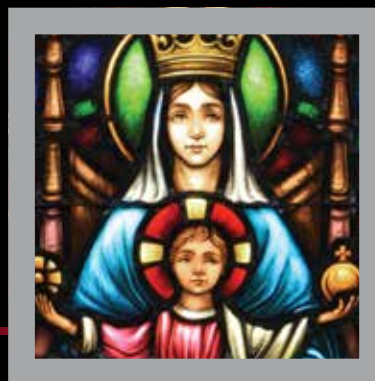
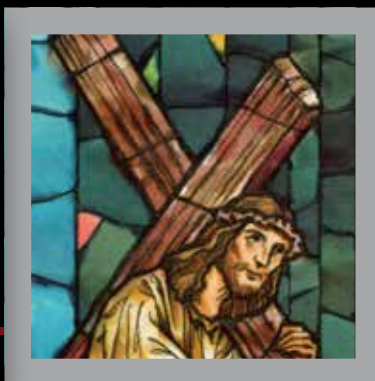
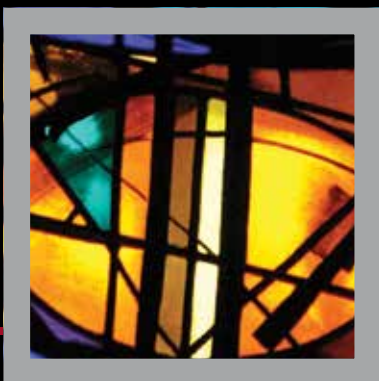
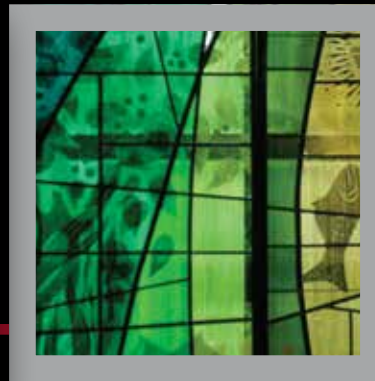
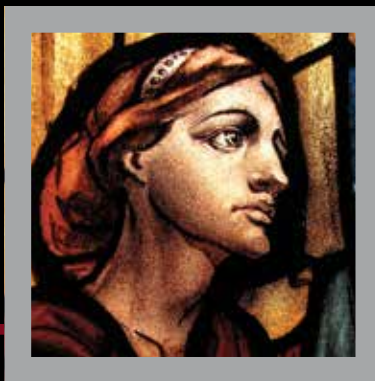
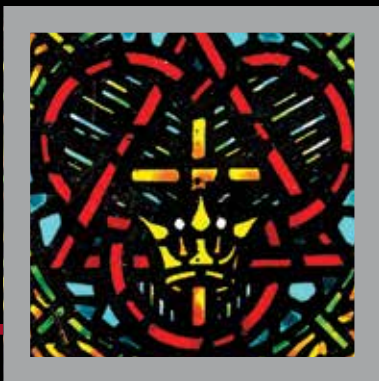




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NEXT ISSUE

Special Theme Issue: The Architecture and Art of Community

CONTENTS

Designing for the Subarctic Sacred

Tammy Gaber 6

The 'Stereotypical' Mosque

Abdulgader S. Naseer 12

Learning From Gothic Cathedrals

Timothy O. Adekunle 17

Faith & Fashion

Michael J. Crosbie 19

Sövik's House for the People of God

Mark Torgerson 22



ON THE COVER:

Fashion inspired by Catholicism on exhibit at the Metropolitan Museum of Art in New York. In this example, John Galliano for House of Dior. Evening ensemble, autumn/winter 2000–2001 haute couture. Courtesy of Dior Heritage Collection, Paris. Digital composite scan by Katerina Jebb (*article begins on page 19*). Photo: Courtesy of Metropolitan Museum of Art

DEPARTMENTS

Editor's Page.....	4
Architects Directory.....	28
Artist/Artisan Directory.....	28

INDEX OF ADVERTISERS

ArchNewsNow.com.....	5	Faith & Form/ID Awards Program.....	5
Connect to Faith & Form.....	31	Faith & Form Theme Issue.....	4
Conrad Schmitt Studios Inc.....	32	J. Sussman, Inc.....	30
Dekker/Perich/Sabatini.....	5	Subscribe to Faith & Form.....	31
EverGreene Architectural Arts.....	5	Willet Hauser Architectural Glass, Inc.....	2



DISPLACEMENT AS A CONDITION OF FAITH

EDITOR'S PAGE ★ MICHAEL J. CROSBIE

The recent annual symposium of the Architecture, Culture, and Spirituality Forum (acsforum.org) in Coral Gables, Florida, focused on the topic of "Displacement and Architecture." For me, this theme called into question the assumption that people of faith find solace from a profane world in sacred places where believers can find a spiritual home. In fact, many have argued that the condition of genuine religious belief is one of "displacement," that spiritually the believer is not of this world, focused ultimately beyond earthly concerns. And if this so, how might religious architecture reflect this displacement?

The rabbi and Jewish theologian Abraham Joshua Heschel did not view space as sacred; rather, time is sacred. He made the distinction that space is in the realm of human "things" that can be created and destroyed. But time is a divine dimension, controlled only by the deity. In his landmark book, *The Sabbath*, Heschel wrote: "Monuments of stone are destined to disappear; days of spirit never pass away." In other writings, Heschel cautions that space is alien to human spirituality, while time offers its own sanctity: "Judaism teaches us to be


attached to holiness in time, to be attached to sacred events rather than to sacred places, to learn how to consecrate sanctuaries that emerge from the magnificent stream of a year. The Sabbaths are our great cathedrals..."

Another perspective on this spiritual displacement is offered by the geographer Yi-Fu Tuan (one of the founders of "humanistic geography") who articulates a distinction between human place making (which concerns geography) and religion (not of a place, in his view). Tuan writes that for the "true followers" of Buddha, Moses, and Christ, "the shift from place to placelessness is not a cause for regret; for them the true home for human beings is never a geographical place—a holy city or mountain—somewhere on Earth. It is always elsewhere."

The idea of a church building not necessarily being a "sacred place," but instead a secular realm of displacement for people of belief, is most vividly seen in the writings and architecture of Edward Anders Sövik (who Mark Torgerson profiles in this issue). Sövik designed mostly Protestant churches and wrote extensively about church design and its liturgical underpinnings. His view was that faith is not expressed through ecclesiastical

architecture, but rather by how one lives out his or her religious beliefs. To Sövik, church buildings should be secular places, not imbued with "holiness"; they should be open to the community in which they are built, serving their needs.

Sövik argued that early Christianity lost its way under Emperor Constantine, when the idea of "sacred place" became more important. In his seminal book, *Architecture for Worship*, Sövik writes that in the 3rd century, the Roman Empire had a variety of religions with a multitude of deities, each with their own shrines, temples, altars, and holy places. But Christians, says Sövik, "saw themselves uniquely as a community of faith unattached to any place," because followers of Christ are not of this world. Their spiritual home lies elsewhere.

For Sövik, religious buildings should not be considered "sacred" but rather fully secular in character, offered to our communities for purposes other than worship. Today, the nature of sacred space is changing as more people choose secular settings in which to share fellowship and live out their religious beliefs. The "displacement" of their faith propels them to create way stations of compassion on their spiritual journeys "home." 

MICHAEL J. CROSBIE IS THE EDITOR-IN-CHIEF OF FAITH & FORM AND CAN BE REACHED BY EMAIL AT [MCROSBIE@FAITHANDFORM.COM](mailto:mcrosbie@faithandform.com)

The Architecture and Art of Community

How do the sacred places that we create serve community needs and become neighborhood assets? More and more faith communities have a new appreciation of their role as resources for those outside their immediate congregation. Works in this issue will explore how creative design can forge strong connections between sacred environments and the communities they serve.

Send us your ideas, projects, designs, art about the connections between sacred space and community!
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DESIGNING FOR THE SUBARCTIC SACRED

FOUNDED IN 2013, THE McEWEN SCHOOL OF ARCHITECTURE AT Laurentian University in Ontario was the first new school of architecture in Canada in 40 years. The first undergraduate cohort graduated in 2017, and in the fall of 2017 the Master of Architecture program was launched with three parallel studios each with a theme tying into the mission of the school: “Architecture and Community,” “Architecture and Indigenous design,” and “Architecture and Craft.” I led a group of 12 graduate students in a Craft studio that centered on the design of a sacred space in the subarctic climate of Iceland. This one semester graduate studio is intended to launch students into graduate-level design and research through several methodological approaches, including craft of making and drawing; primary analysis onsite; literature review and research culminating with a design proposal and self-published document of the process.

DESIGNING A GRADUATE STUDIO ON CRAFT

The studio was grounded in the fundamental relationship of craft and craftsmanship in design and the students’ familiarity with design/build culture fostered in the undergraduate program through directed group projects created for the local community. In this studio the

students from the beginning of the course were tasked with individual exploration of forms and materials tackled at various scales from the understanding of analogue and digital systems of geometry. Early in the semester there were workshops in fundamental geometric systems using analogue first principles. These exercises occur early in the semester so that one can recognize different geometric families in both natural formations and architectural ordinances existing in Iceland, which heavily reference the hexagonal structures of basalt geological formations throughout the country. Richard Sennet’s *The Craftsman* was examined throughout the semester to reinforce the critical discourse of making, meaning, and design and to encourage students to articulate their positions on craft.

“Craftsmanship” may suggest a way of life that waned with the advent of industrial society - but this is misleading. Craftsmanship names an enduring, basic human impulse, the desire to do a job well for its own sake... craftsmanship focuses on objective standards, on the thing in itself...[and] explores these dimensions of skill, commitment, and judgement in a particular way. It focuses on the intimate connection between hand and head.

The back-and-forth dialogue between making and designing framed the design of this studio. The palpable qualities of physical explorations in the form of analogue and digital model making at various scales activated the design process pursued in this studio. As the semester progressed with design development, the students developed their geometric studies to 3D interpretations using both analogue and

ONE OF THE FOUNDING FACULTY OF THE McEWEN SCHOOL OF ARCHITECTURE AT LAURENTIAN UNIVERSITY IN SUDBURY, CANADA, THE AUTHOR IS DOCUMENTING CANADIAN MOSQUES IN THE FIRST EXTENSIVE STUDY OF ITS KIND, SUPPORTED BY A GRANT FROM THE FEDERAL GOVERNMENT OF CANADA.



