

Research on the Design of Intangible Cultural Heritage Products Based on Cultural Ecology — Taking Dali Bai Ethnic Group Tie-dye as an Example

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ABSTRACT

This paper explores the cultural and ecological background of the design of Dali Bai tie-dye intangible cultural heritage creative products and their embodiment in historical culture, production technology, and aesthetic patterns. It analyzes the main problems in its market performance, including limited sales channels, narrow coverage of consumer groups, small market share and product homogeneity. In response to these problems, innovative strategies are proposed to integrate modern design concepts, expand application areas, enhance cultural ecological experience and promote cross-cultural cooperation. At the same time, it is emphasized that tie-dye cultural and creative products should pay attention to cultural and environmental balance and sustainable development in their development and avoid the loss of cultural connotation by protecting traditional skills and inheritors to achieve a win-win situation of cultural inheritance and economic benefits.

Keywords: *Dali Bai ethnic group tie-dyeing, Intangible cultural heritage products, Cultural ecology, Innovation strategy.*

1. INTRODUCTION

In recent years, the global attention to cultural heritage protection has been continuously increasing, and the inheritance and development of intangible cultural heritage ("ICH") have been highly valued [1]. As the crystallization of human wisdom and a living testimony to historical culture, ICH carries rich ethnic memories and regional characteristics and is an important part of demonstrating cultural diversity. Against this background, ICH cultural and creative products have gradually emerged as a new trend in the integrated development of culture and economy. Dali Bai ethnic group's batik is one of the first batch of national ICH in China, with a profound historical foundation and unique cultural charm. Originating from the life practice of the Bai people, the batik technique has been passed down for thousands of years. Its craftsmanship is simple and exquisite. It uses natural plant dyes (such as *Isatis indigotica* and *Polygonum tinctorium*) and presents

a natural and unique color halo effect and pleated texture through manual stitching and dyeing processes [2]. Its patterns cover Cangshan colorful clouds, Erhai waves, flowers, birds, fish, insects, and mythological stories, vividly reflecting the folk customs and aesthetic tastes of the Dali Bai people and are a true epitome of Bai ethnic historical culture. Carrying out research on ICH cultural and creative product design based on Dali Bai ethnic group's batik is of great significance. Whether in cultural inheritance, economic development, enriching cultural ecology, or promoting cultural exchange, this topic is worth in-depth exploration and practice. This paper will focus on the research of batik ICH cultural and creative product design based on cultural ecology, providing valuable ideas and methods for the inheritance and innovative development of batik techniques.

2. THE ECOLOGICAL MANIFESTATIONS IN THE HISTORICAL AND CULTURAL ORIGINS OF DALI BAI ETHNIC BATIK

Dali Bai ethnic batik has a long history, and its development process distinctly reflects the cultural ecological characteristics of different stages, closely linked with ethnic exchanges and regional features, and contains rich ecological cultural connotations.

The batik technique originated in the Han and Jin dynasties and initially emerged in the Central Plains region. During this period, the Central Plains was a hub of frequent cultural and economic exchanges, and it was against this backdrop that the batik technique was conceived, reflecting the local people's wisdom in life and aesthetic concepts. With the passage of time and increasing ethnic exchanges, the batik craft gradually spread to the southwestern regions inhabited by ethnic minorities. In the Song Dynasty, the Zhang Shengwen Scroll already depicted Bai people wearing clothes with batik patterns [3], indicating that the batik technique had become deeply rooted in the lives of the Bai people and had evolved into a distinctive ethnic decorative art. This stage of batik development witnessed the spread and integration of culture, reflecting the intermingling characteristics of cultural ecology across regions.

During the Ming and Qing dynasties, the batik technique in the Erhai Bai ethnic region reached its peak. The emergence of dyeing and weaving guilds, as well as the prosperity of dyed fabrics such as red cloth and Xizhou cloth, indicated that the batik technique had not only matured but also held an important position in economic trade. This development was facilitated by the abundant raw materials provided by the local natural environment and the Bai people's exquisite manual skills, while also demonstrating the mutually reinforcing relationship between the batik technique and cultural ecological elements such as social division of labor and economic transactions.

