Artistic Analysis on Jilin Stone Building Based on Hippolyte AdolpheTaine’s Three Elements Theory

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Abstract:

The paper elaborate the characteristics of Ji Lin Stone Building, based on Hippolyte AdolpheTaine’s Three Elements Theory, including race, times and environment. The ethical traits of the building is expounded in three aspects: Chinese ethical culture, the building layout and traditional adorn. The traits of times is stated in two aspects of building and architect. The paper concluded that the Stone Building embody the contradiction of architect’s thinking and the times.

Keywords: Three elements theory, Stone building, Artistic analysis.

I. DANNER'S THREE ELEMENT THEORY

1.1 The Origin of Danner's "Three Elements"

Danner (Hippolyte AdolpheTaine, 1828-1893) is a French literary critic and aesthetic historian. He grew up in abstract thinking since he was a child, and lived for ideas. Danner traveled to various European countries and provided many materials for his academic research. Danner taught the history of aesthetics at the Paris School of Fine Arts. His main works include "History of English Literature", "Critiques", "La Denne and His Fables", "On Intelligence", "Philosophy of Art", and the incomplete "On Will" etc. "Philosophy of Art" focuses on Danner's aesthetic thoughts, and is also the highest achievement of Danner's philosophy of art, and is the theoretical summary of his art criticism.

The natural sciences of the 18th to 19th centuries had a great influence on Danner's artistic philosophy. Among them, philosophers and art critics such as Hegel, Comte, Montesquieu, Saint-Beuf, Winkelmann, etc. were the direct originators of Dana's thought. Danner is a positivist and empiricist. He believes that the emergence, development, evolution, and extinction of all things in the world follow laws. Both science and art can adopt a purely
objective attitude and treat everything equally. "Aesthetics itself is one A practical botany", so he believes that the methods and means of natural science can be used to study the development and evolution of art. Whether it is material things or spiritual things, both science and art follow Darwin's theory of evolution, and the gradual development and evolution from low-level to high-level depends on the three elements of environment, age, and race, namely the "three elements" theory. Danner believes that the production of works of art depends on the spirit of the times and surrounding customs. The three factors of environment, era, and race are the social and historical backgrounds of artistic works, which determine the types and main characteristics of works of art [1].

1.2 The Connotation of the "Three Elements" Theory

Danner argued with a large number of historical facts that the nature of material civilization and spiritual civilization depends on the three major factors of "race, environment, and age". He said: "To understand a work of art, an artist, and a group of artists, one must correctly imagine the spirit and customs of their era. This is the final interpretation of the work of art, and it is also the basic reason for everything."

Race is the permanent instinct of a nation, and is the inherent cultural tendency of a nation in terms of physiology and genetics in terms of personality, temperament, opinions, and intelligence. This tendency is a nation's innate and most stable original characteristics, and it is rarely changed by the influence of the migration of the environment and the changes of the times. This kind of innate character appeared in the era when the nation originated, and it runs through all his history, and always exists in all situations and climates. Danner described the inner temperament of race as a seed. He said: Artwork is the imprint of the structure of the natural world on the national spirit. The aesthetic sense is innate. The artwork is first of all the product of the entire nation, connected to the life of the nation, and rooted. In the national character. Environment includes natural environment and human environment. The former refers to the physical environment, including natural conditions such as the astronomical status of ethnic life and climate conditions; the latter refers to folk customs and energy, including politics, wars, and the entire social and cultural atmosphere such as national character and life interest. Different living environments will put different marks on the talented races. In Danner's system, human beings were initially driven by the environment through the role of time, planning the characteristics and style of art, and forming artistic features with environmental and regional characteristics. The era is a complex of race and environment. Danner believes that art is always produced in a specific era, and must be stamped with a specific era. Each period has its certain varieties, which become distinctive products. Very rich and complete; and some of the main features of the works reflect the main characteristics of the era and the nation.

In Danner's three elements, "race" embodies the horizontal differences and connections, and is the seed and internal essence of art; "environment" is the vertical influence and change, the soil and external influence of artistic growth. The era is the "external influence" led by the
"seeds of internal essence". The "three elements" are the mutual promotion and interconnection of the trinity.

II. THE NATIONAL CULTURE OF STONE BUILDING

The Stone Building, the former school building of Jilin Province University, was built in 1929 and is located in Chuanying District, Jilin City, Jilin Province (126°55'E, 43°83’N). It is now the teaching building of Northeast Electric Power University. It is a national key protected cultural relic. The designer Liang Sicheng who is a famous architect and enlightener of architectural thinking in China. The stone building is a masterpiece in the development history of modern Chinese architecture.