BY TAMMY GABER

Above: Svartifoss Waterfall, Iceland.

Left: Hallgrímskirkja Church, Iceland, by Guðjón Samúelsson, 1945.
Photos by author



digital model explorations of one geometric family and material testing to create a detail of the building wall system or liturgical furniture.

LOCATING THE SACRED IN CRAFT

For this studio, the connection between craft and the design of a sacred space was integral. As a building type, sacred space becomes both the container and facilitator, framing transcendental or spiritual experiences. The qualities of the sacred space are choreographed, curated, and crafted at all scales to emphasize and express this. The phenomenological qualities of a sacred space are directly connected to the craft of every detail, every sequence of space, every material, and every governing geometric system of organization. Juhani Pallasmaa perhaps expressed this best:

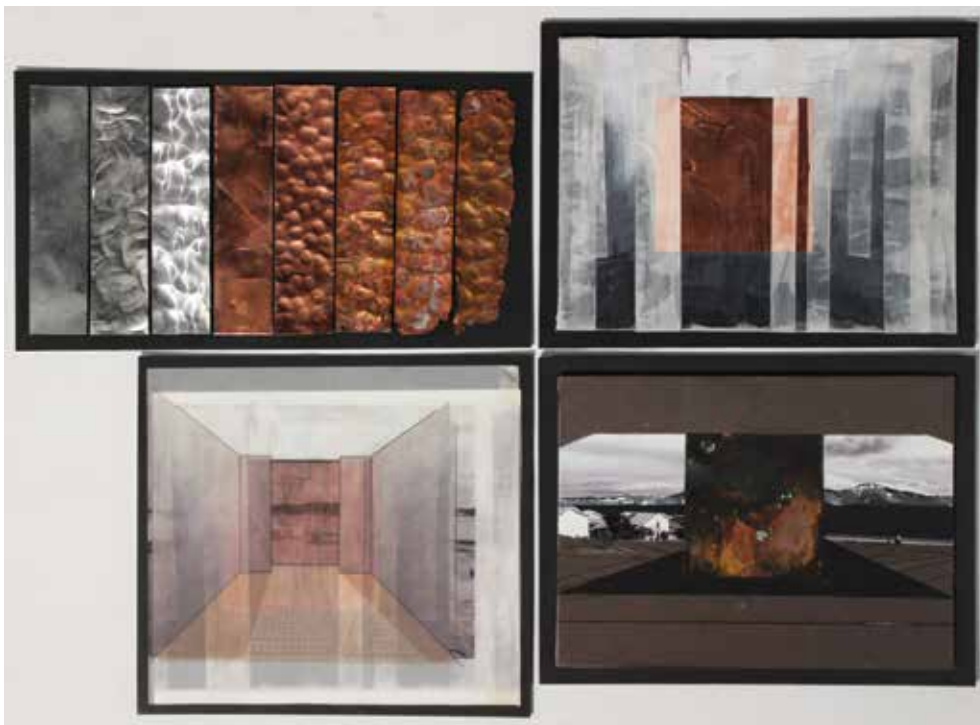
We tend to think of spirituality and sacredness in architecture in terms of specific building types, such as religious buildings and spaces, built especially for devotional purposes. Religious architecture and sites – churches, chapels, mausoleums and cemeteries – intentionally express their spiritual purpose through deliberately evoking experiences of awe, devotion, piety, authority, mystery, ecstasy, timelessness,



Project site, view toward mountains.



Site model by Sahana Dharmaraj, Kiera Hughston, and Shannon McMillan of wood, matboard, and acrylic glass.



Multimedia perspectives of Buddhist temple design by student Shannon McMillan--matboard, paper, vellum, aged copper, aluminum, and acrylic paint.

or afterlife. The experience of sacredness implies a feeling of transcendence beyond the conditions of commonplace and the normality of meanings. A sacred space projects experiences in which physical characteristics turn into metaphysically charged feelings of transcendental reality and spiritual meanings.

With these phenomenological qualities in mind the students researched a specific faith group and the prototypical buildings associated with the faith group. This was important in the self-directed research to access and analyze ritual and liturgical requirements as well as historical and contemporary precedents for the faith group the student chose to focus on in preparation for the design of a sacred space.

LOCATING THE SACRED IN ICELAND

For this first cohort, the majority of sites and regions studied in the undergraduate program were in northern Ontario. The opportunity to explore another subarctic landscape within relative proximity and with even more extreme landscape qualities was a lesson in design, especially when layered with both the efficient and raw constructions of development as well as extraordinary examples design. Lessons of locally responsive design can be explored. Clearly the hexagonal extrusions of the geological formations have inspired, in many ways, architectural form. From literal reference to and inclusion of basalt rocks (like the ones found at the dramatic Svartifoss) at the National Theater of

Iceland, to the dramatic neo-Gothic hexagonal extrusions at Hallgrímskirkja, to the richly layered and complex glass blocks composing the Harpa Music hall, the influence of the environment may seem to focus on form. But material inclusion and exploration through architecture in the country indicates a very regional engagement of landscape to architecture. To better situate the focus of sacred design, each student was tasked with independently researching a faith practice of their own choice and identifying parameters such as demographics in Iceland, liturgical ritual, and prototypical buildings and elements.

The dominant religion in Iceland in pre-history up until 1000 CE was Norse Paganism, locally called Aastru. In 1000 CE Christian missionaries from Germany Christened a large portion of the population. With an exponential rate of conversion, the country remained largely Catholic until the Danish King, Christian III (r.1537-1559) gained control and implemented the Reformation, approved by the parliament in 1541. The Lutheran faith remains the dominant faith in Iceland. As of 2017, the population of Iceland is Lutheran in majority, but a number of other faiths, including the pagan Nordic faith of Aastru, are growing in numbers. The students were keen to investigate the design of faith groups outside of their spectrum of understanding, and recognized the challenges of designing for such small populations of followers in Iceland.

In the fourth week of the semester, the studio group and I spent one full week in Iceland.

The three-fold focus of the trip was to document the site and elements of landscape; visit and document key buildings; and research and follow up with local architects and/or local faith groups. While in Iceland the students measured and documented a large site for the project, located on the western edge of the city, in Seltjarnarnes, sloping down to Faza Bay of the North Atlantic, facing the Acraanes mountains. Site analysis is a fundamental step in the process of design, the opportunity to visit a site affords many levels of primary research through direct analysis. Before the visit to Iceland the students analyzed available maps and studies of the site and area and identified questions and areas in need of clarification. This was the only collaborative assignment in the term and the students worked together to document the site and shared all materials.

As a group a number of key buildings were documented first hand, which allowed for primary research through direct lessons of form and design as well as phenomenological perceptions and interpretations. The landscapes of eastern and southern Iceland were studied including a number of notable waterfalls with the influential basalt geological formations, which reinforced the understanding of the impact of the form and material. Students independently contacted and visited local places of faith gathering related to their research, and some were able to meet with local architects who are currently working on the design of buildings related to the students' research.

PROCESS

Throughout the remainder of the term the students collaborated to consolidate all research findings from the field visit to Iceland including creating a digital and physical model of the site as well as information on the case study buildings. However, before launching into orthographic design drawings or even programmatic diagrammatic studies the students were asked to consider the volume of information gathered both on the site and through the research of the faith group of study through vignette studies. As an approach to design, the students first sketched vignettes of key spaces they imagined on the site. The use of multi-media encouraged students to collage in photos of views on the site (such as the ocean and mountains). By this point in the semester the students had already designed their liturgical furniture or the element of a wall system based on 3-D geometric studies; they could collage these elements into the vignettes or reimagine them. Many students used this as an opportunity to test out actual or simulated qualities of various building

Photo courtesy of Shannon McMillan



Site section through Buddhist temple design by student Anastasia Renaud.

materials. Each student was asked to create a minimum of five vignettes, including studies of the main worship space. In small groups of three or four they presented to each other for informal discussions and critiques, and then reworked the vignettes until it was clear to each student the qualities of the sacred space being designed.

There was some skepticism about this process as it was counter to their previous experiences of immediate plan-centred programmatic studies and design development. However, the two-week vignette exercises led to greater confidence in the process and in individual design positions. Following this exercise the students were asked to design their building in section only, leaving the plan aside (counter to their previous experiences). The sectional drawings focussed on varied roof heights and designs, material use, lighting, sequence of spaces, as well as furniture and movement. These sectional studies resulted in stronger articulation of the qualities and varied sequences of the spaces in architectonic terms that both underscored the specific rituals as well as reinforced the continuing dialogue of phenomenological consideration of experiences in the spaces. Only after several iterations of the sections were students encouraged to draw the plans for their buildings. Essentially, this final portion of the design process was the shortest, as much of the qualitative and spatial issues had already been resolved.

For the final critique of the semester, students presented their designs for a sacred space utilizing tools developed throughout the term, including the site model and small-scale model of the building, larger model studies of

the building, details and furniture, continued vignette studies of the spaces, as well as orthographic drawings of the building and site. In addition to this, students collated all of the research and studies of the entire semester into a self-published book, which was presented at the final critique to aid the external critics in their review of the projects. The book functioned as a repository of the students' research and work throughout the term, but more importantly it was a tool for the students to familiarize themselves with respect to ordered methodology and presentation, a valuable experience in preparing their independent research for their master's thesis.

REFLECTION


The ambitions of the graduate studio course were multi-fold and broad, and by focussing on a typology of architecture not commonly approached in architecture schools. Through the research and design of a sacred space, the students were exposed to content not previously engaged in studio work in their undergraduate studies. The content focus on the sacred was paired with the methodological focus on research of various types including: literature review and research, drawing and modeling, primary site research, case studies and design. However, in future iterations of this graduate course, I will most probably streamline the work so that more time can be

Liturgical object model at 1:2 scale of a plaster and dye chair for a Hindu temple feet-washing station design by student Sahana Dharmaraj.



