

# Comparative Study on Characteristics and Development of Chinese and Western Architectural Culture

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**Abstract:** Architecture is an indispensable part of the development of human civilization and the carrier of human civilization. The evolution of architectural style can also reflect the development of a nation. With the continuous development of history, the preservation and development of historic sites has gradually become a topic of common concern in China and the west. However, with the continuous development of modern technology, there are fewer and fewer traditional cultural elements in the newly-built buildings, which lead to the gradual loss of some traditional architectural culture. In order to avoid the further aggravation of this phenomenon, something should be done. From the perspective of the development characteristics of Chinese and western architectural culture, the characteristics and differences of the development process of Chinese and western architecture were listed from ancient to modern times, and gradually the main reasons for the different development directions and characteristics were analyzed. In addition, according to the law and characteristics of the development of Chinese and western architecture, some methods on how to solve the inheritance of Chinese modern architecture to traditional culture were put forward.

**Keywords:** Architectural style, Difference between China and the west, Cultural fusion

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## 1 Introduction

In the development of human civilization, architecture can leave a deep impression. Long before the formation of human civilization, people living in the primitive society started to build primitive villages to form

ethnic groups. Architecture not only records human history, but also carries the development of human culture<sup>[1]</sup>. The biggest difference between architecture and other art types lies in that it not only needs rich imagination, but also fully combines the needs of reality. Therefore, the study of architecture is actually a perfect combination of art and reality. By analyzing the different development directions of Chinese and western architectural styles, this paper hopes the both learn from each other and the cultural core of traditional architecture could be applied in modern architecture.

## 2 Differences in development of Chinese and western architectural styles

Different regions have different political, economic and cultural characteristics. Besides books, the most important and intuitive thing that can turn these imaginary things into reality is architecture. The architectural style is often determined by the local history, culture, geography, climate and other factors, and is often able to show the local characteristics in the most intuitive way. Apart from their own form, excellent architects can also see a country, a culture and a history contained in the architecture. In terms of architectural style, both eastern and western buildings have many different characteristics in terms of shape design and spatial layout, but also have their unique charm.

### 2.1 Development of Chinese architectural style

China's architectural style took shape in the Shang and Zhou dynasties, when board walls and rammed earth began to be applied in buildings on a large scale. With the continuous growth of architectural technology, the appearance of buildings gradually began to pay attention to aesthetics, and more and more carved

patterns began to appear on walls and tiles. After Qin unified the six states, the ruling situation was gradually formed and the architectural style was gradually unified. Most of the large buildings were built to highlight the imperial power and consolidate the rule. Palaces, mausoleums, gardens and defense facilities became the main architectural landscape in ancient China. After Wei and Jin dynasties, due to the introduction of Buddhism and its expanding influence in China, large-scale Buddhist temples and other religious buildings became a major feature of Chinese architecture at that time. During the Ming and Qing dynasties, with the development of commerce and the continuous maturity of handicraft industry, China's architecture once again reached its peak. At the same time, the advent of the age of great navigation in the west also brought western civilization into China. At this time, Chinese architecture, apart from the traditional Chinese style, also integrated many elements of western architecture. The Chinese architecture that shows this characteristic incisively and vividly belongs to the old Summer Palace, which is called "the garden of ten thousand gardens"<sup>[5]</sup>.

Speaking of the old Summer Palace, it has to be said that it is the most beautiful treasure in the history of Chinese architecture and the most impressive building for countless Chinese people. It plays an important role in people's mind not only because of its magnificence, but also because it has witnessed the rise and fall of an era. In the history of Chinese architecture, it has become the epitome of an era. The old Summer Palace is arguably the most typical and successful example of Chinese and western architecture. In terms of its position in the history of world architecture, it is comparable to the palace of Versailles in France. Unfortunately, after the fire of the old Summer Palace by British and French troops in 1860, this garden of ten thousand gardens has been looted again and again in the war and changed beyond recognition. There is nothing left in the old Summer Palace except some broken walls. This has to be said to be a great loss in the history of Chinese architecture, but also a great loss of world civilization.

