



The Influence of Cultural Differences on Chinese and Western Ancient Architecture

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Abstract: Architecture is a frozen music, a visual art, and a visual object whose existence is witnessed by history. Some classic ancient architectures including the pyramids of ancient Egypt, the Parthenon of ancient Greece, the Pantheon of ancient Rome, the Forbidden City, the Great Wall, the Hanging Temple of China and other world-famous traditional Chinese and Western architectures reflect ancient philosophical thoughts of the times. Architecture has formed a unique culture with the passage of time, and in turn culture plays an influential role to the formation of architecture. Geographical differences cause diversity to architectural cultures all round the world. In terms of Chinese and western ancient architecture, the two differ each other on appearance, connotation, space and structure, which indicate not only the culture characteristics but also the aesthetic changes behind the architectures between China and the West. The West's passion for stone architecture and the East's passion for wood architecture are determined by national culture and geographical environment. It is difficult to judge which one is superior, since such designs are developed to adapt to the environment and living habits. Ancient people built their characteristic architecture to meet the needs of the local people and living conditions.

Keywords: Differences between Chinese and Western Ancient Architecture, Cultural Differences, Architectural Culture

Introduction

Different people have differences in historical origins, customs, ways of thinking and values, which also lead to different cultures in different regions. In a sense, architecture itself is culture, and the three most influential architectural cultural systems in the world are Western architecture represented by Europe, Eastern architecture represented by China, India and Japan, and Islamic architecture. The different architectural cultures compare and intermingle with each other, and generate new ideas, while the Western culture focuses on individuality and rational thinking about natural phenomena, and Western architecture emphasizes architectural monoliths and geometric shapes. With the advent of the information technology era, people can enjoy the famous places around the world without leaving home through the Internet, but there are also many comments on the Internet, some people think that Western architecture is more majestic and magnificent than Chinese architecture, so they are sure that Western architecture is better in the competition between Chinese and Western ancient architecture, and some people think that Chinese ancient architecture is more elegant and brilliant, so they reject the architecture of other countries. However, the ancient architecture of any country symbolizes the development history of a country and represents the cultural background of each country, and the ancient architecture from any region is a treasure worthy of appreciation for future generations. The difference between Chinese and Western ancient architecture is the difference of culture, which reflects the difference of material and natural environment, the difference of social structure form, the difference of human way of thinking and the difference of aesthetic realm. Different historical cultures and living customs have created different architectural styles, therefore, taking the cultural differences between China and the West as the starting

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point and comparing the differences between Chinese and Western ancient architecture can not only solve the phenomenon of "one-sidedness" of some people towards ancient architecture, but also allow more people to experience the differences between Chinese and Western cultures, and inspire more people to understand different nationalities and cultures. We will learn from history and let the beauty of Chinese and Western ancient architecture flourish

Literature Review:

Facing western mainstream value^[3] seek common points while reserving difference, and allow the socialist value outlook standing in the forest of world ideology .The book is aimed primarily at students of ancient history and general readers, but also at scholars working on urbanism in other periods and places^[4].report an empirical comparison of matched samples of Chinese and Western construction project managers' conceptions of their work^[5]. J.J. Clarke shows us how Taoist texts, ideas, and practices have been assimilated within a whole range of Western ideas and agendas^[7]. The concluding segment examines historical conditions of law and religion and their relevance for contemporary discussion on human rights. By looking closely at selected classical texts and events^[9] offer both a sustained critique of Confucianism in its traditional formulation and a suggested attempt to re-interpret aspects of the tradition for the current situation. Li demonstrates conclusively the fundamental role of aesthetics in the development of the cultural and psychological structures in Chinese culture that define 'humanity'^[10]. reveal its significance to the current Chinese higher educational practice and reform^[11]. show that an implicit classification hierarchy emerges spontaneously on Wikipedia^[15]. Other influential work includes^{[6] [8] [12] [13] [14]}.

Research Objectives and Research Methods

1. Research Objectives

The traditional concept of mankind is that culture is a social phenomenon, which is the product of long-term human creation, and at the same time a historical phenomenon, which is the accumulation of human society and history. To be precise, culture is the way of thinking, values, lifestyle, behavior, art and culture, science and technology of a country or nation that can be passed on and transmitted, which is a generally recognized ideology that can be passed on by human beings to communicate with each other, and is the sublimation of the perceptual knowledge and experience of the objective world. This study starts from the cultural differences between China and the West, taking the differences in thinking, beliefs and aesthetics between China and the West, the differences in social systems and lifestyles and traditional customs as the research objects, and uses them to analyze their influence on ancient architecture.

