

Cultural Translation Theory and Its Application in Oil-Paper Umbrella Design

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Abstract

This study explores the transformation of the oil-paper umbrella, an intangible cultural heritage, through cultural translation theory in modern creative design. By analyzing the cultural symbols at material, behavioral, and spiritual levels, products like earrings, necklaces, and pens were designed. The findings provide practical references for the innovative transformation of cultural heritage.

Keywords

Cultural Translation, Oil-paper Umbrella, Cultural and Creative Design, Digital Transformation, Intangible Cultural Heritage

Introduction

Oil-paper umbrellas, an iconic Chinese craft, are not only functional but also carry profound cultural values and historical symbols. As traditional crafts face challenges of market shrinkage and cultural preservation, their innovative development while maintaining cultural integrity becomes a key issue (Dabouba et al., 2023).

Cultural translation theory, which originated from linguistics, aims to preserve cultural meaning while giving it new forms of expression through symbol transformation (Zhang, 2022). Recently, scholars have applied it to the cross-cultural dissemination and modernization of intangible cultural heritage (Xu & Zhu, 2023). With digital technology's growth, cultural translation theory has become crucial for promoting and modernizing traditional cultural elements (Li, 2024).

However, although existing research has widely discussed the digital dissemination and re-creation of cultural symbols, there is still a significant research gap on how specific cultural

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elements can be transformed into products that meet modern needs through innovative design, especially in the application of cultural and creative industries. As a traditional element with a profound cultural background, oil-paper umbrellas have been involved in traditional craft research (Lu, 2018), but how they can be reborn in modern design has not been systematically explored in theory and practice. Therefore, this study aims to fill this gap and explore the innovative transformation path of oil-paper umbrella cultural symbols in modern cultural product design through cultural translation theory.

Methodology

This study integrates cultural symbol analysis and cultural translation theory to transform traditional oil-paper umbrella symbols into modern designs (see Figure 1).

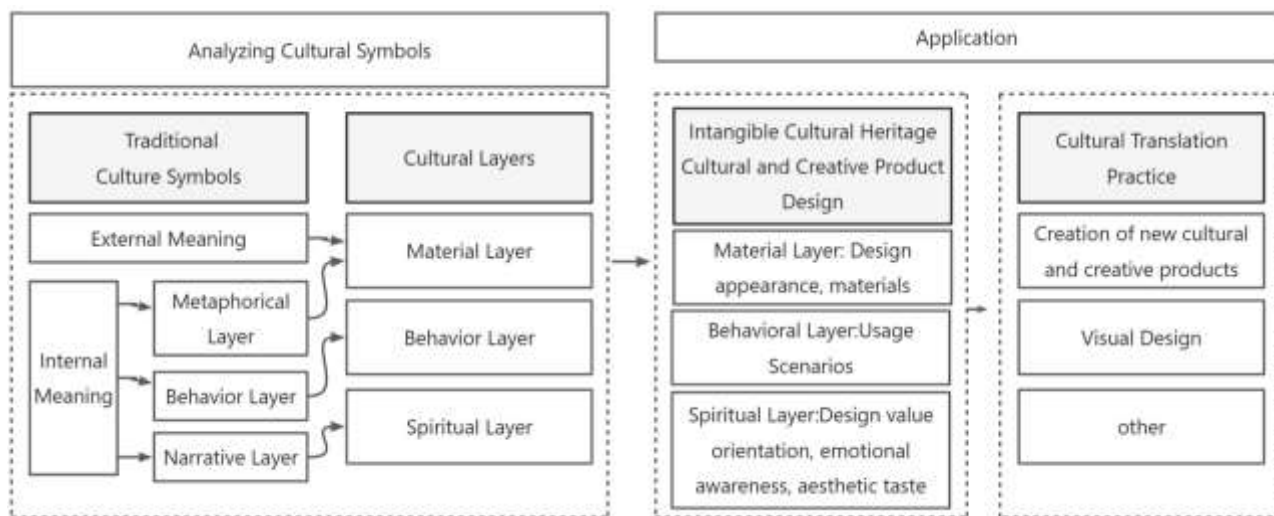


Figure 1. Cultural Symbol Analysis and Application Framework

Cultural symbol analysis examines the connotations and extensions of symbols, focusing on both external (materials, shapes, colors) and internal (metaphorical, behavioral, and narrative) meanings (Ma, 2022). These dimensions explore the symbolic, social, and cultural values of the oil-paper umbrella.

