

# Historical Context and Technical Characteristics of Bouyei Maple Incense Dyeing

Jidan Liang<sup>a</sup>, METTA SIRISUK<sup>b</sup>

Mahasarakham University, Mahasarakham, Thailand

<sup>a</sup> 804241494@qq.com, <sup>b</sup> metta.s@msu.ac.th

## Abstract

As an outstanding representative of traditional Chinese resist-dyeing techniques, buyi ethnic group FungXiangDyeing has an important position in Chinese textile cultural system because of its unique resist-dyeing materials and excellent craftsmanship. In this paper we will be exploring the historical development of Fung Xiang, tracing the development of the dye business from the Tang Dynasty, when it was just starting out, all the way until it was listed as a intangible cultural heritage in the modern day. The study looks into the rhythm of appearance, flourishing, decay, and revival in the Song, Yuan, Ming, Qing idalies as well as the modern times and finds out the changing rules of Fung Xian dyinig in material choice, pattern arrangement and cultural use. Research shows that the technical traits of Fung Xiang dyeing have been shaped multidimensionally by natural surroundings, economic trade, societal structures, and ethnic aesthetic values in SWC. In today's times, Fung Xiang dyeing changes from a old-time useful craft to a new-time artistic shape and a part of culture industry. Not only this study will provide a large number of theoretical basis for understanding the real condition of Buyi FungXiang dyeing technology, but also can provide an important reference for the modernization and sustainable development of traditional craft technology in modern society.

## Keywords

Buyi People Who; Liquidambar Dyeing; Historical Process; Craft Features; Non-material Cultural Heritage.

## 1. Introduction

In the broad stretch of worldwide textile resist-dyeing techniques, resist-dyeing methods have always been an important branch representing human ingenuity in material creation. Bouyei Maple Incense Dyeing is a special resist-printing craft in southwestern China. Its name comes from using a special resist made of maple resin and yellow ox wax[1]. Unlike traditional pure beeswax res-dyeing (batik)it has an extraordinary visual impact when greasinarmass is removed –there's a complex crackle like qinghair porcelain with great contrast between deep blue and white making it an amazing item aesthetically as well as for general scholarly appreciation. Researching Maple Incense Dyeing's historical course is not just about looking into the technical progress of a handicraft skill, it's also like doing an analysis on how the Bouyei folks adapted to the environment around them and put together their own special way of cultural expression based on local traditions[2].

## **2. Bouyei People Liquidambar Dyeing Art Historical Evolution and Technical Characteristics**

### **2.1. Germination and Initial Formation: The Foundational period in Tang Dynasty**

Tang Dynasty was the first systematization phase in ethnic handicrafts in southwestern China and also a starting point for the formation and establishment of Bouyei people's Fengxiang Dyeing Technology. During this era, with the development of technology in agriculture and the beginning of material exchange within the region, ancestors of the Bouyei people who were living in the mountainous areas of southwestern China, in order to improve their quality of life, widely sought ways to make use of local natural resources[3]. The liquidambar tree (Liquidambar formosana), which is widely found in this area, produced resin that had very good adhesion and was waterproof, and it was used early on by people for things like everyday tasks that required water resistance and sealing. Artisans through long-term work and practice on textiles and dyeing, accidentally found that after drops of liquidambar oil are applied on the hemp fabric, and when it is soaked in indigo dye, the part that has been applied on with oil will still preserve the original color of the fabric[4]. The discovery was made accidentally due to the nature of natural resources. This forms the technical basis of the Fengxiang dyeing resist-dyeing technique[5].

### **2.2. Song Dynasty Fengxiang Dyeing Technology Development Trajectory**

#### **2.2.1. Emergence Period: Establishment of Tribute Status and Early to Mid-Northern Song Dynasty Standardization of Craftsmanship**

During the initial to middle part of the Northern Song Dynasty, owing to the intensification of regional economic interconnections and simultaneous advances in transportation infrastructure, unique regional items from the Southwestern area started to reach the central area more regularly. In this time period where Fengxiang dyeing with its special texture and strong regional characteristics was transforming its production scale, shifting from being privately used to small scale concentrated production. At this point, the Buyi ethnic group's artisans began to be consciously summarizing their own experiences when extracting and refining Fengxiang resin and during the fermentation of indigo. They started to formulate some simple technical operating standards. To make the resin resist tougher and more sticking, artisans began trying out mixing up and matching up some yellow ox wax with plain old ung woven all the way across Fengxiang at certain amounts.