2. Research methods

Literature research method:

We read a lot of literature about Chinese and Western architectural differences, Chinese and Western cultural differences, Chinese and Western religious differences, Chinese and Western institutional differences and other related literature, and then summarized and organized to understand the historical development of Chinese and Western architectural differences and development background, so that the study is more scientific and representative. After the comparative analysis of literature, we have a deeper understanding and clearer insight into the research content.

Interdisciplinary research method:

Architecture, history, religion, etc. have different research contents and methods, through interdisciplinary research methods to collect material information and integrated research, to provide a large number of reference arguments for the comparative analysis of the differences between Chinese and Western ancient architecture, increasing the credibility of the study and more comprehensive analysis from the perspective of cultural background.

Descriptive research method:

The descriptive research method is a simple research method that describes and explains the existing phenomena, laws and theories of Chinese and Western architecture, religion, and historical and cultural backgrounds by combining them with our own understanding and verification. We summarize the experiences of our predecessors, internalize them, form new perceptions and ask new questions. The descriptive research method is rich in examples and is conducive to information collection and data compilation to popularize knowledge.

Results and Discussion

The influence of beliefs and aesthetic differences on the space and style of ancient architecture:

Since the ancient Greek period, Europeans have attached importance to the logic of form, western architecture often has a sense of sculpture, emphasizing the form of the facade and the sense of perspective, westerners generally believe that three-dimensional geometry is the most beautiful figure in the world, European gardens are also composed of geometric shapes of pools, flower beds, lawns, etc.. The aesthetic scale of architecture is not only a visual effect created by the space and appearance of the building, but also a subjective feeling generated by the aesthetic characteristics of the building in people's mind. The aesthetic scale of architecture essentially indicates a relationship between people and architecture, and is a sense of size formed by the proportional relationship between the whole or part of the building and people, which expresses the appropriate size of the building or the aesthetic effect to be pursued. From the ancient architectural tradition, Chinese and Western architecture, under the influence and constraints of different social cultures, formed two different aesthetic scales, that is, Chinese architecture pursues the human scale, while Western architecture aspires to the scale of God, the so-called human scale, refers to the design principles and structural modeling and other aspects of human beings as the starting point, taking into account the applicable functions and aesthetic characteristics of people. Chinese traditional architecture, whether palaces, temples, royal or private gardens or residential complexes, from the whole to the local, from the group to the individual, are very concerned about the scale of the volume of reasonable collocation, pay attention to the harmony of the spatial order round, in the psychological can produce a comfortable and pleasant aesthetic feeling. The so-called God's scale refers to the distance between man and God highlighted by the towering of architectural space. Western classical architecture, whether it is the pyramids in Egypt, the Parthenon in Greece, the Arc de Triomphe in Rome or the Hagia Sophia in Constantinople, Notre Dame in France, all focus on the shape and extreme size of the monolith to express the sense of reverence for God. The Renaissance was a period of great change in Western architecture, based on the critique of the medieval theocracy and the affirmation of humanism, the architects of this period hoped to reshape the harmonious order of the ideal classical society with the help of classical proportions, and they believed that beautiful objects, both the constituent elements and the objects themselves, must be in harmonious proportion and balance. They also believed that the proportions of the human body were a perfect proportion and that this natural order should be adopted and expressed in architecture.

In addition to that, in the Chinese concept, great importance is attached to the overall harmony, while the Westerners pay more attention to the differences of analysis. Chinese philosophy talks about the unity of opposites in things and emphasizes the harmonious relationship between man and nature and man and man. Western philosophy, on the other hand, advocates the independence of the objective world and the separation of subject and object. The difference between Chinese and Western philosophy of architecture is reflected in the relationship between man and architecture, and the relationship between space and entity as mutual transformation. Western classical architecture emphasizes solids, which are dry and changeable, while space differs less and is more monotonous. Traditional Chinese architecture is both real and virtual, and is rich in physical and spatial aspects, especially in residential houses and their gardens and imperial palaces. The traditional Chinese idea of "unity of heaven and man" is reflected in architecture, which is very different from the Western view that man is separated from objective things. The most significant is the functional adaptability and spatial flexibility of ancient Chinese architecture, which fully adapts to the changes in human life and integrates with people. Together with the choice and arrangement of patios, courtyards, garden corridors and feng shui, there is a close integration between people, architectural space and nature. For example, traditional Chinese architecture attaches importance to the adaptability of functions, such as houses, study halls, teahouses, hotels, etc. coexist at the same time to adapt to the different needs of use. Western classical architecture attaches more importance to geometric composition and emphasizes the majestic beauty of architecture. For example, the Royal Greenwich Hospital in London is stately and luxurious, but nearly half of the wards are part of the corridor of the large unified room, the courtyard is as large as the parade ground, in the forecourt display giant anchor, just like a naval museum. Another example is the European teaching in general is extremely tall and deep, far from the human scale. Another example is the medieval row of store guilds and market houses, many long and narrow and no patio, small windows on the mountain side, the internal use is very inconvenient, while the wall is richly carved and painted, the emphasis is on viewing from the outside.