As a kind of plastic art, architecture is in harmony with the local environment (climate, geographical features), age, race, belief, economy, culture, etc., to achieve an organic whole. All architectural works of art are rooted in nationality, and imprint a common feature, that is, the quality of the entire nation. Therefore, the study and analysis of the artistic signs of the stone building starts with the analysis of race and its basic character, starting from the architectural cultural characteristics of the Chinese nation, and grasping this characteristic that is not affected by time and always exists in all situations and climates.

2.1 The National Culture and Architectural Cultural Characteristics of the Chinese Nation

The race of ancient northern Asia belonged to the Mongolian race, with thick straight hair, flat nose, yellow skin and shovel-shaped incisors. The cross with the Caucasian race formed the characteristics of the mixed race in the northwest region, and the cross with the Negroan race formed the southern Mongolian race of the various ethnic groups in southern my country. The innate genes of race have gradually formed different national characters and characteristics under the infiltration of social development, political economy and geographical environment. This kind of national character will reflect a kind of integration and penetration in different differences, that is, strong cultural identity. Although China has a vast territory and diverse ethnic groups since ancient times, due to its innate racial roots and a unified feudal autocratic system, the common cultural characteristics of all ethnic groups in China have been formed, which has become the fundamental reason for the convergence of ethnic cultures. In general, this kind of national cultural characteristics can be attributed to: Yin and Yang thought and the Golden Mean. The yin and yang thought is the Chinese nation’s understanding of the laws of the world, including the laws of natural and social development.

2.2 Spatial Layout of the Stone Building Complex

The three teaching buildings of the Stone Building: the main building, the east building and the west building (Fig 1 and Fig 2) are all well preserved [2]. The layout and style of the building have not changed much from the original. They are all made of rectangular gray-white granite. The main building has two floors (excluding the basement), covering an area of 3383 square meters, and its plan is slightly in the shape of a "shi". The east and west teaching buildings are arranged symmetrically on the south side of the main building.
Fig 1: The main building of the stone building

Fig 2: East Stone Building (1930)

2.2.1 South-facing Layout of the Main Building: the Embodiment of "Tao"

The auditorium of the group of stone buildings faces south and back to the north. This choice of architectural orientation is consistent with the southward thinking of traditional Chinese orientation. In China, the ancestors first chose the environment as the direction of measurement. *Poetry·Gong Liu* says: That is, the scenery is the hill, and the yin and yang are relative. "*Said Gua in Zhouyi*": Those who leave Ye are Ming Ye, all things can be seen, and the Gua in the South. Li Gua symbolizes light, so "the saint listens to the world from the south and governs toward the Ming." And "the north is good, the two are facing back" (Xu Shen in *Shu Wen Jie Zi*), in Fuxi's Eight Trigrams, the south is stem and the north is Kun. The principle of sitting north and facing south is the understanding and orientation thought gradually formed by the ancients through the process of understanding natural phenomena, and it has the principles of simple materialism and practicalism. Formed the Chinese nation's thinking that the south is the supreme and the north is the submission and tolerance. Therefore, most of the official buildings such as palaces and government offices and the main buildings of temples and
2.2.2 Central Composition with Protruding Axis: the Embodiment of "Center" and "Harmony"

Chinese people often think that the unspokenness of happiness, anger, sorrow, and joy is said to be in the middle, and all that is said to be the sum (The Golden Mean). This kind of doctrine of the mean not only profoundly affects the layout of traditional Chinese cities and buildings in form, but also embodies the cultural pursuit of "harmony". Therefore, Guan Zi says: "If you don't make it, you won't be prestigious." Song dynasty book Building a French Style contains: round shape, square shape, square shape, stand in the suspension, balance in the water, not only reflect the harmony and unity of the overall balance of the primary and secondary buildings and the "courtyard" form of the Chinese architectural complex combination. And it is a manifestation of the national spirit and culture of "respecting the middle and the most precious". The influence of this doctrine of the mean is mainly manifested in two aspects: "court space" and "main building". Courtyard space is the basic unit and constituent unit of Chinese ancient architectural space. Simple constituent units form a rich architectural community. The main building of the stone building is located on the central axis of the entire building complex, and is arranged in a "concave" shape with the two buildings on the south side. Together with the south-facing gate, it forms a regular courtyard-style space layout. The height of the main building is not much different from that of the east and west buildings. In order to highlight its main body position, a high step is set at the entrance, thereby strengthening the control of the central axis on the entire building community.