Photo courtesy of Shannon McMillan



spent on the particularly effective exercises such as the study of fewer buildings in Iceland and the focus further on the development of vignettes and sections and less on the geometric exercises. The sustained consideration of the spatial qualities of sacred spaces as well as the relationship of contemporary architectural design to liturgical ritual afforded a rich complexity of both research and design for the students to engage with. The students were keen to investigate qualities of sacred spaces of faith groups either unfamiliar to themselves or to re-evaluate their previous engagement and understanding through the research and design process. 



Interior rendering of Buddhist temple design by student Anastasia Renaud.

NOTES

1. Bachelor of Architectural Studies (BAS), a four-year pre-professional program required for entry into the two-year professional degree of Master of Architecture (M. Arch).
2. In their undergraduate studies these students have designed and built an ice fishing station, a canoe, kiosks, and a portable sauna.
3. Sennett, Richard. *The Craftsman*. New Haven: Yale University Press, 2008.
4. Juhani Pallasmaa "Light, Silence, and Spirituality in Architecture and Art" in *Transcending Architecture: Contemporary Views on Sacred Design*. Bermudez, Julio. Ed. Washington: The Catholic University of America Press, 2015.
5. "Brief History of Catholic Church in Iceland," Diocese Reykjavikensis. <http://bit.ly/ff-bhcc>
6. The total population of Iceland was 338,349 in 2017. Of this, 75.7 percent belonged to the Lutheran faith, 6 percent professed no faith, 3.8 percent were Roman Catholic, 1 percent followed the Aastru faith, 0.3 percent were Buddhist, 0.2 percent were Muslim, 0.1 percent were Baha'i. The remaining 12.9 percent belong to a large number of other faith denominations and sects. See Statistics Iceland, 2017. <http://bit.ly/ff-iceland>
7. The majority of the 12 students in this study chose to study religions they had little or no understanding of: All-Faith, Anglican, Aastru (Nordic Paganism), Baha'i, Buddhism, Catholicism, Hinduism, and Taoism.

The 'Stereotypical' Mosque

Inventing an architectural form to provide for the worship of an invisible and non-representational deity has never been achieved, and anything that became an accepted form had to be evolved through the passage of time.¹ ~ Martin Frishman

IN THE SPRING OF 2015, AS PART OF A GRADUATE DESIGN STUDIO at the Yale School of Architecture, I set out to design a mosque that attempted to challenge the stereotypical image attached to the typology. The response from my studio critic, Leon Krier, could be summarized in one quote by him: "It must have a minaret." The instant rejection of the idea that a mosque could have a form that is different from the common image of what it "should be" is what fuels this article. Furthermore, this mythical image of mosques has contributed to several political controversies, such as the Swiss referendum in 2009 against the construction of minarets, which was ultimately approved by 57.3 percent of voters.² By doing so, the Swiss government, and the large public that supported this initiative, reduced the identity of an entire religion to a single architectural element.

Any discussion about what a mosque *can* look like has become a highly contested topic, as in few places one cannot propose a mosque without a minaret, for example, without being accused of radically attempting to change Islam, largely due to the false belief that such elements are in and of themselves divine,³ and a rejection to them would be an attack on the religion itself. This in large part is a product of the orthodox nature of most Islamic schools of thought, where the notion of innovation is viewed as taboo. However, I would argue that the current image of the mosque *is* a product of innovation, as the typology has undergone a series of transformations since the birth of Islam nearly 1,500 years ago. Hence, the stereotypical image of the mosque can only be challenged by identifying the paradigm shifts in history. The design of mosques has undergone a series of changes, proving that the typology is not static. The mosque is a fluid condition. Any image of the mosque is a temporal phenomenon that is subject to change. It should be noted that the intention is not to argue for the "purification" of mosques, but to demonstrate that the typology is an ever-changing one, and asking what a mosque should look like is a constructive, not destructive, question.

ISLAMIC "NON"-INNOVATION

Those of you who live after me will see great disagreement. You must then follow my Sunnah and that of the rightly guided caliphs. Hold to it and stick fast to it. Avoid novelties, for every novelty is an innovation, and every innovation is an error.⁴ ~ Prophet Muhammad

In order to understand the resistance to innovating the design of mosques, one must contextualize the discourse within the larger issue of innovation, or *bid'a*, in Islam. As Mehran Kamrava argues in the book *Innovation in Islam*,⁵ the above hadith attributed to Prophet Muhammad has served as justification for anyone who opposes innovation in Islam. As a result, the word *bid'a* over time has acquired a negative connotation. However, a lesser-known hadith by the Prophet alludes to

the reality, and necessity, of innovation in Islam: "Allah will raise for this community at the end of every hundred years the one who will renovate its religion for it."⁶ These persons are referred to in Arabic as *muslihoon*: reformers. Tariq Ramadan interprets the notion of *islah* (reform) here not as radicalizing the primary sources, principles, or fundamentals of the faith, but how the religion is understood and practiced in different times and places. The aim of these *muslihoon* is to advocate reform with the intention of bringing Islam back to its original state, restoring its purity, and improving upon it. To this, contemporary scholars such as Kamrava and Ramadan point out how Islam, while preserving the essence of its timelessness, could be rethought to take into consideration the modern times. As Ramadan puts it, "There can be no faithfulness to Islamic principles through the ages without evolution, without reform, without a renewal of intelligence and understanding."⁷

Walter B. Denny addresses the issue of innovation specifically in Islamic architecture, with the view that innovation can be seen as a response to the specific needs of the environment at a particular time; therefore, it is only natural. Denny uses the Ottoman mosque as an example, which he claims was a response to both the artistic environment ("as a challenge to the Byzantine structures of the past") as well as a response to the seismic threats that have plagued the Ottoman capital. The engineering used in Ottoman mosques was a departure from the Persian structures of the 15th century, where environmental considerations were not as important.

While many historians and architects perceive the direct referencing to historical types in the design of mosques as the continuation of tradition, Denny criticizes it as a superficial stylistic revivalism. According to him, mosques that reflect nostalgia to an earlier age, mostly those that replicate the "Sinanian" style, have lost sight of what made the original buildings special: "It was...not the buildings themselves, but the dynamic spirit of innovation and creativity that they embodied." Azra Akšamija shares a similar sentiment; she attributes the phenomenon of replicating ancient monuments to a desire to (re)create identities of their builders in the present. She uses the Mosque of Hassan II in Casablanca, Morocco, as an example, where an architect visibly replicated architectural features widely perceived as traditional for that region, while "pushing the notion of historicism to an extreme level of monumentality."



By Abdulgader S. Naseer

MOSQUE AS TEMPORAL PHENOMENON

The peculiarity of 'invented' traditions is that the continuity with it is largely factitious. In short, they are responses to novel situations which take the form of reference to old situations, or which establish their own past by quasi-obligatory repetition. ~ Eric Hobsbawm

Hobsbawm argues that all invented traditions use history as “a legitimator of action and cement of group cohesion.” I will revisit the same history that conservative Muslims (and some Westerners such as Krier) look at to justify the stability of tradition; however, as opposed to referencing pivot moments (mostly the introduction of the Ottoman mosque) to distill a single image for mosques, the typology has always been an invented tradition that changed over the course of its history in order for it to take into account the varied functional, and aesthetic, requirements of societies.

Given that the Qur'an and Sunna serve as the primary reference for both sacred and secular Muslim life, the investigation into mosques should begin in the literature. The Arabic word for “mosque,” *masjid*, is derived from the verb *sajada* (to prostrate), which implies that the literal definition of *masjid* is “a place for prostration.” In all of the 28 occasions that *masjid* appears in the Qur'an, there is no mention of any physical or spatial characteristics of a mosque, alluding to the common belief that nothing physical is regarded as intrinsically sacred in Islam.

One thing that is mentioned in the Qur'an, however, is the specific requirement of facing Mecca when one prays. The *qibla* serves as the only “spatial” requirement in mosques. As H. Masud Taj points out, “Any definition of the mosque devoid of the *qibla* is erroneous; any stylistic addition to the definition (that which has domes, minarets, etc.) is superfluous.”

Additionally, while not a requirement for prayer spaces, there is a tendency to opt for width in prayer halls rather than depth when designing layouts. This is due to the belief that the first row of worshipers is more blessed than the rows that follow it, something attributed to the Prophet: “Abdulahman ibn Awf narates that the Prophet said, ‘Allah and the angels send blessings upon the first row (in communal prayer).’” Therefore, the horizontal layout in plans is an attempt to realize these *hadiths* and give more worshippers the opportunity to be so blessed.

However, what is implied by the term “mosque” in itself is unclear. Prophet Muhammad stated, “The earth has been made for me (and for my followers) a mosque and a purifier.

Therefore my followers can pray wherever the time of a prayer is due.” This *hadith* further emphasizes the lack of spatial characteristics of a mosque. The spot that a Muslim chooses to pray becomes their mosque for the duration of the prayer. It can be distilled, then, that the “requirements” for a mosque are an orientation towards Mecca, and the performance of the ritual of prayer. The temporary reuse of city infrastructure and/or large structures, such as sports facilities, for communal prayer alludes to this notion that, for the duration of prayer, any space can be transformed into a mosque. For Muslims, any secular space can become a sacred one, i.e. a mosque, through the ritual act of prayer. This makes a conceptual understanding of mosques more productive for architects than a formal one based on an invented tradition. One cannot help but wonder how the argument for a specific image for mosques can be made when Muslims can demarcate any space as a mosque, at any moment, through performing their ritual prayers.

SHORT HISTORY OF MOSQUES

The evolution of mosques reveals major paradigm shifts where innovation within mosque design occurred. The house of Prophet Muhammad in Medina served as the first prayer and congregation space for the Muslim community, and still continues to provide guidelines for mosque design. While the house was used for prayer five times a day, it also was the vessel for social, civil, and political discourse. This multi-functional nature of mosques remained the case for several centuries, and perhaps could be seen at its full effect in the Great Mosque of Kufa, constructed in the mid-7th century, where the *Dar al-Imara* (seat of governance) was physically attached to the mosque itself. Furthermore, the *Bet Maal al-Muslimeen* (Muslim public treasury) was placed within the courtyard of the mosque as it was deemed the safest place in the city to locate it.

