

Natural Dye in the application of Silk Tapestry in view of the preservation of its intangible cultural heritage

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Abstract

This Taiwanese proverb “The man planting and the woman weaving gives the perception of a prosperous economy” defines Taiwan’s society. Since the discovery of synthetic fibers and colorants at the beginning of the 19th century, natural dyes and handmade products were in less of a demand. This change became a serious setback for Taiwan’s society and economy as manual labor could not compete with mass production. Silk tapestry has played an important role in the preservation of Chinese painting and calligraphy and has continued to do so since the Song Dynasty (960-1279). Unfortunately, because of the complexities of this technique craftspeople will eventually stop using it, and if this method is not preserved, it will ultimately disappear. This research makes every effort to study the original history and techniques to find a solution to preserve this handmade technique of using natural fibers and dyes. This method, which can recreate a painting or a piece of calligraphy, can better preserve the historical and cultural heritage of this art. However, because this distinctive art form was originally displayed on paper it is much harder to preserve, thus, there is an urgent need for a more durable material such as silk. When a silk tapestry is created by hand, it can capture the details of calligraphy and ancient Chinese paintings, and it is also more resilient than paper or canvas. When a tapestry is created by machine it cannot capture the minute details and thus preserve the historical meaning. While it is also made out of a more resilient material, it cannot capture the true meaning behind each piece of the artwork, thus the importance of using the Natural Dye technique to preserve pieces of art. The larger outlook is not only for the preservation of Chinese painting and calligraphy, but also in the creation of refined, handmade art.

Keywords: Nature Dye, fibers, Silk Tapestry, Intangible cultural heritage

Introduction

Since prehistoric times, discovering, using, and refining, natural dyes and fibers have been passed down to successive generations within families and communities. At the beginning of the 19th century, the discovery of synthetic fibers and colorants has shifted from small-batch craftsmanship, to mechanization, and then mass production. The large-scale production of synthetic dyes and fibers today has resulted in serious environmental pollution, a reliance on finite fossil fuels, and a possible loss of ancient techniques and knowledge. In view of the declaration of UNESCO (United Nations Educational, Scientific and Cultural Organization) on the importance of the intangible cultural heritage protection concerned with ancient knowledge and traditional craftsmanship on nature dyeing, a joint International Conference on Natural Dyeing by the International Symposium Economic Natural Dyes (ISEND), and the World Eco-Fiber and Textile Forum (WEFT), was formed, and in view of this, a worldwide trend for using natural colorants also emerged. Various research on nature dyeing has provoked a great deal of attention on the historical Chinese documents directly related to the studies of traditional Chinese color and natural colorants, which have indicated the diversity of the nature dyeing sources, refining techniques, and applications. China's traditional color culture reflects the ancient political, economical, social customs, literature and art, folk festivals, ideas, and aesthetic standards. This fully shows the respect on all the colors today from their predecessors.

World Heritage Convention

Joint education, the seventeenth session of the Scientific and Cultural Organization (UNESCO) General Assembly -October 17 to November 21, 1972, held in Paris, through the World Cultural and Natural Heritage Protection Convention, taking into account inherent interdependence between the intangible cultural heritage and the natural heritage. But not until the thirty-second session from – September 29 to October 17, 2003, held in Paris, decided that only intangible cultural heritage protection by the Convention for that intangible cultural heritage is a living heritage, and the range includes skills, technology, and knowledgeable, heritage. Traditional crafts masters in China have since then been protected by the State, but Taiwan is still in its initial stage. Since 2003, The General Conference of the United Nations Educational, Scientific and Cultural Organization hereinafter referred to as UNESCO are considering the deep-seated interdependence between intangible cultural heritage and tangible cultural and natural heritage.

(1. Retrieved from : <http://www.unesco.org/culture/ich/index.php?lg=en&pg=00006>)

The main vegetable dyes in ancient China

Nature dyeing can be separated into a two color principle: blue color and another refined color. Ancient China book 《The Tang 6 Code》 : “Where the dye was probably made from vegetation with an assortment of stems and root bark, when harvested in January.” Therefore, allowing vegetable dyes to become a natural material source, and have existed for more than 2000 years. Dye plants had an ancient name “Dyeing herb”. The dye

plants of wood, roots, leaves, bark, fruit, and flower buds. During the period of Zhou (11BC – 256BC), it was written that there was one role of “-management of dyeing the herb“, and the usage has been one of the scale rules.

