

# In Praise of Light

Phenomenology of Light in Sacred spaces

Miguel Perez

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Figure 0.1  
Reflection Space TEC

# In Praise of Light

Introduction



# Introduction

In Praise of Light: Phenomenology of Light in Sacred Spaces is a study focused on the use of light and its emotional effects on one’s connection and experience within sacred spaces. But what is phenomenology? And what is a sacred space?

Juhani Pallasmaa, in The Eyes of the Skin, describes phenomenology as a multi-sensory experience in which architecture engages both the body and the mind in a deep connection with its environment. He also posits that architecture is an extension of nature into the man-made realm, thus blurring the line between the natural and the built world.<sup>1</sup> Christian Norberg-Schulz, in his work Genius Loci, discusses how places and architecture contribute to the human experience, emphasizing the spirit of place (genius loci) and the emotional and existential connections people develop with their surroundings.<sup>2</sup> In short, phenomenology in architecture is a philosophical approach that emphasizes the human experience of space and its relationship to the built environment.

What is considered sacred architecture? And what does it mean for a space to be sacred? The term “sacred” is often avoided by architects because it is difficult to control the narrative surrounding the sacred; when we speak of light, space, material or texture we retain control over the experience. The term “sacred” implies a deeper, uncontrollable dimension that we, as architects, do not create but rather enable others to see and experience.<sup>3</sup>



Figure 0.2  
Mosque of Light

Frank Lloyd Wright considered all of his work sacred, seeing architecture as an expression of a living spirit. For him, the act of building was sacred, and the inclusion of nature in his designs was a way to experience God through His creation. Wright described his architecture as organic, regardless of whether the buildings were religious.<sup>4</sup> Le Corbusier, in contrast, used the term “ineffable space” to describe the highest experiential quality that architecture can provoke—something he equated with faith, and therefore sacredness. He believed that the sense of the sacred is provided by architecture itself, through its materiality, proportions, harmony, and craftsmanship.<sup>5</sup> Tadao Ando shares Wright’s belief in the sacredness of nature, arguing that architecture captures and frames nature, especially light, to provide a sense of holiness.<sup>6</sup> Lastly, Rafael Moneo states that the architect, when tasked with designing a sacred space, cannot rely on a shared vision of the sacred with the users of the building. Instead, the architect must take a creative risk, offering his or her own interpretation of sacred space through the manipulation of light, sound, materials, textures, and colors.<sup>7</sup>

The title In Praise of Light draws inspiration from Tanizaki’s In Praise of Shadows. In his essay, Tanizaki appreciates the subtle interplay of light and shadow in traditional Japanese aesthetics, arguing that embracing shadows allows for a more meaningful interaction with space, highlighting imperfection and silence as key elements of beauty. While Tanizaki does not explicitly mention phenomenology, his reflection on the experience of darkness and shadow aligns with phenomenological themes.<sup>8</sup> In contrast, this study will investigate how light, rather than shadow, shapes human experience and perception of space.

The concept of phenomenology is a theory that has been heavily researched. The building type or space that best exemplifies phenomenology, and that has been the most researched, is the sacred, the religious, and the meditative spaces. This is why this research will focus heavily on examining sacred spaces. Through this research anthology, I will focus on the phenomenological aspects of sacred architecture, using case studies to explore how light, context, and intent shape both the experience of the space and the space itself.

# In Praise of Light

Case Studies



# Wooden Chapel | John Pawson

2018 Lutzingen, Germany

## Introduction

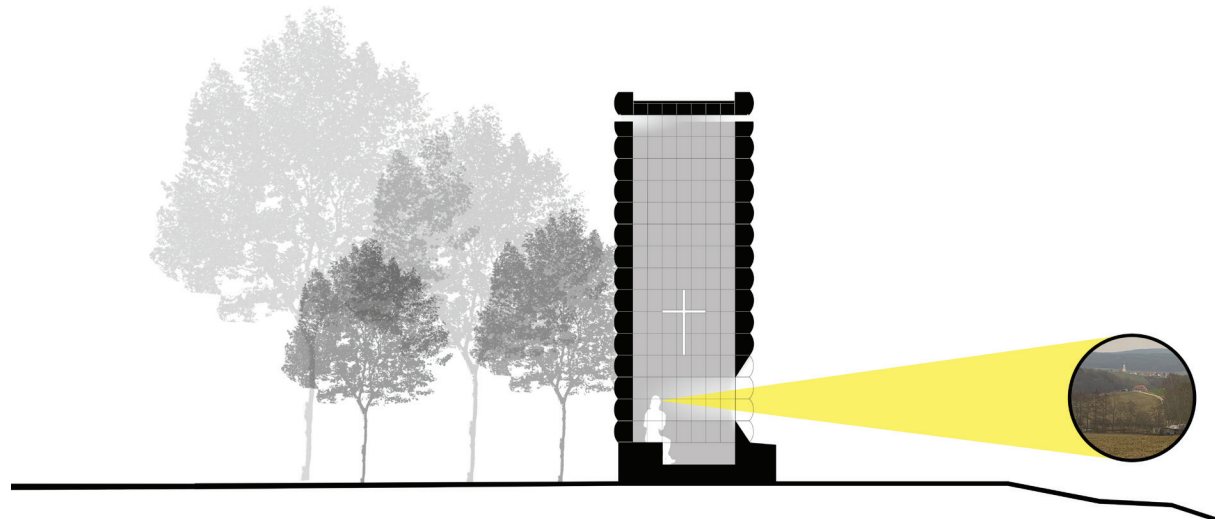
The Wooden Chapel by John Pawson stands as a powerful testament to how light and space can profoundly influence one's emotional and spiritual experience. At the smallest scale of the case studies, this chapel offers an intimate environment designed to foster reflection and meditation. Pawson's use of light in this space is minimal yet intentional, creating a sanctuary where the absence of abundant natural light amplifies the sense of solitude and introspection.<sup>9</sup>

In phenomenological terms, the Wooden Chapel exemplifies how light—or the lack thereof—shapes the user's experience in sacred spaces. The interplay between shadow and light, combined with the chapel's compact size, evokes feelings of stillness, isolation, and quietude, allowing visitors to focus inward.<sup>10</sup> This building demonstrates that light is not merely a functional element but a critical tool for manipulating the emotional atmosphere and guiding spiritual reflection.<sup>11</sup>

Figure 1.1

Interior view of Wooden Chapel by John Pawson





**Figure 1.2**  
The singular window is positioned to look directly at the towns church.



**Figure 1.3**  
The singular window is positioned to look directly at the towns church.

## Context

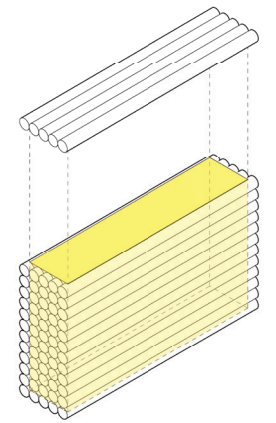
The Wooden Chapel is positioned on the edge of a forest, where it serves as a quiet transition between the dense woodland and the open prairie. This transitional placement reinforces the phenomenological experience by connecting the chapel to its natural surroundings, creating a strong sense of place. The singular window strategically faces the nearby town and church<sup>12</sup>, establishing a visual connection between the chapel's isolated location and the larger community.

On one side, the chapel blends seamlessly into the forest, with its timber structure reflecting the natural environment, while the other side opens up to clear views of the surrounding landscape. This duality allows visitors to experience the building as both part of nature and as a distinct architectural object. The chapel's placement creates a place that feels both isolated and connected to the broader context. The landscape reinforces the phenomenological approach, where the natural environment and the chapel's materiality engage the senses and create a deeper emotional and spiritual connection.<sup>13</sup>

## Intent

John Pawson's design for the Wooden Chapel was to create a "found experience" between forest and prairie.<sup>14</sup> Pawson envisioned the chapel as an object that visitors would encounter unexpectedly, emerging naturally from its surroundings. From the forest, the chapel appears as a simple stack of drying logs, while from the grasslands, it takes on the form of a wooden sculpture placed on a concrete plinth. This perception reinforces the phenomenological experience of parallax, allowing the building's form to shift based on the visitor's approach.<sup>15</sup> The chapel is deliberately understated, allowing nature and light to shape the experience more than the architecture itself.

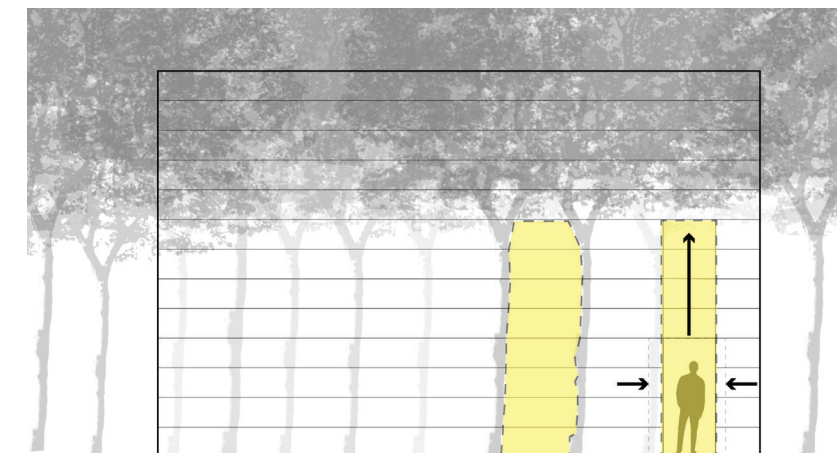
The entrance is purposefully narrow and tall, evoking the feeling of walking through the dense forest. Pawson designed the entry to mirror the vertical scale of the trees, creating an immediate connection between the natural landscape and the built form. This sense of compression continues inside, where the narrow sanctuary leads to tall ceilings, echoing the feeling of walking through the woods.<sup>16</sup> This design choice emphasizes the phenomenological principle of body-space relationships.<sup>17</sup>



**Figure 1.4**  
The form is meant to represent a pile of logs that are drying. The chapel is placed within the pile of logs



**Figure 1.5**  
View of chapel at the edge of the Forest.



**Figure 1.6**  
The door's exaggerated height and narrow entrance evoke the dimensions of the surrounding forest.

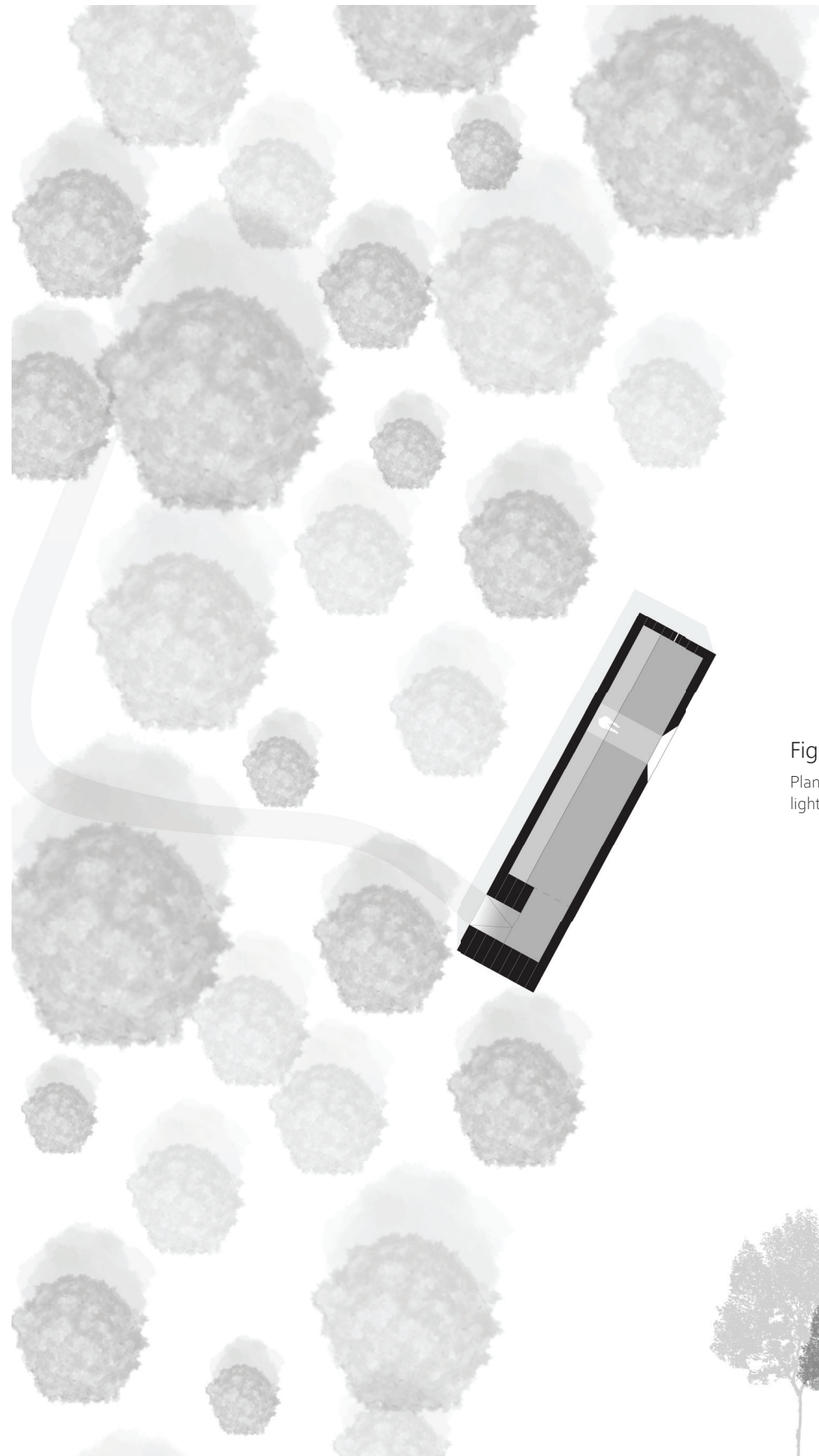


Figure 1.7  
Plan view of chapel showing morning  
light in the winter

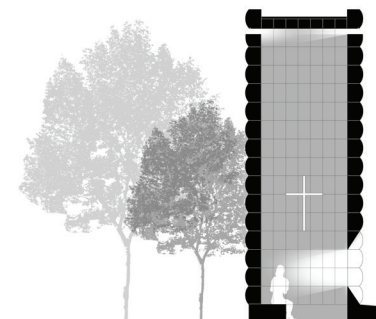


Figure 1.8  
Section of chapel showing morning light  
in the winter



Figure 1.9  
Interior elevation of chapel showing  
morning light inside the chapel

## Light

Light was the driving force behind the design of the Wooden Chapel, shaping both its physical and emotional experience.<sup>18</sup> Pawson intended for light to create a meditative space where solitude and quietness could prevail. The quality of light changes throughout the day, offering different experiences depending on the time. The most dramatic of these occurs in the early morning, when the chapel is primarily used for morning prayer. During this time, the light entering the chapel is soft yet focused, creating a serene and contemplative atmosphere. The changing light quality heightens the phenomenological experience, making the visitor aware of time and place.

In elevation, the chapel's design highlights the effect of light on the user. As the light enters the space, it frames the individual standing within the otherwise dark interior, creating a powerful moment where the person is literally and metaphorically illuminated. This framing effect allows the architecture to highlight the sacredness of the individual experience, reinforcing the chapel's role as a space for personal reflection. The plan and section drawings show how the building was designed to maximize this interplay between light and shadow, using natural illumination to shape the emotional atmosphere within the space. As explored in *In Praise of Shadows*, the interplay of dim light and shadow fosters a sense of stillness, enhancing the visitor's capacity for meditation and introspection.<sup>19</sup>



# Church of the Light | Tadao Ando

1999 Ibaraki, Japan

## Introduction

Tadao Ando’s Church of Light stands as a profound example of the phenomenology of light in sacred architecture. Known for his masterful use of minimalism, Ando designed this small chapel to create a dialogue between light and darkness<sup>20</sup>, revealing the spiritual power of architecture through contrast. The Church of Light explores the idea that light is not merely a physical element but a spiritual force that shapes how we perceive and experience sacred space. With its cross-shaped opening, the building evokes a deep sense of reverence, using light to guide reflection and contemplation.

From a phenomenological perspective, the Church of Light highlights how architecture can manipulate one’s emotional and spiritual experience through the interplay of light and shadow. As Ando himself stated, “Light, alone, does not make light. There must be darkness for light to become light.”<sup>21</sup> This contrast enhances the space’s sacredness, inviting visitors to immerse themselves in a journey of connection. The stark simplicity of the chapel allows the light to become a material of its own, turning the void into an emotional space.

