

## Application of White Bi Style in Modern Environment Design

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**Abstract**—By exploring and comprehending Bi Gua in the *Book of Changes* from an esthetical angle, the aesthetic connotation of White Bi is derived as an ultimate of decoration that reverts to simplicity, and as an advocate of returning to original appearance and nature. It implies many of the essential ancient Chinese thoughts, such as thrift, the relations between decoration and simplicity, the relations between objects and their orderliness, and harmony between human race and nature. Therefore, White Bi possesses important reference value in environment protection and sustainable development.

**Keywords**—White Bi; advocate of original appearance and nature; simplicity; sustainable development

### I. INTRODUCTION OF THE CONCEPT

Human race's material civilization has been undergoing rapid development, so accompanied the need for exploring more profound connotation of aesthetics. With the present urgent situation of tremendous resource consumption, environment and ecological deterioration, White Bi design style in environment design serves as a positive solution to relieve the current crisis, and is of compelling significance and value.

The idea of White Bi originates from Bi Gua, 22th Gua from the *Book of Changes*. It explores the beauty of decoration, and contains 6 Yaos (Yao, Chinese character “爻”, 6 Yaos are included in each Gua, a continuous line as “—” stands for Yang Yao, a line breaks off in the middle as “- -” stands for Yin Yao, see Figure 1). The first Yao is directed against fingers and toes. It argues that people's pursuit for beauty starting from four limbs. The second Yao is directed against hairs. It means having people's hair set. The third Yao is about smoothing and sheening one's clothes. The fourth Yao is decorating the horses into glorious white, comparing to modern world's fancy cars. The fifth Yao is about renovating gardens or houses. The previous four Yaos concentrate on decorations of the person's appearances, while the fifth Yao has diverted to people's living conditions. Modern people are getting tired of the hustle and bustle of city lives, and they began to yearn for the simple lives like ancient hermits. Houses are more and more built in or around mountains in China; decorations are becoming succinct in accordance with people's desire for the peculiar features of a peaceful living condition in remote areas. The sixth Yao, which generates the concept of White Bi being harmless, promotes innocuous simple decorations. The last Yao has shifted the angle of aesthetics

from outside world to people inside psychology. It encourages people to focus on the intrinsic value of how living environment can feed back to us. It guides people to find that the ultimate decoration accommodates our cultivation of taste for quality life and moral sentiment. In the end, people can reveal the mysteries of Tao and appreciate the state of simplicity and austerity.

White Bi design style is an environment design philosophy that is based on the comprehension upon the sixth Yao of Bi Gua. The exploration for implication of Bi Gua has reached its maturity in Shang and Zhou dynasty in China. From the first Yao to the fourth Yao, we can observe that the appetency for aesthetics is continuously expanding. At the fifth Yao, people begin to self-exam, and at the sixth Yao, aesthetic standard has exceeded from the external and materialized beauty to the internal and natural beauty, which achieves a state of simplicity and austerity.

Simple, white, indelicate decorations or grains are the characteristics of White Bi design. Chapter Bi Gua in the *Book of Changes* writes, the top Yang Yao refers to White Bi, does no harm. Xiang (means explanation of Gua or Yao) of Bi Gua writes, simplicity does no harm, Yang Yao on the top implies achieved person shows austerity and this quality is regarded as a merit.

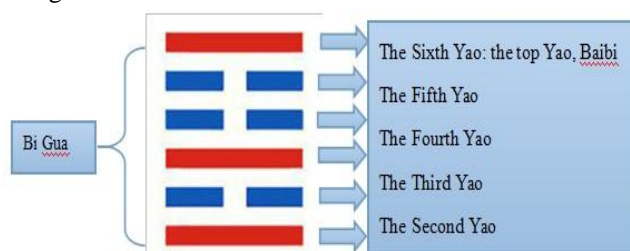


Figure 1. The relations between Bi Gua and Yaos

Wang Pi wrote in *Annotation of the Book of Changes*, “White Bi” was on top of the six Yaos, and also the last state in the process of appreciation of beauty, in likely manner it should be the last to consider in the steps of decoration. Notice that ultimate decoration reverts to simplicity, attempts should be made in the process to keep the original appearance of the materials with no or little embellishments attached and in this way and it's harmless to the nature or the surrounding environment. Using plain tone and the very texture could bring no bad luck, and it's a performance of a virtuous man. Kong Yingda expressed the same idea and extended it as upholding a moral life, and

