

Exploration of the Innovative Development Path of Bamboo Weaving and Fashion Design in the Background of Intangible Cultural Heritage

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Abstract: Based on the background of intangible cultural heritage, the article analyzes the current situation of bamboo weaving techniques and cultural industry and the current problems of bamboo weaving fashion design, and discusses the innovative design of the integration of non-heritage bamboo weaving and fashion industry from the perspectives of balance of cultural heritage and innovation, sustainable fashion design, international vision and bamboo industry chain development, respectively. It focuses on the balance between traditional skills and modern design, the integration of environmental protection concepts, the promotion of Chinese culture in the international market, and the economic benefits brought about by the development of related industries, and carries out innovative design based on this, aiming at analyzing the point of convergence between the non-heritage culture and fashion, and promoting the inheritance of the non-heritage bamboo weaving skills and the sustainable development of the fashion industry, which is an important guide in the fields of culture, economy and environment. The design of this project is based on the innovative design of bamboo weaving.

Keywords: Intangible cultural heritage, bamboo weaving, fashion fusion, innovative design

1. Introduction

In today's context of globalization, cultural inheritance and innovation have become the key to lead the development of fashion industry. As a treasure of Chinese traditional culture, the non-heritage bamboo weaving technique represents the crystallization of the wisdom and hard work of the Chinese people for thousands of years. As a unique cultural heritage of China, the non-heritage bamboo weaving technique has a profound historical background and unique artistic charm. However, in the wave of modernization, how to let this traditional skill be inherited, developed and better integrated into the fashion industry has become a challenge and opportunity in front of us. The purpose of this paper is to study in depth the path and innovation points of the integration of the non-heritage bamboo weaving skills and fashion, so as to provide new ideas and inspirations for the inheritance and innovation of Chinese traditional culture in the field of fashion.

2. Bamboo weaving techniques and cultural industries

China is rich in bamboo resources, mainly in Zhejiang, Jiangxi, Hunan and Fujian, etc. Bamboo weaving, as one of the traditional intangible cultural heritage skills in China, has experienced prosperity and decline in the development and change of the times. Due to regional differences, bamboo weaving in different places has its own characteristics, such as Dongyang Bamboo Weaving, Anxi Bamboo Rattan Weaving, Qing Shen Bamboo Weaving, Liu's Bamboo Weaving in Quxian County and Shengzhou Bamboo Weaving. Bamboo weaving products have appeared since the Neolithic period, the Qin and Han dynasties have matured, the Tang and Song dynasties have fine weaving and obvious aesthetic value, and the Ming and Qing dynasties have been developed comprehensively, the weaving techniques and the degree of sophistication have become more and more refined, and after thousands of years of baptism are still one of the common utensils that the people are happy to see and enjoy. However, due to the war and the 21st century, a large number of plastic products occupy the market directly led to the bamboo weaving market atrophy, the state for the protection of intangible bamboo weaving development will be included in the ranks of intangible

cultural heritage, by the eighteen before the "salvage", "protection" to the current stage of the "productive protection". "Productive protection" and "adaptive use" [1].

The fashion industry encompasses a vibrant and evolving field of apparel, accessories, cosmetics, textiles and other related fields, and its trends include sustainable fashion, digital fashion, fast fashion and slow fashion, diversity and inclusion, technological innovation, globalization, museumization and second-hand market [2]. According to the preliminary statistics of the National Bureau of Statistics, China's NCS market will reach more than 40 billion yuan in 2023, with a growth rate of more than 5%. Meanwhile, both domestic and international fashion industries continue to evolve in the face of the challenges of market change, technological innovation, and shifts in consumer demand, in which the directions of policy support, cultural creativity, and sustainable development will continue to lead the development of the fashion industry in the future. The Made in China 2025 program aims to upgrade China's manufacturing sector, which includes the textile, apparel and fashion industries, and the government will promote the upgrading of the fashion industry through policy support in technological innovation and quality improvement [3]. In addition China's newly enacted relevant innovation and entrepreneurship policies, trade policies, sustainable development policies and cultural and creative policies are also promoting the development of the cultural industry.

