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**Research Article**

# Sustainable Inheritance of Chinese Architectural Decorative Heritage: An Investigation on the Design Characteristics Huizhou *Baofujin* Architectural Color Painting

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**ABSTRACT**

Huizhou's traditional architectural *Baofujin* color painting is an important cultural heritage in China. However, studies on inheriting and understanding its content are limited, posing the risk of losing this architectural decorative art from a historical perspective. This study uses qualitative research methods (field observation, semi-structured interviews) to explore the artistic design features of Huizhou's *Baofujin* color paintings (i.e., artisanry process, artistic themes, and composition form) to sustainably inherit and promote this ancient architectural decorative art. The results of a field survey, interviews, and observational research reveal that the artisanry of *Baofujin* color paintings follows a systematic nine-step process. Artistic themes are categorized into five types, with each constituting diverse artistic elements that indicate meaningful inferences and symbolize people's aspirations for a better life. The composition of the *Baofujin* color painting is divided into segmented and central forms, revealing the increasing influence of the official architectural-style paintings on the folk style, thereby reflecting the alleviation of feudal rulers' control over the people. This study provides insight into the conservation and restoration of traditional architectural color paintings in Huizhou and highlights the rich aspects of cultural heritage protection that have tangible effects on the inheritance and development of *Baofujin* color paintings, to aid in promoting the sustainable development of cultural heritage.

**Keywords:** Sustainable Inheritance; Chinese Architecture; Decorative Heritage; Huizhou Architecture; *Baofujin* Color Painting.

## INTRODUCTION

The preservation and inheritance of intangible cultural heritage has rapidly become an international, social, and cultural movement with broad implications (Yan & Chiou, 2021). Color paintings in ancient buildings are an ancient art form in China and a crucial source of cultural heritage worldwide (Fu et al., 2020). These color paintings involve the use of pigments for decorative applications on ancient Chinese wooden buildings, and represent an important tangible cultural heritage with historical, artistic, and cultural values (Han et al., 2023). However, rapid urban development has underscored the gradual decline of these paintings that are a medium of China's traditional architectural heritage (Yingchun Zhang & Wu, 2016). Furthermore, this gradual decline presents challenges in the study of traditional architectural decorative arts (Fan & Wang, 2022). Traditional Chinese architecture is characterized by high diversity (Liu, Liao, Wu, Mulugeta Degefu, & Zhang, 2019), and these multiple architectural forms present significant differences among regional architectural decorative arts. Therefore, methods to scientifically preserve traditional architecture and architectural decorations from a regional perspective are required (Fang & Li, 2022).

The architecture of Huizhou has a long history and considerable regional characteristics (He, 2020). Figure 1 shows the Huizhou region, which includes Huangshan City in southern Anhui Province, Jixi County in Xuancheng City, and Wuyuan County in Jiangxi Province, China (Lu, 2016). The ancient buildings in the Huizhou district have scientific, cultural, and aesthetic value, with more than 600 years of history. These buildings are rich sources for studying regional history and culture (UNESCO, n.d.). In particular, a building constructed in the Huizhou style uses many wooden components, specifically the beam system and main building frames, which are well-developed and decorated (S. L. Li et al., 2017). Among the different traditional architectural decorations, *Baofujin* color paintings are prevalent in the Huizhou region of China and have unique regional characteristics. A *Baofujin* color painting is shaped similarly to a textile wrapped around a building component (Chen, 2016), with its rich artistic themes, exquisite composition, and elegant colors fully demonstrating the exquisite traditional craftsmanship of architectural decoration and robust humanistic artistic atmosphere of the Huizhou region (C. Huang, 2015).

The presence or absence of traditional architectural color paintings is an obvious sign distinguishing traditional and modern Chinese architecture (Z. Zou, P. Zhao, & Zhao, 2021). However, the rapid decline in Huizhou's *Baofujin* color paintings in contemporary times, coupled with a decreasing number of historical remnants, is particularly concerning. Therefore, the sustainable preservation and development of Huizhou's *Baofujin* color painting is paramount.

