



Religions Culture Sharps the Space

Xiaowen Wu¹, Claudio Gambardella²

¹*Department of landscape architecture, School of design, East China Normal Univeristy, China*

²*Department of Industrial Design, Università degli Studi della Campania "Luigi Vanvitelli", Italy*

Email: xiaowenw002@gmail.com

Abstract

Religious culture shapes the characters of space and it reflects people's attitudes towards the relationships between people and gods. Every religious architecture, such as a temple or a church, demonstrates its physical connections with life. This paper focuses on comparing different countries' religious architectures to better understand the dominant cultural elements which influence design concepts of these architectures. In Western cultures, the religious architecture format is the church. However, Tadao Ando designs the Church of the Light with oriental features. It changes western religious cultures to adapt to local conditions. Ando's work is just one of many examples in which the local culture can transform religious architecture form with their own characters, and make it become an iconic mark to represent their country. This paper, analyzing project thinking and development involving a local citizen, user, artist, and architect, tries to find out how design concepts, decisions on site location, and construction method will be determined. In these case studies on architectural formats from all over the world, this paper uses valuable data to show what elements will be the most critical ones to influence people's thinking about religious cultures and religious architectural transformation. Furthermore, in this research, it compares religious cultural characters between western and oriental regions. This research also answers questions about how cultures change local people's behaviors. This is the most valuable point of religious architectures, because they can comfort people and mitigate their sorrow. The research demonstrates how religious cultures and understanding about life can further develop architecture forms. Local materials and conditions are key factors which greatly influence architectural designs. Moreover, this paper compares the latest technology and development of construction materials to illustrate how technology reshapes religious designs in our age. It links local cultures with contemporary architectures to help local architectures continue to develop with their unique characters instead of being eliminated by globalization.

© 2019 The Authors. Published by IEREK press. This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords

Religious cultures, local cultures, religious architectures, architecture forms, social factors

1. Introduction

Religion is a spiritual element to link people with their home space. Without religious cultures, when people move around the world from one apartment to another, from one city to another, from one country to another, only the physical environment will change. Religion is a spiritual culture to help people settle down and adapt to new places for security. A unique space can connect people's beliefs, traditions, and values. It links people's mind with the local environment. People not only live in a specific geographic space as their house but also live in a place with traditions and local cultures connecting themselves with their mind. Mysterious gods will give them the courage to conquer all fears. Religious architectures are the spaces where all exchanges with gods start. In the history of religious

architectures, the smallest space can be the place for worship. It's a mini house containing ancestral religious goddess figures for people to pray for their sorrow. As the sizes of cities are getting larger, temples and churches are another architectural forms for people to gather to support each other and share the spiritual power of praying. A typical type of religious architecture is not only for living and exchange but also for people to exchange their beliefs with the outside world. Therefore, exploring religious impact of different cultures helps us understand the primary design elements that will refresh people's spirit and influence their minds.

2. Methods

To investigate religious influence on architectures in different countries, this paper employs case study and research methods such as visiting libraries, documentary studies, and interviews to collect information to support its viewpoints.

3. The definition of religion

Religion is also called as customs and faiths. Religion offers solutions and methods, and it can also be interpreted as what a human chooses for his life (Gil-Mastalerczyk, 2016). It is a cultural system of designated behaviors and practices, morals, worldviews, texts, sanctified places, prophecies, ethics, or organizations, which connect humanity with supernatural, transcendental, or spiritual elements. (Salimi, Yurtyapan Salimi & Kara Pilehvarian, 2016)

Religion can be a specific type of system organized by the same believers. However, besides many religious groups such as Christianity, Buddhism, and Catholic, respecting and worshipping ancestors is a type of religious behavior in different countries, especially for oriental religions.

Religious behaviors influence architectural layouts such as designs of houses and public outdoor spaces. Religious architecture and space always represent local political power, philosophy of local civilization and their advanced vision. Many religious buildings in the world are made of the most expensive materials, in the most complex construction forms, and they are the most significant symbols in one country.

Religious architectures are complex because of national cultures and religious functions that involve different activities. A religious architecture is a micro storybook about a country, which illustrates how local people think, what their beliefs are and the cultural message they want to pass on to their descendants.

4. Oriental religious cultures and meaning of humans' life

4.1 Places for religious worship

Temples, churches, mosques, and synagogues are common architecture types for worship. All kinds of prayers in the world have three crucial praying objects: worship for nature, worship for ancestors, and worship for persons (gods and goddesses).

4.1.1. A space for worship for nature

Back to the age of agriculture, people relied on weather and cultivating land to produce food and good harvest. Nature was like the God to them, and there were temples for people to worship Heaven, Moon, Ocean, and Earth to pray for good luck.

