The Architectural Style of Ancient Buddhist Temples between China and Thailand: The Baima Temple in Luoyang, China, and the Temple of the Emerald Buddha in Krung Thep Maha Nakhon, Thailand

Sicong Liu^{1,*,†}, Xiaoqi Yang^{2,†}

¹Beijing Institute of Technology, Zhuhai, Guangdong Province, China

²Beijing Technology and Business University, Beijing, China
liuyb.yn@chinaccs.cn

*corresponding author

[†]These authors contributed equally.

Abstract: Baima Temple is the earliest one which was established after the time of the first introduction of Buddhism. It transforms and integrates Tianzhu Buddhist thought into Chinese traditional characteristics. It is known as 'the first ancient temple in China'. As one of Thailand's three national treasures, the Temple of the Emerald Buddha shows the unique artistic characteristics of Thailand's ancient architecture and is known as the artistic treasure of Thailand's Buddhist architecture, sculpture, and painting. Starting from the influencing factors of the two temples, this paper takes color as the main research object to study the differences between the architectural styles of the two temples and the cultural differences behind them.

Keywords: Temple of the Emerald Buddha, Baima Temple, Ancient Temple Architectural Styles, Cultural Variations

1. Introduction

It is said that Liu Zhuang, Emperor Ming of the Han Dynasty, had a dream in the south palace. The next day, he learned that the dream was a Buddha, so he sent envoys Cai Yin and Qin Jing to the western regions to worship Buddhism [1]. Cai, Qin, and others met the Tianzhu (ancient India) eminent monks Jiashimoteng and Zhufalan who traveled to this place. So invited them to China to preach the Dharma, loaded with white horse Buddhist scriptures, and Buddhist statues, trekking, and finally arrived in the capital Luoyang [2]. The Emperor Ming of the Han Dynasty ordered the construction of the temple in imitation of the Tianzhu style. To remember the work of the white horse, the temple was named Baima Temple. Since the beginning of the White Horse Temple, Chinese monasteries are widely known as temples, the White Horse Temple is therefore considered the birthplace of Buddhism in China. The eminent monks of the past dynasties and even foreign famous monks also came here to read the scriptures and seek the law, so the Baima Temple was also respected as Zuting and Shiyuan. It was the first official temple built after Buddhism was introduced to China. In addition, Luoyang, as the capital and political, economic, and cultural center at that time, had a brilliant royal culture and historical heritage, which promoted the development of religion, culture,

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and economy in the region. Buddhism was formally introduced into China in the tenth year of Yongping in the Eastern Han Dynasty [3, 4]. The capital Luoyang was the starting point for the spread of Buddhism [5].

According to historical evidence, Buddhism was introduced to Southeast Asia from India in the 3rd century B.C., just as Mahayana Buddhism began to spread in northern and central Thailand during the Angkor Dynasty in Cambodia. Around the 12th century, Hinayana Buddhism (known as Theravada Buddhism in Thailand) was introduced into Thailand from Burma and Sri Lanka. After the establishment of the Sukhothai Dynasty in the 13th century, the rulers began to promote Buddhism and it gradually became the most important religion in Thailand. Ranganghon the Great actively introduced and strongly promoted the modified Hinayana Buddhism. The inscription reads: "The governors, the rich, the people, the men and the women of Sukhothai all kept the precepts of righteousness. During the summer festival, Sukhothai dynasty people had the custom of giving alms and observing precepts." The term "observing the precepts of the summer festival" refers to the short period of monasticism during the summer festival or going to temples to listen to sermons, which were integrated into the daily life of Sukhothai people at that time. During the Ayutthaya Dynasty (1351-1767), the dynasty and Buddhism were closely connected. According to the book Ayutthaya: History and Politics, "Ayutthaya dynasty made Southern Buddhism the state religion and also incorporated the ideas of animism and Mahayana Buddhism. At the same time, the Ayutthaya dynasty also consolidated the status of the divine king with Hindu Brahmanical rituals, forming a ruling system that blended the 'divine right of kings' with the 'ten good laws of kings'" [6].