From the early Qin and Han (202BC-220BC) dynasties, the production of vegetable dyes gradually expanded, to the Ming and Qing (1368-1644) Dynasties whose generation developed into a large and profitable company.

Chinese philosophy in view of nature’s source

Five elements(2), five colors, five directions form the Chinese philosophy in view of nature’s source, which comes from Minerals, Plants, and Animals, for nature’s dyeing them when used for tinting and painting.

Chinese color research began from the Zhou Dynasty (1059 BC– 255 BC), the color were divided into five colors, such as red, green, yellow, white, and black, with another nuance color between these five colors. Otherwise, if we want to explain nature’s dyeing colors for silk tapestry, we must talk about the Chinese five colors.

The Republic of China contains five thousand years of history of natural colorants.

For those Chinese ancestors who opted to follow the law, the five kinds of elements of the universe were likewise: earth, wood, fire, water, gold, and to establish a relationship with color Derivatives to the north, south, east, and west in all the five directions. The universe is divided into nature’s colors of red, green, yellow, white, and black, the five basic colors concept. The earliest description is mentioned as colored and faceted "Winter officer Kaogongji" and multicolored mixing five colors." This ancient book is the earliest explication during the period of the Zhou (3) Dynasty. In this research, it describes the various types of handicraft manufacturing processes, specifications and literature. This book chronicles on various types of handicraft

(2) Yan T. Wong,(2011), *The Colors of China*, Taipei, Linking publishing.

(3)Zhou is divided into two periods : "Western Zhou Dynasty " (before mid 1059 - 771 years ago) and "Eastern Zhou Dynasty" (770 BC - 255 years). Retrieved from: <http://ctext.org/rites-of-zhou/dong-guan-kao-gong-ji/zh>

design specifications and manufacturing processes. The book retains a lot of the handicraft production technology, arts and crafts materials, and a documented series of production management and construction systems, which must have reflected the extent of the prevailing ideas.

The "five color mining equipment form the embroidery" is the highest aesthetic attitude. Another document published during 515BC to 512BC. Warring States Dynasty, "The Art of War potential Volume II” pointed out : “ There are only five basic colors, but their variations and blending produce colors more beautiful and splendid

than ever seen. "Nature reflects the basic five colors, and if we transform these five colors, we can obtain a multicolored world."

Historical Reference of red color

Chinese "red" comes from the emergence of character "scarlet" or is carved on the bronze ware in a bronze inscription on the casting (also called bronze inscriptions or engraved inscription)

In historical research, The word "scarlet" emerged from the end époque of the Shang Dynasty (17BC to 11BC) prevalent in Western Zhou, about 3000 years of history. Red has always been popular in the Dynasty Tang. The casual cloth that the Tang Dynasty emperor wore was a red garment gown, and also the Red colored sign that the third and fifth grade officials must wear. When talking about the structure of a Chinese character, on the left side from the "Shito (fine silk)," and on the right side from "Work."

The meaning of the color Red

The book "Taking about and explaining the Chinese words" said, in the field of dialog: "red, signifies a Kingfisher Red White," he also said, meaning that the red color is mixed with white and was presented as a color adjustment. Since War Epoque Swords into Plowshares is battle when China first said unto all fuses. The total listener.

The former refers to peach and pink, such as a red light manilla phase of red. The color-Chak-yiu, vibrant chicken-ming, becomes the preferred color to the Chinese dynasties since ancient époque. In the Chinese culture, the "Red color" is radiant and one of the colors all the Chinese people prefer. It is a sign of the spirit, power, grade, status, positive, romantic, sensual, etc.

What is the Colorants source of where the red color comes from?

From madder, Su Fang (aka hematoxylin), sandalwood, and other vegetation, natural red pigment is used for dye stains.

