quite common in Australia during the mid to late 19th century. As such, unfortunately, due to space limitation and context, this thesis is unable to account for liturgical architecture elsewhere, such as Asia or Latin America. Nevertheless, this also speaks of the limited exposure and research in the theological and liturgical academia on the European historical influence on vernacular church architecture of Asia or Latin America, as well as discussion on the state of contemporary church architecture in these continents.

With this, it is the hope for this thesis that, in a small way, it will add to the ongoing conversation on the post-Vatican II reforms of the liturgy and liturgical architecture. In that, new thinking can take shape toward forming liturgical architecture for the active and dynamic worshiping body.

Stroik, "Church Architecture Since Vatican II," *The Jurist: Studies in Church Law and Ministry* 75, no. 1 (2015): 5-34, Project MUSE.

[6] Kevin Seasoltz, *A Sense of the Sacred: Theological Foundations of Christian Architecture and Art* (New York: Continuum, 2005); James F. White, *Roman Catholic Worship: Trent to Today* (Collegeville: Liturgical Press, 2003).

[7] Bert Daelemans, *Spiritus Loci: A Theological Method for Contemporary Church Architecture*. Studies in the Religion and the Arts, Vol. 9 (Leiden: Brill, 2015); Louis Bouyer, *Liturgy and Architecture* (Notre Dame: University of Notre Dame Press, 1967); Richard Kieckhefer, *Theology in Stone: Church Architecture from Byzantium to Berkley*, (Oxford: Oxford University Press, 2004). Daniel P. McCarthy and James Leachman, *Come Into the Light: Church interiors for the celebration of the liturgy* (Norwich: Canterbury Press, 2015); Rudolf Schwarz, *The Church Incarnate: The Sacred Function of Christian Architecture*, trans. Cynthia Harris (Chicago: Henry Regnery Company, 1959).

[8] For efficiency sake, this thesis uses "Archdiocese of Boston" to locate the liturgical spaces identified in Chapter Two. Some of these liturgical spaces locate within the ecclesial boundary of Archdiocese of Boston, but without the geographical boundary of the City of Boston.

Chapter One

Major developments of the altar and ritual movements in the liturgy

from the early Church to the immediate post-Vatican II years

Much had changed since the first century when Christians gathered in private houses and catacombs. Nevertheless, the liturgical centrality of the place for the Eucharist in a Christian worship space generally remains the same (depending on the particular Christian denomination). The physical centrality of the altar, however, has changed and developed through time as many other aspects of the buildings in which Christian worship takes place.

This chapter traces the development of the altar in the history of Christian worship and liturgical space by highlighting five key moments. First, the altar defined the focus and orientation of the liturgy, the architecture, and the worshipers. Second, once the Church reaches the Byzantine era, the altar became less a single focus and more a part of the *foci* and movements in the liturgy. Nevertheless, while the altar occupied a prominent place in the chancel, it was more so the liturgical actions in the Eucharist that gave it the liturgical and theological centrality.[9] Third, with the advent of Gothic architecture, light became a more central expression of the relationship between the divine and the profane. While the altar remained at the center of the Eucharistic liturgy for the clergy and ministers, the illuminated stained-glass windows shaped the experience of the transcendence for the laity. Fourth, after Gothic architecture and the medieval liturgy solidified the position of the central altar and hidden it behind screens and choir. And, at the same time, the multiplication of side altars significantly diminished the eucharistic focus of the central altar. Baroque architecture refocused and expressed the visual, theological, and devotional aspects of the liturgy to the opened and highly decorated chancel. At the same time, the visual glory of the decorations, along with the post-Trent liturgical and devotional practices, ironically, also diminished the eucharistic centrality of the main altar. Fifth, the liturgical renewal movements in the first half of the 20th century became the catalyst for the liturgical reforms proposed by Vatican II. The architecture responded to the call for a more participatory liturgy primarily through restoring the eucharistic table as the single central altar, physically and visually accessible, in the liturgical space.

This chapter will show that the liturgy of various periods in the history of the Church had situated the altar in different places in the worship space. Nevertheless, it consistently remained

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[9] Due to the limitation of space, this thesis is unable to discuss the historical significance of the Carolingian and Romanesque church architecture that follows the Byzantine era. They are foundational for Gothic architecture. Nevertheless, there appear to be no drastic shifts in the architectural development of the altar from the Carolingian and Romanesque era to the Gothic period, except, for the multiplication of side altars in the pre-Romanesque period in the design of the Benedictine monastery of St. Gall, for example. See Kenneth J. Conant, *Carolingian and Romanesque Architecture: 800 to 1200* (Baltimore: Penguin Books, 1959).

at the center of eucharistic liturgy despite at times obscured by the varying liturgy, devotion, and architecture.

I.   Place-making of the liturgy: focus and orientation - the early Church

The 'eucharistic' table of the 2nd-century house church, likely to be a wooden dining table in a Roman house, had acquired a liturgical use, for 'the breaking of the bread.'[10] Following that, there are various theories as to the development of the Christian worship space before Christianity became the Roman state religion.[11] Once Christianity was approved as the state religion of the Roman Empire, "by the time of San Crisogono [early 4th century?] and Theodore's church at Aquileia, the focal point of the hall was set aside for altar, clergy, and bishop."[12]

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[10] Richard Krautheimer, *Early Christian and Byzantine Architecture* (Harmondsworth: Penguin Books, 1986), 24. For a concise introduction to the first 150 years of Christian architecture, see Krautheimer, *Early Christian and Byzantine Architecture*, 23-32. L. Michael White suggests, "The main arena of worship assembly, including both the eucharist and other acts of instruction and exhortation, was the communal context of the dining table in the house church." See L. Michael White, *Building God's House in the Roman World: Architectural Adaptation among Pagans, Jews, and Christians,* (Valley Forge: Trinity Press Int'l, 1990), 119.

[11] Krautheimer suggests that when the Christian population increased, they meet in a local community house, *domus ecclesiae*, which "owned by the congregation." Archeological evidence indicates that Dura-Europos (c. 231/2) was one such early Christian meeting house. See Krautheimer, *Early Christian and Byzantine Architecture*, 26. Also, see Carl H. Kraeling, *The Christian Building (The Excavations at Dura-Europos (Yale University). Final Report VIII, 2)* (New Haven: Dura-Europos Publications, 1967).

   L. M. White discusses two models of theories of the early development of Christian worship places, "The 'atrium house' and basilical theories," and "The house theory and models of Christian development." He generally accepts the evidence that Dura-Europos was a house renovated for larger communal worship. Yet in contrast to Krautheimer, L. M. White suggests that this "Christian community house" should be called a "church building," *domus ecclesiae*, making a distinction that the worship has taken on a more public nature rather than more private ones, "from house to house" (Acts 2-5). He argues that "the unrenovated space of the Pauline period as the *house church*." As such, "a specially adapted building [can be called] the *house of the church*, hence, *domus ecclesiae*." This might seem like a minor distinction, but, for Krautheimer, *domus ecclesiae* "were purchased and remodeled far into the fourth century." Larger and grander buildings were used for public worships only came into being after Christianity became a Roman state religion. For L. M. White, however, "well before Constantine introduced the basilica to Church architecture, the Christians had begun to move toward larger, more regular halls of assembly. It is for this stage of the development that the term *aula ecclesiae* ("hall of the church") has been chosen." See L. M. White, *Building God's House in the Roman World,* 12-17, 20, 108, 111, 128; and Krautheimer, *Early Christian and Byzantine Architecture*, 27 & 37.

   Domus ecclesiae could be translated as either *house* or *building of the church*. As such, L. M. White argues for the distinction between early Christian worship in smaller private homes and that in larger converted houses or buildings. Hence, he introduces the term *aula ecclesiae.*

[12] L. M. White, *Building God's House in the Roman World*, 138-139. Krautheimer suggests that this larger meeting hall is far from the monumentality of a Constantinian basilica. See Krautheimer, *Early Christian and Byzantine Architecture*, 36-37. While L. M. White's argument on the distinction between *the house church* and *house of the church* seem esoteric at first, it is the beginning of his theory for a clear progression of development of Christian worship space from private to public, from *the house church* to *house of the church* to the *church building*. L. M. White's theory is considered to be controversial. One review is critical of his presentation of Dura-Eropos, Stephen Goranson, *Journal of the American Oriental Society* 112, no. 1 (1992): 165-66, https://doi.org/10.2307/604625.

Hence, after the Edict of Milan in 313 C.E., which Constantine proclaimed to inaugurate first of the official Christian centuries, the Basilica Ulpia (built c. 112 C.E.) and Basilica of Maxentius (built c. 307-12) were some of the pre-existing Roman *basilicas* used for public Christian worship. The apse (the focal point and the place for the altar) was shifted to the longitudinal axis, to provide for the procession in the liturgy.[13] At the same time, also in 313 C.E., the construction of the Lateran Basilica began, the first unique church building of the Roman Christian empire.[14] After that, in the period between 320 and 330 C.E., the (first) Basilica of St. Peter began to be built.[15]

Figure 1.1: Reconstructed axonometric drawing of the Lateran.
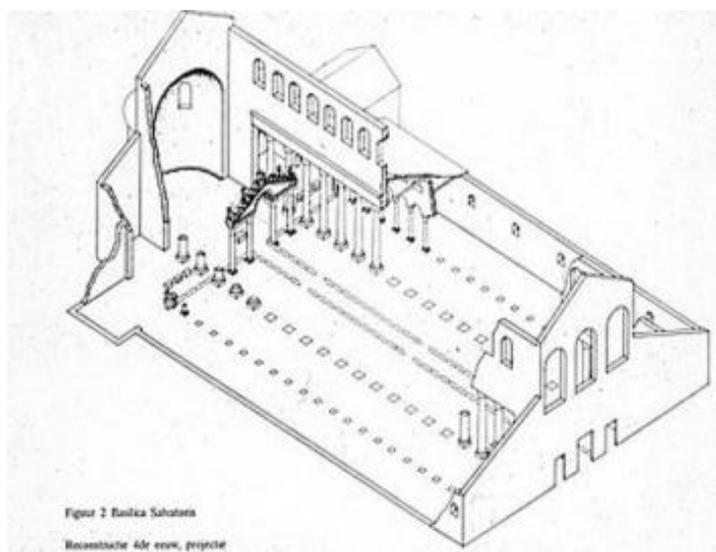
The spatial arrangement of the Lateran consists of a vast rectangular nave, flanks by two aisles on each side, running east-west with an apse at the west end. The bishop and his presbyters take their seats at the apse, behind the altar, facing the gathered assembly standing in the nave. Figure 1.1, on the left, shows the huge *fastigium* (an arch, or "pedimented screen") placed between the apse and

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Another would question the lack of supporting material for his theory on the progression of the development of Christian worship space. See Paul C. Finney, *American Journal of Archaeology* 96, no. 4 (1992): 776-77, https://doi.org/10.2307/505210. Nevertheless, Finney suggests that Chapter 5, on the transition from *house church* [as in early Christian worship in private houses not a translation of the word *domus ecclesiae*] to *basilica* "is indispensable for all serious students of early Christian architecture." However, subsequently, White has provided the archeological and documentary evidence in question in L. Michael White, *The Social Origins of Christian Architecture, Vol. II: Texts and Monuments for the Christian* Domus Ecclesiae *in its Environment* (Valley Forge: Trinity Press In'l, 1997). 121-257. Another review also suggests further studies are needed on L. M. White's theory due to the sweepingly large time frame from which L. M. White draws his conclusions. See Frederick W. Norris, *Church History* 62, no. 1 (1993): 101-02, https://www.jstor.org/stable/3168418.

[13] Edward Foley, *From Age to Age: How Christians Have Celebrated the Eucharist* (Collegeville: Liturgical Press, 1996), 79, 82-83; Spiro Kostof, *History of Architecture: Settings and Rituals* (Oxford: Oxford University Press, 1995), 252; Krautheimer, *Early Christian and Byzantine Architecture*, 39.

[14] Krautheimer, *Early Christian and Byzantine Architecture* 46-47.

[15] Foley, *From Age to Age*, 84; Kostof, *History of Architecture*, 260; Krautheimer, *Early Christian and Byzantine Architecture*, 58-59.

the nave.[16] This arrangement resembles the Roman Imperial court where the magistrate takes his seat in the semi-circular apse at the end of the hall. The Christian congregation approaches the altar in the same way Roman citizens approach the royal court. Richard Krautheimer notes, referencing Eusebius, that this approach on the axis along "a royal path" did not happen by chance.[17] Hence, he suggests that the designs of Constantinian churches were not necessarily "derived from palace basilicas: but Christian leaders and their architects quite naturally transferred to their church buildings large parts of the architectural panoply surrounding the Emperor's Divine Majesty."[18]

As described above, the move from *domus ecclesiae* to *aula ecclesiae* placed the altar at the prominent place once were reserved for civic functions.[19] And, as such, the move from the domestic to public worship in the Christian religion significantly altered the nature of the ritual gathering. In the domestic setting, the people assembled around the eucharistic table, given the limited space for a small gathering. On the other hand, in the official public setting of the basilica, the people assembled before the altar in a longitudinal space. The bishop and presbyters occupied the space behind the altar, much like that of the Roman magistrate.

Therefore, I would argue that it seems natural for the Christian religion (once became the Roman religion) would need to be adapted to Roman civic ritual and architectural setting. As much as the approach and procession by the bishop, presbyters, and worshipers might have caused the altar to be placed at one end of the longitudinal worship space, it remains the visual and liturgical focus as in the house church.[20]

The altar, from its 'domestic' to 'public' form, became the preeminent place-making element in the worship space. The people process to and gather around the altar in the Eucharistic liturgy. The altar, with the help of other architectural elements and spatial divisions, defines the visual focus of the Eucharistic liturgy.[21]

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[16] Robin Jensen, "Recovering Ancient Ecclesiology: The Place of the Altar and the Orientation of Prayer in the Early Latin Church," *Worship* 89 no. 2 (2015); 121.

[17] Krautheimer, *Early Christian and Byzantine Architecture*, 46. Here, he references Eusebius's description of the newly built church at Tyre. See text and translation in, L. Michael White, *The Social Origins of Christian Architecture,* 94-99.

[18] Krautheimer, *Early Christian and Byzantine Architecture*, 46-48.

[19] L. M. White called the reconfigured Roman basilicas as *aula ecclesiae.* See in, L. Michael White, *Building God's House in the Roman World*, 132 & 137-139.

[20] Krautheimer, *Early Christian and Byzantine Architecture*, 42-43.

[21] Krautheimer, *Early Christian and Byzantine Architecture*, 40-41.

Before discussing the Christian architecture of the Byzantine era, it would be helpful to look at an example of the transition from the basilica architecture.

A noted example of North African basilica is a late 4th century or early 5th century martyrs' shrine located "near the coastal town of Tabarka, Tunisia (ancient Tabraca in Africa Proconsularis)."[22] This type of design is seen to be heavily influenced by the Constantinian basilica.[23]

Figure 1.2: Mosaic depiction of Tabarka shrine (c. 4th or 5th century).[24]

As much as Tabarka shrine closely resembles the Lateran Basilica in its form and ordering of space, it has two distinctive features. The freestanding altar is without any barrier and located in front of the raised apse.

Figure 1.3: Reconstructed axonometric drawing of Tabarka shrine.[25]
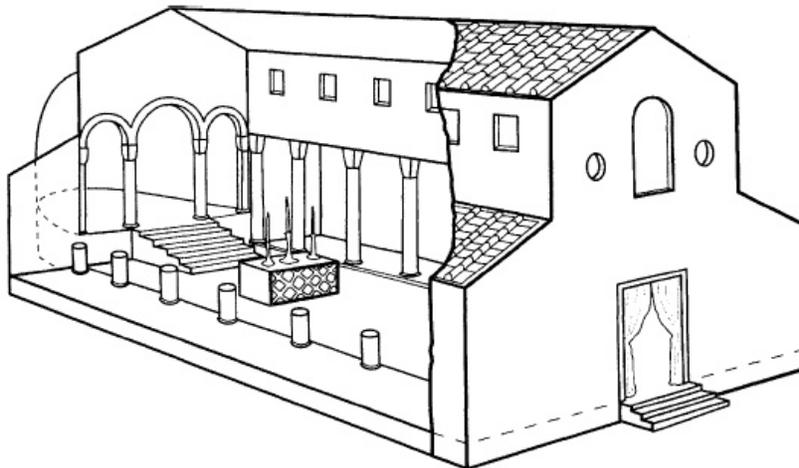
This means that the presider would have to go down from the raised *presbyterium* to preside at the Eucharist, rather than remain behind the *fastigium* as in the Lateran. [26] The second distinctive feature is the apse is separated by a colonnade

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[22] Jensen, "Recovering Ancient Ecclesiology," 105.
[23] Krautheimer, *Early Christian and Byzantine Architecture*, 188.
[24] Jensen, "Recovering Ancient Ecclesiology," 103.
[25] Jensen, "Recovering Ancient Ecclesiology," 105.
[26] Jensen, "Recovering Ancient Ecclesiology," 108. The terms *presbyterium*, chancel, or sanctuary interchangeably throughout the thesis. These terms denote the area or space in most Roman Catholic liturgical space set aside for the altar, ambo, and in some cases, also the presidential chair and seats for the assisting ministers. This area is distinct from the nave, which is typically reserved for the lay faithful or congregation. In some cases, as also seen in Figure 1.3, the apse can also be the *presbyterium*, chancel, or sanctuary.

archway (similar to the *fastigium*) but incorporated into the end wall instead of a freestanding structure as in the Lateran.

While not dealing with a more controversial question about the position of the presider in relation to the altar and the congregation, it could be presumed that the presider and ministers would be going around, to and from the altar. At the same time, as there is no barrier to the altar, it seems that the assembly would be closer to the altar and approach it from different directions (rather than one direction where the altar is in the apse behind barriers or demarcation). As such, it is reasonable to suspect that, given the importance of the martyr associated with the shrine, worshipers would join in the procession to venerate the relics.

II. Movement in the liturgy: Multi-focal and multidirectional (Byzantine era)

Perhaps the best-known church building of Byzantium is the Hagia Sophia (first construction between 532 – 537). Despite a resemblance to the longitudinal Roman basilica in plan, it is unlike any church building built before and has a lasting, but not complete, influence on Byzantine ecclesiastic architecture.[27] Figure 1.4 & 1.5 (to the left) show the Hagia Sophia's longitudinal section and plan.[28]

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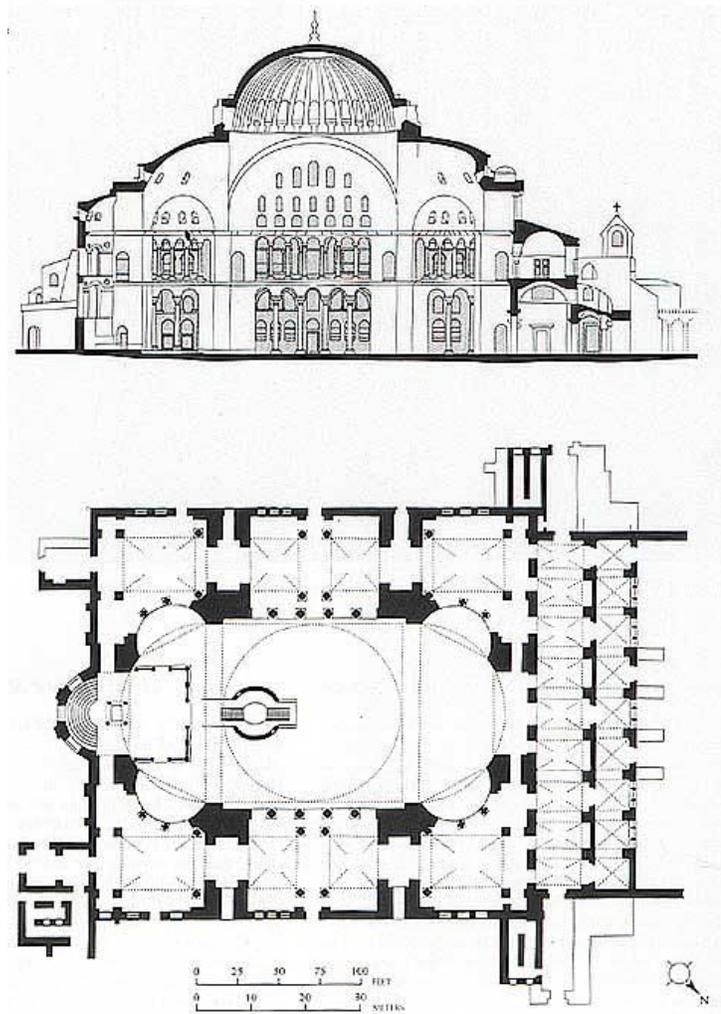
[27] Krautheimer, *Early Christian and Byzantine Architecture*, 238.

[28] Image of the Hagia Sophia's cross-section found in "Interior Design Courses: Hagia Sophia, longitudinal section and floor plan including ambo," Pinterest, accessed September 5, 2018, https://www.pinterest.com/pin/520939881871407804/. These drawings appear to illustrate the building with the reconstruction of the ribbed central dome, which replaced the shallower dome that collapsed in 558. Krautheimer explores in great detail the construction history and architectural features of the Hagia Sophia in his book. See Krautheimer, *Early Christian and Byzantine Architecture*, 206-217. Also see John F. Baldovin, *The Urban*

The floor plan in Figure 1.5 (above) and Figure 1.6 (below) show the ambo placed in the nave nearer to the front of the altar. The altar is placed much closer to the *synthronon* (or apse), if not inside it, and preceded by a rectangular area with some sort of barrier. This is much different than the plan and altar's placement of the Tabarka basilica shrine.

Figure 1.6: Reconstructed floor plan of Hagia Sophia.[29]
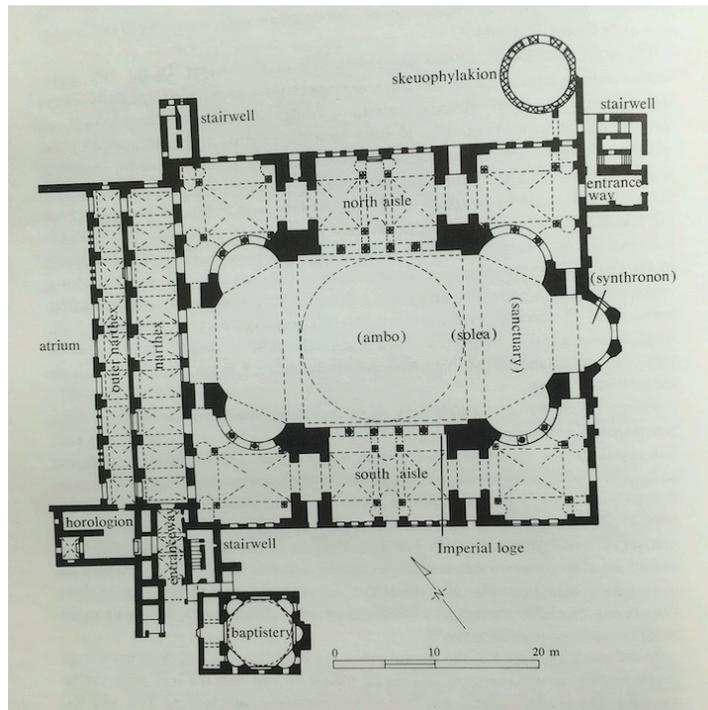
It would be a challenge to completely visualize the lavish liturgy conducted in this enormous and richly decorated space. Baldovin and Krautheimer offer vivid descriptions and helpful discussions of the liturgy with the spatial arrangement of the great church.[30] Here are two brief comments on two aspects of the liturgy and architecture: the movements (including processions) between spaces, and the segregation of people in the spaces.

First, it appears that there are many direct accesses into the building other than the grand western entrance (with the Royal Doors – three at the center) that opens into exonarthex (outer narthex). The most important procession is the Great Entrance when the Eucharistic gifts are taken into the church building. The deacons processed into the church with the offerings from the external *skeuophylakion* – a connected round building north-east of Hagia Sophia (top right of the floor plan in Figure 1.6 above). They emerged from the narthex through the north side then carry the gift through the

center of the nave to the altar, solemnly processed through the assembly. This marked the beginning of the high point of the liturgy, the Liturgy of the Eucharist.[31]

The royal procession entering the church takes place at the Royal Doors that directly access the narthex (top right of the building in plan drawing).[32]During the Lesser Entrance,[33], the bishop, clergy, and people processed into the church from various other entrances, where the lay faithful fill the aisles, and up in the galleries. The religious and imperial leaders make the procession together into the nave, and then, go to their separate areas. Here, we are beginning to see the segregation of people in the space partly due to the way they access the building for the liturgical celebration. It seems that during the liturgy, the presider, clergy, ministers, and the emperor (if he is in attendance) performed most of the movements and processions that occurred in the nave. As such, it is understandable that the liturgical roles would dictate their access and movements. The laity, as it seems, was afforded only a few occasions for liturgical movements in the space, and their views of the proceedings were often obstructed. On the other hand, as it seems, the patriarch and the emperor are more at the center of the actions.[34]

Here, it would be helpful to note that a post-Vatican II Roman Rite understanding should not be imposed on the *foci* in the Byzantine liturgy.[35] Nevertheless, the Eucharist is the high point in the Byzantine liturgy whether or not the sovereign is attending and regardless of the location of the altar. The Great Entrance is reserved for the procession of the Eucharistic gifts, whereas the Lesser Entrance for the patriarch and sovereign. This spatial hierarchy is evidence for the centrality of the Liturgy of the Eucharist, despite the apparent ceremony of both

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[31] Baldovin, *The Urban Character of Christian Worship*, 175-178; Krautheimer, *Early Christian and Byzantine Architecture*, 218; T. F. Matthews, *The Early Churches of Constantinople*, 155-162. For an extensive study of the Great Entrance, see Taft, *Great Entrance*.

[32] For descriptions of other Royal Entrances into the church building, refer to Baldovin, *The Urban Character of Christian Worship*, 176-177.

[33] As opposed to the Great Entrance reserved for the procession of the Eucharistic gifts

[34] Baldovin, *The Urban Character of Christian Worship*, 177; Krautheimer, *Early Christian and Byzantine Architecture*, 218. Krautheimer also has this to say, "Emperor and patriarch were the two halves of God'. And if the patriarch reflected the religious aspects of the Godhead, the Emperor mirrored the secular aspects, power and justice. The interaction of Emperor and priesthood was essential for establishing and maintaining a Christian Empire, and their meeting under the great dome of the H. Sophia becomes a symbol of the interaction. Both the ecclesial and secular hierarchies were permeated by the light the Divinity which emanated from the centre of the heaven and spread to the angels, patriarch, clergy, and emperor. Thus, in the H. Sophia, the spatial shapes, the light, and the colours all emanate from the centre dome. The ordinary people in the aisles and galleries remained hidden in the shadows. Only from afar were they allowed to see the light, the colours, and the glory that streamed from the centre, the seat of the Godhead." In Krautheimer, *Early Christian and Byzantine Architecture*, 218-219.

[35] Here, the *foci* are taken to include both liturgical objects and actions (i.e., the altar and the Liturgy of the Eucharist or the ambo and the Liturgy of the Word).

entrances. Therefore, it would be reasonable to argue that although the altar was given a prominent place in the sanctuary of the Hagia Sophia, the liturgical actions in the Eucharist gave the altar its liturgical and theological centrality.

There is a significant religious value to be had in the splendor of the Byzantine liturgy, especially when it serves the purpose of expressing and maintaining the Christian empire. Even though there were multiple *foci* in the liturgy, they ultimately pointed to the Eucharist. The liturgy, in which the sovereign participated, was meant to show the assembled faithful that they are being led by both the ecclesial and sovereign powers to the divine. Thus, the architecture of the Hagia Sophia is designed to assist the liturgy in this.[36]

The Justinianic Hagia Sophia, together with the ecclesial and imperial power, significantly shaped the liturgy celebrated in this spectacular church building. It also created a kind of symbiotic relationship between liturgy and architecture that together produce a visual and aural experience like no others.

III. Transcendent liturgy: visual and theological illumination - Gothic

1. Opus modernum - *the emergence of a new style - moving from the monasteries to cities*
The 12th century marked the gradual change from Romanesque to Gothic, *opus modernum*, or "modern style" ("gothic" was a term assigned to this style in the 17th or 18th century to mean 'not classical').[37]

St Denis abbey church and its abbot, Suger, are seen to be the introduction of the significant shift in church architecture. The Gothic style was launch in this royal abbey; hence, it began with "royal jurisdiction and influence. Its first, full-blown Cathedrals in the cities of the royal domain – Chartres, Amiens, Reims, Bourges." It was deemed as "an architectural style born to serve monasticism and feudalism."[38]

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[36] A recent example of the meeting between monarchy and church is the processions to the ceremony at St Paul's Cathedral for the National Service of Thanksgiving for the Diamond Jubilee of the Reign of Queen Elizabeth II, see YouTube video at https://youtu.be/KrlaW_IpRg0. Even though the sovereign and her entourage were dressed in understated and modern garments they use motorized transport in procession, and the Queen being greeted by the bishops upon arrival at St. Paul's Cathedral, the royal and ecclesial procession through the assembly all resemble quite precisely the same concept as that of imperial Constantinople. While the general public might not believe in the embedded religious beliefs and theology in the ceremony and rituals, and even in the monarchy, their purpose remains to maintain the British Constitutional Monarchy.