The differences between Chinese and Western architecture can also be seen in other means of cultural presentation. Take the painting "The Academy of Athens" by the Italian painter Raphael during the Renaissance period as an example, in 1509 the Pope invited Raphael to paint for his Vatican Palace, and the painting Raphael made was the "Philosophy" in the first room, and named "The Academy of Athens". The painting is 20.794 meters high and 6.172 meters long, with a total of 58 figures, each of which is painted vividly, and the expressions on each face are clearly visible, and the figures in "The Academy of

Athens" are different from his other works, with the figures painted more voluptuously and stoutly. From the fresco, the painting uses an arch as the background, and this arch goes straight to the sky, which instantly breaks the limitation of the wall facing the room and visually increases the depth of the whole picture and the sense of space. We can also see two sculptures on the walls on either side of the archway: on the left is Apollo holding a seven-stringed lyre, and on the right is Athena, the goddess of wisdom, and her shield of Medusa. From this painting, we can easily find that the Westerners' reverence for the gods can be seen everywhere, and more obviously, the Westerners' ultimate pursuit of spatial three-dimensionality, which can also be seen from the proportional size of the painting to the towering characteristics of Western ancient architecture.



Academy of Athens

Chinese Suzhou Garden

Western Geometric Garden

Ancient Chinese architecture was particularly good at courtyard construction, and courtyard-style architecture was prevalent, with the closed-centered structure creating a harmonious and quiet environment for people to cultivate themselves. Confucianism was regarded as the orthodoxy and dominated the construction of ancient Chinese architecture. Confucianism, which promotes introversion and modesty, is reflected in the construction of houses and houses in closed courtyards. At the same time, since ancient times, China has paid special attention to "filial piety", which is the respect for elders and children, and living under the same roof can not only maintain family ties, but also facilitate children's filial piety. In this way, a centripetal style of architecture is formed. Influenced by traditional thinking, Chinese architecture is conservative, emphasizing the harmony and unity between man and nature and the natural scenery.

From the comparison of Chinese and Western thinking beliefs and aesthetic differences, China's humanism that emphasizes emotion and knowledge of reason and Western god culture form a sharp contrast, and at the same time formed a sharp style difference in architecture, the humanistic spirit of the Chinese permeates in thousands of years of social life, architecture as a container of culture must always reflect this spirit, while this humanism in China's long feudal society is bound to personal concepts. At the same time, this humanism in China's long feudal society inevitably played a restraining role in personal perceptions, making the physical vision of people smaller and less open. And with the idea of worshipping the gods in Western classical culture, Western architectural styles are also distinctive, whether it is the Pantheon in ancient Rome or Notre Dame in Paris, all reflecting the pursuit of tallness and the desire to intersect with God. The Chinese have a unique understanding of architecture, seeing it as a part of nature, with people in the building as in nature. Whether it is the Great Wall of China or St. Paul's Cathedral in the West, both are expressions of people from different regions interpreting architecture in their own best way.

The influence of social system differences on the function and material use of ancient buildings:

The political system in the ancient West was somewhat democratic, and city-state democracy prevailed. The Greek city-states had a rich variety of types of polity, roughly divided into democracies, aristocracies and monarchies, and oligarchies. Among them, the city-states of Athens and Sparta are particularly representative. Sparta had an aristocratic system, while Athens was known for its democracy. The Greek city-states practiced civic politics allowing city-state citizens to enjoy fuller political rights. Athenian democracy, in particular, has provided valuable lessons for future generations. Groups are the most fundamental part of Western society. Every group has to face the challenges of other groups in its development. In a competitive environment, a group either wins or perishes. For a group to develop, it must form alliances with as many groups as possible to oppose its enemies. The principles of democracy are recognized and promoted in order to establish the legitimacy of leaders in group alliances. For example, democratic politics in Athens and during the Roman Republic, so it can