#### **2.2.2. Prosperous Period: Advancement of Craftsmanship, Standardization of Production, Craftsmanship Integration with Aesthetics (Mid to Late Northern Song to Early Southern Song)**

During the mid-to-late Northern Song and early Southern Song dynasties, due to the comprehensive economic rise of the south, there was a significant development of handicraft industries, which was the first peak in the history of Fengxiang dyeing. Technologically speaking, they also achieved a relatively accurate control over the mixture ratio (Fengxiang resin and ox wax), often making flexible adjustments at will with seasonal temperature changes so as to guarantee that the resist agent would flow smoothly when applied and remain firmly adhered during dying. At the same time, the process of making the technology of Indigo Vat matured; by adding auxiliary materials like wood ash and rice wine, the color intensity and brightness of the dye solution were greatly improved, resulting in deep, rich, and vivid indigo cloth. The big difference between so many bright colors and just a bit of quiet white created something that looked like the old blue-and-white china. Aesthetic change with the increase of interregional cultural exchange, the native nature motifs of the Buyi ethnic

group such as water ripples, Tibetan bronze drums, plants and birds and beast patterns, etc began to merge deeply with the popular auspicious patterns interlieing vine scroll and geometric meander from the central China. :were formed.As seen in Figure 1 below,However more balanced, symmetrical, composed of intricate and rhythmical dynamic based.



**Figure 1.** Integration of indigo dyeing technique and patterns in the Bui ethnic group's fabric production

### **2.2.3. Decline Phase: Socioeconomic ups and Downs and Inheritance Problems from Mid to Late Southern Song Dynasty.**

During the mid-to-late Southern Song period, due to the impact of large-scale macroeconomic reform and population migration, the traditional commercial routes in southwestern China have also undergone great changes. Local economies being down led to a decrease in wax-resist dyeing production(Fengxiang dyeing). Silk and cotton fabrics, which were more amenable to mechanization and large-scale distribution, began to gain more market share. Handmade Fengxiang dyeing's labor-intensive, complicated procedures lost a lot of competition to everyday consumers. And in addition to the difficulties in obtaining raw materials, the quantity of high-quality fir resin available and the cultivated land for the indigo plant had fallen because agriculture had shifted focus, which brought disruptions to the supplier lines for both resists and dyes.

### **2.2.4. The Recovery Period: Reconfiguration of Local MEMORIES and Surviving Construals of Craftsmanship (Late Southern Song to Early Yuan)**

From the late Southern Song to the early Yuan dynasty, the local society started to stabilize and the agricultural economy was recovered, so the Buyi communities started to reconsider and bring up the indigenous cultural traditions again. This period was an adaptive revival of the Fengxiang dyeing technique. It differs from previous phases marked by large commercial trades; instead, it is grounded within the internal cultural identity and ritualistic requirements of the Buyi people: As a material manifestation of collective memory and ethnic identity, Fengxiang dyeing gained greater cultural value. The artist didn't stop at crafting basic restoration arts but rather put more emphasis in incorporating the group's history stories and philosophic world view during design process of pattern.

## **2.3. Fengxiang Dyeing Techniques Development during the Yuan Dynasty**

### **2.3.1. Emergence Period (approximately 1270s–1290s)**

In the early years of the Yuan dynasty,with the establishment of the state and the construction of a cross-regional postal relay system, the southwestern region saw a new wave of species and technology exchange. The event that had the biggest impact on the development of lacquer dyeing, Fengxiang dyeing, during this period was the widespread adoption of cotton

farming and cotton textile techniques. Before the Yuan Dynasty, the main substrates used for Fengxiang dyeing were locally produced rough hemp fabrics, because of the relatively coarse texture, such fabrics would be limited in terms of coloring and the effectiveness of resists. In the 1270s to 1270s, because the cotton cloth is soft and skin-friendly, and has strong water-absorbency, the cotton cloth became very popular among the Buyi people. The introduction of cotton fibers brought new demands to the material system of Fengxiang dyeing: because cotton fabrics have thicker warp and weft threads than hemp, the penetration and adhesion performance of the resin crystalline and animal resinous mixture on cotton is very different from that on hemp: Thus artisans had to experimentally adjust the melting point of the resist material and improve their application techniques for pressure and precision. It's about adapting to this new material from a technical point of view, which is like the beginning, the budding stage, where Fengxiang craftsmanship began to develop during the Yuan Dynasty.