3. Problems of the current bamboo weaving fashion design

3.1 Insufficient integration of tradition and modernity, single product style.

Bamboo weaving, as a traditional craft, although has a rich heritage in terms of craftsmanship, there is still a lack of integration with modern fashion design. Many bamboo weaving designs are still stuck in the traditional patterns and styles, the lack of a keen sense of contemporary aesthetic trends and creative thinking, which leads to a single product style of bamboo weaving products, it is difficult to attract young consumers in the market, so that its fashionability and innovativeness is challenged. Its performance is mainly reflected in the traditional patterns and styles are not novel enough, single color matching, form constraints, lack of style innovation and other aspects.

3.2 Material and technology limitations and insufficient market recognition.

As a traditional material, bamboo weaving is limited by its material and processing technology to a certain extent. Compared with modern materials such as plastic and metal, there is a gap in the plasticity, strength and durability of bamboo weaving materials, which limits the space for designers to play in product innovation and diversification. Despite its unique cultural heritage and eco-friendly characteristics, bamboo weaving has relatively low recognition in the market. Many consumers do not know enough about the functions, characteristics and advantages of bamboo weaving products and lack recognition of their value, which makes the promotion and sales of bamboo weaving fashion products in the market subject to certain constraints and makes it difficult to form good market demand and sales growth.

4. The innovation and development path of bamboo weaving fashion design

4.1 Balance point of cultural "inheritance" and "innovation"

Intangible bamboo weaving as China's traditional skills is an important carrier of cultural heritage and innovation, and how to promote the development of traditional Chinese intangible cultural heritage such as bamboo weaving, but also need to accurately grasp the balance between cultural heritage and innovation. In the balance between the two, "inheritance" and "innovation" complement each other, innovation needs to be based on inheritance, and inheritance also needs to rely on innovation to push forward the new (see Figure 1).

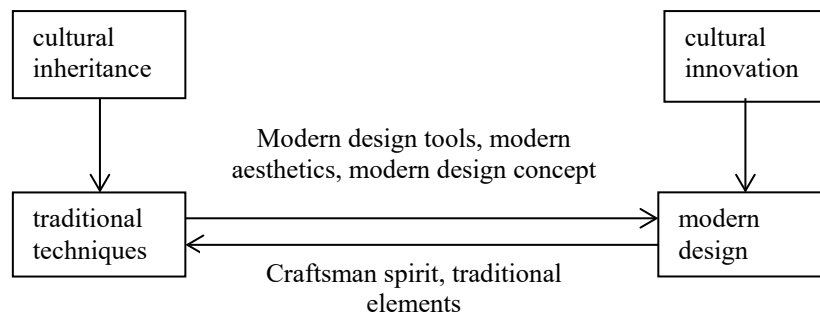


Figure 1: The relationship between traditional techniques and modern design

In terms of cultural inheritance, traditional skills have been revitalized at the design level through the use of modern design tools, aesthetics and concepts. First, the integration of modern design tools allows traditional bamboo weavers to create new works more efficiently, exploring different shapes, structures, and uses, and this integration infuses bamboo weaving with a sense of modernity, making it better adapted to the needs of contemporary life [4]. Traditional craftsmen can use the convenient operation of software such as chatgpt and midjourney to find design inspiration at the beginning of the design process, and produce more creative and modern bamboo weaving period works. Secondly, contemporary aesthetics plays a key role in inheritance and innovation. While modern design focuses on the combination of aesthetics and practicality, traditional bamboo weaving has its own unique aesthetic traditions, such as the conceptual model of apparel created with bamboo weaving presented by the founder of the FENGCHENGWANG brand at the spring/summer collection of London Fashion Week 2020 (see Figure 2). This design retains the traditional cultural values while appealing to a wider audience. Finally, in terms of concept, traditional bamboo weaving usually embodies the reverence and love of nature and life, and this concept has been continued in modern design. This balance of heritage concepts makes bamboo weaving more vital as an intangible cultural heritage, not only connecting the past and the present, but also providing a solid foundation for future development [5-6].



