

Research on Visual Innovation Design of Weifang Kites

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Received: 14 May 2024; Accepted: 13 June 2024; Published: 14 September 2024

Abstract:

Weifang kites are traditional Chinese handicraft treasures and one of the most intangible cultural heritages in China. Both the color and the shape have high aesthetic research value. In the current information age, the development of science and technology provides new ideas for the inheritance of kites and brings new possibilities for the development of Weifang kite culture. The article explores and researches from various aspects such as content, shape, pattern and color, aiming to closely combine its aesthetic value with modern life, enhance local cultural confidence, and use digital media technology to seek a sustainable development path for the inheritance of Weifang kites.

Keywords:

Weifang Kites, Traditional Chinese Culture, Visual Design

1. Introduction

Culture is the identity symbol of the nation, and folk culture is a representative of a local characteristic. Weifang kite is one of the representatives of folk culture in Weifang area of Shandong Province, which has strong regional characteristics, witnesses the historical development of the area, and is a precious cultural resource. This paper studies the visual innovation design of Weifang kites, attracts more people to understand and appreciate Weifang kites, participates in the design and inheritance of kites, spreads Weifang folk culture, and promotes the inheritance and development of kite intangible culture.

2. Background and Current Situation of Weifang Kites

2.1. Research background

Weifang, located in the eastern coastal area of Shandong Province, China, is the birthplace of Chinese kites. Because of its long history of kites and exquisite craftsmanship, it is also known as the kite capital. Weifang kite making has a long reputation in China, from the Spring and Autumn period thinker Mozi to making the first “wooden kite.” It has a history spanning thousands of years, from the Ming and Qing dynasties to the peak. After many generations of inheritance and innovation,

Weifang kites have developed a unique process, including the selection of materials, design patterns, production skills, and decoration technology. Most of Weifang's kites are made of paper and bamboo, and the production process requires superb craftsmanship and patience. These traditional crafts have been preserved by some local craftsmen and have become a valuable cultural heritage.

Kites have a high ornamental value, and kite flying is also a popular national traditional sport. This activity is integrated with the local custom of flying paper kites during the Qingming Festival, which enriches the cultural connotation of kites for people to send good wishes for the future. Kite flying can not only delight the body and mind, but also achieve the purpose of dispelling illness and strengthening the body, strengthening the brain and intellect. In 1986, kites were officially included in the national sports competition program with the approval of the National Sports Commission, and since then kite flying competitions have become more and more formal [1]. In 2005, the United Nations Educational, Scientific and Cultural Organization of Folk Art included the Weifang International Kite Festival in the intangible cultural heritage and folk art protection project. The following year, the first batch of national intangible cultural heritage lists included "Weifang kite-making skills" among them. The introduction and implementation of relevant policies provide a stable system for the inheritance and development of Weifang kites.

2.2. Research status

Weifang kite is not only a handicraft but also an important folk culture. Every Qingming Day, Weifang City will hold a grand kite festival event, attracting tens of thousands of tourists and kite enthusiasts to watch. The kite festival not only shows the world the exquisite craftsmanship of Weifang kite making but also further sublimates the fun of kite competition, so that people cherish and inherit this precious cultural heritage even more. In addition, the kite industry in Weifang has also promoted the development of local tourism and commerce to a certain extent. According to Zhang Chonggao, Deputy Secretary-General of the International Kite Federation and Director of the Weifang Kite Office, in an interview, the sales of kites and extended products in Weifang reached 1 billion yuan in 2011, accounting for about 75% of the country and 60% of the world [2].

At present, the traditional national sports have been gradually marginalized, people's lifestyles and cultural habits have changed greatly, the custom of kite flying has been slowly forgotten in the younger generation, and the inheritance and development of Weifang kites are facing the dilemma of lack of environment, serious homogenization and difficult inheritance. First of all, with the acceleration of global economic integration, the social environment and natural ecology on which many intangible cultural heritage depend have changed, the natural rural environment has gradually disappeared, and large areas of open space have become more valuable in the process of urbanization. Secondly, many intangible cultural heritage products are still in the stage of production thinking, and do not consider the aesthetic taste and emotional needs of users, resulting in a lack of improvement and innovation in the style and use of intangible cultural heritage products, and a lack of experience and participation in the performance and display of intangible cultural heritage [3]. As a result, it is difficult for many intangible cultural heritage skills to be passed on in modern life.