### **2.3.2. Period of Prosperity (Approximately 1300s–1340s)**

By early to mid-14th century, large market networks and relatively free commercial environment due to the Yuan Dynasty led to a thriving period for handicraft trade in Southwestern China. After fully adapting to cotton textile substrates, wax-resist dyeing (Fengxiang dyeing) experienced a qualitative leap in quality. During this boom period, Fengxiang dyeing went beyond its previous restrictions within the clothing of the Buyi ethnic group and became a precious specialty fabric, circulating widely via ancient tea-horse trade routes and a complicated web of commercial post roads. From the craftsmanship perspective, artisans developed a more advanced copper drawing tool, which could maintain a constant temperature for the resist oil. And this kind of tool could create delicate continuous lines like fine threads.

### **2.3.3. Period of Decline (approximately 1350s–1360s)**

In the late Yuan Dynasty, economic development was suffering from prolonged economic plundering and heavy taxation, and the economy in the regions was extremely bad. In the 1350s to 1360s commercial trade network in the southwest China, there was a huge reduction in the textiles distribution center as a consequence of severe disruption of commercial trade. Fengxiang dyeing relies on a steady supply of dye as well as a booming consumer base, but both meet with heavy blows. Lots of indigo workshops shut down, and basic cotton growth also dropped off sharply because there wasn't enough people to work. Under pressure from material shortages and subsistence hardship, all kinds of skilled craftsmen in Fengxiang dyeing were thrown away from traditional crafts and turned to agricultural labor in order to live.

### **2.3.4. Recovery Period ( Late Yuan to Early Ming, Hongwu Era)**

In the midst of the reconfiguration of regional order during the transition from the Yuan to the Ming dynasties, the early Ming dynasty, especially the Hongwu period, carried out a set of economic rebuilding measures for rest and recuperation, encouraging farming and silkworm breeding. These means gradually made the socio-economic structure in Southwest China more stable. Recovery of agricultural production in Buyi villages gives a material basis for the revival of the village handicraft industry. During this period, the technique of lacquer dyeing (Fengxiang dyeing), supported by the tenacious culture of the ethnic group, quietly came back to life in remote villages. this revival had a distinct "in house" character, Fengxiang, dyeing mainly served to fulfill the internal domestic and ritual requirements of the ethnic group.

## **2.4. Development of the Fengxiang Dyeing Techniques of the Ming and Qing Dynasties**

### **2.4.1. Emergence Period (from the Hongwu to Zhengde) eras): Cultural Embedding in Life Rituals (Marriage, Death, Funeral, Wedding, Birthday Celebration)**

During the early to middle Ming dynasty, from Hongwu period to Zhengde period, Fengxiang dyeing was in a stage of development where it became deeply embedded in the life rituals and folk institutions of the Buyi people. Afterwards, Fengxiang dyeing was no longer just an ordinary way of making textile decoration; instead, it became the main material medium expressing social relationships as well as ethical norms and auspicious wishes. Marriage ceremonies made wide use of Fengxiang-dyed fabrics to create wedding clothes, bedspreads, and back carriers (cloth bags used to carry babies). Craftsmen designed special patterns representing fertility, prosperity, and marital harmony, such as "pomegranate pattern", "double fish auspiciousness motif", and paired "butterfly pattern", in order to reflect the cultural value and expectation of these rituals.

### **2.4.2. Prosperity Period (Approximately from Jiajing-Qianlong)**

In terms of content rewriting: The southwestern region of China saw significant administrative and economic restructurings between the mid-Ming and mid-Qing Dynasty (Jiajing to Qianlong). This broke down the previous geographical isolation objectively and greatly facilitated the movement of people and commodity markets. This era was a period of the longest and greatest prosperity in the history of Fengxiang dyeing craftsmanship. And at this period, the commercialization of Fengxiang dyeing became fully revived, giving birth to some famous textile production towns and specialized clusters of handicraft industries. Way of Saying: Technologically, the cold-dye technique concerning the production of Jianlan vats had celebrated its apex and produced goods capable of withstanding many washes while holding bright colors.