## 2.2 Development of western architectural style

The civilization of the west originated from the Greek civilization. Different from the unified governance of China, Greece is composed of numerous city-states,

large and small. Each city-state has its own unique governing concept and conducts its own affairs. But this does not mean that the city-states are not connected. They are connected by a common language, literature and culture. Therefore, although western architectural styles vary in detail from region to region, they are essentially the same.

Greek architecture is the foundation of traditional European architectures and has a profound influence on the formation of western architectural style. The most famous buildings in Greek architecture are various temples, such as Parthenon temple and Erichthion temple<sup>[4]</sup>. The Greeks attached great importance to the appearance of the temple. In order to bear the weight of the top of the temple and make the appearance of the temple more beautiful, the Greeks attached great importance to the construction of columns. The more famous types of Greek columns are: Doric column, Ionian column and Corinthian column. Among them, the Doric column is the most famous because its representative work is the acropolis called the crown of Athens.

The architectural style of ancient Rome basically followed the basic characteristics of Greek architecture, preferring to use a variety of columns to support the gorgeous and heavy dome. The outer wall of the building is often filled with all kinds of ingenious sculptures for the purpose of decoration.

When the European society entered the Renaissance era, Europeans began to raise a lot of Renaissance activities, so there are many buildings with the characteristics of the Renaissance. At that time, architects began to reject the traditional Gothic architecture and advocated the restoration of the architectural style of ancient Rome. Columns, arches and domes are once again the dominant features of the building.

After entering the 20th century, western architecture also began to pay attention to practicality and economy, and began to advocate innovative architectural style, so "post-modern architecture" came into being. This kind of architecture emphasizes simplicity and practicality, and rarely uses luxuriant and complex decoration to decorate the architecture. Generally speaking, the evolution of western architecture is huge, and most of it changes with the change of social nature and people's thinking, which has certain epochal characteristics.

### **3 Reasons for differences between Chinese and western architectural styles**

#### **3.1 External reasons**

##### **3.1.1 Natural factors**

China's ancient dynasties were mostly built in the plains in the middle of subspecies, and the land was rich in various kinds of trees. Therefore, the central plains were rich in timber resources, which made it easy to build houses with local materials. Therefore, most houses in ancient China are mainly made of wood structure<sup>[3]</sup>. However, most western buildings use stone materials as building materials. The main reason is that the European continent has a small area and a wide range of mountains and rivers, so there are fewer trees but with many mountain and stone resources.

##### **3.1.2 Geographical environment factors**

In terms of geographical environment, China and the west are also very different, which also leads to the difference in architectural styles between China and the west<sup>[4]</sup>. China is a vast country with many plains and a long history of agricultural civilization. Therefore, people are very dependent on the natural environment and the way of living in groups. Therefore, most ancient Chinese buildings appear in the form of architectural complex, and all of them combine the environment background of the building to some extent. In Europe, due to the influence of mountains and terrain and the serious limitation of space, large ethnic buildings cannot be fully extended. Therefore, most western traditional buildings are mainly independent castles or churches, emphasizing individual images.

#### **3.2 Internal reasons**

##### **3.2.1 Political and cultural factors**

Architecture is not only the label of a country's culture, but also the epitome of a country's political culture. Therefore, political culture will also influence the style of architecture<sup>[2]</sup>. Ancient China was under the centralized political system for a long time, so it emphasized the supremacy of imperial power and hierarchical system. Therefore, most of the ancient Chinese traditional buildings also follow this kind of rules, which are uniform in form, distinct in priority and orderly. It perfectly reflects the social characteristics of ancient China<sup>[4]</sup>. Since the ancient Greek civilization, western political culture has emphasized a democratic

ruling mode. Therefore, most western buildings are less restricted by the ruling class, and most of the urban layout is irregularly radial.

