The Application of Zen Aesthetics in Contemporary Lamp Design

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Abstract. Zen Buddhism combines Confucianism and Taoism culture and is the product of the Sinicization of Buddhism. Zen aesthetics is developed from Zen thought. As an important part of traditional Chinese aesthetics, it has had a profound impact on Chinese people's aesthetics. This article analyzes the characteristics of Zen aesthetics, explores its application ideas in contemporary lighting design, conducts design practice, and attempts to embody the characteristics of Zen aesthetics in contemporary lighting design, while integrating modern aesthetics and modern lifestyle, and provides a basis for the application of Zen aesthetics in contemporary lighting design. Provide thoughts and suggestions on applicability and application paths in design

Keywords: Zen aesthetics, lighting design, Traditional culture

1 Introduction

The fast pace of modern society makes people face all kinds of pressures in life, and they all hope to obtain their own tranquility and maintain a free and relaxed state of mind. Zen Buddhism is a philosophy of mind cultivation. As an aesthetic system, it contains rich aesthetic thoughts. Exploring its connotations can help people today find a balance between spiritual peace and freedom, and provide spiritual comfort and satisfaction. The integration of Zen aesthetics and contemporary lamp design can allow people to get tranquility and comfort in the noisy modern society through the modeling structure, color selection, material texture and interactive experience of lamps and lanterns, and the use of modern new materials and new technologies and modern aesthetic expressions can not only promote the application of Zen aesthetics in modern society, but also enhance the cultural heritage of the lamps themselves, enrich the user's Zen experience, and then make Zen aesthetics can be integrated into modern life. This concept of Zen Buddhism enables people to live a poetic life, away from the noise and hustle and bustle of the city, and build their own spiritual home in a corner of the city^[1].

2 An overview of Zen aesthetics

Zen, Zen aesthetics is an aesthetic thought based on Zen thought and practice. It advocates a simple, natural, indifferent, quiet, leisurely and peaceful attitude towards life, attaches great importance to people's direct experience of the inner world, and strives to achieve a kind of freedom in the spiritual world through personal understanding and enlightenment. It takes "mind" as the starting point of activities and advocates practicing inner meditation to achieve the harmonious unity of the subject self and the natural world, in the hope of returning to the true state of the self. Pi Chaogang once said: "Zen aesthetics has its very unique nature. It is not aesthetics in the usual sense, nor is it a general philosophy of art, but a philosophical thinking about human meaning and aesthetic survival, or it is a reflection on human meaning and aesthetic survival. The poetic thinking about the meaning and value of life is the aesthetic thinking about the ontological level of life, so it is essentially a kind of life aesthetics that pursues the freedom of life" ^[2].

3 Zen Aesthetic Characteristics and Their Expressions

3.1 Ethereal beauty

The ideological basis of Zen Buddhism is the Mahayana sect of emptiness^[3,]Buddhism believes that everything seen in the world is not real, but false and unreal. All phenomena and things are born from the heart and are the projection and manifestation of the state of mind. Therefore, it is advocated to use "empty" to perceive everything in the world, and blank space is derived from this concept. It not only conveys the infinite possibilities of "less is more", but also implies profound and thought-provoking connotations and indescribable spiritual moods. . This kind of blank space is not completely "empty". It expresses the content that "can only be understood but cannot be expressed" through the form of blank space. Visual simplicity achieves spiritual purity.

The most typical example of the white space technique in traditional Chinese painting is the use of large areas of white space to reduce visual interference. The unpainted blank space gives the viewer enough room for imagination and thinking to appreciate the artistic conception outside the picture. flavor. Of course, take Ma Yuan's "Fishing Alone on the Cold River" as an example. A lonely fisherman is fishing quietly on a boat. A large area of blank space is used to express the river water. Although there is no deliberate depiction of the river water, it gives the viewer Charge

3.2 Natural beauty

Zen Buddhism's view of nature inherits the Buddhist Mahayana view of emptiness, which holds that the mind is the true existence (truth), and that by looking at nature as empty, nature becomes an illusion or a state of mind ^[5]. The "nature view" of Zen aesthetics believes that the world is formless, and everything will eventually return to nothingness. Therefore, we should break the external forms given to things, deeply explore their inner essence, and return to the inner natural state. Therefore, we must maintain an attitude of conforming to nature and accepting nature. We should not be obsessed with technical perfection, but pursue the expression of inaction and nature, present the original appearance of things in the most natural

way, reduce human intervention, and retain their original state. , in order to realize the harmony of life and the beauty of nature, obtain a leisurely and comfortable state of mind, and experience the harmonious resonance between nature and the heart.