Cultural translation theory is the key support for this study, focusing on how to reconstruct the meaning of traditional culture in a modern design context while preserving its essence. Cultural translation is not only a cross-context symbol representation but also a dynamic process of reconstructing cultural values (Yuan, 1991). With the advancement of AI and AR technologies, digital visualization techniques have enabled more interactive and immersive cultural design experiences, expanding the potential for intangible cultural heritage preservation (Tang et al., 2024). This study explores how these technologies can be used to modernize the symbolic representation of oil-paper umbrella patterns in digital product design. It requires attention to both the surface meaning of symbols (such as visual symbols) and their deeper meanings (such as

cultural emotions). This theory emphasizes the reconstruction and expression of cultural symbols' meanings in different contexts and is seen as a critical tool for promoting the modernization of traditional culture (Jiang, 2019). In this study, cultural translation is categorized into three levels: material, behavioral, and spiritual. At the material level, traditional materials and patterns are simplified and optimized for modernization. An example of this is the use of digital tools to abstract and redesign the canopy patterns of oil-paper umbrellas, making them more compatible with contemporary aesthetic preferences. At the behavioral level, traditional rituals are integrated with modern application scenarios. This includes transforming the umbrella's patterns into wearable items such as earrings and pendants, which serve both functional purposes and maintain a sense of ritual. Finally, at the spiritual level, the focus is on extracting the symbolic meanings embedded in the culture—such as auspiciousness and harmony—and expressing these values through product design to evoke emotional resonance and foster value identification.

Based on the above analytical framework, the study proceeds with the following steps: conduct a multi-dimensional analysis of the traditional symbols of the oil-paper umbrella (material, behavioral, spiritual levels); use cultural translation methods to redesign and express these symbols; develop cultural and creative products based on oil-paper umbrella symbols, such as earrings, pendants, and writing tools, in practice.

Products such as earrings, pens and pendants were selected as design carriers for this study. These products were selected taking into account the fact that modern consumers like to wear items with symbolic meanings, especially those accessories that convey good meanings, wishes and cultural values. For example, oil-paper umbrellas carry rich symbolic connotations, such as harmony, tenacity and protection. The selection of practical daily items such as earrings, pens and pendants, and the integration of these traditional cultural symbolic elements into them, aim to combine the spiritual core of traditional culture with the needs of modern consumers, so that these products have both practical functions and can convey deep cultural connotations. The design process was completed by students of the Cultural and Creative Design course of the Visual Design major. Students used Adobe Illustrator for the design work, ensuring a professional and precise approach to the reinterpretation of the cultural symbol of the umbrella.

Results and Discussion

The cultural translation framework helped uncover the core cultural features of the oil-paper umbrella and provided guidance for its modern applications. This study analyzes the umbrella's cultural symbols across three levels: material, behavioral, and spiritual.

At the material level, the shape, color, composition, materials, and craftsmanship of the oil-paper umbrella collectively form its unique external cultural meaning. As shown in Table 1, the design of the umbrella ribs and the circular shape of the canopy not only represent resilience and reunion but also reflect the Chinese traditional aesthetic pursuit of harmony. The patterns on the umbrella surface often feature traditional auspicious motifs such as plum, orchid, bamboo, and chrysanthemum, symbolizing purity, nobility, and harmony. The materials of the umbrella primarily include bamboo ribs, mulberry bark paper, and natural plant oils, showcasing the

environmentally friendly nature of handmade craftsmanship. In terms of craftsmanship, the oil-paper umbrella employs techniques such as hand-painting, dyeing, and oiling, fully reflecting the exquisite and elegant qualities of traditional Chinese craftsmanship.