Figure 2: FENGCHENGWANG 2020 bamboo concept clothing

In terms of cultural innovation, modern design is not only simply accepting and imitating traditional craftsmanship, but also revitalizing it by digging deep into the spiritual connotation behind traditional skills [7-8]. The qualities of patience, craftsmanship, and extreme pursuit of details contained in the traditional bamboo weaving craftsmanship are regarded by modern designers as a crucial source of inspiration in the design process, and this craftsmanship is not only inherited on the technical level, but also a persistent pursuit of art, which has become a creative attitude in modern design [9]. In the process of absorbing traditional elements, modern design is also not simply the introduction of

traditional bamboo weaving patterns and forms, but through a deep understanding of the core of traditional culture, into the design language. 2023 spring Chinese women's clothing brand NEXY.CO (Naikou) hand in hand with the non-genetic heir of Sichuan Province, the third generation of the Daoming bamboo weaving family heir, Yang Longmei, jointly launched the launch of the launch of the non-legacy of the bamboo weaving artist co-branded The series w"Zhiwu - Bamboo" (see Figure 3) presents creative bamboo weaving patterns through fashion design, creating a collision between tradition and fashion. This not only includes patterns and structures on the surface, but also involves the interpretation and re-interpretation of cultural symbols. By digging deeper into the traditional elements, the modern design not only gives the work a more profound connotation, but also conveys the respect and cherish for traditional culture.



Figure 3: NEXY.CO co-branded series released show

Traditional bamboo weaving techniques provide historical origins and cultural heritage for modern design, while modern design injects a new zeitgeist into traditional handicrafts by rethinking traditional aesthetic concepts and craft heritage. This balance not only promotes the development of non-heritage bamboo weaving, but also finds wider recognition and application for traditional handicrafts in contemporary society.

4.2 Sustainable environmental protection concept and fashion design

While exploring sustainable fashion design, non-heritage bamboo weaving injects unique cultural and handicraft values into this concept. Sustainable fashion emphasizes the "dual-carbon" concept of environmental protection, that is, to achieve the two goals of carbon peak and carbon neutrality, non-heritage bamboo weaving techniques, such as traditional handicrafts from a wide range of sources, emission-free, purely handmade and other characteristics of the dual-carbon concept of the effort [10]. 2022, November, China joined hands with the International Organization for Bamboo and Rattan to launch the "bamboo instead of plastic" initiative, in order to contribute to the "bamboo instead of plastic" initiative, and to promote the "bamboo instead of plastic" initiative. In November 2022, China and the International Organization for Bamboo and Rattan launched the "bamboo instead of plastic" initiative, which provides an effective solution to reduce plastic pollution globally. 2023 In November 2023, the "First International Symposium on Bamboo instead of Plastic" formally released the "Bamboo instead of Plastic" Global Action Plan (GAP). "In November 2023, the First International Symposium on Substitution of Bamboo for Plastic officially released the Global Action Plan on Substitution of Bamboo for Plastic (2023-2030), which incorporates the element of substitution of bamboo for plastic in development strategies and plans, and contributes to the realization of the 2030 Sustainable Development Goals.

Traditional bamboo weaving is usually made of natural bamboo material, which is inherently fast-growing, versatile, renewable, and biodegradable, which is compatible with the environmental concept of sustainable fashion [11-12]. Sustainable fashion design advocates the recycling and reuse of materials, while non-heritage bamboo weaving has a long tradition in this regard [13]. Due to the fast growth rate of bamboo, which can be matured in 3 to 5 years, moderate harvesting will not cause long-term damage to the environment and can steadily and continuously provide raw materials for the bamboo weaving manufacturing industry, while traditional bamboo weaving craftsmen transform

bamboo into durable and beautiful works of art through skillful design and production techniques. This recycling method is in line with the concept of sustainable fashion design, which reflects the effective management of resources and the protection of the environment.

Through the concept of "dual-carbon" environmental protection and natural bamboo materials, non-heritage bamboo weaving retains the charm of traditional craftsmanship while contributing to contemporary society's pursuit of sustainable fashion. This fusion not only injects new fashion elements into traditional culture, but also provides a unique and in-depth option for sustainable development.

4.3 Opportunities under the internationalization vision

Under the internationalization vision, with the rise of China in the global economic and cultural fields, China's traditional handicrafts have repeatedly demonstrated the unique beauty of Chinese culture on the international stage, and the non-heritage bamboo weaving, as one of the representatives of China's traditional handicrafts, is also receiving the attention of the international community.