then the nature will be revealed. So is why the last Yao in Xiang signifies that ultimate decoration mirrors simplicity, righteousness and morality [1]. Scholar Liu Xizai from late Qing dynasty wrote in *Yi Gai - Wen Gai*, White Bi placed on top of Yaos is because it represented the highest level of taste and civilization, which were the inherent qualities of things [2]. Tracing back to Liu Xie from the Northern and Southern Dynasties, he wrote in *the Literary Mind and Carving of Dragons*, one put on coarse cloth outside to cover the baldaquin inside. The metaphor refers to a man who abhors too much of ornate rhetoric, Bi Xiang argues that the ultimate of embellishment is to decorate with original colors; the most commendable is to revert to the natural appearance. Zheng Kangcheng, a scholar of Scripture Study in Han dynasty, used three Chinese characters to demonstrate how things evolve, “始”(pronounces as “shi”, means start), “壮”(pronounces as “zhuang”, means in the process of development), “究”(pronounces as “jiu”, means observation and study, or in the end). Three great masters in ancient Chinese history have respectively declaimed similar understandings in their expertise.

Su Dongpo’ opinion on Chinese ancient style prose:

Flat-----Magnificent-----Flat

Liu Xizai’s opinion on Chinese ancient poetry:

Ordinary words-----Witty remarks-----Ordinary words

Sun Guoting’s opinion on Chinese calligraphy:

Square and straight-----Thin and forceful-----Square and straight

All the above are in accordance with the process of “始”, “壮”, “究”. The sixth Yao, Bi tops the other five Yaos, which are the Yaos of decorating one's toes and fingers, the Yao of decorating one's hair, the Yao of tidy oneself, the Yao of decorating one's transport, the Yao of decorating one's garden[3]. The concept of the sixth Yao, meaning at the end of decoration the appearance looks like at the beginning, and this very esthetical connotation holds important reference value to the design of residential environment.

Before the time of pre-Qing dynasty, especially in the thoughts of Confucius aesthetics, “文” (pronounces as “wen”, refers to grains in sculptures, or embellishments) and “质” (pronounces as “zhi”, refers to simplicity, the way things naturally look like) are two fundamental concepts. These two concepts, though not specifically aiming at environment art, are of intense connection with residential environment design in China. Long before the Warring States Period, Mo Zi said that people's pursuing for happiness is on the precondition of consistency of residential environment. “Pursuing for happiness” compares to the concept “质” in residential environment, “consistency of residential environment” compares to the concept of “文”. Huang Dacheng in Ming dynasty pointed out in *Xiushilu* that artificer should follow the principles of people oriented and Yin-Yang theory, the former reflected the concept of “质” and the later reflected the concept of “文”[4]. The idea requires designer consider people's internal needs and the principle of Yin-Yang change of external ornaments. In the

residential environment design, “文” refers to grains of ornaments; “质” refers to the contents or effects the design would like to present and the natural materials with no artificial grains as well. *Analects of Confucius - Yongye* records, predominant “质” feels rough, and predominant “文” feels impractical, once the two come into a balance could one become noble. So as in residential environment design, the two elements must be integrated in a harmonious order.

White Bi is a combination of ultimate “文” and ultimate “质”. It aims at returning to the natural simplicity. In the designing of an environment, White Bi does not refer to shabbiness nor luxuriousness, but a concise and simple way to achieve a living philosophy that the splendid are destined to shed, and innocence is what really peaces oneself.

In traditional Confucian's point of view, “质” and “Tao” are both in highlight. So they cast particular attention to grains of ornaments, and they opposed excessive of grains as well. Liu Xiang in his book *Shuo Yuan* records, Confucius got Bi Gua in divination and lifted up his eyes and sighed dissatisfied. His student Zizhang entered and asked him, “I heard Bi Gua was a good sign, why sighs?” Confucius answered, “The way of Bi is not righteous, that's why I sighed; I believe that things are suppose to look like what they naturally are, white is white and black is black, there's no need to modify.” Zizhang asked, “What about ‘文’ and ‘质’?” Confucius answered, “I heard that red paintings should be free from processing, white jade should not be carved further, things in good quality were not supposed to be decorated further more.” From this dialogue, we can see that Chinese from ancient times have been holding the opinions that the ultimate beauty lies in the natural simplicity, no decoration or further procesing would add any beauty on them.

Hanri Rousseau (1712-1778) believes that art brings up extravagance, science grows slothfulness, art and science would cause human no happiness but disasters, we see that by the light of science and art appear at the edge of sky, merits fade away. This phenomenon is seen everywhere, every time [5]. However, it is not the case in the art design of Chinese residential construction.

