

The Evolution And Development of Modern Su Embroidery Technique

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Abstract: *Su embroidery in the Ming and Qing Dynasties, whether it is the production of skills or theme performance have reached the peak, but after the end of the Qing Dynasty by the influence of Western culture, Su embroidery skills and theme performance are very different. Since modern times, Su embroidery technology has always maintained the traditional "fine, fine, elegant, clean" art characteristics on the basis of continuous innovation of needle skills, giving this national craft treasures a new vitality.*

Keywords: *Su embroidery, skills, evolution, development*

1. Introduction: Inheritance of Su Embroidery

From the beginning of the Ming Dynasty, Suzhou gradually became an economic and cultural center. At the same time, the art of Su embroidery developed rapidly. Ming Dynasty scholar Wang ao wrote in the volume of *Gu Su Zhi*: "exquisite, Fine, elegant and pure, called Suzhou embroidery." This is the first time that Su embroidery appears in the literature in the form of words. "Exquisite, Fine, elegant and pure" has become the core artistic feature of Su Embroidery. "exquisite and fine is not only a material surface perception, but also a spiritual humanistic connotation" [1], "elegance" and "pure" are the precise summary of the material expression effect of Su embroidery craftsmanship; "Elegance" and "pure" are the spiritual pursuit of Su embroidery art in material expression. The perfect embodiment of harmony and unity.

The traditional Su embroidery art has been greatly developed in the Ming and Qing dynasties. The prosperity of the Ming Dynasty commodity trade and the strict requirements of the palace on embroidery tributes directly promoted the development of Su embroidery art. In the Qing Dynasty, the art of Su embroidery reached its peak, recording to "*ShangHai county chronicles*": "every family has an embroidery shed, and every household is embroidering". According to the "*Shanghai County Chronicles*": "Su embroidery is very skillful, drawing from life like a picture, and does not have it. The people are also accustomed to making a living, which is a bit like weaving. The method of splitting the silk, the needle is as thin as a hair." At this time, Su embroidery has been completed It shows the characteristics of exquisite embroidery and harmonious color matching, especially the maturity of double-sided embroidery technology in the Qing Dynasty, marking the historical peak of Suzhou embroidery technology.

In the art of embroidery, the technical level of the embroiderer is a key factor in whether the embroidery can be called the art of embroidery. In essence, embroidery is a needle and thread technique that combines technology and art. "Needle is the method of embroidering time and needle, and it is also the form of embroidery line organization" [2]. The essence of the exquisite beauty of Su embroidery art lies in the fact that embroidery artists combine and arrange various silk threads through different stitches and colors to form a unique aesthetic form. Therefore, stitching is an important part of Suzhou embroidery art. There are mainly three types of traditional Suzhou embroidery: palace embroidery, boudoir embroidery and folk embroidery. "The needle method can be divided into three levels: the most basic is called the basic needle method, which refers to the trajectory and structure of a needle, such as loop needles and straight needles. The second level can be called derivative needle methods. , Is the most important content of the needle method, it reveals the relationship between the continuous basic needle methods, such as "flush needle". The third level is the combination of derivative needle methods, called combined needle methods, such as scaled cutting needles, etc."

Generally speaking, according to the performance effect of the needle method, the traditional Su

embroidery techniques can be classified into seven categories: yarn embroidery, net embroidery, flat embroidery, dot embroidery, knitting embroidery, stripe embroidery and auxiliary stitching, totaling more than 40 kinds. Ding Pei, a famous embroidery master in the Qing Dynasty, summarized the seven standards of embroidery skills in the "Chenggong" chapter of "Embroidery": "equal, light, straight, uniform, thin, smooth, and dense". Later, Su embroidery artists added the standard of "light" in their embroidery practice. These eight standards are not only the strict requirements for the embroidery craftsmanship of Su embroidery art, but also the generalization of the artistic spirit pursued by Su embroidery artists.

2. The innovation and development of Su embroidery techniques in the late Qing Dynasty

At the end of the Qing Dynasty, Western technology, culture and ideas continued to enter China. At the same time, the development of Su embroidery was also influenced by Western cultural ideas. Under the influence of this social ideological trend, Su embroidery also began to integrate Western ideas and techniques, giving birth to artificial embroidery and chaotic stitch embroidery.