##### **3.2.2 Humanistic factors**

Ancient Chinese followed nature and believed that contradicting nature would offend god and lead to disaster. Therefore, the construction of architecture was close to the natural environment, and the architectural style was mostly influenced by the natural environment. However, western architecture usually pays great attention to the overall characteristics of each building and pursues the uniqueness of architecture. At the same time, under the influence of religious culture, many of the western architectures have certain religious factors. The most typical architecture is gothic, whose solemn architectural style expresses people's respect for god, while its towering spire shows people's desire to get close to god and shorten the distance between heaven and the world.

### **4 The fusion of Chinese and western architectural styles**

#### **4.1 Opportunities for fusion**

Due to the barrier of mountains and deserts and the lack of transportation conditions, Chinese and western architectural culture developed in a closed system according to its own characteristics for a long time. Until modern times, with the development of science and technology in various countries and the advent of the age of great navigation, cultural and technological exchanges between China and the west became more and more frequent, and architectural styles began to gradually integrate.

The first major change in Chinese culture came after the opium war. However, such a culture shock is not a peaceful evolution, but a fierce cultural confrontation. In this cultural confrontation, China's absorption of foreign cultures has been in a very contradictory state. If China wants to get rid of the situation of being invaded, it must learn advanced western culture. However, western countries' suppression on China in political, economic and cultural aspects has created an insurmountable gap of national contradictions between China and western countries. This strong ethnic conflict makes Chinese people's rejection of foreign cultures even more serious<sup>[5]</sup>. In such an environment, China's absorption of foreign culture is more the result of the invaders' forced promotion.

## 4.2 Methods of fusion

Generally speaking, Chinese and western architectural styles have two different approaches<sup>[4]</sup>. One is based on the traditional Chinese architectural style and absorbs the technology and characteristics of western architecture on the basis of the original Chinese architecture. The other is based on the western traditional architecture and inserts some Chinese elements in it, so as to realize the integration of architectural styles.

The integration of architectural styles is mainly divided into the integration of architectural appearance, internal structure and architectural technology<sup>[3]</sup>. The architectural style pursued by all countries in modern society is: on the premise of meeting the needs of the development of modern society and life, to reflect the traditional architectural cultural characteristics of the region as much as possible.

## 5 Thoughts on the development of China's future architectural style

### 5.1 Current problems in China's construction development

The development of Chinese-style architecture is still faced with many problems: for example, the current technical level of China's construction industry is not enough to support the perfect combination of China's long and brilliant architectural culture and modern architectural needs, and the lack of advanced materials and technology seriously restricts the development of China's construction industry. In addition, Chinese architecture is close to the modern development in the process of gradually lost its original characteristics, therefore, how to keep the building the high quality of maximum and cultural integration in the world in the context of a comprehensive and detailed manifests the Chinese architectural culture of the original characteristics become the construction industry in China now issue to consider.

### 5.2 Analysis of the causes of current architectural style problems

There are two main factors affecting architectural style<sup>[6]</sup>. On the one hand, it is the needs of the ruling class. Throughout all ages and all over the world, although many of the beautiful buildings admired by the world are the crystallization of the wisdom of countless working people, it is the will and needs of the ruling

class that really determine the main style of architecture. For example, in terms of European architecture, in order to facilitate their rule and their own entertainment needs, the nobility of ancient Rome built many temples, theaters, gladiators and other buildings full of Roman style, which became a beautiful scenery line of ancient Rome. In the feudal society of Europe, the church built many gothic churches for the convenience of ruling people's thought and the spread of religion. After the west entered the capitalist society, there appeared many buildings of Renaissance and romantic style on the European continent, which were also the embodiment of the capitalists in order to consolidate their rule. And the situation of ancient Chinese architecture is roughly the same as that of Europe. From the Great Wall and mausoleum in Qin dynasty to the Buddhist temple in Han and Tang dynasties to the landscape gardens in Ming and Qing dynasties, the political purpose of Chinese architecture is far more than practical. Therefore, the architectural style is often controlled by a few rulers and unable to absorb the opinions of the masses, which greatly restricts the development of architectural style.

