

The Innovative Culture Design of Weifang Traditional Kite

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ABSTRACT

Weifang traditional kite patterns face the core market dilemma of high cultural recognition but low consumption conversion. This study addresses the practical issue that their visual styles are outdated and fail to attract contemporary consumers, despite their profound cultural connotations and significant value for inheritance and transformation. It aims to bridge the gap between traditional pattern language and modern aesthetic applications through modern design transformation. Using the theoretical frameworks of design semiotics and color psychology, along with the case study method, this research systematically collected, deconstructed, and interpreted the patterns of typical Weifang kite cases. This process involved extracting and recombining motifs and contemporaneously translating the traditional color system. Based on this, new pattern and color series conforming to the modern visual context were constructed. Design principles and methods for cultural and creative products based on Weifang kite culture were proposed. Accordingly, cultural and creative products, ultimately aiming to promote the revitalization of the Weifang cultural tourism brand.

Keywords: Weifang kite, Traditional patterns, Cultural and creative products, Innovative design

INTRODUCTION

Weifang, China, is renowned as the “World Kite Capital”, boasting over two thousand years of kite-making history. It is a significant representative of China’s intangible cultural heritage. Its pattern system integrates folk auspicious symbolism, mythological tales, and natural imagery, forming a complete visual symbolic language.

In the contemporary consumer market, Weifang traditional kites face severe challenges. Despite high cultural recognition, their consumption conversion rate is low, especially among younger demographics. The issues are mainly reflected in: Firstly, the complex composition and intense, vivid colors of traditional patterns significantly differ from the prevailing contemporary aesthetics (Smith, 2022). Secondly, existing products lack innovation, struggle to integrate into daily life, and often have singular functions. Most kites remain confined to festivals and toys, failing to expand into daily consumption categories.






This study aims to provide a systematic solution for the contemporary transformation of Weifang kite patterns. Its significance lies in: theoretically, exploring the methodological pathways of design semiotics and color

psychology in traditional pattern innovation; practically, developing cultural and creative products that preserve cultural genes while aligning with modern aesthetics, thereby facilitating the revitalization and upgrading of the Weifang cultural tourism brand. The objectives of this study are to extract and transform the core symbols and colors of Weifang kite traditional patterns, forming a set of pattern series applicable to modern product design, and to summarize generalizable design principles.

Analysis of Traditional Weifang Kite Patterns and Colors






This study selected ten representative and well-documented cases of traditional Weifang kite patterns for analysis (see Table 1). Through in-depth pattern collection, morphological analysis, and symbolic interpretation of these cases, reliable original material and cultural basis were provided for innovative design (Robert, 2019). All cases are sourced from the Weifang Kite Museum collection and works by national-level intangible cultural heritage inheritors, ensuring their typicality and authenticity.

Table 1: Analysis of traditional kite patterns and colors.

No.	Title	Picture	Pattern	Implication	Color
1	Longevity and Prosperity		Peony, Butterfly, Cat	Butterflies frolic among peonies, and the cat homophonous with “longevit” symbolizes enduring wealth and prosperity	Sapphire Blue, Pink, Bright Yellow
2	Auspicious Longevity Swallow		Bat	Bats and peaches of longevity represent safety, health, fortune, and long life	Sapphire Blue, Red, Emerald Green
3	Butterflies among Flowers		Butterfly, Peony	Butterflies circling peonies signify a joyful and fulfilling life	Black, Mineral Green
4	Hall Filled with Treasures		Goldfish	Goldfish homophonous with “gold and jade” symbolize household abundance	Black, Orange
5	Four Generations Under One Roof		Four Dancing Lions	Four lions (homophonous with “four generations”) represent family harmony and prosperity	Black, Vermilion, Mineral Green

(Continued)

Table 1: Continued.