[37] Foley, *From Age to Age*, 191.

[38] Spiro Kostof, *History of Architecture: Settings and Rituals* (Oxford: Oxford University Press, 1995), 329; also see Stancliffe, *Church Architecture*, 110-112.

Figure 1.7: St. Denis, an interior photograph of view toward apse.[39]
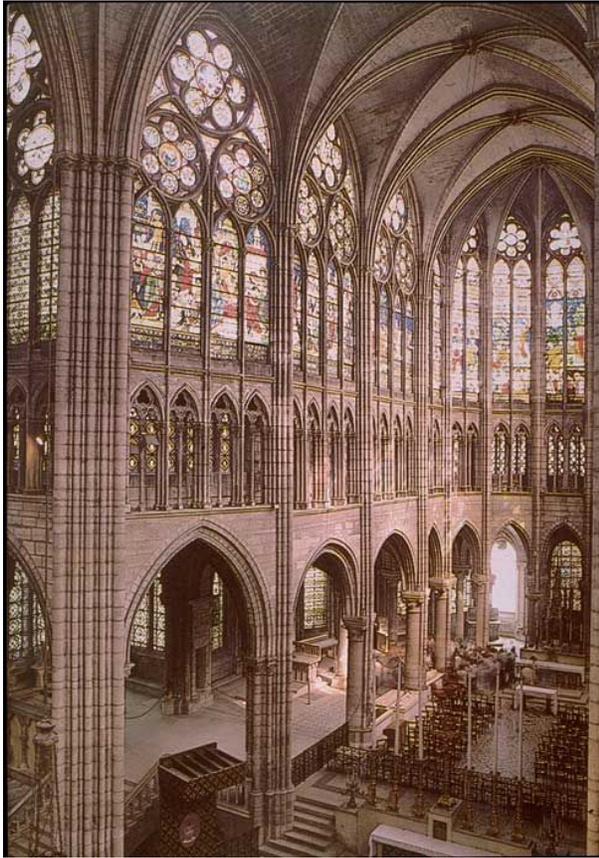
Figure 1.8: St. Denis, A 17th-century drawing by Félibien.[40]
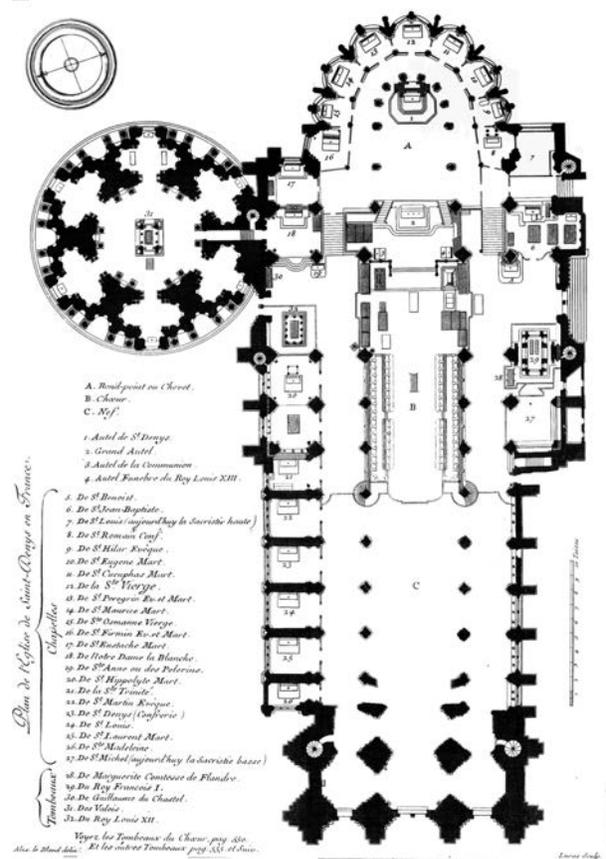
St Denis, while began as a late Romanesque plan, ended up to be what we now called early Gothic. When the building was completed, the windows were filled with colored glass. Abbot Suger wrote, "The entire sanctuary is thus pervaded by a wonderful and continuous light entering through the most sacred windows." Here, the abbot appears to form a new idea; the light illuminating the church's interior is not just natural light, but the true Light, Christ. It is the light that, as Denis the Pseudo-Areopagite said, also illuminating the world. "The new emphasis on light is what distinguishes Gothic architecture, aesthetically and theologically, from the Romanesque."[41]

"Luminous light-filled environment." In reality, however, 'Gothic interiors were not at all bright." Only direct sunlight can penetrate the thick colored stained glass. "Even then it was a

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[39] "Saint Denis," Pinterest, accessed January 15, 2019, https://www.pinterest.es/pin/421931058830818604/.

[40] Alison Stones, "France: Abbey of Saint-Denis: Maps, Plans and Drawings," Images of Medieval Art and Architecture, University of Pittsburg, accessed September 21, 2018, http://www.medart.pitt.edu/image/france/st-denis/plans/sdenmap.html.

[41] Kostof, *History of Architecture: Settings and Rituals*, 330-332.

muted, chromatic illumination they engendered. It was precisely that this rich, deep, encrusted transparency that recalled the bejeweled structure of heavenly Jerusalem." This is *lux nova,* the "new light," Christ. The heavenly light shines with the glory of God onto the earthly stone and made it more precious. That is the image the Abbot Suger hoped to evoke when seeing the colored light appears on the stone walls of St Denis. As such, the theology that emerged in the viewer's mind is that even if they are "caged" in the stone church, with the aid of the very material that encased them, they are released into the "new light" and come to know the truth.[42]

Here is a visual experience, visual participation - rather than tactile or bodily. I would argue that architecture and liturgy developed through the Middle Ages had emphasized a greater separation between the ethereal and earthly, sacred and profane, and clergy and laity. Therefore, the visual and auditory are only the senses that the majority of the faithful can employ to experience, and some extents, participate in the sacred liturgy at St Denis at the time. Hence, illumination and space play a significant role in helping to represent and shape the way the lay faithful encounter, experience, and to some extent, participate in the divine.

2. *Liturgical movements and processions in (and around) Gothic churches*

Figure 1.9: Durham Cathedral.[43]   Figure 1.10: Chartres Cathedral.[44]
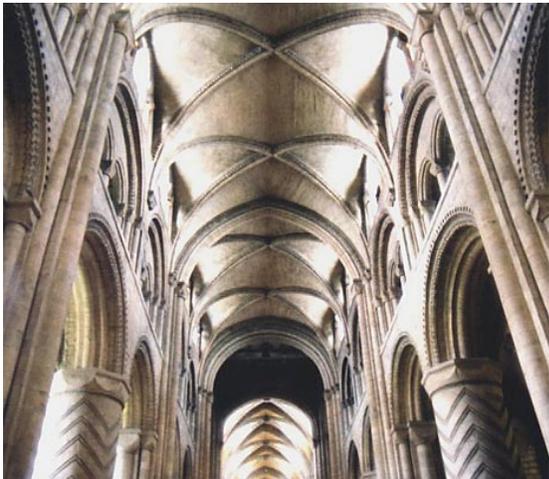
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[42] Kostof, *History of Architecture: Settings and Rituals*, 331-332. For documentation and commentary on Abbot Suger's writings on the abbey church of St. Dennis, see Gerda Panofsky-Soergel, *On the Abbey Church of St.-Denis and Its Art Treasures*, 2nd ed. (Princeton: Princeton University Press, 1979).

[43] Robert Gibbs, "Scottish Gothic Churches and Abbeys," Department of History of Art, University of Glasgow, accessed September 21, 2018, https://www.gla.ac.uk/departments/gothic_open/img_html/drmint3.htm.

[44] Photograph by Lawrence Lew, in "Chartres," Flickr, August 13, 2014, accessed April 20, 2020, https://www.flickr.com/photos/paullew/14810177740/in/album-72157646710072541/.

One can argue that the vision for greater illumination had already begun in the late Romanesque period, for example, the Durham, Salisbury, and Chartres Cathedrals. These are some of the church buildings that seen to be the bridge between Romanesque and Gothic. A later Gothic church building, such as Chartres Cathedral, can be considered as a definite departure from Romanesque.[45]

Other than luminosity - signifying the encounter with the divine, as referenced earlier, Foley suggests that Gothic church architecture expresses the divine order in stone.

> "The Gothic cathedral is an architectural synthesis of the divinely ordered universe. Internally, for example, the building was well ordered, with each individual part integrated into the whole. Within the medieval universe, every person had a specific place and function ordained by God. The Gothic cathedral embodied this hierarchical vision. It acknowledged and accented the centrality of the priest and the masteries he enacted within the sacred precincts of the sanctuary."[46]

Figure 1.11: Floor plan of Canterbury Cathedral. [47]

Figure 1.12: A medieval procession
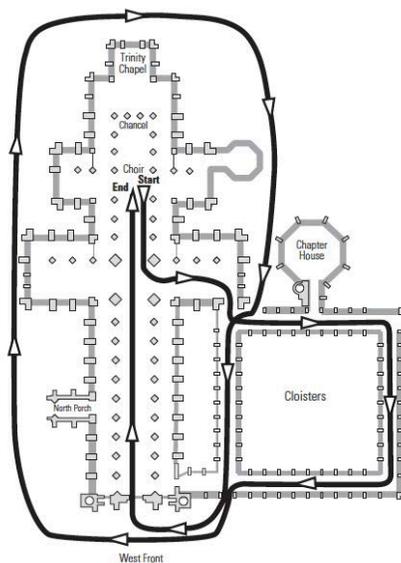
41. The medieval Palm Sunday procession at Salisbury Cathedral used the entire building, inside and out. The route was dictated by the Sarum Use, the official liturgy of the cathedral.
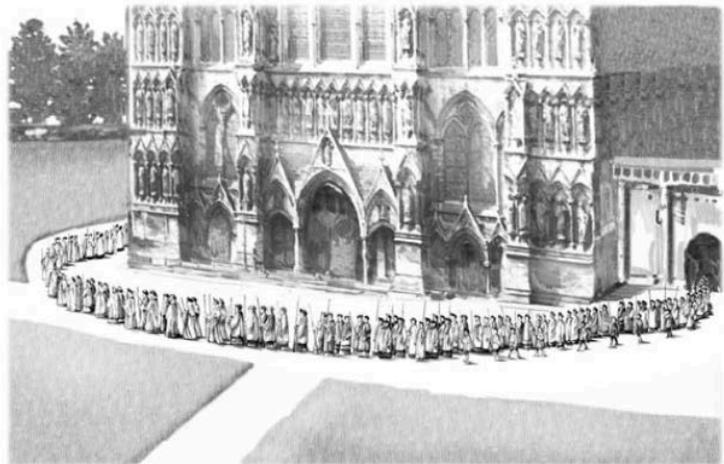
40. An artist's rendering shows how a medieval procession at Salisbury might have looked.

As such, the architecture, is unavoidably a controlled environment, can "also personified a notable degree of liturgical exclusion" (rightly or wrongly looking at it from a 21st-century post-Vatican II perspective).[48] One's proximity to the altar determines one's importance in the relationship with the divine. "The distancing of the laity and even the various orders of clergy

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[45] Stancliffe, *Church Architecture*, 112.
[46] Foley, *From Age to Age*, 193.
[47] Figures 1.11 & 1.12 are reproduced from Robert Scott, *The Gothic Enterprise: a guide to understanding the medieval cathedral* (Berkeley: University of California Press, 2011), 165-170.
[48] Foley, *From Age to Age*, 193

from the altar during the Eucharistic celebration was a clear message about the degrees of holiness or unworthiness in the medieval church."[49] This procession resembles that of the Cluny Abbey in the exiting and reentering the church building, yet different in that it also circulated the church building in addition to the cloister. Robert Scott suggests that while this procession is a commemoration of Christ's triumphal entry into Jerusalem, it also serves as a way of protecting the sacred space or building.[50]

Figure 1.13: West façade of Salisbury Cathedral.[51]

Looking at Salisbury's exterior, we see that there are holy statues on the west façade (Figure 1:13 to the left). It would be reasonable to observe that this is a part of the significant continuation from the Romanesque church design. This delineation between the sacred and profane (or worldly) was also a considerable shift over time from the early Byzantine, not only in the architecture but the liturgy as well. The processions and "stational liturgy" were part of a larger liturgical celebration that involves the urban centers.[52] On the other hand, the medieval procession was more restricted to the vicinity of the sacred site and for additional purposes. It also seems that the medieval church has solidified the compression of the stational liturgy into and around a sacred space.[53] At the same time, and perhaps most

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[49] Foley, *From Age to Age*, 193.

[50] Scott, *The Gothic Enterprise: a guide to understanding the medieval cathedral*, 169-170.

[51] Image reproduced from the photograph by Jonathan Player in Jenifer Conlin, "In Salisbury, England, A Spire and Inspiration," *New York Times*, December 24, 2008, https://www.nytimes.com/2008/12/28/travel/28dayout.html.

[52] A stational liturgy is a particular kind of liturgy (or liturgical phenomenon) that resulted from the interaction between Christian worship and the city. There are several keys aspects that consist the historical stational liturgy. First, it was presided over by a bishop or his representative. Second, it was mobile, which involves moving from one place to another, church or shrine. Third, the choice of site depends on the choice of "feast, fast or commemoration being celebrated." Fourth, it was "*the* urban liturgical celebration of the day. All other services of worship were subordinate to it both in scale and style." For background definition of the stational liturgy, see Baldovin, *The Urban Character of Christian Worship*, 35-38.

[53] To help one's understanding of the historical significance of the religious processions in the Middle Ages is to reenact a Palm Sunday procession. One such excellent presentation of this was the 2015 performance in the New York MET's Cloisters. The performance was a reconstruction of the procession that took place in the city of Chartres, France, ca. 1190. See Metropolitan Museum of Art Cloisters, "Palm Sunday Procession, Chartres, ca. 1190,"

importantly, being at the center of the liturgical space, the altar is not only symbolizing the Eucharist, but it is also the physical center of the Liturgy of the Eucharist. It marks the *focus* of the liturgical space. The altar is the place marker and place maker. It is where the procession, such as the medieval Palm Sunday procession, begins and ends. The altar draws people into the sacred realm and then sends them back out into the world.

IV. Unidirectional liturgy: visual and theological focus - Trent

The Neo-Classical/Renaissance liturgical space began to open up the Gothic "shrine,"[54] which allowed a more unobstructed view of the liturgy of the Eucharist, while the clear separation between the clergy (with his minsters) and laity, remains. The most significant Roman Catholic Church building during the transition between Renaissance and Baroque is St. Peter's Basilica in Rome. It began as a Renaissance design and completed as an early Baroque church. James F. White argues that the gradual shift from Gothic to Baroque church architecture had been the most "startling change" in "Roman Catholic worship [that culminated] in the last third of the sixteen century."[55] Nevertheless, the position of the altar in the liturgical space (namely in the chancel/sanctuary, as distinct from the nave) has generally remained at the same since the Gothic period.[56] At the same time, the Renaissance/Neo-Classical arrangement of the chancel revealed much more of itself and hence the altar.

The open chancel of "the centrally planned churches" can be seen in the Santa Maria del Calcinaio in Cortona (1485-1513), Italy (Figure 1.15), built with a basic Greek cross plan with a high dome over a central square, the more Classical church of San Giorgio Maggiore in Venice (1556-1610) (Figure 1.16). Michelangelo's design began with the Greek cross form and finished building by Bramante of St. Peter's Basilica in Rome (1506 – 1666) in the Latin cross plan.[57]

(commentary by Xavier Seubert and performance by John Baldovin et al.), March 28, 2015, videos, accessed April 20, 2019, https://www.metmuseum.org/metmedia/video/collections/med/palm-sunday-procession-performance.

[54] J. F. White, *Roman Catholic Worship*, 2.

[55] J. F. White, *Roman Catholic Worship,* 2. The term "culmination" inserted into this quote is reflective of Stancliffe's suggestion that the period from classical to Baroque shows the "evolution of the centrally planned churches." In David Stancliffe, *Church Architecture* (Oxford: Lion Hudson PLC, 2008), 171-176.

[56] It would be helpful to point out this aspect at this time, as the paper discusses later that in many post-Vatican II centralized liturgical space, there is little or no distinction between the chancel (as such) and the nave. Although not always consistent, it seems that the smaller the space, the lesser distinction between the chancel and nave. The priest presider, ministers and the lay faithful occupy the same liturgical space, rather than separate.

[57] Stancliffe, *Church Architecture*, 171-176;

Figure 1.14: St. Peter's Basilica, plan (c. 1908).[58]
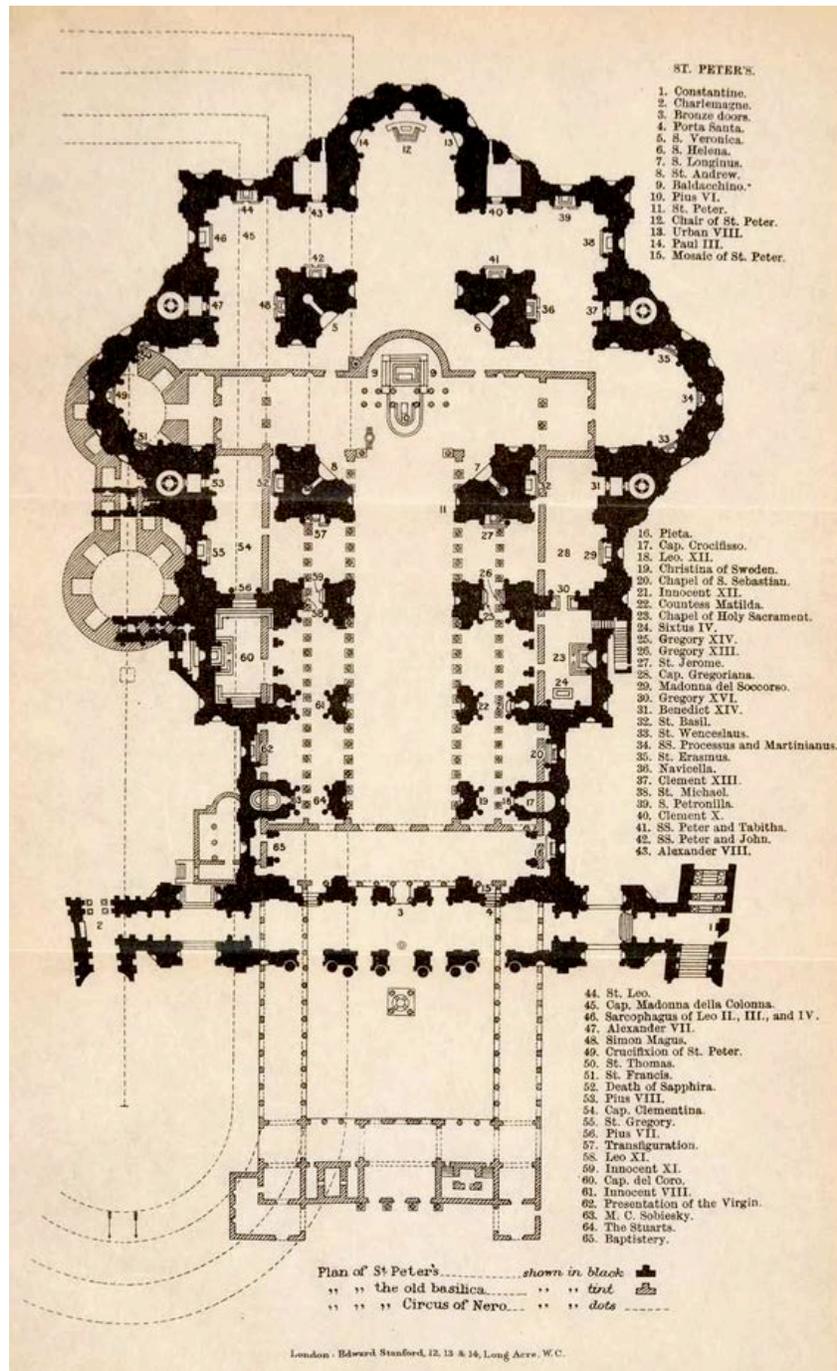
Figure 1.15. Santa Maria del Calcinaio, interior.[59]   Figure 1.16: San Giorgio Maggiore, interior.[60]
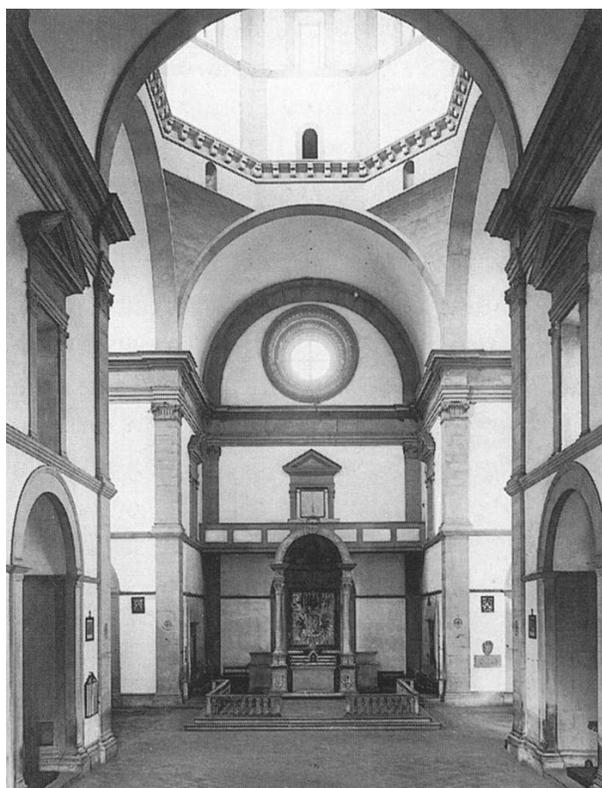
In each of these designs, particularly the Santa Maria del Calcinaio, it shows the open chancel, with minimal separation between it and the nave and transept. They represent a startling different from their medieval predecessors, where a choir and screen separate the lay faithful with the clergy. Ironically though, as Stancliffe comments, these interiors offer little to encourage movements. "There is no succession of spaces to draw you forward, no screen to pass through, no changes in level or lighting." The space completely revealed itself to the observer, and there appear little needs to move about to discover it.[61]

However, it is uncertain as to what sort of movement Stancliffe refers to, as this thesis is interested in ritual/liturgical movements. It can be assumed that Stancliffe probably contrasts the successive spaces that characterize Gothic church architecture (with side aisles and ambulatory, which promote movements) to the open plan style of late Renaissance and early Baroque

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[59] "Art in Tuscany," *Traveling in Tuscany* (blog), accessed December 12, 2018, http://www.travelingintuscany.com/art/francescodigiorgiomartini.htm.

[60] Photograph by Gilbert McCarragher in "John Pawson creates installation in Palladio basilica," Phaidon, accessed December 12, 2019, https://www.phaidon.com/agenda/architecture/articles/2013/june/05/john-pawson-creates-installation-in-palladio-basilica/.

[61] Stancliffe, *Church Architecture*, 172.

churches. It seems that these churches may not have been popular pilgrimage churches. One such is St Peter's Basilica, which has numerous side altars. From looking at the plan above, it is apparent that these side altars were designed to blend in with the structure of the Basilica, giving the central altar (over St. Peter's tomb) the most prominent position, the visual center, in the basilica. While the completed Basilica has the element of the Latin cross form, the centralized plan and Greek cross remain apparent. These features help to retain the centralized plan, at the same time, shape movements to and around the central high altar. Nevertheless, by the mid to late 16th century, the high altar is pushed against the apse and provided with an unobstructed view from the nave.

Figure 1.17: The Gesù, interior view toward the apse.[62]   Figure 1.18: The Gesù, ceiling.[63]

As such, the open church plan is even more apparent in Baroque churches, particularly the Gesù, which many considered to be the beginning of Baroque (see Figures 1.16 and 1.17). While the Baroque altar might be the visual center, it is not the physical center of the liturgical space. Be it as it may, in responding to the Protestant reformation, the Gesù was designed for grand and spectacular liturgies as part of highlighting and reinforcing the Roman Catholic identity that was distinct to that of the

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[62] Photograph by the author.
[63] Photograph by the author.

Protestants.[64] Over time, it's decorations and artworks also served as a powerful evangelization tool. Liturgy, in this sense, was very different from that of the Gothic. Correspondingly, the architecture and arts were a significant contrast to those of the Medieval.

Figure 1.19: San Fedele, Milan, interior view toward apse.[65]

When considering the influence of the new theatrical art – opera, which became popular at this time, it would be reasonable to argue that the architecture appeared to have been developed alongside the liturgy toward a unifying spectacle. Instead of opera theater with its stage set, the altar became the visual focus in the open chancel, with the elaborate reredos as background. Hence, the drama is the liturgy. The priest presider and ministers, wearing elaborate vestments, perform the liturgical spectacle. Of course, music composed at the time fittingly contributed to the spectacular liturgy. With all of this, the lay folks had little to do other than observed in awe at the liturgy, or pray privately.[66]

In general, for Roman Catholic churches where preaching was increasingly important, two crucial architectural changes corresponded to the post-Reformation liturgical practices.[67] First, since the Jesuits were dispensed with the obligation to recite the liturgy of the hours in

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[64] Seasoltz, *A Sense of the Sacred*, 173.

[65] Photograph by author.

[66] John Harper, *The Forms and Orders of Western Liturgy from the 10th to the 18th century* (Oxford: Clarendon Press, 1991), 160; Seasoltz, *A Sense of the Sacred*, 172-173; J. F. White, *Roman Catholic Worship*, 2, 12-15.

[67] More preaching was a Catholic's response to the Protestant reformation. And, the pulpit was generally for preaching but not for the proclamation of the Gospel, as the Gospel is proclaimed in the *presbyterium* (or in front of the chancel) without an ambo. For a summary of the Protestant critique, liturgical reform, and Catholic response (from the Council of Trent to the *Rituale Romanum* of 1614), see Nathan Michell, "Reforms, Protestant and Catholic," in *The Oxford History of Christian Worship*, ed. Geoffrey Wainwright and Karen B. Westerfield Tucker (Oxford: Oxford University Press, 2006), 317-343.

common, there was no need for a choir stall in their churches, thereby giving the altar full exposure.[68]

Second, as the Jesuits and other religious orders such as the Dominicans had put greater emphasis on preaching, pulpits became more common in their churches. As such, sermons often accompanied Eucharistic adorations. Hence, the architecture responded by locating the pulpit in the body of the church to give the congregation better hearing (see Figure 1.19 in the previous page).[69] At the same time, the altar, located at the apse with no visual obstruction (as in rood screen), with the tabernacle affixed on it, giving the congregation a clear visual connection to the Blessed Sacrament (whether exposed in a monstrance or reserved in the tabernacle).[70]

As Baroque architecture expanded expeditiously in Europe and the Americas in the 17th century, "enormous emphasis was placed on outward and visible splendor" of public devotions and liturgical practices. This was a marked contrast to the inwardness that characterized medieval piety and liturgy.[71] As a result, the Baroque church "provided the most dynamic expression of this new piety." Here, the church building served as "God's audience chamber," where "the altar became Christ's throne, from which God Incarnate reigned in solemn majesty."[72]

As such, when Rococo architecture emerged in the late 17th century, the "throne room became even more ornate."[73] Hence, the altar became lost in the splendor of the *reredos* and surrounding decorations. It was no longer the singular object devoted solely to the liturgy of the Eucharist as in the early Church, at the same time trebled in function compared to its medieval

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[68] However, in San Fedele, the Jesuit church in Milan, built between 1527-1596 (see Figure 1.19), a choir is located in the apse, behind the chancel, as the design was commissioned before the Jesuits were founded. Kevin Seasoltz also noted that other (non-Jesuits) Baroque churches also do not have a choir stall, or if they do, it was placed elsewhere in the body of the church. See, Seasoltz, *A Sense of the Sacred*, 172.

[69] Photograph by the author.

[70] Seasoltz, *A Sense of the Sacred*, 172; Frank Senn, *Christian Liturgy: Catholic and Evangelical* (Minneapolis: Fortress Press, 1997), 529.

[71] For elaborations on the architecture catered to medieval piety, see Seasoltz, 173, and Senn, *Christian Liturgy*, 529 (i.e., the compartmentalized devotions and worships conducted simultaneously in different parts of the medieval church by individuals and groups – clergy, nobles or laity in general.)

[72] J. F. White, *Roman Catholic Worship,* 26-28; also see Seasoltz, *A Sense of the Sacred*, 172; and Senn, *Christian Liturgy*, 491. Nevertheless, the opening up the chancel was not strictly a Baroque phenomenon, which already began in some late Renaissance churches, and one such is San Giorgio Maggiore in Venice (1556-1610). (Of course, if one needs to look even further back, the early Christian basilica churches have the first centralized plan.) At the same time, the highly elaborate *reredos* and altar serve as a throne for the exposition of the Blessed Sacrament. Unlike Gothic architecture, which serves to shield the "holy," Baroque architecture exposed the "holy." Despite Pugin's attempt to return to shield the holy with rood screen, he was met with resistance. Of course, the ability to be in proximity and contact with holy remained the privilege of the clergy and ministers.