In the Tang Dynasty, the role of batik in ethnic cultural exchanges became even more prominent. During the Zhengyuan years of the Tang Dynasty, King Yimou Xun of Nanzhao sent a musical troupe to Chang'an to perform. The dancers' costumes featured batik techniques, with patterns mainly consisting of birds, beasts, plants, and other natural elements, symbolizing the flourishing of all things.

These costumes not only showcased the superb skills of Bai ethnic batik but also reflected the exchange and borrowing of artistic aesthetics and craftsmanship between different ethnic groups. As an ethnic craft, batik entered a broader field through cultural exchanges and disseminated the Bai people's ecological concept of drawing inspiration from nature.

In summary, the development of Dali Bai ethnic batik at different historical stages vividly reflects the cultural ecological environment in which it existed and serves as an important testament to the sedimentation of ecological culture.

3. FORMS AND CHARACTERISTICS OF DALI BAI ETHNIC BATIK CULTURAL AND CREATIVE PRODUCTS

Dali Bai ethnic batik cultural and creative products come in a wide variety of forms, covering areas such as clothing, home soft furnishings, accessories, and bags. Their unique use of patterns, color matching, and functional design showcase the artistic charm of traditional batik and the innovative style of modern cultural and creative products.

In the field of clothing, the batik technique is widely used in dresses, tops, scarves, and more. Batik dresses ingeniously combine traditional patterns with modern styles. For example, a minimalist dress incorporates blue and white batik elements at the neckline, cuffs, and hem, using floral, bird, fish, insect, or geometric patterns to reflect both ethnic charm and modern fashion sense. Batik tops are often used for T-shirts and shirts, presenting rich color variations through techniques such as section dyeing, adding personality and vitality to the wearer [4].

In the field of home soft furnishings, batik products such as tablecloths, door curtains, bed sheets, and cushions artistically depict natural scenery, creating a warm and comfortable home atmosphere. For example, the patterns on tablecloths are inspired by the Cangshan and Erhai, with a fresh and light color palette that complements the home environment; door curtain patterns move gracefully with the wind, adding a sense of liveliness; bed sheets and cushions focus on symmetry and harmony, showcasing a neat and elegant beauty, and infusing the indoor space with a cultural atmosphere.

In terms of accessories, batik handkerchiefs, headbands, bracelets, and other products are both

practical and decorative. Handkerchiefs feature exquisite patterns and are soft to the skin, reflecting unique taste; headbands have vibrant colors and distinctive patterns, adding highlights to hairstyles; bracelets combine batik fabric strips with beads and cords to create fashionable accessories with a distinct ethnic flair.

In the bag category, batik cultural and creative products include backpacks, shoulder bags, wallets, and more. These products integrate batik fabric with modern materials, combining aesthetic appeal with practical value. For example, batik backpacks combine leather straps and metal accessories, reflecting ethnic craftsmanship while meeting daily needs; shoulder bags have creative patterns and become fashionable items for travel or daily outings; batik wallets showcase unique cultural charm with their delicate texture and exquisite patterns [5].

4. MARKET PERFORMANCE OF EXISTING DALI BAI ETHNIC BATIK CULTURAL AND CREATIVE PRODUCTS

At present, Dali Bai ethnic batik cultural and creative products exhibit multifaceted characteristics in the market. Their sales channels mainly rely on offline tourist attractions. For example, in popular scenic spots such as Dali Ancient Town and Xizhou Ancient Town, there are numerous batik shops filled with a wide variety of batik cultural and creative products, attracting a large number of domestic and international tourists. These products, with their strong ethnic characteristics, are often purchased by tourists as souvenirs [6]. However, the development of online sales channels is insufficient. Although some merchants have opened shops on e-commerce platforms, they face many issues in operation, promotion, and logistics, making it difficult to break through geographical limitations and hindering the nationwide and even international promotion of the products.

