

The Origin of Su Embroidery

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Abstract

The connotations of Su embroidery have been enriched chronically. Su embroidery was recognized as a speciality of a specific geographical site when it was first taken as an art of style. Later both the place it was produced and the style of the products affected the evaluation of the embroidery. The technique of the Su embroidery was earlier recognized than its fame known as “Su Xiu” in Chinese. The recognition of its technique resulted from man’s esthetic need and the production of the needed instruments like thread, needle, fabric and dye. Thus the system of the techniques was formed between the middle and late period of Liangzhu Culture (28-20th century BC) and the Spring and Autumn Period and the Warring States Period (557-532 BC). The development of technology, the need of the market, and the influence of culture altogether brought out the name “Su Xiu” in the Zhengde period of the Ming Dynasty (1506-1521).

Keywords: name, Su embroidery, technique, the origin of Su embroidery

1. Introduction

As the top of the four famous embroideries and the name card of the representative intangible cultural heritage of China, Su embroidery has exquisite craftsmanship, diverse themes, elegant colours, and what’s more, shows the cultural customs of Jiangnan, which is employed to refer to the middle and lower reaches of Yangtze river in Chinese. Now no definition of Su embroidery is unanimously agreed by Chinese researchers. Some of the definitions are as follows: (1) The traditional folk embroidery fabrics popular in the areas around Suzhou, with the style of the embroidery of Song Dynasty, emphasizing the use of needles and the effect of needling (Encyclopedia of Textiles, 2005). (2) The representative embroidery of the areas around Suzhou, which is characterized by elegant patterns, graceful colours, flexible stitching, and exquisite style (Encyclopedia of China, 1984). (3) The handmade silk embroidery of Wu (Wu is the ancient name of the areas where Su embroideries are produced) (Sun, 2009). (4) A generic term of all embroidery products produced in the areas around Suzhou and characterized by the local stitching technique and the artistic features (Wan, 2013). (5) Single or double-sided ornamental and practical products with special artistic effects mainly produced in Suzhou and embroidered manually on base materials such as mulberry silk fabric, mulberry silk viscose filament interwoven fabric by using dyed pure mulberry silk (including the golden thread) as embroidery thread and stitching technique of the Su embroidery (National standard for Suzhou Embroidery, 2019). Above all, place of origin, style, and needling technique are the dimensions in deciding whether a piece of work can be categorized in Su embroidery.

The connotation of Su embroidery has been enriched chronically. Due to the immature development of social productivity, textile technology, aesthetic orientation, and market economy, Su embroidery did not form its own style in the early stage, but was a name of the products of certain geographical site. During the Ming and Qing dynasties, Su embroidery began to be accepted as some product with “delicacy and elegance”, and by then, both the place where it was produced and the style of the product were taken as measurement in evaluating a product. Therefore, this paper proposes that: Before a distinctive style was shaped, Su embroidery refers to all the handmade embroidery products in the areas of the Taihu Lake Basin and with Suzhou as the center; after that, it was defined as handmade embroidery products characterized by “delicacy and elegance”, or described as “flat, neat, thin, dense, even, smooth, harmonious and bright”.

The reasons for defining the geographical scope of Su embroidery as the Taihu Lake Basin is twofold. Firstly, this area possesses a shared cultural heritage dating back to ancient times, including Majiabang culture, Songze

culture, Liangzhu culture during the Neolithic Age, the Wu State and the Yue State of the Spring and Autumn Period. The ancestors of this region commonly adopted the practices of avian (Huang, 2004), and dragon worship (Jin & Lu, 2017), as well as the custom of cut-hair-short and tattooing (Lin, 2008; Xiao, 1988). Secondly, the current schools of Su embroidery scatter in the Taihu Lake Basin. According to the recognition of intangible cultural heritage by both China and Jiangsu Province, the embroidery of Suzhou, Wuxi, Nantong, Yangzhou, Dongtai, and Changzhou, are all included within the Su embroidery school. Therefore, based on the historical and cultural background and the current distribution of schools, the Su embroidery discussed in this paper covers the products of the places in the Taihu Lake Basin, with Suzhou as its center. (Figure 1)

The origin of Su embroidery is discussed in two aspects: the origin of the superb technique and the origin of the particular name “Su Xiu” in Chinese. These two aspects are interrelated, with the superb techniques and the fame. It is only based on the exquisite techniques achieved altogether by the abundant raw materials, brilliant needling technique, well-chosen themes, and ingenious colour coordination that the fame of Su embroidery was established. This combination ensures that the fame of Su embroidery truly follows its techniques.

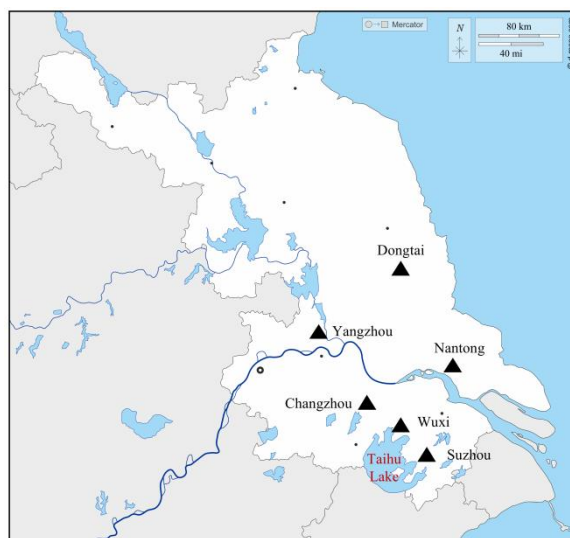


Figure 1. Distribution of Su embroidery

2. The Condition and Time of the Origin of Su Embroidery Technique

The formation of handicrafts is inseparable from the natural and cultural environments upon which it depends, and Su embroidery is no exception. The origin of Su embroidery technique depends on the production of the needed instruments like thread, needle, fabric and dye, and is also influenced by the aesthetic orientation of primitive humans.