No.	Title	Picture	Pattern	Implication	Color
6	The Great Blue Swallow		Bat, Peach of Longevity	The blue background adorned with bats and peaches conveys blessings of fortune and longevity	Cerulean Blue
7	The Convergence of Five Blessings		Bat	Five bats gathered together signify the arrival of the “Five Blessings”.	Black, Vermilion, Mineral Green
8	The Swallow of Nine Fish		Goldfish	Nine fish represent longevity, prosperity, and surplus	Vermilion, Black, Sky Blue
9	Three Abundances and Nine Similes		Bat	Bats symbolize numerous offspring, abundant fortune, and long life	Vermilion, Black
10	The Soaring Dragon of China		Dragon, Auspicious Clouds	Five dragons soaring amid auspicious clouds express wishes for the nation’s prosperity and strength	Black, True Red, Bright Yellow

The typical patterns and color systems of traditional Weifang kites serve as essential visual carriers of their cultural core. The ten traditional Weifang kites selected for this study all adopt the swallow (“Sha Yan”) as their fundamental form. Their patterns predominantly feature central symmetry and balanced compositions, with key motifs such as flowers, bats, goldfish, and dragon patterns. These elements closely align with auspicious themes like longevity, family reunion, and prosperity, conveying the culture of Chinese traditional blessings.

In terms of color, the palette is based on foundational hues such as sapphire blue, vermilion red, bright yellow and black, complemented by shades like mineral green, sky blue and pink. Overall, this creates a characteristic high-saturation color contrast. However, these high-saturation colors are not arbitrarily chosen: red symbolizes joy and auspiciousness, yellow represents nobility, blue conveys tranquility, and green signifies vitality. Collectively, these kites integrate symbolic patterns with traditional Chinese color symbolism, epitomizing the artistic principle of “expressing meaning through form and conveying emotion through color” inherent to traditional Weifang kites.

Nevertheless, in contemporary times, the high-saturation color schemes and fixed patterns of traditional kites struggle to resonate emotionally with

modern audiences. Their misalignment with the emerging aesthetic trends pursued by today's consumers has gradually eroded their competitiveness in the market.

REDESIGN METHODOLOGY FOR WEIFANG KITE PATTERNS

A case study approach was adopted to conduct an in-depth analysis of the ten aforementioned cases. Design semiotics was applied to deconstruct the patterns, while color psychology guided the translation of color schemes.

Extraction, Deconstruction, and Recombination of Patterns

Extraction: Core cultural symbols were isolated, such as “bat” (fu, meaning good fortune), “peach” (shou, meaning longevity), “peony” (representing wealth and nobility), and “cloud patterns” (symbolizing auspiciousness).

Deconstruction: Traditional realistic patterns were optimized to align with contemporary aesthetics. The number of pattern layers was reduced to enhance recognizability while achieving a lighter and more refined visual appearance.

Recombination: Overly dense compositions were broken up by introducing negative space, a principle of modern graphic design. The deconstructed symbolic elements were rearranged to establish a new visual order while preserving a sense of symmetrical balance.

Color Translation Design

Current Context Analysis: Contemporary young consumers show a preference for Morandi tones, neutral colors, low-saturation palettes, and nature-inspired hues, emphasizing visual comfort and a sense of sophistication (Li, 2022). From a psychological perspective, while strong color contrasts and intricate pattern combinations can create immediate visual impact and evoke positive emotions as well as cultural identification (Elliot and Maier, 2014), the highly stylized nature of traditional visual language creates a disconnect with modern aesthetics that favor simplicity and individuality, posing challenges for its continued relevance and development.

Translation Method: Saturation and brightness were reduced. Traditional bright red was translated into terracotta red or brick red; bright yellow into pastel yellow or cream yellow; and indigo blue into gray-blue or haze blue.



















Color System Construction: A color system comprising primary, secondary, and accent colors was established. Primary colors were derived from traditional hues but with reduced purity. Secondary colors, such as black or navy blue, were used to balance the composition. Accent colors involved sparing use of traditional high-saturation colors to add brightness and evoke cultural memory.

Psychological Association: Color psychology principles were applied. For example, blue tones convey tranquility and wisdom, green tones are associated with nature and vitality, and low-saturation warm tones evoke warmth and nostalgia, making the designs more aligned with contemporary emotional needs.

Outcomes of Redesigned Kite Patterns

Patterns extracted from various Weifang kites were redesigned, resulting in six combined motifs, each applied to a swallow-shaped kite with a distinct form (see Table 2). The designs are named: “Butterflies Among Flowers”, “Goldfish Herald Spring”, “Dragon Treading on Clouds”, “Perfect health and longevity”, “Birdsong and Blossoms”, and “White Crane in Clouds”.

Table 2: Redesign evolution steps.