Figure 2.1  
Chruch of Light by Tadao Ando





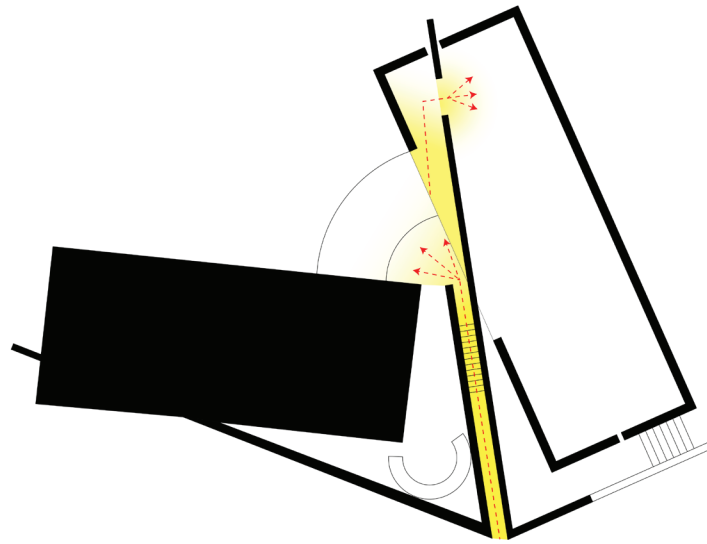


Figure 2.2  
The act of purification through compression and release

## Intent

Ando's design for the Church of Light is crafted to evoke a profound emotional and spiritual journey. The narrow, compressed entryway symbolizes the spiritual purification process that one undergoes before entering the sanctuary. As visitors move through the chapel's entrance, they experience a release into the open, light-filled space, echoing Ando's concept of compression and release. This transition mirrors a journey from darkness into light, both physically and metaphorically.<sup>22</sup> The process of moving through narrow, shadowy spaces before reaching the illuminated sanctuary creates a sense of reflection. The architecture itself becomes a vessel for spiritual preparation.

The diagonal wall that redirects visitors as they approach the entrance is more than just a physical boundary—it is an intentional architectural move designed to prepare the individual for the sacred experience within. As visitors move along the diagonal path, they are gradually led into alignment with the cross, the spiritual and architectural focal point of the chapel.<sup>23</sup> This gradual transition serves to reorient the visitor's body and mind, shifting focus from the outside world to the contemplative space within. The concept of *shintai*—a Japanese notion that refers to the body's capacity to engage with its environment—becomes significant when understanding the impact of the empty cross at the end of the axis. The *shintai* draws the visitor's perception into the cavernous coldness of the space, toward the warmth and brightness the cross promises.<sup>24</sup>

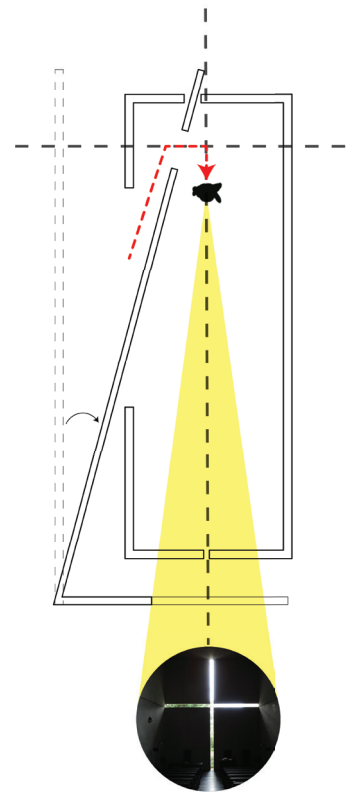


Figure 2.3  
The axial relationships formed by the angled wall

## Context

The Church of Light by Tadao Ando is oriented to the southeast, enhancing the phenomenological experience of light within the chapel. This orientation ensures that the chapel is bathed in natural light during the morning hours, a time when the building is primarily used for prayer and meditation.<sup>25</sup> The southeast-facing cross-shaped window becomes a focal point, allowing sunlight to pour in, gradually illuminating the dark interior and casting long, dramatic shadows. The light from the early morning sun not only brightens the space but also enhances the spiritual atmosphere.

Ando's decision to align the chapel to capture the morning light emphasizes the relationship between nature and spiritual practice. The use of light in the morning, when the chapel is most active, ties the physical experience of the space to the rhythm of the day, reinforcing the idea that sacred spaces are not just static environments but living entities that interact with nature.<sup>26</sup> One also interacts with the wind through the open cross. Ando thought it was important for the human physical form and nature to come together.<sup>27</sup> This connection between the movement of the sun, the feeling of the wind, and the experience of the building.



Figure 2.4 interior  
Interior view of entrance looking from the alter

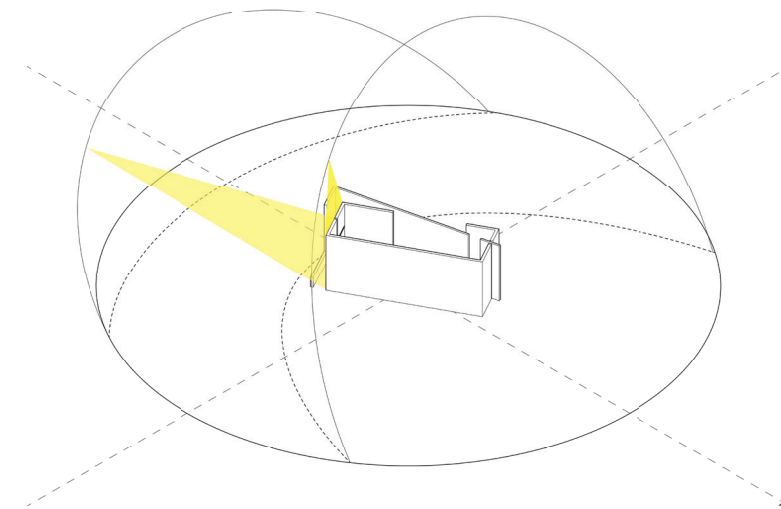


Figure 2.5 orientation  
Orientation showing light in winter and summer at 10am showing the importance of morning light and orientation

Figure 2.6  
Plan view showing morning light  
in the winter when the sun angle  
is low.



Light

Light is the defining element in Tadao Ando's Church of Light, shaping both the architectural design and the spiritual experience within. Ando's philosophy, expressed in his statement, "Light is the origin of all beings. Light gives, with each moment, new being and new interrelationships to things, and architecture condenses light to its most concise being,"<sup>27</sup> is reflected in this space. The interplay of light and shadow transforms the minimalist concrete structure into a dynamic spiritual environment. As the light shifts throughout the day, it offers different emotional experiences, from the soft glow of the morning sun that fills the chapel during prayer to the dim, contemplative light of the afternoon. These changes foster a meditative atmosphere, inviting quiet reflection and deepening the visitor's emotional connection to the space.

The plan of the Church of Light reinforces Ando's concept of compression and release. Visitors enter through a narrow, shadowed entryway, experiencing a sense of confinement before being released into the expansive, light-filled sanctuary.<sup>28</sup> The cross-shaped window, aligned along the main axis, serves as the focal point, guiding visitors toward spiritual reflection. Ando's belief that there must be darkness for light to become light<sup>29</sup> is fully realized in the design, where the stark contrast between shadow and illumination heightens the emotional and spiritual impact. The section and interior elevation reveal how light sculpts the space, casting long shadows on the concrete walls and framing the visitor within the dark interior. The careful choreography of light aligns with Jun'ichirō Tanizaki's *In Praise of Shadows*, where dim light and shadow foster tranquility<sup>30</sup>, further elevating the Church of Light as a timeless example of phenomenological architecture that transcends physical form to engage the spirit.

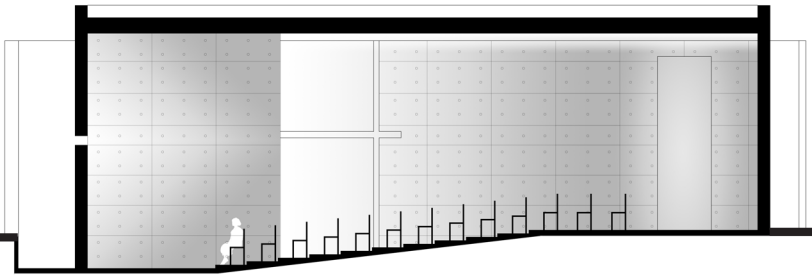
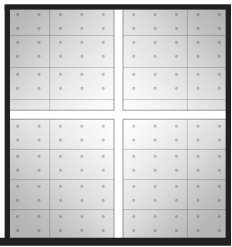


Figure 2.7  
Section view showing light in the  
morning during the winter when  
the sun angle is low.

Figure 2.8 Elevation  
Interior elevation showing light  
shinning though the cross





## Tervajärvi Forest Chapel | Architecturestudio NOAN

2020 Lempäälä, Finland

### Introduction

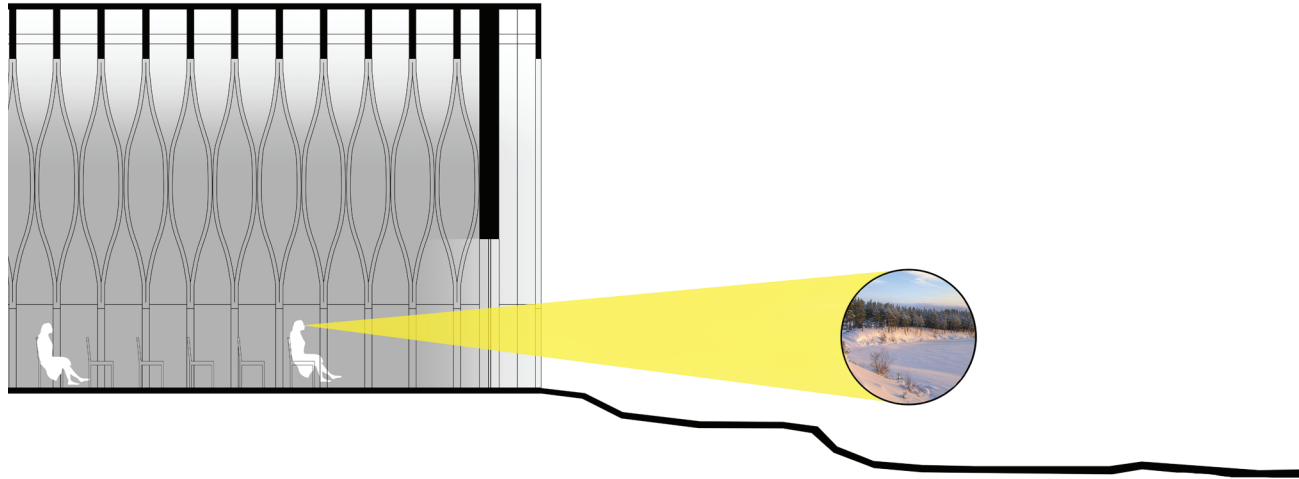
The Tervajärvi Forest Chapel, designed by Architecturestudio NOAN, offers a modern interpretation of sacred spaces that emphasizes simplicity, tranquility, and an intimate connection to nature. Rather than relying on traditional institutional symbols, the chapel uses its honest tectonics to express the spiritual through the raw beauty of its structure. The chapel's design is rooted in the idea that smaller, more personal sacral spaces can evoke a sense of community and offer consolation to those seeking refuge.<sup>31</sup> Through its exposed timber framework, the chapel creates an atmosphere of calm and reflection, blending seamlessly into its forested surroundings.

This chapel demonstrates how honest tectonics can enhance a sacred space, where the structure itself becomes a symbol of authenticity and spiritual clarity. The visible glulam timber truss system, inspired by nature and ecclesiastical forms, plays a crucial role in the chapel's aesthetic and functional integrity. Here, the architecture is not hidden but celebrated, allowing the physical construction to become a medium for spiritual reflection. The transparency of the structure serves to remind visitors that sacredness can be found in the simplicity and honesty of materials, echoing the ideas of Moneo that sacredness can arise from the architect's creative shaping of space and light.<sup>32</sup>

Figure 3.1

Tervajarvi Forest Chapel ceiling.





**Figure 3.2**  
The exterior connection made from inside the chapel connecting one to nature

### Context

The Tervajärvi Forest Chapel is situated on the edge of a forest, creating a strong relationship between the built structure and its natural surroundings. This context defines the chapel's architectural intent and the phenomenological experience it offers. By positioning the chapel at the boundary between forest and open space, the design fosters a seamless blend with the natural environment while providing clear views of the forest canopy and lake. This placement invites visitors into a space of reflection and connection with nature, aligning with the evolving role of sacral spaces, which prioritize tranquility and consolation over grand institutional symbolism.<sup>33</sup>

The design reflects the idea that sacral spaces can be smaller, more intimate, and rooted in their natural surroundings rather than defined by traditional religious symbols.<sup>34</sup> The surrounding forest acts as an integral part of the chapel's atmosphere, reinforcing the architectural theme of quiet reflection and offering visitors a retreat from the noise of modern life. In this way, the chapel's relationship with its context emphasizes its role as a place for contemplation, where the natural world and the sacred converge.

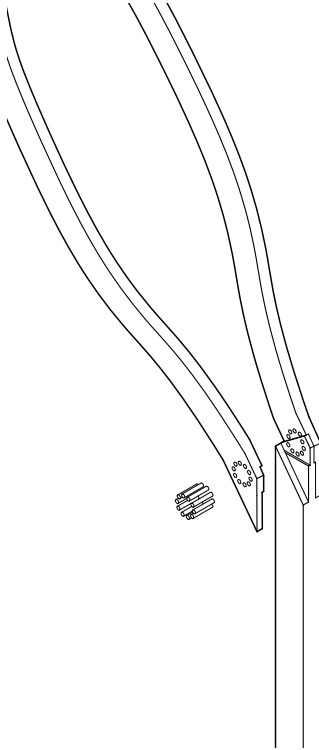


**Figure 3.3**  
Interior view of chapel showing how light and structure interact.

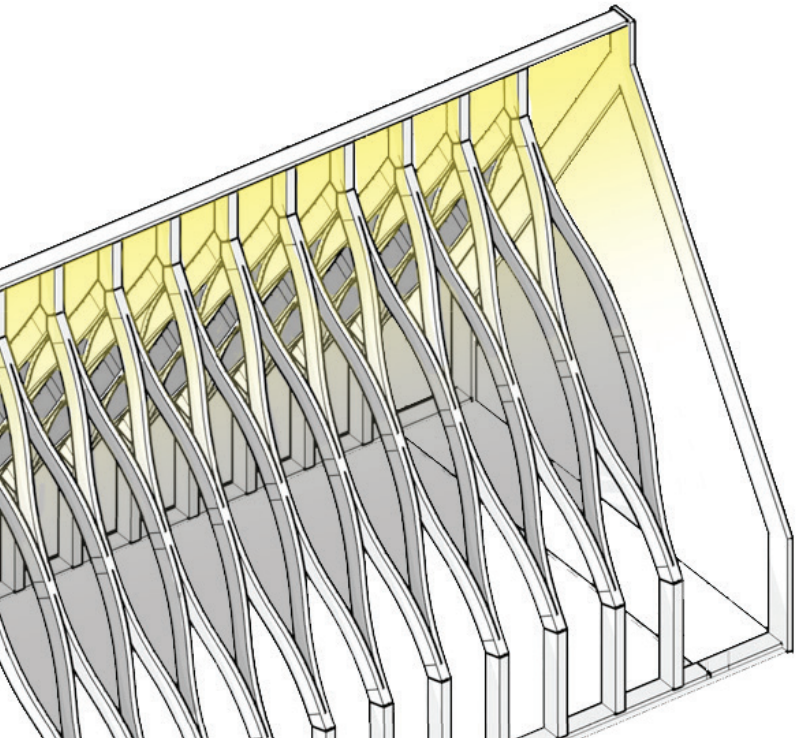
### Intent

The Tervajärvi Forest Chapel by Architecturestudio NOAN is a powerful example of how tectonic honesty and structural clarity can shape a sacred space. The primary intent behind the design was to create a place of tranquility and reflection through simple, transparent architecture. The glulam timber roof trusses serve as the focal point, both structurally and visually, reflecting the organic curves of the surrounding forest and lake. These exposed beams, which act as their own stiffening structure, eliminate the need for additional supports, reinforcing the chapel's sense of openness and purity.<sup>35</sup>

The chapel's design aligns with the idea of architectural tectonics, where the materials and construction are essential to the building's meaning. By leaving the structure visible, the chapel embraces tectonic honesty, allowing the craftsmanship and materiality to become part of the spiritual experience. The construction, carried out by volunteers, further adds to this authenticity, making the building not just a space for solitude but a communal effort.<sup>36</sup> The exposed timber and the proportion of the beams create a serene environment, where the structure itself fosters reflection and connection with nature. The symbolic connection to the surrounding forest and lake is reinforced by the curved glulam beams, with interpretations ranging from the shape of a fish, a Lutheran symbol, to the form of a boat, a connection to the lake's context.<sup>37</sup>



**Figure 3.4**  
Structural detail of beam and post connection



**Figure 3.5**  
Structure and light interaction showing the play of light in shadow created through the structure

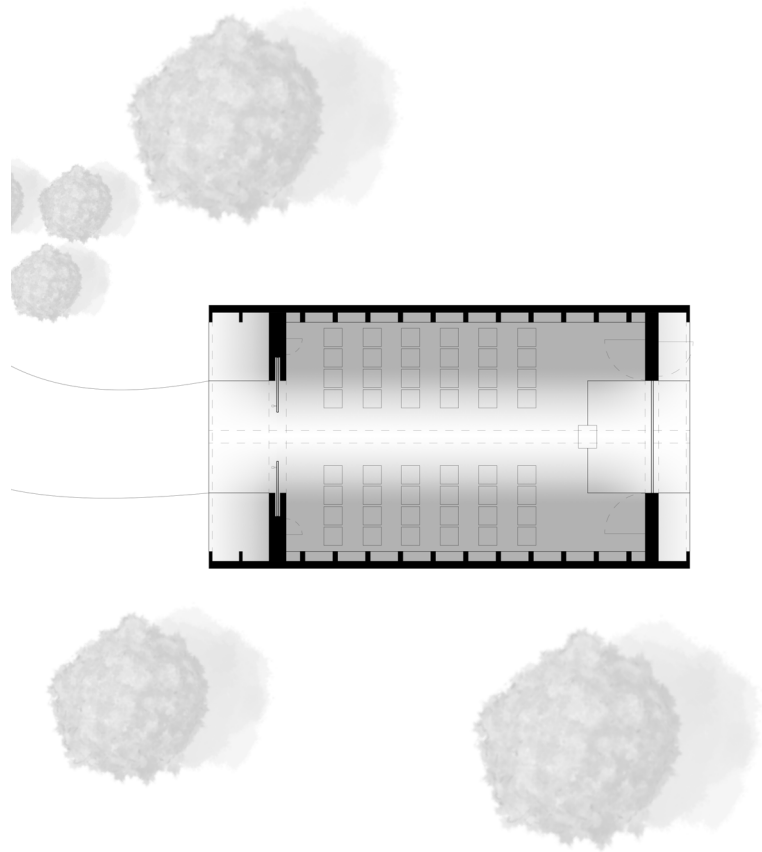


Figure 3.6 Plan

Plan view showing diffused light seen inside throughout most of the day

## Light

Light in the Tervajärvi Forest Chapel is used not only to shape the emotional atmosphere but also to highlight the tectonic structure of the building. The glulam timber beams are accentuated by the changing light throughout the day, with the soft, filtered light entering through the upper clearstory. The quality of light interacts with the exposed structure, emphasizing the texture and form of the materials, allowing visitors to experience the building in a tactile and visual manner.