2.1 The Condition of the Origin of Su Embroidery

2.1.1 Objective Conditions: Thread, Needle, Fabric, Dye

As early as the Paleolithic era, primitive humans had already mastered the technique of twisting fiber bundle. A large number of bone and stone ornaments were unearthed at Hemudu Site (Cultural Relics Administration Commission of Zhejiang Province and Zhejiang Provincial Museum, 1978), some with a diameter as fine as 1mm. There was a perforation on the upper side of a butterfly device, with traces of friction of ropes on the hole wall. It can be inferred that man had known how to make ropes and threads. In addition, the plenty of perforated bone needles at the Hemudu site suggest threads be used to connect bone needles and threading materials. Supposedly, thread, needed for the origin of Su embroidery, had already been used in the Paleolithic Age.

The Xiaogushan Site, Upper Cave Man Site, Xi'an Banpo Site, Hemudu Site, and Wujiang Meiyuan Site have all yielded bone needles of varying quantities. In 1973, bone needles dating from 7 000 to 6 000 years ago were unearthed at Hemudu Site, with the smallest aperture being only one millimeter (Cultural Relics Administration Commission of Zhejiang Province and Zhejiang Provincial Museum, 1978), which shows the maturity of bone needle-making technique and confirms the development of thread-making technique during this period. Fifty-six bone needles of different lengths and thicknesses were unearthed from Meiyuan Site in Jiangsu province. Some of them had cylindrical perforations with oblate holes, while some had larger round holes with aperture distribution of two to three mm (Chen, 1963), which demonstrates the fine grinding and perforation techniques of bone needles during that time. It can be concluded that needles had already appeared in the late Paleolithic period, and

the technique of making bone needles in the Taihu Lake Basin had reached a relatively advanced level in the middle and late Neolithic period.

In 1977, at the Hemudu Site in Yuyao, parts of the original loom, such as a warp beam, a harness lever, a weft beater, and a cloth rolling stick dating back about 6 900 years were found, as well as an ivory cup engraved with silkworms (Figure 2), indicating that people already had primary weaving skills and there was a witchcraft worship of the silkworm. From the Caoxieshan site of Wuxian County, Jiangsu Province, 6 700 to 6 300 years ago, carbonized weft weave ribbed fabric was discovered, along with textile and sewing tools such as pottery spinning wheels, wooden skein rods, and bone spindles. In 1958, uncarbonized yellow-brown silk clothes, carbonized ribbons, and silk threads were found at the Neolithic site of Qianshanyang, Wuxing County. In 1959, many artifacts were excavated and collected from the Neolithic site of Meiyang in Wujiang, including seven pieces of the flat circular spinning wheel. There were two silkworms in the pottery decoration, reflecting the sericulture production. From a large number of unearthed objects, it can be proved that sericulture and silk weaving technology had emerged in the Neolithic Age around Taihu Lake.



Figure 2. Bone needle and Silkworm striped bone cup in the Neolithic Age

Note. Information is Taken in Suzhou Silk Museum.

Archaeological findings from the Paleolithic era, such as the red-stained perforated pebbles with red remained on the wall of its holes found in the burial objects of the Upper Cave Man, and the four pieces of red ochre with obvious grinding marks unearthed from the Dadunzi site in Pixian County, Jiangsu Province, indicate that mineral dyes were already widely used by ancient people in the Neolithic era. A light red leno dating back 5 500 years discovered at the Qingtai site in Xingyang in the 1990s is the earliest and the only coloured silk fabric ever found. During this period, ancient people shifted the application of dyes from minerals to fabrics. These findings suggest that dyeing, as one of the objective conditions required for the origin of Su embroidery, began to be used as a means of processing decorative items earlier than the Paleolithic era and by the late Neolithic period, ancient people had already mastered the method of dyeing fabrics.

2.1.2 Subjective Preference: The Formation of Patterns



Figure 3. Jade and pottery from the Liangzhu culture period

Note. Information is Taken in Suzhou Silk Museum.

The Taihu Lake Basin in the Neolithic period went through three stages of development: Majiabang culture, Songze culture, and Liangzhu culture, which reached its peak during Liangzhu culture period. At this time, with the rapid development of agricultural society and economy, handicrafts began to specialize in production, and the production sectors of pottery, jade, textiles, and lacquerwares were developed. Among the unearthed objects, exquisite jade and pottery were the essences of burial objects of this period (Figure 3). *The Book of Rites* (周礼)

records that “using cyan Bi worships the sky, and yellow Cong worships the earth.” 「以苍璧礼天，以黄琮礼地」 Cong and Bi are the ritual vessels used for sacrifice. Although there are varieties of Liangzhu jade objects, the patterns mostly show standardized and repetitive patterns of gods, humans, and animals, which mirror the integration of the primitive art, religion and hierarchical system. The most representative pattern comes from the jade Cong of No. 12 of Fanshan tomb, known as the “King of Cong” (Figure 4). The godman wearing a wide crest in the decoration should be the real portrayal of the wizard or clan leader in Liangzhu society (Wang, 2010). At this time, the main pattern of Liangzhu jade has been standardized, and the unified pattern is a symbol of rulers or class power.