Figure 1. Zhang Huagang's "Fuxing" kite (Picture from the Internet).



Figure 2. Traditional Weifang swallow kite (Picture from Baidu Encyclopedia).



Figure 3. Light kites (Picture from Baidu Encyclopedia).

3. Visual Design

The traditional Weifang kite has a strong local life atmosphere, and the appearance is eclectic to the strength of all families. Weifang kites transplanted the process of making woodblock prints to the shape structure and painting color of kites and applied the traditional techniques of Chinese painting to the drawing of kites, forming a unique style with beautiful shapes, fine workmanship, and bright colors, which became an important genre of Chinese kites [4]. As a new force in the development of science and technology in recent years, digital media technology covers a wide range of fields and provides a new path for kite design.

3.1. Content innovation

The design content of the kite expresses the emotional needs of contemporary people. First, add interesting content. The themes of traditional Weifang kites are mostly traditional flowers, birds, and Fuwa patterns, which have gradually lost the enthusiasm of most modern people. Therefore, by injecting more contemporary and interesting elements, it is imperative to make the kite design closely fit the psychological pursuits of contemporary people and attract the favor of more young people. Second, add good wishes. Through clever theme shaping, it arouses the audience's associations and emotional resonance. For example, designing a flying pigeon kite can symbolize peace and freedom, evoking people's desire for harmony and freedom in the world. Heart-shaped kites can symbolize love and promote the exchange of emotions between people. This kind of kite design that focuses on content expression is not only a graphic display, but also a bridge for emotional communication.

The design content of the kite reflects contemporary social phenomena. The integration of important issues in contemporary society into the design makes the kite itself a fashionable cultural symbol. Such as environmental awareness, social progress, etc., make the kite itself a cultural symbol, and at the same time, it can also arouse the audience's deep thinking about social topics.

3.2. Modeling innovation

3.2.1. Create a new image

Drawing inspiration from the natural world, the image is refined, and new image characteristics are incorporated into the design. For example, the shape design of the butterfly kite is mainly based on the butterfly family, with two large and round wings

and tail wings at the end. In reality, there is not only one butterfly in the butterfly family, but also the butterfly-winged phoenix butterfly with butterfly wings in the shape of a droplet and the three-tailed brown butterfly with gorgeous tail wings. By exaggerating the size of the wings, adjusting the shape of the wings, or adding decoration to the tail, the original image can be renewed.

3.2.2. Image evolution

In the kite design process, both added and simplified elements can be employed. First, add elements. By introducing more details, such as tail fins, streamers, etc., the kite is visually more complex and diverse, and at the same time, it adds richer athletic expressiveness to it. Second, simplify the elements. Designers use abstraction to transform natural elements into more simplified shapes and structures. The result is a cleaner, clearer, and more unique visual effect for the kite.

3.2.3. Deconstruct the combination

First, deconstruct the process. The concept of decomposition is used to emphasize fragmentation and superposition, to value the individual and the parts themselves, and to oppose the unity of the whole, thus creating a sense of fragmentation and uncertainty [5]. Taking the fish-shaped structure as an example, the representative element of scales is used to design the main image of the kite. The rearrangement and deformation of the scales can present a more abstract and imaginative form, making it more unique. Second, reassemble the individual elements. Using multiple permutations, such as size gradients, color gradients, create a complete work of art by designing a series of kites that are related to each other in shape, size, and color. At the 40th Weifang International Kite Festival, Zhang Hua's teamwork "Weifang Fuxing" string kite was unveiled (Figure 1). The kite is 150 meters long, composed of a locomotive and 50 carriages; the string shape expresses the modern theme; and the carriages are decomposed into discs and arranged in series to form the image of the EMU.

3.3. Pattern innovation

The patterns of Weifang kites are mostly from Yangjiabu New Year paintings, and some of the patterns are relatively old. Designers can use the following methods to inject fresh ideas into kites:.