During different times of the day, the interaction of light and shadow with the chapel's timber structure transforms the space, creating new visual experiences that highlight the architectural details. This use of light aligns with the phenomenological approach to architecture, where light is a dynamic element that shifts the perception of space. In the early morning, when the chapel is most often used for quiet reflection, the direct light, like in Tadao Ando's Church of Light, acts as a focal point, drawing attention to the sacred experience.<sup>38</sup> By using light to accentuate the honest tectonics of the building, the design reinforces the connection between structure and experience, making the chapel a place of both architectural and spiritual contemplation.

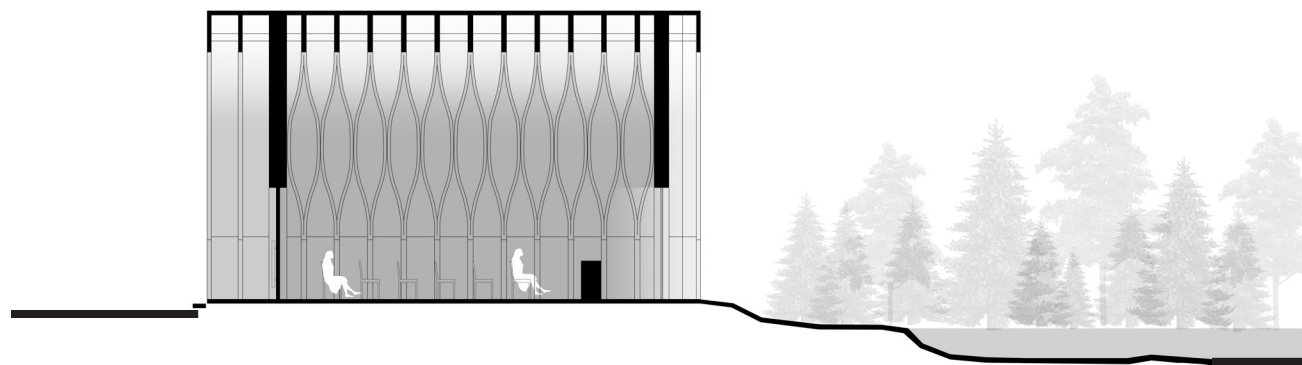


Figure 3.7 Section

Section view showing diffused light seen inside throughout most of the day



Figure 3.8 Elevation

Interior elevation showing material detail and diffused light.



# Chapel of St. Ignatius | Steven Holl

1997 Seattle, USA

## Introduction

Steven Holl’s Chapel of St. Ignatius is a highly studied building in the realm of phenomenology, where light becomes the primary medium to evoke deep emotional and spiritual experiences. The chapel’s design is rooted in Holl’s concept of a “gathering of different lights,”<sup>39</sup> where each carefully crafted space interacts with natural light in ways that reflect the nuances of spiritual life. The phenomenological approach here is not just about aesthetics—it’s about how light transforms the space and invites the visitor into a dynamic interaction with their surroundings, evoking contemplation, reflection, and a heightened awareness of time and place.

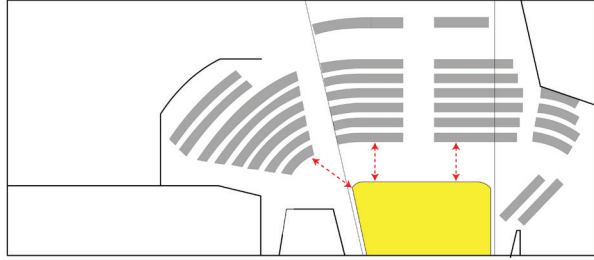
Holl’s mastery lies in using light to connect the sacred with the personal. As natural light shifts throughout the day, the chapel’s spaces are continuously redefined, creating a fluid, ever-changing environment that influences how one feels and experiences the building. The varying qualities of light—whether sharp and bright or soft and diffuse—establish different moods, allowing the architecture to engage directly with the emotions of those within. By making light the primary architectural material, Holl elevates the chapel beyond a mere religious building into a space where visitors are prompted to reflect on their own spiritual journeys.

Figure 4.1

Chapel of St. Ignatius by Steven Holl







### Context

The Chapel of St. Ignatius is an integral part of Seattle University's campus, embodying elements of the city, university, and chapel in its design. The campus was planned on existing urban blocks, and the chapel was placed in the center of a former street, elongating the building plan and creating new green space to the north, west, and south.<sup>40</sup> Holl's concept of a "stone box" with bottles of light<sup>41</sup> is expressed through the plan, where each light volume corresponds to a part of the building's mass. For example, the city-facing north light relates to the Chapel of the Blessed Sacrament, emphasizing the university's mission of outreach to the community. The eastern and western light volumes fill the main worship space with natural light for services, reflecting the connection between spiritual practice and the rhythms of the day.

Holl designed the worship space in the round, following the preference of the Second Vatican Council,<sup>42</sup> but also accounted for the need for a processional hall, balancing both elements in the layout. The chapel is a modern interpretation of the Jesuit church plan which was a rebellion against mid evil church plans. The elimination of side aisle and a shallow sanctuary brought the worshipping assembly closer to the liturgy.<sup>43</sup>

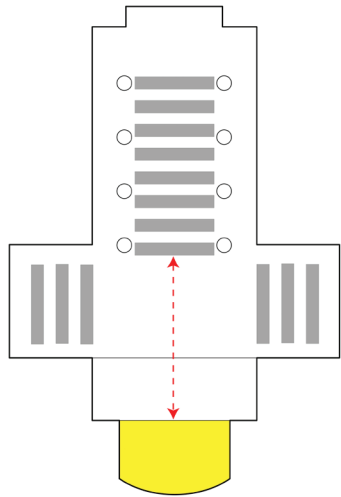
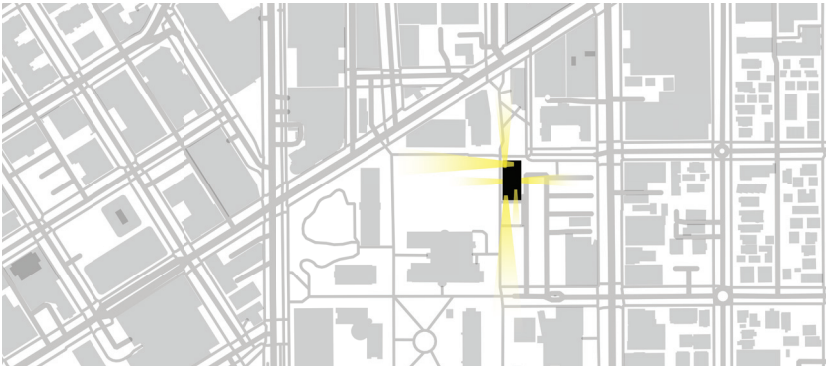


Figure 4.2 Plan intent

Comparative plan of a traditional mid evil church compared to Steven Holl's interpretation of a Jesuit church plan.

Figure 4.3 Site lights

The site connection each one of the skylights makes

### Intent

Holl's concept of "a gathering of different lights" refers to both the diversity of nationalities at Seattle University and the elements of Jesuit liturgical programs.<sup>44</sup> Each bottle of light corresponds to a specific programmatic element: the narthex, processional hall, main gathering space, reconciliation space, choir, Chapel of the Blessed Sacrament, and the seventh bottle, the bell tower<sup>45</sup>. The design reflects the idea of community, spiritual reflection, and the university's outreach mission.

At night, the light volumes become beacons, shining across the university. Calling for all student to attend the nightly masses offered. The bell tower, or seventh bottle of light, is especially prominent, emphasizing the geometry of the chapel and its role as a spiritual landmark on campus. The reflection pond, called the "thinking field," is illuminated at night by the bell tower<sup>46</sup>, creating a serene atmosphere where the interplay of light and water invites contemplation.

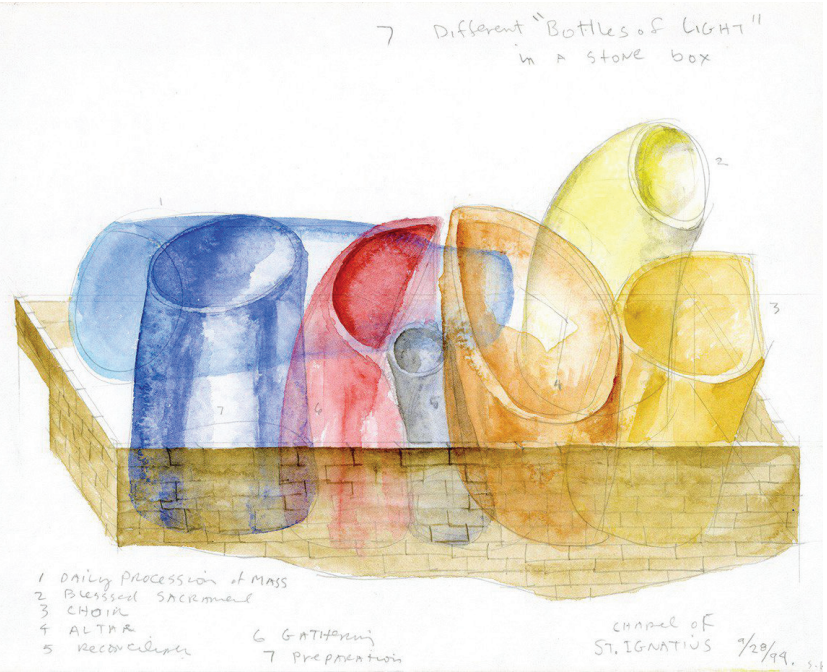


Figure 4.4 concept

Steven Holl's original sketch for the chapel of St. Ignatius

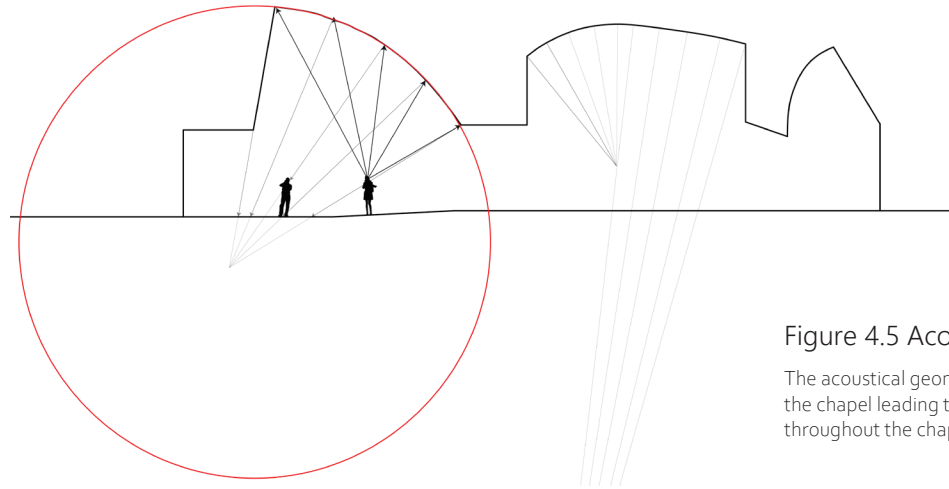


Figure 4.5 Acoustics

The acoustical geometry behind the chapel leading to optimal sound throughout the chapel

## Multi-sensory experience

In the narthex and processional hall of the Chapel of St. Ignatius, natural sunlight creates a dynamic play of shadows that gradually deepen as one moves further into the chapel. The light mysteriously glows from reflected color fields, with each “bottle of light” containing a unique reflected hue complemented by a lens of a contrasting color.<sup>47</sup> This interplay produces a visual phenomenon of complementary colors, where, for instance, staring at a blue rectangle on a white surface causes the viewer to perceive a yellow rectangle<sup>48</sup>. The merging of light and color in the chapel is not just a visual effect but a reflection of the phenomenological experience of light.

The Jesuit churches, including the Chapel of St. Ignatius, pay special attention not only to the layout and aesthetics but also to the acoustics of the space, ensuring that sound, like light, enhances the spiritual experience<sup>49</sup>. Each section of the chapel is imbued with its own color: the procession is illuminated by diffused natural light, while the nave features a yellow field paired with a blue lens to the east and a blue field with a yellow lens to the west. In the Chapel of the Blessed Sacrament, an orange field is lit by a purple lens. The choir is accompanied by a green field with a red lens, and the reconciliation chapel combines purple with orange. Both the bell tower and the reflection pond feature projected light that complements the natural light,<sup>50</sup>. This creates a multisensory environment where color, light, and acoustics coalesce into a deeply reflective spiritual space.

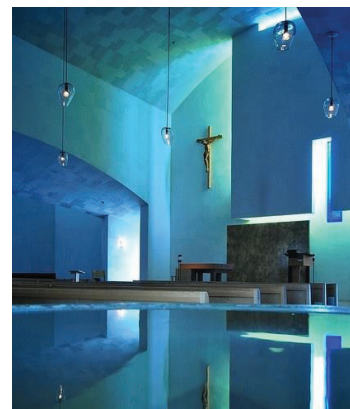


Figure 4.6 Acoustics

Colored light gleaming through the east



Figure 4.7 Acoustics

Colored light filtered and diffused by a series of colored glass skylights and walls

## Light + construction tectonics

The construction of the Chapel of St. Ignatius emphasizes the role of light in defining both the physical and spiritual experience of the space. The “stone box” is constructed from 21 concrete tilt-up slabs that interlock at the building’s four corners like a Chinese box, exposing the load-bearing thickness of the concrete. Window openings are formed where the cuts at the slab joints engage as the slabs are tilted into place, allowing light to enter in highly controlled ways.<sup>51</sup> Light is not just an aesthetic element but a critical part of the chapel’s tectonics, from the construction of the concrete walls to the placement of the skylights.

Inside, sunlight projected through colored lenses marks certain times of the day and year, aligning light with the central theme of time in the interior. When clouds, typical of Seattle’s climate, pass overhead, they create a “phenomenal pulse” of reflective color that sweeps through the space like a breath, invigorating the silence of the chapel<sup>52</sup>.