[73] J. F. White, *Roman Catholic Worship,* 49.

altar.[74] There were undoubtedly daily Eucharistic celebrations in the church, and "in most parishes there was one high Mass on Sundays, sung by priest and choir, with little participation and not much comprehension by the laity of the action of the liturgy."[75] At the same time, the laity was able to receive communion at any time during the Mass or at a "communion Mass" in the early hour of the day (provided that they have been to confession prior).[76] While the focus is on the sanctuary/chancel, the altar is lost in the spectacular *reredos* along with the dramatic liturgy performed by the priests and ministers in splendid vestments accompanied by music and choir chanting. The altar had lost its primary function as the place for the Liturgy of the Eucharist and symbol of the Eucharistic sacrifice. Hence, any ritual movements to and around, or rather, in front of the altar, were strictly the function of the clergy and ministers. This architectural setting and liturgy last for centuries until the early 20th century. The next section discusses the architectural response to the liturgical reforms of Vatican II.

V. Participatory liturgy: active and conscious participation in the liturgy and the liturgical space – the Modern period and Vatican II

1. The modern period between the two World Wars

While the style battle between Neo-Gothic and Baroque ensued in the United States in the early 20th century, Europe looked to create a new architecture for worship, as to respond to Pope Pius X's 1903 *Mortu Propio* on sacred music, *Tra le Sollecitudini*:

> It being our desire to see the true Christian spirit restored in every respect and preserved by all the faithful, we deem it necessary to provide before everything else for the sanctity and dignity of the temple, in which the faithful assemble for the object of acquiring this spirit from its foremost and indispensable found, which is the active participation in the holy mysteries and in the public and solemn prayer of the Church.[77]

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[74] J. F. White, *Roman Catholic Worship,* 26.
[75] J. F. White, *Roman Catholic Worship,* 37.
[76] J. F. White, *Roman Catholic Worship,* 37.
[77] Seasoltz, *A Sense of the Sacred*, 172. Underlined text by the thesis' author.
    In his thesis, Gilbert Sunghera offers a brief, yet concise background and overview on the modern liturgical reform, the 20th century Modern Liturgical Movement, the debate on the contemporary reform in the late 20th to early 21st century, and the architectural impact of the Modern Liturgical Movement. See Gilbert Sunghera, "The Shifting Location of Transcendence in Church Architecture: How Rudolf Schwarz Can Once Again Influence the Modern Debate of Church Design, as Illustrated in the Shifting Language of Environment and Art in Catholic Worship (1978) and Built of Living Stones (2000)" (master's thesis, Yale University, 2005), 8-21.

Even though briefly interrupted by World War I, the liturgical movement that had begun in the 19th century now gathered momentum in the early 20th, particularly in France, Germany, and Switzerland. The post-WWI period saw optimism and renewal, of recovering a more genuine sense of tradition. It was "peeling away the later layers of traditions [since the Middle Ages] or interpretation to get at some supposed central core," and reviving the patristic study in the liturgy.[78]

Figure 1.20: Hall interior with the liturgical arrangement.[79]

Three aspects that have had a significant influence on the subsequent church designs in the post-WWI period were: the priest celebrant faces the people across the freestanding altar table, the offertory procession of the faithful, and the communal and initiatory character of baptism.[80] Others would interpret that church architecture created in this period as a result of the architects' rejection of traditions.[81]

Only within a space of ten years after WWI, Europe saw an emergence of new forms of church building. First among them, the work of Romano Guardini and Rudolf Schwarz: renovation of the castle at Schloss Rothenfels-Main, 1928 (see Figure 1.20 above). While there was a dedicated chapel, the larger hall was occasionally used for the liturgy.

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[78] Senn, *Christian Liturgy*, 609-610. For an extensive discussion on the history of art, architecture and liturgical reform, and liturgical movements in the United States in the 20th century – particularly the Liturgical Arts Society (1928-1972), see Susan J. White, *Art, Architecture, and Liturgical Reform* (New York: Pueblo Publishing Company, 1990).

[79] Hugo Schnell, *Twentieth Century Church Architecture in Germany* (Munich: Verlag Schnell & Steiner, 1974), 67.

[80] Seasoltz, *A Sense of the Sacred*, 204-241; Stancliffe, *Church Architecture*, 245-246; White, *Roman Catholic Worship,* 88-89.

[81] Stroik, "Church Architecture Since Vatican II."

Hence, it allowed for a more flexible arrangement of the worship space.

> If a Eucharist was being celebrated, a provisional altar was set up in such a way that the people could gather around it on three sides. The presider closed the circle by facing the community from behind the altar. The liturgy, as celebrated in the space, was certainly a celebration of the whole assembly; it was expressed with great simplicity and flexibility. Hospitality surely took precedence over monumentality, and the community took precedence over objects. Both the distinguished community that gathered with Guardini and the liturgical space had significant influence in Germany and Switzerland.[82]

The liturgical setting of this space characterizes several central aspects in the subsequent development in modern church architecture that responded to the gradual liturgical reforms of the 20th century and culminated with those of the Second Vatican Council. Firstly, the freestanding altar placed further from the wall allows the congregation seating to be closer to the altar as well as surrounding it on three sides. Many subsequent modern churches in Germany follow this model.[83] Secondly, since the altar was freestanding, it became much less monumental (compare to those of the Baroque or even Neo-Gothic). This shifted the visual focus from the priest and ministers as the primary liturgical actors to the liturgical actions of the whole assembly, which includes the people, clergy, and ministers. Thirdly, as the liturgical settings had changed, and thus promote a greater sense of a community of worshipers (rather than spectators). As such, the liturgical actions of the community that celebrates the Eucharist gingerly began to take center stage.[84] The Eucharistic celebration is at the center of the community's faith life, and the architecture is a significant expression of this (even though at this stage, as the rubrics to the Mass had yet to change, where the clergy and ministers were still performing the significant parts of the liturgy). As such, the visual elements relating to the community's private devotions were absent from much of the modern Catholic worship space, at least in those churches in Germany and Switzerland during this time.[85]

Several churches built from the 1930s to 1950s in Germany, Italy, and the United States expressed this new direction in the liturgy. The common construction feature in these churches is primarily reinforced concrete, at least for the European church buildings. This is a significant

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[82] Seasoltz, *A Sense of the Sacred*, 240-241.

[83] See Schnell, *Twentieth Century Church Architecture in Germany*.

[84] "Gingerly" is used to mean that liturgical reforms at this stage in the early 20th century mostly occurred in specific communities (primarily monastic and religious).

[85] This was not a universal development in Europe. Post-WWII modern churches in Italy, particularly those in Milan (built before and after Vatican II), varied as to the display of religious and devotional artworks. See, Marco Borsotti, *Chiese e Modernità* (Milan: Solferino Edizioni, 2015). It was likely due to cultural factors more than theological or liturgical ones.

post-war development. As such, this allowed architects to explore new forms of building envelop and spatial arrangements that were not possible in the 19th century.[86]

Among the early pioneers, Dominikus Böhm designed St. Englebert, in Riehl, completed in 1935. It has an open circular plan that suggests a more communal setting, with the visible chancel inviting greater intimacy to the liturgy. Yet, while the altar is freestanding, the high altar remains remote as it was placed at the back of the apse.

Onward to the post-World War II period, and it is, in a sense, very similar to that of the 1920s, to begin again in both liturgical reform and architecture.[87] St. Mark's Church in Burlington, Vermont, completed 1944 (by Freeman, French, and Freeman, is considered to be the first pre-Vatican II modern church in the United States (see Figure 1.21 below).[88]

Figure 1.21: St. Mark, interior photograph.[89]

The altar, centered on a Greek-cross plan, is surrounded by three sides of seating, the choir and the pulpit on the fourth. St. Mark's was ahead of its time. And so are some of the other modern churches discussed in this thesis.[90]

The last example is the church of Santa Maria Nascente in Milan, completed in 1955 (by Vico Magistretti and Mario Tedeschi) (see Figure 1.22 on the next page).

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[86] Other than Notre Dame du Raincy in France, Dominikus Böhm's St. Englebert in Cologne-Riehl (1932) shows a circular plan with tall concrete arches form the structure.

[87] White, *Roman Catholic Worship,* 101-103.

[88] White, *Roman Catholic Worship,* 77, 103.

[89] "Dialogue Mass – XIII, The Appeasement Process: Feeding the German Crocodile," Tradition in Action, November 5, 2014, https://traditioninaction.org/HotTopics/f088_Dialogue_13.htm.

[90] For extensive discussions on modern/post-war liturgical architecture of the first half of the 20th century, see Schnell, *Twentieth Century Church Architecture in Germany*, Hammond, *Liturgy and Architecture*, and, Joseph Pichard, *Modern Church Architecture*, translated by Ellen Callmann, (New York: Orion Press, 1960). Currently, the Parish of St Mark is planning to renovate the church. The new plan retains the central chancel and altar. At the same time, it shifts the tabernacle center to the wall on the fourth side behind the altar. See the parish website: https://www.stmarksvt.com/56.

Figure 1.22: S. Maria Nascente, floor plan.[91]
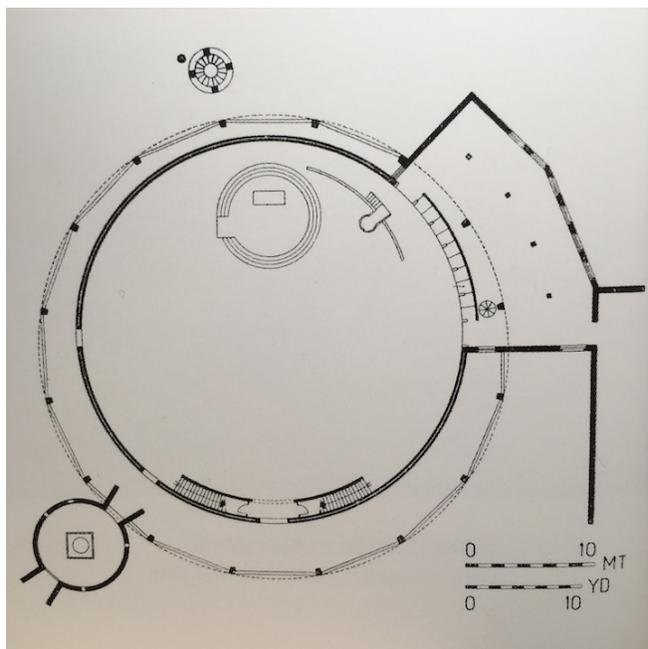
In the floor plan view, the design features two circles – the exterior envelope and interior worship space. In that is the circular chancel delineated by a slightly raised dais with the single freestanding altar. The cylindrical pulpit was placed to the right of the chancel, where the choir gallery surrounds the circular space below.[92]

These examples discussed here stand out, not because they have a new geometric form that is drastically different from those of the earlier age, but because they were built from the liturgy of their time, or at least, at the stage of liturgical reforms of their time. Each of the buildings, including the liturgical setting for the Hall at the castle at Schloss Rothenfels-Main, shows, on the one hand, a definitive break from or at least significant reinterpretation of the traditional architectural forms to respond to the changes in the liturgy, particularly that toward greater active participation. On the other hand, particularly with the church of Santa Maria Nascente, the new form remains in tension, to this day, both with the traditional ideas of church architecture and liturgical practices that are so engrained in the Roman Catholic DNA, so to speak. At the same time, considering the proposed renovation to St. Mark's church in Burlington appears to be quite sensitive to the historical value of the architecture. It could also mean that a certain form of liturgical architecture makes inflexible any future changes to the location of the main altar. That is a subject discussed in subsequent chapters in this subject.

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[91] Borsotti, *Chiese e Modernità*, 24.

[92] Despite everything in this church calls for a more circular/radial congregation seating, the early setting has straight pews facing the altar. The design sketches appear to propose a semi-circular seating arrangement. See, Marco Borsotti, *Chiese e Modernità*, 23. A 21st-century renovation to the church shows the pulpit removed, and straight pews remain. Interestingly enough, the circular altar rails also remain. Also, an altar against the wall with an attached tabernacle, along with new altar rails, was added to the left of the chancel. See the parish website for recent photos: http://www.marianascente.it/2018/.

The examples, of some modern church buildings above, show that the altar had clearly and finally wrestled itself from the wall and had returned to be the singular focus of liturgy of the Eucharist and symbol of Eucharistic sacrifice. With that, by reducing the altar's monumentality and thereby, in conjunction with the new form of a centralized plan, the architecture reemphasizes the communal nature of liturgical worship and Eucharistic hospitality. This era signaled the beginning in the spatial redefinition of the relationship between the clergy/minister and laity as one community worshiping in one sacred space.

2. *Vatican II*

The Vatican II liturgical reforms were instituted and implemented through three key documents: *Sacrosanctum Concillium*, Vatican Council II "Constitution on the Sacred Liturgy," 1963 (hereafter *S.C.*), *Inter Oecumenici*, issued by the Sacred Council of Rites (Instruction on liturgical Norms), 1964 (hereafter *IntOe*), *Instituto Generalis Missalis Romani,* the first edition of the General Instruction on the Roman Missal, 1969 (hereafter *IGMR1969*) (associated with the Order of Mass *Ordo Missae*, 1969).[93] The *SC* is a fundamental Vatican II document outlining the principles and norms for the implementation of the liturgical reforms. Several key aspects are relevant to the topic at hand – first, the promotion of liturgical formation and active participation (Chapter 1, Section II). The full and conscious participation of the sacred liturgy was a paramount concern for the Council as it emphatically stated in Article 14 of *S.C.* Thus, to do so, it desires for the liturgical formation of not only the laity but also those with pastoral responsibilities.[94] The Church has to be (re)formed for the new liturgy that it participates in. Second, Section III in the same chapter sets out the norms for the implementation of the reform of the sacred liturgy. Here, it emphasizes that "sacred scripture is of the greatest importance in the celebration of the liturgy."[95] As such, the liturgical space should be designed so that sacred scripture can be heard and seen proclaimed prominently in the liturgy. Thirdly, along with calling for the forming of commission for sacred music and art at the local churches, the Council instituted norms regarding sacred art and furnishings in the last chapter of the *S.C.*[96] Here, the principle for church design is laid down in Article 124, "And when churches are to be built, let

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[93] Abbreviations used here follow the convention of Edward Foley, Nathan D. Mitchell, and Joanne M. Pierce, eds. *A Commentary on the General Instruction of the Roman Missal* (Collegeville: Liturgical Press, 2007), xiv-xvi.
[94] Vatican Council II, The Constitution on the Sacred Liturgy *Sacrosanctum Concilium* (4 December 1963) §14-20, in Vatican Council II: Constitutions, Decrees, Declarations, ed. A. Flannery (Northport: Costello Publishing, 1996).
[95] Vatican Council II, *Sacrosanctum Concilium*, §24.
[96] Vatican Council II, *Sacrosanctum Concilium*, §46, §122-130.

great care be taken that they are suitable for the celebration of liturgical services and the active participation of the faithful."[97] It also stipulates that "the cannons and ecclesiastical statutes which govern the provision of the externals of sacred worship should be revised" as these laws govern the "construction of sacred buildings, …, the design and construction of altars." The Council also added that laws not suited to the reform should be corrected or abolished. Whereas, "those which foster [the reformed liturgy] are to be retained, or introduced if lacking."[98]

IntOe is the instrument for the carrying out of "the directives of the Constitution [on the Sacred Liturgy] and of *Sacram Liturgiam* and to provide the means for interpreting these documents and putting them into practice." It also directs that the conferences of bishops take up the responsibility to carry out the tasks with due competency.[99] *IntOe* generally follows the structure of *S.C.* The last chapter, V, provides instructions on "designing churches and altars to facilitate active participation of the faithful." It stipulates that the altar "should be truly central so that the attention of the whole congregation naturally focusses there." It also specified that the presidential chair should also be clearly visible, "and that makes it plain that the celebrant presides over the whole community." As mentioned earlier regarding *S.C.*'s emphasis on the prominent place of sacred scripture in the liturgy, *IntOe* states that "there should be a lectern or lecterns for the proclamation of the readings, so arranged that the faithful may readily see and hear the minister." At the same time, the place of the lay-faithful should be arranged to "assure their proper participation in the sacred rites." These instructions, then, reflected in *IGMR1969* (and subsequence editions of *IGMR*) to be implemented in the local churches.[100] Chapter Two will discuss the relevant parts of the Instruction on the Roman Missal for the dioceses in the United States (2010), and the United States Conference of Catholic Bishop's guidelines on art, architecture and worship - "Built of Living Stones" (2000).

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[97] Vatican Council II, *Sacrosanctum Concilium*, §124.

[98] Vatican Council II, *Sacrosanctum Concilium*, §128.

[99] Catholic Church – Sacred Congregation of Rites, "*Inter Oecumenici,*" *The Catholic Liturgical Library,* accessed April 17, 2020, http://www.catholicliturgy.com/index.cfm/FuseAction/documentText/Index/2/SubIndex/16/ContentIndex/379/Start/378.

[100] For a historical background on and evolution of the *IGMR*, particularly the immediate post-Vatican II period, as well as *IGMR1969*'s relationship with *IntOe* and *Ordo Missae 1969*, see Nathan D. Mitchell and John F. Baldovin, "*Institutio Generalis Missalis Romani* and the Class of Liturgical Documents to Which It Belongs," in Edward Foley, Nathan D. Mitchell, and Joanne M. Pierce, eds., *Commentary on the General Instruction of the Roman Missal*, 1-27.

In the ecclesial context discussed above, the new architecture that emerged in responding to Vatican II's liturgical reforms appears to have had a relatively less traumatic transition likely due to the progress of liturgical architecture made in the first half of the 20ᵗʰ century.[101] However, there are three keys aspects of the liturgical space that are new or further developed from those before Vatican II.

The first, and most importantly, as the priest presider was no longer facing the liturgical east, away from the people, the freestanding altar is brought forward in the chancel if there is not enough space for the presider. In churches where the high altar was attached to the wall, a new altar was built. At the same time, the architecture responded accordingly to the clear distinction between the central parts of the Mass, the Liturgy of the Word and the Liturgy of the Eucharist, by making appropriate provision for the ambo as a prominent place so that the Liturgy of the Word is solemnly presented.

Second, the spatial separation between clergy/ministers and laity in a worship space is significantly reduced as existing church buildings made the transition to the reformed liturgy. The reception of communion by the hand while standing had made the communion rail obsolete. This was a significant development in helping to unify the worship space. Modern churches built after WWII, especially those mentioned in the previous section, make a natural transition to a post-Vatican II worship space.

Third, at the same time, a greater emphasis on the distinct roles of the people gathered to worship; the lay faithful, priest presider, choir, and musicians, lectors, servers. The people's roles indicate and guide their participation and responsibility in the liturgy, and not the areas in the worship space. As such, he clear separation of areas in the worship space became less critical. Hence, the shift from a strictly hierarchical to a more communal liturgy subverts the spatial hierarchy of the pre-Vatican II worship space.[102]

While these three keys aspects might appear rather straightforward for 21ˢᵗ-century post-Vatican II Catholics, they were revolutionary shifts. James F. White summaries the immediate period after Vatican II quite succinctly:

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[101] The term "wreckovation" is often used to describe dramatic changes to pre-Vatican II churches.
[102] When observing a Tridentine liturgy celebrated in a pre-Vatican II worship space, it appears that who can be where and when based on their order (hence, roles in the liturgy): priest, deacon, sub-deacon, acolyte, lector. This order and hierarchy are disturbed when the ordinary faithful, who exercise their roles in the liturgy as acolytes, lectors, cantors, or extraordinary ministers of communion, can access the chancel.

> Thousands of churches were found unsatisfactory for reformed worship and underwent drastic renovation. New churches were built on an entirely different principle. God was imaged, not as somewhere out beyond the east window, but as present in the midst of God's people. This produced buildings whose focus said more about immanence than about transcendence. Attention shifted from the church building as the house of God to the house of God's people.[103]

Those rejected Vatican II's liturgical reforms because they truly understood what Vatican II had meant and how it attempted to change the Church as they knew it.[104] Hence, this means that the rejection must also include the liturgical architecture created in responding to the reforms of Vatican II. Since liturgical architecture is inherent to the liturgy, they both contribute to the expression of a particular ecclesiology. Does this mean those who accept Vatican II's liturgical reform must reject pre-Vatican II's liturgical spaces? Yes, emphatically. Therefore, does that mean all pre-Vatican II's church buildings should be destroyed? No, emphatically. However, they would have to be changed and reordered, and most have. The real question is how. And that would be a subject for subsequent chapters in this thesis.

Nevertheless, at the center of this remaining most passionate debate, on how a pre-Vatican II liturgical space to be changed or reordered, is the altar and which direct the presider is facing.[105] To accurately express Vatican II's liturgy and ecclesiology, the main altar cannot be the Tridentine high altar (even if it is a freestanding one). For a post-Vatican II liturgical space, be it a new or reordered one, the altar must be a substantial and distinctive object worthy of expressing that God is indeed in the midst of God's people. At the same time, God is also beyond human living and understanding. As such, it is an incredible challenge for liturgical architecture in general, and the altar, in particular, to symbolically embodied both the immanent and transcendent of God. Hence, the ongoing debate on liturgical architecture is wrestling over these two seemingly competing priorities. As such, those appeared to have accepted the liturgical reforms of Vatican II also loudly lamented about the 'plain church' phenomenon in the late

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[103] White, *Roman Catholic Worship,* 124-124.

[104] See Massimo Faggioli, *True Reform: Liturgy and Ecclesiology in* Sacrosanctum Concilium (Collegeville: Liturgical Press, 2012), 7. In his book, Faggioli argues forcefully that Vatican II's liturgical and ecclesial reforms are inherently related. Thus, those who reject the liturgical reforms, not only because of the liturgical theology but more in how the liturgy expresses the Church, in a completely different way as they had known it.

[105] Dan Hitchens, "Cardinal Sarah asks priests to start celebrating Mass facing east this Advent," Catholic Herald, July 5, 2016, accessed January 14, 2020, https://catholicherald.co.uk/news/2016/07/05/cardinal-sarah-asks-priests-to-start-celebrating-mass-facing-east-this-advent/; Jensen, "Recovering Ancient Ecclesiology"; Neil X. O'Donoghue, *Liturgical Orientation: The Position of the President at the Eucharist. Joint Liturgical Studies 83.* (Norwich: Hymns Ancient & Modern Ltd, 2017); Stroik, "Church Architecture Since Vatican II."

1960s and 70s.[106] (Perhaps they should also include those minimalist church buildings of the prior decades being discussed this paper, and more). Artworks can be helpful in so far as they are made for the liturgical space and the active participation in the liturgy in that space.[107]

In conclusion, sacred arts and things used for divine worship to are to be made "worthy, becoming, and beautiful, signs and symbols of things supernatural." At the same time, they should be made "suitable for the celebration of liturgical services and for the active participation of the faithful."[108] These words from *Sacrosanctum Concillium* were a catalyst for the implementation of the reform of liturgical architecture.

Nevertheless, the implementation of Vatican II's liturgical reform remains in progress as the evidence of liturgical architecture of the last 50 years appears to suggest. It can be disheartened if one only looks at the recent developments that seemed to turn back the reforms. Therefore, it is essential to look back further and see the liturgical movements that had begun 150 years before Vatican II as well as the process of liturgical reforms since Trent, and particularly the architecture that accompanied them. In many ways, the altar stood at the center of this long process of developments and reforms of the liturgy and liturgical architecture, despite being obscured at times. And, in that, the altar had marked the place for the worshiping

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[106] One of those voices is Martin Mosebach. See Martin Mosebach, *The Heresy of Formlessness: The Roman Liturgy and Its Enemy*, trans. Graham Harrison (San Francisco: Ignatius Press, 2006), 74-75.

[107] If there is anything to go by is the "General Instruction on the Roman Missal," particularly §§ 296, 298, 299, and 303. See, "Chapter V: The Arrangement and Ornamentation of Churches for the Celebration of the Eucharist," General Instructions of the Roman Missal, United States Conference of Catholic Bishops, accessed December 12, 2019, http://www.usccb.org/prayer-and-worship/the-mass/general-instruction-of-the-roman-missal/girm-chapter-5.cfm. This means that it would be entirely unacceptable for a church to have a flimsy-looking wooden moveable altar that is quite apparently overwhelmed by a substantial marble high altar behind it. In this particular Jesuit church, the existing high altar currently features faux pine trees and angel statue on top. It is quite apparent while it was decorated as such to mark the Advent season but also to cover up the old tabernacle in an attempt to deemphasize the old altar. Perhaps it had the opposite effect, making the old altar stands out even more (given the flimsy-looking wooden altar in front of it).

At the same time, quite many churches built in the last decades that essentially architectural copies of Byzantine, Gothic, Baroque, and everything in between, which featured a high altar completed with reredos against the 'east' wall along with a freestanding altar of precisely the same architectural style. A recently built Jesuit high school chapel in Florida, in neo-Classical/neo-Baroque open-church style, features a freestanding altar that stood so close to the one behind that make one visually indistinguishable from the other. Nevertheless, the voices similar to those of Mosebach and Stroik often seem to equate beauty with transcendence, which makes what they view as "banal" architecture and arts as unsuitable for divine worship. Their line of argument usually leads to traditional architecture and arts (which they equate as beautiful generally). However complex, it is essential to reflect on and create liturgical architecture today to engender a healthy balance between immanence and transcendence, without resorting to the architectures that are no longer suitable for the post-Vatican II liturgy.

[108] Vatican Council II, *Sacrosanctum Concilium*, §§ 122 & 124.

community to orient and move toward, despite their movement and orientation have been impeded at times.

What Vatican II had done, liturgically and architecturally, was to restore the altar to its rightful place, in the midst of the worshiping community. Nevertheless, the principles of liturgical reform continue to challenge and question the liturgical architecture of the present time on whether it has been able to engender a more participatory liturgy. The next chapter will explore some liturgical spaces in the Archdiocese of Boston to see how the current practices manifest the reception of the liturgical reforms, particularly by the placement of the altar in relation with the worshiping body. In turn, it will also discuss whether visual aspects play a role in active participation in the liturgy. If so, how can a liturgical space be arranged for optimum visual connection and engagement with the Liturgy of the Eucharist?

Chapter Two

Participatory yet axial or unidirectional:

Liturgy of the Eucharist in the Roman Rite and current practices and

preferences in arrangements of liturgical space

in the Archdiocese of Boston

Churches are to be built for the liturgy and the active participation of the worshiping community.[109] It is taken that the liturgical reforms espoused by Vatican Council II include the re-forming, forming again, of the space for liturgical celebrations. While the Council said very little on liturgical architecture, the statement above speaks volumes as to the roles of the liturgical space and architecture in liturgical celebrations. Nevertheless, the Council had hoped that the liturgical reforms would promote the active and conscious participation of the people in the liturgy. Yet, even fifty years after the Council had concluded, the state of the discussion remains divided.

This chapter aims to discuss the liturgical and architectural practices in a local ecclesial context as the present response to, or reception of the liturgical reforms of Vatican II. As such, how the visual aspects play a role in active participation in the liturgy, or do they? How can a liturgical space be arranged for optimum visual connection to and engagement with the Liturgy of the Eucharist?

The first part of the chapter will briefly address the architectural requirements for the Liturgy of the Eucharist in the General Instruction of the Roman Missal (hereafter GIRM) and the United States Conference of Catholic Bishops' "Built in Living Stones" (hereafter, BLS) and Vatican II's Constitution on the Sacred Liturgy *Sacrosanctum Concilium* (hereafter, *SC*).[110] The second part of the chapter will look at four Roman Catholic liturgical spaces in the Archdiocese of Boston and discuss their various spatial arrangements. Post-Vatican II liturgical spaces discussed in this chapter have provided for the participatory liturgy, at least in the basic requirements of the GIRM. Nevertheless, by and large, many of the pre-Vatican II spaces continue to shape a unidirectional liturgy – the assembly faces toward the altar in one direction. In the third part of the chapter, the subjective study shows the need remains for direct and uninterrupted visual access to the presider, his liturgical actions, and objects in the Liturgy of the Eucharist. At the same time, the survey of liturgical spaces in the Archdiocese of Boston shows

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[109] Vatican Council II, *Sacrosanctum Concilium*, §124. For reference also see Australian Catholic Bishops Conference, *And When Churches are to Be Built…': Preparation, planning and construction of places of worship.* (Brisbane: Liturgy Brisbane, 2014). This thesis acknowledges that the understanding of conscious and active participation has evolved since Vatican II. Nevertheless, it can also mean that this understanding remains inconsistent among the laity, as well as the clergy. As such, the liturgical arrangements discussed in this chapter are some expressions of that understanding. At the minimum, active participation can mean that the Mass is celebrated in the vernacular language and the priest presider faces the people at the altar.

[110] Unless otherwise specified, this and subsequent chapters reference the English translation of the 2010 edition of the General Instruction of the Roman Missal for use in the Catholic Dioceses of the United States.

that the level of direct and uninterrupted visual access to the Liturgy of the Eucharist remains inconsistent. Therefore, it would be reasonable to arguable that unobstructed and clear visual access to the Liturgy of the Eucharist is inherent to active visual participation, and hence, a significant part of the overall active and conscious participation in the liturgy. In making this argument, this thesis is presupposing that, in the ordinary form of the Mass, during the Liturgy of the Eucharist at the altar, the priest presider faces the assembled faithful.