First of all, the organic integration of natural elements into the kite design can create a unique texture. For example, the texture of an animal's skin is extracted, as if a kite has become a living elf. Secondly, use other traditional elements to blend with the kite. For example, the blue and white porcelain pattern is integrated into it to form an elegant charm. In addition, it is possible to borrow existing art styles. For example, the impressionist style is integrated into the pattern design, and the kite pattern presents a unique artistic sense through the subtle changes of impressionist colors. Pattern design is not only a continuation of tradition but also a unique interpretation of artistic language, so that Weifang kite not only has the heritage of traditional culture but also shows the fashion and personality of modern art.

3.4. Color innovation

Remix with traditional colors. Traditional Weifang kites are mainly based on magenta, magenta green, acacia yellow, and smoke black, but designers can still further explore a variety of color combinations to make the kite show a richer and unique appearance in color. For example, on the basis of traditional colors, try to

explore the Dunhuang color system and give the kite a calm and classical charm through blue, golden, and other colors.

Highlight the kite's personality with highly saturated colors. Bright and bright tones, such as orange yellow, fluorescent green, etc., can make the kite stand out more in the blue sky, creating a cheerful and energetic atmosphere. The highly saturated colors emphasize the presence of the kite and make the overall look stand out. This color innovation is not only a bold break with tradition but also a pursuit of individual expression. While using highly saturated colors can be impactful, they also need to be carefully balanced to avoid overly harsh colors.

Use contrasting colors to enhance the silhouette and shape of the kite. Guide the audience's gaze and create a sense of visual hierarchy. Accentuate the silhouette of the kite by using contrasting colors on different parts of it. The use of contrasting colors allows the kite to catch the attention of the viewer in a variety of lighting conditions. This method can improve the recognizability of the kite and make the kite more vivid when flying. For example, the swallow kite, with a large area of red and a small area of green, is decorated with small black and white color blocks, which enriches the visual effect (Figure 2).

Consider the color emotion, and make sure that the color matches the emotion expressed by the subject of the kite. For example, orange and red convey warm and festive emotions and are suitable for celebratory kites, while blue and green create a sense of tranquility and harmony and are suitable for kites that express serene landscapes or nature themes. The consideration of color emotion helps to create a visual experience that is closer to the audience's heart, so that the kite is not only a craft but also a tool for expressing emotions. By ensuring that the colors fit the theme and emotion, Weifang kites can resonate with the audience at a deeper level while showcasing traditional culture.

4. Material Innovation

Traditional kites are made mainly of bamboo as bone, paper as membrane, and hemp rope as a connection. Paper is favored for its lightness and toughness, especially when it comes to applying a variety of colors and patterns. However, the expressive power of a single material is limited after all, and the development of modern materials provides more possibilities for the innovation of kite design.

Depending on the aesthetic needs, choose translucent or reflective materials. The use of new materials can lead to a richer choice of colors. Transparent or translucent materials allow light to pass through, creating interesting effects of light and color. Especially at sunset, it gives the kite a unique beauty. Kite designers can make the most of the material's color and transparency to create eye-catching visuals that enhance aesthetic value. Using multiple layers and transparency to overlay colors can create rich blends that create a more vivid picture.

Depending on the ambient brightness, select the light-emitting material. As the light fades after dark, so does the visibility of the kite. As a result, designers can incorporate light elements when flying kites at night. By adding LED lights (Figure 3) or fluorescent effects to the kite, this innovation allows the kite to become an eye-catcher not only during the day, but also at night. By matching different light source colors, a variety of colors are presented. The combination of different colors of light sources can create a variety of effects, such as warm golden yellow, mysterious blue-

violet, and so on. Designers can flexibly adjust the brightness and color temperature of the light source to make the night kite present a dynamic color change. With an adjustable lighting system, the kite evolves into an interactive art installation at night. Viewers can interact with the kite through remote control or sensors, changing the mode and color of its light source, adding a sense of movement and fun to the night flight.

5. Dissemination and Display

Traditional exhibitions and cultural events provide visitors with the opportunity to experience the beauty of Weifang kite art up close, and the use of digital displays and social media breaks through geographical limitations, allowing the uniqueness of Weifang kites to be disseminated to the world through virtual technology and online platforms.