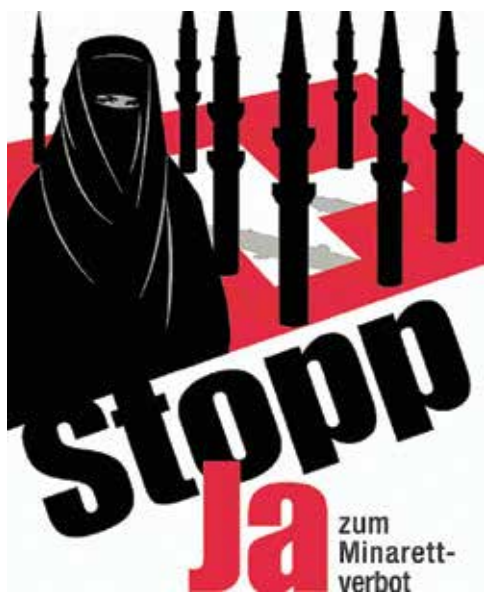
The House of the Prophet made no attempt to establish a distinct style of itself that separated it from the built context of Medina. It had no minaret or *mihrab*, both of which developed later. Bilal ibn Rabah would climb onto the roof of the house to perform the *adhan* (call for prayer). This simple design was a direct response to the functional needs of the Muslim community. While the Prophet's house became the prototype for all future mosque designs, its minimal form left the visual trajectory of mosque architecture open-ended.

The first mosque “style” to emerge, under the Umayyad Dynasty, was the hypostyle hall, a direct evolution of the porticos used for prayer inside the Prophet's house. Its basic unit, the bay, could be infinitely expanded upon as the Muslim community grew, as was the case when the Prophet's house went through its first expansion under the Umayyad caliph Walid II (705-715). This expansion marked the position in front of the *qibla* wall, from which the Prophet used to lead the prayer, with a niche, and by extension created the first *mihrab* in mosque design, which became the reference for all future mosques.

In the hypostyle hall, the dominant central axis in Christian churches which has to do with the Christian liturgy being based on the procession towards the altar, is replaced with multiple and equivalent parallel vectors, all converging on the distant vanishing point of the Ka'aba in Mecca. This, in addition to the religious incentive of a longitudinal



Sketch by Leon Krier depicting the image of what the author's proposed mosque design project should be like.



Poster designed by Werbeagentur Goal served as the defining symbol of the campaign, led by the conservative Swiss People's Party.

prayer hall, gave the "Islamic basilica" a different proportion and characteristic from the Christian church, even though both shared the same typological ancestor.

The directional ambivalence occurring inside the Damascus Umayyad mosque, the first of its scale, due to its construction on the bones of a pre-existing church, and superimposing the hypostyle on the previous nave, was resolved in later mosques. Ultimately, the hypostyle reached its full visual and spatial effect in the Great Mosque, Cordoba.

The hypostyle mosque remained, for the most part, consistent for several centuries. Minor modifications to it took place, such variations of arcades or colonnades, and sometimes adding small domes in the squares between the columns. It was not until several centuries later that the first significant evolution of the typology occurred, where it shifted from the hypostyle to the introduction of the four *iwan* form surrounding a major courtyard. This development coincided with the rise of *madrasas* in Muslim communities in

the 11th and 12th centuries, and the function of *madrasas* directly influenced the design of mosques, which for the first time departed from the traditional pillared hall. The rise of this new typology (*madrasas*) in the 11th and 12th centuries was due to the desire of the Seljuk dynasty to promote orthodox Sunnism. Given the multifunctional nature of mosques at that period, the function of the *madrasa* halls overlapped with prayer spaces, and eventually challenged and influenced mosque architecture giving rise to a new typology. The presence of the four *iwans* around a central courtyard allowed for the simultaneous teaching of the four orthodox schools of Islam, which gave justification to the cruciform scheme. In this case, the mosque served as a prayer complex as well as a learning institution. The development within the mosque typology also coincided with the technical mastery of craftsmen in developing the *muqarnas*, an innovated way to transition from rectilinear to round shapes.

The next, and arguably final/most important evolution is the Ottoman domed hall, pioneered by the Ottoman architect Koca Mimar Sinan in the 16th century. Between the 16th and 19th centuries, this innovated typology spread over the entire Ottoman Empire and was, to some extent, identified with its political supremacy. Today, it serves as the basis of the stereotypical image of mosques. On May 29, 1453, Sultan Muhammad al Fatih captured the city of Constantinople, marched triumphantly into the church Hagia Sophia, and proceeded to pray in the space. This act launched a series of changes, to both the interior and exterior that ultimately converted the Hagia Sophia into a mosque. This aesthetic has become the preferred style for mosques of that period, which continued to evolve as architects, Sinan included, maintained the culture of innovation throughout the history of the Ottoman empire. The central domical plan, untouched throughout the renovations, had the most lasting influence for centuries to come all the way up to today. Mosques emulated the transformed and prototypical Hagia Sophia. The irony is in the fact that the ur-type for what has become the contemporary image of mosques is based on a pre-Islamic typology and Christian building. It is based on an innovation within the typology.

STEREOTYPICAL IMAGE AND SYMBOLISM

The symbolic scope of an Ottoman mosque is significantly expanded to be considered as a sign of Muslimhood, and by extension of Islam. More than a mere feature, the minaret together with

the dome, becomes a structural metonym of a singular Muslim Identity.
~ Nebahat Avcioğlu

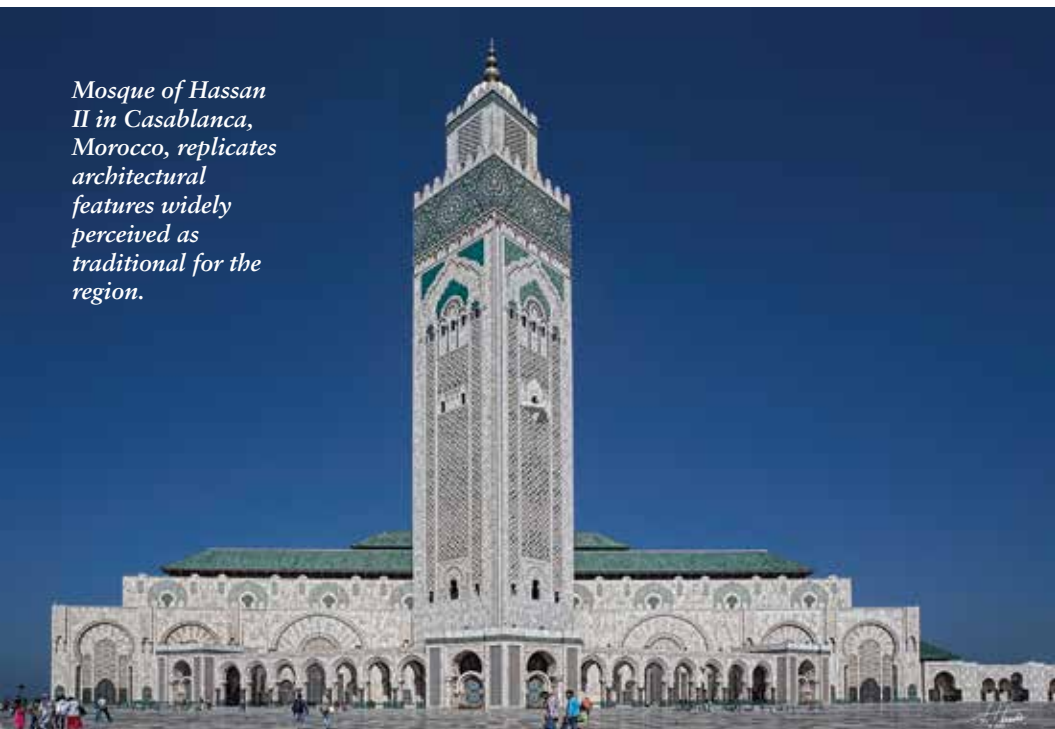
On June 16, 2007 a group of locals gathered in Cologne, Germany in a demonstration organized by the Pro Cologne Citizen's Movement to protest the construction of what would be the largest mosque in the city. The criticism, driven by fear that the construction of the mosque would empower the Muslims in the city, used the architectural representation of a mosque as a means to express those views. The placard carried by protesters depicted a diagrammatic drawing of an unmistakable Ottoman-type mosque. The design of the mosque itself is recognizably "traditional" in its appearance, using the canonical Ottoman centrally planned hall and minaret. The public's demonization of this image illustrates the symbolic power of the mosque's traditional image, specifically the minaret, as their protest banners read "We want the Cathedral Here, Not Minarets." To this, Avcioğlu states: "The focus on the features of the mosque rather than the overall design itself is revealing of the power of a stark image, and the convoluted discourses around it."

What is more striking is the choice of words the architect, Paul Böhm, used when coming to the defense of his design. He states, "This is a mosque, and it should clearly and consciously present itself as such." By subjectively claiming that the proposed design is what mosques *should*, as opposed to *can*, look like, Böhm disregards all centuries of mosque design that pre-date the Ottoman mosque and reinforces the stereotypical image. To take it one step further, from this rhetoric the identity of an entire religion is reduced to a single architectural element, whether a dome or minaret, and the mosque is reduced to one of its features, the minaret. The resemblance between the diagrammatic mosque on the protest placards and the sketch drawn by Krier shows that it is not only the general public that fall victim to the stereotypical image but architects as well.

In contrast to the case of Cologne, the Mosque of Grand National Assembly in Ankara constructively raises questions about symbolism in mosques. The design challenges the traditional layout and vocabulary of mosque architecture while remaining respectful and true to the requirements for prayer and opens the door for innovation of a new architectural language for future mosques, rather than continue the phenomena of replicating historical monuments.

What is most striking about this mosque is how the traditional elements, specifically the

Mosque of Hassan II in Casablanca, Morocco, replicates architectural features widely perceived as traditional for the region.



minaret, dome, and *mihrab* were abstracted and fragmented. The minaret, for example, is stripped away from its primary identifying element: its verticality. Similarly, the spherical dome symbolizing perfection and transcendence has been replaced with a pyramidal structure. The *mihrab* that is known for its solidity, which reflects the worshippers' gaze inwards, is substituted with a completely transparent curtain wall that visually extends the mosque beyond the confinement of its physical enclosure and establishes a link with the landscape beyond. These consciously incomplete historical references symbolically remind worshippers that there is an architectural rupture between the traditional past and the present. The architects themselves declared that one of the significant aspects of this project is its contemporary interpretation of the fundamental concepts of Muslim worship space without resorting to the conventional motifs that compose what I have been referring to as the stereotypical image.