I. Architectural and ritual requirements of the *General Instruction of the Roman Missal* on the Liturgy of the Eucharist, "Built of Living Stones," and Vatican Council II's Constitution on the Sacred Liturgy *Sacrosanctum Concilium.*

As mentioned in the introduction to this chapter, the liturgical space should be designed for the active participation of the faithful. And, as such, the GIRM provided for the arrangement of the liturgical space with this purpose in mind.[111] The central statements on the altar and its placement are found in § 296, 298, and 299, in section II, "Arrangement of the Sanctuary for the Sacred Synaxis (Eucharistic Assembly) within Chapter V, which devoted solely on "the arrangement and furnishings of churches for the celebration of the Eucharist."[112]

> § 296 states:
>
> The altar, on which is effected the Sacrifice of the Cross made present under sacramental signs, is also the table of the Lord to which the People of God is convoked to participate in the Mass, and it is also the center of the thanksgiving that is accomplished through the Eucharist.[113]

This crucial theological statement expresses three complementary metaphors for the altar: the place of sacrifice, "the table of the Lord," and "the locus of the eschatological banquet."[114] As the Eucharist is the source and summit of the Christian life, the altar is at the center of the Liturgy of the Eucharist.[115] As such, the physical centrality of the altar should demonstrate this

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[111] Chapter V, § 288, in "General Instruction of the Roman Missal."

[112] "General Instruction of the Roman Missal."

[113] The English translation of the 2002 *Institutio Generalis Missalis Romani*, in Edward Foley, Nathan D. Mitchell, and Joanne M. Pierce, eds., *Commentary on the General Instruction of the Roman Missal*, 360, has "The altar on which the Sacrifice of the Cross is made… the People of God is called together to participate in the Mass, as well as the center of the thanksgiving…"

[114] Edward Foley, Nathan D. Mitchell, and Joanne M. Pierce, eds., *A Commentary on the General Instruction of the Roman Missal*, 360.

[115] Vatican Council II. *Sacrosanctum Concilium* § 10, and Dogmatic Constitution on the Church *Lumen Gentium* (21 November 1964) § 11; "Catechism of the Catholic Church," nos. 1324-1327, United States Conference of Catholic Bishops, accessed February 3, 2020, http://ccc.usccb.org/flipbooks/catechism/336/index.html.

sacramental reality, be it occupies the physical center of the liturgical space or visual focus of the Liturgy of the Eucharist.

§ 298 prefers that, in churches, altars be attached to the floor as clear and permanent sign "of Christ Jesus, the Living Stone."[116]

§ 299 states:

> The altar should be built separate from the wall, in such a way that it is possible to walk around it easily and that Mass can be celebrated at it facing the people, which is desirable wherever possible. Moreover, the altar should occupy a place where it is indeed the center toward which the attention of the whole congregation of the faithful naturally turns.[117]

Here, the GIRM reemphasized the sacramental and theological centrality of the Eucharist by prescribing the physical centrality of the altar. The altar is not only the sign but also a physical representation of the centrality of the sacramental life of the Christian faithful, to which they are called together to give thanks. Hence, the altar, as the center of the participatory liturgy, its placement must be visually and physically accessible to the Eucharistic assembly.

At the same time, § 294, part of the General Principles, stresses the importance of the "coherent and hierarchically ordered" assembly. Hence, the liturgical space should be arranged so that "it conveys the image of the assembled congregation and allows the appropriate ordering of all the participants, as well as facilitating each in the proper carrying out of his function."[118] This article reiterates that the physical arrangements ought to reflect the hierarchical structure and diversity of ministries in the liturgy, as well as the unity of the Church. This ecclesiological aspect can be seen in tension with the liturgical arrangement of space that aims to engender greater participation in the liturgy.

"Built of Living Stones" is the guiding document of the US Conference of Catholic Bishop, published in 2000, a revision of *Environment and Art in Catholic Worship*, published in

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[116] "General Instruction of the Roman Missal."

[117] "General Instruction of the Roman Missal." Here, the 2010 GIRM references *Inter Oecumenici*, § 91. It states, "The main altar should preferably be freestanding, to permit walking around it and celebration facing the people. Its location in the place of worship should be truly central so that the attention of the whole congregation naturally focuses there," in Catholic Church – Sacred Congregation of Rites, "*Inter Oecumenici.*" For the Latin version, see Catholic Church – Sacra Congregatio Rituum, *Acta Apostolicae Sedis* 56 (1964), p. 898, no. 91, in "Acta Apostolicæ Sedis," The Holy See, accessed April 27, 2020, http://www.vatican.va/archive/aas/documents/AAS-56-1964-ocr.pdf.

[118] "General Instruction of the Roman Missal."

1977.[119] The key phrase in this document that reflects the reforms of the Council is, "Liturgy is 'the participation of the people of God in the 'work of God.'"[120] Following that is the "Liturgical principles for building or renovating churches." Again, this document reflects Vatican II's stance on giving no preference for architectural style for building churches.[121] At the same time, BLS also says, "attention to the [liturgical] principles will ensure that from the ritual requirements will receive the priority they deserve in the design process." As such, the second principle (§31§) states, "The church building fosters participation in the liturgy," and the third (§32§), "The design of the church building reflects the various roles of the participants."[122]

Keeping in mind these various ecclesiastical requirements along with their various historical and theological interpretations (mentioned in the Introduction), the next section discusses some of the Roman Catholic liturgical spaces in the Archdiocese of Boston and their efforts in balancing between the expressions of hierarchy and unity, and participatory liturgy.

II. Current spatial arrangement in four liturgical spaces in the Archdiocese of Boston

The study discussed in this section was conducted between January and April of 2019. It surveyed the liturgical spaces of twelve Roman Catholic churches, particularly in the ordering of these spaces (arrangement of the sanctuary – altar, ambo, presidential chair; seating arrangement in the nave – congregation and choir) and other relevant architectural features such as natural and artificial lighting, audio and acoustics.[123] Due to the space limitations of this chapter, four of these will be discussed as representative of the range of liturgical arrangements of the twelve

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[119] For a discussion on the interpretation of liturgical laws and liturgical documents, and analysis on and discussion of the "shifting language" that characterizes the rhetorical evolution from *Environment and Art in Catholic Worship* (EACW) to its successor, "Built of Living Stones" (BLS) which can shed light on the differing priorities of the two documents, see Sunghera, "The Shifting Location of Transcendence in Church Architecture," 38-62.

Sunghera argues that "the shifting language and style between these two documents indicate that liturgical reform continues, although not necessarily in unison with those codified in Vatican II." He identifies, first, "the shifting understanding of assembly, with greater attention given to distinction of the ministries (especially, ordained from lay), at the probably cost of a sense of unity in the full liturgical assembly." And, second, "a return to architectural expressions of transcendence that are familiar, such as the tabernacle, which may weaken the expanded understanding of the Eucharistic liturgy, and stifle explorations of other architectural interventions which enhance transcendence." Sunghera, "The Shifting Location of Transcendence in Church Architecture," 61-62.

[120] "Built of Living Stones," Office of Liturgy Archdiocese of New York, accessed May 10, 2019, https://nyliturgy.org/wp-content/uploads/BOLS.pdf, §19§.

[121] Vatican Council II. *Sacrosanctum Concilium*, §123.

[122] Office of Liturgy Archdiocese of New York, "Built of Living Stone," §31§ & §32§. This part document is reflective of the General Principles and elsewhere in Chapter V in the GIRM as discussed.

[123] The term "sanctuary" is used in this chapter (or elsewhere), also interchangeable with "chancel" (as used elsewhere) or "*presbyterium.*"

spaces. Also, because of various logistical complications, the author of this thesis could not seek permissions from all pastors of the twelve parishes surveyed, the names or locations of these four churches will not be mentioned. They will be identified as Liturgical Space 1, 2, 3, and 4 (or LS1, etc.).

Secondly, this study was not intended to understand the quality of the faithful's participation in the liturgy concerning the arrangement of space. At the same time, there are several limitations to this study. First, its finding is a result of subjective evaluations of one person, the author. Second, there was no systematic selection of the spaces to visit. While the author received advice on the liturgical spaces, it was a practical matter as to which he could visit. Distance and time are the two practical matters. Fourth, this study could not account for the process of reordering of the space, which gives insights into the intention of a community and its pastor when deciding to make a significant alteration of the space, or not. Due to various logistical issues, and also the author's intention, he was able to have conversations with some of the pastors of the parishes, where the liturgical spaces he visited. In the four liturgical space featured in this chapter, the author only has a conversation with the pastor of the parish with Liturgical Space 4.

1. Liturgical Space 1 (LS1)

This Roman Catholic parish was established in 2004. However, the church seems to have been built much earlier and in the New England Congregational style. The liturgical reordering of the space in this church is the most different from all of the twelve surveyed. The sanctuary was shifted to the center of the space (whereas it was initially at the current location of the northern entrance to the space).

The seating areas were rearranged to face the sanctuary from both sides. The pews are seen angled slightly to orient the assembly toward the altar. In this arrangement, the altar and ambo face the baptismal font and choir stall on the opposite side. The renovated design retains all of the architectural style and features, except perhaps the high altar of the previous space.

On the day of the visit, there was no liturgical celebration; and thus, only visual observations can be made. First, the reordered liturgical space is very striking. Perhaps reflective of its architectural style, the ambo very clearly situated in the space. It is intriguing that, while it looks more like a pulpit architecturally, it resembles a Roman or Byzantine ambo.

It seems that this was quite a feat to reorder the liturgical space while preserving the architectural style of the interior.

Figure 2.1: Northern view of LS1 toward the altar (draped in purple cloth) at the end of the center aisles (below left of the chandelier), and northern entrance beyond.[124]

Figure 2.2: Northern view closer to the altar (draped in purple cloth - below left of the chandelier) and northern entrance beyond.

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[124] The author had taken all the photographic images shown in this chapter.

At the same time, the liturgical arrangements in the worship space raised some concerns. In the sanctuary, the large chandelier, while drawing focus to the centrality of the sanctuary, seems visually dominating. While the ambo/pulpit and altar are quite visible, the presidential chair is very diminutive and appears to be an afterthought in the design process. The size of the ambo/pulpit appears larger and stands higher behind the altar and has significantly diminished its prominent. The sizeable baptismal font also competes for attention in the central space, opposite the altar. The sanctuary appears cluttered with a small lectern, piano, organ console, etc. All these things are visually distracting and lessen the prominent of the altar.

Figure 2.3: Southern view of the liturgical space with the sanctuary (on the right of the image) and organ loft (beyond) above the existing narthex.

Figure 2.4: Southern view where the sanctuary faces choir stall on the opposite, and organ loft (beyond) above the existing narthex.
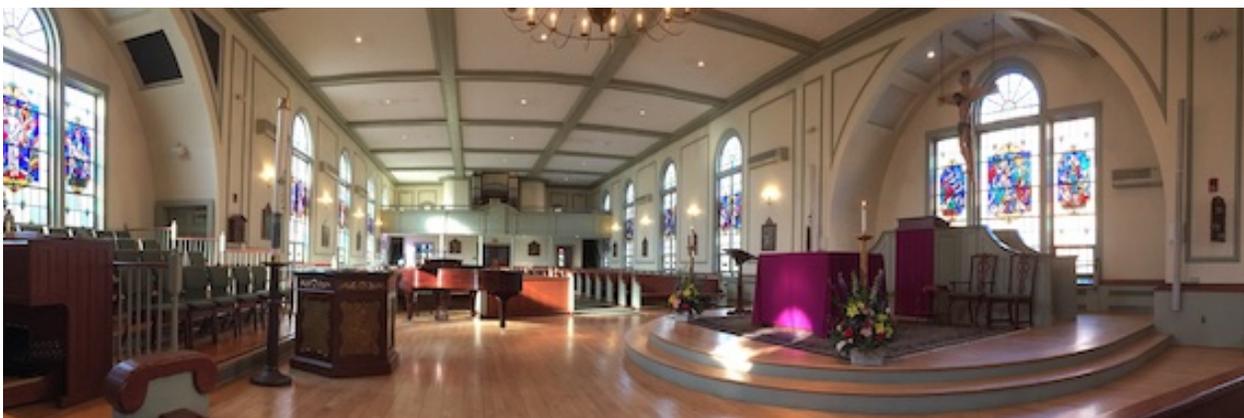
The reordering of the space clearly shows a desire for making the sanctuary the physical center of the space and the liturgy. Thereby, the pews are organized to orient toward this center. Nevertheless, the design and placement of other elements in the sanctuary had significantly diminished the altar. At the same time, the visual access of those sitting at the far ends of the assembly to the altar would appear to be interrupted. The architecture seems to elevate the Word over the Eucharist by locating a large and tall ambo/pulpit behind a smaller altar.[125]

2. Liturgical Space 2 (LS2)

Figure 2.5: view toward sanctuary from the nave.

This Roman Catholic Parish was established in 1950. The current church building was built around 2015. The author attended the Sunday Vigil Mass at 4:00 pm. The floor plan of the worship space is in a Latin Cross form with the sanctuary in the center of the transept. Behind the wooden screen is the daily Mass chapel. The large tabernacle is placed to the left of the altar and ambo (seen from the nave) but does not appear to dominate the sanctuary. The presidential chair is not readily noticeable upon entering the nave. The pews in the main worship space are oriented toward the sanctuary. The space is accessible everywhere.

Elevated by two steps, the sanctuary is accessible by wheelchair ramps. The most interesting feature of the space is the wooden screen between the main worship space and the day chapel behind it. It is possible that during major liturgical celebrations such as the Easter Vigil and Christmas Eve, the wooden screen is pulled open and hence enlarging the worship space further. This arrangement would have the assembly sitting around the sanctuary.

The space is well furnished, except for the presidential chair, which appears to be quite different in style compared to the ambo and the altar. While there the materials and forms of the

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[125] Philip Bess suggests, "the ambo could be significantly elevated, as it is in many medieval churches, to underscore that the divine Word which dwelt among us nevertheless come to us from on high." See, in Philip Bess, *Till We Have Built Jerusalem*, 147.

altar and ambo make good contrasts with the wood surrounding, it is not the same for the presidential chair. The chair seems ordinary compared to the ambo and altar, which appear to have been specifically designed for the space.

Figure 2.6: View of sanctuary.

During the Mass, the readers and presider were easily seen where they minister, but required some shifting while in the pew for clearer visual access. Instead of giving the homily at the ambo, the presider stood in front of the altar. While he was easily seen, it was less prominent since he was not standing on the sanctuary. Sitting in the middle of the rear part of the nave, the author experienced adequate visual access to the Liturgy of the Eucharist while kneeling. He could mostly see the presider and his liturgical actions at the altar. It was somewhat more challenging to see all the liturgical vessels from a distance.

Figure 2.7: View toward the nave from day-chapel.

3. *Liturgical Space 3 (LS3)*

Figure 2.8: View toward the sanctuary from the rear of the space.

This Roman Catholic Parish was founded in 1858. The latest reordering of the liturgical space was likely to be in the 2010s. The altar and ambo were made with distinctive colors and materials compared to the existing interior. At the same time, they remain in keeping with the architectural style of the sanctuary. Another unique feature is the repurposed existing altar rails. Now, they stand in front of the first pew.

Figure 2.9: View toward the sanctuary.

While marking the space, the former altar-rails do not appear to create a dominating separation between the nave and the sanctuary. Understandably, the tabernacle is where it is, given the accessibility to the altar and circulation at the sanctuary. Locating the organ console and musicians at the former side chapel preclude placing a tabernacle there. At the same time, the main altar appears more prominent than the pedestal made for the tabernacle. However, this still has too much resemblance to a wall-attached altar.

Figure 2.10: View across the sanctuary.

Perhaps the most distinctive feature of this reordering is the arrangement of the angled pews in the front of the nave. The first six rows of pews were reorganized to be in semicircular formation, appearing to give a sense of real focus to the altar. The remaining rows remain as they were.

4. *Liturgical Space 4 (LS4)*

This Roman Catholic parish was established in 1930. However, the current church building on site was built in the 1960s. This building represents the series, built during the last twenty years of Cardinal Cushing as Archbishop of Boston (1944-1970), which have similar floor plans, styles, and materials. This visit took place at a 9:00 am weekday Mass.

Figure 2.11: View from the rear of the nave toward the sanctuary.

LS4 has a large and wide nave with large and colorful stained-glass windows along the walls. The altar is quite easily seen standing on an elevated sanctuary (4 to 5-step high). This arrangement does give the altar and ambo a sense of visual prominent and also visual unity by having a similar style and materials.

Figure 2.12: View from the rear of the nave toward the sanctuary.

Behind the sanctuary is a new stained-glass 'lightbox window' behind the tabernacle. This and the existing sanctuary stained-glass clearstory windows engendered focus to the sanctuary. The sanctuary and nave are well lit. At the same time, it looks cluttered with piano, chairs, and credence tables near the altar. The two well-lit statues beside the sanctuary also draw unwanted attention.

Even with a relatively elevated altar in the space, sitting at the area as seen in Figure 2.9 - a long distance away from the altar, it shows that visual connection to engagement with the liturgical presider and liturgical actions would be a challenge.

5. *Discussion*

The four examples of Roman Catholic liturgical spaces described above show the general similarities in the 'traditional' cross form or rectangular floor plan. Except for LS1, the other three liturgical spaces generally have a unidirectional orientation to the altar, despite LS2 and LS3 being somewhat different in the arrangement of the congregation seating. This is typically the case for most of the Roman Catholic liturgical spaces in the Archdiocese of Boston, particularly in parish churches, most likely due to their 19th-century architectural heritage.

As such, there appear to be three general models in these post-Vatican II liturgical arrangements in pre-Vatican II worship these four spaces. First, the unidirectional arrangement is particularly tricky to reorder due to the long rectangular nave. If there were an attempt to give the assembly a more multidirectional arrangement, they would occur in spaces such as LS2. At the same time, a new church, LS3, had the opportunity to be designed to even more suitable for a participatory liturgy that appears to be quite restrained architecturally. This direction of liturgical

arrangement of space calls for a more centralized altar with congregational seating orient toward it.

Second, this arrangement of the post-Vatican II liturgical space, where the sanctuary is close to or at the same level as the nave's floor in the church, shows the most significant unintended visual consequence. LS1 and LS3 show a greater shift in the reordering of liturgical space, compared to LS2 and LS4. The altar of LS1 and LS3 sit lower than those at LS2 and LS4. This caused the reduction of visual access to or visual participation in the Liturgy of the Eucharist. Those who kneel or stand behind taller people or sit further away from the altar generally will not be able to see the Liturgy of the Eucharist fully. One would argue that these people could sit closer to the altar for better visual access. However, GIRM's Chapter V stipulates that the liturgical space should be arranged so that the faithful can easily see the actions and hear the words of the Liturgy, as well as have physical access to the altar and ambo.

The third model is the minimal reordering of pre-Vatican II basilica or Latin cross formed churches. This is probably the predominant model of liturgical space arrangement in the Archdiocese of Boston. LS2 and LS4 are representative of it. Both spaces retain the existing or with minimal extension of it. The post-Vatican II altar stays on the sanctuary, which would be raised at least three to four steps above the floor of the nave. Even though in LS2, the first few rows of pew organized radially from the altar, the majority of the seats face forward toward the sanctuary as in LS4.

The unidirectional orientation is a lasting legacy, in architectural terms as much as liturgical, because the dominant and monumental character of the pre-Vatican II's high altar placed at the liturgical-east end of the space. Pulling the post-Vatican II altar away from the traditional sanctuary or *presbyterium* may appear as somehow lessening the 'sacredness' of the sanctuary. The GIRM (§ 295) has favored the ambo, altar, and presidential chair to be located in the *presbyterium*. At the same time, re-ordered spaces often retained the high altar, or if it was removed, a tabernacle is placed on a pedestal at the same location (as in LS3). As such, if the central altar is not sufficiently shifted away from the existing *presbyterium* in a Latin-cross liturgical space, communal worship will remain entrenched in the unidirectional arrangement. Furthermore, placing the post-Vatican II altar closer to the existing high altar will create a greater symbolic and liturgical confusion between the actions of Eucharist and eucharistic devotion.

The reordered LS3 shows the intention to engender a sense of community and participatory liturgy. At the same time, the altar, ambo, and sanctuary were designed in keeping with the existing architectural style. At the same time, the tabernacle is placed directly behind the altar on a pedestal that resembles a wall-attached altar. Alternatively, a tabernacle located in a separate and well-furnished space would give greater intimacy for one's Eucharistic devotion over the distant tabernacle behind the altar in a larger liturgical space.

Nevertheless, as these four examples show, the liturgical spaces with higher *presbyteria* afford greater visual access to the liturgy of the Eucharist compared to the other two with the lower sanctuary. This shows the unintended visual consequence for active participation due to the tension between emphasizing hospitality versus monumentality. I would argue that this is generally common in a large number of liturgical spaces in the Archdiocese of Boston.

III. Subjective preferences in arrangements of a small liturgical space

This part of Chapter Two summarizes a limited research project with a modest attempt to measure the spatial/visual effects of a small liturgical arrangement (seating capacity of about 70) on participation in the liturgy. It is a quantitative and qualitative study that investigates the degree of the participants' visual connection and engagement during the Liturgy of the Eucharist. The visual targets (or stimuli) are the liturgical presider, the liturgical actions (gesture and movements), and the objects used at the liturgy of the Eucharist (patens, chalices, book, etc.).

The analysis found that both actual (measured) and subjective (perceived) distance have a marginal correlation with the subjective ratings of visual connection to the presider, liturgical actions, and objects. At the same time, the average results of the subjective ratings show that when a participant's view is partially obscured, as opposed to full view, the subjective rating is lower.

The results also show that visual connection remains essential for participating in the liturgy regardless of the distance to the presider, or liturgical actions and objects. At the same time, the subjective visual connection in the Liturgy of the Eucharist is not determined only by visual factors (such as distance) but also seating habit and overfamiliarity with the worship environment or the liturgy itself.

Nevertheless, it remains that the visuals must continue to play a critical role in active participation in the liturgy. Therefore, a well designed liturgical space considers the unhindered

visual access to the liturgical presider, actions, and objects. The following sections will briefly discuss the research project.

*1. Research method, experiment setting, and participants*

The author conducted the study by having the subjects participate in three liturgies held at the Holy Name Chapel at St. Peter Faber Jesuit Community in Brighton, Massachusetts. These liturgies are part of the regular scheduled community Masses. The author presided at each of the three liturgies as part of the study. Each liturgy used a different liturgical arrangement of space. After each liturgy, the participants complete a questionnaire on their subjective visual experience of the Liturgy of the Eucharist. Each visual experiment was conducted about a month apart.

The Holy Name Chapel was rearranged in three different liturgical settings. Experiment 1 used a choir style arrangement with the altar in the apse. This arrangement provided 69 seats, including the presider's chair. For Experiment 2, a choir style with the altar in the center of the nave. This arrangement provided 67 seats for the assembly. For Experiment 3, the chapel was rearranged so that the 69 seats face forward toward the altar in the apse divided by a central aisle.

Figure 2.13: Setting for Experiment 1 (photo was taken after the experiment was completed showing artificial lights turned off) & Figure 2.14: Setting for Experiment 2.

Figure 2.15: Setting for Experiment 3.
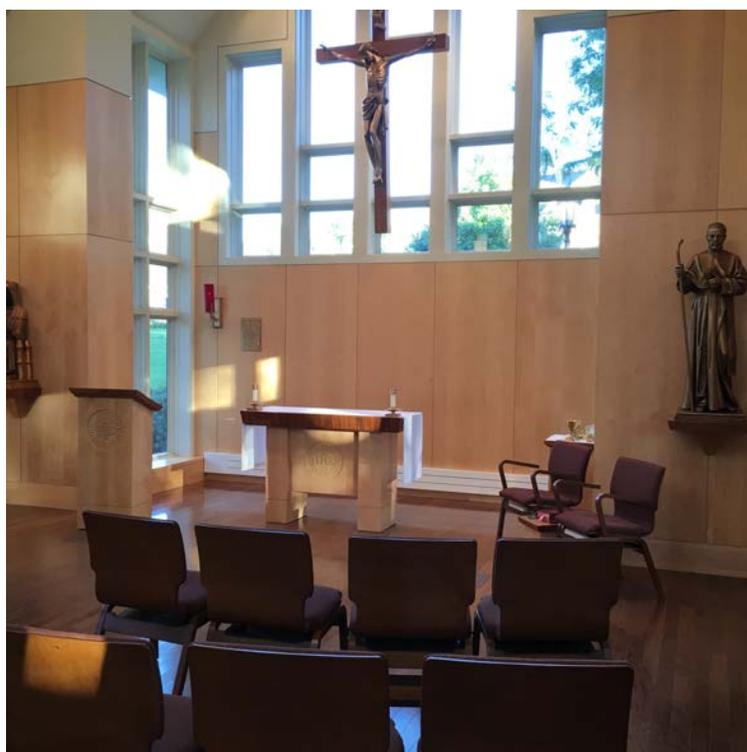
The participants/subjects of the experiments are Jesuit priests and scholastics. They are also students and professors at the Boston College School of Theology and Ministry, as well as some visitors. Thus, not only that, all of the participants are Roman Catholics, but since they are almost all priests and professed religious, they are expected to have an even greater familiarity with the Roman liturgy.

Each participant completed a short questionnaire after the Mass. The first three of the five questions entail the quantitative survey. These questions require a numerical rating response (0 to 10). The second set has three questions and requires short answers. Question 1 (in three parts) asks the respondent for the subjective rating of their visual connection or visual engagement with the presider, the liturgical actions, and the liturgical objects. Question 2 asks the respondent whether they can see the presider, the liturgical actions, and the liturgical object (with full view, partial view, or no view at all). This question seeks to know if their view to the altar is obstructed, perhaps by someone in front of them. Question 3 asks the respondent how often do they look at the presider, liturgical actions, and liturgical objects during the Liturgy of the Eucharist in question. This question asks about the respondent's visual preference. Question 4 asks whether if the seat the respondent is sitting on is the usual seat or area in the chapel. This question seeks to know the respondent's sitting habits. Question 5 asks the respondent to estimate the distance between them and the presider at the altar in feet or meters. The answer to this question would provide data on the respondent's sense of space from where they are sitting.

Each questionnaire was placed on a seat in the Chapel and noted with a number. This number indicates where a particular respondent was sitting. The survey did not collect names or

any other personal data. After the first experiment, the questionnaire was revised to clarify some of the questions. The samples of the questionnaire appear in Appendix 1 and 2.

2. *The findings and discussion*

a. *Visual connection and actual distance*

In general, looking across the results of the three experiments, they show that actual distance between the subject and visual stimuli has only a marginal effect on the sense of visual connection to the stimuli (the presider, liturgical actions, and objects). There appear to be a significant number of subjective responses of high rating (7 to 10 points range) across a wide distance (Figures 2.16, 2.17, and 2.18).

Figure 2.16: Graph of 34 responses, from Experiment 1, of subjects who had full and partial views of the presider. (Actual distance in feet.)
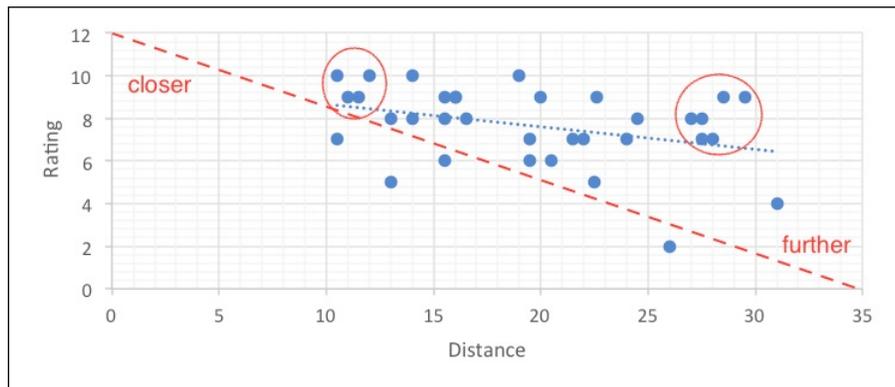

Figure 2.17: Graph of 24 subjective responses of visual connection to the presider (full and partial views) from Experiment 2. (Actual distance in feet.)
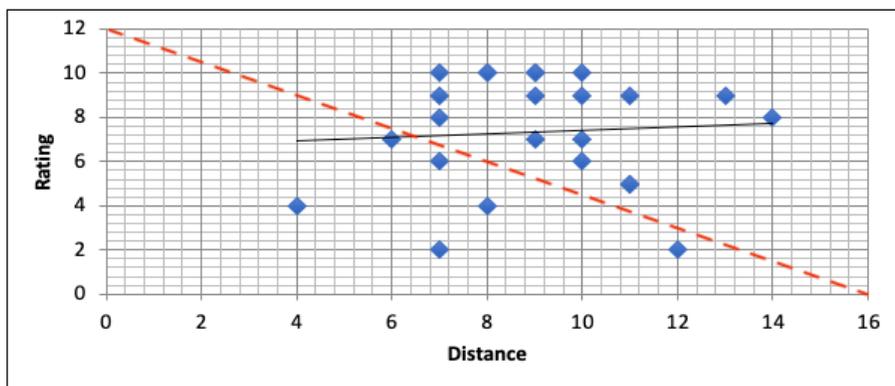
Figure 2.18: Graph of 24 subjective responses of visual connection to the presider against actual distance (in feet) (nodes with red circles denote responses of partial view) in Experiment 3.
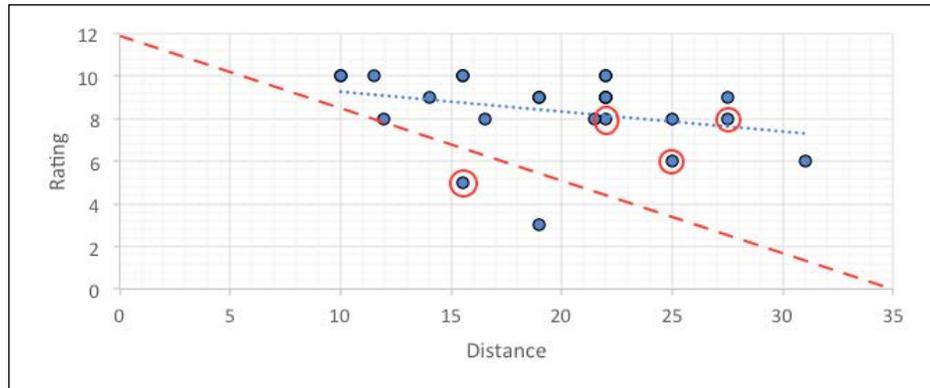

This phenomenon is intriguing, as one would expect to perceive less visual connection by being far away or more by being closer. However, given the subjects have great familiarity with the chapel space and the liturgy, the actual distance may not have much effect on their responses. Of course, some responses are closer to the line of correlation, but that is a small minority.