According to historical records, Thailand's first dynasty, Sukhothai Dynasty, was first established in 1238 AD, just under 800 years ago. And according to the first volume of the "Nanhai Yai Gui Nai Fa Chuan", Buddhism was already prevalent in Thailand before the establishment of the country, and according to the earliest unearthed Buddhist artifacts, it can be conservatively assumed that Buddhism was spread in Thailand before 1500 years ago [7]. Before Thailand was established, it was originally under the jurisdiction of the Khmer people and belonged to a city of the Angkor Dynasty in Cambodia. The Angkor Dynasty, one of the most famous dynasties in world history, ushered in the most glorious era in Cambodian history. In the 1st century B.C., Phnom Penh emerged and developed its economy through maritime trade, taking its place in the East-West trade. As the saying goes, "the economic base determines the superstructure", economic development also ushered in the introduction of Buddhism, and Buddhist architecture began to appear at this time.

Krung Thep Maha Nakhon, the central region of Thailand, is one of the birthplaces of Thai culture and is considered to be the central hub of Thai culture, and Buddhism has a long history of development in the central cultural region. For a long time before the establishment of the Sukhothai Dynasty in Thailand, primitive Buddhism, Theravada Buddhism, Mahayana Buddhism, and Hinduism were spread in the central cultural region of Thailand, which led to the cultural diversity of Krung Thep Maha Nakhon. During the Thonburi and Krung Thep Maha Nakhondynasties, the rulers continued to promote Sri Lankan Theravada Buddhism, and at the same time, they continued to absorb the best foreign cultures and localize them. The long and complex history of development and the exchange and integration of multiple cultures has resulted in an overall eclectic character of Buddhist architecture in the central cultural region of Thailand [8, 9].

In Thailand, Buddhism constitutes the main body of Thai national culture, and Buddhist architecture encompasses the spiritual world of the people and the political system of Thailand. This analysis shows that the development of history and politics has a great influence on the development of art.

2. Dissemination Route

According to historical research, the spread of Indian Buddhism is mainly divided into three routes: Northern Land Route - Northern Buddhism (Chinese Buddhism), Southern Sea Route - Southern Buddhism (Mahayana Buddhism), and Southern Land Route - Tibetan Buddhism. China's route of transmission belongs to the first land-based northbound route. According to historical records, the route from Gandhara (Pakistan, northern border of Afghanistan) through Central Asia, across the Pamir Plateau into the Western Regions (New Qiang), and then through the Hexi Corridor to reach the Midlands, known as the 'Silk Road'. The development of the Silk Road, not only brought products to China, promoted the development of politics and economy, but also promoted the in-depth exchange of Chinese and Western cultures, promoted the spread of Buddhist culture, and opened up a new realm of people's ideological and cultural aspects. After the rise of Buddhism, a large number of Buddhist scholars from the Western Regions came to China, the translation of scriptures rose, and the popularity of Buddhism increased. In addition, Buddhism from the Silk Road into China's s path can be divided into two South Road and North Road, South Road as early. Since the first year of the first birthday of the Ai Emperor in the Western Han Dynasty, Buddhism was introduced into the Central Plains of China from the Western Regions. Then, Buddhist classics were successively translated in the late Eastern Han Dynasty. After that, Buddhist doctrine began to be combined with traditional Chinese ideology and culture, and reached its peak in the Sui and Tang Dynasties, forming sects such as Tiantai, Huayan, Fa, Law, Pure Land, and Zen [10].

This route originated around the 3rd century B.C. According to legend, the route came directly from India, where King Ashoka sent preachers to spread Buddhism after the third rendezvous. One of the groups was led by Suna and Yudhishthira to the Golden Land (i.e., present-day Thailand or the Malay Peninsula), and this route spread Buddhism by sea to Indonesia, Burma, Thailand, Cambodia, and other regions, spreading the earlier sectarian Buddhism, which was mainly Theravada Buddhism at that time.

3. Comparison and Analysis of the Differences Between Chinese and Thai Buddhist Architectural Styles

From the world geographical map, people can easily find that China is located in eastern Asia, on the west coast of the Pacific Ocean, as well as Luoyang is located in the northwest of Henan Province, the south bank of the middle reaches of the Yellow River. It is located in a warm temperate zone. The climate is temperate monsoon, the feature is dry and windy spring. To be specific, there is high temperature and rain in the summer, concentrated precipitation, while is cold and dry in the winter. People can find that there are four distinct seasons throughout the year, and the climate is changeable. The average temperature of the hottest month is 13 $\,^{\circ}$ C -23 $\,^{\circ}$ C, the average temperature of the coldest month is about-6 $\,^{\circ}$ C, and the average annual precipitation is 400-800 mm, which has obvious seasonal characteristics. In addition, the sunshine duration is more in summer and less in winter, the spring and autumn are in the middle as well. Then, The annual sunshine hours are 2141.6 hours.