The uniqueness and profound heritage of Chinese culture are vividly presented in non-legacy bamboo weaving, which attracts the international audience's strong interest in traditional Chinese culture. Through exhibitions, cultural exchanges and international cooperation, non-legacy bamboo weaving not only establishes the image of traditional Chinese culture in the international arena, but also makes a positive contribution to the international dissemination of Chinese culture. For example, Ecuador, an equatorial country, has more than 40 kinds of bamboo due to its geographical advantages, and has formulated the "Bamboo Strategy 2018-2022". With the strengthening of Sino-Ecuadorian cooperation and the spread of China's concept of "bamboo instead of plastic", Ecuadorian craftsmen have made Chinese bamboo weaving into an important part of Chinese culture. With the strengthening of Sino-Ecuadorian cooperation and the spread of China's concept of "bamboo instead of plastic", Ecuadorian craftsmen have combined Chinese bamboo weaving with local traditional skills to seek innovation and integration, which has greatly contributed to the international development of Chinese bamboo weaving skills, and the uniqueness of non-heritage bamboo weaving has often become the focus of some international cultural activities and craft exhibitions, for example, non-hereditary inheritor He Hongbing's works use bamboo threads with different shades of different colors interlaced into a fashionable latticework, which is free from the traditional pattern of Dongyang bamboo weaving bottles and cans. For example, the works of He Hongbing, a non-hereditary heirloom bamboo weaver, are interwoven with different colors of bamboo threads into fashionable lattice patterns, which are free from the traditional Dongyang bottles and jars, and have been displayed in the National Museum of Denmark's "Winds from the Sea - Exhibition of Non-Genetic Inheritance and Contemporary Designs", the University of Kentucky's "Dancing with Bamboo Embroidery", and Portugal's "Contemporary Non-hereditary Art". Contemporary Intangible Cultural Heritage Art Exhibition at the University of Kentucky in the United States, as well as the Zhejiang Culture and Tourism Exhibition in Lisbon, Portugal (see Figure 4) [14].



Figure 4: He Hongbing's bamboo lamp and 'Thousands of Rivers and Mountains' dress

Non-heritage bamboo weaving demonstrates the unique charm of Chinese culture in an internationalized perspective and provides a practical example for China to win more respect and recognition in the international arena. This balance of cultural inheritance and innovation has enabled

non-heritage bamboo weaving to play the role of a cultural ambassador around the globe, making a positive contribution to the promotion of the international dissemination of Chinese culture.

4.4 Opportunities created by bamboo industry chain development

Non-heritage bamboo weaving can not only play a role in cultural inheritance and innovation, but also make a positive contribution to economic growth and the provision of employment opportunities. With the emphasis on non-heritage bamboo weaving, the corresponding industrial chain has gradually been formed.

From the collection and processing of bamboo to the handmade segment, the establishment of the whole industry chain provides multi-level support for the local economy, which helps to enhance the added value of the local bamboo industry and stimulate the development of the bamboo industry chain [15]. At the same time, the promotion and sale of non-heritage bamboo weaving creates employment opportunities for related practitioners. Taking China as an example, it is estimated that by 2020, China's bamboo weaving industry has involved millions of practitioners, including bamboo weaving craftsmen, designers, salespersons, business managers, and other people at all levels. As the promotion and sales of bamboo weaving products grow in both domestic and international markets, the scale of employment in the bamboo weaving industry is also expanding. For example, the intangible cultural heritage of Daoming Bamboo Weaving in Chongzhou City has taken rural revitalization as an opportunity to strengthen the development of Daoming Bamboo Weaving in many ways through the comprehensive form of government + college + farmers + base + industry + tourism, realizing the organic unity of the protection and inheritance of intangible heritage and the local economic and social development [16]. In terms of industrial development, some local governments and enterprises have further stimulated the potential of the bamboo weaving industry by supporting the training, promotion, and exhibition and marketing activities of the non-heritage bamboo weaving, and this positive industrial policy has helped to expand the scale of the market and improve the competitiveness of the products, thus promoting the development of the local economy.

Overall, NRM bamboo weaving has played an important role in economic growth and employment opportunities. Through the industrial development of traditional crafts, it has provided a new growth point for the local economy and created more employment opportunities for practitioners. The development of this cultural industry has helped to pass on traditional skills as well as making a practical contribution to the prosperity of the local economy.

