Application of Traditional Embroidery Techniques Aided by Image Design Software in Modern Clothing Design

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Abstract. Embroidery, as a folk craft widely inherited by our country, has experienced thousands of years of cultural accumulation and precipitation, and has a very high artistic achievement. Under the background of economic and cultural development, traditional embroidery has formed a unique and complete art system, which has a high reference value for the application and development of fashion design. Based on the discussion of the artistic characteristics and cultural connotation of traditional embroidery, this paper analyses the application principles and development status of traditional embroidery in modern clothing, and puts forward innovative thinking and design methods of embroidery in modern clothing, uses computer image design software to assist in researching the application of traditional embroidery technology in modern clothing design, with a view to making some exploration, innovation and contribution to inheriting ancient Chinese handicraft and integrating it into modern clothing design.

Keywords: Tradition, Embroidery Techniques, Modern, Fashion Design, Computer Software, Image Design Software

Since ancient times, the relationship between embroidery and clothing has been very close. In ancient times, people used embroidery as an ornament to beautify clothing. As early as 4000 years ago, there was a saying about clothing painting and clothing embroidery in China. Many people used embroidery to redesign clothing. After the emergence of modern fashion design, most people realize the close relationship between embroidery and clothing, and adopt embroidery to decorate clothing one after another. Embroidery has brought tremendous wealth to fashion design. Therefore, it is necessary for us to study the application of embroidery in fashion design.

1. Traditional embroidery
As one of the oldest handicraft techniques in China, traditional embroidery has gradually formed, developed, matured, inherited and innovated in the succession of ancient dynasties and the development of society. Today, it has been inherited and developed for more than two thousand years. All kinds of embroidery methods and materials are complex and there are many crafts. From the point of view of embroidery needle method alone, there are common needles, loose sets, application
needles, false and solid needles, and so on. There are forty-eight kinds of needle methods, such as random needle, joint needle, etc. The color of embroidery has become more bright and colorful. Most of the contemporary embroidery works of art are co-matched and used by a variety of similar color silk threads or silk threads of similar color. All kinds of silk threads are nested together in order to achieve excessive natural color effect. Even a few masters of embroidery art have created a delicate embroidery art[1]. The product will use dozens or even hundreds of different colors of silk thread, fully reflecting the extensive and profound traditional embroidery crafts in China.

2. Application of Traditional Embroidery in Modern Fashion Design

With the innovation of science and technology and the development of the times, the traditional embroidery handicraft technology has been gradually replaced by embroidery machinery. Traditional embroidery in the true sense is mainly used in high-level customized fashion in the current international fashion trend. The following three aspects of the application status of traditional embroidery are described. As shown in Table 1.

Table 1. Application of Traditional Embroidery in Modern Fashion Design

| Application of Traditional Embroidery in Modern Fashion Design |
|---------------------------------------------------------------|
| ❖ Close Combination of Material and Pattern of Traditional Embroidery in Advanced Customized Clothing |
| ❖ Innovative Application of Decoration and Technology of Traditional Embroidery Patterns |
| ❖ Intensive Innovation of Traditional Embroidery Colors and Patterns in Advanced Ready Made Garments |

2.1. Close Combination of Material and Pattern of Traditional Embroidery in Advanced Customized Clothing

As the earliest senior custom fashion designer in China, Duo Pei founded Rose Square Fashion Company in 1997. Her works often embody Chinese elements in the details of clothes. There are many handcrafts, especially embroidery.

2.2. Innovative Application of Decoration and Technology of Traditional Embroidery Patterns

Chinese traditional embroidery patterns, with their unique cultural features, have become fashion elements widely used by international designers. At the Alice Archer 2016/17 Autumn/Winter High-end Garment Conference, its series of clothes embroidered Chinese flower and bird patterns on smooth and shiny fabrics, exaggerated embroidery shape, rich decoration, exquisite craftsmanship and extension patterns, making every detail of the clothing vivid, exuding a beautiful atmosphere and oriental artistic features[3].

