The Innovative Design and Application of Traditional Qiang Embroidery Patterns in the Souvenirs of Qiang Village

Xueqing Lu

Sichuan University of Science & Engineering, Zigong 64300, People's Republic of China

Abstract

By using the methodology and digital technology of digital computer art, this paper explores the innovative interpretation of traditional Qiang embroidery patterns in modern art design, and constructs a design system with Qiang decorative style to apply it to the decoration and packaging design of Qiang village tourist souvenirs. Based on the modern aesthetic principle, this paper puts forward the specific methodology of the secondary creation of traditional Qiang embroidery patterns by using the new artistic means of computer fractal art, so that the traditional Qiang embroidery art can be inherited and developed, which has certain reference value for the design of tourism souvenirs in Qiang village.

Keywords

Qiang embroidery pattern; Fractal art; Tourist souvenir.

1. A Study on the Pattern of Traditional Qiang Embroidery

As one of the intangible cultural heritage, Qiang embroidery has its irreplaceable historical value and national cultural value. In recent years, the state and local government have done a lot of work on the rescue and protection of Qiang embroidery. Through various seminars on Qiang embroidery culture and the development of Qiang embroidery industry, experts from different industries have been organized to conduct in-depth analysis and Discussion on the cultural connotation, value, current situation, transformation and development of Qiang embroidery, and gradually lead Qiang embroidery to industrialization and marketization based on the local actual development, Let it go on the road of inheritance and development. Under the guidance of this idea, Qiang embroidery industry has developed to a certain extent, especially in the tourism industry, Qiang embroidery products have become the local tourism commemorative products with great characteristics. The reason why the tourist souvenirs of Qiang embroidery are loved by people is because of its patterns with national characteristics. As a unique art form, the traditional patterns of Qiang embroidery reflect a nation's customs and habits in life and labor, aesthetic preferences, religious beliefs, legendary experience, etc. it also plays a role in the cultural heritage, recording, performance and promotion of Qiang people One of the spiritual signs of ethnic minorities is to construct a rare visual language with Qiang style decoration system.

At present, there are many kinds of souvenirs related to ABA Qiang Village: local Chinese herbal medicine, crystal stone, local specialty, Zajiu, Niujiao comb, Qiang embroidery and other handicrafts. However, looking at the souvenirs in Qiang village, we can see that the design and development of these souvenirs is still in a primary stage, the form of souvenirs is too single, and the depth of Qiang culture excavation is not enough. All experts and scholars have carried out various research on this issue and put forward some suggestions and ideas. For example, Wang Xuemei [1] discussed the development principles and Strategies of Qiang tourism souvenirs, and proposed specific approaches and methods for product development; Jiao Feng [2] and others elaborated the development strategies and product packaging design principles

of Qiang tourism souvenirs, and Xu Jianli [3] and others put forward from the perspective of ecotourism Yan Tingting [4] expounds the design elements of Qiang tourism souvenirs and puts forward some specific plans for their design, etc. In addition, some scholars also discuss the feasible methods and strategies for the development of different types of tourist souvenirs, such as Gongbozhaxi [5], who proposed the development strategy of Qiang traditional clothing as tourist souvenirs, jihongjuan [6] elaborated the development strategy of Qiang embroidery as tourist products, etc. These research results provide a preliminary framework for the development and design of Qiang village tourist souvenirs, and provide a theoretical basis for further study. But we should see that the development of tourist souvenirs needs not only theoretical basis, but also practical methods. The key point of the development of tourism commemorative products lies in the design of products, but there are relatively few researches in this area. How to show the profound cultural connotation of Qiang Nationality in the design of products is the key point for the successful development of Qiang village tourism products.

2. Comparison between Computer Fractal Art Figure and Traditional Qiang Embroidery Pattern

2.1. The Contrast of Formal Beauty

Both computer fractal art and Qiang embroidery patterns take natural phenomena or natural objects as research objects, but because they are based on different geometric principles and processing methods, the art forms presented are not the same.

