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ETHNIC PATTERN DIGITIZATION IN MODERN FASHION DESIGN

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In the era of globalization, with the modern fashion industry's rising demand for cultural value and national patterns at risk of inheritance, this paper explores their digital application in modern fashion design. By analyzing cases, it proposes retaining cultural essence and integrating modern elements. This digitization paves a new way for cultural inheritance and innovation, and calls for more research.

Key words: ethnic patterns; digitization; modern fashion design; cultural inheritance; fashion trends.

INTRODUCTION

In the context of globalization, the integration of ethnic cultures into modern design has become a significant trend. The number of traditional artisans is sharply declining, leading to a crisis in the continuity of ethnic patterns. Meanwhile, the modern fashion industry's demand for cultural added value is increasingly growing. Ethnic patterns, as an important part of national culture, carry rich historical and cultural connotations. The digitalization of ethnic patterns provides new possibilities for their application in modern fashion design. This paper explores the application of digitalized ethnic patterns in modern fashion design from the perspective of cultural inheritance, aiming to achieve the organic combination of cultural inheritance and innovative design.

PURPOSE

The purpose of this research is to analyze how to retain the essence of national culture and meet the modern fashion trend in the application of digitalized ethnic patterns in modern fashion design. By studying relevant cases and theories, specific applications are proposed to promote the development of modern fashion design with ethnic characteristics.

RESULTS AND DISCUSSION

1. Retaining the Essence of National Culture. Symbolic Meanings: ethnic patterns are full of symbolic meanings. For example, the totem patterns of some ethnic minorities represent their beliefs and spiritual sustenance. In digital design, these symbolic meanings should be accurately understood and retained. By using digital technology to accurately reproduce the details of patterns, the original cultural connotations can be maintained 1.

Traditional Color Schemes: Color is an important element of ethnic patterns. Each ethnic group has its own unique color preferences and symbolic meanings.



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When applying ethnic patterns digitally, traditional color schemes should be respected and applied appropriately to convey the unique cultural atmosphere.

- 2. Meeting Modern Fashion Trends. Simplification and Abstraction: modern fashion emphasizes simplicity and innovation. Ethnic patterns can be simplified and abstracted through digital technology. For example, intricate traditional patterns can be simplified into geometric shapes. This approach not only preserves the distinctive features of ethnic designs but also aligns with modern aesthetic principles, thereby encapsulating the essence of traditional ethnic culture in a simplified manner 2. For example, using high - tech fabrics with ethnic - pattern printed digital patterns to create a sense of the combination of tradition and modernity.
- 3. Case Analysis. Viktor&Rolf's Batik Inspired Collection: Dutch fashion brand Viktor&Rolf once released a collection inspired by Indonesian batik patterns. Batik is a traditional Indonesian textile art with complex wax - resist dveing techniques, and its patterns often feature intricate floral and geometric motifs. Viktor&Rolf digitized these batik patterns and applied them to modern - style evening gowns (fig. 1). They simplified some of the overly complex traditional patterns while retaining the core visual elements. The use of high - quality silk and tulle fabrics, along with modern draping techniques, made the dresses not only showcase the charm of Indonesian batik culture but also exude a modern and luxurious feel.

Gucci's Collaboration with Chinese Artists on Dragon Pattern Designs: Gucci collaborated with Chinese artists to introduce dragon - themed patterns into their collections. Through digital technology, the artists re - created traditional dragon patterns in a more contemporary and artistic way. These digitalized dragon patterns were then printed on Gucci's classic products like T-shirts, handbags, and scarves. The integration of iconic Gucci brand elements, such as the double-G logo, with digitalized dragon patterns successfully captured the attention of global consumers. particularly the younger generation, who show a growing interest in cross-cultural fashion. This collaboration not only promoted the spread of Chinese dragon culture but also demonstrated Gucci's innovation in cultural integration (fig. 2).



Fig. 1. Viktor&Rolf's Batik - Inspired Collection

Fig. 2. Gucci dragon element pattern design



In summary, these cases demonstrate the diverse and effective application of digitalized ethnic patterns in modern fashion design. Brands have successfully



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retained the cultural essence of ethnic patterns, whether it's the symbolic meanings in batik or dragon-related motifs, by precisely digitizing the original elements. Meanwhile, they have aligned with modern fashion trends through techniques such as simplification, color adjustment, and the integration of modern materials and brand-specific elements. These practices not only bring traditional ethnic cultures to life on the modern fashion stage but also provide valuable references for designers to create more culturally rich and fashion-forward works.

CONCLUSIONS

In conclusion, this set of strategies not only provides fashion designers with specific design ideas and methodological guidance, helping them create more outstanding works that integrate ethnic cultural heritage with modern fashion sensibilities, thereby promoting the diversified development of the modern fashion design industry; it also offers new pathways and models for the inheritance and dissemination of ethnic culture in the fashion field. It enhances the influence and recognition of ethnic culture, fosters cross-cultural exchange and integration, and further expands the application and commercial value of ethnic cultural elements in the global fashion market.

The digitalization of ethnic patterns provides a new path for the application of ethnic cultures in modern fashion design. By retaining the essence of national culture and meeting modern fashion trends, we can achieve the organic combination of cultural inheritance and innovative design. In the future, more indepth research and exploration are needed to continuously promote the development of ethnic - culture - based modern fashion design. Designers should enhance their cultural awareness and innovative abilities to create more excellent fashion works that integrate ethnic cultures and modern aesthetics.

REFERENCES

- 1. Zhang, S. Research on the digital inheritance and innovative design of Chinese traditional patterns. Art Science and Technology. 2022. № 35 (19). P 155-157.
- 2. Wang, K. (2022). Research on the digital design of traditional ethnic patterns. East China Paper Industry. 2022. № 52 (6). P. 53-55.

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ОЦИФРУВАННЯ ЕТНІЧНИХ ВЗІЗУНКІВ У СУЧАСНОМУ ДИЗАЙНІ МОДИ

В епоху глобалізації, коли сучасна індустрія моди збагачується попитом на культурні цінності та національні зразки, ця стаття досліджує їх цифрове застосування в сучасному дизайні одягу. На основі аналізу робіт дизайнерських брендів, пропоуються засоби збереження культурної сутності та інтегрування традиційних елементів у сучасні моделі одяшу та аксесуарів. Таке оцифрування відкриває новий шлях для поєднання культурної спадщини та інновацій і вимагає додаткових досліджень.

Ключові слова: етнічні зразки; оцифрування; сучасний дизайн одягу; культурна спадщина; модні тенденції.