

The Design and Application of Zigong Lantern based on Regional Culture Difference

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Abstract

Objective: The design and application of Zigong Lantern in the study of regional culture difference. **Method:** To analyze the aesthetic principle of lantern design, the principle of design originality, the structural mechanics of Lantern, and the practical experience of lantern project. **Conclusion:** Lantern design is the foundation and premise of making lantern, lantern design should be prominent theme, strong creative at the same time have a festive cheerful atmosphere, the concept of advancing with the times, the vision of a strong sense of beauty, economic and technological feasibility.

Keywords

regional cultural; Zigong lantern; design; application.

1. Introduction

"Chinese colored lanterns are well-known in ancient and modern times; the Zigong lantern show has long enjoyed a good reputation" [1]. The Zigong lantern show originated from the Tang and Song dynasties, flourished in the Ming and Qing Dynasties, and flourished in today, its history is nearly 1,000 years. After the founding of New China, with the support of the Zigong Municipal Government, Zigong has held the seven-time spring-heralding lantern show and the 23rd International Dinosaur Lantern Show, the Zigong lantern show has won the reputation of "the first lantern in the world" with unique artistic features, the Zigong is also called as "China's Lantern City".

Zigong colored lanterns occupy about 80% of the colored lantern market at home and abroad, and have been successfully exhibited in more than 500 large and medium cities in China and more than 60 countries and regions on five continents [3]. Whether domestic or foreign colored lanterns, first of all, the colored lanterns designer needs to design the colored lantern effect painting, they often need to go to the site to survey or consult the local human history, regional culture, local customs, special food through the Internet or literature, etc., and then these materials are reasonably designed in the form of light carving, light box, three-dimensional modeling on the colored lantern effect painting.

2. Design Status of Zigong Colored Lantern

Due to different cultural differences in different places, Zigong colored lantern designers often design lantern effect painting based on the local customs and the geomorphology of the exhibition site. The design of colored lanterns is constantly developing with the development of the times, at present; there are several methods of colored lantern design:

2.1. Traditional Hand-Decorated Colored Lantern Design

Before the 90s of last century, lantern design paintings were mostly done by hand-painting, designers must have a basic skills of solid painting in order to accurately and vividly draw the proportions, shapes, colors and lighting effects of colored lanterns. The traditional colored

lantern design painting has a long painting cycle, is not easy to modify, and the effect is not very realistic, at present, the colored lantern market is rarely used.

2.2. Colored Lantern Effect Painting Made by Computer Software

With the development of computer software, computer graphics technology is widely used in the design of colored lanterns. Lantern designers generally use Photoshop and CorelDRAW, these kinds of software are fast, efficient, intuitive, and easy to modify, and can also make simple lantern lighting effects. The designer first organically combines various colored lantern materials through cutouts, puzzles, and other methods to obtain colored lantern shape, and then adjust the colors of the colored lanterns to make the colors of colored lantern festive and unified. In recent years, some lantern companies have applied 3dmax, AE, flash and other software into the design of lanterns, the use of this lantern animation can make the audience vividly place in the entire lantern show, with the shift of perspective, and the audiences can watch the effect of color lights from multiple angles and in all-round, however, the cost of this method is relatively high, and the cost is often calculated in seconds, generally, the use of colored lights animation is only used in the bidding of large-scale lantern show.

2.3. Combination of Hand Painting and Computer Software Processing

The method of combining hand painting and computer software is also a common method for making effect paintings of colored lantern, first, paint part or the whole of the colored lanterns, then scan the graphics in the computer, and put them in the corresponding software for coloring, when coloring, it is often necessary to make monochrome color, transparent color, gradient, blooming, drawn edge, etc., and then place it in the real scene according to the required size, and adjust the brightness, purity, light inverted image, light reflection, background atmosphere of the real scene and other details, and finally mark the lantern name, design description, size, production process, power consumption and other information to get the effect painting of colored lantern.

3. Design and Application of Colored Lantern under Regional Cultural Differences

Colored lantern designers have excellent professional qualities in Zigong, and most of the colored lantern designs in our country come from their hands. China is a country with a vast territory, many nationalities and diverse cultures. They will design different colored lantern effect painting according to cultural differences in different places. Attention should be paid to the following matters in the design and application of the effect painting of colored lights:

3.1. Strong Creativity and Prominent Theme

The creativity of colored lantern is based on the display plan and publicity goals of the client of the colored lantern design, on the basis of solving the needs and possibilities; it comprehensively analyzes the environment of production, installation environment, and the audience situation of colored lantern, and puts forward the thinking process and expression method of effective colored lantern design [4]. The creativity is the vitality of colored lantern design, fresh and creative colored lantern designs can often make people feel good and resonate, therefore, lantern design ideas should be different and hold the client's and the public's eyes firmly. The core of colored lantern design is creativity, it can be said that creativity is the soul and life of colored lantern art [5].

