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## BASED ON THE ELEMENTS OF CHINESE YAO ETHNIC CLOTHING PATTERNS: A CREATIVE DESIGN APPROACH

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*This design practice was based on the direct extraction of elements from the patterns of Chinese Yao ethnic costumes. By using design steps such as extraction, simplification, and replacement of forms, the desired design form was obtained. Subsequently, through techniques such as hand-drawn sketches, 3D virtual modeling, and software rendering, the creative design of a tea set was achieved. The research results demonstrate that two-dimensional patterns can be transformed into three-dimensional product forms with artistic characteristics through the design process. This finding has certain guiding significance for the practical application of cultural design.*

**Key words:** *Textile patterns; Innovative design; Chinese Yao ethnic group; Elements; Design application.*

### INTRODUCTION

The Chinese Yao ethnic group is known for its colorful and vibrant clothing [1], which features rich patterns that not only carry cultural significance but also provide inspiration for modern design [2]. By applying design methods such as extraction, simplification, and transformation of two-dimensional plane forms found in Yao clothing, a wide range of design styles can be achieved. This study focuses on the creative design of tea sets based on the "ma leaf pattern" found in Chinese Yao clothing, utilizing techniques such as hand-drawing, 3D virtual modeling, and software rendering.

### PURPOSE

The purpose of this study is to explore the integration of art and design, guided by the principles of wholeness, artistic expression, cultural significance [3], in the innovative application of Chinese Yao ethnic clothing patterns. Using direct extraction, the study has completed the creative design of the "ma leaf pattern" found in Chinese Yao patterns, providing creative ideas for cultural design applications.


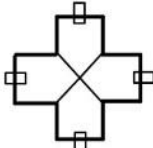
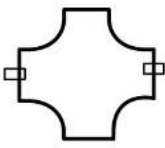
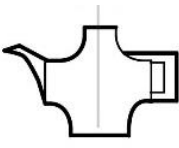
### RESULTS AND DISCUSSION

The main objective of this design practice is to utilize the plant-based element "ma leaf pattern" from the traditional costume patterns of the Chinese Yao ethnic group as the fundamental form of the teapot. The design process of the

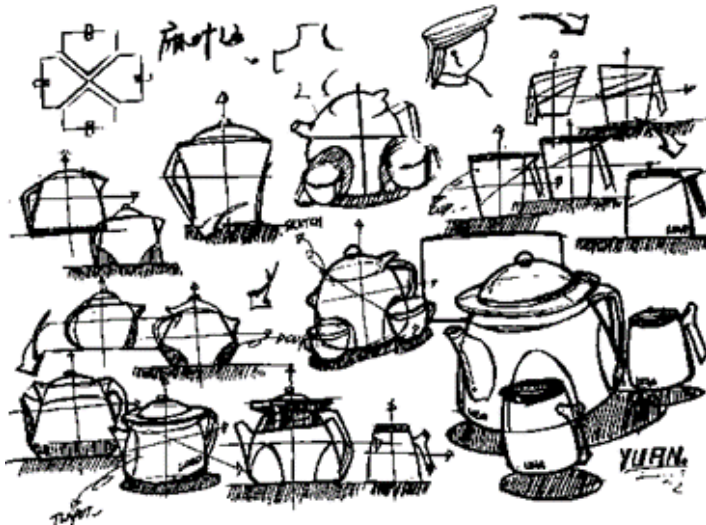


teapot's form was achieved through steps such as extraction, simplification, and substitution. The specific process of form design is illustrated in Table 1. Through the adoption of this approach, the researcher successfully integrated the traditional costume patterns of the Chinese Yao ethnic group with teapot design, effectively showcasing its artistic and cultural characteristics and providing new creative ideas for teapot design.

**Table 1** -The process of forming a pattern

MA LEAF PATTERN	EXTRACT	SIMPLIFY	PERMUTATION MODELING
			

In this design scheme, the form of the teapot was carefully considered and the three-dimensional effect of the tea set was expressed through hand-drawing, based on the creative vessel form that was developed. Subsequently, a series of teapot and tea cup shapes were further developed through continued refinement in order to determine the final design of the teapot. The specific tea set design effects can be seen in Figure 1.



**Fig.1.** Design and style of the hemp leaf pattern



In addition, we also experimented with different color combinations, as shown in Figure 2. Finally, we chose blue as the main color for the tea set and proceeded with the next steps of model construction and rendering. Blue represents purity, openness, and a beautiful life, which is in line with the cultural connotations of the tea set.



**Fig.2.** Color matching and rendering effects

## CONCLUSIONS

This design practice takes Chinese Yao ethnic clothing patterns as creative materials, and uses teapot design as a case for creative design practice. The results show that, through the design method, it is possible to derive three-dimensional product modeling with artistic characteristics from the two-dimensional form of Chinese Yao ethnic clothing patterns. This discovery has important significance for the integration of culture and design.

## FOUNDATIONS

The Project for Improving the Research Capabilities of Young and Middle-aged Teachers in Guangxi Universities (China): "Genealogy Arrangement and Creative Product Design Research of Yao Ethnic Costume Art in the Gui-dong Region" (Program Code: 2021KY0689); Guangxi Educational Science Planning Project (China): "Research on the Integration Path of 'Art Education + Political Education' Design Education Based on Guangxi's Intangible Cultural Heritage Resources" (Program Code: 2021C360).

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