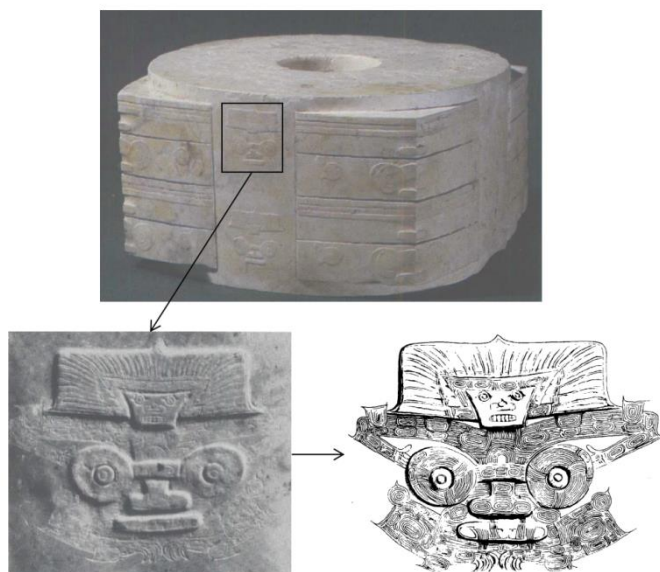


Figure 4. The face pattern of gods, humans and animals, jade Cong, from Fanshan M12: 98

Note. Information is extracted from “Brief Report on Excavation of Liangzhu Cemetery in Fangshan, Yuhang, Zhejiang”.

From the differences in the cultural altars, sacrificial relics, and tomb specifications of the Liangzhu period, as well as the more standardized patterns of gods, humans, and beasts on jade and pottery, it can be inferred that a class society was established in the Liangzhu period, with the theocracy dominance and many religious sacrificial activities (Bing, 1988). A large number of spinning wheels, linen fabrics, bamboo woven fabrics, and silk at the Caoxieshan site can be inferred that the textile industry was developed to certain degree, and the production of the needed instruments for the origin of Su embroidery, such as thread, needle, fabric, and dye, were all available. Moreover, the patterns reflecting the hierarchy and theocracy of Liangzhu ancestors were found in pottery, jade, and other hard materials. Since textiles are apt to decompose in moisture condition and hard to be preserved, it cannot be ruled out that patterns without needlework appeared on textiles during this period.

The ancestors of Wu tended to cut their hairs short for the convenience of life and work and tattooed for exorcising evil spirits. This custom is mirrored in the bronze hanging drum with ring and the dove cane (Figure 5) found in the tomb in the north mountain of Dantu, Jiangsu Province, of Spring and Autumn Period (Jiangsu Dantu Archaeological Team, 1988). At the four corners of the hanging drum ring, there were kneeling figures with short hair on the forehead-like bangs, with ornament holes on earlobes, and cloud patterns on their bodies and legs. The square socket found at No. 306 tomb of the Warring States Period in Shaoxing was composed of three parts: the column socket, the seat body, and the pad foot (Figure 6) (Mou, 1984). The pad foot was four kneeling figures of the human body decorated with cloud and thunder pattern. In addition to the body-painted figures on unearthed bronze wares, the literature records also confirmed the custom of cutting hair and tattooing the body in the Wu region. For examples: (1) “Duke Zhou wore court dress and court hat to implement Zhou Li. Zhong Yong inherited Duke Zhou as the monarch. He cut his hair short, and painted his body. This is not in accordance with the ritual!” 「大伯端委以治周礼，仲雍嗣之，断发文身，赢以为饰，岂礼也哉？有由然也。」 recorded in *Tradition of Zuo · Duke Ai of Lu* (左传 · 哀公七年) (Zuo, Du, & Li, 2020). (2) “The people of Yue live besides water, so they cut their hair and painted their bodies to resemble snakes, thus avoiding to be harmed.”

「常在水中，故断其发，文其身，以象龙子，故不见伤害。」 recorded in *The Records of the Grand Historian · Wu Taibo family* (史记 · 吴太伯世家) (Sima & Zhang, 2014). (3) “The custom of Wu and Yue: cutting hair short and tattooing body” 「吴越之俗，断发文身」 recorded in *Lunheng · Articles on the four taboo* (论衡 · 四讳篇) (Wang & Zhang, 2017). The ancient people of Wu tattooed their skin with sharp objects such as bone cones, plant spines, or fine stone tools of black flint, and used red as the dye for tattoos to depict the pattern marks retained for their lives.

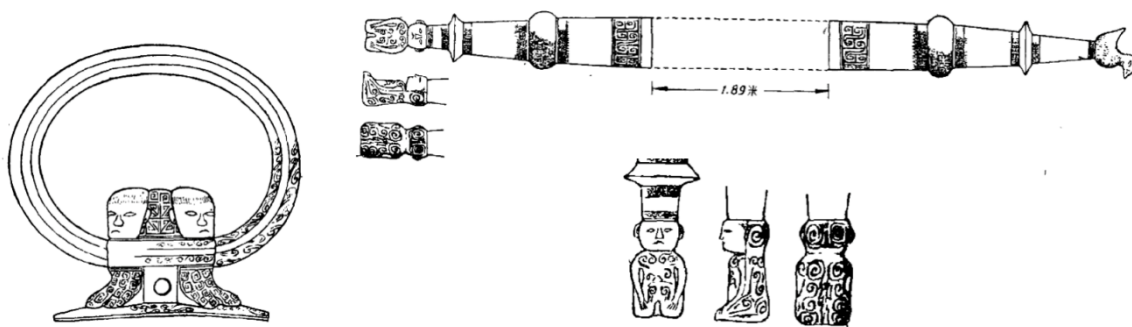


Figure 5. The bronze hanging drum ring (M: 25) and the dove (M: 24) cane excavated in the tomb of the Spring and Autumn period in the north mountain of Dantu, Jiangsu Province

Note. Information is extracted from “Report on the Excavation of Spring and Autumn Tomb at the North Mountain of Dantu, Jiangsu Province”.