2.1.1. Euclidean Geometric Beauty of Qiang Embroidery Patterns

Like the traditional pattern design, Qiang embroidery pattern design takes Euclidean geometry as the basic principle, regards the natural things as points, lines and surfaces, forms various basic patterns by means of symbols and generalizations, mainly by means of flat painting, curving and mud dots, and then uses aesthetic principles and composition rules to change the patterns so that the formed patterns are suitable for the production process Abstract art. This method of pattern design based on Euclidean geometry can draw complex individual patterns and combination patterns composed of basic patterns. In addition, the pattern of Qiang embroidery shows the plane beauty. In the performance of the pattern, it pays more attention to the form itself, and is committed to the unity of the static and dynamic contour characteristics of things. Therefore, the form of its performance is concise, vivid, and visualizable.

2.1.2. The Fractal Geometry Beauty of Computer Fractal Art Figure

Fractal geometry regards the traditional point, line and surface as a whole. The natural image is continuous everywhere but differentiable everywhere. The beauty of form created by fractal geometry cannot be displayed by Euclidean geometry. The core feature of fractal graphics is its self-similarity, that is to say, their relationship between the local and the whole in morphology is convergent. This kind of convergence performance produces a kind of hierarchical organization beauty - with the increase of the number of fractal layers, the self-similar relationship between adjacent layers will produce a kind of Psychedelic beauty. The figure constructed by fractal geometry principle is separated from the absolute scale of traditional geometry, and can be infinitely fine. The formation of "nested" structure is endless. With the continuous expansion of the level of fractal figure, new artistic beauty can be constantly generated. Figure 14 is the most classic Mandelbrot set of computer fractal graphics. It is generated by a simple mathematical formula, but deduces a dreamlike beautiful pattern. If you enlarge any details of it, you can change a more wonderful scene.

2.2. The Contrast of Formal Aesthetic Feeling

2.2.1. Symmetry and Balance

The design of Qiang embroidery pattern follows an absolute balance of symmetry. The balanced realization form of Qiang embroidery pattern generally adopts equal amount of heterochromatic, homomorphic and heteromorphic, and only needs to maintain a plane balance state in the constituent organizational structure. The fractal figure not only contains the balance of formal beauty in traditional aesthetics - up and down, left and right and central symmetry, but also reveals a new symmetry - the symmetry of part and whole. In the layout of graphics, it reflects a dynamic balance. Fractal graphics show the best balance between monotony and complexity in a clear and orderly order. Compared with traditional aesthetics, fractal graphics have greater spatial beauty.

2.2.2. Specificity and Harmony

Computer fractal art graphics embody the law of movement from imbalance to balance, and enter our vision in a subtle and harmonious form. This harmony reflects the unity of mathematical beauty and natural beauty. Its appearance breaks the traditional concept of graphic harmony. Specifically speaking, the harmony of computer fractal art graphics is embodied in the uniformity and variety of shape and color. However, the "harmony" of computer fractal art graphics has great randomness and arbitrariness. It is very difficult for us to find a completely consistent form in computer fractal art graphics. Therefore, compared with the traditional clothing patterns, the overall style of computer fractal art graphics is unique, and with the mysterious and fantastic beauty.

2.2.3. Repetition and Gradual Change

The pattern repetition of traditional Qiang embroidery is mainly realized through different combinations, such as the most common two-way continuous pattern and four-way continuous pattern. Computer fractal art graphics are generated by using the iterative function in mathematics, and are processed by the computer through repeated digital processing. The formation of graphics is random and accidental, which is a kind of mathematical order.

Gradual change is the gradual change process between things. Gradual change can give people a sense of peace, stability, relaxation, softness and nature, with strong visual affinity. Due to the limitation of production technology, the traditional Qiang embroidery patterns generally adopt the form of multi-level transition of point, line and surface to achieve gradual change. The internal structure is not smooth enough to undertake, so the texture of the patterns is slightly lacking in softness, and the color cohesion performance is not very natural. Computer fractal art graphics are calculated according to certain rules after defining mathematical models and algorithms. The change of each part of the graphics and the transition of each color block show a natural beauty.