The decisions by the architect were an attempt to interpret, in a modern context, an old tradition. It could be argued that, with the accrued intellectual and technological advancements, historical mosque elements such as the minaret have lost their formal meaning as well as their functional purposes; however, these prototypical elements still are relevant symbolically. For this reason, the Ankara project abstracted the elements to serve as a familiar sign and reminder. As the architects themselves state:

The building design focuses its aims at creating a space for the single believer. It is

free of the traditional architectural clichés developed throughout the history as both symbols of the state power and of the collective will, focusing primarily on “familiarity.” Such clichés are of no significance here and are avoided. Here, the focus of design is on the iconoclastic nature of Islam.

DISMANTLING THE STEREOTYPE

I question the applicability of formalist methodologies that seek to discover particularly “Islamic” features related to certain historical or formal specificities. The absence of formal definition of the mosque allows for innovation in mosque design. ~ Azra Akşamija

In order to move past the stereotypical image of the mosque, one must understand and interpret the typology conceptually rather than formally. Such was the case over the course of history when the form of the Muslim prayer space morphed in order to meet the functional requirements of societies while still being true to the religion. Akşamija came up with what she calls “Generative Design Principles” that she believes can assist designers in developing a conceptual continuity with Islamic building traditions in mosque designs while allowing them to execute spatial transformations that respond to their respective social, political, economic, and technological transformations of their respective time and place. She argues that it is the architect who is primarily responsible for “satisfying the spiritual journey of the worshipper, but also navigating through political, economic, and other factors that play



Great Mosque of Kufa in Iraq.



The Şemsi Paşa Complex, Üsküdar, Istanbul, by Mimar Sinan in the 16th century includes many of the elements that became the preferred style for mosques of that period.

a crucial role in the mosque design process.” This can only be achieved by a continuously innovated architectural vocabulary for the mosque that can provide the necessary *conceptual* continuity of the typology while still abiding the Islamic religious doctrine.

An opposing view of this is that of architect and historian Nader Ardalan, where he attempted to establish a fixed typology of the mosque by defining it according to the occurrence of eight architectural elements that, in his view, constituted a mosque: the courtyard, the minaret, the dome, the gateway, the portico, the plinth, the ablution place, and the *mihrab*. While the chosen elements were present in 83 per cent of the 113 mosques Ardalan surveyed, by selecting eight elements that he subjectively considered to be “traditional,” he was reinforcing the argument that mosque design is static. Contrary to Ardalan’s view that the prevalence of these eight elements in the majority of the surveyed mosques is due to a representation of “a natural Islamic language of visual forms for mosque design,” I believe they are due instead to the continuation of an invented tradition, as opposed to reinventing the tradition.

The quantification of architectural elements that emerged at different times in history, with the goal of determining whether a building qualifies as a mosque, must end. This does not mean a total rejection of the traditional elements; the symbolic value behind them



Photo: CÉphoto, Uwe Arenas


Left: Cologne Central Mosque completed in 2017 by architect Peter Böhm, who said the design 'should clearly and consciously present itself' as a mosque.

Below: Members of the right-wing organization Pro Cologne protest against plans to build a new mosque in Cologne, Germany, in 2007.



Photo: Hemming Kaiser/AFP

could co-exist with a conceptual continuity if the discourse on mosque design is opened up to innovation. The goal is not to "purify" mosques or to distill them to a bare minimum; it is to make an argument for

dismantling the stereotypical image associated with mosque architecture so that an architecture student or architect can go about designing a mosque without being told "It must have a minaret." 

NOTES

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25. Akšamija lays out the five principles in *Generative Design Principles for the Contemporary Mosque*. They are "prayer exactement," "spatial cleanliness" (both spiritual and physical), "directionality" (towards Mecca), "volume of prayer," and programmatic variability.
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Learning From Gothic Cathedrals

By Timothy O. Adekunle

What can Gothic cathedrals teach us about architecture today? While these buildings are masterpieces in the history of architecture, how relevant are they today in educating young architects? Beyond architectural history courses, we have found that Gothic cathedrals can be powerful case studies in teaching aspiring architects about structural systems and analysis. One of the most important features of a Gothic cathedral is its often innovative and daring structure, visible within and without the building fabric. Structural elements can provide excellent examples for teaching architecture students the principles of structural performance and analysis, using the Gothic cathedral as an organic demonstration of structure in action. Gothic cathedrals are built with durable, sustainable, strong, and locally sourced materials. The example of the Gothic cathedral can effectively supplement existing teaching methods to engage architecture students in structure courses. The focus of the approach is to increase the participation level of students while meeting learning outcomes. The approach is also aimed to improve the quality of teaching the courses in line with the criteria set by the regulatory bodies for the architecture program. This pedagogical approach requires architecture students to consider structural analysis of a sacred Gothic building. The students are divided into groups of three to four. After the first phase of the group project has been completed, each student selects and explores a sacred building as an individual project for further analysis.

ANALYSIS OF PLANS, ELEVATIONS, SECTIONS

Students are instructed to consider historical overviews of several Gothic cathedrals. Floor plans, images, elevations, sections, construction drawings, and previous work on the buildings are studied, analyzed, and discussed in class. All drawings are dimensioned in feet or meters. Also, students are instructed to include elevations and sectional drawings as well as structural hierarchy of the buildings. An emphasis is put on structural analysis of the buildings by focusing on gravity-load path

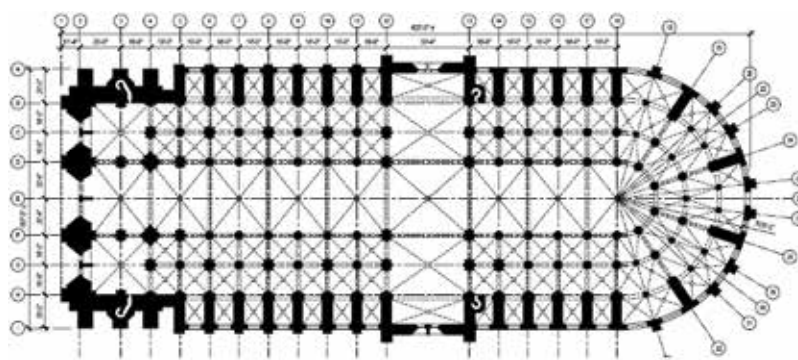


Figure 1:
Floor plan of
Notre Dame
Cathedral,
Paris, France.

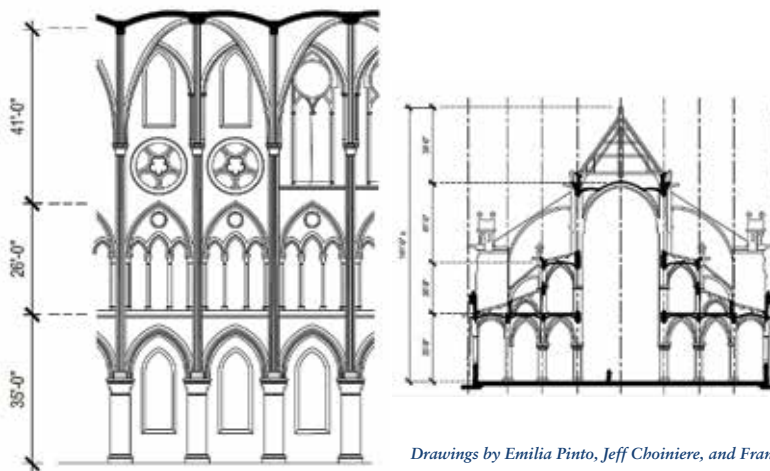


Figure 2:
Longitudinal
section and
cross-sectional
drawings of
Notre Dame
Cathedral,
Paris, France.

Drawings by Emilia Pinto, Jeff Choiniere, and Franklin Illescas, 2015

and lateral-load path diagrams. Uplift wind analysis, construction sequence, and structural calculations are also considered. At least one structural model to explain the concept of collapse mechanism is required.

Floor plans, elevations, and sections are properly dimensioned using the SI or US Customary Units to highlight the lengths, widths, and heights of the cathedrals (figures 1-2). In addition, dimensions of the components such as size of windows, columns, beams, arches are specified. On the analysis of the plans and sections, students are instructed to identify structural hierarchy of the structural members of the buildings. This analysis is done using color-coded drawings to identify various structural members.

GRAVITY LOAD PATH, LATERAL LOAD PATH, AND COLLAPSE MECHANISMS

Gravity loads are described as the vertical applied loads acting on a building. Gravity loads (such as the weight of a structure) act in a downward direction due to gravitational forces and must be transmitted to the base or ground supporting the structure. Lateral loads are the forces acting on a structure in a horizontal direction or parallel to the plane of the horizon. In most cases, lateral loads are expected to have a complete path of load to transmit the

applied loads to the base or ground supporting the structure.

Students consider vertical and horizontal loads acting on the Gothic cathedral. Gravity load path and lateral load path diagrams help students understand various loads acting on a building and how the loads can be transferred to the ground without causing any structural deformation to the cathedrals. Examples of the diagrams are presented in Figures 3 and 4 on the following page.

CONSTRUCTION SEQUENCE DIAGRAMS

Emphasis is put on the importance of construction sequence to any project to ensure the project is well laid out and not prone to structural failure that could arise due to excessive loads or uncoordinated construction procedures. Students consider construction sequence diagrams of the buildings to understand how structural elements are assembled on site. Although the students were not involved in the construction process of the case study buildings, the consideration of construction sequence serves as a guide when

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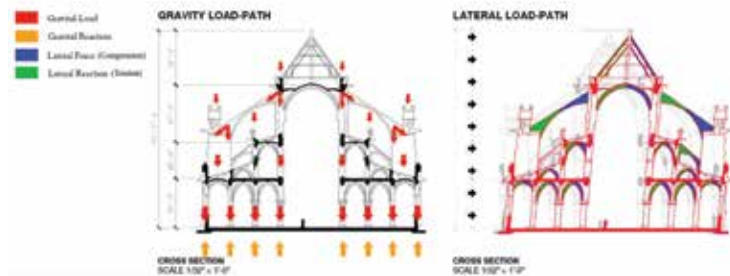


Figure 3: Gravity load path and lateral load path diagrams of the section of Paris's Notre Dame Cathedral.