## II. WHITE BI PHILOSOPHY IN CHINESE RESIDENTIAL DESIGN

In China, residences are generally adopted the White Bi style in design. The concept of “文” of artistic and splendid, and the concept of “质” of practical and simplicity are both inherited; it wouldn't develop people's desires for luxury and by no means reduce merits and happiness. Thus, White Bi has become one inseparable part of Chinese nation's esthetical quality. Typically, the designing style of White Bi is manifested as the following three features.

### A. Emphasis on the Living Functions of the Residence

White Bi design style lays stress on the living function of the residence itself, including obtaining raw materials locally, adopting measures suiting local conditions,

accompanying the natural geography and environment.

*Mo Zi-Chapter Jieyong* writes, saving materials and manual works by cutting off unnecessary ornaments. He thought that residence should comply with particular construction principles, and then to achieve the functions of a residence [6]. The principles of building palaces should be, the ground sill high enough to avoid moisture, walls thick enough to prevent from cold and wind, eaves extended enough to keep out snow and rain, walls high enough to keep the courtesy between man and woman.....so was why enlightened rulers built palaces not for view and admiration, but for the building itself [7].

### B. Complying with Local Conditions

White Bi design style complies with local climate, pursuing for the harmonious relations between man and nature.

Chinese people have always been emphasizing on astrology, geomancy, the theories of Yin-Yang and the five elements, and ultimately the harmonious relations between man and nature. China is an agricultural country; climate and environment are particularly valued. Gu Yanwu, the scholar from Qing dynasty said in *Rizhilu* that everyone knew something about astronomy tracing back three generations. Above the sky, it's the motions of stars that guide the people working and resting. Traditionally, residences in mountain areas choose an inclusive landform, where three directions are surrounded by mountains, the terrain goes from high south to low north, and the Yang side locates at the front while the Yin side locates in the back. This kind of landscape is considered as a reservoir of the wind and Qi. China locates at the northern hemisphere, strong wind comes from the west, northwest, north and northeast. This kind of landform with mountain barrier is beneficial to human living condition. Acclimation to the climate and local environment is also a demonstration of White Bi design style.

### C. Corresponding to Traditional Cultural Background

Thirdly, White Bi design style's simplicity and elegance have a profound cultural background.

Simplicity is the most important character of White Bi design style. The idea simplicity comes from *Laozi* originally; it calls for austerity, egoless and lessening desires. At the forefront of changing period, Laozi expressed his hatred towards slaveholders' ever-grand selfish desires and their corrupt ways of life. He wished to return to the ancient society when countries and populations were still small and scattered. He believed that giving up sages' courses could people benefit more, giving up benevolence and righteousness could people regain piety, giving up artfulness could there be no thieves, so were the coming up of the governing proposition of simplicity and lessening desires. Therefore, Laozi strongly opposed delicate art forms or excessive beauty. He argued, the five colors blind eyes, the five sounds deaf ears, the five tastes numb tongues. From his point of view, that gorgeous kind of coloration was not only encroaching minds but was a corrodent to the whole society.

During pre-Qing period, Taoists and Mo-hists were all inclined to devalue the function of grains of ornaments. Chapter 81 in *Laozi* writes, "Promising remarks are not pleasing while pleasing remarks are not promising, well-doers do not argue while arguers are not holding good will." In *Chuang Tzu*, it writes, "simplicity is the beauty that surpasses anything in the world", and its argument about the relations between artistic conception and expression also illustrated his despise or even objection on adorning the writings. Because they thought any artistic form that deliberately used as a means to adorn the writings was in no way comparing to the ultimate state of "Tao", and they could become a nuisance in the pursuing for the ultimate "Tao". Hanfeizi succeeded the ideology of Taoism and wrote in *Hanfeizi*, it could be hardly complimented as beauty after being added with ornaments. Residences in central Shanxi province have taken on White Bi design style. The blue green tile does not lose to the modern popular colored ceramic tile, mosaic tile and encaustic tile, aesthetically speaking.

## III. CONCLUSION

Plain remarks contain lingering significance and unique flavor [8]. The aesthetic connotation of White Bi represents the essence of China's traditional aesthetics. When we draw lessons from several of western schools, styles or doctrines, it is vital to insist on the development on the ground of traditions. At the same time, we are obliged to eliminate the wrongness and reserve the essence. The esthetical principle of White Bi used in modern room space design inherits traditional sense of beauty and ameliorates the functions of traditional residences. Introducing White Bi design style and its philosophy into modern environment design, it can not only achieve harmonious unity between man and nature, sustainable development, but also will further more create a better living condition for human race.

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