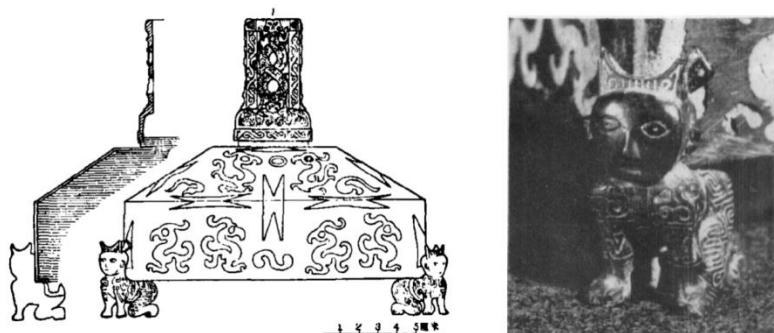


Figure 6. The square socket (M306: 18) excavated in the Warring States, No. 306 Tomb in Shaoxing

Note. Information is extracted from “Brief Report on Excavation of the Warring States 306 Tomb at Shaoxing”.

Whether as a means of self-protection (Ban, 2007), a symbol of totem worship, a sign of coming-of-age ceremonies (Liu & Yang, 2015), or a mark of social status (Yue, 1882), the ancient custom of tattooing has existed in Wu for a long time, and it has continuously varied with the changes of social production technology and aesthetic concepts, and gradually was employed to paint and embroidery clothing.

2.2 Documentary Records and Unearthed Objects

The birth of Su embroidery was dependent on the existence of materials and the progress of production technology; additionally it was closely related to the primitive aesthetic sense, religious belief, and hierarchical structure. Next, the article will explore the origin time of Su embroidery from two aspects of literature records and unearthed objects.

2.2.1 Su embroidery in Literature Records

As mentioned above, embroidery first appeared in literature as one of the methods for making the pattern of the emperor's clothing. *The Book of Documents Benefiting the Country* (尚书 益稷) mentioned that: “To highlight the class differentiation in clothes, paint the sun, moon, stars, mountains, dragons, and pheasant, embroider zongyi (sacrificial ritual vessels, with one painted tiger and one pheasant), algae, fire, powder, rice, fū (axe shaped), and fú (two beasts face each other), and make clothes of five different colours to differentiate the status. It's your task” 「予欲观古人之象，日、月、星辰、山、龙、华虫、作绩，宗彝、藻、火、粉米、黼、

黻、絺绣，以五采彰施于五色，作服，汝明」(Sun, Chen, & Sheng, 1986).

The embroidery technique could be traced back to 4 200 years ago, and the patterns of the twelve chapters embroidered were relatively mature, which should be the product of a certain well-developed stage. The earliest record of Su embroidery appeared in *Garden of Anecdotes* (说苑) of the Han Dynasty, when Shu Xiang went on a mission to Wu, he saw people wearing embroidered clothes with leopard fur, and some wearing brocade clothes with fox fur (Liu & Cheng, 2018). Pinggong of Jin reigned from 557 BC to 532 BC, which is more than 2 500 years ago. There are abundant records of the embroidery technique of Wu Area, such as: *Wu Yue Spring and Autumn Period ·the King of Wu Yu* (吴越春秋 · 越王无余外传) recording a story that Yu climbed the mountain, roared up to the sky, and suddenly lay down, and due to a dream of a man in red embroidered clothes who claimed to be a messenger of Xuanyi and Cangshui (Zhao, 2008), and *Wu Yue Spring and Autumn Period ·Biography of Fu Chai* (吴越春秋 · 夫差传) recording a story that the King of Wu was about to kill himself with his sword, but he looked around and said, “I would like to restore three pieces of embroidery to cover my eyes.”「吴王临欲伏剑，顾谓左右曰……愿复重罗绣三幅，以为掩明」(Zhao, 2008). These records suggest that the embroidery craftsmanship in Wu was highly developed during that time, and embroidery products were mainly used for practical items such as clothing and handkerchiefs.

2.2.2 Archaeological Objects of Su Embroidery

In 1982, archaeologists discovered fragments of embroidery while cleaning a tomb of the Han Dynasty in Tianshan, Gaoyou, Jiangsu Province. The fragments were embroidered with flower-like lines using lock stitch to represent the pattern of clouds and birds, which were similar to the “longevity embroidery” found in Mawangdui. In 1993, two pieces of the embroidered quilt were found in another tomb of the Han Dynasty in Yinwan Bay, East China Sea (Ji & Liu, 1996), with bright colours and exquisite patterns, which were precious embroidery products of the Han Dynasty (Figure 7). The embroidery used lock stitch as the basic method, while changing the application of open lock stitch, closed lock stitch, single row, and multiple row lock embroidery techniques. The colours of red, brown, taupe, stone yellow silk threads are used to show the feather-man, phoenix bird, gods, beasts, and “zhuang” (a flag-shaped barrel that expresses victory and auspiciousness) (Wu, 1996). The above two embroideries were the earliest products of Su embroidery. During this period, Su embroidery was mainly made of lock stitch, while the auspicious clouds, mythical beasts, feather figures, dragons, and phoenixes were the main themes of the pattern. It can be noted that Su embroidery has not formed its characteristics during the Han Dynasty, which is similar to the embroidery found in Mawangdui, Dabaotai, Wuwei, Loulan, and other tombs of the Han Dynasty. It reflects the concepts of the Times, such as praying for the immortal, celestial situation, and interaction between heaven and man.



Figure 7. Embroidery quilts discovered from Tomb M2 of the Han Dynasty, Yin Wan, East China Sea

Note. Information is extracted from “Study on the Content and Technology of the Han Tomb Yin Wan in the East China Sea”.