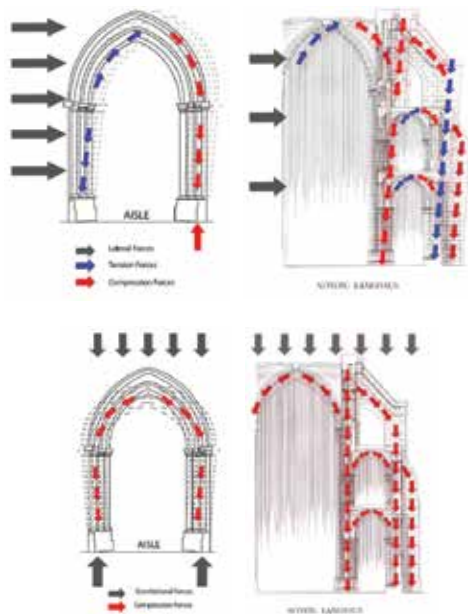


Figure 4: Lateral load and gravity load path diagrams of sections of Noyon Cathedral, Noyon, France.

CONSTRUCTION SEQUENCE

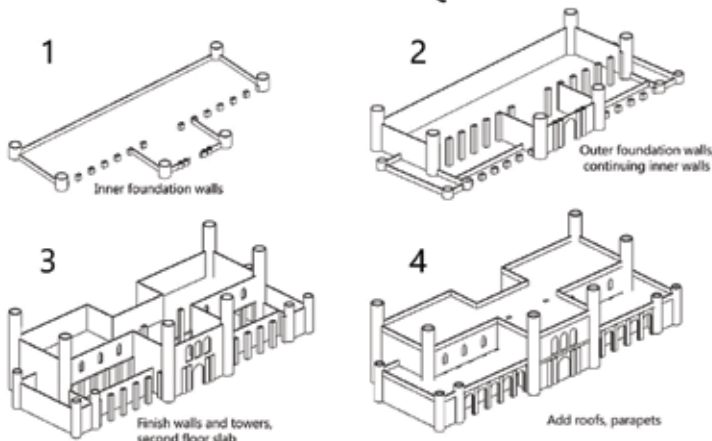


Figure 5: Diagrams showing construction sequence of a Gothic building.

supervising construction of similar projects in the future. An example of construction sequence diagrams produced by students is presented in Figure 5.

Apart from production of the diagrams, students also discuss the construction sequence explored with questions relating to the process. In some cases, students consider further analysis to understand why a certain procedure was not considered, and further discussions/explanations are provided on the question. Also, students are asked to reflect on


and discuss the construction sequence they would prefer if they were appointed as the architects for the buildings. This is an interesting part of the exercise as students tend to find out the importance of the process and why any mistakes in terms of construction sequence could hinder the successful completion or timeline of the project. Overall, production of construction sequence diagrams adds to the quality of the materials produced on the project.

STRUCTURAL CALCULATIONS

Students carry out simple structural calculations of dead loads and live loads that act on the Gothic cathedrals. Examples of structural calculations of buildings were provided in class to guide students on how to carry out the analysis. Additional materials guide students on how to conduct the structural calculations. Some of the materials provided include previous studies on sample design calculations such as introduction to design of structures (Breyer et al 2015). The structural calculations aspect of the project focuses on vertical and horizontal loads acting on the buildings.

CONCLUSIONS

From the project assigned to students, the quality of work produced shows that they gained valuable experience and better understanding of the analysis of forces acting on buildings. The experience gained through the approach is evident in the structural project including models produced and presented by the students. On collapse mechanisms, the analysis shows that if a gravitational force were to be exerted on the structure and if the cathedral were to fail, the fracture points would be closer to the top or bottom of the building. In general, Gothic cathedrals are not capable of resisting the force acting on the walls without the help of buttresses. Sacred Gothic buildings would not be able to withstand the outward tendencies of the interior walls without supports or buttresses. On structural calculations, the analysis shows that Gothic cathedrals are massive in terms of their total loads and it is important to provide adequate support to resist different loads acting on the buildings.

We have found that this pedagogical approach helps architecture students learn more effectively than only when the traditional approach (that is, structural calculations) are employed. Structure courses can be well integrated in various architectural design classes without limiting the learning outcomes set for the courses. The use of relevant examples on these sacred buildings has aided learning outcomes. The percentage of students performing well in the courses also increased. The teaching approach has strengthened the quality of work produced in various architectural design courses as students pay closer attention to sections, details, and structural models to explain their projects. 

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Faith & Fashion

A new exhibit at New York's Metropolitan Museum investigates the impact of Catholicism on clothing design.

By Michael J. Crosbie

Do religions make fashion statements? Is there a “Catholic style” that offers a well of imagery from which a purveyor of haute couture might draw? The premise of a new exhibit, “Heavenly Bodies: Fashion and the Catholic Imagination,” is that the long history of the Roman Catholic Church includes a sense of aesthetic style, expressed in liturgical vestments, clerical garb, and holy jewelry that is perennially ripe for transformation into secular fashion. The show, designed by Diller Scofidio + Renfro and on display at New York's Metropolitan Museum of Art's Costume Institute through October 8, features the creations of such fashion giants as Versace, Yves Saint Laurent, Chanel, Dior, Geoffrey Beene, and Valentino (part of the exhibit is on display at The Met Cloisters Museum, also in New York). Designers of these haute couture powerhouses whose work is represented in the show cite the influence of the Catholic esthetic on their work or the cumulative marinate of being raised in the Catholic visual culture.

The exhibit is organized in two spaces in the Fifth Avenue museum building. The bulk of the show's display of Catholic-inspired fashion is dramatically arranged throughout the Met's extensive collection of Byzantine and Western medieval art, which includes period artifacts of religious art and architecture. These museum works become the perfect foil for the objects of contemporary fashion. As one wanders the exhibit, thousand-year-old sculptures of bishops with mitres (those tall, pointy hats) and veiled nuns form the backdrop for such stunning reinterpretations as an evening ensemble (complete with mitre) designed by John Galliano for Dior, or an evening dress by Valentino inspired by Lucas Cranach The Elder's 1526 painting “Adam and Eve,” or Yves Saint Laurent's take on a Statuary Vestment for the Virgin of El Rocio. The Dominican Order's habit is reinterpreted in a variety of garments on display by several contemporary designers.



Photos: Michael J. Crosbie

Above: View of exhibit in the Met's medieval art galleries, at the center is John Galliano for House of Dior. Evening ensemble, autumn/winter 2000–2001 haute couture. Courtesy of Dior Heritage Collection, Paris.

Right: Detail of Chasuble (back) of Pius XI (reign 1922–39), 1926. French. Courtesy of the Collection of the Office of Liturgical Celebrations of the Supreme Pontiff, Papal Sacristy, Vatican City.



Part of the show's nature is to shock, of course, mixing sacred images with secular frocks, and that theme is underscored by the fact that an excerpt from Federico Fellini's film “Roma” (1972) is part of the exhibit. Fellini devoted a scene in the movie to an “ecclesiastical fashion show” in which clerical costumes are reinterpreted in a wickedly



An angel poised, by John Galliano for House of Dior. Evening ensemble, autumn/winter 2005-6 haute couture. Courtesy of Dior Heritage Collection, Paris.



Fashion interpretations by several designers inspired by the classic habit of the Dominican Order.



Mitre of Pius XI (1922–39), 1929, Italian, a gift from Benito Mussolini. Courtesy of the Collection of the Office of Liturgical Celebrations of the Supreme Pontiff, Papal Sacristy, Vatican City.



Mantle of Pius VII (reign 1800-1823). Courtesy of the Collection of the Office of Liturgical Celebrations of the Supreme Pontiff, Papal Sacristy, Vatican City.

Photo: Courtesy of Metropolitan Museum of Art



Yves Saint Laurent. Statuary vestment for the Virgin of El Rocío, ca. 1985. Courtesy of Chapelle Notre-Dame de Compassion, Paris. Digital composite scan by Katerina Jebb.

Photo: Courtesy of Metropolitan Museum of Art



Domenico Dolce and Stefano Gabbana for Dolce & Gabbana. Ensemble, autumn/winter 2013–14. Courtesy of Dolce & Gabbana. Digital composite scan by Katerina Jebb.


Photo: Courtesy of Metropolitan Museum of Art



Maria Grazia Chiuri and Pierpaolo Piccioli for Valentino. Evening dress, spring/summer 2014 haute couture. Courtesy of Valentino S.p.A. Digital composite scan by Katerina Jebb.

funny turn on the runway, as priests, nuns, bishops, and even the pope make appearances in the latest Catholic fashions, reinterpreted as only Fellini could. The Met's show owes a debt to the Italian cinema icon.

Another segment of the exhibit is on display in the Anna Wintour Costume Center at the Met: a stunning collection of approximately 40 objects from the Vatican's Sistine Chapel Papal Sacristy, many of which are on view outside of Rome for the first time. There are gold- and jewel-encrusted chalices, croziers, and several papal tiaras from the 19th and 20th centuries (the last pope to wear one was Paul VI, who put an end to the tradition in favor of the papal mitre—his is on display as well).

The papal copes, robes, chasubles, slippers, crosses, and gauntlets on display provide a taste of Catholicism's tradition of sumptuous threads that Church leaders donned within an environment of elaborate church architecture. These were all part of Catholicism's magnificent visual culture—which since Vatican II had been on the wane, but is now enjoying a revival (as is traditional church architecture). This makes the Met's celebration and interpretation of heavenly garb all the more provocative, and perhaps prescient. 