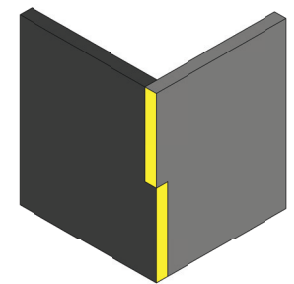


Figure 4.8 Joinery

Chinese box joinery exposing the load bearing thickness

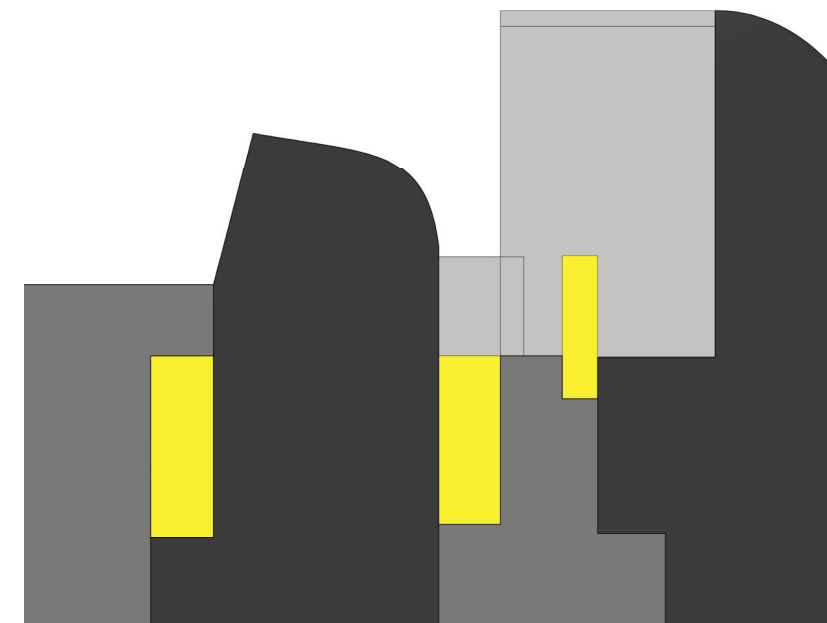
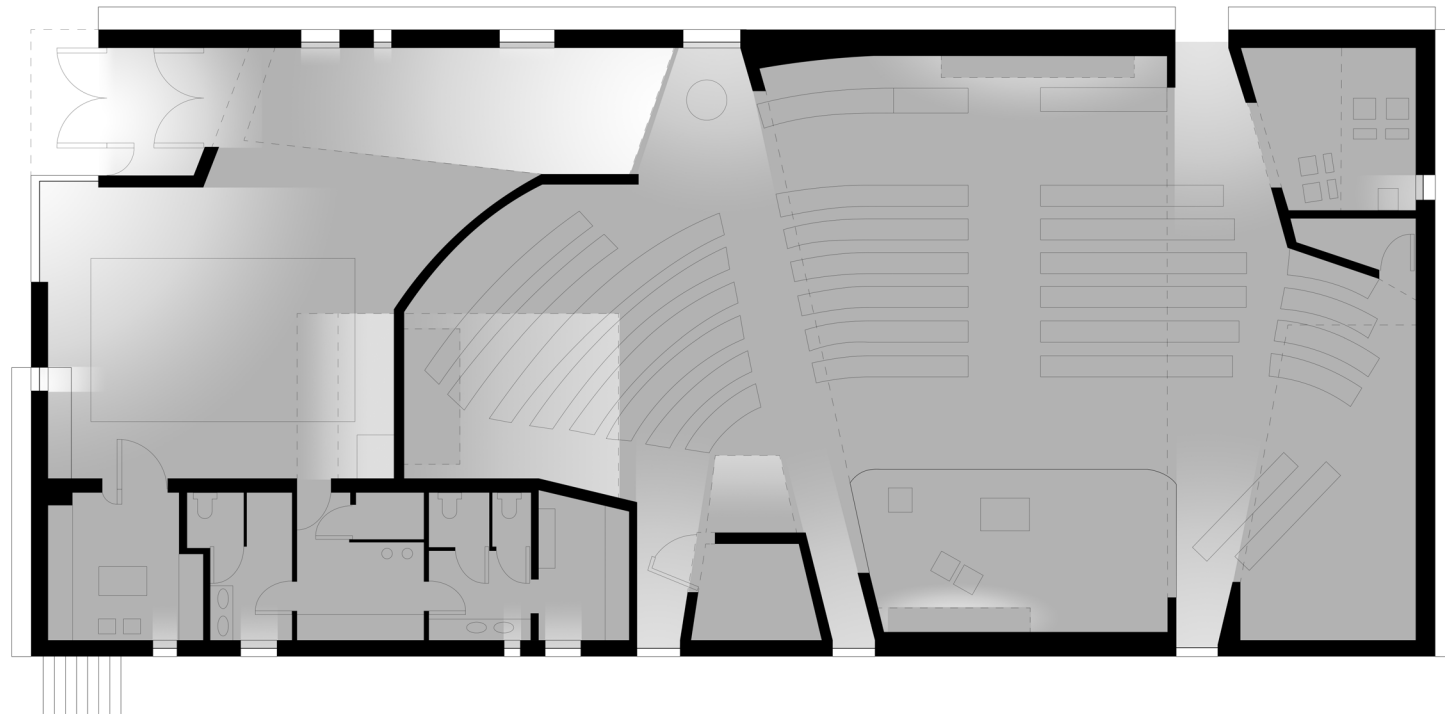


Figure 4.9 structure + Light

Interlocking slabs that come together to frame and build the windows and openings



## Light

In the Chapel of St. Ignatius, light is used as a measure of time and duration. Holl aligns this concept with Saint Augustine's meditation on time: "What then is time? If no one asks me, I know. If I wish to explain it to a questioner, I do not"<sup>53</sup> (Chapel of St. Ignatius by Steven Holl). The light in the chapel shifts throughout the day, creating a sense of movement and marking the passage of time in a spiritual context. The interaction of light with colored lenses creates an oscillating wave of reflected color, producing a dynamic and contemplative atmosphere.

The chapel's design ensures that light interacts with the materiality of the building in a way that constantly transforms the space. Holl uses light as a silent but dramatic surface, orchestrating how natural light enters through the skylights and window openings to interact with the architecture. This constant play of light and shadow invites visitors into a space of reflection and introspection, making the Chapel of St. Ignatius a prime example of phenomenological architecture.

Figure 4.10 Plan

Plan of chapel showing southern light midday.

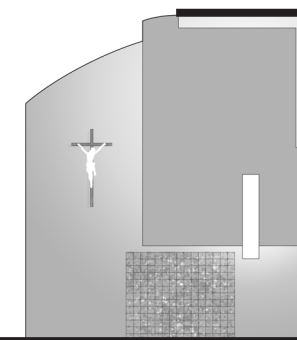
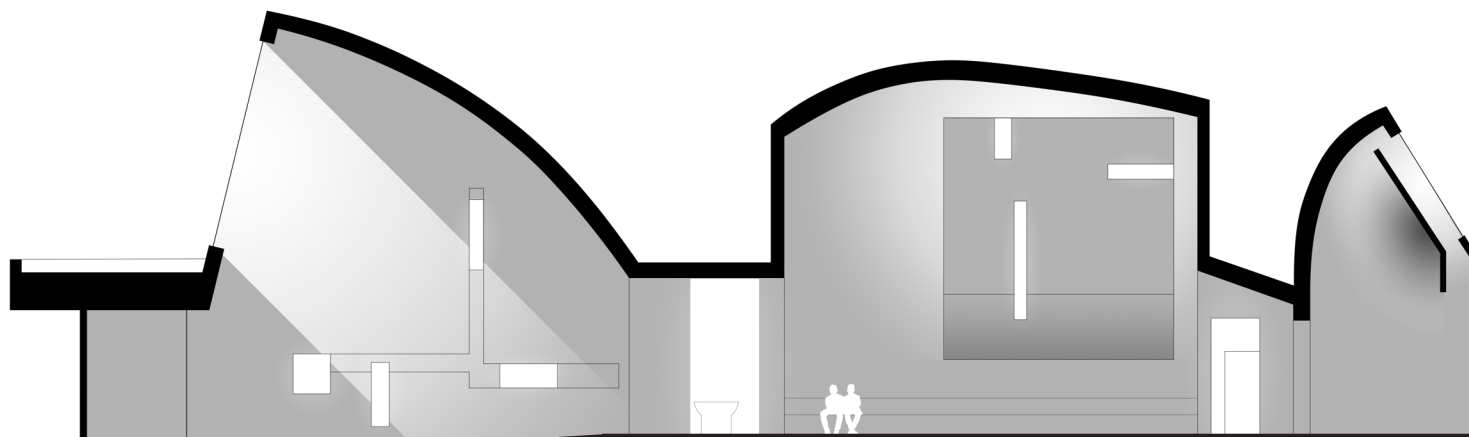


Figure 4.11 Section

Section of chapel showing light midday.

Figure 4.12 Elevation

Interior Elevation of altar.





# Reflection Space TEC | Alberto Kalach

2020 Monterrey, Mexico

## Introduction

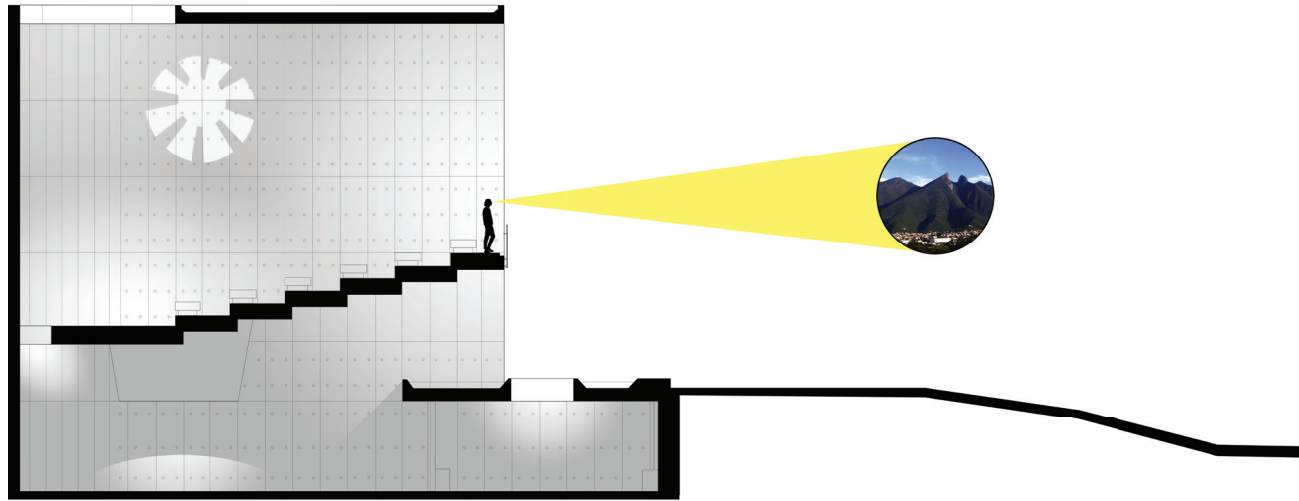
The Reflection Space at TEC, designed by Taller de Arquitectura X and Alberto Kalach, is a serene embodiment of phenomenological architecture, where light, material, and space come together to create an environment that fosters contemplation and introspection. This space, dedicated to mental health and reflection, uses light as a central element to slow down time, encouraging a deep connection between the visitor and their surroundings. The careful manipulation of natural light, combined with the use of shadow, creates an atmosphere of calm and stillness, making it a place for pause and meditation.

The phenomenology of this space is rooted in how light interacts with the architecture and the landscape, emphasizing the importance of human scale and materiality. By controlling the height and filtering natural light, the Reflection Space allows visitors to experience an intimate connection to the environment. It demonstrates that sacredness in architecture doesn't rely on overt religious symbolism but can be achieved through the thoughtful orchestration of light and space, creating a sanctuary for personal reflection and emotional healing.

TEC de Monterrey innovates in the area of education, focusing on a curriculum that seeks to adapt flexibly and dynamically to the rapid changes in society, to provide students with the necessary skills to face these changes. Within its 2030 vision, it also understands that education is comprehensive. It has a focus on people and their mental health, housing a space with a very particular and compelling program: a space for pause and reflection.<sup>54</sup>

Figure 5.1

Reflection Space TEC



## Context

The Space for Reflection is located on the edge of the TEC campus, framing views of the Sierra mountain range and creating a direct connection to Monterrey's powerful landscape.<sup>55</sup> This placement is critical to the building's phenomenological design, which ties space to place by using the natural surroundings to influence the experience of the structure. The building's eastern face opens towards the mountains, allowing the natural grandeur of the landscape to become an integral part of the interior experience. This framing of the mountains serves as both a literal and metaphorical window into the vastness of nature, encouraging reflection on the scale of the individual in relation to the environment.

The building is part of a larger master plan for the TEC campus, which aims to integrate the campus infrastructure with the needs of the students and the relationship with the city by positioning the Space for Reflection at one of the campus edges.<sup>56</sup> The architectural promenade that guides users through the space is carefully designed to take them out of the campus context and immerse them in the experience of the building's materiality and the surrounding geography. The use of concrete planes and thoughtful massing emphasizes this separation from the urban environment, creating a sanctuary for contemplation within the bustling campus.<sup>57</sup>

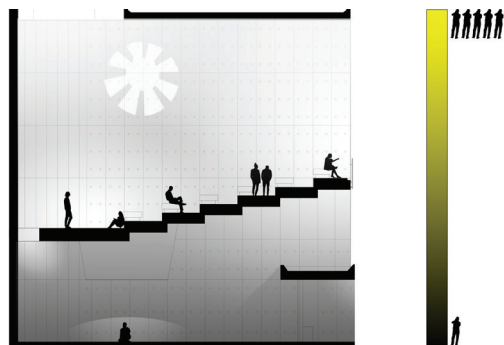


Figure 5.4

Correlation between light and density of people versus darkness and solitude.

Figure 5.2

Connection to the mountain range seen in section



Figure 5.3

Image of the strong connection with the mountain range.

## Intent

The Space for Reflection was designed with an emphasis on how light interacts with the material and space, using intentional construction methods to support this goal. The building is primarily constructed from cast-in-place concrete, with gaps strategically placed between the concrete panels to allow natural light to filter through the building. These gaps are an essential part of the architectural design, guiding the flow of light into different parts of the building and creating a rhythm of light and shadow that enhances the contemplative experience.

By using these construction techniques, the building creates a seamless connection between its materiality and the light, transforming the concrete into an active participant in the sensory experience. The cast-in-place concrete surfaces were designed to catch and reflect the natural light, amplifying the contrast between brightness and shadow. The gaps between the panels and the integration of skylights allow light to become a defining feature of the space, intentionally shaping the emotional tone of each area. The lower, darker levels encourage intimate reflection, while the lighter, more open spaces on the upper levels foster a communal experience. This careful interplay of density, space, and light serves as a guiding principle throughout the building's design, illustrating the deep connection between light and architectural form.

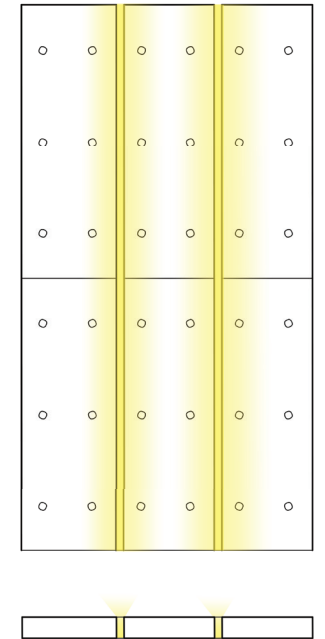


Figure 5.5

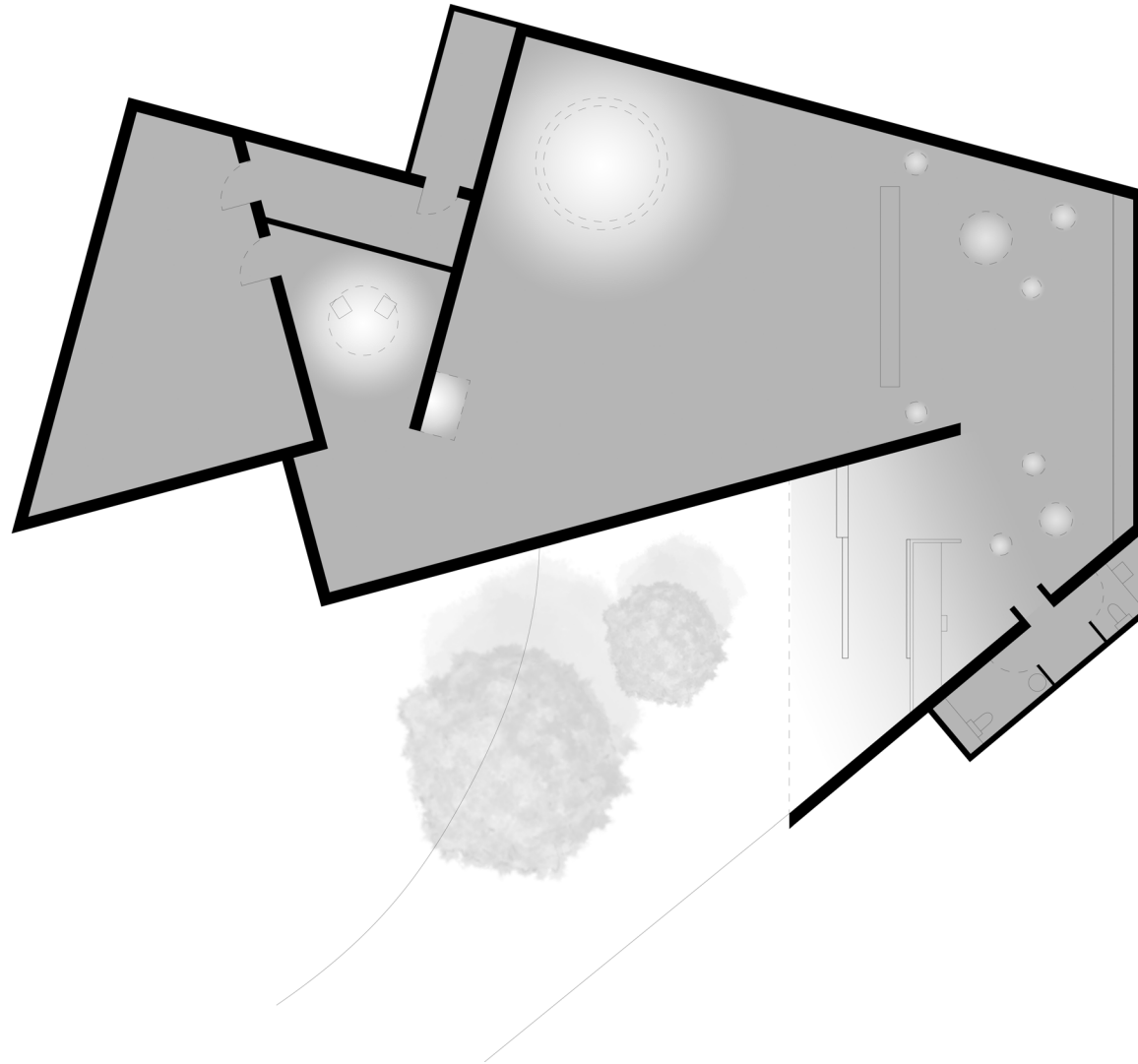
Plan and elevation detail of wall showing how light and structure interact



Figure 5.6

Lower floor meditation space.