The expression of the theme is the primary responsibility of the colored lantern design, only the accurate and prominent theme can achieve the display plan and propaganda purpose required by the funder [6]. Lantern designers often need to consult the local culture, human history, folk customs, special foods, etc. in the design, and use information such as propaganda

text, lantern theme words, couplets and other information highlight the theme of the colored lantern. For example, when designing the lantern show for Kunming, the materials such as stone forest, Daguan Pavilion, the Hump, Yunnan minorities' amorous feelings, Ming treasure voyages, and crossing-over bridge rice noodles are used; "Spring City Kunming", "South of Colorful Clouds", and "Tourism Yunnan" and other propaganda text are integrated to emphasize the theme.

3.2. Apply Many Colors to Create Festive and Lively Atmosphere

Lantern shows, as traditional Chinese folk activities, are mostly displayed on festival days, it means that colored lanterns need to create festive, lively and busy atmosphere. The silks and satins with various colors are organically combined on the surface of the colored lanterns to show the festive effect. The design of colored lantern should use more colors with higher purity and lightness, such as red, vermilion, golden, lemon yellow, orange, orange, light blue, sky blue, pink green, emerald green, light purple, and flesh as the main, brown, dark blue, dark green, crimson, jujube, dark purple should be matched with, and less black and gray. When making the effect paintings, we should also pay attention to the main color of the colored lantern, while ensuring the main color, the transparent colors are appropriately increased, gradient color, similar color, complementary color, etc., so that the color of the colored lantern is rich and unified, the colored lights are festive and gorgeous. In addition, the designers should also pay attention to the taboo color of the place where the colored lanterns are installed, and the taboo colors do not use.

3.3. Have the Concept with the Times and Apply New Materials in Time

With the rise of the economy and the advance of science and technology, people's lives have undergone rapid changes. Colored lantern designers should pay attention to the current situation and politics, current trends, and cater to the public's hobbies and interests. For example, the popular music "little apple" in 2014; the topic "where has the time gone?"; "The Belt and Road" policy hosted by the state in 2016; the Animation "Huluwa 2" in 2017; the 19th National Congress of the CPC, etc. Colored lantern designers should pay attention to these trends, and designing these kinds of lanterns in time is very easy to impress the funders, when the crowds see the favorite popular themes, they will also resonate, and they are greatly satisfied and comforted emotionally [7].

Today's era is an era of rapid development and leapfrogging advance, the change of lighting materials prompts designers to pay attention to new materials when designing colored lanterns. The built-in lanterns have been transformed from the independent lantern caps, bulbs and wires used in previous years to the integration of lantern caps and wires, and then transformed into the integration of lantern caps, wires and energy-saving lanterns. The energy-saving lantern chain saves electricity and is not easily broken, meanwhile greatly reduces the workload of electricians and reduces labor costs. In recent years, the materials such as cold light, flexible neon tubes, and color acrylic have greatly enriched the expression of color lights, these new materials should be accepted and applied by colored lantern designers.

3.4. Place Lantern According to Local Conditions

Most of the installation positions of colored lanterns are outdoors, this requires the colored lantern designers to survey the site and design colored lanterns suitable for site in accordance with factors such as the length, width, and depth of the site, geomorphology, depth of the pool, wind strength, installation difficulty, rain and snow, etc. Size is an important factor in the design of colored lanterns, if the designed size of colored lanterns is large, the colored lantern cannot be installed, if the designed size of colored lanterns is small, the momentum will weaken and the display effect will be poor. The design of colored lanterns needs to be based on the local conditions, according to the local conditions, and place the lanterns according to the local

conditions, reasonably design the single-sided viewing colored lanterns, double-sided viewing colored lanterns, three-sided viewing colored lanterns, and multi-sided viewing colored lanterns. The full use of water landscape can make the reflections of colored lanterns on the water appear, from "one" to "two", in addition to the fluctuation of water patterns, it will present a unique visual art effect. The rational design of colored lanterns can ensure the effect of the lantern group; can reduce labor intensity and operating costs.

3.5. Have Aesthetic and Conform to Public Aesthetics

Colored lanterns belong to the art category, and the design of colored lanterns must follow the basic laws and aesthetic principles of fine arts, to have aesthetic. The symmetry, balance, rhythm, contrast, emphasis, exaggeration and other methods are used to build the form beauty of the colored lantern, and the factors such as shape, space, structure, color, warm and cold, and material are used to enrich the expression of the colored lantern.

The colored lantern project also belongs to public art, when designing colored lanterns, designers should not focus on their preferences to do whatever one likes individually, but should pay more attention to the feelings of the masses. Colored lanterns, as an excellent folk culture, often express the people's beautiful emotions and aspirations with allegorical means, such as the combination of elephants and vases means "auspicious and peaceful"; the combination of pine trees and fairy cranes means "prolong life"; the combination of peony and pomegranate means "rich and many children" and so on. Designers should avoid colored lanterns with bad meanings, such as designing treasure bowl with gold ingots, pearls, jewelry, etc., in order to emphasize the form; the designers should make the central axis at a 45-degree angle with the ground. This design will make the funder think of the bad implication of babies spilling out and the outflow of money, but the original meaning of the treasure bowl is completely absent.