Table 1. Analysis of Classic Designs and Cultural Features of Oil-paper Umbrellas

Representative Works	Audience	Shape	Color	Composition	Material	Technique
"Plum, Orchid, Bamboo, and Chrysanthemum"	Traditional culture enthusiasts	Circular umbrella surface, symbolizing reunion	Bright colors such as red, yellow, and blue	Symmetrical, balanced, symbolizing harmony	Bamboo frame, mulberry paper, plant oil	Hand-painting, dyeing, oiling
"Lady Figure Umbrella"	Scholars and literati	Umbrella surface painted with lady figures	Soft and elegant tones	Delicate and refined, reflecting classical aesthetics	Bamboo, paper, tung oil	Detailed handcraft techniques
"Red Celebration Umbrella"	Newlywed couples	Circular surface with a red theme	Dominated by red, symbolizing joy	Full patterns, symbolizing happiness	Bamboo frame, paper, tung oil	Traditional manual crafting



"Plum, Orchid, Bamboo, and Chrysanthemum"



"Lady Figure Umbrella"



"Red Celebration Umbrella"

At the internal level, the cultural symbols of the oil-paper umbrella can be divided into three dimensions: metaphorical, behavioral, and narrative (as shown in Table 2). The transformation of material-level symbols primarily focuses on interpreting the materials and craftsmanship of the traditional oil-paper umbrella in a modern context. The choice of the oil-paper umbrella as the object of study is due to its unique structural aesthetic value and profound cultural symbolic significance. The circular design not only provides a visual sense of harmony but also conveys the beautiful metaphors of reunion and completeness; the radial arrangement of the umbrella ribs symbolizes a strong and unyielding spirit.

At the behavioral level, the oil-paper umbrella is widely used in weddings, religious ceremonies, and festive events, serving as a symbol of protection, blessings, and the warding off of evil. The beauty of its opening and closing actions, combined with its structural elegance, embodies the concepts of guardianship and protection.

At the narrative level, the craftsmanship and historical stories associated with the oil-paper umbrella carry rich cultural memories, such as the legendary story of the wife of Lu Ban, the famous ancient Chinese craftsman, inventing the umbrella. The focus of cultural translation at the narrative level is on extracting and recreating the cultural symbols and deeper meanings embedded in the oil-paper umbrella.

Table 2. Analysis of the Connotation Meaning of Oil-paper Umbrella

Connotation Level	Interpretation Dimension	Interpretation Content
Metaphorical Level	Auspicious Implication	Circular umbrella surface → Reunion; Red umbrella surface → Joy; Umbrella patterns (plum, orchid, bamboo, chrysanthemum) → Purity, resilience, modesty, harmony.
	Cultural Symbolism	Umbrella ribs → Resilience and vitality; Umbrella surface → Protection and shelter; Opening and closing motion → Life's ups and downs, natural cycles.
Behavioral Level	Religious Rituals	Used in Buddhist and Taoist rituals → Sheltering statues, symbolizing protection and sacred blessings.
	Wedding Scenarios	Bride holding a red umbrella → Avoiding evil and bringing blessings; Umbrella patterns (dragon-phoenix, floral motifs) → Symbolizing happiness and family prosperity.
	Festive Activities	Lantern Festival, Dragon Boat Festival → Umbrella used in performances and decorations → Conveying blessings, safety, and warding off evil.
	Daily Use	Sunshade and rainproof functions → Home decoration → Reflecting cultural taste and artistic value.
Narrative Level	Historical Stories	The legend of Lu Ban's wife inventing the umbrella → Demonstrates labor wisdom and practicality.
	Cultural Memory	Umbrella-making craftsmanship (bamboo frame weaving, oiling) → Recording historical values and social aesthetics → Becoming a vital carrier of traditional culture.
	Artistic Inheritance	Umbrella surface combines painting, engraving, and calligraphy → Transmitting intangible heritage; Narrative patterns (myths, folklore) → Reflecting educational and aesthetic functions → Providing inspiration for cultural creative design.