The shape of Japanese tea sets exactly reflects this natural beauty. The natural traces and ecological charm displayed through the less smooth surface and less precise geometric scale can make people feel the Zen spirit of tranquility and austere desires. There is a just right feeling. The sense of reality, although not perfect, actually reveals the traces of life^[4].

3.3 Impermanence is beautiful

Impermanence is the basic attitude of Buddhism towards all things in the world. It believes that the essence of everything is impermanent and manifests itself as instantaneous birth and death. There is no eternal thing, everything is changing and everything is uncertain. The changes and uncertainties brought about by impermanence make people begin to pay attention to the current experience and face the changes in impermanence with a natural and normal state of mind. Suzuki Daishi believes that both incomplete forms and flawed facts are more expressive of the spirit, because too perfect forms tend to turn attention to the form itself and ignore the inner truth ^[6].

The opening of porcelain in the Song Dynasty is undoubtedly a manifestation of this impermanent beauty. It was originally just a natural cracking phenomenon during the production process and was considered a defect, but it was later artificially preserved. This unpredictable and unpredictable feeling of incompleteness and uncertainty is closer to nature, more profound, and more touching, so it has become a "special decoration"

3.4 Beautiful artistic conception

Artistic conception is the meaning and realm conveyed by artistic and artistic works with the help of images^[7].Artistic conception is a very abstract concept. This kind of experience is personal and intuitive, and it is often difficult to describe or express it in accurate words. Everyone's mood is different and their experience is also different. Zong Baihua said: "Artistic conception is the crystallization of 'love' and 'scenery'^[8]. There is Zen everywhere in life. Watching flowers bloom and fall, you can deeply understand the endless cycle of life. Although it is a finite object and finite form, it can express infinite artistic conception. The blend of emotion and scenery becomes artistic conception, so the artistic conception becomes concrete, and the scenery can be selected to create the artistic conception.

Take the Japanese dry landscape garden as an example. It uses a limited handful of fine sand to cleverly outline the infinite flow of water in nature, and uses a few dry stones to symbolize the vastness of the natural island. Although this kind of abstract expression does not reveal the real landscape, it can deeply touch people's hearts and lead people into a profound state of meditation.

4 The application of Zen aesthetics in contemporary lighting design

4.1 Zen extraction of design form

1) In terms of styling, lamps are generally divided into lamp holders, lampshades, lamp stands, light bulbs and switches. Their forms are limited, but human thoughts are infinite. Through limited abstract pictures, unlimited Zen associations can be triggered. Based on the discussion of Zen aesthetic characteristics, the state of lamps under its influence has an irresistible original beauty and ecological sense, which is close to the lamp itself. The author selected some intentional pictures with Zen aesthetic style to extract Zen shapes, as shown in Figure 1. Through the structural disassembly and shape analysis of the lamps, it is known that the shape with Zen aesthetic style tends to be round, organic and symmetrical. Therefore, in the design, we adopt curve-based external outlines, freehand structural divisions, and blank details. We use the simplest lines, shapes, and structures to present natural beauty, and use limited and simple visual language to embody Zen. Tolerance and convey the beauty of Zen Buddhism.

2) In terms of color, it is an intuitive experience second only to the shape, and sometimes even greater than the visual experience brought by the shape. The appropriate use of color can convey the Zen intention that the designer wants to express as quickly as possible. The author selected some intentional pictures with Zen aesthetic style to extract Zen colors, as shown in Figure 1. After analysis, we learned that Zen-style colors generally use black, white, gray and low-saturation colors. The purity of color can make people calm down in the "colorful" world. Therefore, in terms of color matching, in order to take into account both The current color trend and the avoidance of the solemn and depressive feeling that dark colors may bring, will use white in large areas. Pure white can express infinite artistic conception, and some colors can also be used locally to bring a warm and peaceful feeling to people, using color hints to express a Zen atmosphere.