## Light

Light is central to the phenomenological experience within the Space for Reflection, shaping how visitors interact with the architecture and the surrounding landscape. Skylights are strategically placed throughout the building to create dramatic shifts in light and shadow, adding to the emotional and sensory depth of the space. These skylights allow beams of natural light to pierce the otherwise solid concrete structure, creating moments of illumination that guide the visitor's journey through the building. The dramatic interplay of light and shadow reinforces the sense of progression, moving from darker, enclosed spaces to brighter, more expansive areas.<sup>58</sup>

The shadows cast by the skylights play a critical role in the building's phenomenological impact, adding layers of depth and complexity to the user's experience. As the sun moves throughout the day, the light shifts and creates new patterns of shadow on the concrete surfaces, making the space feel alive and continuously evolving. This dynamic use of light is not just functional but deeply intentional, turning the building into a vessel for reflection. The building's design emphasizes how natural light can evoke different emotions and encourage introspection, with the skylights serving as portals to the sky and beyond, anchoring the space within the vastness of nature while allowing the architecture to elevate the spiritual experience.

Figure 5.7

Lower floor plan showing the use of light through skylights in the lower floor

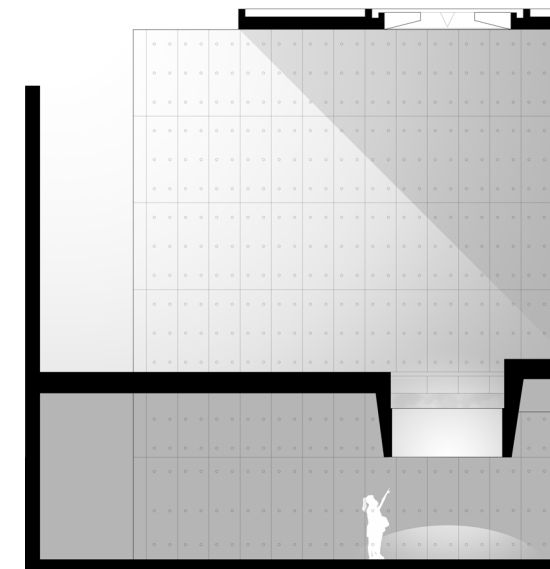
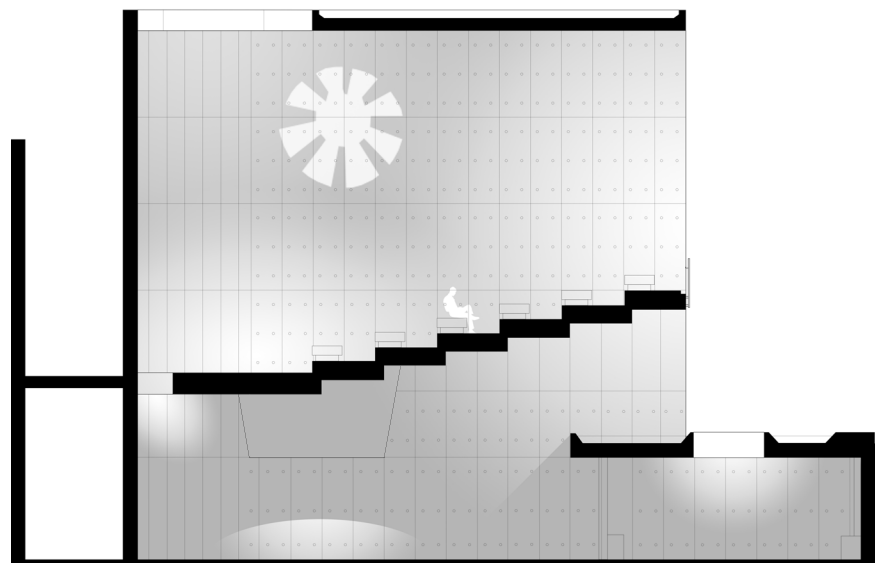


Figure 5.8

Section showing diffused light from the east midday

Figure 5.9

Section showing direct southern light midday



# Niijma Gakuen Chapel | Tezuka Architects

2020 Takasaki, Japan

## Introduction

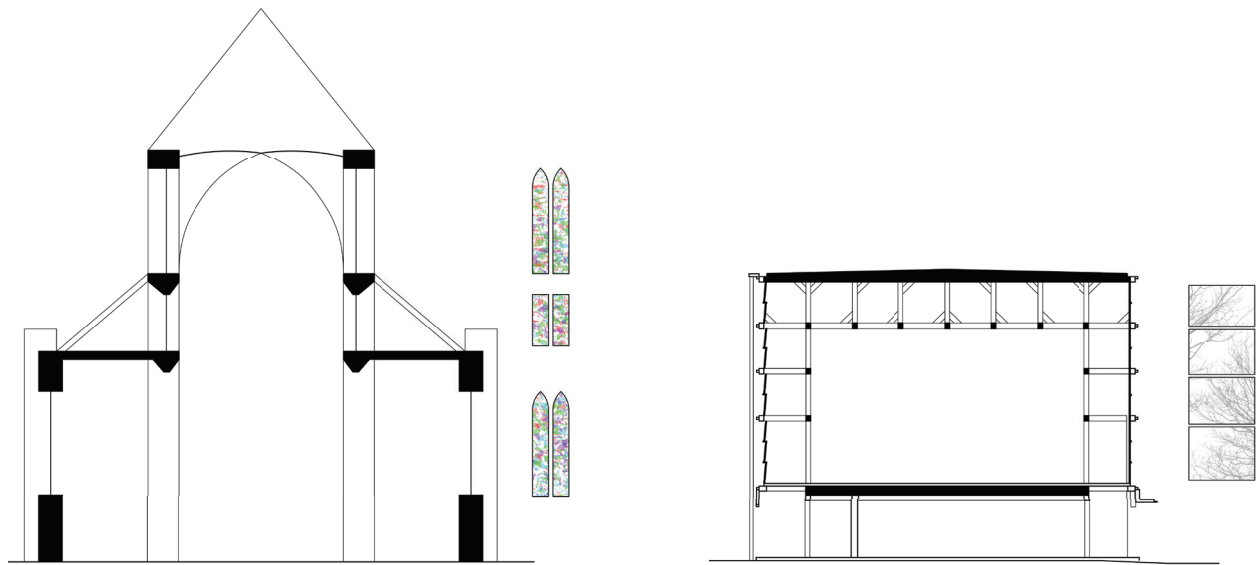
The Niijima Gakuen Junior College Hall and Chapel by Tezuka Architects is a contemporary space that blends light, material, and structure to create an immersive spiritual experience. Located within a Christian college in Japan, the chapel is designed to foster contemplation and reflection, where light plays a crucial role in shaping the atmosphere. The building reimagines the traditional relationship between architecture and light, with natural light filtering through wooden panels and carvings to create a serene and meditative environment. Tezuka Architects sought to create a chapel that is not just a visual experience but one that engages the senses, inviting visitors to touch, walk through, and feel the space.

The design reflects a deep connection to Christian symbolism, notably the Garden of Eden, with the imagery of a forest journeying from dark, enclosed spaces to a brightly lit field. This metaphor speaks to the experience of students, who, like Adam and Eve, must leave the protected environment of the college and face the real world.<sup>59</sup> The chapel serves as a space for both physical and spiritual reflection.

Figure 6.1  
Niijma Gakuen Chapel by Tezuka Architects







## Intent

The design of the Niijima Gakuen Junior College Hall and Chapel takes inspiration from Gothic cathedrals but offers a modern reinterpretation suited to its context and environment. In traditional Gothic architecture, the walls are deconstructed making more space for light. Through stained glass windows, light is abstracted, casting colorful patterns. Tezuka Architects deconstructing the walls to allow for more light, using wooden panels in place of stained glass. These panels filter and abstract natural light in a more organic manner, creating a serene and contemplative environment. The chapel's double posts, which line the space, evoke the side aisles of Gothic cathedrals, but here, the light transforms them into symbolic trunks and branches.<sup>60</sup> This design gives the sense of being immersed in a forest, with the play of light and shadow creating a journey through nature, where the spiritual and natural worlds intersect.

Structurally, the chapel employs a Vierendeel frame, a load-bearing wooden system that allows for large windows and expansive openings, without the need for diagonal braces. the stuctuer can be compared to a swaying forest.<sup>61</sup> This structural choice not only provides the building with an open and airy feel but also maximizes the presence of natural light, which floods the space from multiple angles. The Vierendeel frame is carefully engineered to absorb and dissipate vibrations during earthquakes,<sup>62</sup> ensuring that the building is both resilient and aesthetically delicate. The thoughtful integration of light and structure fosters a deep connection between the sacred and the personal, creating a peaceful, reflective atmosphere. Here, the architecture, through its materials and spatial design, creates a meditative experience where the interaction between light and space serves as both a functional and symbolic feature, guiding visitors on a spiritual journey.

Figure 6.2

Comparing gothic catehdral's use of light to Niijima's use of light

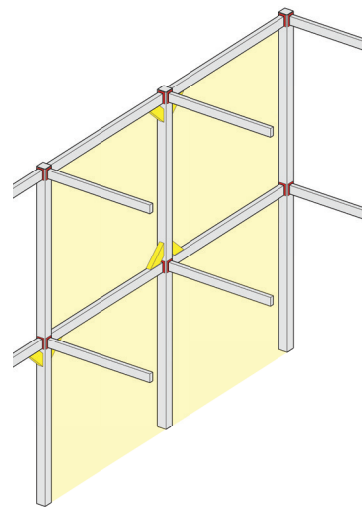


Figure 6.3

Structural diagram showing the space the vierendeel frame creates.

## Context

The Niijima Gakuen Junior College Hall and Chapel is deeply intertwined with the legacy of Joseph Hardy Niijima, a pioneering Christian educator who founded Doshisha University.<sup>63</sup> His influence established a strong Christian heritage in the region, which the chapel reflects through its design and symbolism. The forest imagery depicted on the chapel's walls draws inspiration from the biblical Garden of Eden, symbolizing the journey students undergo, much like Adam and Eve, as they transition from the protective environment of the "Niijima garden" into the broader, more challenging world.<sup>64</sup> This metaphor is reflected in the spatial design, which moves from darker, enclosed areas symbolizing the uncertainty of the forest, to brighter, more open spaces representing enlightenment, growth, and the pursuit of knowledge.<sup>65</sup>

Situated within a Christian college in Japan, the chapel's design contrasts with the darker, more intimate spaces often seen in traditional Japanese temples. The chapel connects seamlessly with its surrounding landscape, offering a sanctuary for quiet reflection. The forest imagery, while not a literal depiction, symbolizes the spiritual and academic journeys that students experience during their time at Niijima College. Although the building faces south, it only receives direct sunlight during the morning and late afternoon due to surrounding structures. However, the significance of morning light in Christian symbolism is profound, often representing divine enlightenment and God's grace as they illuminate the path ahead.<sup>66</sup> This reverence for morning light, as a metaphor for new beginnings and spiritual clarity, is echoed throughout many of these architectural case studies, reinforcing the chapel's purpose as a space for reflection and growth.

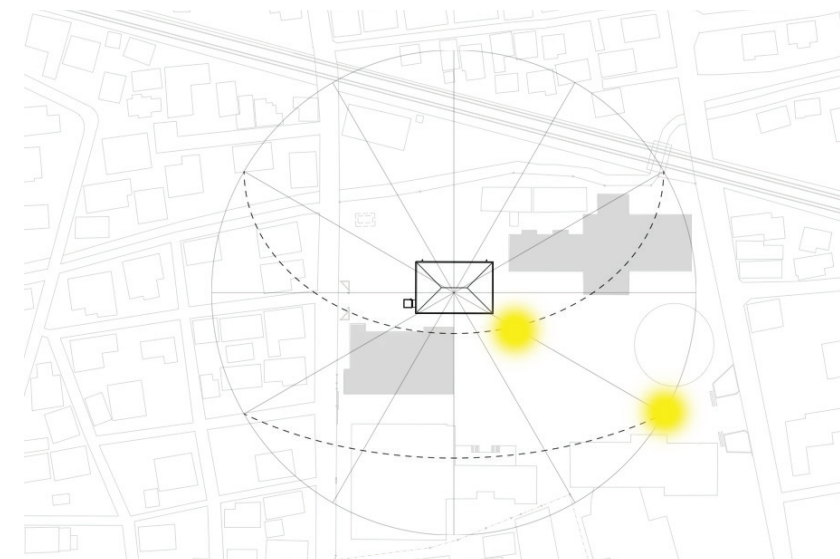


Figure 6.4

Traditional dark Japanese building



Figure 6.5

Interior of chapel showing a contrast to traditional Japanese architecture

Figure 6.6

Sun Path throughout the year emphasizing the shadows the surrounding buildings creating leaving the chapel with minimal direct light in the morning.

Light

Light is the central architectural material in the Niijima Gakuen Junior College Hall and Chapel, shaping the space and creating a meditative atmosphere. The natural light is diffused through small, intricate carvings and gaps in the timber panels, which mimic sunlight filtering through a forest canopy. The chapel’s design uses light to create a constantly shifting environment, where shadows and light change throughout the day, adding depth and dynamism to the space. The architect’s intention was for light to “engulf everything inside, erasing reality, and luring people into an endless kaleidoscope” <sup>67</sup>

The skylights and windows, strategically placed throughout the chapel, bring in abundant natural light, contrasting the typical darkness found in traditional Japanese temples. The interplay of light with the wooden surfaces creates a soft, inviting glow that envelops the entire space, making light not just a passive element but a living part of the architecture. This careful manipulation of light enhances the chapel’s phenomenological impact, drawing visitors into a sensory experience that transcends the physical space. The shifting patterns of light and shadow create a dynamic and immersive environment that encourages quiet reflection and a deep sense of connection with the space and the natural world.

Figure 6.7

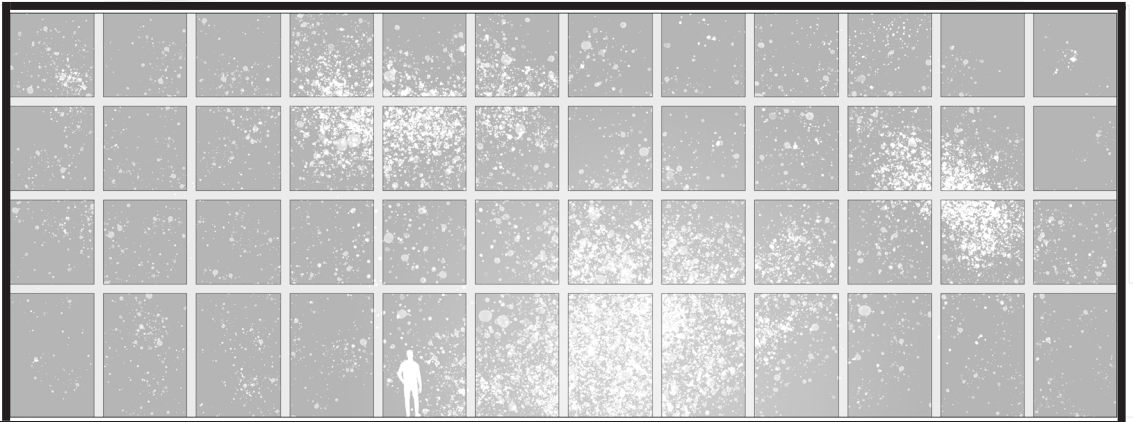
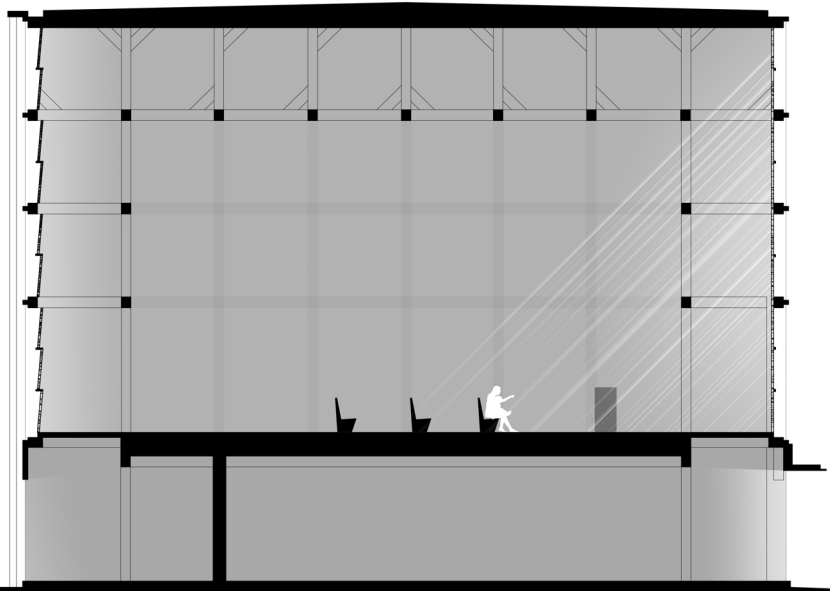
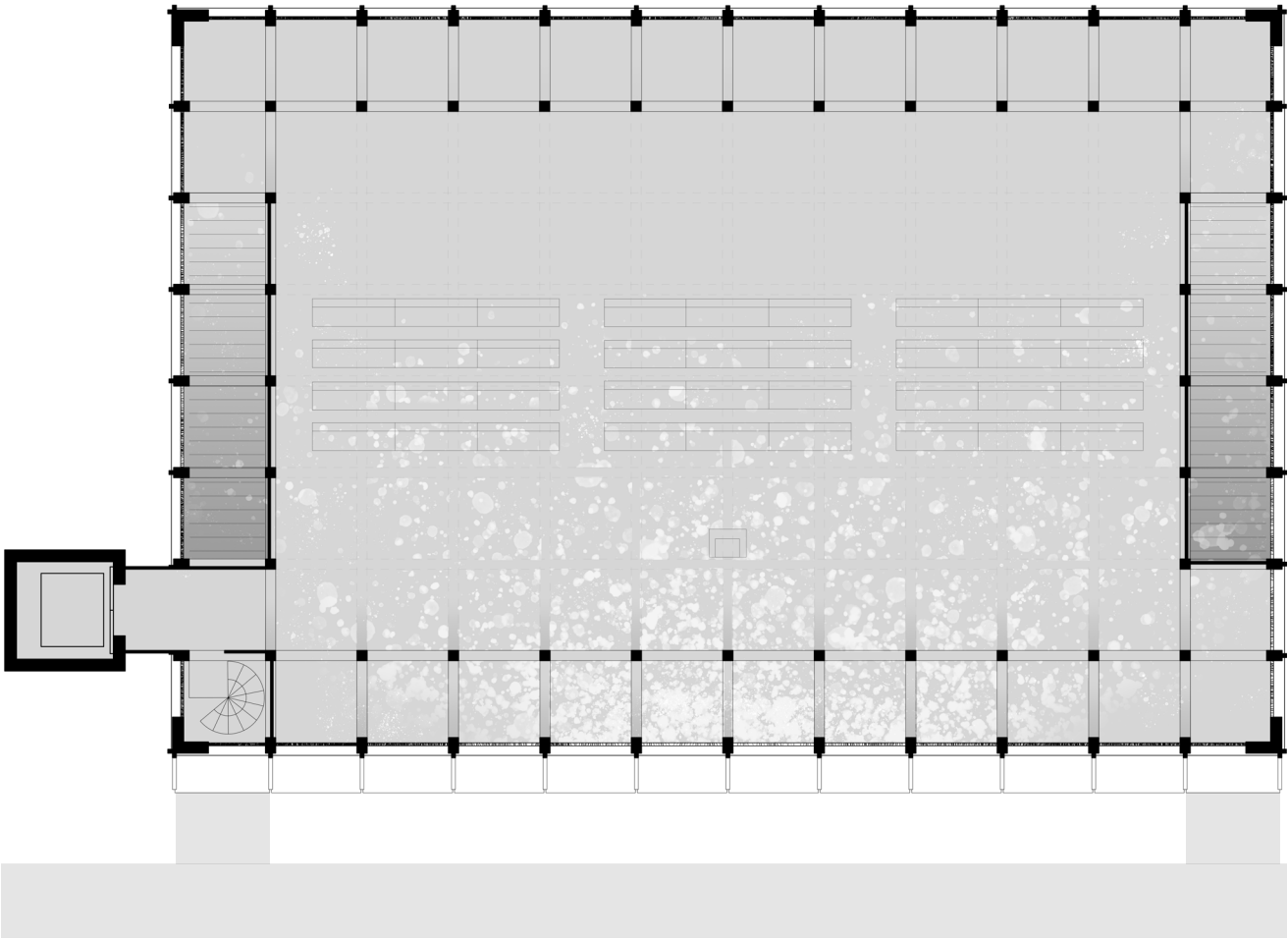
Section showing light piercing through the wooden panels.