5. Bamboo weaving fashion product series design

5.1 Bamboo Earrings

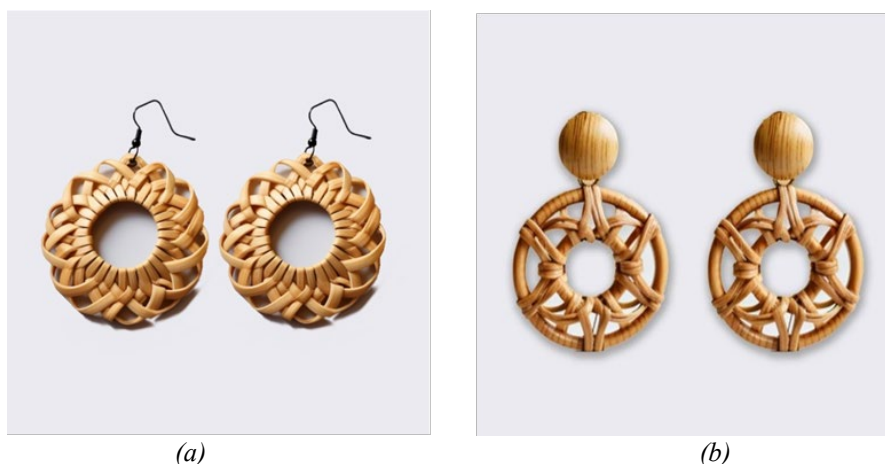


Figure 5: Bamboo earrings design

These handmade bamboo earrings feature a round design with openwork solid color bamboo craftsmanship, presenting a simple and generous aesthetic. The earrings are light and elegant, suitable for daily wear or special occasions. Based on the traditional bamboo weaving technique, it presents a modern sense of fashion through a minimalist design concept that emphasizes an eco-friendly and sustainable lifestyle. The simple shape and solid color of these earrings make them easy to match with

a variety of outfits, adding a natural and elegant charm to the wearer (see Figure 5).

5.2 Bamboo Bracelet

This handmade bamboo bracelet presents a simple and elegant design concept based on a round, closed design with solid color bamboo weaving. The overall shape of the bracelet is both elegant and stylish, making it suitable for wearing on a variety of occasions. Through the skillful combination of traditional bamboo weaving techniques, the bracelet is created to be lightweight and functional. Its solid color design makes it easy to match with all types of outfits and highlights the aesthetics of modern simplicity. This handmade bamboo bracelet not only focuses on the elegance of the shape, but also emphasizes the respect for natural materials, embodying an eco-friendly and sustainable attitude towards life. Wearers will experience the unique feel and natural beauty of bamboo weaving in simplicity (see Figure 6).



Figure 6: Bamboo bracelet design

5.3 Bamboo Weaving Phone Case

This handmade bamboo woven phone case features a one-piece design, which presents an overall solid color and simplicity. With a simple and smooth structure, the case is modern and stylish, adding a natural and elegant style to the phone. Based on the traditional bamboo weaving craftsmanship, combined with the concept of minimalist design, it highlights the attitude of environmental protection and sustainable life. The selection of handmade bamboo weaving material not only provides effective protection for the phone, but also reflects the respect and value of natural materials. The solid color design of this case makes it easy to match a variety of phone styles, bringing the user a sense of simplicity and aesthetics while emphasizing concern for quality of life and the environment (see Figure 7).

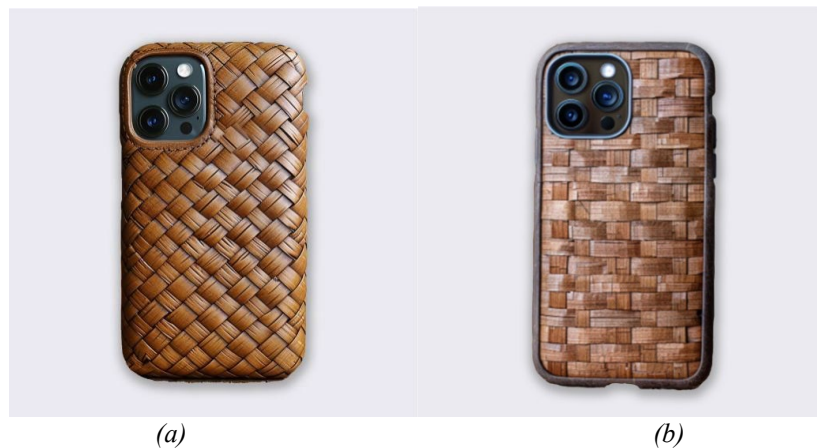


Figure 7: Bamboo mobile phone shell design

5.4 Bamboo Woven Wallet

This handmade bamboo weaving wallet is combined with leather in a brown color palette, showing a vintage, simple and generous design. The wallet is made of traditional bamboo weaving craftsmanship combined with modern leather, presenting a unique material and feel. Its simple and generous design combines practicality and aesthetics, making it suitable for daily carrying. The choice of brown tone color not only complements the natural material bamboo weaving, but also gives the wallet a vintage texture. The design concept of this wallet reflects respect for traditional craftsmanship and the pursuit of modern simplicity, while also emphasizing environmental protection and sustainability. The wearer will feel its unique quality and cultural connotation in the process of using it, experiencing the perfect combination of bamboo craftsmanship and modern design (see Figure 8).