2.1 Shen Shou and emulational embroidery

ShouShen, the original name was YunzhiShen, was born in 1874 in Wu County, Jiangsu Province. At the age of 20, she married *JueYu*, from Zhejiang Province. *S.Shen* is most important Su embroidery artist in the late Qing Dynasty was also an important founder of modern Su embroidery art. On the 70th birthday of *CiXi*, *S.Shen* used the two Chinese paintings "*The Picture of the Amitabha Buddha*" and "*The Picture of the Eight Immortals on Longevity*" as the manuscript, and embroidered these two embroidery as birthday gifts. *CiXi* saw the birthday gift on the day of her birthday, and appreciated immediate plan to award it with "palace embroidery", and appointed *S.Shen* as the chief instructor of female embroidery in the Ministry of Agriculture, Industry and Commerce. *CiXi* also wrote the words "bless" and "longvity" as a gift to Yu Jue. The couple, in order to commemorate it, changed her name to "*ShouShen*". In the second year, *S.Shen* and her husband traveled to Japan to study and inspect Japanese embroidery on behalf of the Qing government. During her stay in Japan, she earnestly studied and learned the techniques of Western painting art, such as oil painting, drawing, photography and so on. It is found by comparison that although the embroidery craftsmanship in Japan is not fine enough, most of the embroidery craftsmen have also studied western realism art, so the realism embroidery works of Japan are more vivid and the overall color matching is more harmonious. Through research, she proposed that if the outstanding Chinese and Western paintings are used as the original embroidery manuscripts and the craftsmanship of Suzhou embroidery is used, China's Su embroidery will surely become famous both at home and abroad. After returning to China, she integrated the painting theory and techniques she learned in Japan and the virtual and real needles of Japanese embroidery stitches into Suzhou embroidery, and invented "emulational embroidery". Emulational embroidery follows the principle of "following the principles of painting and following the true shape". For example, when embroidering human figures and other embroideries, photos are used as embroidery drafts, and the color of light must be emphasized, especially to capture the charm of the figures, so that the embroidery can be produced from Visual effect similar to oil painting. Among them, the most famous emulational embroidery work "Portrait of queen, Elena of Italy" (Figure 1) uses photos as a reference. The stitches of the whole work are fine, the costumes and skin textures of the characters are vivid, and the colors of the embroidery thread transition naturally. applied the perspective technique and light-dark relationship of expressing the front and back spatial relationship in Western art to Su embroidery, and made the expressing objects more lifelike through the delicate stitching of Su embroidery. *S.Shen* not only developed new techniques of Su embroidery, but also broadened the subject matter of Su embroidery and enhanced the artistic expression of Su embroidery.



Figure 1



Figure 2

S.Shen not only inherited and developed Su embroidery craftsmanship, but also founded the Nantong Art Training School, carried out commercial activities, led women to find a way to earn a living, and took the traditional craft of embroidery to an unprecedented new level of development. In addition, the "*Xuehuan Embroidery Book*" compiled and published by S.Shen dictated by Jian Zhang, this book is the first theoretical monograph in China that introduces embroidery techniques and essence in detail. The book describes in detail the traditional embroidery process and the craftsmanship of the embroiderers. "*Xuehuan Embroidery Book*" summarizes the basic needle methods of traditional Soviet embroidery into 18 types, which are: grabbing needle, pricking needle, laying needle, single set of needle, double set of needle, flush needle, scaled cutting needle, meat into needle, sub punching needle, virtual and solid needles etc. After generations of Su embroidery artists continue to innovate and develop, it has increased to more than forty kinds.

2.2 Yang Shouyu and crewel embroidery

Crewel embroidery is also called regular embroidery. It was inspired and influenced by Western oil painting and S.Shen emulational embroidery by S.Y.Yang in the 1920s and 1930s. As the name suggests, the characteristic of crewel embroidery is "chaos". S.Y.Yang broke the traditional embroidery art inheritance of "arranging the needles and closely connecting the threads" in traditional embroidery. And the layers intersect each other, somewhat similar to the performance of the lines in the sketch. But chaotic stitch embroidery is not only about learning the realistic modeling and the relationship between light and shade in sketching techniques, but also pays more attention to the layering of embroidery and the problem of embroidery color wiring. Crewel embroidery will cross-stack silk threads of various colors and pay attention to the length and thickness of the threads. And the occlusion relationship, which ultimately constitutes a varied visual effect. This is somewhat similar to the oil paintings of Western Impressionism. Crewel embroidery (Figure 2) has the biggest advantage compared to the traditional Soviet embroidery technique, which is that needles and threads can be used freely. As long as the embroiderers understand the principles of painting and master the relationship between the colors of the picture, they can not only embroider realistic works, but also embroider famous Chinese paintings and landscape paintings. Although crewel embroidery can embroider the artistic effects of oil paintings, sketches, and traditional Chinese paintings, it is not just a simple copy and imitation of these types of art works, but the special material of embroidery, such as the texture of silk threads, and the difference in stitches, give Su embroidery unique charm of art achieves the artistic beauty that paintings cannot replace.