The Temple of Heaven in Beijing is an example. In ancient China, the Emperor of China was regarded as the Son of Heaven, who administered earthly matters on behalf of the divine authority. The Emperor would like to be seen to show his respect for the source of his power. Ceremonies would be held to pray for bumper harvests for the Chinese people. (Gowans, Scruton, James & Collins, 2019)

As for the architectural layout of the Temple of Heaven, Earth is represented by an open square as the background. The Temple is like a circle, meaning it's the heart of the Earth; and the Emperor represents Heaven. The Temple of Heaven consists of the Qiu (circular mound) altars, and the Qi Gu (prayer valley) altars. The wall of the Temple,

commonly named the “Heaven and Earth Wall”, symbolizes the ancient saying “the Hemispherical Dome Cosmology.” It is a typical temple using natural forms and connecting human power with Heaven power.

The Hall of Prayer for Good Harvests has been divided into four parts. There are four pillars in the inner layer, twelve pillars in the middle and twelve pillars in the outer layer. The whole layout represents four seasons, twelve months and twelve traditional Chinese hours respectively. In addition, there are twenty-four posts to describe the conventional Chinese solar terms. In the Temple, all ceilings have dark blue roof tiles, which represents the color of Heaven. All of the architectural factors are symbolic elements that transferring people’s admiration to nature.



Figure 1. The Temple of Heaven. (Source: <http://famouswonders.com/temple-of-heaven-in-beijing/>)



Figure 2. Qi Gu (pray valley) altars. (Source: <http://famouswonders.com/temple-of-heaven-in-beijing/>)

4.1.2. A space for worship for ancestors

To express humans’ respect to gods, funerary ceremonies and shrines are great examples to explain religious characters in architecture. Architecture formats and landscapes represent religious culture of every nation.

Jesa ceremonies are traditional ceremonies performed by Korean families to honor deceased ancestors who paved the way for their descendants during the Lunar New Year Festival. Worshipping in families is a way for family members to remember their late relatives, and family members also believe the worshipping can connect with and transmit information to the world of bliss. It is the power from their ancestors or families for them to stay more closely.

From the interior settings of the ceremonies, it can be seen as a micro “shrine” without any stable architectural formats. However, it shows an oriental religious culture which connects people in the daily residential architecture.



Figure 3. Table for Jesa ceremonies (Source: <https://thesoulsofseoul.net/2015/02/23/how-to-perform-a-korean-jesa-ceremony/>)



Figure 4. People are worshipping ancestors (Source: <https://thesoulsofseoul.net/2015/02/23/how-to-perform-a-korean-jesa-ceremony/>)

According to family sizes, honoring ancestors during Jesa ceremonies will be carried out in a temple or another architectural format, and it is another way for people to get closer to Nature. Monumental tomb is a type of architectural form which expresses worship for religions and Gods.

The Grave Yard is located in a mountain in Korea. Similar to the Chinese, Koreans design religious architectures to get closer to Nature. Because of Korean traditional religion, cemeteries and tombs look like mountains. In Korean conventional beliefs, the Mountain God is the second important god. The first important is the Heaven God, the second is the Mountain God, and the third is the Ancestral God, etc. Mountains have been regarded as sacred places for early Koreans, and the Korean people even hold the same view up until now. In the example of the Cheonmachong tomb in South Korea, Funeral art perfectly shows how the place of shrine has integrated into the landscape and become a part of Nature. In the Chenmachong tomb park, landscape changes with the season, and local citizens go to the park

for sport and entertainment activities during their daily life. Religious architectures in Funeral art, instead of cutting the ties between people and their ancestors, link people with Nature.



Figure 5. Chenmachong tomb (Source: http://chinese.visitkorea.or.kr/chs/ATR/SI_CHG_2_1_1_1.jsp?cid=331121)



Figure 6. Chenmachong tomb in Autumn (Source: http://chinese.visitkorea.or.kr/chs/ATR/SI_CHG_2_1_1_1.jsp?cid=331121)

4.1.3. A space for worship for persons

The Jade Buddha Temple is one of the most famous temples in Shanghai. The temple is so named because it is dedicated to the Jade Buddha. On specific dates for praying, visitors from the city will wait in line to get into the temple to pray. Most of the prayers come to pray for their wishes, such as good health, wealth, and happy life. People will tie a red ribbon to the column in the temple or to the tree to make their wishes be connected with the temple. It means the red ribbon is conveying their wishes to the Buddha. In the Jade Buddha temple, traditional ancient architectures are kept intact to display the Buddha statues. Both the architecture space and landscape space give visitors a sense of tranquility, and that is also what Zen philosophy proposes.