3) In terms of materials, the use of natural materials can bring us closer to the original distance of things and express the flow of vitality and the state of nature. However, in order to better realize the contemporary concrete expression of Zen aesthetics, it is also in order to be more in line with the aesthetics of modern society. habits, and at the same time reduce the sense of distance brought by industrial materials. The author tried to use the expression technique of material splicing and collision to take into account both. The author selected some intentional pictures with Zen aesthetic style to extract Zen materials, as shown in Figure 1. For example, combining original wood with modern synthetic materials and plastics, or splicing cold metal with warm wood. At the same time, the overall texture is not too smooth, which will give people a simple, natural and peaceful feeling. In addition, the smooth material used in parts can increase the vitality of the product. The collision of the material with its own texture will also give people a A different visual and touching experience. It is worth noting that during the processing process, we try to retain the texture of the material itself and reduce traces of artificial carvings, in order to respond to the pure, simple, and rustic natural beauty pursued by Zen Buddhism.



Figure 1. Zen extraction in design forms, from left to right is shape, color, material (Picture source: image picture is from the Internet; Extraction process: author's own drawing)

4.2 Zen expression of interactive experience

Interactive experience can generally be said to be a touch-based physical and psychological interactive experience, which is obtained through direct contact between the user and the product. During the design process, streamline product operation steps, avoid complex interactions, use concise, intuitive, and easy-to-understand usage methods, and tap into users' subconscious behaviors, so that users can use the product in a natural state. It can not only bring a good interactive experience, but also guide users to enter a state of inner meditation, experience a moment of Zen during operation, and create a feeling of dialogue between the user and the product, rather than just mechanical product operation. With this kind of interactive relationship, users can deeply feel the charm of the product and establish a more natural and harmonious interactive relationship with the product. In terms of switches, the use of contemporary operation methods such as touch or rotation supported by modern technology can make the product show modern features while expressing Zen aesthetics. In terms of interactive experience, the short pause after the switch operation causes the product light to slowly turn on again. This auditory blank method shows ethereal beauty and will guide people into a subjective quiet and introspective mental state, or operate It is unpredictable and reminds people of the beauty of impermanence in life.

4.3 Zen creation of atmosphere and artistic conception

Artistic conception is the product of imagination and association, expressing deep thoughts and perceptions through metaphors and hints. In the design process, symbolic images are used to create a tranquil and comfortable atmosphere, so that viewers can directly experience it through the external form, perceive the inner Zen realm, and achieve resonance between form and meaning. The product itself is used to express the natural and tranquil atmosphere, and the limited operating sound emitted by the switch operation is used to convey the infinite sound of nature, making people think that they are in nature and feel the beauty of nature. Nature, which is far away from us, is therefore Get very close, or trigger some Zen associations through the interaction of switches. Use a lamp to create an atmosphere of Zen meditation, appreciate the beauty of the artistic conception, and then achieve the state of understanding and enlightenment.

4.4 Design practice

Based on the above research and application analysis of Zen aesthetic characteristics, this "determined but impermanent-lamp" was designed, as shown in Figure 2. The overall shape of

the Zen lamp is composed of irregular circles and smooth organic curves, restraining and concise The shape is a response to nature and a return to the product itself; in terms of color, white and black are matched, with low-saturation orange as embellishment. White gives people a feeling of being inclusive, and black gives people a feeling of being able to absorb everything. , solemn and solemn at the same time, coupled with the elegant orange color, there will be a sense of liveliness caused by collision; in terms of material, the entire body is made of hard frosted plastic, and there is a circle of metal around the main body as a local embellishment. The different materials will give people Bring a different visual and touch experience.

There are three lighting methods of Zen lamps, namely ring light strips and upper and lower lights, as shown in Figure 3. The operation method of the Zen lamp is a very modern touch method, and the lamp is turned on by touching it. The Zen meaning of the operation is that it is certain that the light will turn on when touching it, but which light will be turned on is unknown, thus experiencing the sense of impermanence that cannot be controlled with certainty, and triggering the user's thinking about the impermanence of the world. Although it is a tangible lamp, it is It evokes infinite Zen artistic conception. The operation buttons of the Zen lamp are on the base. As shown in Figure 4, there is a recessed "water pool" and a raised "hill". There is no obvious visual prompt, but the recessed place will make people subconsciously think If you press it, the lamp will turn on, and if the raised part makes people subconsciously want to slide it, the brightness will be adjusted. The inclusiveness of the straightforward approach lacks some interactive fun, so blank space is used to increase the user experience.