Two. Four. Three. The period of decline, (the Jiaqing to Guangxu periods), During the mid-to-late Qing dynasty (Jiaqing to Guangxu), traditional Rhus dyeing craftsmanship was on the verge of survival crisis due to the drastic changes in the world trade pattern and the wave-like impact of industrial revolution spreading inland China. The most fatal blow was struck by the huge imports of Western industrially produced 'foreign cloth' cheap and bright red dyes (like fuchsin and anilines) These mechanized textiles and chemical pigments, due to the extremely low price, high production efficiency and wide range of colors, quickly occupied the vast southwestern Chinese textile market. Contrary, rhus can result in dyeing requiring intensive labor procedures such as wax drawing, dye immersion, and fat removal which can last several days to half a month and having limited colors mainly in blue and white so it lost its competitive favorability in terms of price and practicality quickly. As a result, many traditional dye workshops close and artisans and dyers also have to find new jobs. So, rhus dyeing faded away from bustling marketplaces.

### **2.4.3. Recovery Period ( Late Guangxu Era to the Early Republican Period )**

During the turbulent times from the late Qing dynasty to the early days of the Republic of China, under the intense influence of foreign industrial civilization, some Buyi village communities hidden in the depths of remote mountains, where there were relatively isolated transportation systems, became the last refuge for traditional handicrafts. In these outer regions, the closed nature of the subsistence economy did not allow for full penetration by Western industrial goods, thus making it possible for the revival of the lacquer-resist dyeing technique (Fengxiang dyeing) under circumstances similar to a "culture shelter." Such revivals came with their own true and pressing nature, of preserving culture. Elders in the village worry that their own traditional culture will disappear soon, so they teach young people about the traditional culture of Fengxiang, which is a kind of pride for their own ethnic groups.

But the craftsmanship at this stage could not completely bring the levels of tool precision and dye purity back to those of the Qianlong period, the pattern returned to the most original and true aesthetic values of the ethnic group: Even though there are few of these remaining handcrafted works, they continue to hold within themselves the key technical secrets of the resist-dyeing process as well as the vital part of the tradition's cultural genetic material.

## **2.5. Fengxiang Dyeing Development Trajectory from the Modern Era to the Intangible Cultural Heritage Era**

### **2.5.1. Emergence Period (approximately 1900s–1940s)**

From the early 20th century to around the 1940s, as modern ethnology and anthropology emerged in China, people started going on field trips to ethnical minority areas in south-west. Fengxiang dyeing wasn't just seen as a useful rural textile anymore during this period, but slowly became part of modern academic discourse that addressed high-scholarly valued things - such as "ethnographic material" where scholars began doing some basic documentation as well as systematic sorting out regarding craft techniques as well as symbols signifying patterns on Fengxiang dyeing using written records along with visuals.

### **2.5.2. Decline Period (around 1950s - late 1990s)**

Mid-20th to late 20th century, with the full development of modern industry and the dramatic change in lifestyle; Rongxiang dyeing faced a serious downturn of more than 50 years. Synthetic fabrics like "Qiaoliang" are being used more and more widely, just as the modern clothing industry which features mass production and fast fashion rose up. This made the time-consuming and laborious traditional handcraft of Rongxiang dyeing completely impractical and obsolete for daily use. Besides, changes in societal production shifted the foundations, away from family crafts. Young people from many villages have gone out to look for work, and there has been a great break between their parents and grandparents in passing down the skills of Rongxiang dyeing.

### **2.5.3. Critical Care:[Open revelation]: early - 2000s - 2010s**

At the start of the 21st century as more and more people around the world started to get aware of the cultural diversity and saving of the traditional skills and crafts, China started a large scale campaign for preservation of intangible cultural heritage. Fengxiang dyeing is a distinctive ethnic craft, at this time, it faces a severe phase of emergency protection. During this time, local governments and cultural maintenance organizations carried out extensive on-site investigations in Buyei ethnic villages and searched for the few remaining masters. Comprehensive rescue and record work was done by using means like audio-visual recording, oral history collection and collecting physical objects. In 2008, Buyi Fengxiang dyeing technique was listed in the national list of intangible cultural heritage of China. This official acknowledgment greatly improved the social visibility and cultural reputation of Fengxiang dyeing. The government not only put out some money for training centers, it also got master artisans to teach their skills by having apprentices. With the help of policies and financial resources, a protection net was created to prevent Fengxiang dyeing from extinction, making it able to pass the threshold of endangered species.