Madder: also known as madder dyed Fei grass, red and blue, windmill grass, and is a perennial herb. (4)

Because the roots contain red pigment, red dye can be stronger, because madder and indigo herb roots containing human fabric dyeing plant was first used in dyes. Red pigment, may be stronger with the red dye. "Zhou commentaries" in chapter 9 said: "blue with blue indigo dye, madder to dye red color". A dyed fabric color from the Mawangdui Han Dynasty tomb unearthed a study which found that crimson is madder joined with mordant alum (chemical formula for $KAl(SO_4)_2 \cdot 12H_2O$). As early as the Han Dynasty, madder was artificially propagated as having a large number of dyeing purposes, "Han Official instrument", says: "Garden

of madder dye for dyeing royal clothing, pass for Qian (luxuriant growth).”

Su Fang, in ancient times known as hematoxylin, Fan sub assassination trees Name. Because the tree contains the pigment, dyeable fiber is one of the major ancient red vegetable dyes. The Su Fang wood dyeing method uses chemicals found in the Ming Dynasty, "Heavenly Creations": "with hematoxylin is boiled in water, the alum." When Su Fang dye stains fabric alum, if added, will play a catalytic role, After staining, the cloth will produce different shades of red. Later, the Tang Dynasty spread to Japan, and the Japanese color dye witness literature "Engi-style" written like a food recipe : “ One Piece Goods deep Su Fang Ling : Su Fang big pound, vat eight together, gray three-bucket, pay one hundred and twenty pounds in a Cloth Su Fang Ling : Two big eight portion with Su Fang, vat Kuni, gray jin, pay nine pounds. Su Fang Ling a shallow Cloth : Su Fang Xiao Wu twelve vat a close, gray eight liters, paid six pounds.”

Explanation: Aya mentioned in the literature is one-sided glossy and thin silk fabrics, vat means vinegar, salary is firewood.

(4) A Eurasian herb (*Rubia tinctorum* of the family with whorled leaves and small yellowish paniced flowers succeeded by dark berries; broadly : any of several related herbs (genus *Rubia*). The root of the Eurasian madder used formerly in dyeing : also : an alizarin dye prepared from it, and a moderate to strong red. (Retrieved from : <http://www.merriam-webster.com/dictionary/madder>)

Alternative suggestion for layout

One Piece Goods deep Su Fang Ling:

- Su Fang big pound,
- vat eight together,
- gray three-bucket,

Pay one hundred and twenty pounds in a Cloth Su Fang Ling:

- Two big eight portion with Su Fang,
- vat Kuni,
- gray jin,

pay nine pounds. Su Fang Ling a shallow Cloth:

- ❖ Su Fang Xiao Wu twelve vat a close,
- ❖ gray eight liters,
- ❖ paid six pounds.

Historical Reference of yellow color

"Pangu beginning, Baraka" is a chaotic world of Chinese culture considered as the original color.

Yellow represents everything from the foundation of the Chinese nation.

The dictionary says: "yellow is also part of the color."

Extreme emperors advocated the yellow color as meaningful.

China's oldest fabric color dye and pigment painting, with one color from the gardenia plant, and fruit pigment used to dye clothing may be the earliest clothing color "Bei Feng The Green Book of Songs" in "The Green yellow in" dress color matching .

Colorants source

Warm reddish color genus Gardenia yellow, probably first appeared in China as a natural plant that can be dyed yellow.

The Gardenia tree (Rubiaceae Gardenia) Gardenia jasminoides is called zhizi and Kuchinashi, respectively.

Its blossom is used as a yellow dye, used on fabric and food (including the Korean mung bean jelly called hwangoomuk). This fruit is also used in traditional Chinese medicine for its clearing, calming, and cooling properties.

(5. Retrieved from :<http://en.wikipedia.org/wiki/Gardenia>)

It is an evergreen shrub, It blossoms in Spring during April or May and in Autumn, with yellow fruit and yellow juice that contain "hidden spent acid" yellow pigment, obtained by squeezing the fruit directly on Sibo dip cotton fabric.

Historical Records: "Sin... This across goblet its people begin one thousand Hou, etc." Description Gardenia advanced clothing color can be dyed.

The Chinese word for "dye" may be associated with the origin of the word that is concerned with gardenia.