From the world geographic map, people can easily find that Thailand is located in the southern part of the central and southern peninsula in the northern hemisphere, located in the tropical region of its temperature zone, belonging to the tropical monsoon climate; year-round hot year-round is divided into three seasons: hot (from mid-February to mid-May each year), rainy (from late May to mid-October each year) and cool (from mid-November to mid-February each year), with the average annual temperature roughly around 27°C (80.6°F). The highest temperature can reach 40°C (104°F), and the average annual precipitation can reach 1500ml.

During the hot season from mid-February to mid-May, the southwest monsoon has not yet arrived and there is little rain; during the rainy season from June to October, the southwest monsoon brings

a lot of rain and precipitation accounts for about 80% to 90% of the total annual precipitation, which is hot and humid; from November to February, the cool season prevails with a dry northeast monsoon and the climate is cool and pleasant.

To talk about the topography, the north of Luoyang Mangshan and the south of it is Luohe, high in the west and low in the east, mountainous hills, accounting for more than 80 %, fewer plains, the terrain is more complex, but the overall is relatively flat, about 250 meters above sea level.

Krung Thep Maha Nakhonis located on the delta plain of the Chao Phraya River (Chao Phraya River), the "heartland" of Thailand, with a low-lying topography and an average elevation of fewer than 2 meters.

4. Analysis on Expressions

Luoyang White Horse Temple China's Royal Temple, sitting in the north towards the south, initially used the 'fine house type named 'architectural form,' which has strong Indian color, but with the development of history and the localization of Buddhism, Chinese traditional color continued to increase. Facing the mountain gate of Baima Temple, that is, the main entrance of the whole temple, people can see a gray-black Xieshan-style roof. This is a memorial archway style with red wall paint. On the blue stone plaque on the lintel, we can see that three large characters of 'Baima Temple 'are inlaid with gold paint, which gives people a sense of solemnity. In addition, most of the plaques in other parts of the temple also use this color, which has certain regularity. There are three holes below, the largest of them is in the middle. Opposite the mountain gate, two striking gray stone horse statues are opposite to the left and right. It is said that the horse carrying the scriptures of the Han Dynasty is a stone statue in front of a master's tomb in the Northern Song Dynasty. Through the gate, on the central axis from south to north, a variety of Buddhist temples can be seen in turn. Among them, the Tianwang Hall, the Great Buddha Hall, and the Daxiong Hall are magnificent; the connecting hall is exquisite and small, which was located on the cool platform of Pilu Pavilion, and the left and right sides of it are respectively Fabao Pavilion and Zangjing Pavilion.

On the whole, the overall color tone of Baima Temple is warm. On the one hand, this is due to the influence of the geographical environment to a certain extent. Due to the influence of the temperate monsoon climate, it is cold and dry in the winter, the sunshine time is short, the air transparency is low, and the warm tone is dark, more resistant to pollution, and it is not easy to fade for a long time. In addition, in the winter, in the face of cold weather, warm colors have a certain balance effect and adapt to climatic conditions, which brings warmth to local people and promotes positive psychology. In the summer, with the yellow or green trees, we can feel a strong color contrast. A quiet and solemn atmosphere gives a visual impact on the aesthetic. On the other hand, as a royal temple, the color decoration of Baima Temple was greatly influenced by the ideology and culture at that time, which emphasizes the sacred and inviolable characteristics of the rulers 'rights. As the most important color, red is the most important color in ancient China, which symbolizes the majesty of imperial power. In addition, China has been a great power of ethics since ancient times, the color of Baima Temple reflects the hierarchical characteristics of feudal ethics to a certain extent as well.

Enter the interior of Baima Temple, taking the interior wall painting as an example. It mainly includes two styles, one is direct with white painting. The most primitive Buddhist temple building in Baima Temple is a simple white inner wall, which is not colored. However, the interior wall area of this kind of building is relatively small, we can see that the eaves are low, and there are windows on the wall. Therefore, the white color does not appear abrupt, but the gentle intimacy is more, which gives us a warm feeling. The second effect is to cover the wall with murals and painted paintings, which mostly appear in the later repaired buildings. The murals with mild warm soil color as the background, and used stone blue, and stone green to form a distinct contrast between cold and warm.

With the cooperation of black, white, and gray, we can see the simple, bright, simple, vigorous warm tone.