Figure 8: Bamboo wallet design

5.5 Bamboo Brooch

This handmade bamboo brooch bag features a floral, openwork design with woody tones, presenting a simple and generous design. The brooch bag utilizes traditional bamboo weaving techniques combined with modern design concepts, showcasing a unique aesthetic and handcrafted quality. Its flower-shaped hollow design not only adds visual layers, but also injects a touch of romance and elegant atmosphere, suitable for a variety of occasions to wear. The choice of woody tones echoes the bamboo material, showcasing the beauty of nature and simplicity, reflecting the respect and value of the natural environment. The simple and generous design of this brooch bag focuses on practicality and comfort, as well as demonstrating the pursuit of minimalist aesthetics and the pursuit of an eco-friendly lifestyle. The wearer will experience the unique charm of bamboo craftsmanship and the perfect combination of nature and beauty with the embellishment of the brooch bag (see Figure 9).

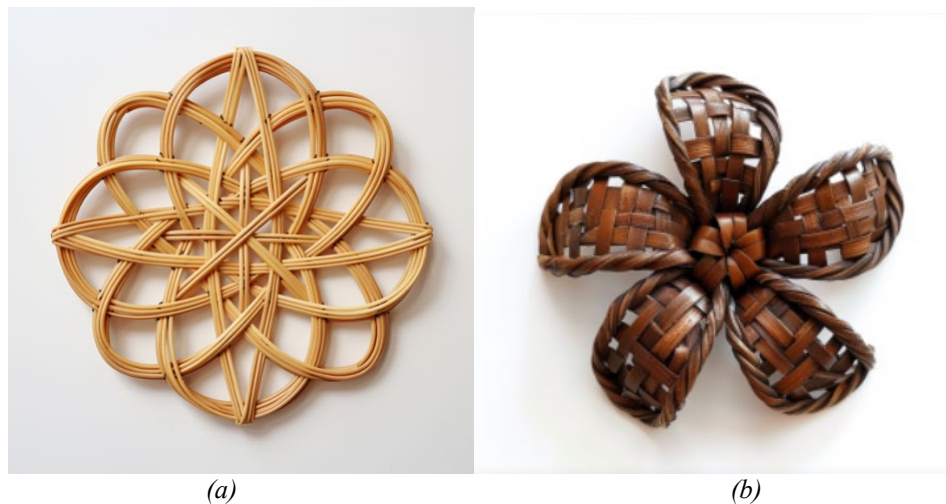


Figure 9: Bamboo brooch design

6. Conclusion and Outlook

In terms of the balance between cultural inheritance and innovation, the study found that non-heritage bamboo weaving has successfully found the golden balance between traditional skills and innovation through the integration with modern design tools. This balance not only enables the traditional culture to be inherited, but also gives new vitality to the art of bamboo weaving in fashion. By adopting environmentally friendly materials and traditional bamboo weaving techniques, non-heritage bamboo weaving not only realizes sustainability at the product level, but also injects new environmental concepts into the fashion industry. Non-heritage bamboo weaving has gradually become a bright representative of Chinese culture in the international market, promoting the diversified spread of Chinese culture and presenting the unique beauty of traditional Chinese handicrafts to the international community. The industrial development of non-heritage bamboo weaving not only promotes the employment of related practitioners, but also injects new vitality into the local economy.

It is foreseeable that the innovative road of integrating non-heritage bamboo weaving with fashion will continue to deepen, and with the continuous progress of technology, the increasing popularization of the concept of sustainable development, and the strengthening of cultural exchanges, non-heritage bamboo weaving is expected to play a more important role in the global context. Through research and analysis and innovative design, the fusion of non-heritage bamboo weaving and fashion will continue to make more outstanding contributions to sustainable development in the fields of culture, economy and environment.

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