Song philologist Luo Yuan, (1136-1184), of "Ya differences" Volume IV: "goblet can be dyed yellow... the cream to take the dye, so dye word from the" wood ".

Song Pei Guangyuan: "The dye from water with wood for the pre-Qin era Mulberry girl's dress borrowed from the song conveys that the dress material should be dyed nine times."

Historical Reference of Green color

Green is an ancient word, "Lu", and is a grass name that first appeared in the "Book of Songs": "green mining towards the end, not profit a skim." The Lu color is the traditional dyed yellow-green fabric dye material.

Found in the Ming Li, "Compendium of Materia Medica": "This green grass can be dyed yellow, and also

remain green. "Green genera color, non-Stern, so the status of natural elegance and orthodox than Stern." So its rank is lower than blue.

Levels significance

Green symbolizes nature's vegetation thriving in wonderful colors, but it needs red foil. Northern Song Dynasty poet, Wang Anshi, (1021-1086): "Dark green ten thousand red point, moving spring to be much." (Wing pomegranate)

Chinese green landscape mainly planted with malachite, and azurite green landscape mineral pigments.

Colorants source

"Dictionary", saying: "green, silk green yellow also."

Means yellow and blue cloth dye available from the dye stack.

Historical Reference of purple color

In the "Forbidden City" of the emperor Gotemba, the purple color became one of the most important traditional Chinese colors.

Purple cloth fabric is made from the grass roots of the plants, that includes a water chestnut dip, with the dyed material being continually repeated.

Warm colors and cool colors are made from red and blue dip.

A pre-Qin era Mulberry girl's dress was borrowed from the following song's lyrics:

Pre-Qin era Mulberry girl's dress borrowed from the following song's lyrics conveys: "Mulberry Shengyang during the spring months, how elegant the picture of the green leaves on the tree climbing up the trellis, look beautiful on her purple silk skirt." (Mulberry degrees)

Eastern and Western paintings: how to extend the life of the intangible Cultural heritage

We suppose that Chinese people will replicate the ancient art of calligraphy and painting on silk tapestry, otherwise Westerners may transfer them into mosaic art.

Research motivation

Taiwan's National Palace Museum exhibition organized by the Song tapestry in 2009, displayed precious tapestry works shown about once a decade.

Silk tapestry art appreciation, tapestry and painting techniques in royal collections which were out of reach of many modern processes. In its publication of "Silk tapestry weaving elegance - Bird Song tapestry exhibition

catalog" books(6), arts and crafts shows, and silk tapestry has been lost in modern times.

Traditional Illusion of old China gives “farming men and women weave give one wealthy life” – Countless achievements of five thousand years of Chinese culture – Chinese silk dyeing has a long history, content-rich, and highly skilled. This fully demonstrates the wisdom and creativity of our ancestors in the history of the world’s civilization and written as a glorious chapter of that time. Today, the many excellent traditional dyeing techniques, although it’s sad to say that some have been lost, fortunately others were replaced by modern technology; although until today, the lack of a written records system needs to be consolidated. If we do not rescue this important information, then these skills will fade away and be forgotten, This national history and human civilization will be a consummate loss, so the significance of this research topic is extremely important. Since ancient times, the art of dyeing and weaving has had a tremendous impact throughout the various aspects of social life.

“The mother of Mencius, chooses the neighborhood place; the child does not learn, away from the loom”

Mengmu said to her son: "The study of the truth, and my truth, like weaving,

From the slightest trace of weaving up to being woven into a useful cloth.

Do your studying the same way we must strive hard, after a long period of accumulation, in order to have success.

Historical study of silk tapestry

Oriental silk tapestry comes from wool tapestry that originated” in Gobelins Royal Factory in Paris”(Short Guide to Tapestry Art (c.800-2000))

(9. Retrieved from : <http://www.visual-arts-cork.com/tapestry-art.htm>)

The Song Dynasty was a period for Chinese tapestry technique and artistic flourish, as "The Complete Works of Chinese traditional crafts • silk weaving, dyeing," described in detail. Since the Song Dynasty, the ancient tapestry works many superb imitation paintings, especially the substantial tapestry paintings, with character and elegance, and very rich in texture, mostly for the collection of the courts, and therefore more expensive than gold. A Tapestry of your work is still very costly, and silk tapestry has thousands of silk weaves with innovative designs working together, "as one woman’s clothes, takes one year of weaving" Silk tapestry’s skills is difficult to learn and challenging to master, although silk tapestry and painting is not simple to copy or imitate, it requires mastery of the craft of painting techniques and a very high artistic accomplishment. No development of the silk tapestry industry is faced with the same fate of the traditional craft that has been lost.