In terms of consumer groups, the appeal of batik cultural and creative products is mainly focused on consumers who are interested in traditional culture and pursue personalized and unique souvenirs. Among them, middle-aged and elderly people, due to their emotional identification with traditional crafts, are more inclined to choose batik clothing or home furnishings; while young people pay more attention to the artistic style and personalized characteristics of batik and prefer accessories or backpacks [7]. However, the overall consumer

group coverage is relatively narrow and has not yet formed a wide influence in the mass market.

From the perspective of market share, Dali Bai ethnic batik cultural and creative products account for a relatively small proportion in the cultural and creative products market and face many competitive pressures. On the one hand, mass-produced textiles from modern industry, with their low prices, pose a threat to them; on the other hand, cultural and creative products from other regions' intangible cultural heritage (ICH) are also highly competitive, diverting consumers' attention and purchasing power.

Despite these challenges, Dali Bai ethnic batik cultural and creative products possess unique advantages. Their manual craftsmanship, profound cultural connotations, and fresh, natural artistic style make them stand out among cultural and creative products and irreplaceable. However, there are still some existing problems: their fame is limited to Dali and its surrounding areas or groups of travel enthusiasts, and they have not yet formed a brand recognition on a national or even international scale [8]; the product design is highly homogeneous, with some products simply copying traditional batik patterns, lacking innovation and integration, and failing to meet consumers' increasingly diverse and personalized needs.

5. INNOVATION STRATEGIES FOR DALI BAI ETHNIC BATIK CULTURAL AND CREATIVE PRODUCTS BASED ON CULTURAL ECOLOGY

To promote the inheritance and development of Dali Bai ethnic batik craftsmanship, cultural and creative products need to be innovated within the context of cultural ecology, combining modern design concepts, expanding application fields, enhancing experiential aspects, and promoting cross-cultural cooperation to adapt to market demands and the development trends of the cultural industry.

5.1 Integration of Modern Design Concepts

For Dali Bai ethnic batik cultural and creative products to stand out in the market, the key lies in innovating by integrating modern design concepts. By combining modern minimalism and fashion design with batik culture, traditional craftsmanship

can be revitalized [9]. Modern design in terms of shape, structure, and function allows products to retain their cultural essence while meeting the aesthetic demands and usage habits of modern consumers [10]. This innovation not only enhances the market competitiveness of batik cultural and creative products but also paves a broader path for the inheritance and development of batik craftsmanship.

5.2 Expansion of Product Application Fields

With the advancement of technology and the diversification of consumer needs, batik cultural and creative products should not be confined to traditional forms but should actively integrate with emerging fields [11]. For example, in the digital cultural and creative sector, virtual reality (VR) and augmented reality (AR) technologies can be utilized to provide consumers with entirely new interactive experiences. Additionally, batik-themed experiential workshops can be established, allowing tourists to participate in the processes of material selection, binding, and dyeing to experience the unique charm of handicrafts. Combining with the tourism industry, batik cultural tours can be launched, including visits to batik museums, meetings with folk artists, and immersive services such as workshop experiences. These measures can break through the traditional limitations of products, attract a wider consumer base, and rejuvenate batik craftsmanship [12].

5.3 Enhancing Cultural Ecological Experience

Enhancing consumers' cultural ecological experience is an important direction for the development of batik cultural and creative products. Through experiential workshops and themed activities, consumers can gain a deep understanding of the batik technique and its cultural background, thereby enhancing their sense of identification with the products. Additionally, cultural interpretation sessions can be set up, where professional interpreters introduce the historical origins, development trajectory, and the close connection of batik with the lives of the Bai people [13]. This kind of experience not only increases the cultural added value of the products but also enhances consumers' sense of participation and cultural awareness.