2.3. Intensive Innovation of Traditional Embroidery Colors and Patterns in Advanced READY MADE Garments

Taiwanese fashion brand Mia I Chen was founded in 1978. Its designer Wang Chen Caiaphas is good at using contrasting color sets or analogous matching of the same color systems in clothing. For example, Shiatsu Chen's new style clothes in spring and summer of 2016 are mainly pink in color. On the basis of silk and transparent yarn splicing, the peach pattern of the same color is embroidered with gold thread and pink silk thread, which is hand-refined and multi-user, and the romantic beauty of the clothes is vividly deduced. At the same time, at the lower end of the skirt, the mosaic pattern with modern flavor is embroidered, and the traditional embroidery pattern with Hui pattern is partially matched, which combines tradition with modern, western and eastern, and shows the unique artistic vision of fashion.
3. Application Strategy of Traditional Embroidery in Modern Fashion Design

Traditional embroidery, with its profound cultural connotation and rich aesthetic and artistic value, occupies an important position in the costume history and culture of China for thousands of years. In order to keep the vitality of the times, traditional embroidery must be combined with modern costume design. Following are some strategies to solve the problems of traditional embroidery in the development of modern clothing and how to enhance the influence of embroidery in international fashion. As shown in Table 2.

| Table 2. Application Strategy of Traditional Embroidery in Modern Fashion Design |
|--------------------------------------------------------------------------------|
| Grasp the lifeblood of the times and keep abreast of fashion trends |
| Actively Combine "Introducing" with "Going Out" |
| Based on traditional culture, inherit Chinese civilization |
| Keep a Bright Style and Build a Characteristic Brand |
| Inclusion of world's excellent cultures |

3.1. Grasp the lifeblood of the times and keep abreast of fashion trends

Traditional embroidery must keep pace with the times if it is to become the dominant element of fashion trend. While combining with modern fashion design, we should firmly grasp the lifeblood of the times, combine the aesthetic concept of modern fashion with traditional embroidery elements, and maintain our own design nationality without losing the modernity of design. This requires traditional embroidery to follow the four design principles mentioned above in modern fashion design, namely, the principle of material innovation and the principle of pattern fashion. The principles of modern color and diversification of techniques[3].

3.2. Actively Combine "Introducing" with "Going Out"

Only by digging deeply into Chinese traditional national culture and characteristic embroidery handicraft, swerving pushing national culture to the international level, and introducing international fashion to exchange and collide with Chinese traditional culture, can our traditional costume culture be carried forward and flourished. In recent years, the mysterious Ciao embroidery has stepped out of the mountains and gradually entered the stage of international fashion. With gorgeous patterns, unique texture and exquisite craftsmanship, the foreign fashion circles were amazed. Bu Ding wore a "hundred bird clothes" in the magazine "Arena" in December 2011. The combination of the complex and beautiful patterns of Ciao embroidery and the simple atmospheric outline of Europe and America shows the unique rhythm of the design[4]. The collocation of high fashion brands and Ciao costumes is so harmonious and tense.

3.3. Based on traditional culture, inherit Chinese civilization

As an ancient handicraft in China, embroidery must be rooted in Chinese traditional culture if it wants to go to the world. On the basis of inheriting national embroidery technology and embodying the connotation of traditional culture, combining with contemporary fashion trends, and innovating with determination, we can find a way of clothing with rich cultural connotations and make embroidery recognized by more people in international fashion. As an influential national brand in the world, Mia I Chen drew inspiration from the famous Chinese book Journey to the West in the spring and summer series of 2016[5].

3.4. Keep a Bright Style and Build a Characteristic Brand

Traditional embroidery should adhere to manual sewing, maintain a distinct style, and establish a distinctive brand. Design style and brand characteristics are the soul of clothing. In the era of different
fashion styles, guiding the original personality is not limited by fashion, and not influenced by fashion trends is the premise for clothing to retain its distinctive style and brand characteristics. However, compared with clothing, traditional embroidery is characterized by impermeability of manual sewing, while Alexander McQueen, known as the "ghost talent", uses these two characteristics with ease and makes the brand distinctive in personality[6].

3.5. Inclusion of world's excellent cultures
Every nation in the world has its own design style characteristics. We can use them for reference, such as the rigorous and retro English style, the elegant and romantic French style, the gorgeous, complex and exquisite Russian Royal style, the ancient Chinese heavy and beautiful, simple and natural style, and the bright and winding Indian style. In addition, religions, totems, architecture, culture, clothing and other countries are also part of the world's excellent culture.

4. Conclusion
Traditional embroidery has a profound cultural connotation and a long history. In the course of the development of human civilization, traditional embroidery technology has become more significant with the evolution and development of costume art. Clothing has also been accompanied by the innovation of embroidery and become more national. Traditional embroidery technology, from simple sewing, stitching to gorgeous embroidery, is still charming after thousands of years. As an important part of China's traditional cultural heritage, it is still an indispensable application element in the modern fashion trend. By analyzing the application status of traditional embroidery in modern clothing, this paper puts forward the innovative thinking and design methods of embroidery in modern clothing, uses computer image design software as an auxiliary research method, so as to make some exploration, innovation and contribution for inheriting ancient Chinese handicraft and integrating it into modern clothing design.

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