Therefore, overfamiliarity with the space could be one possible cause for the lack of correlation between subjective visual connection and actual distance. One can argue that there can be a reliance on the auditory more than the visual as much of the Liturgy of the Eucharist is the spoken word. However, this doesn't explain why the vast majority of the responses in all three experiments say that they would often or sometime look at the presider, liturgical actions, and objects. Nonetheless, at one time or another, the participants did look at the liturgical actions at the altar.

b. *Visual connection and subjective distance*

Figure 2.19: Graph of 34 subjective responses (full and partial views) against their subjective distances (in feet) to the presider in Experiment 1.
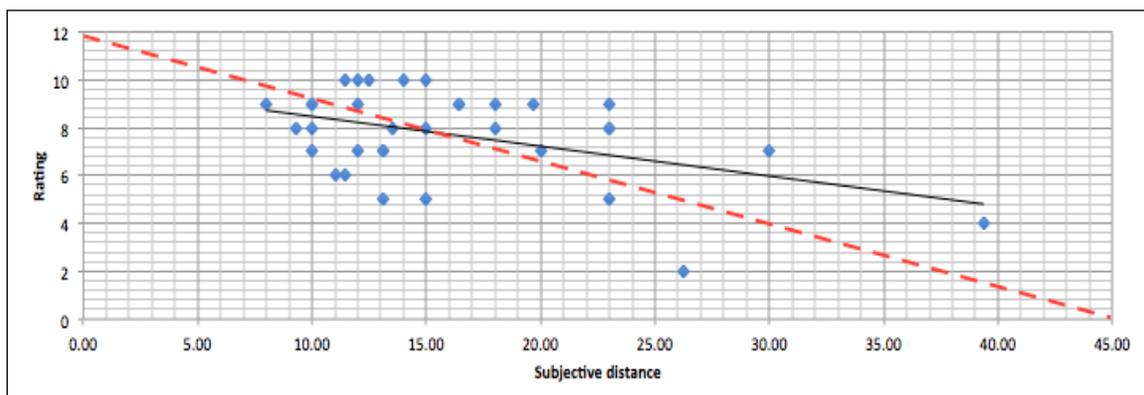
There is a mixed review, however, when it comes to the relationship between subjective responses and subjective distance (perceived distance). In Experiment 1, the results in Figure 2.16 (against actual distance) show a higher level of correlation than those in Figure 2.19 (against subjective distance). Yet, the results show no correlation when analyzing the subjective ratings of visual connection to the liturgical actions (Figure 2.20).

Figure 2.20: Graph of 30 subjective responses (full and partial views) against their subjective distances to the liturgical actions in Experiment 1.
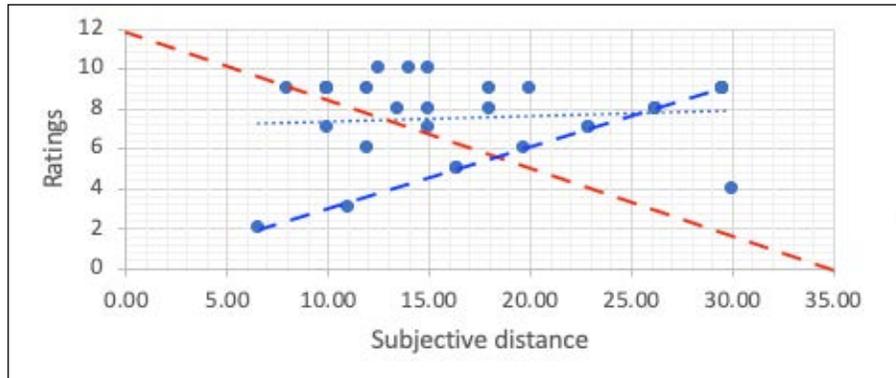
The same can be said about Experiment 2, represented by Figure 2.21 below. Here the results show no correlation between subjective ratings of visual connection to liturgical objects and subjective distance. This is most intriguing because Experiment 2 placed the altar in the center of the space, and thus the furthest seat measured half the distance compared to when the altar was in the apse. One would assume that since the altar being closer, there would be a greater overall sense of visual connection.

Figure 2.21: Graph of 19 subjective responses of visual connection to liturgical objects against subjective distance.
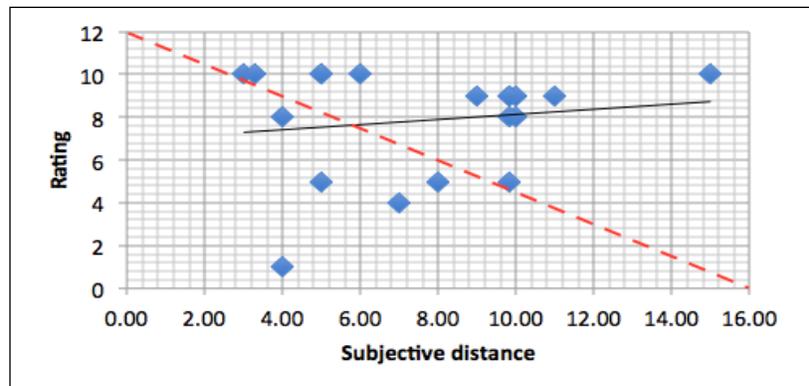
However, that is not the case. In Experiment 2, the average number of the subjective ratings of visual connection to the liturgical objects (from those who had full view) is 8.36 (Table 2). Whereas in Experiment 1, it is 8.72. This is marginally higher (0.36 of a point) than Experiment 2. However, Experiment 2's results show the average number for this category of response is 9.21. This is the highest number, as mentioned earlier. These results, and those discussed in this section, mean that many other factors could not be accounted for, be they physical or theological, etc.

As for the physical factor, one is the size of the space for the experiment. It is probably too small for subjective judgment of distance differentiation. The author's previous study of three auditoria (MPhil thesis) had the opportunity to use three auditoria, with a seating capacity from 530 to 2600 seats. These are much larger rooms and had allowed for the results that show a more precise correlation between distance and subjective responses. Nevertheless, the visual connection still matters to the participants in this study, and the minority of the results do show a correlation between distance and subjective responses.

3. *Visual connection and visual obstruction*

One of the physical factors that has a more apparent effect on the subjective visual connection to the stimuli is visual obstruction. As discussed earlier, and shown in Tables 2.1, 2.2, and 2.3, the subjective ratings are consistently lower if the subjects had a partial view of the presider, liturgical actions, or objects rather than full view. (Those who have their views completely obstructed, which were only four respondents, responded with 0 ratings.)

Table 2.1: Averages of subjective responses on the visual connection in Experiment 1

Experiment 1	Presider	Actions	Objects	Averages
Full views	8.16	8.10	8.72	8.33
Partial views	6.45	6.67	6.50	6.54
Differences	*1.71*	*1.43*	*2.22*	*1.79*
Averages	7.65	7.56	7.83	**7.68**

Table 2.2: Averages of subjective responses on the visual connection in Experiment 2

Experiment 2	Presider	Actions	Objects	Averages
Full views	8.19	8.40	8.36	8.31
Partial views	5.63	6.13	6.38	6.04
Differences	*2.56*	*2.28*	*1.98*	*2.27*
Averages	7.33	7.61	7.64	**7.53**

Table 2.3: Averages of subjective responses on the visual connection in Experiment 3

Experiment 3	Presider	Actions	Objects	Averages
Full views	8.70	8.82	9.21	8.91
Partial views	6.75	6.24	6.71	6.57
Differences	*1.95*	*2.59*	*2.50*	*2.35*
Averages	8.38	7.87	7.83	**8.02**

The averaged results are the most evident correlation. A partial view of the visual source/stimuli diminished the sense of visual connection. As limited these results might be, they show that regardless of the seating arrangement, some will have their visual access to the stimuli obstructed as long as the participants and presider are standing/sitting on the same floor level. Hence, reducing their visual participation in the liturgy.

4. Seating habits

Studying the participants' seating habits was probably the most amusing part of the experiment to be able to see a number on what is the seating habit of a Jesuit community when it comes together for the liturgy. In all the three experiments, out of 80 individual responses (a participant was not asked if he or she had participated in one of the other experiments), the average of habitual versus nonhabitual sitters is 50/50.

It is also interesting that in Experiment 3, the result is the reverse compared to the other two experiments. The seating arrangement in Experiment 3 is forward-facing toward the altar, and thus, drastically different than the two previous experiments. Yet, the participants reverted to the great Catholic tradition of avoiding to sit in the front three rows, while 67% percent of them responded that they were not seated in their usual seat/area in the chapel.

When excluding Experiment 3's result on seating habit, it appears that about 60% of the participants sat in their usual areas when in a familiar setting. Experiment 3's results, when considered alone, show that, in traditional seating arrangement (forward-facing pews toward altar), the participants, probably like most Catholics usually do, avoid the front seats (religious/priests and laypeople alike).

5. Most suitable liturgical arrangement for greater visual connection

As it was more challenging to determine any significant correlation between distance (both actual and subjective) and subjective visual connection, the averaged ratings appear to indicate some level of certainty about the effect of visual obstruction and accessibility on the participants'

visual experience of the liturgy. However, because of so many unaccounted factors, be they physical or theological, these results are in no way conclusive. Only that they show, the seating arrangement in Experiment 3 elicited the highest average subjective rating of visual connection. Thus, in this context, the location of the altar appears to be less relevant as long as the space and seating arrangement provides every participant an unobstructed view to the altar. Therefore, the results suggest that even smaller liturgical spaces (that accommodate between 50 and 100 persons) should provide all participants with unobstructed visual access to the visual source by the design of or physical modification to the space. In this way, either the seating areas are elevated on steps (like in a stadium or concert hall) or the altar is placed on a raised platform.

However, it would be relevant to consider also, perhaps in another study, what is the subjective response (be they visual or otherwise) when a priest presides at the Liturgy of the Eucharist with his back to some members of the congregation. In Experiment 2, there were at least four participants, almost directly behind the presider. One of these participants responded with a 0-rating for all the questions, saying that he cannot see anything because the priest blocked his view. That is a reasonable response. Nevertheless, it is not clear as to why this person did not rate the visual connection to the presider since nothing was obstructing his view of the presider.

Interestingly enough, one respondent provided a written response that he did not "like" that the presider had his back against the people. This respondent was not behind the presider, however. At the same time, the other participant standing behind the presider provide ratings for all the questions. At least, it is likely that when the presider himself obstructs the liturgical actions and objects had caused some low rating responses. Nevertheless, as such, this study could not account for other non-visual factors that may also be in play.

In conclusion, considering the present reality of Roman Catholic liturgical spaces in the Archdiocese of Boston and the subjective responses in the visual connection to the Liturgy of the Eucharist, there is much work to be done in making liturgical spaces engender a greater sense of active participation in the liturgy. The effort in reforming the liturgical spaces, be they re-ordered pre-Vatican II spaces or new ones, have been inconsistent. There appear to be complex tensions between respecting the architectural and cultural heritage, the religious traditions associated with these spaces, and the effort to create spaces that can help to engender a greater sense of

community, hospitality, and active participation in the liturgy. At the same time, there appears to be a revival of neo-classical, neo-gothic, neo-byzantine new church buildings, at least in the United States. It seems that these architectural solutions are the response to what might have been seen as a failure of "modern" or post-Vatican II liturgical spaces in the reform of the liturgy.

In the remaining two chapters, this thesis will respond briefly to this movement on the aspect of active participation in the liturgy. However, here, it must consider that, as visual accessibility remains a significant part of active participation. Hence, regardless of the architectural style of any liturgical space, uninterrupted visual access to the Liturgy of the Eucharist is essential. At the same time, as this chapter shows, some post-Vatican II liturgical spaces, in providing for a greater sense of community and hospitality, have reduced the visual access to the altar, thus the Liturgy of the Eucharist.

Therefore, the next chapter of the thesis will address a few alternative models of liturgical space arrangement that have endeavored to balance the community, hospitality, engender greater movements, and active participation in the liturgy with the aspects of ecclesial hierarchy, transcendence in liturgical architecture and traditions.

Chapter Three

Four alternative models for arranging liturgical space

Chapter One of this thesis laid out the five significant historical developments of the altar and movements in the liturgy. It also argued that the altar remains at the liturgical and visual center of the liturgy and the liturgical space, albeit obscured at times. Chapter Two continued by describing the spatial arrangements and liturgical practices in Roman Catholic liturgical spaces in the Archdiocese of Boston. It also identified the persisting significance of visual access to the Liturgy of the Eucharist in the active participation of the assembly. This chapter will look at four alternative models, immerged in the last 100 years of liturgical space ordering and liturgical practice, that will substantially contribute to the aim of this thesis – designing or arranging liturgical space to engender greater bodily movements in the liturgy.

The first model of liturgical space arrangement is best considered as a theoretical model. Rudolf Schwarz's *Vom Bau Der Kirche* (1938 - translated into English in 1957 with the title *The Church Incarnate*) was his highly abstract and theoretical, yet theological and poetic, treaties on sacred architecture. The third part of the book includes "The Seventh Plan," which is a culmination of the Six Plans, or six theories (or theoretical developments of sacred architecture). The "Six Plans," and particularly the "The Seventh Plan," can serve as a theoretical model for contemporary thinking on the forms of sacred architecture.

The second model is the church of the Dominican priory in the outskirt of Lyons, France. Le Corbusier's La Tourette was built in 1960. It was designed for a large community of Dominicans in academic formation. The priory church could be considered a monastic church. Nevertheless, the Liturgy of the Word takes place in the nave of the church. Following that assembly moved to the sanctuary for the Liturgy of the Eucharist.

The third alternative model is the liturgical arrangement of St. Gregory of Nyssa Episcopal Church in San Francisco, which was built in 1995. It can be considered as conceptually similar to that in La Tourette. The Liturgy of the Word is celebrated in one space of the church. After that, the assembly and presider processed into another area to celebrate the Liturgy of the Eucharist. One enters the liturgical space through the space for the Liturgy of the Eucharist. This space is also used for other activities and gatherings outside of the Liturgy.

The fourth alternative arrangement is the Mass of Ordination to the Presbyterate at the Notre Dame Cathedral in Paris in 2012. The YouTube video shows the assembly gathered in front of the Cathedral and also inside. The Liturgy of the Word took place outside, in front of the Cathedral doors. The Calling of the Candidates (for priestly ordination) took place there as well.

After the Candidates have presented themselves, they processed into Cathedral, and the Examination of the candidates took place at the narthex.

These four models of the liturgical arrangement of space show that there are alternative ways to engender a greater sense of bodily movements in the liturgy, be they designs of new liturgical space or innovative use of existing ones. This chapter will discuss these alternative models in further detail. These models would form the basis for the two proposed models in the following chapter in this thesis.

I. Rudolf Schwarz's Seven Plans

The German architect Rudolf Schwarz (1898-1961), designed several iconic modern churches. Two of them are St. Fronleichnam in Aachen (1930) and St. Anne in Düren (1956). In 1938 Schwarz published a highly theoretical and theological volume on sacred architecture, *Vom Bau Der Kirche*. It was translated into English in 1957 by Cynthia Harris, entitled *The Church Incarnate*. Schwarz's highly abstract architectural and theological language, accompanied by equally conceptual architectural drawings, made his book a challenge to read.[126] Nevertheless, it shows, being a collaborator and friend of Romano Guardini, a founder of the 20th-Century Liturgical Movement, Schwarz was exploring a new way of seeing and making sacred space.[127]

Schwarz argues that a new expression of sacred architecture is needed for his time. The reality, of which the church buildings of the past belong, is no longer that of his time. Churches ought to be built out of the experience of the people of their time. They must recognize the sacredness in their reality and experience of God. As such, human senses, through the eyes and hands, experience this earthy and sacred reality of their time. At the same time, the eye and hand

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[126] However, Schwarz is not without critics. Frèdèric Debuyst decried that Schwarz's book as "one of the most dangerous books ever written about church buildings." See, Frèdèric Debuyst, *Modern Architecture and Christian Celebration*, Ecumenical Studies in Worship, vol. 18 (Richmond: John Knox Press, 1968), 46. Sunghera comments that "Although he gives no specific reason for this opinion, I suspect it has to do with Schwarz's first major commission (in Aachen), which did not provide a full sense of 'hospitality' Debuyst had envisioned." See Sunghera, "The Shifting Location of Transcendence in Church Architecture," 22.

[127] In 1928, with Guardini, Schwarz designed the liturgical arrangement for the worship space at Burg Rothenfels mentioned in Chapter One. For an extensive discussion on the life, works and ideas, and especially his collaboration with Guardini in liturgical renewal, see Kieckhefer, *Theology in Stone*, 229-264.

are central concepts to his Six Plans of sacred architecture - Schwarz's vision of the church incarnate.[128]

Schwarz used the bulk of the book to explore what he called the Six Plans of sacred architecture that express the development of the gathering Church for worship. And, in that gathering, Christ is incarnated in the Church. The function of sacred architecture is to express the relationship between God and God's gathered people. For Schwarz, sacred architecture is the physical embodiment of the human journey in encountering God.

Figure 3.1: The First Plan –
The sacred inwardness (closed ring).[129]
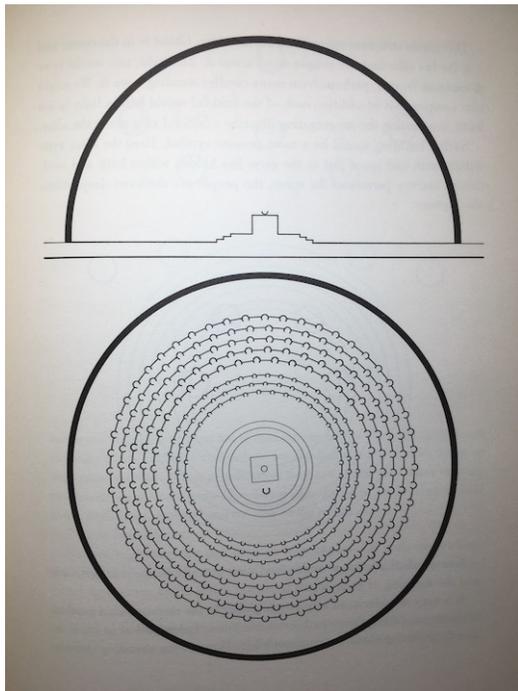
Figure 3.2: The Second Plan –
The sacred parting (open ring).[130]
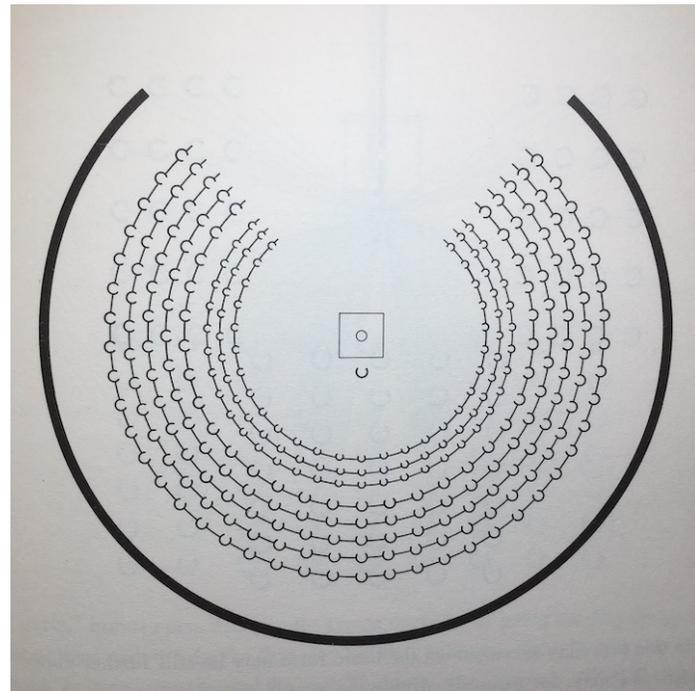
[128] Schwarz, *The Church Incarnate*, 8-24, 31-32. Steven J. Schloeder interprets Schwarz to mean that "when the medievals built a church model on the body of Christ, they had a particular idea what *body* meant – an idea steeped in an iconographic thinking that we no longer have."

On the other hand, while not discounting Schloeder's interpretation, this chapter interprets that, for Schwarz, modern people must discover the meaning of the *body* of their time (not just rediscover the historical significance of *body*), and how the body experiences and senses the *sacred*. Moreover, hence, sacred space should be built in today's reality of the body, using the understanding of the body through bodily experiences and senses. See Steven J. Schloeder, *Architecture in Communion*, 234. Sunghera suggests that Schwarz's series of plans, also "faith journeys," were purposefully connecting the "architectural community and the community of faith." In a similar interpretation as in this thesis, Sunghera suggests that Schwarz developed the approaches "for these faith journeys [represented by the plans] were based on his desire to foster a sense of transcendence through the relationship of the congregation, altar, and presider within the built environment." See Sunghera, "The Shifting Location of Transcendence in Church Architecture," 1 & 22.

[129] Schwarz, *The Church Incarnate*, 37.

[130] Schwarz, *The Church Incarnate*, 69.

The concept of Schwarz's sacred architecture is expressed in the circular or spherical form (the ring/the eye, also an open ring), the radial form (the rays/the hand). In that, the encountering with God is symbolized by a line, interrupting the ring and parting the rays. The line in geometrical space, particularly the symmetrical arrangement of space, serves as an axis. Lines in Schwarz's three-dimensional conceptual sacred architecture are axial, radial, directional, vertical, and horizontal. In the interest of this thesis, the line expresses movement but ordered movement, not chaotic.

Figure 3.3: The Fourth Plan – The sacred journey.[131]
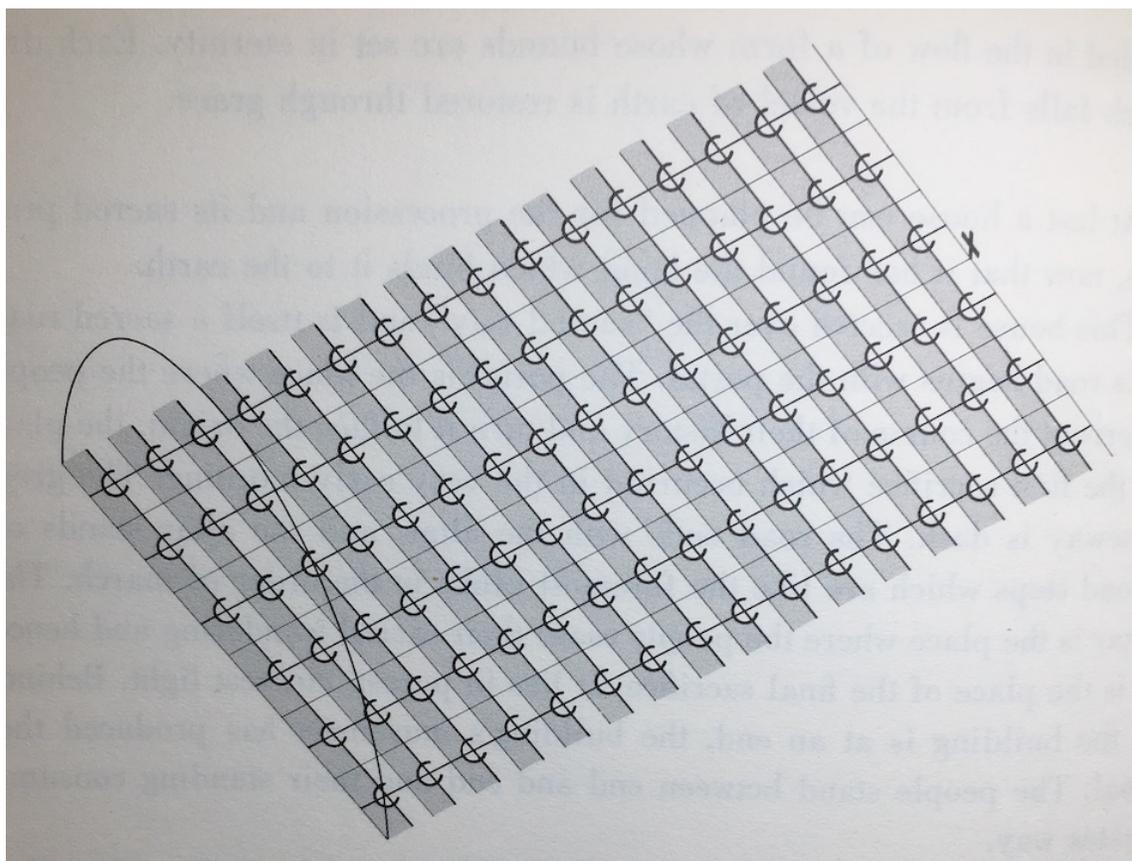
Schwarz does consider these six plans to have continuous development. It appears that some of Schwarz's conceptual drawings can be identified with the specific historical development of ecclesiastical architecture.[132] Nevertheless, it seems that the Six Plans are

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[131] Schwarz, *The Church Incarnate*, 136.

[132] In "The Third Plan, Sacred Parting – the Chalice of Light," Schwarz refers to Hagia Sofia and St. Clemens's Basilica in Rome. In "The Six Plan, Sacred Universe – the Dome of Light," he refers to St. Peter's Basilica without naming it directly. See Schwarz, *The Church Incarnate*, 96, 112 &184

conceptual expressions of the journey of God's people encountering God in and through the structures they have built throughout Christian history.[133]

The Seventh Plan, "The Cathedral of All Times – The Whole," is the culmination of and development from the Six Plans, incorporating the "ring," and the "sacred parting" that opens the ring and the sphere, the way or "sacred journey," that reached an opened ring. For Schwarz, that is insufficient as the Christian journey in encountering God is continuing. It remains open-ended, to the "beyond."[134]

In each of the plans, light is an essential theological concept, as well as an architectural one. Light penetrates each of the six plans and holds the Seventh together. Physically, in a building or space, light entered through apertures – windows and openings - that the structure controls. For Schwarz, conceptually, the light is the vessel holding the liturgy. Hence, Schwarz's concept can be interpreted that the light penetrates the structure and also pour forth from the vessel.

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[133] Schwarz, *The Church Incarnate*, 189. While Gilbert Sunghera provides a concise analysis of Schwarz's key elements, he argues that the First Plan – Sacred Inwardness "became a model of the post Vatican II churches," and the Fourth Plan – Sacred Journey: The Way represented the pre-Vatican II scheme." Sunghera's is a reasonable argument, and it helps to reinforce the point that this thesis will make in the following chapter about the uneasiness situation of the post-Vatican II liturgy being celebrated in pre-Vatican II spaces. Nevertheless, The Second and Fourth Plan appear most prominently in the Seventh Plan. See Sunghera, "The Shifting Location of Transcendence in Church Architecture," 25-36.

[134] Schwarz, *The Church Incarnate*, 189-190, 193. Schloeder offers a more theological critique of Schwarz's Six Plans. He suggests that Schwarz proposes a "New Iconography." See Schloeder, *Architecture in Communion*, 234-238. One could ask why Schloeder suggests Schwarz's graphical interpretation of Bramante's plan of St Peter's Basilica (Schwarz, 184) to be the Seventh Plan. Schloeder also appears to misname it as "the Cathedral of the Ages." Schwarz's Seventh Plan looks nothing like Bramante's plan but a clear culmination of the Six Plans (see Figure 3.1).