5.1. Virtual reality technology

New media technology provides a multimedia means for kite propaganda. Designers can use video production technology to create documentaries or art short films that record the kite-making process, showing the charm of kite art in a more intuitive and vivid way. At the same time, using animation and special effects techniques, designers can create stunning kite flight scenes that transport the audience into a fantastical art world. The 38th Weifang International Kite Festival was affected by the epidemic and organized the “Cloud Kite Festival” activity. The Organizing Committee has sent invitations to 140 countries and regions for online kite activities. Weifang Digital Cultural and Creative Economy Research Institute is the first in the country to use virtual reality technology to develop VR kite flying institutions, flying experience has two scenes of land flying and sea flying, kite types can be switched at will, and the future will continue to develop VR kite competition by changing the traditional kite flying form, combined with science and technology, breaking the tradition.

5.2. Panorama online exhibition

Traditional kite art publicity often relies on exhibitions, performances, and traditional media coverage. Nowadays, with the development of new media technology, through online exhibitions and virtual reality technology, designers can create virtual exhibition spaces that allow audiences to enjoy kite artworks without time or geographical limitations. For example, the National Museum of China uses panoramic image technology to provide visitors with a richer and more innovative way to experience the virtual scenes of these pavilions through the web page and view a variety of precious exhibits.

6. Conclusions

General Secretary Xi Jinping pointed out: “It is necessary to cultivate good inheritors, pass them on from generation to generation, and make intangible cultural heritage bloom with more charming brilliance.” [6] The innovation of kite design is to continue the tradition and express the needs of the present, and this innovation is a tribute to tradition and an exploration of the future. Through the update of content, the upgrading of shape, the creativity of patterns, and the improvement of colors, the kite is no longer limited to the past, taking into account the national cultural characteristics and the aesthetic characteristics of the times. The clever use of local cultural elements,

combined with Impressionism, Dunhuang color, and other artistic styles, brings a richer visual experience to the kite. The introduction of light transmission, reflective materials, and lighting elements gives Weifang kites a unique artistic charm at night. This series of innovations not only enriches the appearance of Weifang kites at the aesthetic level but also shows a deep understanding and contemporary interpretation of traditional culture.

Chinese traditional culture is in a critical period of development and innovation. We should seize this opportunity and make full use of the advantages of modern technology so that more people can understand the kite folk culture of Weifang, so as to stimulate more people's interest, emerge with more creativity, and pass on this ancient and unique culture.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Funding

This work was supported by the China University of Mining and Technology (Beijing), 2022 Undergraduate Education Teaching Reform and Research, Project Name: "Research on the Presentation of Colour Teaching Achievements". No. J220601.

References

- [1] Wang, Q.S.; Zhao, X.X. Development and protection of Weifang kites. *Sichuan Sports Science*, 2021, 40(04), 106-108+116, DOI: 10.13932/j.cnki.sctyx.2021.04.23.
- [2] Zheng, Y.C.; Liu, B. The origin and development of Weifang International Kite Club. *Sports Culture Guide*, 2013, 03, 33-36.
- [3] Wu, C.D.; Wang, Y. Let the intangible cultural heritage "live": the metaverse and the development of China's intangible cultural heritage. *Yuejiang Academic Journal*, 2022, 14(03), 148-157. DOI: 10.13878/j.cnki.yjxk.20220424.001.
- [4] Cao, L.P. Weifang Kite Painting and Yangjiabu Woodblock New Year Painting. *Fine Arts*, 2012, 03, 105-107, DOI: 10.13864/j.cnki.cn11-1311/j.2012.03.004.
- [5] Feng, H.J. Derrida and Deconstructivism. *Journal of Wuxi Vocational and Technical College of Commerce*, 2006, 6(6), 109-111.
- [6] Ministry of Culture and Tourism's "Ten Horses Five" Intangible Cultural Heritage Protection Plan [EB/OL2022-07-121]. Available online: <http://www.gov.cn/zhengce/zhengceku/2021-06/09/content5616511.htm> (accessed on 12 August 2023).



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