Figure 6.8

Plan view showing light patterns on the floor created by the wood panels.

Figure 6.9

Southern elevation showing light through the wooden panels







# Light of Life Church | Shinslab Architecture

2014 Gapyeong-Gun South Korea

## Introduction

The Light of Life Church, designed by Shinslab Architecture in collaboration with IISAC, embodies the principles of simplicity, reflection, and light. Located in Gapyong, South Korea, on the southern slopes of Bori Mountain, the church serves not just as a place for Sunday worship but also as a sanctuary for daily contemplation and prayer.<sup>68</sup> The design is deeply rooted in the concept of "Beautiful Nothingness," where light, silence, and natural materials are used to create a tranquil, meditative atmosphere.<sup>69</sup> Guided by Protestant values that reject idolatry, the minimalist architecture reflects the purity of the surrounding environment, blending seamlessly with the natural landscape through the use of materials like Siberian red cedar, glass, and polycarbonate. The structure is symbolic of a deep connection between the sacred and the natural world, using light and material to foster a sense of awe and peace.

Figure 7.1

Light of Life Church by Shinslab Architecture





Figure 7.2

Comparing the resurrection of Jesus with the notion of life and vertical logs vs. Death with the use of horizontal logs.

## intent

The vertical cedar trunks in the Light of Life Church are central to its spiritual and symbolic design intent. The 834 trunks, standing upright, are not merely structural elements but are meant to represent life and resurrection,<sup>70</sup> echoing the symbolism of Christ's resurrection. Unlike horizontal wood, which can be associated with death or the end of life, the vertical orientation of the trunks symbolizes life, growth, and renewal. The designers intended for the logs to represent "living trees," evoking the imagery of a forest, a space of life and rebirth.<sup>71</sup> This choice contrasts with the typical use of wood in construction, where horizontal beams or planks may be seen as lifeless. The vertical trunks in the dome are alive and active, reinforcing the church's spiritual mission of renewal and hope through Christ's resurrection. The decision to leave the trunks in their natural state, rather than processing them into uniform planks, further emphasizes the theme of life and the continuity of natural cycles.

## Context

Set at the end of SeolGok Road in a village for retired missionaries, the Light of Life Church finds its strength in the subtle harmony between nature and architecture. The church's placement at the base of Bori Mountain allows it to blend seamlessly into its surroundings, with reflective and transparent materials ensuring that the structure mirrors its environment. This connection to nature is further enhanced by the acoustic design of the chapel, which emphasizes silence as a part of the "Beautiful Nothingness" experience. The wooden cedar trunks and open dome act as natural sound diffusers, scattering sound waves throughout the space.<sup>72</sup> The wood absorbs ambient noise—such as footsteps or whispering—creating a quiet atmosphere conducive to prayer and meditation. By preventing excessive reverberation and softening sound, the architecture fosters a peaceful environment, in stark contrast to traditional dome structures, which typically amplify noise. This focus on both visual and auditory quietness helps deepen the sense of stillness and contemplation within the chapel.

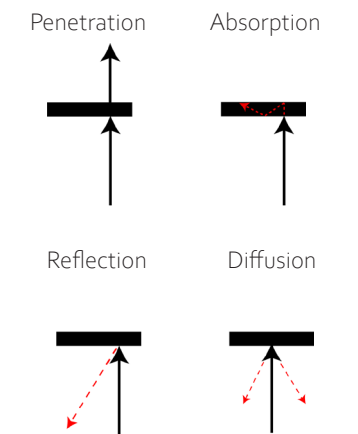
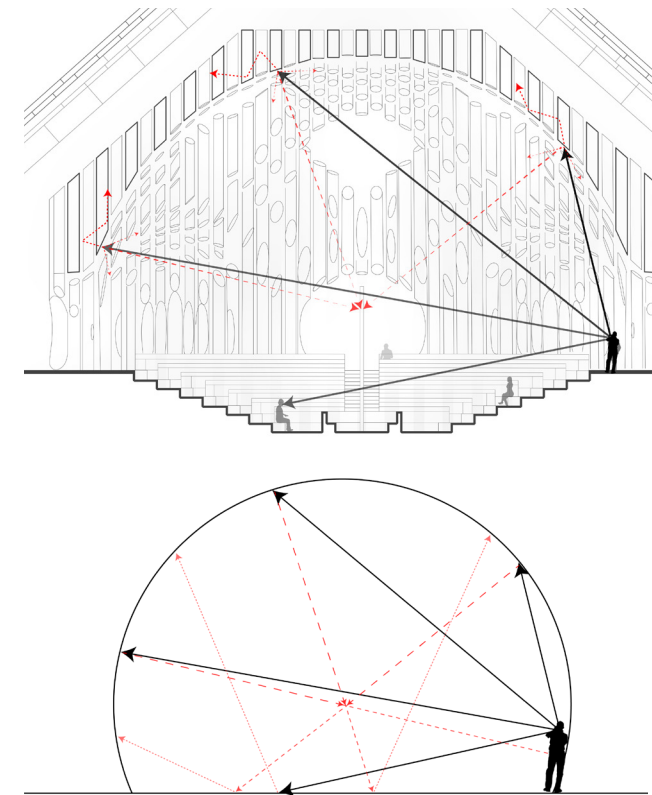


Figure 7.3

Comparing acoustics in a traditional dome with a reflective material vs. the dome in the light of life church whose material absorbs and diffuses sound.

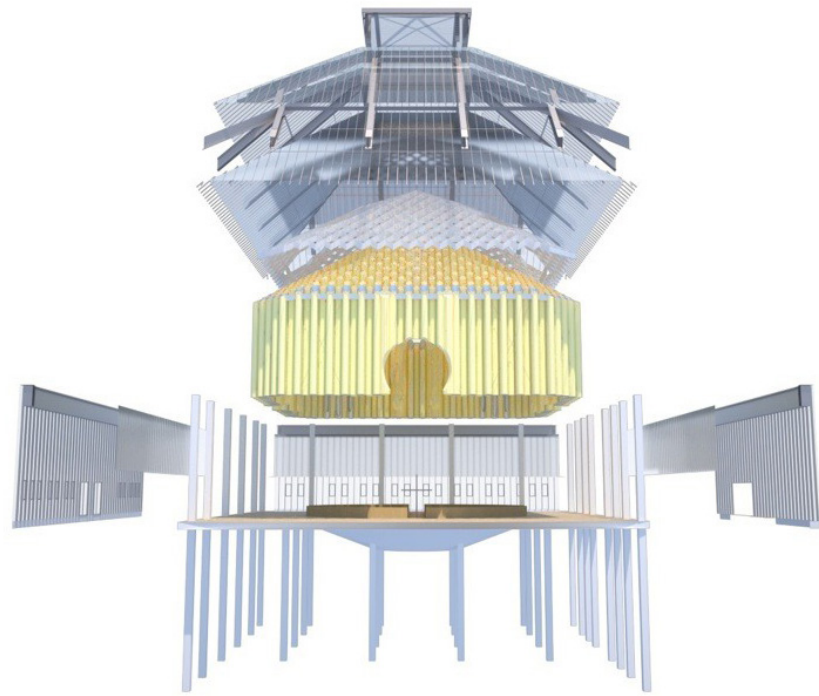


Figure 7.4  
Exploded axon showing the free standing dome structure

## Structure

Structurally, the Light of Life Church relies on a careful balance between wood and steel. The vertical cedar trunks that form the dome are supported by a steel grid at both the top and the bottom of the structure.<sup>73</sup> This grid allows the weight of the trunks to be evenly distributed, ensuring the stability of the dome while maintaining the visual lightness of the space. The steel grid is hidden within the design, allowing the trunks to appear as though they are standing independently, like trees in a forest. The structural system exemplifies the balance between natural and industrial materials, with the wood providing warmth and spiritual symbolism, and the steel offering strength and support.<sup>74</sup> The construction not only holds the building together but also reinforces the architectural concept of "Beautiful Nothingness", where materiality is reduced to its simplest form, creating a serene and contemplative atmosphere.

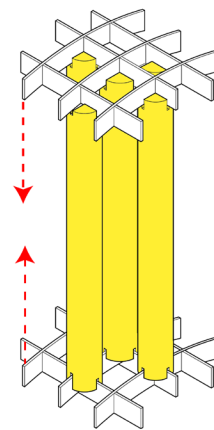


Figure 7.5  
Detail showing how the logs are suspended with a steel grid.

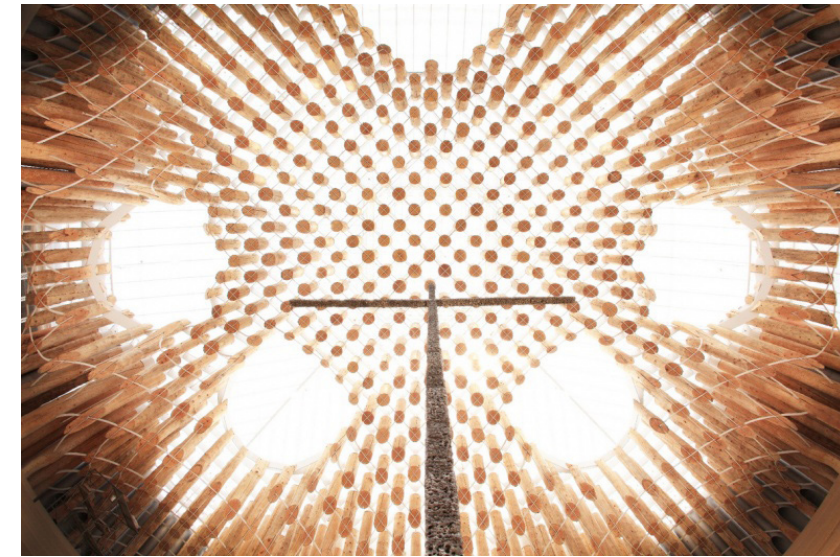


Figure 7.6  
The interior of the wooden chapel has been designed to create a meditative environment through light shadow and scale.

## Light

Light is a fundamental element in the Light of Life Church, shaping both the physical space and the spiritual experience. The glass pyramid that encloses the cedar dome allows natural light to filter through the vertical trunks, creating a diffused glow that softens the atmosphere and enhances the meditative quality of the chapel. This interplay of light and material reflects the principles explored by Jun'ichiro Tanizaki in *In Praise of Shadows*, where light is carefully orchestrated to evoke stillness and contemplation.<sup>75</sup> The soft, diffused light creates a sense of "Beautiful Nothingness", where the focus is on serenity and quiet reflection rather than visual opulence. However, despite the diffused light, the space remains well-illuminated, designed to accommodate large groups of worshippers without overwhelming them. In the Light of Life Church, the interaction between the light and the cedar trunks gives the space a feeling of stillness inviting visitors to pause and enter into a moment of contemplation.



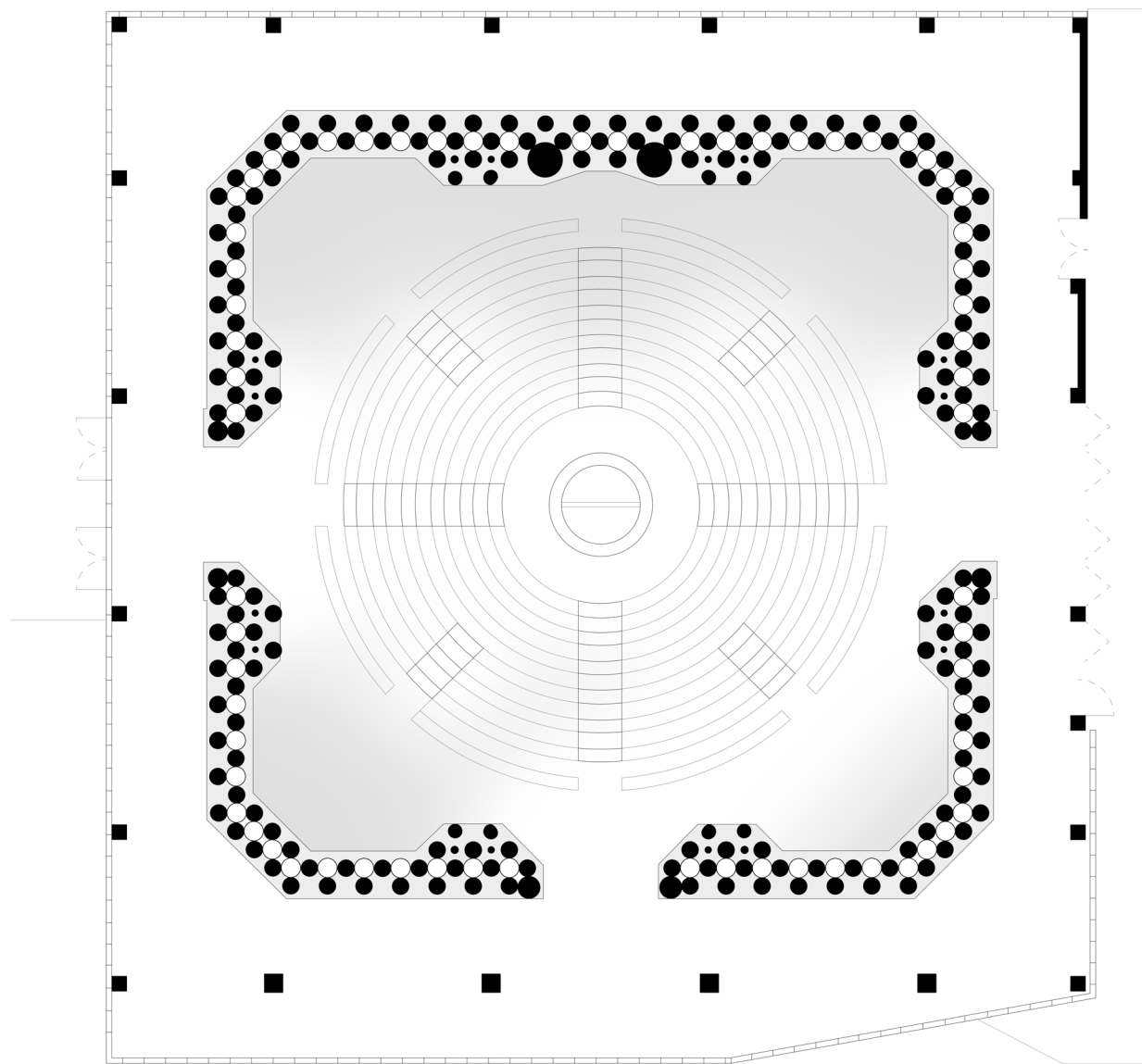


Figure 7.7  
Church Plan Showing soft diffused  
light.