In this study, the cultural symbols of the oil-paper umbrella are translated based on selected typical elements (such as the circular structure of the umbrella canopy, plum, orchid, bamboo, and chrysanthemum patterns, and phoenix motifs). Through visual refinement, these elements are transformed into the core pattern language for product design (as shown in Figure 2). The modern demands of translation enable traditional cultural symbols to adapt to the needs of cultural product design and be integrated with specific design outcomes. The "oil-paper umbrella," "plum, orchid,

bamboo, and chrysanthemum" patterns, and the "phoenix" motifs will serve as the core decorative elements in the cultural creative product design. These elements are chosen because they are widely recognized in Chinese traditional art for their specific symbolic values. The craftsmanship of the "oil-paper umbrella" itself gives it unique aesthetic features and strong recognizability. The "plum, orchid, bamboo, and chrysanthemum" not only represent nobility, resilience, and the scholarly spirit but also reflect the moral pursuit and aesthetic philosophy behind the design works. The image of the "phoenix," which symbolizes auspiciousness, harmony, and family unity, is especially common in celebrations such as weddings and festivals.

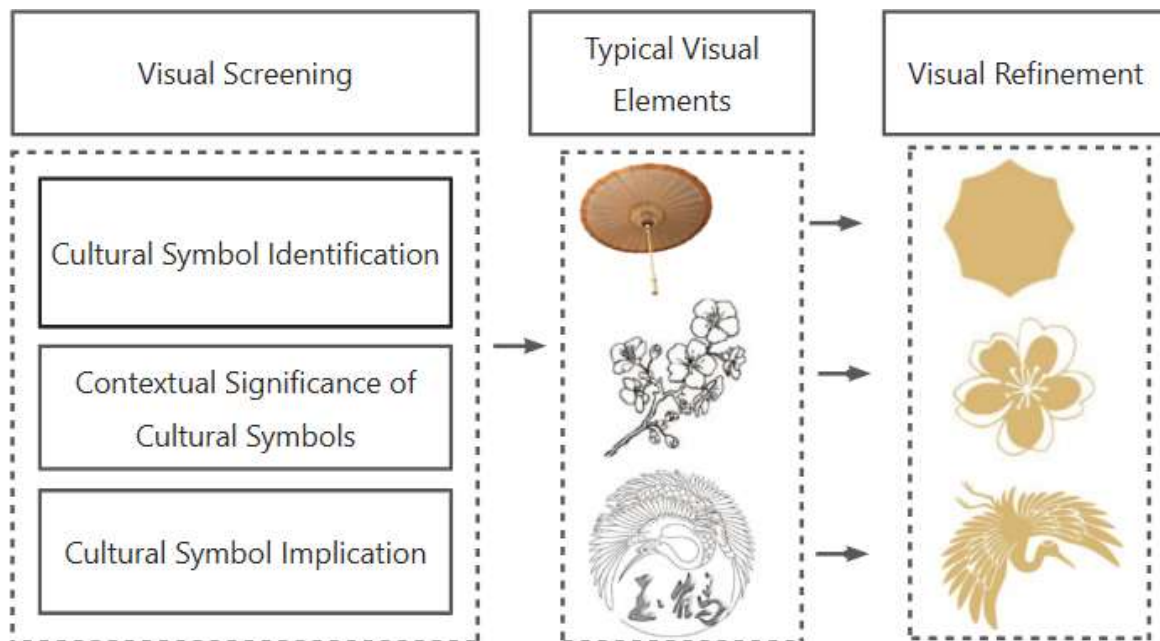


Figure 2. Visual Element Refinement Process of Oil-paper Umbrella Cultural Symbols

The spiritual level of translation focuses on the cultural connotations and symbolic meanings carried by the oil-paper umbrella. The design incorporates these symbolic elements into the product, emphasizing the retention of cultural meaning while showcasing the modern design principles of simplicity and functionality. The behavioral-level translation concentrates on the recreation of the traditional functions of the oil-paper umbrella in contemporary contexts. Everyday products commonly used by modern consumers, such as earrings, necklaces, pendants, and pens, are selected as design carriers to meet the dual demands of modern consumers for decorative appeal and cultural significance. This approach integrates the spiritual core of traditional culture with daily life, imbuing the products with cultural and emotional depth.

