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# THE APPLICATION OF TRADITIONAL ETHNIC GRAPHICS IN MODERN DESIGN

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The work is devoted to the study of the application of traditional ethnic graphics in modern design and its role in the promotion of cultural heritage and innovative design. Emphasis is placed on rethinking traditional graphics using modern techniques and integrating them into the design context by analyzing compositional logic, graphic structure, and color schemes. Recommendations on ways to combine elements of traditional and innovative graphics in modern art and design practices are offered.

**Key words:** traditional ethnic graphics, modern design, graphic structure, and color schemes.

#### INTRODUCTION

With the advancement of globalization and deepening cultural exchanges, the application of traditional ethnic graphics in modern design has increasingly attracted the attention of designers and scholars. Traditional graphics are not only an important component of national culture but also a unique creative resource in modern design. Correctly applying these graphics can enhance the cultural depth and artistic value of design works, while also contributing to the inheritance and promotion of national culture. Therefore, the need for an in-depth study of the application of traditional ethnic graphics in modern design practice from different points of view is obvious.

#### **PURPOSE**

The purpose of the work is the study of traditional ethnic graphics, the search for ways to build graphic structures and the generalization of possible color solutions in the ethnic style, based on modern design concepts.

### **RESULTS AND DISCUSSION**

Structural analysis of traditional ethnic graphics.

In the process of dissemination and iteration, ethnic graphics have gradually formed their own unique composition forms, such as two-way continuous structure, four-way continuous structure, and central symmetric structure. These structures have a strong geometric orderliness and can even summarize many corresponding mathematical models

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For example (fig. 1), this is a caisson pattern from the murals of Dunhuang. In the process of copying and analyzing its structure, we found that the overall composition of the pattern adopts a centrally symmetric design, while the local parts utilize quarter-symmetric and other composition methods. Within a square composition, the patterns are divided by circles, triangles, diagonals, and centerlines. The scroll patterns, honeysuckle patterns, and lotus petal patterns form a symmetrical and continuous layout. It is through such ingenious geometric calculations that these gorgeous and stable patterns with strong ethnic characteristics are created.

Through structural analysis of traditional folk patterns, we can identify the basic laws of the inheritance and continuation of traditional graphics, which serve as a reference for modern graphic design. This geometrically ordered composition has become a common technique in modern design.





Fig.1. Caisson pattern from Dunhuang Murals

The Panchang knot pattern (fig. 2) is recorded in the "Illustrated Catalog of Buddhist Objects" as the eighth of the Eight Buddhist Treasures. The Panchang knot pattern symbolizes infinity and eternal existence, with its continuous loops and interconnected lines. This pattern possesses a strong decorative sense and auspicious, beautiful symbolism.





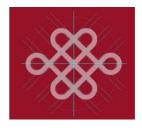


Fig. 2. Traditional panchang knot pattern and logo of china unicom



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The logo design of China Unicom is evolved from the ancient auspicious pattern "Panchang Knot" in Chinese culture. This logo adopts a symmetrical graphical structure, with its central part resembling two interconnected "hearts" placed vertically, symbolizing the company's service principle of being intimately connected with its customers. The overall design of the China Unicom logo incorporates traditional Chinese red and ink black, rather than the more typical blue often associated with the telecommunications industry, to better reflect Chinese cultural characteristics. In color psychology, red evokes excitement and stimulation, and in the context of corporate logos, it symbolizes positivity, health, enthusiasm, celebration, and dynamism. Black, on the other hand, evokes a sense of stability. The color combination of these two hues creates an aesthetic balance that is both dynamic and dignified. This is an excellent example of the application of traditional Chinese graphic patterns in modern design.

Extraction of colors from traditional ethnic patterns.

Each ethnic group possesses its own color traditions due to differences in cultural inheritance. For instance, the Chinese nation considers red as a color that represents the cultural characteristics of its people. By extracting, classifying, and summarizing the colors from traditional ethnic patterns, we can devise numerous color schemes that exhibit ethnic features (fig. 3). These summarized color schemes play a significant guiding role in modern designs with ethnic styles.

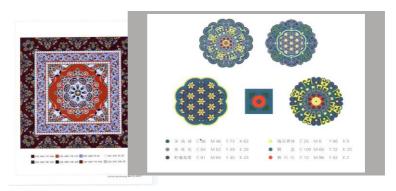


Fig.3. Color schemes for traditional ethnic patterns

As shown in the Chinese-style poster in (fig. 4), the graphics utilize many traditional Chinese patterns, such as lotus petal patterns, cloud and water patterns, and the character for "good fortune." The color scheme, which is particularly representative of the ethnic style, extensively employs traditional colors like red, blue, green, and gold. The overall composition has a strong visual impact, exuding a festive atmosphere that is both lively and stable.



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Fig.4. Chinese-style poster

#### CONCLUSIONS

The application of traditional ethnic patterns in modern design not only brings new sources of creativity to the design field but also opens up new avenues for the inheritance and development of traditional culture. Facing the dual challenges of cultural respect and innovation, designers need to conduct thorough research on the cultural background of traditional patterns and explore their potential for modern expression. This provides a new perspective and practical strategy for the application of traditional patterns in modern design.

#### **REFERENCES**

- 1.Dunhuang Painted Thus: Continuing the Journey of Beauty for 1600 Years. Dunhuang Painting Institute. CITIC Publishing Group. June 2022. First Edition
- 2.Translation: "Illustrated Handbook of Chinese Classic Patterns." By Huang Qingsui. Beijing: Posts & Telecom Press. 2021.1
- 3.Translation: Zhao Xigang. Modern Graphic Design and Traditional Patterns. Ornament. 2003.4

# МИХАЙЛЮК О., ЛІ Ц. ЗАСТОСУВАННЯ ТРАДИЦІЙНОЇ ЕТНІЧНОЇ ГРАФІКИ В СУЧАСНОМУ ДИЗАЙНІ

Робота присвячена дослідженню застосування традиційної етнічної графіки в сучасному дизайні та її ролі в популяризації культурної спадщини та інноваційного дизайну. Акцентовано увагу на переосмисленні традиційної графіки з використанням сучасних методів та її інтеграції в контексті дизайну шляхом аналізу композиційної логіки, графічної структури та колірних рішень. Запропоновано рекомендації щодо способів поєднання елементів традиційної та інноваційної графіки в сучасних арт та дизайнпрактиках.

**Ключові слова:** традиційна етнічна графіка, сучасний дизайн, графічна структура, колірні рішення.