On the other hand, the types of building materials and the development of science and technology also greatly affect the development of architectural style<sup>[2]</sup>. If architecture wants to achieve revolutionary development and form a new type of architecture combining tradition and modernity perfectly, it must break the restriction of building materials and technology and provide a new development path for architectural creation. After the industrial revolution, the industrial level of western countries has been improved to varying degrees, and a variety of new building materials have emerged in an endless line. This has led to significant changes in the architectural styles of western countries. A number of modern architectures have emerged in Europe and America, making the whole continent full of modern flavor. This kind of new architecture has completely broken through the original framework and made a great breakthrough both in appearance and in the idea reflected in the architecture. In contrast, the road of China's construction reform is not so smooth<sup>[7]</sup>. The main reason is the lack of building materials and technology. After entering modern times, Chinese culture was gradually endowed with western characteristics under the influence of western culture, and China began to learn to use some new building materials to build some buildings with western styles.

Gradually, Chinese architecture began to break the restrictions of traditional architecture. However, even though Chinese architecture has achieved a breakthrough and started to take on a new look, it is essentially a change based on western architecture. Although it seems to be much more advanced, it gradually loses the original style of traditional Chinese architectures. One of the reasons for this phenomenon is that China does not have suitable materials and technologies to support the improvement of Chinese buildings<sup>[1]</sup>.

### 5.3 Suggestions on solving China's current construction development problems

(1) Narrow class differences, enhance the participation in the construction industry, and make the majority of the people participate in architectural design. While a few elite members of the construction industry can come up with near-perfect solutions, brainstorming is no bad thing in any case. Listening to the opinions of the masses may yield some unexpected gains<sup>[6]</sup>. (2) Promote the development of science and technology to improve the quality of building materials and the level of building technology<sup>[3]</sup>. As mentioned above, one of the serious problems faced by the development of modern architecture in China is that most of the styles of modern architecture in China are copied from western architecture, and in the development of traditional architectural styles, they have not completely broken through the limitations of tradition and formed a modern architecture with Chinese characteristics. As for architecture, advanced materials and technologies are indispensable if artistic styles and design concepts are to be successfully put into practice. (3) The government strengthens the emphasis on the construction industry<sup>[3]</sup>. As an important part of China's economy, the macro-control from the government is essential. The government should pay attention to the development of the construction industry from various aspects<sup>[7]</sup>. The most important aspects include: paying attention to the fund investment of the construction industry, paying close attention to the distribution of materials in the construction process, the application of technology and the quality of the construction to ensure

that every building, whether government buildings, public facilities or private housing, can be completed with quality and quantity. In this way, construction cost can be saved and maintenance cost can be reduced in the later period of construction.

## 6 Conclusions

Nowadays, the world situation is becoming more and more diversified. Under the influence of this trend, buildings with different cultural styles are becoming more and more common. With the development of modernization trend of thought and the continuous improvement of science and technology, modern architectural culture has become a major trend of future architectural development. In the context of globalization, China's modern architecture is also becoming increasingly mature. More and more foreign architects are flooding into China to integrate their own architectural concepts into Chinese architecture. Chinese architects are also trying new architectural models that combine Chinese and western styles, tradition and modernity.

## References

- [1] Chen XL. Analysis of the differences between Chinese and western architectural cultures[J]. Beauty and times (city edition), 2018(7):20-1.
- [2] Hou YB. Cultural collision and "integration of Chinese and western architecture"[J]. Huazhong architecture, 1988(3):6-9.
- [3] Sun L. Differences and integration between Chinese and western architectural design[J]. Art science and technology, 2018(2):142-3.
- [4] Li FM. Evaluation and reflection on the development of Chinese and western architecture[J]. Journal of pengcheng university, 1997(1):44-8.
- [5] Shi J. Spirit of the earth[M]. Shandong: shandong pictorial publishing house
- [6] Dong Y, Sun R. A brief analysis of Chinese and western architectural cultural concepts[J]. Architecture and culture, 2014(11):150-1.
- [7] Wang YY. Comparative study of Chinese and western architectural texts[J]. Art education research, 2014(10):183.
- [8] Zhang AZ. Perspective of cultural differences between Chinese and western architecture[J]. Journal of jiamusi institute of education, 2012(6):104-5.