### **2.5.4. Recovery Phase (from around the 2010s till now).**

Since the 2010s, the craft of Fengxiang Dyeing is in a comprehensive period of revival and innovative development that integrates "cultural tourism" with "modern cultural creativity development". Under the macro strategy promoted by the state to revitalize traditional crafts and promote rural revitalization, Fengxiang Dyeing has become much more than just an exhibit in a museum, and has re-emerged, with a lot more commercial and cultural vitality. Contemporary designers and university research teams are involved in Fengxiang Dyeworks

more and more, keeping its main traditional technique of dyeing, which is “resin-based resist dyeing,” as well as traditional ethnic patterns and adding modern design concepts.

**Table 1.** Bouyei maple scent dyeing’s historical progress and main craft feature changes

<b>Historical Period</b>	<b>Development Stage</b>	<b>Core Resist-Dyeing Materials &amp; Carriers</b>	<b>Representative Patterns &amp; Application Scenarios</b>	<b>Social &amp; Cultural Functions</b>
Tang Dynasty	Germination and Foundation	Pure maple resin; Coarse linen	Simple dots, basic geometric shapes; Daily practical use	Anti-corrosion, waterproofing, basic beautification
Song Dynasty	Initial Standardization	Prototype of maple resin + yellow cattle wax; Linen	Initial appearance of water ripple and bronze drum patterns; Tributes, local trade	Regional trade specialties, ethnic identity markers
Yuan Dynasty	Prosperity and Technical Adaptation	Maple resin mixture; Introduction of cotton cloth	Full and symmetrical patterns, over-dyeing embellishments; Cross-regional circulation	Integration of ethnic cultures, commodity circulation
Ming and Qing Dynasties	Ritualization and Commercialization	Mature wax/grease formula; Fine cotton cloth	Butterfly patterns, pine and crane patterns; Wedding dresses, baby carriers (Beishan), longevity clothes	Carriers of life rituals, ethical symbols
Modern Era	Decline and Endangerment	Traditional materials impacted by synthetic fibers	Shrinkage of traditional patterns; Internal use in a very few villages	The last cultural sanctuary
Contemporary (Intangible Cultural Heritage)	Living Revitalization and Cultural Creativity	Silk, cotton-linen blends; Eco-friendly dyes	Modern deconstructed patterns, diversified cultural and creative products; Fashionable home decor	Cultural inheritance, cultural tourism industry, aesthetic consumption

Fungxiang Dyeing’s use has gone past traditional rough cloth on to nice materials like silk and cotton-linen mixes, and it’s not limited to regular things like quilts and outfits, but also moves into the world of fashion accessories, house decorations, stationery, and more modern

cultural creations. In the early historical period, Fungxiang Dyeing mainly has practical function and purpose of making waterproof and durable and does its job as a basic labor technique. With the development of social productivity and the improvement of rituals, especially in the Ming and Qing dynasties, the visual symbols became detached from practical functions and transformed into a folk art representing ethnic aesthetics and philosophies, as listed in Table 1.

### 3. Conclusion

In terms of the modernization today, the biggest problem facing the Fungxiang is the difference between the high cost of time required for handmade production and the need for efficient large-scale production in the modern market and the gap between traditional rural taste and the changing aesthetic tastes of city dwellers. A sustainable solution to this contradiction is not simply mechanized mass replication, which would strip away the precious human warmth and un-repeatable uniqueness - especially the unique "ice-crack" patterns - that make Fungxiang dyeing special. In the future, we should stick to the concept of "productive preservation", and choose a "high-end path" with features such as customization and cultural experience. Fungxiang dyeing's ethnic narratives are quietly explored, so its cultural value is enhanced by this; dyeing is integrated into cultural tourism so that the dyeing process itself becomes a cultural consumption experience. Only by effectively mixing traditional indigenous wisdom with modern commercial logic, can the ancient intangible cultural heritage of the Buyi people, Fungxiang dyeing, continue to take root and thrive in the soil of modern society.

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