be seen that the ancient Western political system had a certain degree of democracy. For example, the Acropolis, an ancient architectural complex in Athens, was arranged in accordance with the topography of the land, and the layout was free and lively, giving the impression that it was more vibrant than solemn. The typical representatives of Western architecture are the ancient Greek temples and medieval churches. Ancient Greek architecture is good at using the human body as a scale, as can be seen by the ratio of columns to human height, with Doric and Ionic representing men and women. The towering stone columns support the thick roof, forming a richly developed interior space, and symbolize the worship of strength, giving an aura of expansion upward and around, highlighting column changes, emphasizing the expression of the individual, and forming a sharp contrast with the surrounding natural environment. In addition, ancient Greece and Rome is located in the land coast, limestone, marble reserves, the humid climate also makes the building using wooden structures will be more susceptible to decay, so stone buildings are more conducive to preservation and maintenance. In Western mythology, the human race suffered a great flood was recreated through the stone, the medieval apprentices were seen as uncarved people, and those who have learned to be seen as "pillars of talent", so you can see that the stone in the Western concept, in a higher position. Ancient Roman architects, as early as 2000 years ago, put forward the principles of strong, practical and beautiful architecture. Architecture should be strong first and foremost, and strength and longevity are linked together. To pursue strength and longevity, stone is the most appropriate building material. Some people say that Western architecture is built for the gods, so Western stone buildings are generally developed vertically, and the higher the stone roof is built, the closer it is to the gods, for example, the Colosseum in Rome is 48 meters high, and the Pantheon is 43.5 meters high, these solemn and majestic buildings truly reflect the fervor of Westerners who worship the gods.

The ancient Chinese architecture has a strict hierarchy of barriers from the layout of the building orientation, size, structural components, architectural decoration, building materials to the size of the city, the width of the road, etc., everywhere cohesion of strong hierarchical norms, and even the relevant legal provisions. The Forbidden City is the largest surviving wooden structure in the world, covering an area of about 720,000 square meters, with more than 70 large and small palaces and more than 9,000 houses, where the 9,000 pieces are not nine thousand individual rooms, but an area unit, which represents the emperor's ruling status. In addition, the Forbidden City's Taihemen Square within the Golden Water River is located on five Hanbai stone bridges, this can be said to be the most gorgeous section of the river, like a bow and arrow, and these five stone arch bridges are like the five arrows of the bow that will be shot, representing the benevolence, righteousness, propriety, wisdom and faith of the Ru family, that is, the five virtues will be shot to earth. The entire Forbidden City is divided into Inner Jinshui Bridge and Outer Jinshui Bridge, Inner Jinshui Bridge closer to the emperor, different status levels of people walking on the bridge are different, there are dedicated to the emperor walking, there are high officials and members of the clan walking, there are also for lower ranking officials walking, such details reflecting the imperial power can be seen everywhere in the Forbidden City. Thus we find that, influenced by the centralized system of ancient times, Chinese ancient architecture tends to serve the imperial power in the selection of materials and functions, bringing the idea of imperial supremacy to the fullest. This makes one wonder why the ancient Chinese were not keen on stone architecture. The first is the time to build, from the construction of the situation, wood buildings are easier to build than stone buildings, large stone buildings often take hundreds of years to build, and the ancient Chinese dynasty did not have so much time to build such a palace, from the collection of stone and then processing and transport costs only more manpower and material resources. Therefore, stone architecture is generally used in walls, such as various grottoes and wall reliefs, and stone architecture is very demanding on carvers, so carvers are very difficult to find, but carvers for wooden buildings are more easily produced. Secondly, ventilation and heat dissipation, the stone buildings in the West are with a defensive role, so they are more closed, from the ventilation, wood buildings have more ventilation and faster heat dissipation, in addition to these, wood buildings have a higher degree of carving and are more complex, coupled with the unique construction, Chinese wood buildings are more brilliant in the history of world architecture, and finally, resistance to earthquake damage, stone buildings are relatively hard buildings, in Defense against earthquakes, often cracks or collapse, it is more difficult to repair, and wooden buildings with a certain amount of seismic performance, which the ancients have long understood, whether it is repair or seismic, and adaptability, wooden buildings have certain advantages, of course, if the earthquake level is not enough, stone buildings also have advantages, these factors have made the ancients prefer wooden buildings, in addition to these and many other factors, such as by Confucianism, the ancient people have a love for wooden buildings, from the historical development, the ancients did not give up on stone buildings, although in some of the palaces to wooden buildings, but stone buildings are also many, some stone carvings are also lifelike, and in the wall China is the use of stone buildings, the famous Great Wall is unique. Comparison of Chinese and Western architecture have their own beauty, are determined from their own culture of the West is keen on stone architecture, the East is keen on wood architecture, which are and national culture, geography and other aspects of the decision, and can not say who's architecture is superior, only that the ancients in order to adapt, will build a more suitable for the local ethnic architecture.