Although the space layout and style follow traditional architecture style, new Zen study activities are renewing the old architectural layout. For example, in the Jade Buddha temple, visitors can join the copying of Sutras, Zen study and Buddha sutras exchange groups. Providing new study activities in the old temple makes the temple not only become a place for displaying and worshipping the Buddha, but also a space for exchanging ideas and sharing culture and spirit.

From those three topics related to religious spaces, it can be seen that oriental worship spaces have strong connections with Nature. In the area where a religious architecture is located, not only patterns of human life are copied to serve as building elements, but also natural elements are imitated. Oriental cultures respect Nature, and hope to establish the relationship between humans and natural environment through imitating natural elements. From The Temple of Heaven in China, the Grave Yard in Korea, to the Jade Buddha, it can be discovered that although they are in different shapes, they imitate natural elements to express people's respect and worship for Gods.

In oriental cultures, the Zen philosophy tells people to stay calm and slow down to follow Nature's rhythms and manage as well as control emotions. It has influenced architectures and landscapes profoundly in both ancient religious architectures and modern ones.



Figure 7. Architecture space in Jade Buddha Temple Figure. (Source: <http://www.yufotemple.com/view/863>)



Figure 8. Garden space in Jade Buddha Temple. (Source: <https://july-cogarden.com/7372519>)



Figure 9. Prayers in Jade Buddha Temple. (Source: <http://www.yufotemple.com/view/270>)



Figure 10. Interior space of Jade Buddha Temple. (Source: <http://www.yufotemple.com/view/270>)



Figure 11. Zen study in Jade Buddha. (Source: <http://www.yufotemple.com/view/270>)



Figure 12. Copying of Sutras in Jade Buddha Temple. (Source: <http://www.yufotemple.com/view/270>)

4.1.4. Western religious cultures and meaning of humans' life

Compared to elements in oriental religious architectures, which imitate natural elements, western cultures focus more on light and mysterious atmosphere of the space. In western countries, there are no typical persons or objects for worshipping, but the space transfer the atmospher to hold people together at specific moments.

4.1.5. A space for worship for persons

The Catholic church has distinctive Catholic religious characters. All of the worshipping of God centers on Jesus Christ and his stories described in the Bible. The space of church is a place for gathering, ceremonies and spiritual enlightening.

Examples such as Duomo di Milano, Notre-Dame de Paris, and Sagrada Família have genes of Gothic architecture styles. However, the most attractive point of these traditional Catholic churches is the beauty of light. For instance, in the Duomo di Milano, the windows not only direct light into space, but also illustrate stories in the Old and New Testament. Light goes through the windows with biblical stories and stories patterns are thus reflected on the ground. Light not only reflects colors, but also brings religious atmosphere generated by the stories into the interior of the church.

It is designed not only for the worship of Jesus Christ, but also for depicting journeys in the Bible and Jesus Christ's beliefs.



Figure 13. Interior of Duomo di Milano



Figure 14. Windows of Duomo di Milano

4.1.6. A space for worship for memorial

“In order to design buildings with a sensuous connection to life, one must think in a way that goes far beyond form and construction.” –Peter Zumthor

Bruder Klaus Field Chapel is a chapel built by local farmers to worship their patron saint Bruder Klaus. The church is used for honoring a specific person, Bruder Klaus. However, Peter Zumthor did not design the church based on Bruder Klaus’ autobiography. The designer has created the place for the memorial of farmland.

The contrast between the interior and the exterior at unique moments attracts visitors from all over the world to see the church. Natural wood is used as the interior material, which connects people’s feelings with the life circle of the countryside. Life always has its circles of birth and death. The wood frame corridor creates a light transforming space for visitors to experience a mystical journey. It is a church of memorial, a place for connecting people with environment and an ambiance of time.



Figure 15. Bruder Klaus Field Chapel. (Source: <https://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor>)



Figure 16. Chapel’s sky light. (Source: <https://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor>)

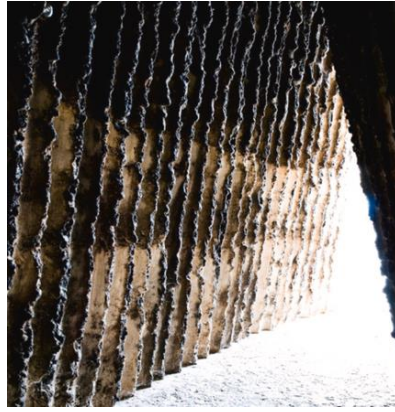


Figure 17. Chapel's wooden frame pattern. (Source: <https://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor>)

4.1.7. A space for worship without any typical objects

MIT Chapel, located in the MIT campus, is surrounded by tree groves and a big lawn. It is a chapel open for all religions. When you are on the way to approach the church, it seems that you are searching the meaning of life: there's no direct route to the entrance, and its interior space is stunning, which cannot be judged from the exterior facade. The interior is composed of highly detailed and atmospheric qualities that are enhanced by natural light.

