Influence of Chinese Traditional Culture on Modern Architectural Engineering Design

Kaida Chen 1, a, Pengbo Li 2, b, Yunfeng Zhao 1, c

1 Department of College of Art & Landscape Architecture, Fujian Agriculture and Forestry University, Fuzhou, Fujian, China.

2 Department of Urban Planning, National Cheng Kung University, Tainan, Taiwan, China.

a kaidachenwhu@gmail.com, b lipengbo0214@gmail.com, c 348994169@qq.com

Abstract: The use of Chinese traditional culture in architectural design is a history of wave-driven development. With the development of the construction industry, people's requirements for the appearance of buildings have also gradually increased. While pursuing the modern fashion of architecture, it pays more attention to the connotation of the architecture itself. Therefore, the application of Chinese traditional culture in architectural planning and design is particularly important. Through the analysis of traditional culture and the influence of traditional culture on architectural planning and design, this paper summarizes the performance of traditional culture in architectural planning and design.

Keywords: Chinese Traditional Culture; Architectural Engineering; Design.

1. INTRODUCTION

The use of Chinese traditional culture in architectural design is the history of wave development. With the development of the society and the progress of the times, traditional cultural elements are still active in various design fields, especially modern architectural design. In a sense, new topics can even be described as a linking process. This article elaborates on the traditional Chinese culture, the traditional symbols extracted from China for thousands of years, and the influence of modern architectural design and its design style.

2. CONTINUITY OF INTEGRATION

This integration is not a simple combination of form and ornamentation, but a unity of absorption, digestion, and organic integration. Before the civilization was created, the process of composition and reorganization of the six regional creations, the Wei, Jin and the Southern and Northern Dynasties and the Sui and Tang Dynasties, foreign and other the process of absorbing and integrating ethnic creations shows that Chinese creations are highly integrated.
In terms of the historical period of the world’s traditional creation design, Chinese traditional creation designs belong to the few types with the strongest integration characteristics. Continuity is embodied in the continuation of technology and form. In the practice of creation for thousands of years, a continuation mechanism of technology and form was unconsciously established. When the socio-economic and cultural changes occurred, new materials and new contents when the creation of a new creation is promoted, the continuation of the creation can provide new techniques with the help of technology and form [1].

3. REGIONAL ADAPTABILITY

When the ancients first opened up an artificial world from the barbaric nature, they combined with the specific natural conditions of a certain region to form the features of the region of creation. In the traditional design of creation, dynamic adaptation or positive adaptation is a fundamental Principle of Sexuality: Chinese creative design adapts to the laws of conformity with nature and society and strives to achieve a harmonious and harmonious relationship with it. It is also necessary to make effective use of it and make every effort to achieve the ultimate goal of social coordination. Therefore, adaptive creation comes from its deeper layers. It is an effort made by mankind to construct a living space in which man and nature, man and society mutually reconcile [2].

4. RITUAL AND STANDARDIZATION

In traditional Chinese society, the relationship between creation design and ritual music is most closely related. In the integration of creations and rituals, everything serves between rites and tao. This on the one hand promotes the rapidity of creation design. Development has always affected the development of later generations of creation designs. The prototype of the standardization of Chinese creative designs may be traced back to the late Neolithic era [3]. The principle of standardization is the principle of simplification, system, optimization, coordination, and efficiency. These principles have long been implemented in industrialization. In the previous Chinese creation design art, it showed great economic and social benefits. Therefore, it is undoubtedly of great practical significance to pay attention to exploring and summarizing the elements of the standardization of Chinese creation.

5. CHANGE AND SYSTEM

Change and integration form the yin and yang poles of the development of design history. Different from the long-term stagnation of the feudal society in China, continuous change is a feature of Chinese creation art [4]. It embodies the wisdom of Chinese ancient craftsmen. Especially for modern architecture, the process of transitioning to modern design is a difficult process, which requires our unremitting efforts.
6. DESIGN ELEMENTS AND CHARACTERISTICS IN TRADITIONAL CULTURE

Some influences on modern architectural design. In order to use the design elements of traditional Chinese culture in the modern architectural art, we must grasp the characteristics of Chinese traditional creations and consider the regional factors. The Chinese architecture has for thousands of years the nationalization of its own structure has also enabled the artistic form of Chinese ancient architecture to be brought into full play, reaching the point where it is in full bloom. This gives it the beauty of Chinese traditional architecture, creates an atmosphere with Chinese artistic conception, and can better enable construction. To convey their own artistic beauty. The use of specific traditional design elements in modern architecture has the following performance [5].