Sövik's House for the People of God

On the centenary of his birth, Edward Anders Sövik's designs and ideas about religious architecture continue to reverberate.

by Mark Torgerson

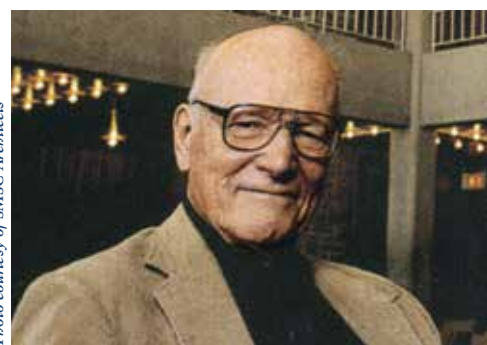


Photo courtesy of SMSC Architects

Architect Edward Anders Sövik's concept of a new direction in architecture for worship was based on his belief that 'a church should not look like a church.'

A remarkable convergence of movements shaped mid-20th-century church design in Europe and the United States. Momentum for liturgical renewal was building in Christian circles at the dawn of the 20th century. Concern for relating liturgical activities to contemporary culture and encouraging an increased level of participation among laity (both in theological

Interior view of First Lutheran Church, Onalaska, Wisconsin, completed in 1954. The interior of the worship space was reversed in 2000 in order to allow for a new primary entrance with spacious gathering area. The chancel area was moved to the opposite end of the worship space. The original, rectangular marble altar table was removed and the communion rail was adjusted. The original pulpit and font were retained.

understanding and practice) were central to this movement. Groundwork for this renewal effort began in Europe and spread to the US especially through a network of Roman Catholic liturgical scholars. By the mid-20th century Protestants were inspired to join their efforts. Ecumenical activities between Roman Catholic, Eastern Orthodox, and Protestant leaders also flowered in the 19th century and gathered momentum into the 20th century. Cooperation between denominations in international mission work developed into cooperation in meeting national social needs in urban communities, especially in the wake of significant migration movements between Europe and North America and in the aftermath of two world wars.

New architects, enthusiastic about embracing the modern doctrine of design, took up the challenge of creating religious buildings

according to the values of the renewal movement and modernism. Edward Anders Sövik was one of these young, enthusiastic architects who translated the modern movement of design into religious buildings for Catholic and Protestant congregations across the US from 1950-1996. This midwestern American architect was born in Kikungshan (now, Jigongshan), China on June 9, 1918, to Norwegian Lutheran missionaries serving in the Henan province. Piety in faithfulness to Christ, service to neighbor, and ecumenical cooperation were central formational influences upon Sövik; the priorities of the liturgical renewal movement and ecumenical movement also resonated with him.

Sövik left China in 1935 to attend St. Olaf College, Northfield, Minnesota, attracted to the study of art due in part to the mentoring of an art professor, Arnold Flaten, who

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At top: Zion Evangelical Lutheran Church, Dysart, Iowa, completed in 1961. The shallow, low chancel has the liturgical appointments of pulpit, altar-table, and font. A screen for projection has been added to the rear wall of the chancel recently, requiring a shifting of the suspended Greek-style cross off-center.

Below: Northfield Methodist Church (now United Methodist Church), Northfield, Minnesota, completed 1966. Textile art has been added to the décor through the years and some of the fixed bench pews have been replaced by matching oak chairs to increase flexible seating.

appreciated the historical development of both the Christian tradition and art. Following the completion of his bachelor's degree at St. Olaf, Sövik pursued studies in both painting and theology. He spent a year developing his painting skills at the Art Student League, New York City, from 1939-40. Sövik followed this year with three semesters of theological studies at Luther Theological Seminary (the denominational seminary for the Norwegian Lutheran Church in America), St. Paul, from 1940-41. At the end of this two-year period Sövik's intention was to be a thoughtful artist, conversant with the content of the Christian faith, who might serve God and the church through the creation of beautiful art. America's entrance into the conflict of the Second World War changed his plans.

BECOMING AN ARCHITECT

In January 1942 Sövik enlisted in the Marine Corps and began his formal training as a Navy fighter pilot. Another officer with whom Sövik was friends intended to study architecture following his tour of service. Sövik became interested in studying architecture through this connection. Following his discharge from the Marine Corps, Sövik entered Yale University to study architecture. The Yale Department of Architecture had made a transition from its previous Beaux-Arts emphasis to modern design gradually from the late 1930s to the mid-1940s. Guest critics in the Department of Architecture during Sövik's tenure included Louis I. Kahn, Paul Schweikher, Carl Koch, Gardner Dailey, Antonin Raymond, Eero Saarinen, and Pietro Belluschi. While Yale's approach to design was not perhaps as dogmatic in adherence to the Bauhaus approach of Harvard, a commitment to pragmatism, abstraction in design, and utilization of new materials and technology was imprinted on Sövik.

Church design proved to intrigue Sövik at Yale. For his senior thesis project, "A



Design for the Lars Boe Memorial Chapel, St. Olaf College, Northfield Minnesota," he designed a modern church in the spirit of many post-war European church designs, with a unified nave and chancel, set off from one another by a slightly elevated altar area. Contemporary building materials (concrete, steel, and glass) were expressed through a thoughtful if Spartan aesthetic. The design even featured a moveable screen near the chancel area in order to facilitate shielding the sacramental furnishings should the space be needed for non-liturgical purposes. With training in both theological and architectural studies, Sövik set off in early 1949 to practice in Northfield, Minnesota, joined architect Gerhard C. Peterson, and worked on

numerous renovation and new construction church building projects for upper mid-western, primarily Lutheran, congregations.

In 1953 Sövik developed a partnership with architects Sewell J. Mathre (1922-2016) and Norman E. Madson (1922-2013) to establish a new architectural firm, E. A. Sövik and Associates. Institutional design for religion and education became the focus of the practice. In the years immediately following World War II there was a tremendous investment in building projects for religious and educational use. Sövik and Mathre focused on the development of church projects primarily in Minnesota, Iowa, Wisconsin, and North and South Dakota. From 1965 to Sövik's retirement, numerous United Methodist, Roman



Left, at top: Saint Leo Catholic Church, Pipestone, Minnesota, completed 1969. Originally, the façade featured only the name of the church without the Latin-style cross.

Middle: View from a primary entrance to Saint Leo Catholic Church, with the granite font to the right of photo and chancel area to the left.

Bottom: Central United Methodist Church (now Trinity United Methodist), Charles City, Iowa, completed 1972, is an example of Sövik's 'non-church.'



Catholic, Presbyterian, United Church of Christ, and Episcopal churches contracted with his office.

INTELLECTUAL BASES FOR DESIGN

Sövik's curiosity and ability to navigate historical and theological content facilitated an ambitious reading agenda. The ecumenical movement was increasing in momentum in the mid-20th century as well, so his reading material embraced ideas from Roman Catholic and Protestant scholars alike. From the 1950s-1970s Sövik read (in both English and German) writers such as Hans Lietzmann, Adolf von Harnack, Josef Jungmann, Gregory Dix, G.W.O. Addleshaw, Frederick Etchells, J.G. Davies, Paul Thiry, Otto Bartning, Rudolf Schwarz, Ferdinand Pfammatter, Dietrich Bonhoeffer, Anton Henze, Vilmos Vajta, Hendrik Kraemer, William Stringfellow, Richard Niebuhr, Paul Tillich, Peter Berger, and Rudolf Otto. Sövik was especially drawn to theological ideas concerning elimination of a hierarchy between clergy and laity in ministry, the full and active participation of the whole congregation in worship, and service to neighbor (both inside and outside of the faith community). The overall external appearance of the church building should relate to the ordinary, vernacular expressions of the day. Beauty in design was a priority, but it was to be recognized in the excellence of selected materials and creative expression. His readings, conversation partners, and contemplation led him to focus on a vision of Christ as the humble servant of all, present in and through both the liturgical and non-liturgical activities of the local faith community. The primary purpose of the religious building thus was to be considered a "house for the people of God." The building fulfilled a role in bearing witness to the presence of Christ in community (a public witness), but it was to demonstrate an image of Jesus as servant to the world in all of life's activities. A strong accent was placed on the



Photos courtesy of the author



Saint Leo Catholic Church bronze tabernacle on red oak stand designed by Frank Kacmarcik. The tabernacle is located in an area with oak chair seating that can function as a reservation chapel adjacent to the primary worship space.

hospitality of the built environment. Sövik became an influential advocate for an accent on the “immanence” of God (“God with us”) in church design.

It is important to contextualize Sövik in his promotion of church designs oriented toward a “house for the people of God.” Multiple influences were underway. The Social Gospel movement (initiated in the late 19th century) had set the stage for 20th-century Protestant congregations to consider how their religious

activities might address issues of inequity and justice in their communities. In the Catholic Church, the liturgical renewal movement focused on clarifying the theological content of worship and mobilizing all of the laity in active participation. By the mid-20th century, post-war concerns for accommodating increasing numbers of congregants and addressing their social needs emerged. All of these emphases elevated the significance of the people of God in worship and ministry to

others. In church architecture circles conversations articulating concern for relating to the people of the world in modest and vernacular architectural language (vs. in “triumphal” or “other-worldly” expressions) were unfolding. Expanding church designs to include a wide variety of social activities (both ministry and entertainment oriented) developed. Concern for building rapidly at minimal cost was increasingly emphasized. Modern architecture appeared to offer an approach to church design that would assist with meeting this array of priorities. Sövik absorbed this agenda and sought to work toward design solutions that would fulfill this range of needs.

GAINING A NATIONAL VOICE

Sövik was not alone in his developing church architecture prioritizing vernacular, hospitable, servant-oriented buildings. He was unusually active in both ecclesiastical and architectural circles though and thus had an important role to play in disseminating modern church design. Sövik actively accepted leadership roles in national and international, ecumenical initiatives concerning congregational life and church design. From 1954, Sövik was a part of the first Commission on Architecture of the National Council of Church’s Department of Worship and the Arts. He worked with theologian Marvin Halverson and architects such as G.E. Kidder-Smith, William Conklin, Herbert Johe, and Harold Spitznagel exploring the relationship between art, theology, and architecture. In 1959 he was chosen to be a delegate from the US for the International Conference on Church Building, Bossey, Switzerland. He held a leadership role in the Church Architectural Guild of America (CAGA) from 1961-65, even editing the newsletter from 1961. His voice in the guild was joined by those of Robert Hovda, Frank Kacmarcik, Robert Rambusch, Glen Gothard, and John Morse, Catholic and Protestant consultants and designers seeking to promote active congregational engagement (liturgical and non-liturgical) through the renewal of church design. Sövik became the first president of the Guild of Religious Architecture in 1965 when the CAGA decided to become an ecumenical affiliate of the American Institute of Architects, remaining in this position until 1968. Sövik served as chair of the editorial board of the Guild’s journal *Faith & Form* from 1967-1970. He was on the board of directors of the Liturgical Conference from 1965-71 and served as president of the Interfaith Research Center (IRC), 1968-72. The IRC created an International Congress on Religion, Architecture, and the Visual Arts.