Talking about the Ming and Qing dynasty's rise and fall of tapestry: from the Mongol period and the early Yuan Dynasty, Mongolian nobles favored tapestry much more than the enjoyment of practical goods, so tapestry was returned to the main track on real products.

Suzhou tapestry from prosperity to decline

"The Complete Works of Chinese traditional crafts (7) silk weaving, dyeing," noted: During the Qing Dynasty, Suzhou, west of Lake Tai used farmers tapestry as a sideline. After the Republic of China, Suzhou tapestry concentrated in the suburbs Lu tomb, Li mouth, Dongzhu area, but also as a farmer's sideline, but this time the tapestry was exported to Italy, France, and the United States.

During the World War I, tapestry was almost all exported to Japan, for the manufacture of kimono belts, robes, album, because of low prices and the product's quality. At the end of the war, tapestry fell out of favor and lost many sales. So with the early founding of a New China, and with the country no longer producing tapestry in Suzhou, the artists of Suzhou tapestry now had to rely on farming for a living.

Silk tapestry historical allusions

Silk tapestry (Chinese sound ke) is a long history of silk, silk weave as a special craft, and generally passed through the weft weaving in different ways, through simple plain looms, with a weft-off approach adopted by weaving.

Righteousness "Ke" word of, in Gu Liang Ye King wrote "Jade articles" (a book that was published 543 years ago) and called "weft weave", which is composed of the screen changes attributed to the weft, with the weave patterns as positive and negative is considered as the same as those. Because the different colors are woven into the weft pattern not associated with each other, thus, leaving a gap around the jagged pattern, so the tapestry has become like an "engraved wire." (10)

The collision with industries, life, and economics for human life

Source: Wu Meiyun (1998), "Chinese female red - the mother culture"

"First, people need to be in accordance with certain rules and then levels rise,

When life has developed to a certain stage,

When the product does not meet the monotony of the factory, it will own a handmade work.

The second is the number of years of culture "gene" has deeply penetrated in quality among the people, who can say no culture will "return" a few years later?

If it is part of the production, therefore it is a part of life, the nature of both the economy and the culture with this duality to determine its historical status in Chinese society.

Fieldwork

Sampling area: China and Taiwan

Continental: Suzhou Dongzhu tapestry factory in the western town of Wuwen Kang, Beijing Forbidden City
Master Wang Jinshan tapestry studio.

Taiwan: Taichung City Huang Jing tapestry companies.

Taiwan tapestry factory production process

1. silk dyeing
2. Warping
3. painted artwork
4. Wiring
5. Weaving
6. loop processing

Tapestry industry in Suzhou

There are four main techniques of silk tapestry:

1. Results
2. Whipped
3. Hook
4. Closure

Conclusion

Our findings: Silk tapestry techniques that have not yet been lost

Research studies have found that tapestry techniques have not yet been lost, but if not instantly recovered a destiny heritage career may be lost forever. The future will invest in a more complex social state of costs without too many problems.

If the art of silk tapestry was lost, there might later be speculation that would be contrary to an “authenticity” issue set by the world’s cultural heritage.

There are not many books on tapestry in the region, so it will be dependent on the experts to complete their research. And it re-uses of derivatives for a variety of techniques as follows : Ping Ke, takes the shuttle, picture through, split wire twisted together, three blue closure, including heart berm, Mushu closure, ink, etc. Tapestry.

The possibility of the development of cultural and creative industries for tapestry, inch tapestry inch of gold, and silk tapestry is “woven in the holy” handicraft textile machines to replace the industrial age. However, the process of hand-made tapestry texture for a machine cannot be replaced, although it is limited for the

development of cultural and creative production boutique. Now, the main export commodities to Japan for a Kimono and a waistband.

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