6.1 Application of specific traditional materialization elements in modern architecture

The four major animal designs of ancient China are highlighted, in particular, dragon ornamentation is used as a traditional cultural element in modern architectural design. The four major beasts are Qinglong, Baihu, Suzaku, and Xuanwu. They respectively serve as the four gods of the East and the South. In the prevailing age of doctrines, the Five Elements added five colors to the southeast and northwest according to the five elements of yin and yang, and each color was matched with a mythical beast and a deity; the east was blue, the dragon was assigned, the west was white, and the tiger was South is Zhu color, with tits, North is black, with Wu, Huang is the central color. Long as the symbol of the Chinese nation, the earliest should be traced back to the ancient totem worship. Dragon as a noble image, appeared early in the building the decoration, but since the dragon and the emperor had a relationship, the dragon's image was heavily used in architecture. In the traditional Chinese architectural culture, the dragon symbolizes the imperial power, and only the royal architecture can use the dragon as a decoration. Architecture: The Forbidden City of the Forbidden City in Beijing. Dragon ornaments in traditional Chinese architecture are mainly reflected in columns, shadow walls, caisson, ridges and other buildings. Most of them are used for decoration and pray for the protection of the gods. As the representative image of the emperor, the dragon occupies a dominant position in the decoration. In the two imperial palaces of the Forbidden City and Panyang Palace in Beijing, it can be said that there is no place for dragons. The ceiling, the algae well, the base of the emperor's throne, the screen, the imperial palace. There are also many types of wooden dragons on the chairs. According to statistics, there are 12654 dragons inside and outside the Taihe Temple in the Forbidden City. Therefore, when you enter the palace, you feel as if you are in the dragon's world. Since Long is no longer an animal of nature, it is an ideal image that humanity has gradually created in history. Therefore, his posture and size can be changed and become amorphous. This creates convenient conditions for decoration. For example: Beijing Tiananmen the dragon on the Chinese table circling the column with his long dragon body and the dragon tail down. As if the dragon was on the top, it seemed that there was a momentum that formed the unique majesty and grandeur of the Chinese table. Since the dragon became the representative of the emperor, the emperor’s Symbol, so the emperor always wanted to grasp the exclusive rights of the dragon. In particular, after the Yuan and Ming
dynasties, the court ordered three orders and five resolutely, and even established a code that stipulated that the civil architecture could not use the decoration of the dragon. However, the emperor had never been able to control this exclusive right. Because the dragon was a symbol of the entire Chinese nation, this fact was in the emperor. Before the connection with Dragon, it already existed on the land of China, so in vast China, the images of dragons can be found in temples, pagodas, ancestral temples, even in garden buildings and in private houses. Diverse dragons or hidden or decorate various buildings to make them even more glorious. The use of dragon images in modern architecture is everywhere. It has become a symbol of the Chinese nation, not only for modern refurbishment groups, but also for in many business halls, tourism buildings, and catering buildings, especially in the real estate development, the construction of Jiuzhu Yubiao in Kowloon is undoubtedly an inheritance of Chinese traditional culture, and it is also a development of classical architectural culture. We are the descendants of the dragon.

We must build a national consciousness based on the inheritance of Dragon's architectural culture. The builders of the “Lunling Minjiang River” will develop the real estate project in Fuzhou. Order of the national culture. Better promote the use of traditional cultural elements in modern architecture. Besides lower Weilongwu Hakka architectural forms, can be said that the ancient culture and art of the perfect fusion of modern architecture.

6.2 The application of traditional Chinese yin-yang and five elements culture in modern Chinese architecture

Numerous archaeological data have proved that people's living environment is valued. This is an important part of China's native culture. The location of settlements in the Yangshao Culture period has already had a tendency of “environmental choice”. Its performance mainly includes:

(1) Being close to water sources not only facilitates water intake for life, but also contributes to the development of agricultural production. (2) It is located at the junction of rivers and has convenient transportation. (3) On river terraces, it not only has fertile cultivation soil, but also can avoid flooding. (4) If it is on a hillside, it is usually a sunny slope. If the Banpo site is a typical feng shui pattern surrounded by mountains and rivers and two waters, this ancient tradition is deeply rooted in the minds of future generations. It has also been manifested in the site selection and construction of many modern cities and villages. Feng Shui emphasizes the “southing sun” of the city and architecture, which has its profound cultural background and has a very reasonable scientific basis. From a cultural perspective in view of this, it is closely related to the study of the Book of Changes. The Book of Changes says: “The saints are to the south and listen to the world.” The latter people say that the rule of the emperor ruled the country as “the technique of the south”, that is to say, in addition, most of the sunshine Time comes from the south, and people's life and production are based on the direct sunlight. This determines that the direction of people's lighting must be southward. Furthermore, the choice of facing the south is also related to the season's wind direction. The cold northerly wind prevails in most parts of China during the winter and warm and humid southerly wind prevails in summer. This determines that the basic pattern of China’s feng shui environmental model should be north-facing and south-west. There are many mountains on the east and three sides
to withstand the cold winter winds. The south is slightly open to welcome the warm and wet summer.

7. CONCLUSION

After undergoing “great development” of industrialization and urbanization, human society began to summarize and reflect on the consequences of industrialization and urbanization. It is found that the development of human society has increasingly abandoned nature, destroyed nature, and coordinated humans and nature. This relationship was pushed to the other side and tasted various "bad consequences" that followed, such as abnormal climate, environmental pollution, lack of natural atmosphere and so on. However, people are, after all, human subjective initiatives that can self-regulate themselves. All countries in the world are adopting various countermeasures in favor of "people and the environment." At the end of the 19th century, the "Urban Beautification Movement" appeared in the United States, and "Garden City" appeared in the United Kingdom. All this reflects the harmony between people's needs and the environment. The desire to return to nature has already been put into practice. This idea inspired many urban planners and architects. New urban architectural design plans will benefit.

REFERENCES