Richard Kieckhefer offers an extensive theoretical treatment of Schwarz's Seven Plans. See Richard Kieckhefer, *Theology in Stone*, 229-239. Kieckhefer says, "what Schwarz provides is not simply a series of plans for church design but a sequence of meditations showing how to think about church design, and then suggestions intimating how the plans themselves can be seen as linked. Each plan is the basis for a meditation; their connectedness is then a subject matter for further meditation." This interpretation is similar to Schloeder's. See in Schloeder, *Architecture in Communion*, 234. However, it seems that Schloeder does not address the idea of "incarnation in sacred architecture," as in Kiechefer's, that "a conception of how the congregation forms itself underlies his design for a building to house the congregation. The sparseness of the church is meant in part as empowerment for those who bring the space to life in worship." See in Kieckhefer, *Theology in Stone*, 236.

Schloeder appears to lock into the idea of the iconography of sacred architecture - the objective nature of sacred architecture as iconic. He suggests Schwarz's Seven Plans are theories of iconography. As such, he appears to discount the dynamism of the incarnational nature of the worshiping assembly and how sacred architecture serves as a response to that dynamism. See Schloeder, *Architecture in Communion*, 237-238. Furthermore, Sunghera's interpretation of Schwarz is a helpful contribution to the current debate, particularly how liturgical architecture can be the vehicle and significance to express and engender both the transcendence and immanence in the people's encountering with God in a worship space.

The six plans conjoined into the Seventh in three parts: coming together, journey together, and disperse in mission. Along with the light, the axis connects and ordered these three parts within the Seventh plan. It also presents a clear line of movement linking the three parts as well as connecting the points of coming together and dispersing outward. With the light penetrates, focuses, and disperse, the embodied liturgy moved along the axis and between these points of light.[135]

Figure 3.4: The Seventh Plan.[136]
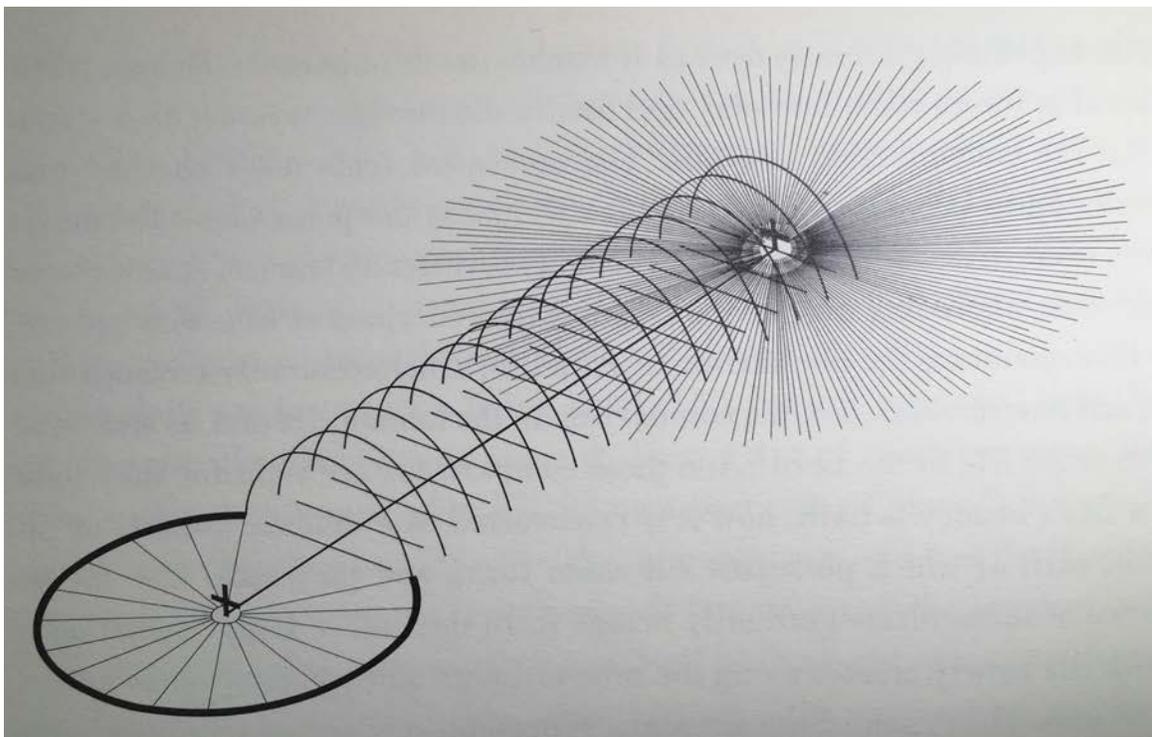
Schwarz does not designate the location of the 'altar' in this conceptual space. Except that he did introduce "The First Plan – Sacred Inwardness, The Ring" with a drawing of an elevated altar in the domed-space surrounded by the people.[137] Thus, it could be interpreted that the points identified with the cross would have this significance. The cross located at the center of the open ring could be interpreted as meeting points of light, of people, and movements. However, it is unclear whether they can be attributed to a physical altar since there are two

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[135] While he did not discuss the Seventh Plan specifically, for Sunghera, it is taken that the points of encounter with God are part of the "shifting location of transcendence." As such, the role of architecture, particularly sacred architecture, is to engender the encounter of this "shifting transcendence."
[136] Schwarz, *The Church Incarnate*, 194.
[137] Schwarz, *The Church Incarnate*, 35 & 37.

crosses in the Seventh Plan. While the composite form of the Seventh Plan expresses movements and transitions, they are drawn by the divine light rather than "sacrifice," which can be associated with the altar. Thus, in the idea of the shifting *foci* (after Sunghera's "shifting transcendence"), it could be reasonable to conclude that the cross would symbolize the points of *focus* and encountering of the transcendence rather than explicitly being a place for the altar.[138]

As such, Schwarz provides a conceptual framework for thinking about and designing liturgical architecture, serving as a bridge between the architectural community and the faith community. Nevertheless, it seems that he takes for granted at least the existing sacramental system, and perhaps, leaving the architect and faith community to work together on the design as if the work itself is sacramental.[139] Thus, architecture should be a vehicle that engenders the encounter between humans and God, one that corresponds with their present reality, rather than a reality of the past. Even in that, the Seventh Plan remains a conceptual aid to the thoughts and works of others, and as Sunghera comments, Schwarz admitted that it could not be built.[140]

II. Le Corbusier's La Tourette

The second alternative model is the priory church of the Dominican Priory in a valley, at the edge of a forest, near Lyon, France. In 1953, The French architect, Le Corbusier was engaged to design a large priory for a community of 100 Dominican friars, 80 of whom were in formation (seminarians). Reinforced concrete was Le Corbusier's favorite choice of construction material

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[138] Schwarz, *The Church Incarnate*, 194. He says, "This form no longer means 'sacrifice,' the word being led to her rim by an eternal light. Rather does it mean the completion and then the dissolution of time. God passes through the structural form and in following after him the peoples erect the form of the cathedral; in it, they consummate time, and God is present." For Kieckhefer, this perhaps had much to do with Guardini's meditation on altars. While Kieckhefer suggests Schwarz "shared Guardini's conception of the centrality of the altar," it seems when one considers (or meditates) on the incarnational nature of church architecture (as it should be for Schwarz), God is present in a person (Guardini's altar of the soul/heart) as much as at the altar in a church (Guardini''s altar at the heart of the church). As such, it could be argued the Schwarz's Seventh Plan shows the shifting *foci* and transcendence and expresses the coming together of the worshipers (offering themselves), journeying together to the "heart of the church" (then disperse again). Therefore, it is no longer just about a sacrifice offered only by the priest. The movement is drawing together by the divine light in each worshiper, who are then brought together to the divine light, at the heart of the church.

[139] Schwarz says, "The creative hand yields itself completely into the hand of God the Creator and God's guiding hand is placed upon it. God sees his world through the knowing eyes of his creatures. God lifts the heavy things which we lift, he places his two hands easingly under ours. Such work is holy work, blessed with an abundance of fruit – it is, if we wish, sacrament." See Schwarz, *The Church Incarnate*, 31-32. The word "easingly" is quoted verbatim from the English translation of Schwarz's book.

[140] Sunghera, "The Shifting Location of Transcendence in Church Architecture," 22. However, here, it appears that Sunghera did not substantiate this comment with a source.

and method. Its plasticity allowed him greater freedom to create varying forms and spaces. Of course, the construction engineering 40 years after World War I helped as well. [141]

La Tourette priory (Couvent Sainte-Marie de la Tourette), completed in 1960, situates high on a hillside. The living quarters face outward (rather than into the courtyard) provides each friar a private balcony and marvelous views down the valley, to the hills, or the forest (see Figure 3.5 for building floor plan). While these and the common spaces such as refectory are allowed an ample amount of light through large windows, the church space is darker. However, Le Corbusier designed for light to penetrate the space through a series of thin horizontal and vertical panes in thick concrete walls, and a light well protruded over the roof over the choir area. (He also uses lightwells over the minor altars in the side chapel.) While these windows let light in, they either have fins or angled upward at the opening to prevent direct horizontal views to the outside. The fins and the interior of light wells and windows are painted with primary colors. The external light reflects the colors into the interior.

The long rectangular church orients southeast/northwest. Hence, the rising sun comes through the high vertical slit, and the wide horizontal slit lets in the light of the setting sun. Through the openings, the church "marks the sun's passage from east to west." At the same time, while functionally appropriate for the austere and serene Dominican life, the visual aesthetic of the architecture, geometric spaces and volumes of La Tourette appears to exist in tension. It is the passage of the sun and the sunlight on the building that seems to unite the various geometrical volumes of the building and soften its jagged edges.[142]

Here, at first, the convent's austere, industrial and utilitarian architecture appears to present a sharp contrast to the Schwarz's idea of light's graceful relationship with movements, ordered symmetrically and hierarchically. Le Corbusier's architecture is paradoxical, in that, the light, symmetry, and hierarchy are present, but reordered in such a way that seems quite visually jarring, even to one who might understand his underlining reasoning and concept.

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[141] Richard Copans, "Le Couvent de la Tourette," YouTube, Video posted on January 27, 2012, documentary film, 24:42, https://youtu.be/HQSozfwZ_5E. In 1970, there was only one Dominican student at La Tourette. It became a conference center; however, it remains under the ownership of the Dominicans, and a smaller community of friars remains there.

[142] Copans, "Le Couvent de la Tourette."

The plan of the church resembles a monastic liturgical arrangement: a choir area in front of the sanctuary. At the same time, the liturgies at the priory church are open to the local members of the faithful. As the number of friars in the community became smaller than before, the lay faithful joined them in the choir (see Figure 3.6 below). For a time, the Liturgy of the Word is celebrated in this area, and then the entire assembly processed or moved to the sanctuary for the Liturgy of the Eucharist.[143]

Figure 3.5: Floor plan of the refectory level.[144]   Figure 3.6: Floor plan of the priory church.[145]
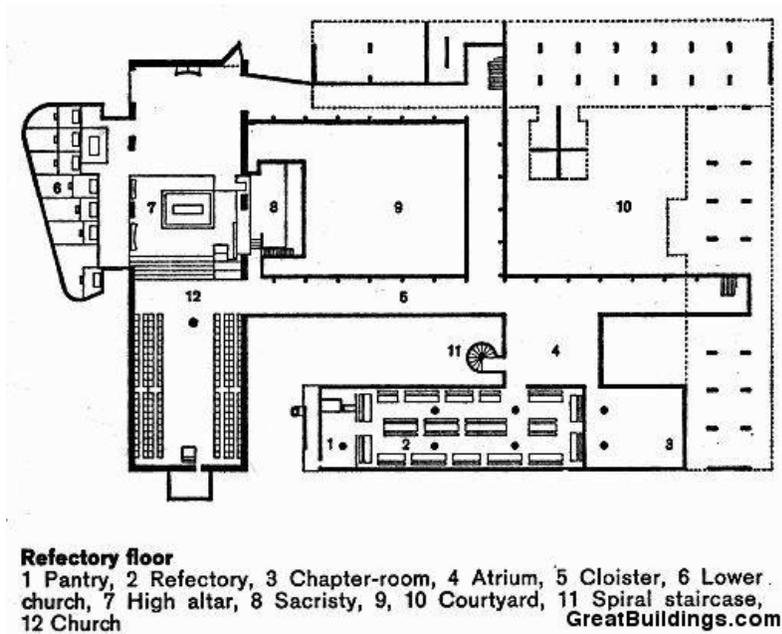
Refectory floor
1 Pantry, 2 Refectory, 3 Chapter-room, 4 Atrium, 5 Cloister, 6 Lower church, 7 High altar, 8 Sacristy, 9, 10 Courtyard, 11 Spiral staircase, 12 Church
GreatBuildings.com
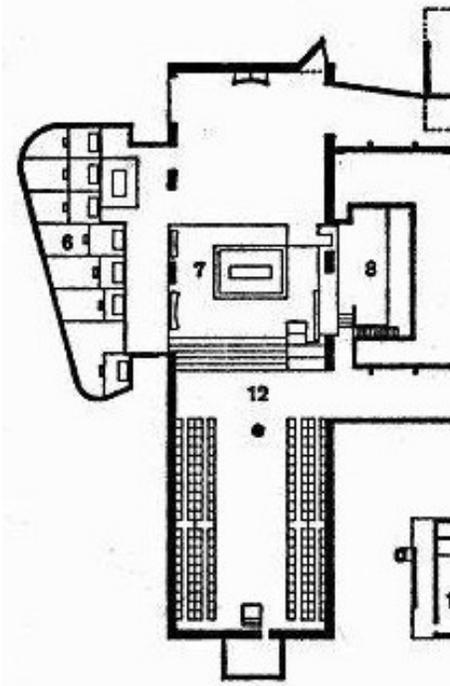
Looking at the floor of the priory church, it shows a dark line connecting the ambo and the existing high altar, marking the axis of the space (see Figures 3.7 & 3.8 in the next two pages). Le Corbusier is not known to use symmetry in designing space or building. Nevertheless, the plan of the priory church shows that it is the most symmetrically arranged space in the whole priory (other than the refectory).

[143] Benoît Thevenon, S.J., conversation with the author, June 2019. Thevenon, now in his late twenties, when a teenager attended Mass at the priory church at "La Tourette."
[144] Photographic images of the plans by Samuel Ludwig in Eduardo Souza, "AD Classics: Convent of La Tourette / Le Corbusier," Archdaily, accessed March 2, 2020, https://www.archdaily.com/96824/ad-classics-convent-of-la-tourette-le-corbuiser?ad_medium=gallery.
[145] Souza, "AD Classics."

Figure 3.7: View toward the sanctuary.[146]
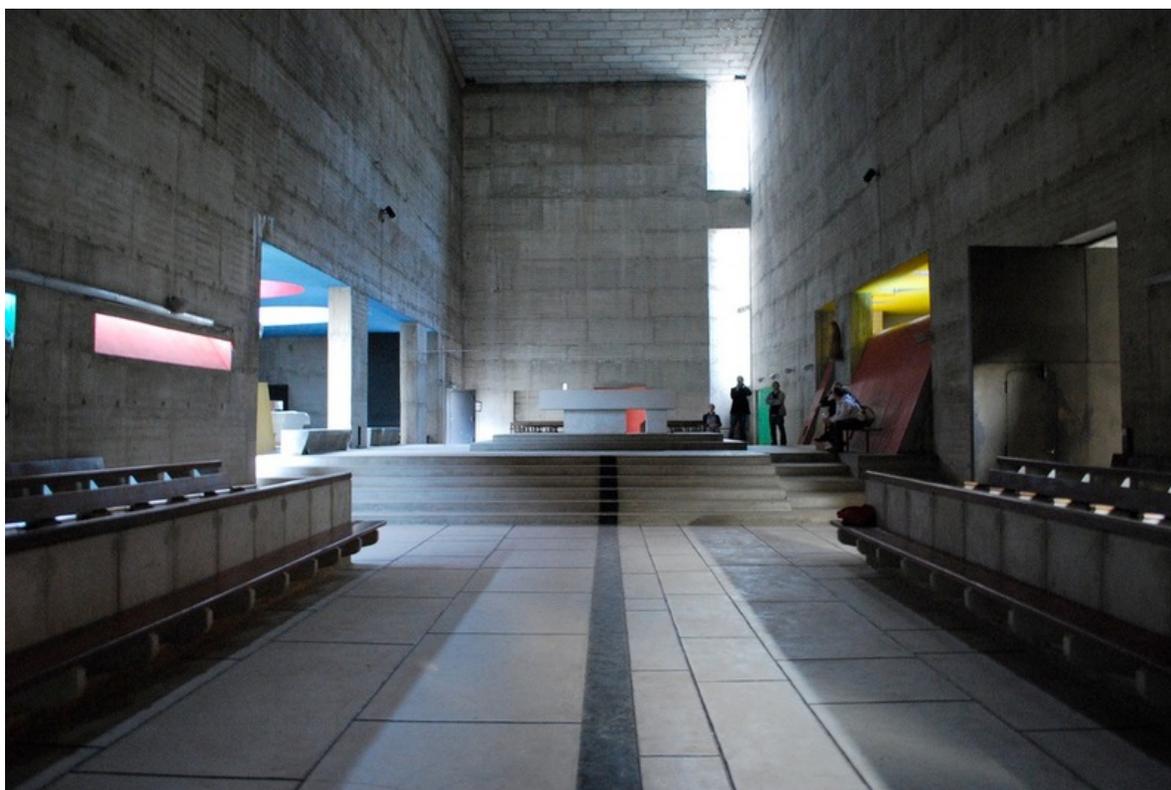
As radical and modern Le Corbusier's architecture is, especially his religious architecture, symmetry remains an essential geometrical element in the design (even if it does not appear as first).[147] As such, it could be argued that symmetry is essential in the liturgical arrangement of space. It is something that Schwarz appears to have taken for granted as something historical and inherent in Christian architecture. Symmetry seems to be quite central in his conceptual designs of the Six Plans, and indeed, the Seventh Plan.

The free-standing principal altar (no. 7 on floor plans) is located on the axis and almost at the center of the long rectangular space. It would be reasonable to argue that this should not be unusual for this point in the development of liturgical space immediately before Vatican Council II.[148] At the same time, a sizable space on the other side of the altar (toward the

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[146] Toward sanctuary from the choir, see Eli Inbar, "La Tourette 'Conscious Inspiration' 2," Some One Has Built It Before (blog), accessed March 9, 2020, https://archidialog.com/tag/la-tourette/page/2/.

[147] Le Corbusier uses a similar geometric pattern to mark the floor of the convent church of Notre Dame du Haut (1955), in Ronchamp, France. While the space is asymmetrical compared to the priory church at La Tourette, there is a similarly dark line marking the axis to the high altar.

[148] Nevertheless, the design is evidence of a liturgical arrangement that prepares for transition. A priest can preside at the Liturgy of the Eucharist on either side of the principal altar. At the same time, there are also eight minor altars. However, they are located in the lower chapel from the main body of the priory church.

east) could have been served as the nave and used for the lay faithful at the time where there was a large Dominican community.

Figure 3.8: View toward the choir. [149]
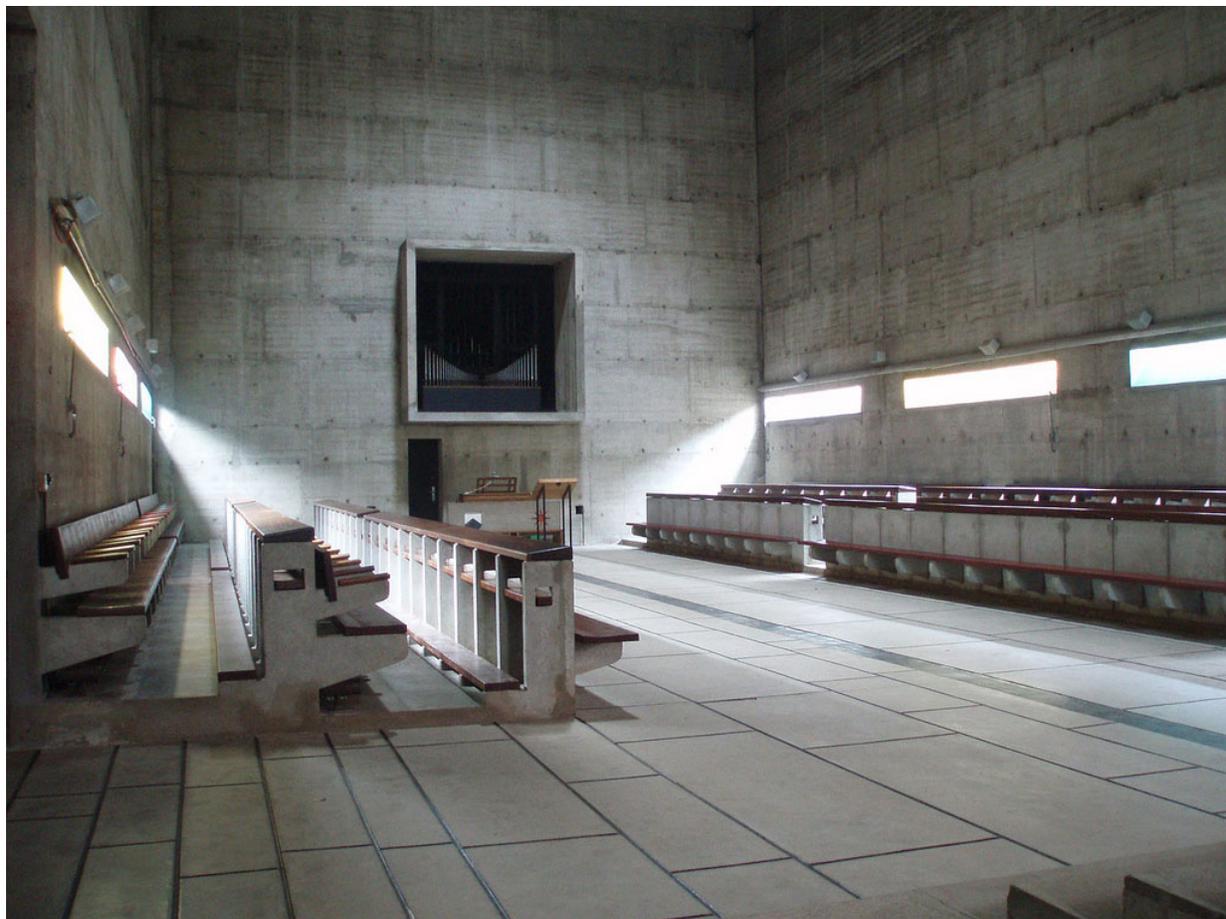
This arrangement would make it possible for the entire assembly to move from the choir to the nave for the Liturgy of the Eucharist, where the priory has much fewer Dominicans. While this current liturgical arrangement and practice appear to be to a creative adaptation of the space, there seems to be no suggestion that this could have been something the architect or client had anticipated. Hence, it could be reasonable to argue that the liturgical arrangement in elongated rectangular liturgical space can be adapted to re-create greater movements of the assembly in the liturgy, especially with a smaller assembly being in a much larger space.

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[149] Photo by Le Corbusier Archives, in "Sainte Marie de La Tourette / Le Corbusier," Archeyes: Timeless Architecture, accessed, March 2, 2020, https://archeyes.com/sainte-marie-de-la-tourette-le-corbusier/.

III. St. Gregory of Nyssa Episcopal Church in San Francisco

One creatively conceived longitudinal church is St. Gregory of Nyssa. There are two distinct spaces yet united in the building plan. The worshiper enters into a tall octagonal space, the rotunda, where the Liturgy of the Eucharist is celebrated. This space is joined directly with an elongated rectangular space where the Liturgy of the Word is celebrated. The rectangular space appears to be in a semi-Latin cross plan with an apse. See Figure 3.9 & 3.10 on the following page.

The current church is designed by the architect John Goldman and completed in 1995. He collaborated closely with the founding rectors of the parish, Richard Fabian and Donald Schell. The design of the building response to "a liturgy they had developed over decades, drawing inspiration largely from the historic worship of Eastern Christianity."[150] As such, the liturgical arts and arrangements in the space, together with the architecture and liturgical practice of the congregation, express their theological, ecclesiological sources and not as arbitrarily put together as it might seem.[151]

Figure 3.9: View of the rotunda and elongated rectangular space beyond (uses for the Liturgy of the Word). (Photographed before the writing of the icons on the upper walls).[152]

On a typical Sunday, the 8:30 am eucharistic liturgy at St Gregory of Nyssa is preceded with the morning prayer. This occurs half an hour before the first Eucharistic liturgy of the Sunday. Turning right, after entering the rotunda, the people quietly gathered in the space shown in Figure 3.10. This space has a slightly raised platform that connects the ambo (left of the photograph) and the presidential chair (at right in the photograph, where the presider is shown sitting on the Thai *howdah*, or elephant saddle).[153]

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[150] Kieckhefer, *Theology in Stone*, 37.
[151] Kieckhefer, *Theology in Stone*, 39.
[152] "Saint Gregory of Nyssa Episcopal Church," Tipping Structural Engineers, accessed March 10, 2020, http://www.tippingmar.com/projects/project_details/18.
[153] Richard Giles, *Re-Pitching the Tent,* 189; Episcopal Liturgy, "St. Gregory of Nyssa."; Kieckhefer, *Theology in Stone*, 37.

Figure 3.10: View of the elongated space with the assembly sits for the Liturgy of the Word.[154]

After the Introductory rites and opening prayer, the assembly sits for the readings. The presider gave the sermon at the *howdah*. There are moments of silence between the reading of the Gospel and the sermon, and also after the sermon. For about five minutes, some people in the assembly share their reflections on the readings. Once the sharing is completed, a lay minister intones the introduction to the chant of the Lord's Prayers. The assembly stands and chants the Lord's Prayer together. At its conclusion, the lay minister chants the doxology.

Figure 3.11: Photograph of the assembly dancing around the altar. The upper walls feature the dancing saint icons. [155]

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[154] "St. Gregory of Nyssa, San Francisco," Episcopal Liturgy, accessed March 10, 2020, http://www.episcopalliturgy.org/st-gregory-of-nyssa.
[155] Episcopal Liturgy, "St. Gregory of Nyssa."

The lay minister briefly "instructs the congregation in the *tripudium* dance step (three steps forward, one step back), and the cantor leads the singing of 'Judge eternal, robed in splendor,' as the congregation dances into the rotunda." See Figure 3.11 and 3.12. This offertory procession begins longitudinally. Once the procession reaches the altar, it became circular, as the assembly danced around the altar.

Figure 3.12: Photograph showing the assembly standing around the altar.[156]

Liturgy of the Eucharist continues as the dance circling the altar has completed. The assembly stands around the altar. It is assumed that some people might be sitting. Where the chairs/benches are provided is unclear. After the Liturgy of the Eucharist completed the presider recite the post-communion prayer.

Following the customary activities (blessings on individuals and announcements) are completed, the assembly is dismissed. "The cantor gives brief instructions, and the congregation sings and dances the carol, 'Thy kingdom comes on bended knee.' The lay [minister] dismisses

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[156] "Connecting with St. Gregory's," St. Gregory of Nyssa Episcopal Church, accessed March 10, 2020, https://www.saintgregorys.org/contact.html.

the congregation, and coffee and snacks are brought out, and placed on the altar for 'coffee hour.' The people disperse after refreshments."[157]

There are three crucial spatial and architectural features, which closely correspond to the liturgy developed and practiced in this community. First, which should already be obvious, the liturgical arrangement has the two distinct spaces united in one building and created for the liturgy that has two distinct parts. This liturgical arrangement is unlike more typical liturgical arrangements of a Catholic Christian worship space, where the ambo and altar are the objects (placed near one another) that identify and signify the two distinct parts of the eucharistic liturgy.[158] Second, the long axis that runs across the two spaces governs not only architectural and liturgical arrangement but also the celebration of the eucharistic liturgies at St. Gregory of Nyssa. This axis also connects the altar, ambo, and presidential chair. Thirdly, the axis is the spine of the movement, the dance, between the two parts of the liturgy and the liturgical space.

Hence, the axis is not merely a centerline, or connector. In this sense, the axis signifies the ordered movements between the foci in the liturgy, between the marked places of encountering God's presence. At the same time, it could be argued that, by dancing between the two liturgical space and part of the liturgy, the assembly expresses the active presence of God. Here, active and conscious participation in the liturgy means the body of the assembly is also moving, dancing.

Therefore, this alternative model of liturgical arrangement has a significant contribution, not only as an expression of close collaboration of architecture and liturgy but also in that collaboration has been able to engender meaningful active participation in the liturgy.

IV. The Mass of Ordination to the Presbyterate at the Notre Dame Cathedral in Paris, 2012.[159]

The last and fourth alternative model for a liturgical arrangement is a creative adaptation of existing church building for a particular liturgical celebration, the ordination of priests. The then

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[157] Episcopal Liturgy, "St. Gregory of Nyssa."

[158] The distinction between the nave and the sanctuary is not meant to be a sign of the two distinctive parts of the eucharistic liturgy. Nevertheless, without the ambo, the altar and the worshipers, the space would lose, if not decrease, its liturgical significance.

[159] KTO Télévision Catholique, "Ordinations sacerdotales à Notre-Dame de Paris," YouTube Video posted on June 30, 2012, recording of live video broadcast, 3:26:58, https://youtu.be/RgFk7uVhq8o. Subsequent presbyteral ordinations took place here, except for the June 2019 ordinations. It took place at the church of St. Sulpice after the fire damaged Notre Dame Cathedral.

cardinal archbishop of Paris, André Vingt-Trois, presided at the ordination Mass of the 11 deacons on June 30, 2012, at the Notre Dame Cathedral.