5.4 Promoting Cross-cultural Cooperation and Exchange

In the context of globalization, cross-cultural cooperation is an effective way to enhance the international influence of Dali Bai ethnic batik cultural and creative products. By collaborating with cultural and creative industries from other regions or countries, it is possible to draw on excellent ideas and experiences while integrating diverse cultural elements to enrich the cultural connotations of batik cultural and creative products [14]. This integration can enhance the international appeal of the products, expand their market scope, and improve their competitiveness on the global stage.

6. CONCLUSION

Through an in-depth study of the design of Dali Bai ethnic batik ICH cultural and creative products, it is clear that they contain rich ecological cultural elements in their historical and cultural origins, production techniques, as well as patterns and aesthetics [15]. At the same time, the analysis of the diverse forms of batik cultural and creative products has revealed the main problems in their market performance, including limited sales channels, narrow coverage of consumer groups, small market share, and serious product homogenization. In response to these issues, innovation strategies have been proposed, including integrating modern design concepts, expanding application fields, enhancing cultural ecological experience, and promoting cross-cultural cooperation.

In terms of cultural inheritance, combined with modern technology and diverse communication channels, Dali Bai ethnic batik cultural and creative products can more widely disseminate the cultural connotations they carry. In the future development process, the balance and sustainability of cultural ecology should be given attention. In particular, it is necessary to strengthen the training and protection of batik craftsmanship inheritors, respect the authenticity of traditional crafts, and avoid the dilution or loss of cultural value due to over-commercialization.

Only by following the trend of the times while firmly maintaining the foundation of cultural ecology can Dali Bai ethnic batik cultural and creative products achieve a win-win situation in economic benefits and cultural inheritance,

ensuring that the cultural value they contain can be sustained and promoted for a long time.

REFERENCES

- [1] (Tang Dynasty) Liang Jianfang: Records of the Xier River Region, in Yunnan Historical Materials Collection (compiled by Fang Guoyu et al.), Yunnan: Yunnan University Press, 1998.
- [2] Lu Zhiyan: Exploration of the Educational Inheritance Mechanism of Bai Ethnic Batik Craft in Zhoucheng, Dali, Master's thesis, Southwest University, 2010.
- [3] Zhou Lijuan: An Overview of the Development of Batik, Science, Education and Culture Review, June 2008 (Mid-month Issue).
- [4] Liu Fushen: Cultural Reflections on Bai Ethnic Batik, Journal of Dali University, December 2007.
- [5] Wang Liqing: The Development History and Current Status of Bai Ethnic Ecological and Folk Culture in Dali, Educational and Cultural Materials, Issue 1, 2015.
- [6] Jin Shaoping: From Traditional to Modern Bai Ethnic Batik in Zhoucheng, Dali, Today's Ethnicities, Issue 11, 2001.
- [7] Liu Xin: The Artistic Characteristics and Cultural Connotations of Modern Bai Ethnic Batik Patterns in Zhoucheng, Doc88.
- [8] Zheng Juxin: The Original Name of Batik and Its Techniques in the Han and Tang Dynasties, Silk, Volume 59, Issue 7, 2022.
- [9] Yu Honggang: Bai Ethnic Batik Craft and the Development of Tourist Souvenirs, Journal of Wuhan Textile University, Volume 32, Issue 1, 2019.
- [10] Ding Yifan, Yao Hongmei: Application of Traditional Batik Handicraft in Cultural and Creative Products from the Perspective of ICH, Fiber and Textile Technology, Issue 3, 2021.
- [11] Wang Zhihui: Research on the Cultural and Creative Design of Yunnan Batik Art, Doc88.
- [12] Zeng Zilong: On the Transformation from Traditional Folk Batik to Modern Batik, Research on the Modern Application of Bai Ethnic Batik Craft.
- [13] Liao Yaxuan: The Application of Batik in Modern Creative Clothing, The Application of Batik in Modern Creative Clothing.
- [14] Xia Shuang: Research on Batik Art in Interiors, Research on Batik Art in Interiors.
- [15] Zhuang Yaqing: Silent Beauty, Naturally Derived—The Aesthetic Connotations of Bai Ethnic Batik Design in Dali, Tian Gong, Issue 8, 2023.