Ancient Western Temple Architecture	Ancient Chinese Patriarchal Ritual Architecture
Venerate the gods and architecture is a symbol of beauty	Patriarchal hierarchy is strong, and architecture is the embodiment of ritualistic thinking
Architecture Towering, Expecting Human-God Communication	Architecture is mainly flat, reflecting clan reproduction
Stone construction is the main pursuit of hardness	Follows the timber architecture and pursues to follow
Architecture is clearly outward-looking	Building closed, inward-looking prominence

The influence of lifestyle and traditional customs on the structure and layout of ancient buildings:

Traditional Chinese architecture has the following three characteristics: firstly, the artistic effect of symmetry, secondly, wood as the main frame, and thirdly, the unique individual shape. Western architecture does not focus on the pursuit of structural beauty of buildings, but more on the pursuit of sculptural beauty of buildings, the most common in Western architecture are stone columns and corridors, which abstractly express the beauty of the human body. In ancient China, the influence of the Zhou ritual system, strict hierarchical structure, naturally also affects the art of architecture, not only at all levels of public buildings in many aspects of strict regulations, according to the hierarchy to distinguish between different styles, even the civil building pattern also has the order of the elders and inferiors, emphasizing the ethical affiliation, such as the Forbidden City in Beijing, pay attention to the symmetry of the central axis, deep layout, three dynasties and five doors, the front dynasty after the bed, symbolizing the nine to five, the imperial power The idea of supremacy. Another example is the traditional Chinese courtyard, which also has a strict axial symmetry layout, with the backyard on the axis being the main house for the elders, the two sides of the rooms for the juniors, and the front yard for the servants' houses and guest rooms, with a strong emphasis on the order of inferiority and superiority and a strong feudal ethic. It is easy to see that all these features are exemplary of traditional Chinese culture. Chinese architecture is closely linked to the highly prosperous secular culture, emphasizing the "worldly application", and almost continues a fairly consistent aesthetic style, mainly using wooden frameworks as the main structural method, paying attention to left-right symmetry, and in the visual and spatial art, using feng shui layout to imply the unity of heaven and man, with closed courtyards showing the coordination of single buildings in exchange for The harmony and unity of the overall environment, not the pursuit of a single building of a few independent, focusing on the combination of virtual and real group space layout, multiple groups of buildings around a central space composition, layer by layer, pay attention to the organic cooperation and lining of the building group plane unfolding. From the spatial layout of the building, Chinese architecture is a closed group of spatial pattern, spread out in the ground plane. No matter what kind of Chinese architecture, from houses to palaces, almost all of them are in one pattern, similar to the "courtyard" pattern. The beauty of Chinese architecture is also a "collective" beauty. In contrast to China, Western architecture is an open monolithic spatial pattern that evolves to high altitudes. Comparing the Forbidden City in Beijing and the Louvre in Paris, which were built and expanded in similar eras, the former is a magnificent and imposing group of thousands of individual houses, forming a series of courtyards around an axis with an unusually large spreading plan. Under the influence of such a collective culture, China has since ancient times advocated a united and harmonious family atmosphere, and under the influence of filial piety and traditional farming civilization, the phenomenon of several generations living under the same roof was very common in ancient China, which was convenient for both collective work and for children to do their filial duty in front of their elders, and the influence of family-centered collectivism was far-reaching, which laid the groundwork for the emergence of courtyards and old Beijing hutongs. This laid the groundwork for the emergence of the courtyard house and the old hutongs in Beijing. In Western countries, on the other hand, they emphasize personal independence and privacy, and families of origin and new families are independent of each other, and rarely have the habit of living together for several generations, and in Western countries, children do not have to bear the obligation of supporting their parents, so both in economic and daily life, parents are completely independent and rarely depend on their children's care, and parents do not have the habit of helping their adult children to take care of their children, so in Therefore, there is no representative closed building for several generations to live together in the Western ancient architecture.

Conclusions

Through comparison, we can see the difference in architectural styles between East and West due to the difference in traditional culture. In the future world, people will be more than tired to continuously meet the material and spiritual needs and use their wisdom to write page after page of brilliance and splendor. Architecture is the carrier of the precipitation of human civilization. With its unique language, it tells people the ideology, religious feelings and aesthetic interests of various regions and ethnic groups. Therefore, China and the West, which have very different geographical and historical cultures, also have different architectural cultures. When we truly understand the differences between Chinese and Western architectural cultures, we can keep the vitality of traditional architecture and further promote the development of human civilization.

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