3. Further innovation of modern Soviet embroidery techniques

After the 20th century, Su embroidery art has been deeply influenced by modern art thoughts. In order to adapt to the new aesthetic needs of the current people, it has also begun to incorporate more modern and contemporary art elements. Since the development of Su embroidery art, its superb embroidery craftsmanship has made it easy to imitate and reproduce photography and painting. However, as people's aesthetic trends become more diversified, Su embroidery also needs continuous innovation and development. GuanzhongWu pointed out in the article "*I Look at Suzhou Embroidery*": "*Traditional stitching is only suitable for expressing traditional themes. To change new themes, new stitching must be created.... For embroidery, stitching must be transformed and innovated with the change of content*".

3.1 The New Stitching Method of Modern Suzhou Embroidery

In the 20th century, as the subject matter of Su embroidery works became more abundant, Su embroidery artists also derived new stitching methods based on the different themes of the times. Different stitching methods have their own different organization rules and unique performance effects. Soviet embroidery makers adopt different stitching methods according to different objects to show the texture of the embroidery object and enhance the artistic expression ability of Suzhou embroidery. At present, there are mainly the following new stitches in Su embroidery.

3.1.1 The relationship between virtual-real in Crewel needle

In the 1960s, ShouyuYang's master YanxianRen made further innovation and development on the basis of chaotic stitch embroidery, that created virtual-real Crewel embroidery. The Crewel embroidery created by S.Y.Yang before is suitable for expressing the themes of oil painting, photography and sketching with rich colors and obvious relationship between light and dark. However, in the face of Chinese paintings that pay attention to the empty space and the artistic conception of picture space, it is always unable to

express appropriately. The emergence of nothingness and essence Crewel needle embroidery has solved this problem. The virtual-real and crewel embroidery combines the characteristics of traditional Su embroidery and crewel embroidery. Through a needle method similar to sketching, different silk threads are combined with density and virtual reality to express the sense of space and perspective of the picture. In the embroidery technique the above is more free, it is a kind of *"drawing from the pure color and single stroke of the sketch to express the three-dimensional sense and layering of the picture"* [3]. The performance of the virtual-real needle method mainly depends on the choice of thickness and density arrangement of the embroidery thread. The embroiderer chooses the embroidery thread based on the picture relationship of the embroidery manuscript. The darkest embroidery thread on the embroidery surface gradually transitions to the gray surface and the bright surface. This is very similar to the sketching technique. Compared with the crewel embroidery of S.Y.Yang period, the embroidery with virtual-real Crewel needle is more delicate overall, the use of intermediate transition colors is more abundant and natural, and the silk thread crossing is softer. It pays more attention to the front and back relationship in the picture, but still maintains the fine and elegant art of Su embroidery features. Her representative work *"The picture of ShengtaoYe"* uses sketching techniques and needle embroidery technology. The embroidery thread gradually transitions from the thick and dense dark part to the gray and bright parts. The background part is left blank, revealing the inherent color of the embroidered cloth, which perfectly presents S.T.Ye's Charm complexion.