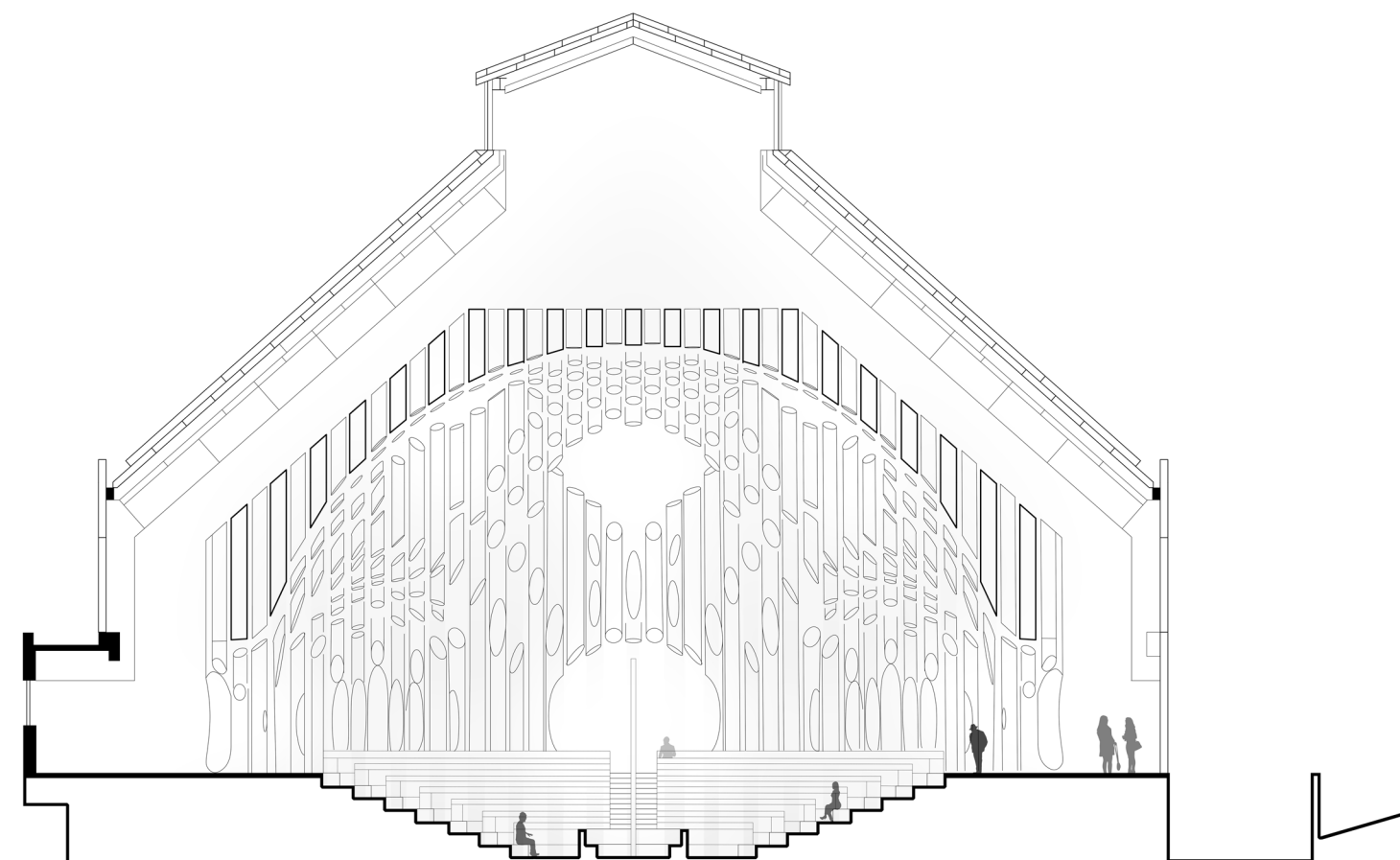


Figure 7.8  
Section showing soft abundant  
light in the large dome.

# Mosque of Light | NUDES

2018 Unbilt Dubai

## Introduction

The Mosque of Light, designed by NUDES, is a contemporary reimagining of Islamic architecture that skillfully integrates light, geometry, and built form to create a profound spiritual experience. The project is conceived with light as the central defining element of the space, using its manipulation to shape the environment for prayer and meditation. Drawing inspiration from traditional Islamic architectural elements like the mashrabiya, the mosque features a multi-layered geometric form that filters natural light into the prayer hall. This careful diffusion of light not only enhances the mosque’s serene atmosphere but also provides a cool, comfortable space for worship, balancing function with spiritual reflection.

Designed to accommodate a large congregation, the mosque is the largest among the case studies, holding up to 7,500 people for daily prayers and special occasions like Friday and Eid prayers.<sup>76</sup> This scale distinguishes it from the more intimate spaces in other studies, yet it maintains a meditative atmosphere through the use of diffused light. The interplay of light and shadow, filtered through Islamic geometric patterns, reflects the core Islamic idea of Al-nur, symbolizing the movement from darkness into light, both physically and spiritually. By merging ancient design principles with modern

Figure 8.1  
Mosque of Light by NUDES



Context

Situated in a hot, arid climate, the mosque’s design integrates sustainable technologies that harness the environment to create a comfortable space for prayer and gathering. The multi-layered, pre-cast surfaces, embedded with Islamic geometric patterns, filter the intense desert sunlight while also functioning as part of a passive cooling system. Cooling water ponds further enhance the mosque’s climate-responsive design, maintaining a pleasant interior temperature. The apertures within the geometric patterns diffuse sunlight, blocking direct heat and ensuring a cool, serene atmosphere inside, in stark contrast to the harsh exterior environment.<sup>77</sup>

Externally, the building aligns with the city’s grid, blending seamlessly into its urban context. However, the internal program is angled to face Mecca, an essential orientation for Muslim prayer. This careful alignment between form, function, and faith exemplifies how the mosque’s architecture serves both practical and symbolic purposes.

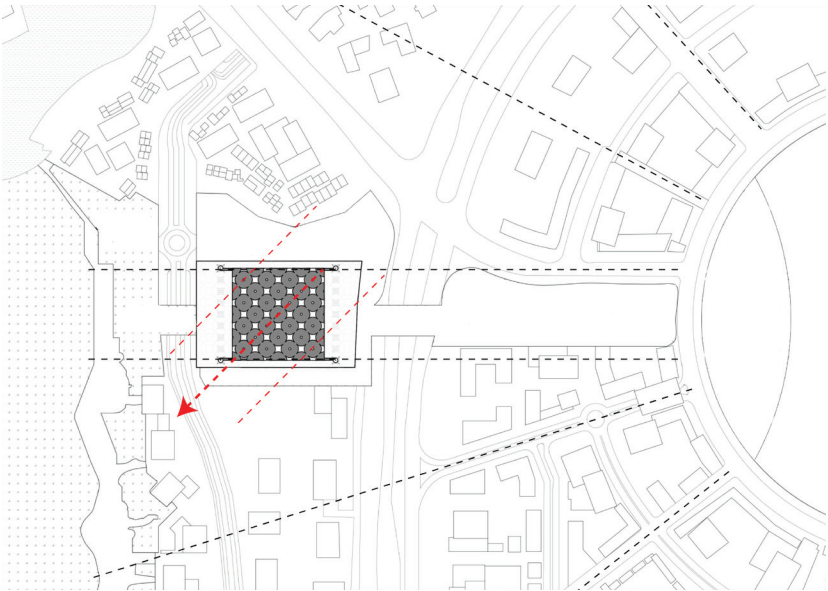


Figure 8.2  
Section showing how the mosque takes from traditional Islamic vernacular to bring in hot air and cooling it down with water for a cooler climate within the open air mosque

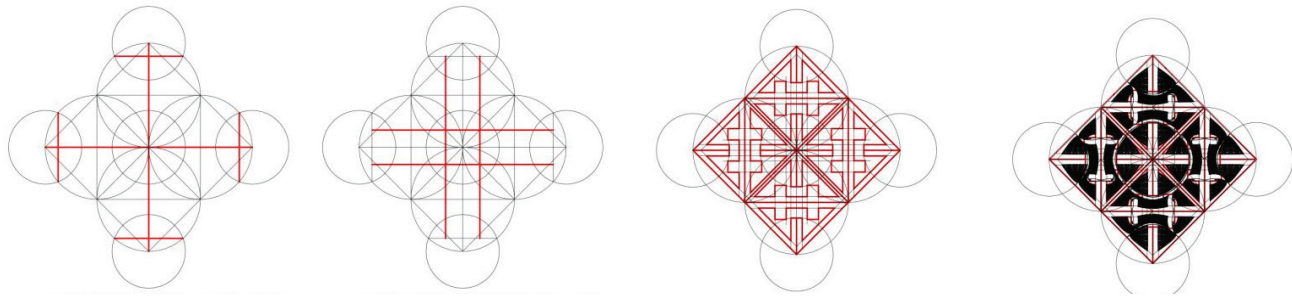
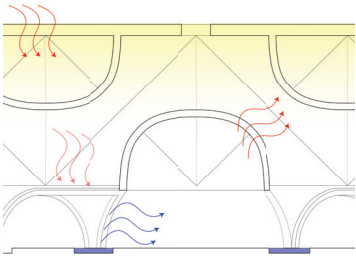


Figure 8.4  
The form of the ceiling is derived from Islamic geometric patterns

Intent

The geometric pattern used in the Mosque of Light is rooted in the Islamic tradition of geometric design, which is heavily based on the use of circles and repetitive shapes.<sup>78</sup> This geometric framework not only serves an aesthetic purpose but also plays a functional role in how light enters and interacts with the space. The patterns create a system of apertures that filter the sunlight into the prayer hall, casting intricate shadows and creating a dynamic interplay between light and darkness. This manipulation of light is symbolic, representing the Islamic concept of moving from zulumat (darkness) to Al-nur (light), embodying spiritual enlightenment through architectural means.

In addition to its visual and spiritual significance, the geometric pattern is inherently modular. This modularity is a key aspect of the mosque’s construction, facilitating ease in both the design and building processes. The repeating geometric units allow for a uniform structure that simplifies construction while also serving a deeper, symbolic purpose. The uniformity of the mosque’s design represents the Islamic belief in the equality of all worshippers before God, as the structure creates an environment where everyone beneath the geometric canopy is treated as equal. The modular nature of the design ensures that the entire space, despite its size, feels cohesive and inclusive, further enhancing the sense of unity among the congregation.

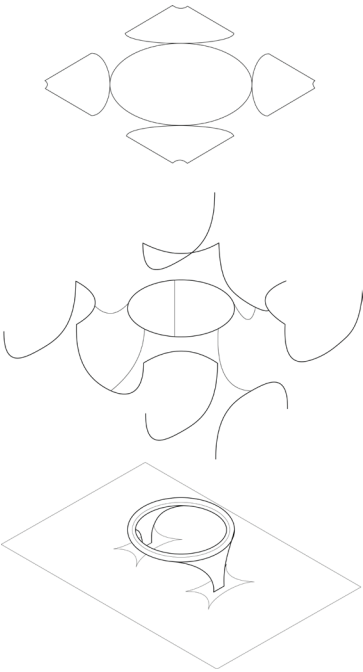


Figure 8.5  
The mosque is broken up into modular unites making it easy to assemble while creating a symbolic purpose of equality.



Light

Light is the defining element in the Mosque of Light, shaping both the spiritual and architectural experience. The design leverages Islamic geometric patterns to filter the strong desert sun, creating a diffused, calming light that fills the prayer hall. The mashrabiya apertures, derived from repeated geometric modules, diffuse light and reduce glare, allowing worshippers to focus on their prayers in a serene atmosphere. The light interacts with the doubly curved surfaces within the mosque, bouncing off the architectural form while invoking stillness and reflection. This manipulation of light is central to the Islamic concept of Al-nur, symbolizing the divine light of guidance that leads from ignorance to faith. In addition, the mosque’s reinforced concrete structure with form-finished surfaces plays a key role in regulating light and heat, ensuring that the space remains not only visually striking but also comfortable for worshippers throughout the day. Through the use of light, geometry, and material, the mosque becomes more than just a place of prayer—it becomes a spiritual journey, reflecting the divine through architectural innovation.

Figure 8.7  
Plan Showing soft diffused light in abundance.

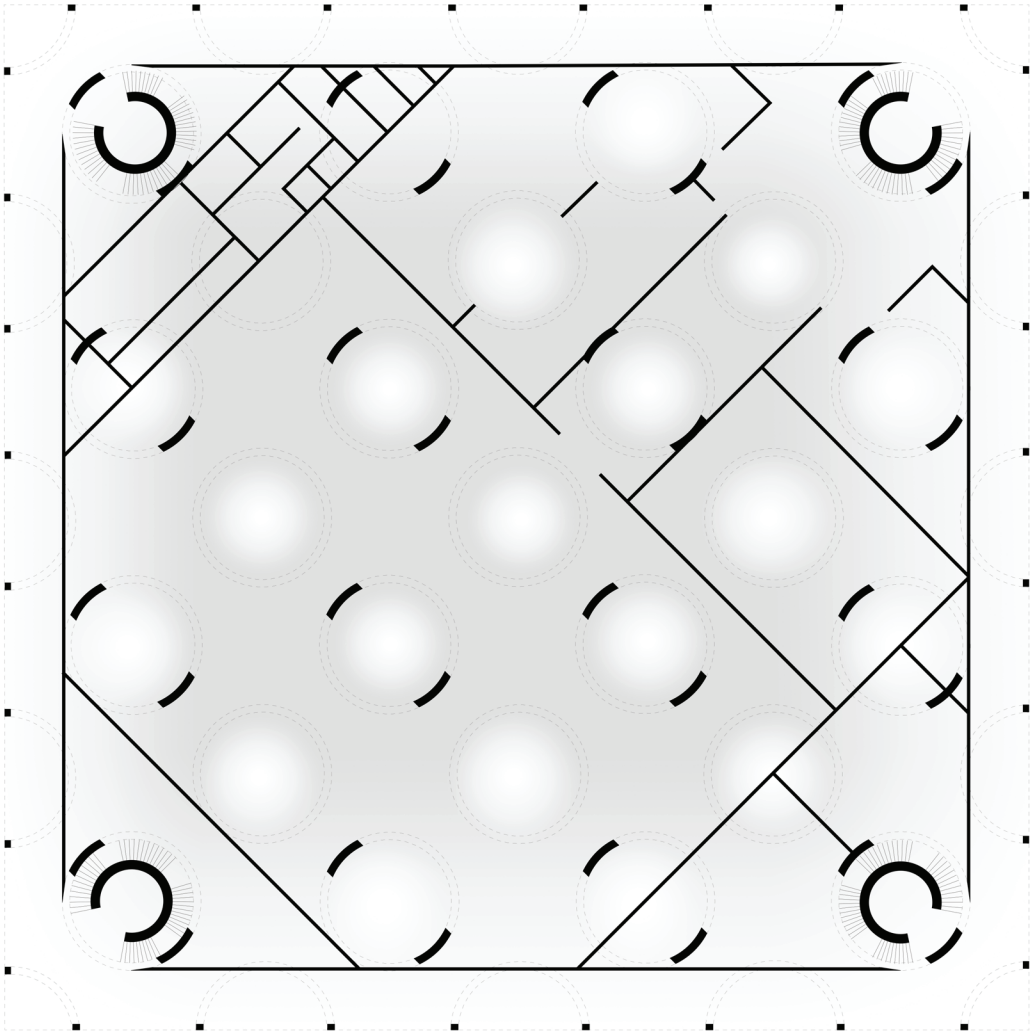


Figure 8.6  
Section Showing soft light.



Figure 9.1  
Case study comparison going in  
order: comparing the scale of the  
buildings though section



Scale 1/48" = 1' -0"

# In Praise of Light

Reading analysis



## Analysis | Introducing Architectural Tectonics + Places of the Soul

Architecture needs both the tectonic and the emotional to truly influence the human experience. The excerpts from the books *Introducing Architectural Tectonics* by Chad Schwartz and *Places of the Soul* by Christopher Day give us two differing perspectives that complement each other on how the built environment impacts our well-being. By looking at architectural tectonics and the spiritual effects of light, we can understand how architecture can be more than just a building—it can be a medium for healing.

Tectonics refers to the art and science of construction, where the materiality and structure of a building are not merely functional but also serve as a form of ornamentation<sup>79</sup>. His analysis is rooted in the belief that the construction process and the choice of materials should be visible and integral to the design, creating an honest and expressive architecture. This approach is heavily influenced by the works of earlier theorists like Kenneth Frampton, who emphasized the “truthfulness” of materials and the significance of structure as a visual and tactile experience<sup>80</sup>.

Schwartz focus is on how the manipulation of materials, structure, and form can create spaces that resonate with their occupants on a physical level. He argues that “the visibility of construction processes—such as the joints, seams, and connections between materials—adds to the authenticity and emotional impact of a building.”<sup>81</sup> This emphasis on the physicality of architecture contrasts with more abstract or superficial design practices that might prioritize aesthetics over substance. For Schwartz, the tectonic approach is essential to creating architecture that is not only functional but also deeply meaningful in its expression of human labor, craft, and ingenuity.