For the most part, of the ordination Mass was celebrated according to the Roman Pontifical and Missal.[160] However, one major part was shifted to a different place of the liturgy or changed. First, the calling of the candidates took place after the Greeting. Second, (a minor adjustment), after the vesting, each new priest received the anointing of the hands, the gifts in chalice and paten, and the Greeting of Peace from the ordaining prelate. The sequence of liturgical actions is the same as in the practice of the Roman Rite in the United States. While this is practically a minor difference, these three actions occur one after the other without interruption. It appears that the offertory procession (following the anointing of hands) is moved elsewhere or omitted.

Before the liturgy began, the square in front of the cathedral was set up with seats for the ordination candidates, a group of concelebrating priests, and the lay faithful. An ambo was set atop a high platform at the right of the central door to the cathedral. This was where the Liturgy of the Word took place.

After the Greeting, a formator (presumably the seminary rector) calls the candidates forward. However, he calls them from inside the cathedral. As their names have been called, each candidate processes one by one, along with some people from their parishes and the vesting priests to their seats in front of the cathedral.

Nevertheless, after that, the Liturgy of the Word proceeded as usual, at the external ambo. Following the Second Reading, the Gospel procession took place from the altar to the external ambo. The cardinal follows behind the deacon who carries the Gospel book. He then proclaimed the gospel reading as per usual. After that, the cardinal gave his homily at the external ambo.

Once the homily is complete, the candidate follows the cardinal in procession into the narthex of the cathedral. There the Examination and Promise of Obedience took place. The cardinal and the candidates stood during this part, except when each candidate knelt in front of the cardinal, promising their obedience to him.

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[160] As the author does not have access to the liturgical books used for this ordination Mass, *Rites II* is used as a reference instead. See Catholic Church, *The Rites of the Catholic Church: Volume Two* (Collegeville: Liturgical Press, 1991), 38-47.

After the cardinal received the Promise of Obedience, he led the candidates in procession toward the front of the altar. They prostrate there for the Litany of the Saints. Subsequence parts of the ordination Mass occurred as usual (except for the second part mentioned earlier).[161]

It is quite encouraging to see the significant effort was made toward greater participation of the laity in an ordination liturgy, especially at the calling of the candidates, accompanying them as representative of their local communities. It could be argued that such innovation for a diocesan ordination can be seen as a significant sign that the local churches and communities can be as much a formation for the candidates as their seminary.

From this perspective, it seems appropriate that the candidates once called, entered the cathedral accompanied by some of the laity from their local communities. Secondly, it appears that the assembly is larger than the seating capacity of the Cathedral. As such, it does make pastoral sense for some a part of the rite of Ordination took place outside the church (as in celebrating the Liturgy of the Word outside the cathedral). At the same time, it is difficult to understand from viewing the video recording, as to why the Calling of the Candidates was done after the Greetings instead of after the readings and at the beginning of the Rite of Ordination proper, or that the offertory procession was omitted.[162]

Nevertheless, it does make pastoral sense to celebrate the Liturgy of the Word outside when part of the assembly is gathered in front of the Cathedral. It is also a creative way to include those who are unable to be seated inside. At the same time, it would be optimum if there were live TV screens both inside and outside the Cathedral so that both groups of the assembly

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[161] With the other video recordings found on YouTube, a similar liturgical arrangement of the ordination Mass also occurred in 2017, 2018 (presided over by the current archbishop of Paris, Michel Aupetit). The 2019 ordination Mass was held as St. Sulpice, 29 June (Notre Dame suffered the fire a couple of months earlier). In this liturgy, the Candidates came into the church after being called. While there were extra seating and two large TV screens were arranged outside the church, the remainder of the liturgy was conducted inside the church. See in, KTO Télévision Catholique, "Ordinations sacerdotales à Saint-Sulpice le 29 juin 2019," YouTube Video posted on June 29, 2019, recording of live video broadcast, 2:57:33, https://youtu.be/4X3IL6pKiGw.

[162] It is possible that the Conference of Bishops of France received an indult from the Holy See to place the Calling of the Candidates where they do. At the same time, it is not clear in the video as to when the offertory procession took place, if at all. As usually practiced in the United States, the assisting deacon receives the gifts from members of the faithful before handing it over to the bishop to present them to the newly ordained priest. The omission of the offertory procession minimizes the symbolic significance of the bread and wine being offered by the people of God for the celebration of the Eucharist, especially at a major liturgical celebration of the local Church. Of course, there is something to be said about the symbolic significance for the lay faithful to accompany the candidates in procession, almost as they are offering a member of their community for priestly service. Nevertheless, this symbolic significance is entirely different from that of the offertory procession before the Liturgy of the Eucharist.

can share equally in the celebration. This is also a significant symbolic move to say that God's presence is not only within the confines of a church building.

This model of liturgical arrangement can be a significant pastoral solution for large and major liturgical gatherings such as ordination, Easter Vigil, where a typical parish church cannot accommodate a large assembly. However, to maximize active and conscious participation, both groups of the assembled must be able to share in the celebration via live video link if visual access from one space to the other is limited or the two spaces are entirely separated.

In conclusion, this chapter has discussed four possible alternative arrangements of liturgical space that, in some varying degree, engender or promote greater bodily movements in the body of the assembly and the liturgy. While Rudolf Schwarz's "Seven Plans" present the most theoretical of the four models, they do offer a set of geometrical principles of the architecture for the liturgy, such as axis, direction, verticality and horizontality, and symmetry. At the same time, these principles express the liturgical and theological dynamics of a worshiping body. For Schwarz, it is a way of thinking about how churches are to be designed that would reflect the bodily experiences and senses in how the divine, how God is encountered here and now.

As such, dynamism is a common theme that runs through each of these models. Schwarz's geometry, if one can call it 'sacred geometry,' is dynamic. One that draws movement from one point to another, from one focus to another. As such, a worshiping body is brought together to a point, moved along an axis to another focus, then dispersed. It is the dynamic worshiping community within (and without) the liturgical space that encounters Christ so that they can go with Christ in the mission of the church outside of the liturgy and the sacred space. Hence, in this sense, the sacred and liturgical space should support and promote this dynamism in and through its form. Thus, the liturgical arrangement in the sacred space should engender and promote the dynamism of the worshiping body in the building built for that worshiping community in its time.

Le Corbusier's priory church of La Tourette is an example that can be seen as having underlining geometric dynamics that Schwarz was proposing. At the same time, as the priory is a very modern space even for today's standard, symmetry is an essential feature for liturgical architecture design.

This dynamism is clearly expressed in the liturgical arrangement and the liturgy of the community at St Gregory of Nyssa. The geometrical principles are embodied in the architecture and liturgical arrangement of the worship space. However, the saints' icons would be rendered static without the assembly moving along the axis of the space, and around a focal point.

The ordination liturgy at Notre Dame Cathedral in Paris was a creative liturgical arrangement that breaks out of the physical boundary of the building to engender greater movements in the liturgy and also, at the same time, provides for the pastoral needs of the liturgy. This alternative model begins to show the possibilities of creative uses of fixed liturgical spaces, that were built for the ecclesiology and liturgy of a previous era, to engender greater movements in the worshiping body.

If the body of Christ is to be the model for the architectural form of liturgical space, then it must also express the dynamism of the body of Christ in that liturgical space. The incarnation is also revealed in the dynamic encountering of Christ that drawn the worshipping body inward so that it can be sent outward. This incarnation is expressed in the dynamic iconography of the liturgical spaces and worshiping body together in those spaces, not merely in static icons. The following and last chapter of this thesis will propose two models of liturgical arrangement that would allow for and engender a more dynamic worshiping body.

Chapter Four

Axial yet multidirectional and multifocal:

Toward an active bodily encounter and participation in the liturgy

In general, most people attend an event because there is an experience to encounter, be they music, film, or dance party. On the other hand, with religious rituals, in this case, a Roman Catholic liturgy, the reasons are more complex. Nonetheless, since they are attending church, this thesis can suggest making the liturgical arrangement so that the assembly's participation can be more active. Thus, their encounter with one another can be more meaningful in the liturgy; and even experiencing the transcendence.

This chapter, culminating from the findings of the previous three, will suggest two models of liturgical arrangement with an underlying geometry. These can be seen as design principles for two forms of liturgical arrangement. The first proposes a rearrangement for the longitudinal rectangular liturgical space, to promote an increase in active participation in the liturgy. The second model proposes a design principle for new liturgical spaces to engender multifocal, multidirectional, and bodily movements and greater active participation in the liturgy.

Figure 4.1: Monastery church, Ronchamp.[163] Figure 4.2: Cathedral of Our Lady of the Angels.[164]
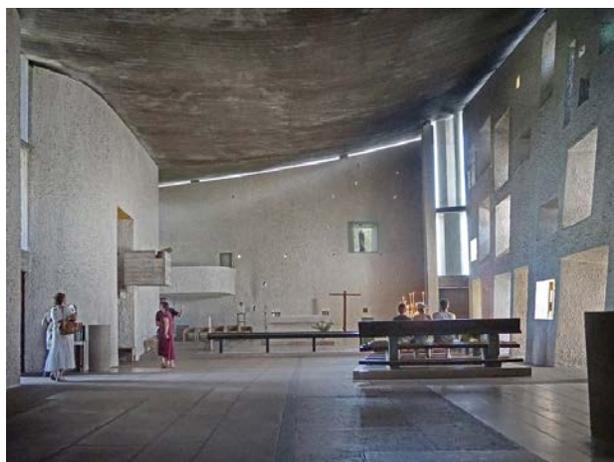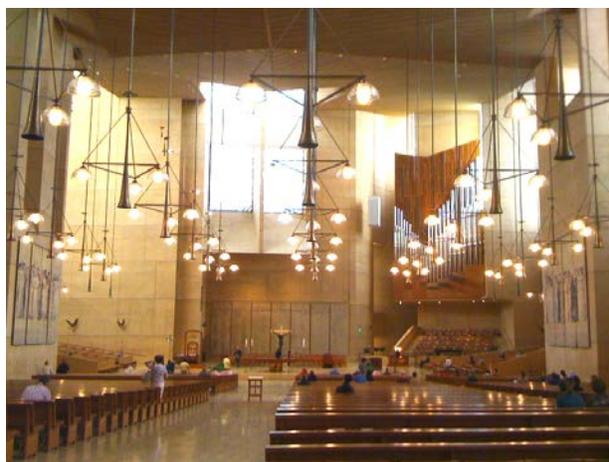
There are two geometric features and one environmental feature that appear in the liturgical spaces studied in this thesis. The first is axial. Because of the enduring legacy of the basilica form, the longitudinal axis is essential in the rectangular plan of a Roman Catholic church building. Many modern church buildings with "irregular" shape, such as Le Corbusier's monastery church at Ronchamp (1955), Rafael Moneo's Our Lady of the Angels in Los Angeles

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[163] Riccardo Bianchini, "Notre Dame du Haut Chapel by Le Corbusier – Ronchamp," Īnexhibit, October 10, 2019, accessed May 1, 2020, https://www.inexhibit.com/mymuseum/notre-dame-du-haut-le-corbusier-ronchamp-chapel/.
[164] Photograph by David Galvan in "Cathedral of Our Lady of the Angels. Church in Los Angeles, California," Thousand Wonders, accessed May 1, 2020, https://www.thousandwonders.net/Cathedral+of+Our+Lady+of+the+Angels?q=Cathedral+of+Our+Lady+of+the+Angels

(2002), or Steven Holl's Chapel of St. Ignatius in Seattle (1997), all retain the axis on which the altar is located. Despite these spaces being asymmetrically arranged, the processional axis remains essential.

Second, symmetry is the enduring significance of liturgical spaces throughout the history of Christianity. It is nearly impossible to avoid symmetry, at least in a Roman Catholic liturgical space. The only symmetry appears in the Chapel of St. Ignatius is the short processional axis. Even that, one can only see that axis by looking at the floor plan, or in procession directly toward the altar.

Third, as much as symmetry, *light* is also an enduring significance in Christian liturgical spaces. Throughout Christian history, architecture shapes the external light that penetrates and illuminates the liturgical space. Now, with interior lighting, the liturgical space is also the illuminating source. As such, light is the preeminent quality of the Chapel of St. Ignatius and was designed to communicate the symbolic and liturgical significance of light in the space - the external light that penetrates the interior through the "bottles of light" during the day and the interior light that shines out during the night. As such, the liturgical space is designed to be both the receptor and emanator of light.

Figure 4.3: Chapel of St. Ignatius, interior during daytime; Figure 4.4: Exterior at dusk.[165]

While this chapter does not disregard the importance of liturgical arts and decoration in liturgical space, it uses the modern examples above to highlight the geometric principles. The lack of excess decorative elements in a liturgical space reveals these geometric and environmental features much more clearly, especially as they are mostly asymmetrically

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[165] "Chapel of St. Ignatius," Steven Holl Architects, accessed May 1, 2020, http://www.stevenholl.com/projects/st-ignatius-chapel; Photograph by Jules Antonio in "Chapel of St. Ignatius," Flickr, accessed May 1, 2020, https://www.flickr.com/photos/julesantonio/8149197235.

arranged spaces. Whereas symmetrically arranged spaces, even when they are more decorated, the geometry can be distinguished. On the theological level, they also help communicate the symbolic and liturgical importance of axis, symmetry, and light.

Therefore, the two geometric models will incorporate the concepts of axis, symmetry, and light to illustrates their symbolic and liturgical significance. The discussion of the two models will be accompanied by illustrations of existing liturgical spaces, three of which are already mentioned, as well as the findings from the previous three chapters.

I. Reordering pre-Vatican II liturgical space

A vast majority of pre-Vatican II liturgical spaces were designed for different a liturgy and ecclesiology than those of the post-Vatican II era. Thus, it is a significant challenge to reorder these spaces to promote greater active participation in the liturgy. Chapter Two of this thesis shows examples of this very challenge, even in the most radical reordering of the liturgical spaces discussed.

Most of the historic church buildings in the Archdiocese of Boston were built in the 19th and early 20th Century in traditional European styles. The architectural and heritage significance of these church buildings are also part of the social heritage of the communities that built them. As such, any changes to the liturgical arrangement in these churches would need a broad consensus of the community.

At the same time, the pews in these churches are made to suit perpendicularly to the axis in a longitudinal space and made to last. Shifting them around in the same space would prove to be logistically challenging. On the other hand, purchasing new chairs would be unfeasible for many already parishes under financial constraints.

While these challenges are clear, a reordering of a long rectangular liturgical space using most of the existing furnishing is not impossible. The geometric concept proposed below considers this challenge. At the same time, it is also important to seriously consider how the liturgy is performed by the community gathered in a particular space.

An example of a reordering of a pre-Vatican II liturgical space is the late 19th-century church of St Canice's in Sydney, Australia (designed by the architect John Bede Barlow in the English Gothic revival style).[166]

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[166] "Parish History," St. Canice's, accessed March 24, 2010, https://www.stcanice.org.au/about-us/parish-history/.

The current arrangement uses most of the existing furnishing in the space to preserve the architectural heritage of the building. Sometime shortly after Vatican II, the central altar was built to suit existing esthetic. The ambo was acquired elsewhere and installed for this current arrangement.[167]

Figure 4.5: View toward the central altar.[168]

This reordering shows the geometrical and environmental elements discussed in the introduction to the chapter. The retains the axis of the existing liturgical space, hence provide symmetry to the new liturgical arrangement. Moreover, additional artificial lighting supports the new liturgical reordering by illuminating the ambo, the altar, and the chair. This liturgical reordering shows that the heritage value of the space can be conserved. At the same time, it can also express a radically different theology and ecclesiology than what the pre-existing church interior signified.[169] As such, several crucial factors distinguish this liturgical arrangement from the previous.

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[167] Stephen Sinn, S.J. (former parish priest of St. Canice), email message to author, March 23, 2020.

[168] "Photos for St Canice Catholic Church," Yelp, accessed March 24, 2020, https://www.yelp.com.au/biz_photos/st-canice-catholic-church-elizabeth-bay

[169] The Catholic Church's current official resources in the English-speaking world on reordering of liturgical spaces include Australian Catholic Bishops Conference, *Fit for Sacred Use: Stewardship and renewal of places of worship*

Figure 4.6: View from the choir loft.[170]

First, the altar and ambo are positioned on the processional **axis** designed for the existing space. At the same time, they are set amid the assembly, rather than before the lay faithful in a separate place - the *presbyterium*. Furthermore, setting the ambo and altar further apart signifies the two distinct parts of the liturgy – the Liturgy of the Word and the Liturgy of the Eucharist. This twin *foci* invite the assembly to turn toward the Liturgy of the Word and then toward the Eucharist. Hence, this is a higher level of conscious participation than merely looking toward the liturgical actions in one direction.

Second, this liturgical space is arranged in **symmetry** along the axis. At the same time, it is an ordered communal arrangement and not a hierarchical one. Unlike the previous arrangement, the altar, ambo, and presider chair are placed in the nave.

The existing *presbyterium* and high altar became a place for the tabernacle, and private prayers and devotion. By rearranging them in their new places, the ambo and altar give greater significance to their roles and the roles of the liturgical ministers and presider in the liturgy. The

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(Brisbane: Liturgy Brisbane, 2018), Bishops' Conference of England and Wales, *Consecrated for Worship: A Directory on Church Building* (London: Catholic Truth Society, 2006), and Committee on the Liturgy, U.S. Conference of Catholic Bishops, *Build of Living Stones: Art, Architecture, and Worship*. November 16, 2000, in Office of Liturgy Archdiocese of New York, "Built of Living Stones."

[170] "Who is our brother? Who is our sister?" St. Canice's, accessed March 24, 2020. https://www.stcanice.org.au/passion/.

rearrangement of the pews shows the place of the lay faithful and signify their roles in the liturgy. It also shows their relationship with the minsters and presiders as a worshiping body united in one space. This arrangement expresses a different ecclesiology. It is a horizontally ordered community rather than a hierarchically ordered community. At the same time, the geometry that expresses hierarchy is that of the vertical, signify by the point at the altar and ambo, where the "sacred" vertical and "mundane" horizontal axes meet. In this sense, the hierarchical order is expressed in the relationship between humans and God in the gathered worshiping community and the liturgy they participated in.[171]

Third, *light*. Once the interior of St. Canice's church was cleaned, it revealed a much lighter stone and brick surfaces. This renovation significantly lightens the entire space. At the same time, a new artificial light was installed to sufficiently illuminate the ambo, altar along with other parts of the space. The natural light coming through the windows illuminates, especially the seating areas of the assembly. As almost all the liturgies in the space occur during the day, the natural illumination plays a significant role in uplifting the assembly, especially those sitting closer to the wall along the side aisles (see Figures 4.5 and 4.6 above).

With an example of what is possible and prudent in a reordering of an existing historical pre-Vatican II liturgical space, the remainder of this section will present the geometrical concept as introduced earlier.

The *axis* characterizes this liturgical arrangement (see Figure 4.7 below). As such, the entrance to the liturgical space should be on the axis before the baptismal font. Following that, on the axis, is the ambo, and then the altar, and last, the presider's chair. Facing inward from both sides of the processional axis are areas for the assembled lay faithful. This conceptual model, building from the example cited above, places the baptismal font before the ambo. This placement is not unusual in new spaces. However, pre-Vatican II church buildings were not designed for the assembled faithful to easily see the baptistry. Here, the gathered faithful can see

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[171] Bess, *Till We Have Built Jerusalem*, 146-147. Bess appears to consider the *axis mundi* applies only to the altar, suggesting placing it at the crossing on a cruciform plan. He sees the axis (in a cruciform plan) to connect "the entrance, the nave, the altar, and (perhaps, but not necessarily) the chair of the celebrant acting *in persona Christi*." In this arrangement, the ambo is left off the axial geometry. As an alternative, Bess suggests that the ambo "could be significantly elevated, as it is in many medieval churches, to underscore that the divine Word which dwelt among us nevertheless comes to us from on high." Here, Bess appears to suggest that the seating area for the assembled lay faithful (if they do) be located in the nave, and some in the transepts, looking toward the altar. Here, for him, this arrangement expresses directionality over *foci*.

baptismal font easily, which can assist and improve their participation in the baptismal rite during the liturgy.

    The axis defines the **symmetry** of this liturgical arrangement, yet it also allows the *foci* to be located within the liturgical assembly. At the same time, each *focus* is distinct from the other. As such, the assembly would turn their bodies or heads to *focus* on the two distinct parts of the liturgy visually – turn their eyes and ears to the Word being proclaimed, and the Eucharist celebrated. These bodily movements of assembly must be considered as more active than a slight turn of the heads or the eyes from the ambo to the altar in a typical pre-Vatican II liturgical arrangement or post-Vatican II sanctuary in the round or fan-shaped arrangement.

Figure 4.7: Plan and cross-section view (at the bottom of the drawing) of a conceptual reordering of a pre-Vatican II rectangular liturgical space.
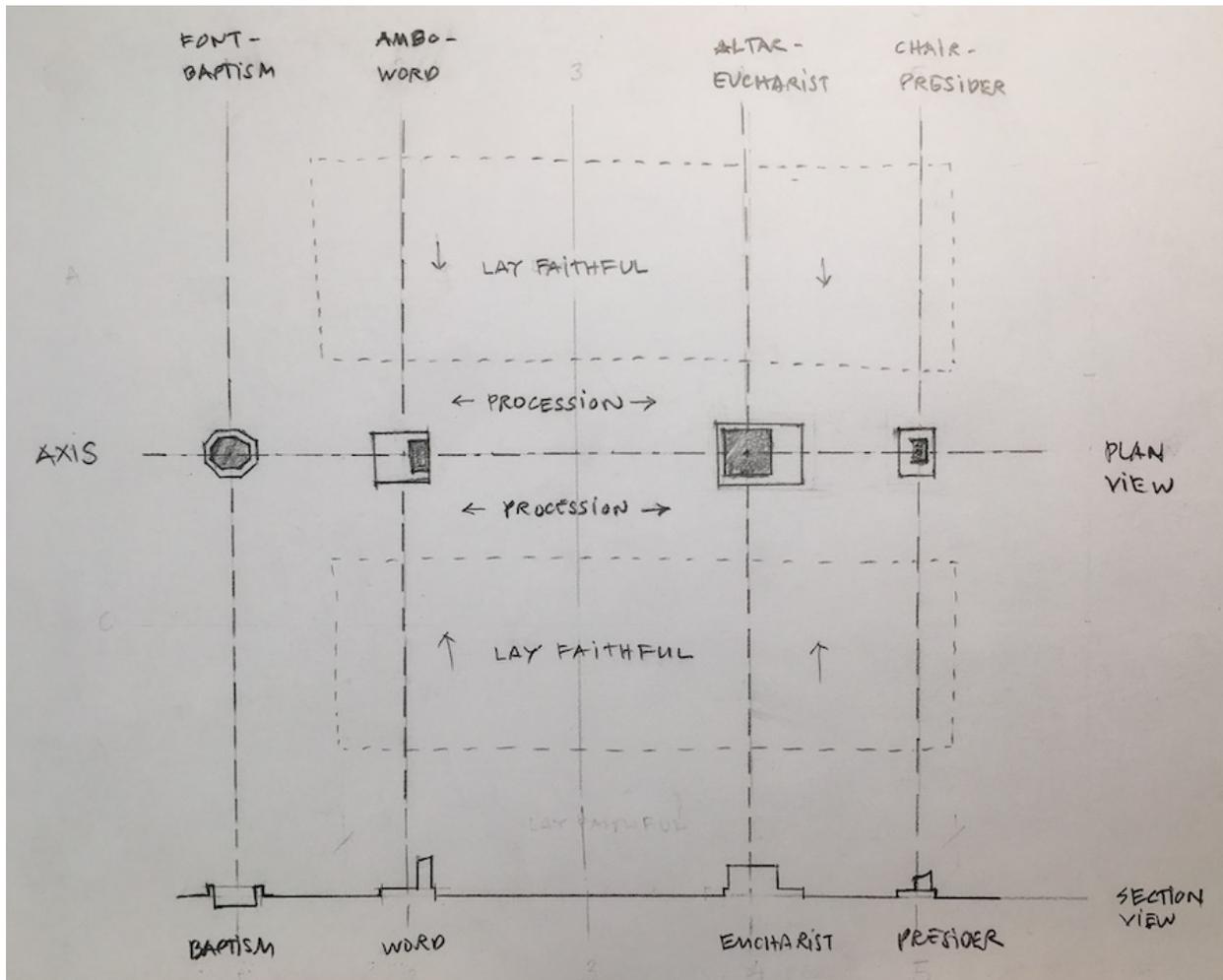
In section view, the ambo, altar, and chair are placed on raised platforms. On a symbolic level, while they could be placed on the floor, a change in the floor material may be sufficient to

indicate their places and roles in the liturgical assembly. The same could also be done for the areas designated for the assembled lay faithful. On the other hand, the raised platform has not only a symbolic significance but also a practical application. Chapter Two discussed the importance of the participants' visual access to liturgical presider, action, and objects. Slightly elevating the altar, ambo, and chair would aid the participants' visual access to the liturgy.[172] Of course, at the same time, if these liturgical furnishings were to be placed on the floor, the seating area for the lay faithful ought to be elevated on steps to allow the assembly to have visual access to the liturgy.

Putting the rows of pews on steps would provide clearer visual access to the altar. This choir style setting is common in monastic and seminary chapels in the United States. St. John's Seminary in Brighton, Massachusetts, is an example. However, if the altar is at the center or near the center of the space, it would give a sense of looking down at the liturgy. Some might consider this as a disrespectful gesture as it might resemble watching sport in a stadium.

Placing the altar and presidential chair on a raised platform higher than three steps would also give the assembly greater visual access to the liturgical actions. However, the height difference between the presider and the liturgical actions at the Eucharist would create a greater separation between them. Some might consider this elevation exaggerates the hierarchal separation between the laity, priest presiders, and ministers.[173]

As mentioned earlier, the model of liturgical arrangement suggested here could not escape the enduring symmetric geometry of the Roman basilica form that transpire liturgical spaces throughout the history of Western Christianity discussed in Chapter One, and modern spaces discussed in Chapter Three and earlier in this chapter. However, to suggest an asymmetrical model would prove to be futile in the reordering of a pre-Vatican II liturgical space such as St. Canice's Church. As such, this model must consider and respect what had endured in architectural traditions. It must also acknowledge at least the axis and symmetry as features inherent to Christian architecture, despite their origins.[174] Nevertheless, at the same time, this

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[172] Bess, *Till We Have Built Jerusalem*, 147.

[173] A decision on which direction to take – whether to elevate the ambo, altar, and presider chair or elevate the seating for the assembled faithful – should be part of a discernment process of the community and the pastor.

[174] One must also consider axis and symmetry as inherent geometrical features of religious architecture, not just that of Christian architecture. The modernist Japanese architect Tadao Ando designed the Church on the Water in Hokkaido, Water Temple in Hyougo-ken (Awaji Island), and Church of the Light in Osaka, intentionally incorporate asymmetrical elements with the symmetrical assembly or worship space. See Francesco Dal Co, *Tadao Ando, 1995-2010* (Munich: Prestel, 2010). However, this would be a whole separate topic outside of this thesis.

model is one way to rearrange the old order to address the ecclesial and liturgical reforms that Vatican Council II had promoted.

In this way, both altar and ambo are *foci* of attention. At the same time, each is honored by their distinct places in the liturgy and the liturgical arrangement. Nevertheless, ultimately the altar is what draws people into the liturgical space and the liturgy, being part of a "double procession" that also sends the community back out into the world, "returning home."[175] At the same time, the faithful people also come into *focus* when the worshiping community is drawn toward the altar, one by one, to receive Communion. In this arrangement, the procession is even more visually apparent as the assembly would see it at a 90-degree rather than looking at the backs of people in the procession.

To consider the alternative, it would be quite logical for a traditional liturgical arrangement when the lay faithful, as well as the presider facing and processing toward one direction. There is an apparent unity in such an arrangement. However, it was an arrangement for a different Church, at a different time, and from a different theology. The challenge with the currently prevailing liturgical arrangement in pre-Vatican II liturgical spaces, as discussed in Chapter Two, is the retention of pre-Vatican II seating arrangement in the nave – the assembled faithful faces the presider behind the altar on the *presbyterium*. When almost all liturgical actions are taking place on the *presbyterium*, it would be not difficult to see the assembled faithful more as spectators rather than participants.

On the other hand, this conceptual model makes more apparent the participation of the gathered assembly. If the Church believes that the presence of Christ is active in a gathered assembly, then it must arrange the assembly in such a way that it is clearly seen as an active body.[176]

At the same time, what are the possible objections to this conceptual model? In his book, *Till We Have Built Jerusalem*, Philip Bess argues that sacred architecture serves as a sacramental sign; and, as such, part of the evangelical mission of the Church. For him, the physical elements of verticality and unity are inherent to sacred architecture. Verticality and unity also characterize the human body. Moreover, as such, the incarnational and sacramental nature of sacred

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[175] McCarthy and Leachman, *Come Into the Light*, xxviii-xxiv.