3.1.2 *"Light Free T-needle"*

The *"light-free T-needle method"* was founded in 1971 by Suzhou embroidery master JinzhenGu and widely used in Suzhou embroidery works. Since the embroidery works use silk thread to express the work, the work presents a silky luster. The luster of embroidery directly affects the texture of the object. In addition, the luster is an essential element when embroidering animal hair or skin texture. However, because silk thread has the characteristics of mercerization, if a certain area is repeatedly embroidered in the same direction and a large area, when viewers stand at different angles to appreciate the embroidery, there will be partial reflections on the embroidery surface. Not only affects the viewing effect of the viewer, but also destroys the overall artistic effect of the embroidery. After repeated exploration and experimentation, Su embroidery artist J.Z.Gu found that if the needle starts from different directions and uses extremely short *"-"* shaped embroidery thread to form a T shape, the angle is about 80 degrees when the needle is inserted, so that the threads can overlap each other. However, the thread eye is still exposed, and the silk thread of very similar color is used for layer-by-layer coloring, so that the overall embroidery thread color is more unified. The work embroidered in this way can avoid the reflection problem of embroidery caused by ambient light, silk light and viewing angle to the greatest extent. The light-free T-needle method first uses the principle of light scattering. Through multi-angle needle and thread insertion, the threads are crossed and overlapped with each other, so that the thread light of the thread itself is dispersed and most of the threads are pressed by the lamination of the threads. Reflective. The use of extremely short lines also turns the originally strip-shaped line light into a point-shaped line light, which can avoid several reflection phenomena to the greatest extent, so that the viewer will not cause the overall embroidered surface due to the angle of appreciation when viewing the Su embroidery works. Light reflections or chromatic aberration problems occur. Compared with embroidery with random needles and embroidery with false and real needles, the light-free T-stitch method is more regular and restrained, but it has more random needles than traditional embroidery techniques. The light-free T-stitch method basically uses thicker threads on the bottom and dark parts of the embroidery. The more the brighter the thread, the thinner and more sparse, gradually changing, so that the final work has a sense of heaviness and has the characteristics of fine embroidery. . This stitching method is particularly suitable for expressing the texture of the skin, especially for portraits of the elderly, men and people of color with strong contrast in facial light perception and rich colors. The light-free T-stitch method solves the problem of reflection that Su Embroidery has been unable to solve in the embroidery of portraits and animal skins for hundreds of years, and greatly improves the skills of Su Embroidery in embroidering portraits of people. *"Chairman Mao in the Study"* embroidered by J.Z.Gu using the light-free T-stitch method was collected by the Suzhou Arts and Crafts Museum and became one of most important exhibits in the museum.

3.1.3 *"Twisted coiled thread embroidery method" and "Three-dimensional embroidery method expressing beaded ornaments"*

Su embroidery artist JindiXue discovered in his embroidery practice that the traditional Su embroidery stitch technique can be used to express all kinds of patterns, but it cannot properly express the sense of weaving when expressing some patterns with kink-like weaves. For example, the branches and vines of grass, the rattans of flower baskets and the Chinese knots. If the traditional embroidery

method is still used, the overall picture of the embroidery will have insufficient three-dimensional volume and lack of tension. After repeated trial and error, she researched and summarized a needle method suitable for expressing patterns and patterns of knitted fabrics, named it "twisted coil embroidery method", and applied for a national invention patent. The main feature of the twisted coil embroidery method is that at least two embroidery threads are combined, one is twisted in the forward direction and the other is twisted in the reverse direction. When embroidering, twist silk thread is used to arrange on the front of the embroidered cloth according to the texture trend of decorative pattern (arrangement refers to coiling or other regular arrangement to place the twisted silk thread on the embroidery cloth regularly), and then embroider the wound twisted silk thread on the embroidery cloth with needles and threads. The twisted silk coil embroidery method breaks the limitations of the traditional Su embroidery needle method for embroidering grass vines, flower basket rattan and Chinese knot embroidery. The twisted silk coil embroidery method can show the authenticity of the object to the greatest extent. Increase the expressiveness of embroidery, so that the embroidery art can better show the sense of space, layering and volume in the limited two-dimensional space, using needle and thread technology. J.D.Xue was not satisfied with this. In her embroidery practice, she discovered that even though the twisted silk coil embroidery method is still displayed on a two-dimensional plane, even if the silk thread color transition is more harmonious and the contrast between light and dark is stronger, it is still two-dimensional. The plane display lacks three-dimensional sense. Therefore, when embroidering portraits of people, J.D.Xue finally concluded the three-dimensional embroidery method of expressing beads. This kind of three-dimensional embroidery method relies on the increase of dense silk threads to express its exquisite three-dimensional sense. In particular, the three-dimensional bead embroidered with silk threads is more realistic and lifelike. It breaks the limitation that the traditional Su embroidery stitch method can only display beads and woven fabrics on a two-dimensional plane, and increases the subject matter and themes of the Su embroidery technique. The content makes Suzhou embroidery art more artistically expressive on the original basis.