Number	Title	Elements	Line drawing	Colored drawing
1	Butterflies Among Flowers			
2	Goldfish Herald Spring			
3	Dragon Treading on Clouds			
4	Perfect health and longevity			
5	Birdsong and Blossoms			
6	White Crane in Clouds			

DERIVATIVE APPLICATIONS OF THE REDESIGNED KITE PATTERNS

A series of cultural and creative derivative products have been developed based on the six redesigned kite patterns, demonstrating their practical application potential (see Figure 1–9).



Figure 1: Posters design.

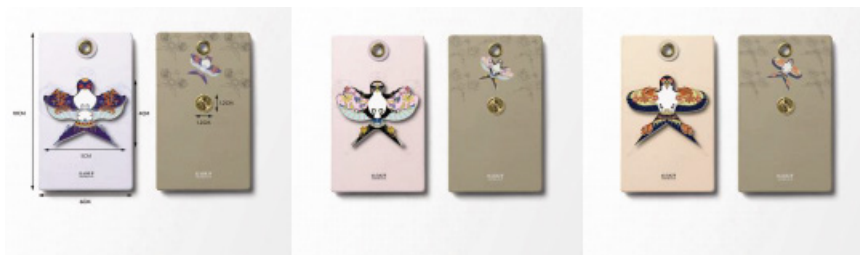


Figure 2: Metal brooch.



Figure 3: Acrylic airbag phone holder.



Figure 4: Acrylic key chain.



Figure 5: Stamp.



Figure 6: Postcards and stickers.



Figure 7: Canvas bag.



Figure 8: Seal.



Figure 9: Packaging design.

By selecting carriers that combine practicality and communicative value—such as postcards, stamps, keychains, and badges—the refined visual symbols were transformed into cultural and creative products aligned with modern aesthetics and consumption habits. Through the integration of graphic and physical products, the modern translation of traditional visual symbols was achieved, aiming to facilitate the daily-life dissemination and innovative transformation of traditional kite culture.

DESIGN PRINCIPLES FOR CULTURAL AND CREATIVE PRODUCTS BASED ON WEIFANG KITE CULTURE

Through the comprehensive research process, the following design principles and methods have been summarized:

Symbolic Translation, Coexistence of Form and Meaning

Design must not remain at the level of superficial reproduction but should translate traditional symbols into contemporary semantics. It is essential to extract the core “meaning” (cultural connotation) and then reshape its “form” using modern design language, thereby fostering a dialogue between tradition and innovation (Wang, 2023).

Color Narrative, Emotional Connection

Color is key to activating cultural memory and evoking emotional resonance. A translation system that bridges traditional color symbolism and modern color psychology must be established, allowing colors to both carry historical significance and narrate contemporary stories.

Scenario Embedding, Functional Value-Adding

The success of cultural and creative products lies in their integration into cultural contexts and daily life. Design should consider the specific usage scenarios of products and endow them with practical functions, transforming them from “souvenirs” into “daily essentials”.

Systematic Construction, Brand Synergy

The influence of a single product is limited. Therefore, a series of systematic product portfolios should be developed. All derivative products should maintain a unified visual language and cultural tone, collectively strengthening the brand image of “Weifang Kite”.

CONCLUSION

By employing the theories of design semiotics and color psychology, along with the case study method, this research has completed a comprehensive exploration spanning from the analysis of traditional patterns, symbolic deconstruction, and color translation to innovative design and practical application. The outcomes of this study not only include the production of six sets of redesigned patterns with modern aesthetic appeal and their derivative application solutions, but also involve the formulation of a set of reference-worthy design principles and methodological pathways for transforming traditional cultural resources into modern design assets. This provides feasible design practice support for the contemporary innovation and development of Weifang kite culture.

The limitations of this research lie in the potential for further expansion of the data sample and the need for deeper integration between the production

processes and cost control of derivative products and the actual production end. Future research could focus on three directions: First, exploring the integration of pattern design with interactive technologies (such as dynamic graphics and immersive experiences). Second, promoting the standardization and open-sourcing of design outcomes to provide fundamental materials for more designers. Third, strengthening cross-cultural comparative studies to explore innovative expressions of Weifang kite patterns in an international context, thereby assisting Chinese culture in making a more influential impact on the global stage. This research aligns closely with the AHFE 2026 Creativity, Innovation and Entrepreneurship track, with a particular focus on Creative process & practices and Designing culture.

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