2.3 Traditional Architectural Decoration Elements

On both sides of the main building’s front facade, there are Chiwen (a roof style like a dragon head), and decorative pieces are retained on the beams and pillars of the interior. Both sides of the steps in the atrium of the entrance are made of Goulan (ancient Chinese Language for Railings) and Baogushi (a stone like a drum that plays a fixed role), and the heads of the pillars are carved with oval patterns. The front facades of the teaching buildings on both sides of the east and west also have Chi-Wen, and the eaves of the building are decorated with the Renzigong (Like a humanoid, a short wood that plays a supporting role) and Yidousansheng (a supporting structure for the roof) imitation wooden relief sculptures from the Northern Dynasties period. Among the pillars in the main building, there are Panjindougong (a supporting structure for the roof between two pillars), Queti (a short wood supporting beam), Yidousansheng, Dougong (a supporting structure for the roof), Baogushi, and beams decorated with brocade lines. The Chiwen is a practical and decorative construction on the roof of Chinese buildings. The Chi is one of the nine sons of the dragon, an ancient Chinese totem. Most of the ancient Chinese buildings are civil structures. The roof ridge is made of wood covered with tiles. It is necessary to fix the tiles at the end of the eaves with tile nails. In the process of beautifying the nail caps, various animal images are gradually formed. The Chiwen is artistic treatment of tile nail form. Dougong and Queti are unique building structural components formed during the
development of Chinese wooden framework. Goulan and Baogushi are the protective facilities of the steps in traditional buildings. They are the traditional structural forms developed in the high-level steps of Xumizuo (high-grade pedestal for Buddhist meditation). The color paintings of the pillars are derived from the wooden frame to protect and decorate the wood. Forms of art [3]. It can be seen that the various decorative patterns of the stone building are based on the symbolic application of the wooden frame of traditional Chinese ancient buildings.

III. THE ENVIRONMENTAL BACKGROUND AND ERA CHARACTERISTICS OF THE STONE BUILDING

3.1 The Era Characteristics of Architecture

At the beginning of the 20th century, China's politics, economy, and military were all reduced to puppets of Western powers, and its culture was weakened by the strength of Western learning. As a scholar-official who was deeply influenced by Confucian culture, the national sentiment was soaring, and national rejuvenation became their common value orientation. Harmony is an inescapable mission. Western democratic and scientific ideas have also profoundly affected their value judgments. At the historical juncture of the country’s worries and the people’s hardship, a large number of patriotic patriots traveled across the oceans to seek ways to save the country. Western art, philosophy, and science and technology were introduced to the country. At the beginning of the last century, the unique cultural diversity phenomenon, China's traditional culture was faced with fierce opposition from the western trend of thought. At the beginning of the 20th century, a group of architects went to Japan, Europe and the United States to receive complete Western-style architectural education, and became the first generation of architectural educators and architects in China. After these overseas students returned to China, they began to establish the earliest architectural education school in China, and later established a civil academic organization for archaeological excavation and research-the Construction Society.

Under the strong influence of Western culture, Chinese and foreign architectural ideas are also undergoing a strong collision, which shows that the time-space relationship between modern Chinese architectural forms and trends of thought is complicated. In addition to Western-style architecture based on eclecticism with colonial input characteristics, a large number of Chinese architects studying abroad are more exploring the revival of traditional architecture, forming a trend of revival of modern traditional architecture.

3.2 Architect's Era Characteristics

In 1901, during this special historical period in China, Liang Sicheng was born. In 1924, he went to the United States to study in the Department of Architecture at the University of Pennsylvania, where he studied under Paul Philippe Cret (1876-18945). Paul Kerry graduated from the Academy of Fine Arts in Paris, so the Penn University Architecture Department taught by him belongs to the orthodox academic teaching system, and the design ideas tend to be eclectic and neoclassicism (Newclassicism) style category. After Liang Sicheng returned to
China in 1928, he served as the dean of the Department of Architecture of Northeastern University. He later established an architectural design office with Chen Zhi, Tong Liao, and Cai Fangyin. From 1929 to 1930, he completed his first batch of works—Beijing Xiangshan Liang Qichao Tomb Pavilion (Fig 3) and the Stone Building in Jilin City (formerly the Auditorium Library and Teaching Building of Jilin Provincial University).