Outside of the chapel, there is a solid brick wall defining the size of the exterior. By contrast, after walking into the interior, you will find the brick wall become a vital background of the exterior, which creates a subtle and elegant feeling for people about the facade. The light transfers the simple chapel into a chapel of light, whose atmosphere and visitors' emotions about space are always changing. The MIT Chapel creates a special religious architectural experience for people, which is mysterious and touches visitors' heart when they go from the exterior into the interior.

"Through sheer manipulation of light and its focus on a blazingly white marble altar block, Saarinen created a place of mystic quiet." –Leland M. Roth



Figure 18. MIT Chapel designed by Eero Saarinen. (Source: <https://www.archdaily.com/112682/ad-classics-mit-chapel-eero-saarinen>)

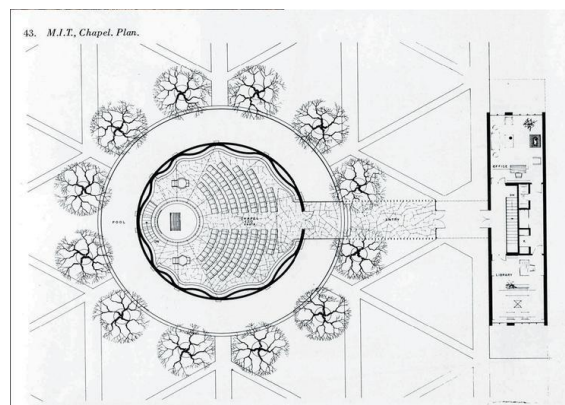


Figure 19. MIT Chapel floor plan. (Source: <https://www.archdaily.com/112682/ad-classics-mit-chapel-eero-saarinen>)

Natural light is widely used in western religious architectures. Religious spaces make use of natural sunlight as the mysterious power to impact visitors' feelings. The sequence of space also directs visitors to release their excitement during the experience journey. There are no specific symbols or figures for worshipping in western religions. The architectures connect people's innermost feelings with God.

5. Conclusion

Differences in religious cultures and meanings of life are influencing religious architectural formats. By comparing oriental and western religious cultures, this paper shows there's strong worshipping of natural elements in oriental religious architectures. In oriental cultures, people rely on the land and believe the mysterious power is given by the God. All related designs demonstrate that people can live harmoniously with Nature. Western cultures have the beauty of science and change people's emotions through space by connecting people with physical elements. No matter how rapidly technology changes materials or architectural structures, religious architecture will always exert the most powerful and purest impact on people's spirits. Religious architectures play a critical role in alleviating people's stresses, tensions and fears through the interaction with space.

References

- Gil-Mastalerczyk, J. (2016). The Place and Role of Religious Architecture in the Formation of Urban Space. *Procedia Engineering*, 161, 2053-2057. doi: 10.1016/j.proeng.2016.08.802
- Salimi, A., Yurtyapan Salimi, A., & Kara Pilehvarian, N. (2016). The Role and Impact of Religion on the Architecture of Mosques and Churches. *The Turkish Online Journal of Design, Art and Communication*, 6(April Special Edition), 22-31. doi: 10.7456/1060ase/003
- Gowans, A., Scruton, R., James, J., & Collins, P. (2019). Architecture | Definition, Techniques, & Theory. Retrieved 19 November 2019, from <https://www.britannica.com/topic/architecture>
- Hallie (2018). *How To Perform A Korean Jesa Ceremony*. [online] The Soul of Seoul. Available at: <https://thesoulofseoul.net/2015/02/23/how-to-perform-a-korean-jesa-ceremony/> [Accessed 19 Nov. 2019].
- Temple of Heaven, Retrieved from: https://en.wikipedia.org/wiki/Temple_of_Heaven
- Souza, E. (2011). AD Classics: MIT Chapel / Eero Saarinen. Retrieved 19 November 2019, from <https://www.archdaily.com/112682/ad-classics-mit-chapel-eero-saarinen>
- Sveiven, M. (2011). Bruder Klaus Field Chapel / Peter Zumthor. Retrieved 19 November 2019, from <https://www.archdaily.com/106352/bruder-klaus-field-chapel-peter-zumthor>