2.2.4. Simplification and Complexity

After the simplified Qiang embroidery patterns are arranged according to different composition rules, rich and complex patterns can be formed. The lines of fractal graphics are very complex and irregular. These complex shapes contain layers of nested systems calculated by mathematical formulas. Their precise fineness greatly enriches the content of graphics. No matter what scale and distance to appreciate, we can feel the change of its construction unit, and we are constantly surprised.

3. Design Example

In this design pattern practice, the author mainly takes the plant pattern in the Qiang embroidery pattern as the theme, combines the vortex pattern in the geometry pattern to design, while embodying the natural worship concept of Qiang nationality, applies the skill of

computer fractal art to transform and reconstruct the pattern, and displays the new visual effect in a new composition form.

3.1. Design Example 1 Tie Dye Style Pattern

(1)Design background: With the prosperity of tourism, souvenirs become an essential part of the tourism process. The aesthetic requirement of tourist souvenirs is that souvenirs must have the unique style of the tourist destination. In a sense, the more regional style of tourism souvenirs, the more loved by tourists. Throughout the Qiang village tourist souvenirs, the styles, shapes, colors and patterns are the same.

(2)Design purpose: to develop tourism clothing souvenirs with Qiang style and characteristics to meet the cultural and psychological needs of the majority of tourism consumers.

(3) Design drawing (Figure 1)

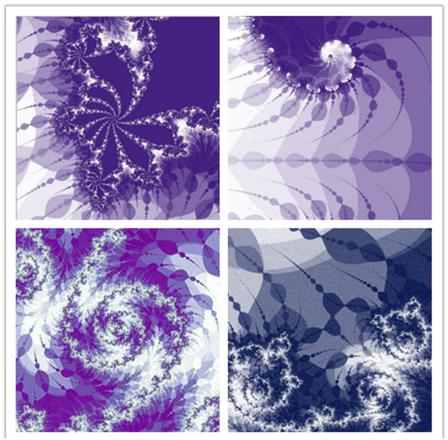


Figure 1. pattern of tie dye style

(4) Application of design drawings (Figure 2)



Figure 2. Canvas bag with tie dye style pattern

3.2. Design Example 2 Pattern of Retro Style

(1)Design background: the prevalence of minimalism in modern design once made people forget the decorative function of patterns. Simple style patterns, simple lines and strong straight lines often give people a cold and solemn feeling, which is even heavier in today's social living environment surrounded by high technology and efficiency. People began to miss the decorative design, a "new decorative" trend is quietly rising.

- (2)Design purpose: Try to integrate new art trend into Qiang embroidery pattern, and serve for contemporary art design.
- (3) Design drawing (Figure 3)

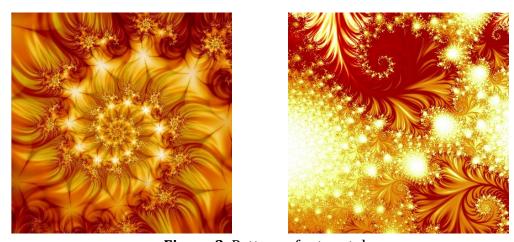


Figure 3. Pattern of retro style

Acknowledgements

Fund Project: research project of Sichuan Tourism Development Research Center, Sichuan philosophy and Social Sciences key research base (LYY14-01).

References

[1] K. FALCONER, et al. Fractal Geometry -- Mathematical basis and its application. Northeast University Press, 1991.

- [2] Kang kuanying, et al. The establishment, development and significance of scientific methodology of fractal theory. Scientific management research, Vol. 6 (1998) No. 12, p.53-56.
- [3] Liu huajie, et al. Fractal art. Hunan Science and Technology Press, 1998.
- [4] Lei guiyuan, et al. Views On pattern art by Lei Guiyuan. Zhejiang Academy of fine arts press, 1992.
- [5] Yan tingting, et al. Thoughts on the design of Qiang tourism souvenirs. Art grand view, Vol.6 (2012).
- [6] Gongbozhaxi, Chen anqiang, Wenqiang, et al. Tourism value and development of Tibetan and Qiang clothing cultural resources in Aba Prefecture. Journal of Aba Normal University, Vol. 3 (2007) No. 9.