2.3 The Origin Time of the Technique of Su Embroidery

Based on the records in *Garden of Anecdotes* (说苑), most scholars believe that Su embroidery has a history of at least 2 500 years and evolved from the ancient tattooing custom in Wu (Xu, 2016; Sun, 2007). However, the specific and accurate time of the origin of Su embroidery is still unknown. This paper holds that the origin of Su embroidery technology should be defined from the middle and late Liangzhu Culture (about 4 800-4 000 years ago) to the Spring and Autumn and the Warring States period (557-532 BC).

In the middle and late Neolithic Age, Taihu Lake Basin had the objective conditions for embroidery, that is, thread, needle, fabric, and dye. The patterns resulting from the subjective orientation matured in the middle and

late periods of Liangzhu culture. The effect of religion and hierarchy found in the decorative patterns of a large number of jade and pottery may appear in textiles of the same period. Unfortunately, because of the difficulty in preserving textiles, and the decline of Liangzhu culture in the later period due to the invasion of the sea, the southward migration of the Longshan culture, and the large-scale investment of non-productive labor, the embroidery products in this period were not preserved. However, the earliest ever-unearthed productions of Su embroidery were the discovery of the Han Dynasty. The exquisite embroidery craftsmanship and lively embroidery patterns convince us that it should not be the products of the beginning stage of Su embroidery but of a long time of development. The origin of Su embroidery is not later than the reign of Pinggong of Jin (557 BC-532 BC), for the earliest documentation on Su embroidery dates back to the Spring and Autumn Period.

3. The Time and Reason for the Origin of the Name “Su Xiu”

Having investigated the conditions and time of the origin of the technique, this paper begins to focus on the origin of the name “Su Xiu” which means Su embroidery in Chinese. After the improvement of lock stitch in the Qin and Han dynasties, the development of flat stitch and the abundance of embroidery patterns in the Tang Dynasty, a mature system of stitching and appreciation embroidery based on literary paintings were formed in the Song Dynasty, and finally the name “Su Xiu” appeared in the Ming Dynasty. Only with the outstanding “craftmanship” can Su embroidery achieve the “fame”. The “fame” represents the local characteristics of elegant patterns, graceful colours, flexible stitching, and exquisite style, showing people’s recognition and admiration of Su embroidery technology.

3.1 The Technique and Style of Su Embroidery Gradually Matured

3.1.1 Development period: Three Kingdoms to Tang Dynasty

Wang Jia’s *Collection of Relics* • Wu (拾遗记 • 吴) recorded that Mrs. Zhao (Wife of Sun Quan, Lord of The Three Kingdoms) embroidered mountains, rivers, seas, cities and other patterns on the square silk, that is, the famous “Mountain Terrain Map”, which is different from practical embroidery.

During the Six dynasties and the Tang Dynasty, splendid silks from the south of the Yangtze River were sent to the central court for the records of the *New and Old Tang Books*. “Wujun, Suzhou, prosperous. Local tribute products: silk pueraria, silk cotton, eight generations of silk, crimson silk, cloth...” 「苏州吴郡，雄。土贡：丝葛、丝绵、八蚕丝、绛缕、布……」 In addition to the processing of garments, embroidery was widely used in religion, sutras and Buddha statues, setting a precedent for the embroidery of calligraphy and painting in the Song. Embroidery patterns ended the Han horizontal rows with ancient motifs of clouds and pentagrams, established the dominance of floral, fresh and free flower and bird motifs, and formed a new style with distinct national and temporal characteristics. The Tang Dynasty was also a period of great development in embroidery needlework, as the dominance of the lock stitch came to an end. Flat embroidery stitches such as the split stitch, the overlap stitch, the block shade stitch, and the roll stitch, as well as plain gold embroidery and coiling stitch with gold thread, gradually developed and took over from the lock stitch as the dominant stitch of the time.

3.1.2 Mature Period: Song and Yuan Dynasties

During the Song Dynasty, the imperial court established a weaving office in Suzhou, which also handled palace embroidery. Yuanfeng three years (1080), Suzhou silk (including all kinds of silk embroidery) up to more than 80 000 pieces. By the time of the Southern Song, Su embroidery had developed a professional production workshop. According to *the research of Song Pingjiang City Workshop* (宋平江城坊考), such as “gunxiu fang”, “jinxiu fang” and “xiuxian fang”. This reflects the development of the embroidery and thread-making industries.

Song embroidery was divided into practical and ornamental embroidery. Practical embroidery continued traditional techniques and motifs from the Qin and Han dynasties, providing technical support for the rise of ornamental embroidery. In the Song Dynasty, the system of embroidery stitching in the south of the Yangtze River was gradually improved, forming the seeded embroidery to represent points, split stitch and roll stitch to represent lines, plain stitch, block shading stitch, overlap stitch and satin stitch to represent surfaces, and decorative techniques such as gold and silver stitching, bead embroidery and clip and paste embroidery. The motif of embroidery is divided into auspicious patterns and embroidery themes. Most of the auspicious patterns are traditional folk themes such as dragon and phoenix, blessing, longevity and well-being. The embroidery department of the Wenxiu Academy at the Song court 「文绣院绣画科」 used paintings in the academy’s style as manuscripts, with fine stitches, delicate colours, landscapes, pavilions, figures, flowers and birds to open the atmosphere of artistic embroidery.