[176] McCarthy and Leachman succinctly refresh the understanding of the liturgical assembly, see McCarthy and Leachman, *Come Into the Light*, 33-36.

architecture is to express the symbolic body of Christ. In this sense, a cruciform plan is the most suitable physical manifestation of this symbol. Here, he goes so far as saying, "The cruciform plan permits the best 'fit' between building form and post-conciliar ecclesiology, sacramental theology, and liturgy."[177]

Here, in principle, Bess may object to the idea that the *axis mundi* has two points of intersections, the altar and the ambo. At the same time, he would also object to this model, which disregards the hierarchy of a cruciform space (such as that of St. Canice's). He may consider this as a disruption to the unity of the assembled body and the symbolic body of Christ.[178]

Bess seems to suggest that the altar is at the heart of the cruciform plan. In this metaphor of the body, the people are drawn to and sent out from the altar. Similarly, the flows of blood are directional to and from the heart. Arranging the seating for the assembled lay faithful this way is perfectly reasonable for a cruciform plan. Here, directionality is essential, yet it left the ambo out of the axial geometry. How, then, does the ambo relate to the altar in the directionality of the geometry and liturgical participation? Is the encountering with the Word considered an intersection between the divine and the mundane?

Perhaps a more vigorous objection would come from Steven J. Schloeder. From a historical perspective, he reasonably argues for a "hierarchic separation" of the *presbyterium* and the nave in a liturgical arrangement. The Church not only makes clear the distinction between the ministerial priesthood and baptismal priesthood that is common to the clergy and laity, but it also follows the long historical precedence of reverencing and respecting the demarcated areas reserved for the sacred actions in the liturgy.[179]

It would not be prudent to entirely reject the hierarchical order of the liturgical arrangement that had jointly developed with the ecclesiology and theology of the Church. Nevertheless, what is being proposed in this conceptual liturgical arrangement is precisely a more forceful reordering of the "hierarchic separation," hence, the pre-Vatican II ecclesiology and liturgical arrangement. Of course, given the prior discussions in this thesis, on the historical

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[177] Bess, *Till We Have Built Jerusalem*, 135-138, 146.

[178] Bess, *Till We Have Built Jerusalem*, 146-147. Bess suggests the altar should be placed at the center of the transept, yet it is unclear where the ambo is placed, other than it must be "significantly elevated." The seating for the assembled faithful should be placed in the nave, "with secondary seating in the transept." It is assumed that the secondary seating areas are oriented toward the altar. He argues that "This is the reasonable seating arrangement for the form of the church, for the liturgical action, and for the inherent directionality of the human person."

[179] Schloeder, *Architecture in Communion,* 53-60. This is a precise example of the priority of BLS that Sunghera discusses in his thesis, which seeks to reemphasize clear distinctions and hierarchy in a liturgical arrangement.

development of the altar and liturgical reforms in Chapter One and current practices of liturgical arrangements in a local church in Chapter Two, this proposal is not unreasonable, nor is it a wholesale rejection of traditions. It is a proposal to bring existing pre-Vatican II liturgical arrangements into alignment with the liturgical and ecclesial reforms of Vatican II.

The previous chapters have shown that, in general, the developments of the altar throughout Christian history were responses to the needs and experiences of the local churches, ecclesiology, and liturgical practices. Nevertheless, at the same time, a principle lineage in the development of traditions can be discerned. As the substance of the traditions (visual elements such as images, architectural styles, decorative features, and even particular ways of placing liturgical furnishings) cannot always be taken from another era and contemporaneously applied at will without critical reflections. As such, geometrical principles (axis and symmetry), environmental principles (light), and corresponding theological principles (the divine meeting the mundane) are at the core of the lineage of traditions that this thesis relies on to propose any conceptual model of liturgical arrangement. Therefore, as in Schwarz's argument discussed in the previous chapter, this conceptual model is a way for architecture to account for today's human reality and experience of encountering the divine. Thus, it can serve as a guide in designing the place of encounter.[180]

It would be reasonable to argue that, in the post-Vatican II Church, with *S.C.* §14, full and conscious participation is the priority for the reform of the liturgy. In that, participation is an essential part of the liturgy, which is the act of Christ and his Church.

This priority for liturgical reform is presented clearly in *Sacrosanctum Concilium* – churches are to be built suitable "for the active participation of the faithful."[181] As shown in Chapter Two, the post-Vatican II liturgical arrangement functions uneasily in a pre-Vatican II liturgical space. As in most Boston's churches, with or without the altar rails, the "hierarchic separation" is presented and, of course, in compliance with GIRM's directive.[182]

Nevertheless, if the Church truly believes that active and conscious participation in the liturgy is a priority, then a liturgical arrangement should be engendering this participation, not

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[180] Schwarz, *The Church Incarnate*, 9-11.

[181] § 124 of the Second Vatican Council's Constitution on the Sacred Liturgy, *Sacrosanctum Concilium*, in Flannery, *Vatican Council II*, 157. Also, see Chapter V, § 288, in "General Instruction of the Roman Missal."

[182] Chapter V, §§ 294, 295, 296-301, 303, on the altar, and § 309 on the ambo, and § 311 on the places for the faithful, in "General Instruction of the Roman Missal."

hindering it. The hierarchical division of space puts the clergy before the laity. Hence, it continues to reinforce the appearance of the laity spectating the clergy over a participatory assembly of both laity and clergy.

If the Church truly believes that Christ is actively present in the Word, Eucharist, and also the body of the assembled faithful – laity and clergy, then liturgical arrangement should unite the assembly, not divide it. The "hierarchic separation" visually prioritizes the liturgical actions of the priest presider and his ministers over and apart from the participation of the laity.[183] This distinction suggests that the liturgical actions in the *presbyterium* are visually more sacred than those in the nave during the liturgy.

To McCarthy and Leachman, worship can be seen as being "caught between heaven and earth."[184] The conceptual arrangement proposed is one way of expressing this act of being caught. In that, the intersection between heaven and earth also occurs in the whole assembly and not only in the sacred actions of the priest presider. The ambo and altar located on the axis amid the assembly visually express the intersection between the sacred and mundane. The assembly, in its participation, is caught in this exchange.[185] In this proposal, the conceptual arrangement allows for visual access to the liturgical actions as well as honoring each part of the liturgical actions as distinctive, without emphasizing one over the other. At the same time, placing the baptismal font on the axis allow the baptismal liturgy its proper place in the celebration.

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[183] See Galatians 3, "Neither male nor female, Jew or Greek, slave or free, all are created equal in the eyes of God." Richard Vosko argues, "In Catholic churches there is a definitive 'pecking order' to distinguish the clergy from the laity, the ordained from the non-ordained. Usually, these two groups sit and function in different spaces. Within each space, there may be further seating privileges. This pecking order creates psychological and social walls or barriers that take form in such things as titles, attire, language, railings, chancels and sanctuaries in church buildings. The same thing happens in classrooms and court of law." See Richard S. Vosko, *God's House is Our House: Re-imagining the Environment for Worship* (Collegeville: Liturgical Press, 2006), 57.

[184] McCarthy and Leachman, *Come Into the Light*, 66-69.

[185] It appears that McCarthy and Leachman differ somewhat with Bess and the discussion in question that the *axis mundi* is located and marked on the floor of a sacred space. It is the spot at the center of the transept, often under a dome, before the altar. It is an accessible place. The place "upon which the baptized receive Communion, enter into marriage, profess religious vows, are ordained, the sick are anointed and where their mortal remains may rest for the vigil until morning celebration of the Eucharist, an image of awaiting to join the heavenly banquet, the wedding feast of the lamb. As the world rotates around its North and South Poles, this liturgical pole attracts all our daily activities into its ambit." Here, these authors also critique that the over-focus on visual accessibility of the liturgy in some churches had diminished the *axis mundi* character in a liturgical space. At the same time, they also critique the raised altar at the center of the crossing of a cruciform plan. "This conflates the vertical axis of the church hall with the vertical axis that once was formed by the altar and its ciborium or baldachin now stripped away, thereby creating unidimensional space that keeps people away and gives such emphasis to the altar as to diminish the place for all other liturgical celebrations." McCarthy and Leachman, *Come Into the Light*, 66-69.

The last possible concern for this conceptual arrangement is seating habits and proxemics – "the study of how people relate to other people and objects in certain spatial settings."[186] As mentioned in Chapter Two, it shows that more than half of participants seated further from the altar in the choir setting as well as in the forward-facing the altar arrangement. Therefore, in a parish setting, at least in Boston, regardless of the liturgical arrangement, there would likely be less of the lay faithful occupying the seating area closer to the altar. Perhaps this is a trend that will continue if clear spatial distinction and separation continue to exist in liturgical spaces. On a typical Sunday liturgy, it is reasonable to expect some parishioners will prefer more distance from the altar and less exposed to the assembly. However, the liturgical arrangement must continue to spatially and visually express that the liturgy is a communal activity and not a performance by the presider and ministers or private individual prayer of the laity.[187] As such, the liturgical arrangement must assist the assembly to fully, consciously, and actively participate in the liturgy. This conceptual model would be most helpful to address this need for pre-Vatican II liturgical spaces similar to that of St. Canice's church.

## II. A new geometry for new liturgical spaces

When there is a (relatively) blank page to start with, a new design should be given every opportunity to go beyond the minimum requirement. This is not to say that the GIRM's requirements represent the lowest common denominator, but they can be seen as minimum requirements.[188] Nevertheless, as already discussed earlier, this thesis disagrees with the GIRM's stance on the "hierarchic separation" of spaces in a liturgical arrangement. This proposal for a geometric model for new liturgical spaces continues from this reasoning that a liturgical arrangement should emphasize the united assembly rather than divided assembly.

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[186] Vosko, *God's House is Our House*, 56-59. Also, see E. T. Hall, *Handbook for Proxemic Research* (Washington, DC: Society for the Anthropology of Visual Communication, 1974).

[187] McCarthy and Leachman are right in saying that people of diverse backgrounds and "different walks of life come together to worships, and "there is no 'audience' of passive spectators who merely watch the priest and the altar servers, and who say their private prayers and devotions." At the same time, they also say, "the liturgy invites each one of us to participate fully and actively in our own way." See McCarthy and Leachman, 33.

[188] There are undoubtedly many factors contributing to the fulfillment of minimum requirements in Catholic liturgical spaces, be they financial constraint, historic preservation, or low priority. Nonetheless, Chapter 2 shows two examples in this category.

Figure 4.8: Plan and cross-section view of a geometric model for new liturgical spaces.
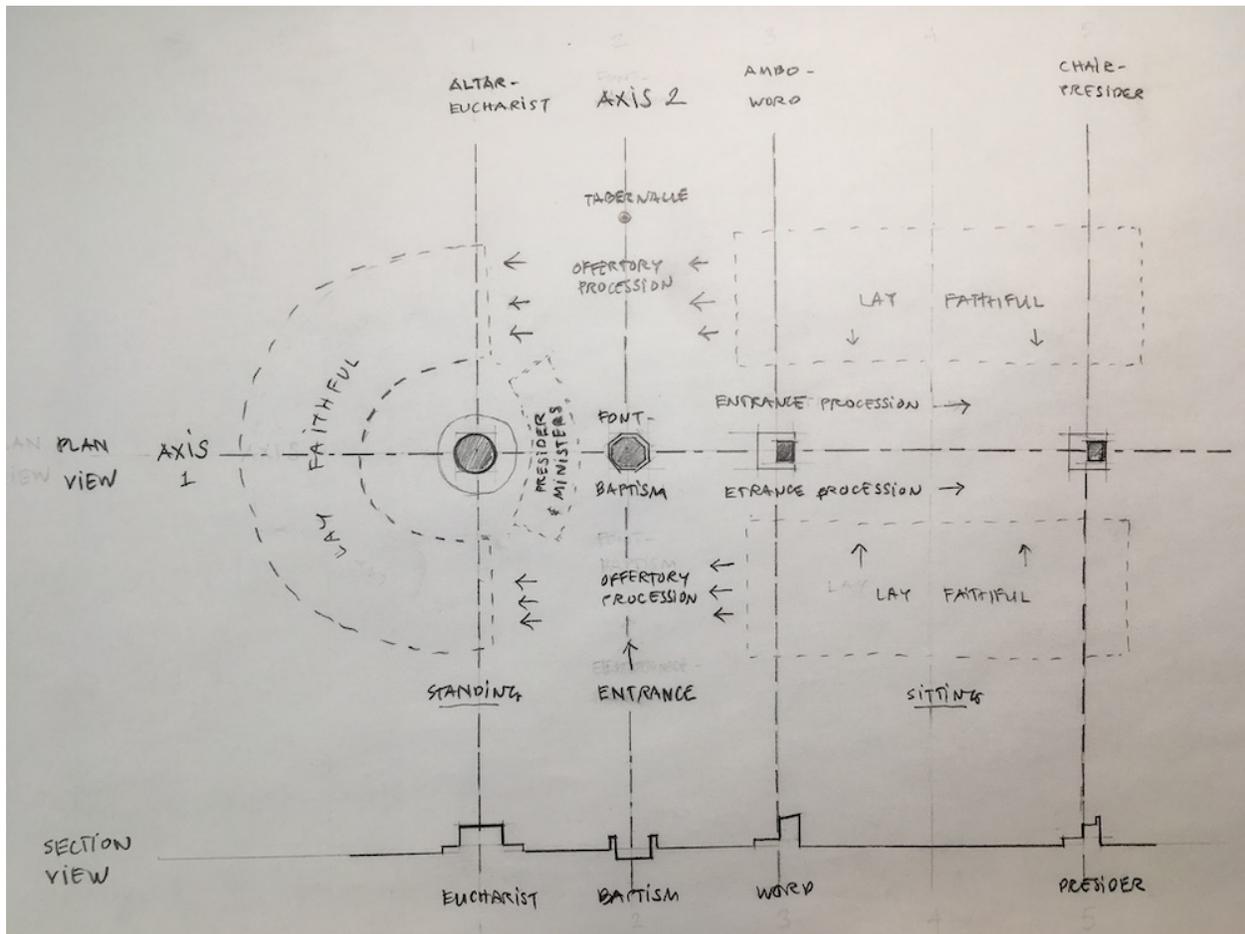
However, taking a step further, this chapter proposes a geometric model similar to and based on the liturgical arrangement of the St. Gregory of Nyssa's Episcopal Church in San Francisco discussed in the previous chapter. The plan view in Figure 4.8 (above) shows a similar axial and symmetrical arrangement. The first noticeable difference is that the baptismal font is located between the altar and ambo. At the same time, this plan has two horizontal axes, for the sake of conceptual orientation, Axis 1 runs east-west, and Axis 2 runs north-south.

This arrangement expands the traditional *axis mundi* and puts the vertical axes at the altar, baptistry, ambo, and presidential chair. In that, it is not so much about a 'central' vertical *axis* but more about significant points in the liturgical arrangement that can symbolize the multiple connections between the divine and the mundane. As if to say, God reaches humans, and humans touch God as water pouring at baptism, hearing the Words proclaimed, with the presider acting *in persona Christi* and braking the bread at the Eucharist.

This plan also shows provision for the preservation of the Blessed Sacrament. The tabernacle can be placed within the geometrical order of the arrangement, yet without being prominently central in the space. This concept also allows for a contemplative space in front of the tabernacle without being part of the proper liturgical space. At the same time, the distance between the altar, baptismal font/baptistry, ambo, and presidential chair can be adjusted depending on spatial and building site requirements. Secondly, the axial crossing at the baptismal font allows for a change in the angle of Axis 1. This means that this the baptistry can be a pivot allowing the west arm of Axis 1 to turn clockwise or counterclockwise. The east arm of Axis 1 can do the same. Thus, this conceptual model gives the flexibility for adjustment to the spatial requirement and building site. This arrangement proposes locating the entrance to the space before the baptismal font.[189]

Therefore, while it remains in keeping with the GIRM, the liturgy celebrated in such a space with this conceptual arrangement would be quite similar to that at St. Gregory of Nyssa's church. In that, essentially, the liturgy would have two principal parts, the Liturgy of the Word and Eucharist. The other similarity is that the assembly would move in procession from one area of the liturgical space to the other, from one principal part of the liturgy to the other.

The envisioned Sunday liturgy in such a space would be in this fashion. After one enters the church, the people would customarily bless themselves with the baptismal water then turn into the area designated for the celebration of the Liturgy of the Word. The Introductory Rites began as the procession enters the church. The presider reverences the altar and follows the minister entering the assembly.[190] The assembly sits after the Collect and stands during the Liturgy of the Word, according to the rubrics.[191] The readings and psalms are proclaimed at the

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[189] Perhaps, theologically more appropriate for the baptismal font to be located away from the intersection of Axis 1 and 2, closer to the entrance to the space. This then, would make an uninterrupted and clearer liturgical, visual and axial connection between the altar and ambo. Also, it would decentralize the baptismal font, for baptism is unlikely to be celebrated at every Sunday Mass. Thus, giving the altar and ambo a greater centrality and unity in the liturgical space.

[190] The GIRM stipulates that the procession to the altar (no. 120). As such, "the direction and goal of the procession is the altar, that the central symbol of Christ amid the assembly, while the procession itself 'expresses visibly the unity and fullness of the assembly.'" See Foley, Mitchell and Pierce, eds. *A Commentary on the General Instruction of the Roman Missal*, 235. This issue will be discussed soon after the description of the envisioned liturgy in the space.

[191] "General Instruction of the Roman Missal," §§ 43, 55-65.

ambo. A priest can deliver his homily at the chair or the ambo. If a deacon delivers the homily, he should do so at the ambo, where he proclaimed the Gospel.[192]

Following the period of silence after the homily, the assembly stands for the Profession of Faith and Prayers of the Faithful.[193] Here, unlike the first conceptual arrangement as discussed above, ritual words and movement should be devised to conduct the Offertory Procession of the whole assembly to the Liturgy of the Eucharist in the space on the other side of the baptismal font. As discussed in the previous chapter, the assembly at St. Gregory of Nyssa sang in a danced procession toward the altar. After the altar has been prepared, and the assembly gathered around the altar, the presider recites the Prayer over the Offerings. The Liturgy of the Eucharist proceeds according to the rubrics.

Here, a relevant question could be asked, does the assembly sit or stand during the Eucharistic Prayer? It is a relatively common practice in the United States and other places that the assembly stands for the Eucharistic Prayer. GIRM specifies these postures for the lay faithful and ministers:

> They should kneel beginning after the singing or recitation of the Sanctus (Holy, Holy, Holy) until after the Amen of the Eucharistic Prayer, except when prevented on occasion by ill health, or for reasons of lack of space, of the large number of people present, or for another reasonable cause. However, those who do not kneel ought to make a profound bow when the Priest genuflects after the Consecration. The faithful kneel after the Agnus Dei (Lamb of God) unless the Diocesan Bishop determines otherwise.[194]

Therefore, the area for the celebration of the Eucharist should provide for standing, kneeling, and sitting. The architectural design process should seriously consider the liturgical practices and pastoral objectives of the worshiping community while keeping in mind the GIRM's requirements, as well as ensuring visual access for the whole assembly. Of course, this is a delicate balance to be struck, especially for a Roman Catholic parish setting. One could ask these questions. Would the altar be placed on a raised platform? Is the presider chair also elevated on the same platform? How high is the platform, if the community usually stands during the Eucharistic prayer? How does the space provide for those who have difficulty standing or those who wish to kneel? What are the liturgical and architectural directions of the local diocese?

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[192] "General Instruction of the Roman Missal," §§ 66, 171&175.
[193] "General Instruction of the Roman Missal," § 43.
[194] "General Instruction of the Roman Missal," § 43. The GIRM also says in § 43, "For the sake of uniformity in gestures and bodily postures during one and the same celebration, the faithful should follow the instructions which the Deacon, a lay minister, or the Priest gives, according to what is laid down in the Missal."

These questions are not merely architectural. They are also liturgical, ecclesiological, and pastoral ones.

Nevertheless, this thesis has set out to propose a new way of arranging the liturgical space that would encourage greater movements in the body of the assembly. The assembly's movement from one distinct area of the space to another - corresponding to the two distinct parts of the liturgy - not only heightens the awareness of their distinctiveness but also would engender a more active and conscious way of participating in the liturgy than the status quo.

However, an obstacle remains. One that this chapter would not be able to resolve on the conceptual level, thus calling for further studies. As already mentioned earlier, "the direction and goal of the procession is the altar, that the central symbol of Christ in the midst of the assembly, while the procession itself 'expresses visibly the unity and fullness of the assembly.'"[195] This creates several awkward liturgical issues for the proposed conceptual arrangement. Visually, the altar is not precisely in the midst of the assembly until the Liturgy of the Eucharist. However, one also could argue that the free-standing altar placed on a *presbyterium* separated from the nave by an altar rail is not exactly in the midst of the assembly.

On the liturgical level, the GIRM stipulates that the entrance procession goes to the altar. Here, in this proposed conceptual arrangement, the procession ends with the presider reaching the chair, on the other side of the space, far opposite the altar. While the entrance procession commonly goes the narthex toward the altar at the other end of the liturgical space, the GIRM does not specify the place where the procession begins. As such, this lack of specification presents an opportunity for the design process to determine where the procession begins in such a space designed with this conceptual model. Nevertheless, according to the GIRM, the procession goes to the altar and that the priest presider reverences the altar before arriving at the chair.[196] Thus, for this proposed conceptual arrangement, the GIRM's requirement would cause disunity of the body of the procession if the priest is separated from the ministers having to reverence the altar before passing the ambo going toward the chair. This is incompatible with the GIRM's idea of the procession, which assumes that the altar is located on the opposite end of the liturgical space, in the apse or the *presbyterium* (or, at least the altar is placed near or before

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[195] "General Instruction of the Roman Missal," §§ 49 & 298; Catholic Church. *Introduction to the Order of Mass: a pastoral resource* (Washington, D.C.: United States Conference of Catholic Bishops, 2003), § 67.
[196] "General Instruction of the Roman Missal," §§ 120-124.

presidential chair).[197] Nonetheless, this conceptual arrangement is also a starting point of thinking about how to reconcile the priorities between the liturgical movements and gestures of the presider and lay ministers to those of the assembled lay faithful. In that, how do the liturgy and liturgical arrangement move beyond the symbolic idea that the entrance procession "expresses the unity and fullness of the assembly?" Shouldn't the entire assembly be the visual expression of the unity of the gathered body of Christ? In one way, the community of St Gregory of Nyssa is already a visible expression of a whole community journeying together to the altar.

In conclusion, these two proposals, while being limited concepts, are significant visual expressions of what Schwarz discussed as a way forward in using the contemporary reality and experience of encountering God and each other human beings to design liturgical space for the worshiping community at present.

The first model offers a kind of 'compromised' solution for the tension that existed between pre-Vatican II liturgical space and post-Vatican II liturgy. This model retains the axial and symmetrical geometry of the traditional liturgical space, yet reordered and unified the assembly into one worshiping body. At the same time, by placing the ambo and altar in the midst of the assembly, the liturgical arrangement is not only drawing people to the altar but also to themselves, the worshiping body. The liturgical arrangement engenders more conscious bodily movements at each of the two principal parts of the liturgy by placing the altar and ambo at two distinct places on the axis in the center of the assembly. This model also highlights the visual significance of the assembly as the meeting place between the divine and the human.

The second model offers a new geometry, yet respects the axial and symmetrical principle of the first model. At the same time, with the aim to engender even greater bodily movement in the worshiping assembly, this arrangement places the ambo and altar in two distinct areas in the space. Hence, the assembly is even more conscious of the two distinct parts of the liturgy by the spatial arrangement and their movements from one distinct area of the space to the other to participate in the two principal parts of the liturgy. Here, the altar is truly drawing the whole assembly toward it in a ritual movement of coming to the Lord's table.

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[197] The first conceptual arrangement would satisfy this requirement as the presidential chair is located after the altar on the axis.

The second model remains in need of further critical studies, reflections and liturgical formation to be able to suit a Roman Catholic liturgy and community.[198] It is significantly more conceptual in design than the first model, as well as being based on an arrangement with different liturgical traditions and practices (St. Gregory of Nyssa Episcopal community). Nevertheless, this conceptual model offers a springboard for more innovative liturgical space designs by raising further questions about what it means for the whole worshiping body to actively and consciously participate in the liturgy.

What this last chapter has shown, based on the research discussed in the previous chapters, is the beginning of two applicable liturgical arrangements that can sensibly and meaningfully contribute to the efforts of liturgical and ecclesial reforms of the Vatican Council II. What this thesis has shown, if anything, that there is no era in the Church's history of liturgical architecture that one could point to as a single definitive arrangement for today's liturgy. At the same time, without the lasting underlining geometric principles of church architecture traditions, contemporary church designs would merely be part of short-lived fashion trends. Nevertheless, what this thesis also confirm is, in the Church's long experience, that any architectural solution is a response to the liturgy. Hence, an architectural response must express the dynamism of the liturgy and must be created for the dynamic worshiping body. This requires the shaping and reshaping of static architecture for the dynamic encounter between God and the gathered faithful. In turn, the dynamic liturgy finds its home in the architecture as the gathered faithful find their home in God.

As the liturgical practice is also a response to the architecture, the liturgy shapes architecture as much as architecture shapes liturgy.

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[198] Chief of the liturgical formation is the reconsideration of what does active participation in the liturgy mean and how does it practice.

Postscript

This thesis was being completed during the months of the COVID-19 pandemic of 2020. As elsewhere in the Catholic Church, my confreres at St. Peter Faber Jesuit Community had to adjust to a markedly different way of celebrating the liturgy and providing pastoral ministries. Even though we could celebrate the Mass having some priests, we could only do so in our various oratories, but not together as a whole community in the chapel. At the same time, we were keenly aware of the laity's inaccessibility to the sacraments due to isolation and the government's social distancing regulations. Thus, some of my brother Jesuit priests ministered to their pastoral communities by celebrating Mass with them through Zoom or Facebook live.

Earlier on during the pandemic, a brother Jesuit of mine, who is also a priest, mentioned to me how his people desire so much to celebrate the Mass 'in' their church, even if it was a virtual experience. There were many available options for online Mass, yet the community desire to celebrate with him 'at' their church. This had shown me how significant is the place that the faithful come together and celebrate the liturgy. Likely it is not because of the presider whom they know. But this is their church, their community. To celebrate Mass, if only virtually, 'at' their parish church is the way of remaining connected to their local faith community.

This significance of the place, in which a community comes together to worship, demonstrates to me the inherent relationship between the people, liturgy, and place. How pertinent, then, is making liturgical space ever more conducive for active participation?

Andy Nguyen, S.J.
Monday of the Fourth Week of Easter and Memorial of St. José María Rubio, S.J., May 4, 2020

Appendices

Questionnaire Forms

Appendix 1: Questionnaire Version 1 – used in Experiment 1

Subjective Visual Impression Test – the Liturgy of the Eucharist

Seat number_____

Some definitions:
The presider: The priest presiding at the Mass
The liturgical actions: The liturgical gesture and movements during the Liturgy of the Eucharist
The liturgical objects: The eucharistic elements (bread, wine, water), the liturgical vessels (paten, chalice, etc.)

The following questions only pertain to your **visual impression** of the **Liturgy of the Eucharist** at the Mass you have just participated at Holy Name Chapel.

1. Please rate your sense or experience of **visual connection** to the following:

                                0 1 2 3 4 5 6 7 8 9 10
   The presider: *None*   *Maximal*
   The liturgical actions:
   The liturgical objects:

2. Standing without leaning, could you see the following?
                               Yes   *Partially*   *No*
   The presider:
   The liturgical actions:
   The liturgical objects:

3. During this Liturgy of the Eucharist, how often do you look at the following?
                               Often   *Sometimes*   *Never*
   The presider:
   The liturgical actions:
   The liturgical objects:

4. If you are a regular participant at Mass in this chapel,   Yes   No
   do you usually sit at this seat or area where you are sitting now?

5. Estimate distance between you and the presider at the altar: _____ feet
   (or) _____ meters

Thank you very much for your participation!

Appendix 2: Questionnaire Version 2 – used in Experiments 2 and 3

Subjective Visual Impression Test – the Liturgy of the Eucharist

Seat number_____

Some definitions:
The presider: The priest presiding at the Mass
The liturgical actions: The liturgical gestures and movements during the Liturgy of the Eucharist
The liturgical objects: The eucharistic elements (bread, wine, water), the liturgical vessels (paten, chalice, etc.)

The following questions pertain **only** to your **visual impression** of the **Liturgy of the Eucharist** at the Mass you have just participated at Holy Name Chapel.

1. Please rate your sense/experience of **visual connection** to or **visual engagement** with the following:

    0 1 2 3 4 5 6 7 8 9 10
    The presider: *None*   *Maximal*
    The liturgical actions:
    The liturgical objects:

2. While standing, what **view** did you have of the following?

    Full view   Partial view   No view
    The presider:
    The liturgical actions:
    The liturgical objects:

3. During this Liturgy of the Eucharist, how often do you look at the following?

    Often   Sometimes   Never
    The presider:
    The liturgical actions:
    The liturgical objects:

4. If you are a regular participant at Mass in this chapel,   Yes   No
    do you usually sit at this seat or area where you are sitting now?

5. Estimate distance between you and the presider at the altar: _____ feet
    (or) _____ meters

Thank you very much for your participation!

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