Photo courtesy of the author



Interior photo of Central United Methodist represents Sövik's original design for the 'centrum' space. The central platform is composed of moveable oak panels; the architect designed the furniture and textile installations as well.

Sövik served on the steering committee for all three meetings, held in New York City and Montreal in 1967, in Brussels in 1970, and in Jerusalem in 1973.

Writing, publishing, and speaking accompanied Sövik's many appointments. From 1959-1973 he published at least 35 articles concerning theology, worship, and church design in periodicals and books (as well as many book reviews). In and through these activities his ideas concerning contemporary church design evolved, solidified, and were disseminated. His conclusions from this period culminated in his writing the book *Architecture for Worship* published by Augsburg Press in 1973. The book proved to be popular and added momentum to Sövik's influence. Sövik penned a reasoned argument for an approach to church design focused on a "house for the people of God." Priorities of servant-oriented buildings included modest, modern, vernacular-inspired architectural designs; use of contemporary building materials; centrally planned, flexible worship spaces (including minimizing the distance between clergy and laity and accommodating liturgical and non-liturgical activities); maintaining the integrity of materials (or "honesty" in expression; no imitation or artifice is pursued); and embracing beauty through both encountering

the familiar and the pursuit of excellence in all things (all beauty can be a portal to the transcendent). Many of the emphases found in *Architecture for Worship* can be found in the document *Environment and Art in Catholic Worship*, Bishops' Committee on the Liturgy, National Conference of Catholic Bishops, published in 1978. It is likely that several of Sövik's professional colleagues helped to develop this document that was intended to assist Catholic congregations in renewing their church designs in the wake of Vatican II liturgical priorities. *Environment and Art in Catholic Worship* is not dependent on Sövik's work, but it is a contemporaneous document that conveys many of the same interpretations and concerns. It is interesting to note that another document, *The Environment for Worship*, edited by The Bishops' Committee on the Liturgy, National Conference of Catholic Bishops, from 1980 includes a chapter written by Sövik. Other contributors included William Conklin, Robert Hovda, Godfrey Diekmann, Louis Weil, Richard Vosko, and Pierre Jounel. This document was intended to continue a conversation begun in *Environment and Art in Catholic Worship*. Sövik was one of many voices focused on liturgical renewal emphasizing God at work in the world in and through God's people.

INDELIBLE MARK ON ARCHITECTURE

Sövik's professional achievements were recognized by his professional peers in both architectural and ecclesiastical domains. He was designated a Fellow in the American Institute of Architects in 1967. He received numerous awards for excellence in architectural design from such organizations as AIA/Minnesota; the Church Architectural Guild of America; the Guild for Religious Architecture; and the Interfaith Forum on Religion, Art, and Architecture. Sövik was the first recipient of IFRAA's Edward S. Frey Memorial Award for "great talent and long-term commitment in the field of religious architecture" in 1981. He was awarded the Gold Medal by AIA/Minnesota in 1982. In 1993 he was awarded the 20th Anniversary Bene Award for "most influential liturgical architect of the last 20 years" by *Modern Liturgy* for his design work, teaching, writing, and participation in interfaith organizations. And in 2003, Sövik was the first recipient of the Godfrey Diekmann award from the North American Academy of Liturgy for having made a significant contribution to liturgical life in North America.

Development of Sövik's liturgical design can be glimpsed in examining a handful of his 400 or so church-related projects. Sövik believed strongly in his theological and architectural ideals, but he also sought to honor the priorities and limits of each congregational client. He knew that certain styles of modern design were popular, and he sometimes emulated them. The ultimate design for every church was the product of a dynamic exchange between the congregation and Sövik. He always sought to educate his clients though, in helping to move them beyond personal aesthetic preferences to understanding theological and liturgical priorities noted above. Often he would provide the congregation with a written statement outlining how the new construction or renovation design related to theological belief and ritual practice.

Sövik was influenced by the writings and designs of modern architects such as Frank Lloyd Wright, Mies van der Rohe, and Le Corbusier. He favored church designs by architects such as Auguste Perret, Otto Bartning, Dominikus Böhm, Rudolf Schwarz, and especially Eliel and Eero Saarinen. Concerns for economy and short construction timelines fueled implementation of "A-frame" style buildings from the late-1940s to the mid-1960s. Sövik participated in this trend. In 1950 he designed a modest "A-frame"

congregational space for Riverside Lutheran Bible Camp, Story City, Iowa. The longitudinal space had laminated wooden arches and tile flooring. It originally had two long banks of pews facing a low, shallow chancel area. At First Lutheran Church (1954), Onalaska, Wisconsin, Sövik used an “A-frame” style as well, but incorporated features that were less typical. A rectangular plan was utilized, but the long axis was minimally longer than wide. Two banks of oak pews faced an altar area that was elevated by only three steps. Rows of pews were set on two additional sides of the altar area, providing seating for choir members, clergy, or others. At First Lutheran Church Sövik was showing early signs of wanting to minimize the distance between clergy and laity, merge the nave and chancel, surround the altar with seating on three sides, and reference symbols via beautiful art work.


Sövik’s liturgical design moved toward more centrally oriented worship spaces by the early 1960s. Centralized spaces were being featured with regularity in European church design books and journals. An early example of a design based on the equi-length arms of a Greek cross can be found in Zion Evangelical Lutheran Church (1961), Dysart, Iowa. The worship space was a near square, a little wider than deep. Each corner was slightly indented to imitate the shape of a Greek-style cross. Across the front was a shallow chancel area, just two steps above the nave. Across the rear of the space was a shallow balcony, which originally held the organ and choir seating. Two banks of oak pews faced the chancel. The rectangular oak altar table, oak pulpit (with sounding board), and limestone font were located in the chancel. A communion rail was placed across the front of the chancel. Sövik continued to develop his theological ideal of a non-hierarchical community of believers at worship, utilizing materials of the time expressed in forms that referenced historic symbols and practice.

By 1965, Sövik began to work with a minimally rectangular design for a centralized worship space. A low platform area with pulpit and altar/table was set along the long axis surrounded by congregational seating on three sides. Examples of this design strategy were featured in the post-war churches of Rudolf Schwarz and other European architects. Northfield Methodist Church (1965-66; now, United Methodist Church), Northfield, Minnesota is an early example. As with Zion Lutheran, concrete, steel, and brick were the primary building materials. The sanctuary, fellowship hall, classrooms, and offices were organized with a primary entrance marked by an arch with a Greek-style cross (no bell tower). The worship space was rectangular, slightly wider than deep, and approximately two stories in height. The distinct chancel area was now expressed as an island, three steps above the nave floor. Seating was located on three sides of the area. A rectangular oak altar table and oak pulpit were placed here. A Greek-style cross on a wooden pole was anchored in the midst of the congregational seating, between the chancel island and the entrance to the space. Sövik introduced a more pronounced use of color in this design. Window glazing (floor to ceiling) near the font was composed of panes of red, orange, and yellow glass (referencing the coming of the Holy Spirit). A set of four large arched windows to one side of the chancel island was expressed in multi-colors, dominated by shades of blue and green. Accent ceiling trusses in the ceiling were painted turquoise.

SÖVIK’S ‘NON-CHURCH’

The design of Northfield Methodist Church became a template for what Sövik ultimately called a “non-church.” A “non-church” approach for Sövik meant a design for a religious building that could function equally well for both liturgical and non-liturgical activities. Sövik chose this designation of “non-church” to try to help congregations conceive of their building as a resource for service to those both inside and outside of the faith community. Saint Leo Catholic Church (1968-69), Pipestone, Minnesota, and Central United Methodist Church (1971-72; now, Trinity United Methodist Church), Charles City, Iowa, are two examples of Sövik’s ideal worship space. The exterior designs of both buildings resembled other public buildings (like schools, libraries, or auditoriums), constructed of concrete, brick, steel, and glass. Both had a large gathering area (“concourse” is the term Sövik adopted for this space) just outside the primary entrance to the “centrum” (Sövik’s term for the flexible room that can be used for worship and non-worship activities). A fixed pool with running water was located near the primary entrance of the centrum to accommodate baptisms. The centrum was an elongated square, with a slightly elevated area for altar/table and pulpit/ambo located along one of the longer sides, surrounded by seating. The area with liturgical appointments was fixed at Saint Leo’s (a concrete island) but was mobile (made of multiple oak panels that can be stacked) at Trinity. Arrangements of fixed, short oak pews provided seating at Saint Leo’s. Padded, oak chairs that be rearranged and stacked were used at Trinity. Frank Kacmarcik served as the liturgical consultant at Saint Leo’s. Willet Studios of Philadelphia designed the leaded-glass installations at Saint Leo’s. Textile installations were included at Trinity, designed by Sövik. Attractive designs were used throughout the two spaces. Beauty was underscored in the careful selection and design of natural materials (such as oak, brick, granite, bronze, and tile) and ample directed natural light through clear and colored glass.

A LEGACY OF HOUSES FOR WORSHIP

Sövik continued to use the principles of his “non-church” approach to liturgical design until his retirement. Each design was a collaboration between his vision and the needs and preferences of a local congregation. He enjoyed sharing his understandings across denominational lines and was a frequent speaker at conferences and workshops examining liturgical renewal through architecture. Sövik worked with integrity on hundreds of church-related projects for Protestant and Roman Catholic communities for 45 years. He developed an approach to church building that was consistent with the influences, priorities, and values of theologians, liturgists, and architects of the mid-20th century. With eloquence in written and oral forms across Christian denominations, he served as a persuasive catalyst for constructing churches as a “house for the people of God” in order that God might be actively engaged and glorified. 

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