In 1957, four embroidered sutra bags were unearthed in the Yunyan Temple of Huqiu, Suzhou, which are the earliest embroidered artifacts ever excavated in Suzhou. Among them, the chestnut-coloured ground embroidery

with the lotus flower pattern is a sutra bundle (Figure 8). Leno was used as the base material, stitch methods such as plain stitch, overlap stitch, block shading stitch and lock stitch were used to embroider the lotus, peony, and begonia. It was white and blue, and blue is the main colour varying from light to deep. The product looked simple, and bright (Qian, Fan, & Huang, 1957). Huiguang Pagoda of Ruian in Zhengjiang discovered a double-sided embroidery sutra bundle with a pattern of two schools of flying parrots in 1972 (Zhejiang Provincial Museum, 1973). In 1978, the Ruiguang Pagoda in the Panmen of Suzhou discovered a sutra bundle, with leno as the ground fabric, plain stitch and split stitch as the main stitching method, and the pattern of the winding branches and flowers (Yue & Liao, 1979). These embroidery products from the late Five Dynasties to the Northern Song Dynasty had different techniques and aesthetics from those of the previous dynasties, which is consistent with Dong Qichang's praise in *Jun Xuan Qing Secret Collection* (筠轩清秘录) for the features of "fine stitching" "graceful colours" and "elegant patterns" of Song embroidery.

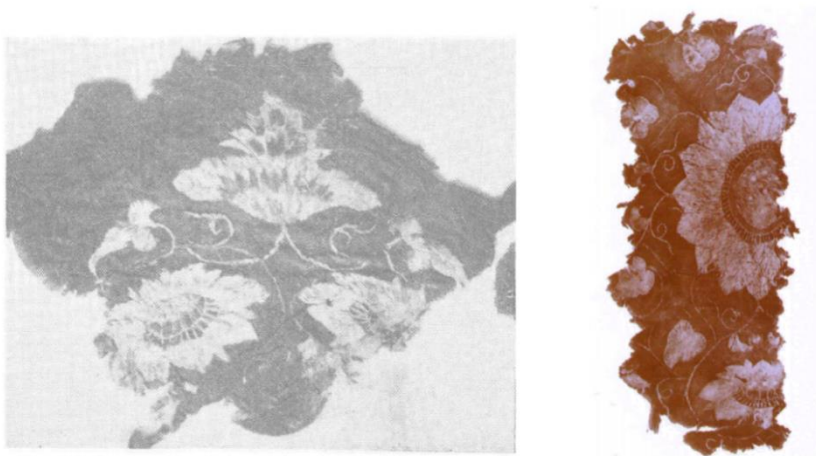


Figure 8. The sutra bundle discovered in the Yunyan Temple of Huqiu, Suzhou, in 1957

Note. Information is extracted from "Content Brief of Cultural Relics Found in Suzhou Huqiu Yunyan Temple Tower".

Suzhou Weaving Bureau was established in the Yuan Dynasty, and weaving and embroidery had to be refined. At the end of the Yuan Dynasty, four pieces of embroidered dress fragments were unearthed from the Cao tomb, the mother of Zhang Shicheng, King of Wu in Suzhou (Figure 9). They were embroidered with nine stitches, such as split stitch, satin stitch, scaling stitch, plain stitch, seed needle, etc., interspersed with clouds, and the composition was dense and picturesque. The Guan Yin Statue(观音像), an embroidery work by Guan Zhongji, wife of Wu Xing painter Zhao Mengfu, is now in the Nanjing Museum. It has delicate and varied needlework techniques, inherited from Song Dynasty embroidery.



Figure 9. Embroidered pieces of double dragon from Cao tomb

Note. Information is Taken in Suzhou Museum.

3.2 The Name “Su Xiu” Was Formed in the Ming Dynasty

3.2.1 Su Embroidery Products Were Abundant in the Ming Dynasty

The Ming Dynasty was an extremely important stage in the history of Su embroidery, supported by a well-developed weaving industry and a large proportion of needlework.

The sayings such as “every woman knows how to operate the embroidery frame, and produces good needlework” reflecting that embroidery became a family sideline of the people in Suzhou and the surrounding areas. The mass family sideline will not only improve the skills of individual embroiderers, but also promote the continuous refinement of embroidery categories, such as appreciation goods, daily necessities and costumes. In the first year of the Hongwu (1368), the Weaving Bureau was rebuilt in the east of Tianxin Bridge and managed by local officials. From the Yongle period, eunuchs were sent to Suzhou and Hangzhou Weaving Bureaus to embroider and weave garments for civil and military officials at the imperial court. Costumes unearthed from Ming tombs in Tongqiao village, Guoxiang, Suzhou (Brown single robe in quadrilateral cloud pattern satin with golden pheasant embroidery) and Xufan tombs in Taizhou (Bright camel yellow robe in eight treasures brocade with peacock embroidery) are embroidered with patterns representing status. Influenced by the Wumen School of painting, talented women in Suzhou excelled in copying famous paintings from the Song and Yuan dynasties, combining them with embroidery techniques to develop a unique style of boudoir embroidery. The embroiderers recorded in the literature included Wu Mu of Wujiang and Mrs. Xue, a female teacher of Qiandai’s family (Zhu, 2013). Embroidery works, such as Qiao’s Embroidery of Luo Shen Fu at the Shanghai Museum (乔氏绣洛神赋).

3.2.2 “Delicacy and Elegance” Are Refined as the Style of Su Embroidery

Wang Ao, an advanced official of the ministry of revenue of mid-Ming Dynasty (1506-1521), once recorded in *Gusu Local Chronicles* (姑苏志) that “Su embroidery is fine and elegant” “精细雅洁，称苏州绣” (Lin & Wang), which first extracted the artistic style of Su embroidery in the written text, and it was also the beginning of the fame of “Su Xiu”. Since then, Su embroidery has become one of the outstanding traditional handicrafts of China.