The Temple of the Emerald Buddha in Krung Thep Maha Nakhonis located in the northeast of the Grand Palace, facing south, and as the most famous Buddhist temple in Thailand, its area occupies about a quarter of the total area of the Grand Palace. Thailand is a Buddhist country compared to China, and although both are influenced by Indian Buddhism, the difference in autogenous conditions leads to a great difference in the use of color.

When entering the gate of the Temple of the Emerald Buddha, the first thing that comes into view is the Jade Buddha Hall, a grand hall surrounded by twelve pavilions. The shrine on the golden Buddha platform in the middle of the main hall is dedicated to a jade Buddha carved from jasper stone, 66 cm in height and 48 cm in width; through the majestic Grand Hall, to the north of it you can see the Lodhana stupa, The temple is located directly behind the pavilion, but the top pagoda is located below the pavilion, and the Vajra Buddha Temple and the Buddhist Dharma Temple are located to the left and right of it.

The Temple of the Emerald Buddha in Krung Thep Maha Nakhon is influenced by environmental factors, making its use of colors more focused on reflective strong tones, making it possible to produce a temperature-lowering effect when seen in Thailand, where temperatures are high. Nearly six meters high outside the Temple of the Emerald Buddha, the Night Stick is one of the four major demon kings in the Buddhist scriptures, with its angry eyes, fierce face, cleft lips and smiling mouth with fangs, and green face (one of the eight guardian deities of the Dragon in Buddhism. Together with the Rakshasasas, they are the celestial dependents of the King of Vishalman. They live on the ground or in the air, and are fierce, swift, and fearful in appearance; they are one of the protectors of Buddhism.) In the main hall where the Jade Buddha is enshrined, there are 40 columns and 112 golden statues of human-headed birds, which are the golden-winged birds of Buddhism and symbolize justice. The red color symbolizes power and vigorous fighting spirit, reflecting the grandeur of royal architecture while the strong color contrast makes the Temple of the Emerald Buddha an extra mysterious, blue, green so the use of cool colors gives people a sense of calm, refreshing; the exterior walls of the temple are all white, in Buddhism, white is associated with the lotus flower, symbolizing sacredness and purity. Red tiles, green ground, white walls, blue sky, golden doors, and windows, although it looks magnificent, can be integrated with nature, natural and harmonious.

As an important part of Buddhist architectural decoration, the murals of the main temple of the Emerald Buddha are the story of Sakyamuni Buddha from birth to nirvana, and the most famous is the cloister mural. 178 murals were originally painted in Rama I, the epic poem of Rama Kin, with strong contrast in the use of color, using the method of gold dots, bright colors, and the pursuit of the effect of gold and blue, very much with the local characteristics of Thailand. It is very realistic in terms of the expression of the frescoes, and the images use a large number of Thai Buddhist art elements, using strong contrasting golden waves of brilliance and colorful images to show the storyline.

Among the many buildings in Thailand, it is easy to see the wisdom of the Thai people, who chose a herringbone roof when building their houses. The main palace in the Temple of the Emerald Buddha is a clear Krung Thep Maha Nakhonpalace architectural style, its roof style is a fusion of the roof of the pole-rail building; at the same time, the Thai people in the construction of the Temple of the Emerald Buddha by the building roof slope is large, the eaves low hanging construction method, so that the temple is not enough light, in general, the inner hall of the Buddha temple is generally more empty to enhance the alienation between the Buddha and people, increasing the sacredness of faith.

5. Conclusion

As the old Chinese saying goes, one side of water and soil raises one side of people, Buddhist culture was founded by Sakyamuni in ancient India, and then spread to China and Thailand through two different routes. In China and Thailand, through the conditional factors of their conditions, the integration of their own culture-Chinese Taoism and Buddhism are mutually integrated and complementary. There is a profound influence of Thai Hinduism on Thai Buddhism. Although the influence of Buddhism, historical politics, environmental geography, and other factors inherited by China and Thailand has led to their respective characteristics in ancient Buddhist architecture, it also shows the unique wisdom of the people of China and Thailand in dealing with foreign cultures, leaving a strong and colorful stroke in the history of ancient religious architecture in the world, which is an indispensable part of the history of world culture. Ancient Buddhist architecture in china and Thailand has its characteristics, and both are artistic treasures. This article mainly compares the color differences between Chinese and Thai Buddhist ancient buildings through the geographical environment, historical culture, and other factors, showing the diversity of world national culture, seeking common ground while reserving differences, and promoting cultural exchanges.

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