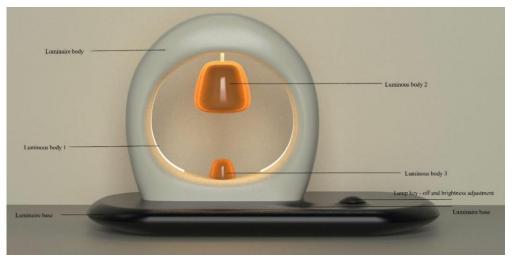


Figure 2. Design effect display and part description(Picture source: author's own drawing)



Figure 3. Three lighting methods of lamps (Picture source: author's own drawing)

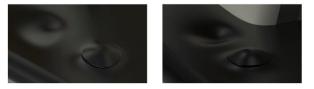


Figure 4. Switch buttons(Picture source: author's own drawing)

4.5 Design evaluation

In order to ensure that the design practice output of Zen aesthetic characteristics in contemporary lighting design is rigorous and effective and closer to the design goals, a final evaluation of the design plan will be taken. Randomly select 5 representatives from the target user population for the final evaluation of the design plan. The evaluation is in the form of a five-point Likert scale. Values from high to low represent different levels of agreement. 5 points represent strong agreement and 1 point represents strong disagreement. The program evaluation mainly involves six aspects: the overall style of the lamp design embodies the concept of Zen aesthetic characteristics, the lamps reflect the Zen aesthetic concept well, the interactive usability and ease of use, the Zen atmosphere, the deep concept of Zen aesthetic thought, and product identity. The design plan evaluation form is shown in table 1.

 Table 1. Design evaluation form (Table source: author's own drawing)

Please evaluate the following concept of lighting design, the selection range is 1-5, the higher the number, the more agree, 5 points represents complete agreement, 1 point represents complete	
disagreement	1
1. The overall style of this lamp design reflects the concept of Zen aesthetic	1-2-3-4-5
characteristics	
2. This lamp is a good expression of Zen aesthetics	1-2-3-4-5
3. This light is easy to understand, easy to use and attractive in terms of	1-2-3-4-5
interaction	
4. In the interaction of this lamp, you can feel the Zen atmosphere and	1-2-3-4-5
a moment of peace	
5. This lamp can trigger philosophical thoughts about self-awareness	1-2-3-4-5
and "nothingness"	
6. I want to own this light fixture	1-2-3-4-5

According to the data presented on the test results, as shown in Figure 5, the solution received high recognition. Users showed high recognition of the overall style of the lamps, the concept of Zen aesthetics and product identity; they gave a relatively fair evaluation of the ease of interaction and the Zen atmosphere, which needs to be optimized in the future; in terms of the

deep concept In the output, the user's recognition of this is relatively not obvious, and the communication of deep concepts does require a certain amount of time to accumulate.

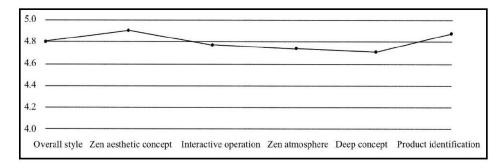


Figure 5. Design evaluation result (Table source: author's own drawing)

5 Conclusion

Zen aesthetic thought, whether in ancient times or in modern times, has brought many inspirations to art creators. It is not only the inheritance and breakthrough of traditional Chinese aesthetics, but also a response to lifestyle and inner world. While respecting traditional aesthetics, contemporary lighting design continues to explore new design concepts and technological breakthroughs to meet modern aesthetics and diverse needs. It can integrate and develop Zen aesthetics and modern aesthetics to create a Zen-like yet complex modern aesthetic. Trending contemporary lighting fixtures. If you want to better combine Zen aesthetics with design, people need to continue to summarize and explore, which is also the direction of the author's efforts.References

References

[1] Pi Chaogang.: Reflections on the Logical Starting Point, Research Object and Theoretical Paradigm of Zen Aesthetics.: Journal of Sichuan Normal University.(1999)

[2] Zeng Jia.: On the influence of Zen Buddhism on art design thinking.Journal of Southeast University.(2009)Qi Zhixiang.: Buddhist aesthetics. Shanghai People's Publishing House. (1997)

- [3] Ji xianlin.: Chinese Zen Series. General preface. China Yanshi Publishing House.(2014)
- [4] [France]Miguel Dufheina.: Aesthetics and Philosophy. China Social Sciences Press.(1985)

[5] Zhang Jiemo.: Zen aesthetics. Zhejiang People's Publishing House.(1999)

[6] [Japan]Suzuki Daisu.: Zen and Japanese Culture. Joint Publishing House. (1989)

[7] Wen Weicai.: The enlightenment of Zen aesthetics to design. Beijing Institute of Technology.(2014)

[8] Zong Baihua.: Aesthetic Walk.Shanghai People's Publishing House.(1981)