“Delicacy and elegance” interprets the beauty of Su embroidery from both technical and artistic aspects. Delicacy is a manifestation of exquisite techniques. The thread is mainly velvet thread without twist, which is used in splitting and the thread is fine; the delicate needlework consists mainly of block shading and overlapping stitches; the stitches are so fine that no stitches are visible, and no base fabrics are exposed. Elegance is the refinement of the artistic style of Su embroidery. The composition is neat and beautiful; the designs are delicate and of high quality, mostly from flowers, birds, fishes and insects, landscape figures and rich in the charm of Jiangnan Water Town; the colours are natural and harmonious, intermediate shades are used.

3.3 Reasons for the Reputation of “Su Xiu”

3.3.1 Technical Support: Developed Silk Weaving Industry and Mature Embroidery Techniques

For the wars all over most parts of China at the end of the Yuan Dynasty, Zhu Yuanzhang, the emperor who founded the Ming Dynasty, carried out the policy of “well-measured use of resources” and ordered the nationals to plant mulberries and hems, which made the agricultural economy recover quickly. The silk industry became a significant part of the national handicraft production. Jiangsu and Zhejiang were the areas that produced most of the silk weaving. *Suzhou Prefectural Gazetteers* (苏州府志) recorded that “The people of Suzhou have no accumulation, and many of them were engaged in silk weaving. Half of the northeast households had weaving tools” “苏民无积聚，多以丝织为主，东北半城皆居机户”，and “to the east of the city, all were engaged in weaving” “郡城之东，皆习机业” (Sun, 1993). Suzhou silk weaving industry produced a variety of fabrics with various patterns, such as satin, leno, damask, jacquard silk, square mesh yarn, and the best-knowns include Wuling (some local silks from Shaoxing in the Tang Dynasty) and Suduan (a kind of famous silk produced in Suzhou). In addition, the Suzhou Weaving bureau established in the Ming Dynasty provided the needed material and the technical support for the development of Su embroidery.

In addition to the increasing variety of embroidery base materials, the thickness, material, and colour of embroidery threads have been continuously enriched. The fine features of Su embroidery are highlighted in the popularity of split threads. *Songjiang Fu Zhi* (松江府志) recorded that “In the past, there were silk threads and kesi, but now the split thread is used for painting embroidery” “旧有绒线、有刻丝，今用劈线为之，写生如画” (Fang & Chen, 1991) Su embroidery is excellent in the use of intermediate and complementary colours for three or four colours, the thread “can not be compared with the Song Dynasty... There is a middle colour line that is not seen in Song embroidery.” “非宋代绣画之所能比拟……率有宋绣所为见之正色外之中间色线” (Fang

& Chen, 1991) As commodities circulated, materials such as peacock feathers, wool, gold and silver threads, and pearls were incorporated into the production of Su embroidery, and exotic materials used in Su embroidery were also a major feature.

Su embroidery focused more on adding techniques to the needlework system, such as conserving water channels, pressing flaps, stacking layers of embroidery, changing needle direction and proper application of thread, with an emphasis on imitating the true state of the material. The embroidered hundreds of children's garment of Empress Xiaojing, unearthed from the Dingling Tomb of the Ming Dynasty, is a manifestation of the integration of Su embroidery during the Ming Dynasty (Figure 10). The dress was embroidered with a variety of stitches, using knitted thread, silk thread, peacock feathers, and gold thread to create a scene from a children's play on the base material of leno.



Figure 10. The embroidered hundreds of children's garment (copy)

Note. Information is Taken in Suzhou Museum.

3.3.2 Cultural Influence: Literary Art and the Rise of the Civil Class

During the Ming Dynasty, the dominant cultural trend in Suzhou was that of the elite literati. In the field of painting and calligraphy (Zhu, 2004), the "Wumen School" is represented by four painting masters, Shen Zhou, Wen Zhengming, Tang Yin, and Qiu Ying. In the field of poetry, the "Four sons of Wu", Tang Yin, Wen Zhengming, Zhu Yunming, and Xu Zhen, are known for their elegant and ethereal style, and high artistic achievement. Under the influence of such cultural and artistic atmosphere, Su embroidery has a poetic and picturesque charm, with fine stitching, beautiful patterns, and elegant colours. Landscape paintings, flower and bird paintings are selected as the theme of manuscripts which are mostly provided by painters. As a result, the works are well integrated between fine craftsmanship and artistic style. After the mid-Ming Dynasty, as Suzhou's urbanization and commercialization accelerated, women had more opportunities to receive education, study, and travel. According to Tang Shuyu's *Yutai History of Painting* (玉台画史), there were 216 female painters from ancient times to the Jiaqing period of the Qing Dynasty, half of them in the Ming Dynasty and nine-tenths of them concentrated in the late Ming period. Many of them used painting and embroidery as a way to improve their culture and express their inner world, which has achieved the status of Su embroidery. The appreciation, collection, and records of scholars have made the Su embroidery technique more and more famous. Gu embroidery was appreciated by Dong Qichang, the leader of the Jiangnan painting. Zhao Huijun's Embroidered Peony Flower (刺绣金带围图) is in Shanghai Museum, and thirty-five celebrities have appreciated and collected the embroidery.

With the full development of urban culture, Su embroidery is widely used as festival items in traditional festivals such as the Spring Festival, the Lantern Festival and the Dragon Boat Festival. The embroidered purse is recorded in the fifth volume of "Needlework in the Dragon Boat Festival" (Yuan, 1998) in *Wujun Aged Gorgeous* (吴郡岁华纪丽). Folk embroidery has a close relationship with people's food, clothing, shelter, transportation, marriage and funerals. There is a wide variety of folk embroidery products, ranging from wedding dresses, bridal skirts, quilts and bed wraps to auspicious-meaning sachets, pouches, sweat towels and hair bags and mirror covers for everyday use. Moreover, secularization has given folkloric colour to religious art. By the Ming dynasty, Confucianism, Buddhism and Taoism had become integral to the core of the Chinese people's spiritual culture. This religious art is also an important part of Su embroidery. There are many statues or stories of Buddha and Taoist figures, such as the Guanyin statue, the Arhats, the Buddha of Infinite Life, the Eight Imams, and the Zhongkui. (Figure 11)



Figure 11. Anxi Palace embroidered Buddha image, Ming Dynasty (1471)

Note. Information is Taken in Shanghai Museum.