In contrast, *Places of the Soul* approaches architecture from a more holistic and spiritual perspective. Chapter 8, titled “Light Nutrition for Body and Soul,” emphasizes the critical role that light plays in human health and well-being. Day argues that light is a form of nutrition for the body, similar to food, and that just as poor diet can lead to physical illness, poor lighting can lead to psychological and physiological issues. He discusses how natural light is essential for regulating circadian rhythms, improving mood, and fostering a sense of spiritual well-being.<sup>82</sup>

Day’s approach is more experiential and less concerned with the technical aspects of construction. Instead, he focuses on how light can be used to create spaces that nourish the soul, promoting a sense of calm, inspiration, and connection to the natural world. This concept aligns with the principles of biophilic design, which advocates for the integration of natural elements into built environments to enhance human health. Day’s work encourages architects and designers to consider the emotional and spiritual needs of building occupants, using light as a key tool for creating spaces that heal and uplift.<sup>83</sup> While both articles approach architecture from different angles, their works are deeply complementary. Schwartz emphasis on the visibility and honesty of construction processes resonates with Day’s call for spaces that are authentic and nurturing. Both authors advocate for a design philosophy that considers the well-being of the occupants as a primary goal, whether through the material expression of tectonics or the careful manipulation of light.

Schwartz’s focus on the physicality of materials and structure could be seen as a foundation upon which Day’s more spiritual and experiential considerations are built. For instance, a building designed with tectonic principles in mind would inherently consider how light interacts with materials and spaces, enhancing the overall experience of the architecture. Day’s emphasis on light as a form of nutrition for the soul suggests that architects should not only focus on the structural and material aspects of a building but also on how these elements contribute to the emotional and spiritual health of its occupants.

*Introducing Architectural Tectonics* and *Places of the Soul* have in common the goal of architecture for a better human experience. Together, these texts remind us that architecture is not merely about creating buildings but about shaping environments that support and enhance the lives of those who inhabit them. By integrating both the technical and the spiritual dimensions of design, architects can create spaces that truly resonate with and support human well-being.

## Analysis | Museum Space: The Display as Presentation in Space + Phenomenology of light in Mosques

In the mosque context, light serves as a phenomenological tool that influences both the psychological and spiritual experiences of users. Abdelhamid’s exploration focuses on how daylight, in particular, creates emotional connections, enhances sacredness, and impacts the overall sense of spirituality within a mosque. For instance, she notes that light in historical mosques was carefully manipulated to evoke a sense of divinity and transcendence, reflecting the spiritual purpose of the space.<sup>84</sup> This aligns with the symbolic role of light in many religious structures, where it is not merely functional but spiritual, connecting worshippers to something greater than themselves. The phenomenological approach Abdelhamid uses highlights the importance of natural light in sacred spaces, arguing that modern mosques have largely neglected this, focusing more on functionality than on spiritual aesthetics.<sup>85</sup>

In contrast, Tzortzi’s article deals with the use of space in museums, where light also plays a pivotal role, but in a more practical, functional sense. Light in museums is primarily used to highlight exhibits and direct the visitor’s attention. Tzortzi discusses how the arrangement of light within the museum space is instrumental in guiding the visitor’s movement and interaction with displays, thus structuring their cognitive and emotional response to the exhibits.<sup>86</sup> In this context, light becomes part of the curatorial process, a way of presenting objects in their best form while also creating an environment for learning and engagement.

Despite these differences, both authors agree on the centrality of light in crafting a user-centered experience. In mosques, light fosters a connection between the worshipper and the divine, shaping the sacred atmosphere.<sup>87</sup> In museums, light fosters a connection between the visitor and the objects on display, shaping an educational and immersive atmosphere.<sup>88</sup> Thus, light in both settings is a key design element that moves beyond mere functionality to shape the emotional and intellectual experience of space.

Both texts also address how space shapes cognition and emotion, although from different perspectives. Abdelhamid emphasizes that the architectural design of mosques, particularly in terms of light and geometry, directly affects the worshipper’s psychological and spiritual well-being. The spatial arrangement in mosques, which includes elements such as iwans and courtyards, creates moments of reflection and tranquility that support the worship experience.<sup>89</sup> The careful consideration of space in mosque design is meant to evoke a sense of peace, contemplation, and connection to the divine, contributing to the overall emotional and spiritual state of the individual.

Tzortzi, on the other hand, approaches space in museums as a framework for cognitive engagement and interaction with art and artifacts. The layout of museum space, including how objects are displayed and how visitors move through the space, affects the learning experience.<sup>90</sup> Tzortzi notes that the arrangement of space can either facilitate or hinder the visitor’s ability to understand and appreciate the exhibits, making the museum not just a space of display but also a space of knowledge transmission. This focus on the cognitive dimension contrasts with the more emotionally charged focus in mosques, but in both cases, space acts as a mediator between the user and the content (whether that content is religious or educational).

These insights are particularly relevant when considering how to design spaces that prioritize user experience. The discussions on light and space in both articles can add complexity and depth to the design of architectural projects. For a project centered on sacred spaces, such as a mosque or a spiritual pavilion, Abdelhamid’s findings underscore the importance of integrating natural light in ways that promote emotional and spiritual well-being. The use of soft, diffused light, the play of shadows, and the orientation of the building to enhance the interplay of light and space could all contribute to creating a meditative environment that fosters reflection and transcendence.

Conversely, Tzortzi’s exploration of museum spaces offers important lessons on how spatial organization can guide user interaction and engagement. If the project involves a museum or exhibition space, understanding how visitors cognitively engage with space and objects becomes crucial. Tzortzi’s emphasis on the spatial arrangement of displays, lighting, and visitor circulation can inform how one might design a layout that enhances learning and emotional engagement, ensuring that the space supports not just the display of objects but also the visitor’s intellectual journey.

# In Praise of Light

Design Intent

## Design Intent

**Introduction** Throughout history, light has played a crucial role in sacred spaces, not only as a physical element but as a means of spiritual connection and emotional resonance. As I delve into the phenomenology of light in sacred architecture, my research has uncovered the significance of place, the interaction between light and darkness, and the embodiment of human experience in architectural design. I have discovered that light alone cannot cause a phenomenological experience; it takes light and place, light and material, light and shadow, or light and nature. In a deeper sense, light is simply a means to an end. We can say we design with light, but in reality, it is the emotion that we are designing with and for. Through light, we can design spaces conducive to warmth, embrace, comfort, contemplation, and inward thinking. This study will guide my future design work, focusing on the tangible and intangible connections that light fosters between the human body, nature, and spiritual awareness.

**The Importance of Place** One of the key discoveries in my research is the role of “place” in phenomenology and sacred spaces. In *Invitation to Archiphen*, Tadao Ando’s work emphasizes the physical and emotional connection one makes with nature through light, rather than the light itself. The Church of the Light serves as an example where the interplay between warmth and light draws the body into an embrace, providing comfort and evoking a sense of divine presence. As Ando explores the concept of *shintai*, the Japanese notion of the body, I found that the body’s sensory capacity engages with the world’s coldness, warmth, sadness, and joy, creating a synthesis between the self and the world. This process happens post-reflection, revealing the deeper connection one can make with sacred spaces through light and nature.<sup>91</sup> In my designs, I will prioritize not only how light fills the space but also how it interacts with the human body on an emotional and physical level. The relationship between light, warmth, coldness, and shadow is as important as the visual aspects of light. Through light, we not only feel emotions but our bodies respond too. The body feels the warmth of the light, the coolness of the air, and the connection to nature. It is this multisensory experience that creates a phenomenon that evokes a feeling.

**The Interplay of Light and Darkness** The contrast between light and darkness plays a pivotal role in shaping the emotional experience within sacred spaces. In *In Praise of Shadows*, Jun’ichirō Tanizaki illustrates the beauty found in dim light and shadows, which contrasts sharply with the brightly lit spaces often found in Western architecture. Tanizaki’s writing underscores how the variation of light and shadow evokes silence, calmness, and a reflective atmosphere in Japanese architecture.<sup>92</sup> This understanding of light emphasizes that darkness is essential to truly appreciate light—without it, the emotional depth of the experience is diminished.

Drawing from Tanizaki’s principles, my design will incorporate shadow as an intentional element, enhancing the experience of light. Sacred spaces require silence, stillness, and contemplation, which can be achieved by manipulating both light and shadow to influence the visitor’s emotional response.

**Phenomenology: Light and Human Experience** Phenomenology, especially as it pertains to architecture, is deeply rooted in human experience. As Iris Aravot discusses in *Of Phenomenology and Architecture*, space is perceived with reference to the body, not merely through abstract dimensions.<sup>93</sup> Light, in this context, becomes a material that engages both the body and mind, affecting one’s perception of the space. Steven Holl expands on this notion by explaining how architectural space is constantly redefined through the movement of the body, resulting in a dynamic spatial perception.<sup>94</sup> This parallax, where space is constantly being redefined in relation to the human body, can be amplified through light. Not only does one’s position within the space affect perception, but so does the time of day, season, or even weather.

By treating light as a material in my design, I aim to create spaces that shift in meaning and perception depending on the time of day, season, or the movement of the individual within the space. James Turrell’s work, as discussed in *Questions of Perception: Phenomenology of Architecture*, exemplifies this idea, as he uses light as a sculptural element that changes perception, creating an ethereal and transcendent experience.<sup>95</sup> This approach to light will be central to my design process, as I aim to craft spaces where light leads to sensory and emotional experiences.



Connection to Nature One of the most essential aspects of phenomenological architecture is its connection to nature. Light is not just a tool for visibility; it is a mediator between the built and the natural environment. In sacred spaces, this connection to nature is often symbolic of a higher spiritual connection. The light that filters through a space can represent divine presence, while its absence may symbolize contemplation or introspection.<sup>96</sup> My intent is to root my designs in their natural context, ensuring that light serves as a tangible link between the building, its surroundings, and its spiritual purpose.

Design Moving Forward: Light as a Spatial Element As I move into the design phase of my project, the primary focus will be on using light as a spatial design element that not only defines the physical characteristics of the space but also affects the emotional and spiritual experience of its occupants. By anchoring the design in the context of its surroundings and paying close attention to the interplay of light and darkness, I hope to create spaces that foster connection, reflection, and serenity.

The goal is not to create a building that simply captures light but to design a space where light is experienced and felt—both physically and emotionally. Light will act as a guide, drawing visitors into spaces of warmth, shadow, silence, and contemplation, much like the embrace of the divine. Sacred architecture must be honest, showing its construction and use of materials, while allowing light to become an expressive force within the space.<sup>97</sup>

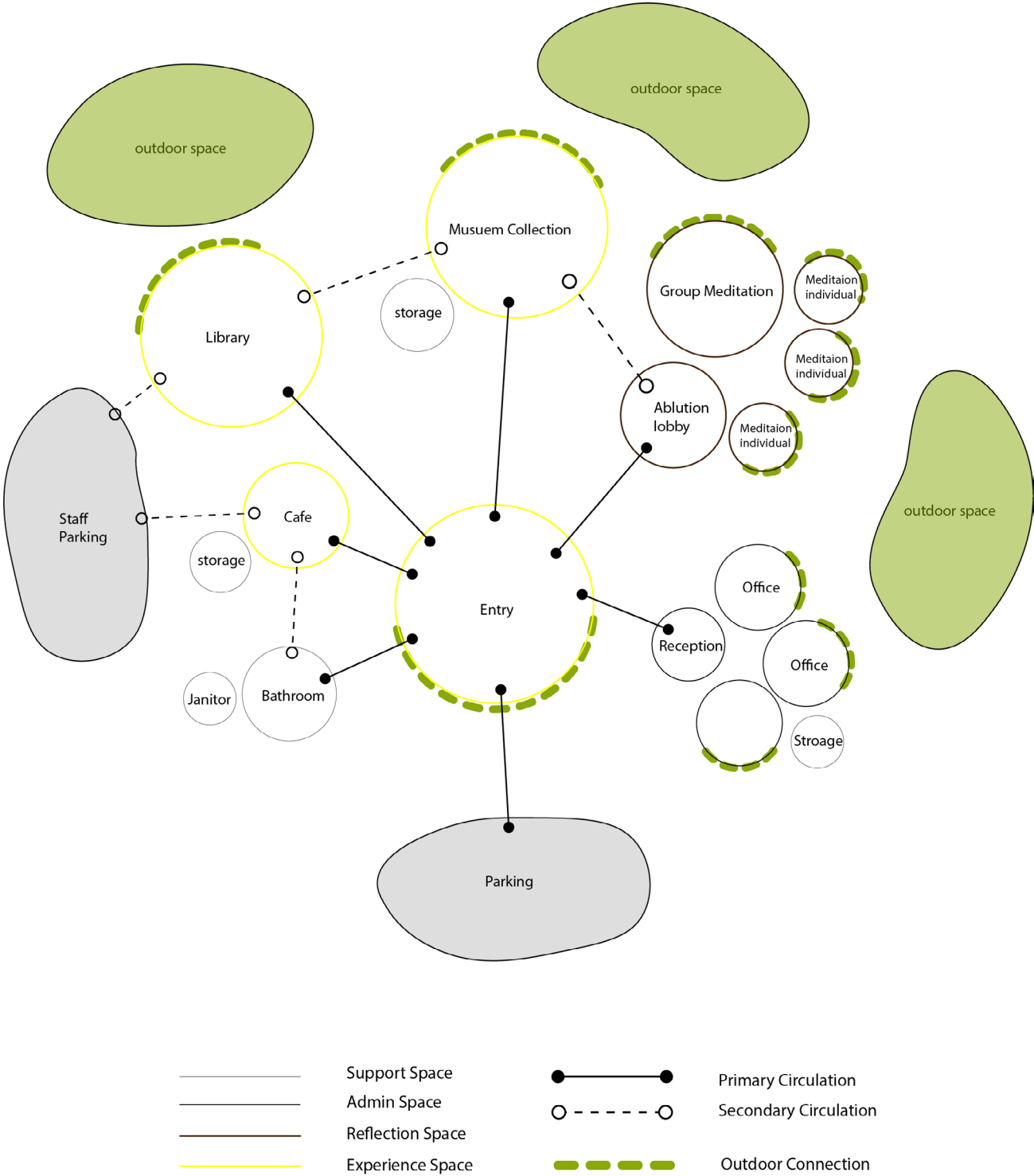
Conclusion In conclusion, my research into the phenomenology of light in sacred spaces has illuminated the profound impact that light has on human experience, spirituality, and connection to nature. Moving forward, my design thesis will focus on creating spaces that are anchored in their context, making light a central element in defining both the physical and emotional qualities of the space. By blending light with shadow, silence, and nature, my designs will strive to create places that evoke contemplation, comfort, and a deeper connection with the world.

# In Praise of Light

Program Analysis

Program Analysis

I. Admin	I. Admin	I. Admin
a. Office (3)	600	Offices for curator(s), facility manager(s) and space for a receptionist and meeting space
b. Office storage/ copy room	150	
c. Office lobby / reception	200	
d. Meeting room	200	
II. Experience	II. Experience	II. Experience
a. Library	1,500	Library/ bookstore with literature on phenomenology and mediation. Museum with rotating exhibits on phenomenology and architectural documents whose ideas represent those seen in the open air museum.
b. Cafe	400	
c. Cafe storage	200	
d. Rotating Collection	2,000	
e. Collection storage	500	
III. Reflection	III. Reflection	III. Reflection
a. Personal Reflection Space (3)	210	Multipurpose spaces for group yoga or other forms of reflection mediation or prayer for 30 people. Ablution room for general public to prepare before entering a sacred space and private mediation rooms for private mediation.
b. Group meditation	1,250	
c. Ablution lobby	250	
d. Reflectino space storage	100	
IV. Support	IV. Support	IV. Support
b. Restroom(5)	440	Four gender neutral bathrooms for public use that are ADA compliant (320 sqft) and 1 unisex bathroom for office use(120 sqft).
e. Mechanical	1,000	
f. Janitor	150	
V. Entry	Entry	
a. Lobby	1,500	
b. Vestibule	50	
c. Check in / coat check	75	
Total		10,775 nsf
Gross Factor		1.3
Total Gross Sqft		14,007 gsf





# In Praise of Light

Credits

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Figure 3.3	Ibid	Figure 7.6	Ibid
Figure 3.5	The framework for this diagram was taken from. <i>"Tervajärvi Forest Chapel / Architecturestudio NOAN"</i> 11 Jul 2020. ArchDaily. Accessed 22 Sep 2024. <a href="https://www.archdaily.com/942651/tervajarvi-forest-chapel-architecturestudio-noan">https://www.archdaily.com/942651/tervajarvi-forest-chapel-architecturestudio-noan</a>	Figure 8.1	<i>"NUDES Designs a Mosque of Light for Dubai"</i> 07 Dec 2018. ArchDaily. Accessed 22 Sep 2024. <a href="https://www.archdaily.com/907321/nudes-designs-a-mosque-of-light-for-dubai">https://www.archdaily.com/907321/nudes-designs-a-mosque-of-light-for-dubai</a> ISSN 0719-8884
Figure 4.1	Holl, Steven. Chapel of St. Ignatius. 1995-1997. <a href="https://jstor.org/stable/community.10817564">https://jstor.org/stable/community.10817564</a> .	Figure 8.4	Mosque of Light <a href="https://mosqpedia.org/en/mosque/551">https://mosqpedia.org/en/mosque/551</a>
Figure 4.4	Ibid		
Figure 4.6	Chapel of St. Ignatius <a href="https://www.seattleu.edu/life-at-seattle-u/faith-spirituality-and-meaning/chapel-of-st-ignatius/">https://www.seattleu.edu/life-at-seattle-u/faith-spirituality-and-meaning/chapel-of-st-ignatius/</a>		
Figure 4.7	Steven Holl Architects, and Olson Sundberg Architects. The Chapel of St. Ignatius; Blessed Sacrament Chapel; Detail. 1997. 6,100 sq. ft.; 52-foot bell tower. <a href="https://jstor.org/stable/community.14742111">https://jstor.org/stable/community.14742111</a> .		

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