The practical phase of this study focuses on the design and development of cultural and creative gift products, including a series of items such as earrings, necklaces, pendants, and pens (as shown in Figure 3). These designs are centered around the oil-paper umbrella as the core imagery, guided by the principle of cultural symbol translation. Earrings and necklaces incorporate the linear elements of the umbrella ribs and the circular geometric form of the canopy, showcasing a minimalist and elegant design language. By combining metal and jewelry materials with traditional

craftsmanship, they convey the delicacy and charm of the oil-paper umbrella. The pendant design miniaturizes classic patterns of the umbrella, such as plum blossoms or cranes, to create small accessories rich in cultural imagery, suitable for everyday wear. The pen design abstracts the lines of the umbrella ribs and handle into the main form of the pen, while the umbrella patterns are integrated into the pen cap decoration, achieving a perfect blend of tradition and modernity.

These designs maintain the essence of traditional culture while incorporating fashionable design elements, making the products both artistic and functional.



Figure 3.Oil-paper Umbrella Collection

Designed by students from the Cultural and Creative Design course, Visual Design major, Guangdong Peizheng University, under the guidance of Instructor Yanfei Tang.

This study successfully translated and refined the cultural elements of the oil-paper umbrella, shifting them from the context of traditional craftsmanship to the design language of modern gifts and accessories. It explores the integration of intangible cultural heritage with contemporary design. By employing a "three-level translation method," the study focused on improving the shape and color of symbols at the material level, giving products new applications at the behavioral level, and extracting and expressing cultural connotations at the spiritual level. As a result, these cultural elements were creatively applied to gifts, such as earrings, necklace pendants, and writing tools. Integrating design thinking principles into the creative process enabled students and designers to engage in problem-solving in real-world scenarios (Lim et al., 2018). This approach not only preserved the core values of traditional culture but also bridged the gap between tradition and modern consumers, both visually and emotionally, providing a feasible model for the modernization of intangible cultural heritage.

However, in the process of symbol simplification and modernization, how to effectively prevent the loss of cultural meaning while improving the practicality and market appeal of symbols is still a topic that needs continuous research. Although the research has achieved encouraging results, there are still some limitations. First, there is a risk of misunderstanding of cultural symbols in cross-cultural contexts, because different audiences may have different understandings of the meaning of symbols, which affects the accuracy of design communication. Second, the design results of this study have not been tested by user feedback or market, and their acceptance and practicality remain to be tested. Finally, since this study only focuses on oil-paper umbrellas, the applicability of the proposed framework in other cultural design projects needs to be further explored.

In addition, the application of artificial intelligence in product design has accelerated the process of conceptualization, but there are still great limitations in interpreting complex cultural symbols (Tang & Leong, 2024), and different communities have different understandings of intangible cultural heritage, which means that future creative product design should pay more attention to the organic integration of aesthetic value and cultural heritage (Leong et al., 2024a). Through such practices, the innovative transformation of intangible cultural heritage not only enriches the cultural depth of creative products, but also opens new avenues for the protection and wider dissemination of intangible cultural heritage (Leong et al., 2024b).

Conclusion

This study demonstrates how the material, behavioral, and spiritual cultural symbols of oil-paper umbrellas can be translated into modern design. By combining traditional cultural elements with contemporary design thinking, culturally meaningful products were created. This discovery not only demonstrates the modern application potential of traditional cultural elements, but also provides a practical path for the innovative inheritance of intangible cultural heritage.

In addition, the research framework has strong universality and can be extended to the design and development of other intangible cultural heritage projects. Whether it is other traditional crafts or cultural symbols, they can be innovatively transformed through similar cultural translation methods. The universality of this research framework provides an operational reference for other cultural design projects and provides important inspiration for the protection and innovation of intangible cultural heritage.

However, there are also some limitations in the research process. First, there may be a risk of misinterpretation when translating traditional symbols in a cross-cultural context, which will affect the accurate communication of the design; second, due to the lack of actual user feedback and market verification, the market acceptance of the product has not been fully tested; finally, the applicability of this research framework still needs to be further extended to other cultural design projects. Therefore, future research should pay more attention to interdisciplinary cooperation, especially joint research among designers, cultural heritage scholars and market experts, to better achieve cultural inheritance and innovation. In addition, future research should strengthen user

demand analysis and market research to provide stronger theoretical support for the wider application and innovative development of cultural heritage.

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