3.6. Economical, Practical and Feasible

The display time of the colored lantern project is as short as three to thirty days and as many as three to six months, its display time is very short compared with public art such as urban landscape, building, and urban sculpture, therefore, the cost should be controlled during the design, not exceed the client's budget price. Designers save money as much as possible under the condition of ensuring quality, with the same funds, more lighting products are more likely to be approved by the clients, the designers can also save costs from the reasonable structure of colored lanterns, surface decoration materials, and improved manufacturing processes, and strive to make the design colored lanterns can not only guarantee the quality, but also be economical and practical.

Colored lanterns are mostly installed on land and water; designers should consider the feasibility of colored lanterns when designing colored lanterns. It was once envisaged that a giant cloud suspended in the air was made by means of colored lantern, it emits colored lights and floats in the wind in the dark night. If such a vision can be realized, the artistic effect must be very good. China's magnetic levitation and satellite launch technology should be able to solve various construction problems, but how much labor, material and financial resources are needed? Is it necessary? Therefore, the design of colored lanterns needs to be based on reality, no matter how beautiful the sky tower is, it is only a short-lived one. The design of colored lights should also pay attention to structural mechanics, wind-resistant and snow-resistant, and cannot cause hidden dangers. Lantern group with huge volume and difficult terrain cannot use cranes should be avoided as much as possible.

4. Design Practice and Application of Colored Lanterns

The ingenious, creative and unique design can not only convey the designer's design concept, but also reveal the designer's unique knowledge and aesthetic connotation [8]. Excellent lantern design works can fully show the human history, culture and art, national customs and regional characteristics of the region. The colored lantern "Tea Horse Road" designed by the author for Songpan County in Sichuan is shown in Fig.1, it vividly shows the flourishing scene of the ancient Songzhou Tea Horse Road, fully expresses Songpan's historical style, humanistic connotation and national characteristics, this design won the excellent award of the "4th Chinese Colored Lantern Creative Design Competition".

Songpan takes cattle and sheep as the main animal husbandry industry, the year of rooster colored lantern "Propitious Songzhou" designed by the author is shown in Fig.2, the abstract "sheep" character, horns, Gesang flower, chicken, lantern and auspicious pattern as elements, the designed gates are festive and lively, full of local characteristics. "Tang Dynasty Songzhou" as shown in Fig.3, which uses the combination of hand-painting and computer software processing, the colored lantern uses the existing sculpture in the ancient city of Songzhou as the main body and places it in the middle of the lantern group, the arches, flames, mountains, figures, and auspicious clouds and combined, it demonstrates Tang's powerful military power, the lantern group is designed according to the scene and has great momentum. The "Fruit Story", which won the excellent prize of the "3rd Chinese Lantern Creative Design Competition", is shown in Fig.4; it is the author's work for the Sichuan Miyi lantern show, the mango, strawberry, watermelon and other fruits produced by Miyi are used as elements, through the anthropomorphic image, a cute and unique colored lantern scene is created.



Fig.1 Tea Horse Road



Fig. 2 Propitious Songzhou



Fig. 3 Tang Dynasty Songzhou



Fig. 4 Fruit Story



Fig. 5 Jurassic Era



Fig. 6 Changfang Welcome You

The "Jurassic Times" designed for Chengdu's "2017 Dayi 1st Mushroom Picking and Lighting Festival" is shown in Fig.5, it takes a unique dinosaur skeleton as the object of expression, and arranges them in order by size, height, and it vividly reproduces other scenes of the Jurassic era. The design of floats and barges is also a common expression of the design of colored lanterns, they are mostly based on ready-made or processed Chang'an vehicles, large trucks, iron boats, wooden boats, cruise ships, etc., and based on ensuring the driver's sight, exterior lighting and cloth decoration are used on the street, and they are mostly used for various celebrations, street parades, and publicity advertisements, as shown in Fig.6. In this type of design, particular attention should be paid to the overall and local dimensions of vehicles and boats, parade routes, street widths, street corners, and other factors, moreover, attention must also be paid to the shape of the vehicles and boats, otherwise the decorative lanterns cannot be installed smoothly.

5. Conclusion

Colored lantern is discipline with various comprehensive categories; it is an artistic work that combines abstract composition, sculpture, painting, composite decoration and photoelectricity [9]. Zigong colored lantern has become a enduring modern folk art which suits both refined and popular taste with the progress and development of the times. The design of colored lanterns is the basis and premise for the production of colored lantern projects, the design of colored lanterns should be highly creative and prominently themed, moreover, they should have festive and lively atmosphere, idea with the times, strong visual aesthetic, economic and technological feasibility.

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