3.3.3 Promotion of the Market: The Development of Commodity Economy and the Stimulation of Market Demand

With a prosperous economy, Suzhou became the political, economic, and cultural center in the southeast of the Ming Dynasty. The emergence of capitalism greatly promoted the development of commodity trade, which was reflected in the appearance of commodity embroidery and its large-scale production and processing. Su embroidery was linked to the market, and a large-scale industry was gradually formed to meet the needs of the time.

On the other hand, the strong demand for products from the royal aristocracy and wealthy merchants promoted the expansion of the Su embroidery industry. In the book *Rebuilding Suzhou Weaving and Dyeing Bureau* (重修苏州织染局记), it is written that “the rules of the bureau defined to produce 1 534 pieces of silk per year, and 1 673 pieces are produced in a leap year”「局之旧规岁造常课纴丝一千五百三十四匹，遇闰月该造一千六百七十三匹」. It also described that there were 667 artisans specializing in different skills in the bureau, and 173 looms. The craftsmen were organized as leaders, masters, calligraphers, embroiderers, flower arrangers, weavers, and so on (Huang & Chen, 2002). These reflect the large scale of the Suzhou Weaving Bureau and the strong demand for silk products from the royal nobles. Besides, the prosperous economic environment attracted lots of merchants gathered in Suzhou. They put forward higher requirements for gorgeous silk fabrics including embroidery, which gradually improved the technical level and created more distinct artistic characteristics of Su commodity embroidery. Beside, the art of Kunqu opera, which emerged after the middle of the Ming Dynasty, was closely related to Su embroidery. Embroidery was widely used in Kunqu costumes to convey love and increase influence, which created a huge consumer demand for embroidery.

3.4 The Name of “Su Xiu” Spread Widely

3.4.1 Flourishing Period: Qing Dynasty

“The art of embroidery is best in Wuzhong”(Suzhou History Museum, History Department of Jiangsu Normal University, & Research Office of Ming and Qing History of Nanjing University, 1981). By the Qing Dynasty, Su embroidery was at the top of the four famous embroideries and reached a period of glory in terms of product types, stitching techniques, industries and practitioners.

With the increasing scale of Su embroidery production and the continuous refinement of categories, embroidery products can be divided into four categories: court embroidery, boudoir embroidery, commercial embroidery and household embroidery. The techniques matured in the Qing Dynasty. *Shanghai Local Chronicles* (上海方志)

recorded that “Su embroidery won the fame for its realistic description of life and even ordinary people can learn this technique to make a living, similar to weaving. The application of the split thread and the fine needle always attract people’s attention.”「苏绣之巧，写生如画，他所无，小民亦习以糊口，略似纺织等。其法劈丝为之、针细如毫发」(Lan, 2009).

The prosperity of Su embroidery was also reflected in the establishment of embroidery shops and industry offices. Most shops are middlemen, handling the distribution and sale of embroidery orders. They are divided into three types: embroidery shops, costume and cutting businesses, which operate different embroidery products such as palace goods, costumes and daily embroidery. The Jinwen Club, founded in the sixth year of Tongzhi (1867), was the earliest trade club of Su embroidery, marking the formal formation of the Su embroidery industry. Dong Xiaowan, Yang Maojun, Qian Hui, Ding Pei, Shen Shou, Shen Li and other famous artists promoted the name of Su embroidery to be widely spread.

3.4.2 Inheritance and Innovation Period: Modern Times

Since modern times, Su embroidery has always created and accepted new ideas, and reformed and innovated, such as the new techniques like simulation embroidery, random embroidery, and double-sided embroidery; the new subjects such as oil painting, portrait, and photography; the new materials such as three-leaf shaped silk, luminous silk and taffeta. On the other hand, Su embroidery has never given up its traditional style. It owns the fame at home and abroad for the characteristics of being “flat, neat, thin, dense, even, smooth, harmonious and bright”.

4. Conclusion

Based on literature records and the excavated objects, combined with research methods in archaeology, ethnology, textile history, and other fields, this paper explores the conditions and time of the origin of Su embroidery. The main conclusions are as follows:

(1) The connotations of Su embroidery has been enriched chronically. Su embroidery was recognized as the handmade silk embroidery of Taihu Lake Basin centered in Suzhou when it was firstly taken as an art of certain style. Later when the certain style was formed, Su embroidery was defined as the handmade silk embroidery in the Taihu Lake Basin and centered in Suzhou, characterized by “delicacy and elegance”, or being “flat, neat, thin, dense, even, smooth, harmonious and bright”.

(2) To trace back the origin of Su embroidery, we can follow two paths: one is the superb “technique”; the other is the “fame” owed to its reputation. The technique of the Su embroidery was earlier recognized than its fame known as “Su Xiu” in Chinese. The technique was formed in the middle and late period of Liangzhu Culture (28-20th century BC) to the Spring and Autumn Period and the Warring States Period (557-532 BC). The development of the silk industry, mature embroidery techniques, and commodity economy, the need of the market, the influence of culture, and artistic heritage of poetic Jiangnan altogether brought out the name “Su Xiu” in the Zhengde period of the Ming Dynasty (1506-1521).

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Authors contributions

Dr. Liu was responsible for the design of the research routes and procedures. Dr. Xu was responsible for data collection and first draft writing. Prof. Cheng reviewed and revised the first draft and Prof. Lian was responsible for the translation of the article. All authors read and approved the final manuscript.

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