3.1.4 "DiDi Needle Method"

The "DiDi Needle Method" is also known as "DiDi Embroidery", a new stitch method for Su embroidery developed by contemporary Su embroidery artist YingziZou. Both the *DiDi* embroidery and the light-free T-stitch method have similarities and differences. They both use extremely short lines for arrangement and combination. The silk thread and the silk thread are separated, overlapped, joined, and intersected in four different forms. However, *DiDi* embroidery has strict requirements. Its specific characteristics are: the stitch distance between the two eyelets when the needle is inserted is greater than 2 times the diameter of the embroidery thread and less than or equal to 10 times the diameter of the embroidery thread. On the front of the embroidery material, the stitches are dotted or short-threaded. The dots or short-threaded stitches are separated, overlapped, joined and intersected to form embroidery traces. The embroidery traces are on the surface of the embroidery material. The above is arranged in a dense and dense manner. Y.Z.Zou tried to use "DiDi Needle Method" for the first time in the work "My Eyes" (Figure 3), which formed a performance effect very similar to that of sketches, that is, it solved the problem of reflection, but also can meticulously embroider the charm of characters and enhance the artistic expressiveness of Su embroidery. Later, when Y.Z.Zou embroidered his works, she made extensive use of the "DiDi embroidery", such as the most famous work "Sakyamuni speaking Picture" (also known as "Liangzhou Ruixiang" Picture 4). This is a piece of Tang Dynasty embroidery that was looted by British explorer Stein and is now in the British Museum. Y.Z.Zou overcomes all difficulties and uses "DiDi Embroidery" to complete the reproduction of the entire work. The picture of the whole work is shocking, and the characters are lifelike. Compared with other Su embroidery techniques, *DiDi embroidery* can not only express some of the sketches with strong contrast between light and dark, but also better reflect the hazy artistic conception of some ink paintings, as well as the brushing skills of in the art of calligraphy.

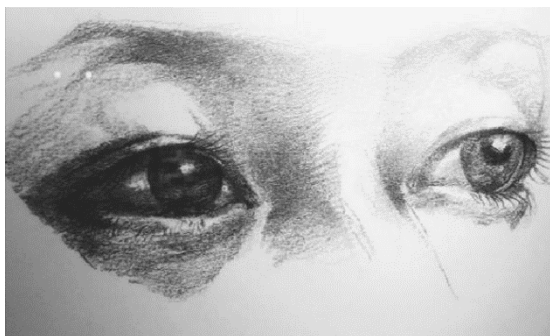


Figure 3

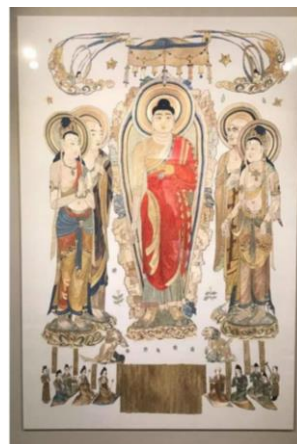


Figure 4

4. Summary

As an important variety of Chinese embroidery, Su embroidery has a long history. Su embroidery techniques are not only well inherited and developed, but also constantly improve needle techniques in accordance with the aesthetic needs of the times. From ShenShou's *"XueHuan Embroidery Book"*, the traditional Su embroidery has 18 kinds of expressive stitches. After generations of Su embroidery artists' continuous innovation, there have been more than 40 kinds of stitches, which are suitable for various subject expressions, reflecting the Su embroidery artists' innovations and breakthroughs. In the Qing Dynasty, Su embroidery embroidered decorative patterns and integrated Western painting styles to create artificial embroidery and random stitch embroidery. On the basis of inheritance, the subsequent Su embroidery artists continued to develop and solve the problems that appeared in the progress of Su embroidery. Improve the expressive techniques of Su embroidery, and promote the expressive power of Su embroidery stitching. Su Embroidery seeks the integration point with modern art and modern technology through comprehensive innovations in themes, stitches, materials, art forms and other aspects, and adapts to the aesthetic needs of contemporary diversified society. LiYu, a famous artist in the Qing Dynasty, once said: *"Change leads to newness, change leads to decay, change leads to life, and change leads to rigidity."* Any form of artistic expression needs to innovate and develop its forms, themes, tools and materials according to the progress of the times.

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