Architectural Narratives of Aesthetic Form: Exploring the Perception and Psychological Design in Church Architecture

Ronghua Li

Jiangxi Normal University College of Urban Construction, Nanchang 330022, Jiangxi, China

Abstract: This article examines church architecture to explore the role of formal beauty in architectural spatial narratives and how perception and psychological design influence people's experiences and emotions. First, the article reviews the theoretical foundations of formal beauty in architecture, elaborating on the application of aesthetic elements such as proportion, symmetry, rhythm, and light and shadow in buildings. Then, through case studies of typical churches from different historical periods (such as Gothic, Baroque, and modern churches), it reveals how architects utilize spatial layout, verticality, light, and decoration to create unique spiritual atmospheres and enhance religious experiences. The article focuses on how architectural space guides people's perception processes, stimulates psychological resonance, and achieves emotional elevation. Finally, it summarizes the key role of formal beauty in architectural narratives, emphasizing the importance of perceptual and psychological design in enhancing the quality of architectural spaces. By deeply exploring church architecture, this study aims to provide new perspectives for modern architectural design, advocating for the creation of formal beauty to enrich the narrative and appeal of spaces while meeting functional requirements.

Keywords: Formal Beauty, Church Architecture, Proportion and Symmetry, Light and Shadow Effects.

1. Introduction: The Role and Significance of Aesthetic Form in Architecture

Aesthetic form, as an indispensable part of visual design, is not only the pursuit of aesthetics but also an essential tool for creating images and conveying emotions. Architectural art expresses various forms of beauty through architectural elements, thereby creating spaces that are visually appealing and capable of touching the hearts of observers. Church architecture, as a unique building type, stands out in its application of the rules of aesthetic form due to its religious function and spiritual symbolism. In church buildings, design elements such as proportion, light, and space not only bring a sense of solemnity and transcendence but also elevate the architecture beyond its religious functionality, making it an important expression of both architectural art and spiritual experience.

For example, the towering structures, symmetrical layouts, and colorful stained glass windows in church architecture are all intended to inspire awe and serenity in the hearts of the observers. Church architecture not only has unique symbolic meaning in its form but also resonates deeply with the spiritual world through its design elements [1]. This paper will conduct an in-depth analysis of the rules of aesthetic form, including proportion, balance, light, spatial design, and material choices, exploring how these elements are used to create sacred spaces and their impact on the visual and psychological experiences of the observer.

2. The Calmness of Order: Proportion and Balance

When people enter a church, they are often first struck by the sense of order in its proportion and balance. This order is not only evident in the building's appearance but also has a profound impact on the inner sense of tranquility. Visual balance is often closely tied to a sense of spiritual calm, as if

the building harmonizes the chaos of the outside world through this order.

St. Peter's Basilica is a masterpiece of proportion and balance. Its magnificent dome, designed by Michelangelo, with a diameter of 42 meters, rises harmoniously above the basilica, creating a visual extension of space that conveys a sense of divine ascension. As observers look up at the dome, they feel a resonance between their visual and spiritual experiences, as though the building is communicating an unspoken agreement between humanity and God through its precise proportions [2].

Similarly, the proportion of Florence's Cathedral of Santa Maria del Fiore is another classic example. The 45-meter-high dome designed by Brunelleschi forms a harmonious visual unity with the church's body. Each proportion is meticulously adjusted to ensure that while the church appears grand, it also maintains a balance between its interior and exterior structures. This design not only strengthens the dignity and grandeur of the church but also instills in the observer a profound sense of awe and inner peace [2].



Figure 1: St. Peter's Basilica (self-taken)



Figure 2: Florence Cathedral (self-taken)

3. The Spirituality of Light: The Contrast Between Illusion and Reality

If architecture is frozen music, then light is its conductor. Every ray of light that passes through glass is part of a dance between the church and its interplay with light and shadow. Although Notre-Dame de Paris may not be as tall or grand as Milan Cathedral, its exquisitely designed rose window is unparalleled in creating an atmospheric space. With a diameter of about 10 meters, the geometric symmetry of the rose window not only creates a harmonious visual effect within the architectural structure but also imbues the interior space with a mysterious and sacred atmosphere when light passes through it. As the sunlight filters through the window, colorful beams dance across the stone floors, weaving together the sacred and the mundane, transforming the church into a timeless space where people stand in reverence and reflection. As Gothic architecture expert Otto von Simson remarked, "Light is an indispensable sacred element in medieval architecture, symbolizing divine revelation" [3].

Light, as a design element in church architecture, is often imbued with symbolism that transcends the physical world. From the colorful beams that pass through rose windows to the natural light that moves through space, light endows the architectural space with life, as if each beam is telling the story of time and the divine.

The Church of Light in Japan uses a cruciform beam of light to guide natural light into the interior. In this minimalist space, light seems to no longer exist as a material presence but rather as a manifestation of the spirit. Observers are transported into another dimension as they experience the changing light. This beam of light becomes an integral part of the church, even its "voice," allowing people to experience the serenity and meditation that church architecture brings. Architect Tadao Ando uses the contrast between light and darkness to make light a language that narrates the sacred and transcends the secular and even the natural world. As light penetrates the church's façade, light and space are constantly in dialogue, guiding observers into another realm of consciousness.