![Liang Qichao Tomb Pavilion (1929)](image)

From his design for Liang Qichao’s tomb pavilion, it can be seen that his design form adopts the "rough cut" stone masonry form commonly used in Western classicism architecture, and the whole rule is made of stone blocks, octagonal. The space form of is the usual style of classical architecture. This octagonal shape also appears on the pillars in the east and west stone buildings and the lampposts outside the building. Comparing the cemetery chapel designed by his tutor Paul Philippe Cret (1876-1845) in the same period (Fig 4), we can see the similarity and closeness of the two forms. This similarity also has an analogy in the design of the stone building.
The "stone building" designed by Liang Sicheng (Fig 1, Fig 2) has a symmetrical overall layout, clear axis, harmonious proportions, and clear primary and secondary relationship. The building uses a large number of rectangles and straight lines to be sufficient for composition, compared with the Federal Reserve Office Building (Fig 5), it can be seen that the architectural facade of the auditorium of the stone building also adopts the classicist typical "three horizontal sections and three vertical sections" composition technique. The vertical section in the middle is a gable facade, protruding forward, and the windows are always two stories. With the large steps set at the entrance, a stable base layer is formed, and it is more prominent in the center of the building complex. The rough stone material is more of Western classicism. Moreover, the head of the hook column in the entrance hall of the main stone building directly adopts the "scroll" shape of the western Ionic column.
Because the University of Pennsylvania continues to use classic architectural teaching methods, it divides buildings into different categories for teaching, resulting in similar buildings with similar shapes. Therefore, when Liang Sicheng was designing university chapels and teaching buildings, his initial design experience as an architect was naturally influenced by Paul Philippe Cret. In terms of design style, he still used similar architectural styles. It is just a change of traditional decorative patterns. This type of design is often called the "decorative" style of architectural revival.

IV. CONCLUSION

Danner said: Artwork is actually a testimony of history. The charm of art lies not only in its aesthetics, but also in its historical value. The specific historical background of the stone building is doomed to its own complexity and contradiction. This feature of the building is realized through the intermediary of the architect. Therefore, any artist realizes the intuitive expression of art's ideals under a large historical background. Their design works are both accidental and inevitable.

Liang Sicheng's father, Liang Qichao (1873-1929), is a master of Chinese studies and a leader of the modern reform sect. Under the influence of this traditional culture, Liang Sicheng's nationalist value orientation and sense of responsibility for national rejuvenation have become stronger. Liang Sicheng's daughter Liang Zaibing recalled: "It may be due to growing up abroad, and our country was in great distress at the time. Under the influence of his grandfather's thoughts, his father had a deep sense of national crisis since he was a child. His motherland cherishes a kind of patriotic enthusiasm for being a child abroad, and this patriotism runs through his life." After submitting his doctoral dissertation "The History of Chinese Palaces" at Harvard University in 1927, Liang Sicheng felt that it was inappropriate to study his own architecture in another country. After going to school, he categorically returned to China. Liang Sicheng devoted his whole life to the research of traditional Chinese architecture, and proposed that the beauty of Chinese architecture originates from the authenticity of architectural structure. However, the design of the stone building is exactly contrary to this. The modern functional layout of the space inside the building is not unified with the external classicism form. This is the contradiction and interweaving of "ancient" and "near". In terms of architectural style, the classical styles of the West are mixed with traditional Chinese decorative elements. This is the contradiction between "in" and "outside", which fully reflects Liang Sicheng's strong awareness of showing nationalism in architecture. Years of professional study, coupled with the first design experience, naturally cannot get rid of the influence of academic education, so Liang Sicheng can only do some embellishment on the surface of the building, but cannot express his inner feelings from the overall building [4].

The contradiction of the stone building is a direct manifestation of the contradiction of the architect's thinking, and also the epitome of the contradiction of the times. It has witnessed the common struggle of the times and the architects. Hegel said: "A work of art is a spiritual
product, and it has to go through beginning, progress, completion and end. " The times and the environment are the soils for art seedlings, flowering and withering. The sum of various social situations and cultural thoughts will definitely arouse people's corresponding needs and cultivate people's special talents and feelings. The artist is a keen catcher of this kind of emotion, and he reflects this feeling, need and talent through art.

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