Figure 3: Rose Window, Notre-Dame de Paris (self-taken)

4. The Sublime: Rising Above the Mundane Through Verticality

When we gaze upon the towering spires and steeples of a church, we often feel an indescribable sense of the divine. These vertical elements not only raise the physical height of the building but also lift the observer's gaze and spirit upwards, as if they are being told that there is something higher beyond the worldly realm.

In Cologne Cathedral, this vertical design reaches its zenith. The twin spires, towering at 157 meters, stand as a visual landmark in the city and a psychological symbol of faith. As one enters the cathedral, the 43.35-meter-high dome seems to connect heaven and earth, drawing the observer's gaze skyward. This extension of height not only creates visual awe but also imparts a sense of spiritual ascension within the stillness of the space.

Verticality is one of the most direct and emotional expressions of aesthetic form. It is not merely a demonstration of height but a pursuit of spiritual elevation. As we pass through the church's portals and our gaze follows the soaring dome, it feels as if the building itself is urging us to ascend with it, beyond the earthly, into the divine. In this architecture, we experience the dissolution of time and space, where all the burdens of the mundane fade, leaving only pure spiritual experience [3].



Figure 4: Cologne Cathedral (image source: Wikipedia)

5. Space and Psychological Perception: The Transition from Noise to Serenity

The spatial design of a church is not merely a matter of physical dimensions; it uses the contrast between expansive and narrow spaces to create a transition from the noisy outside world to inner serenity. The openness and order of the interior space provide a sense of belonging and tranquility from the moment one enters the building.

In St. Peter's Basilica, the vast space of the nave makes one feel as if they are standing in the embrace of the universe. Whether it's the height of the dome or the width of the nave, every design choice conveys a sense of inclusiveness and acceptance. As one enters the church, it feels as though a place has been found for the soul amidst the hustle and bustle of daily life. The expansive space not only offers visual awe but also provides a psychological sense of comfort and peace (Ackerman, The Architecture of Michelangelo).

In contrast, Ando's Church on the Water employs an extremely minimalist spatial design, where the water and light become the central features. The flow of water and the changing light guide the observer into a world of introspection. This transition from external complexity to internal simplicity, from reality to inner peace, is a hallmark of church space design [4].



Figure 5: Church on the Water (image source: Wikipedia)

6. The Tactility of Materials and Spiritual Implications

The materials used in church architecture are not merely physical components; they also communicate profound spiritual implications through touch and visual perception. As architecture theorist Juhani Pallasmaa noted, architectural perception is not solely visual; it involves a full-body experience where materials and tactile sensations play a critical role in shaping the space [5].

In St. Peter's Basilica, the cold, hard marble floors and intricate sculptures convey a sense of historical weight. The cold texture of the stone combines with the grandeur of the church, allowing people to feel the passage of time and the eternity of faith. When visitors touch these materials, they seem to be engaging in a dialogue with the past, sensing that the building is not merely a physical space but a vessel of time and faith [2].

Conversely, the concrete material used in The Church of Light evokes a sense of simplicity through its rough texture. The hardness and coarse feel of the concrete were deliberately chosen to give the entire church an elemental beauty. Touching the concrete walls feels like connecting with nature's forces and the silent dialogue of the building, making the church a space for meditation and reflection [4].

7. Conclusion: The Spiritual Resonance of the Rules of Aesthetic Form

Church architecture employs the Rules of Aesthetic Form not only to create visual harmony and order but also to imbue the building with spiritual power. Whether through proportion, verticality, light, or the tactility of materials, church architecture conveys not only the sacredness of religious rituals but also the care and comfort of the inner world [3].

The rules of aesthetic form are not merely cold design principles; in churches, they are endowed with a soul. Through perfect proportions, church architecture allows us to find balance between visual and psychological experiences; through soaring vertical spaces, the building leads us toward spiritual realms; and through the interaction of light and materials, the church channels sacred power into every ray of light, every tactile sensation. This expression of beauty is what makes church architecture profound; it communicates the spiritual essence of the building itself [1].

The uniqueness of church architecture lies in its ability to build awe-inspiring visual experiences while also providing deep reflection and spiritual solace for its visitors. These buildings represent the pinnacle of human architectural achievement and are eternal homes for the human spirit. The combination of proportion, verticality, light, and material use transforms churches into sanctuaries for the soul, offering a visual and psychological experience that transcends the ordinary [1].

Through the Rules of Aesthetic Form, church architecture provides humanity with an endless spiritual journey. This journey, through proportion, light, materials, and space, takes us to a world beyond the everyday, allowing us to experience the greatness and sanctity of architecture, while also reflecting humanity's timeless quest for the spiritual. In these churches, we engage in a silent dialogue with history, the sacred, and ourselves, and this dialogue leaves an indelible mark on our hearts.

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Author Profile

Ronghua Li Associate Professor of Design Art Studies, currently working at the School of Urban Construction, Jiangxi Normal University, engaged in teaching courses in painting and design.