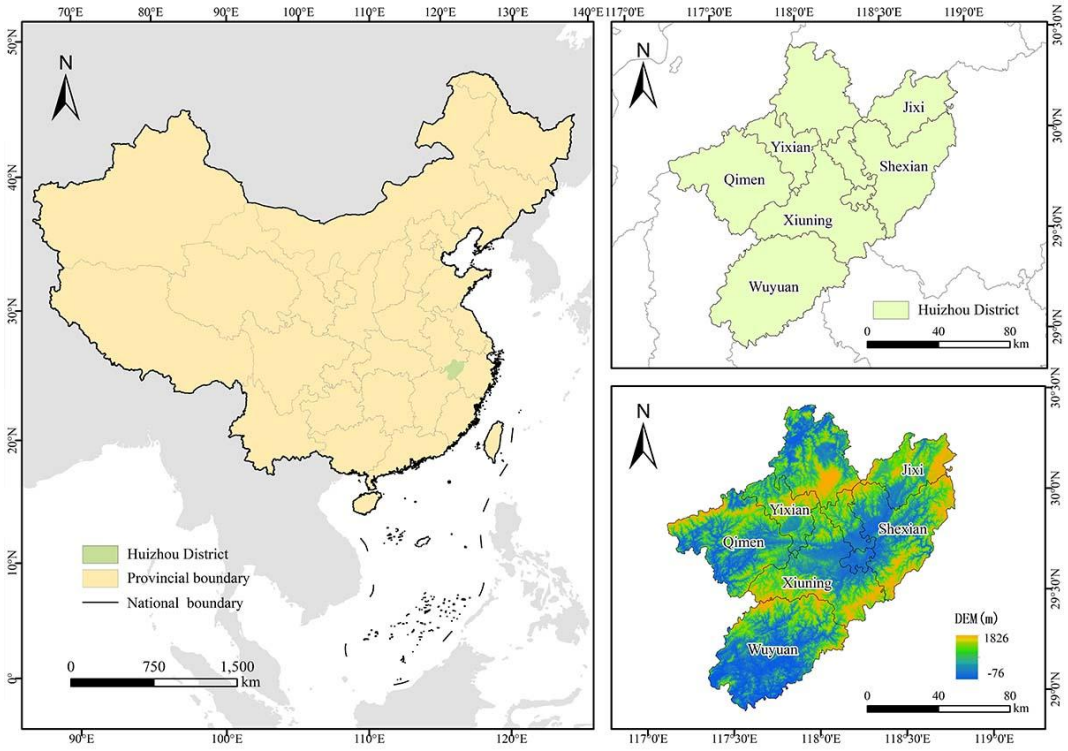



Figure 1. Location Map of Huizhou District [Source: Map created by the author using data with review number GS (2019) 1822]

Since the Huizhou traditional architecture ancient village group was added to the World Heritage Site list in 2000 (UNESCO, n.d.), this architectural form has gained considerable attention, promoting efforts toward the conservation and study of Huizhou architecture. This initiative will be of great benefit to the region's cultural soft power as well as its economy (Lee, 2020). The *Convention for the Safeguarding of the Intangible Cultural Heritage* adopted by UNESCO in 2003 introduced the concept of sustainability and believed that "intangible cultural heritage is passed down from generation to generation and is constantly recreated as communities and groups adapt to their surrounding environment and interact with nature and history" (UNESCO, 2003). However, in the decade since the adoption of the Convention, the international community's discussion on the relationship between intangible cultural heritage protection and sustainable development has gradually faded (Xiyue Zhang, Li, Lin, & Ye, 2021).

Article 4 of the "Intangible Cultural Heritage Law" of the People's Republic of China states that the protection of intangible cultural heritage should focus on its authenticity, integrity, and sense of inheritance (Intangible Cultural Heritage Law of the People's Republic of China, 2011). This implies that to ensure authenticity, the

restoration or repainting of architectural painted patterns is restricted by law unless certain painting methods are fully rediscovered. The observational research conducted in this study revealed that many damaged wooden structural elements were replaced to protect and restore the main structures of traditional Huizhou architecture; however, these replaced structures, which contained multiple wooden components featuring *Baofujin* color paintings, were replaced without being repainted. Due to this approach and lack of understanding, it is likely that the replaced wooden components and paintings have also been lost. This can be attributed to differing opinions among Chinese scholars regarding the traditional *Baofujin* color-painting process. Thus, it is necessary to restore and repaint traditional Huizhou architectural color paintings.

Researchers have found significant gaps in the painting process of Huizhou's *Baofujin* color paintings, and they believe that restoring traditional architectural structures without considering the repainting of architectural colors poses the risk of gradually losing the regional cultural characteristics of this architectural decorative art. Ren (2021) reported that Huizhou architecture has received considerable attention because of its exquisite decorations, and, therefore, preserving only the architectural structure cannot ensure the complete protection of the traditional architecture.

The lack of attention paid to traditional architectural decorative arts in the conservation of traditional architecture highlights the gradual decline of the discipline of *Baofujin* color paintings in contemporary society (Shen et al., 2025). Furthermore, few studies have focused on the use and redesign of traditional architectural painting decorations in modern antique-style buildings. The lack of restoration and protection of traditional architectural paintings has greatly reduced the number of traditional handicraft practitioners who paint traditional *Baofujin* color paintings, thereby reducing the possibility of sustainable inheritance and development of *Baofujin* color paintings from the source of artisanry. Therefore, there is an urgent necessity to understand the *Baofujin* color painting design features so that this traditional craft can be continuously applied in the future, thereby achieving the objectives of protecting and inheriting *Baofujin* color painting.

This study comprehensively explores the decorative techniques, artistic themes, and compositional features of Huizhou's *Baofujin* color painting from the perspective of sustainable development of regional intangible cultural heritage. The findings of this study are expected to aid the inheritance and development of *Baofujin* color paintings and other regional intangible cultural heritage. The study suggests that these findings can help gradually revitalize the valuable architectural decorative art heritage of *Baofujin* color paintings in the future.

The remainder of this manuscript is organized as follows. Section 2 reviews the carrier architectural forms of *Baofujin* color paintings and their historical development process. Section 3 presents the research design, data collection, research instruments, and research steps of this study. Section 4 thoroughly analyzes the multiple artistic design features of Huizhou's *Baofujin* color paintings, specifically the artisanry process, artistic themes, and composition of the color painting. Finally, Section 5 summarizes the main findings of this study, presents the conclusions, and describes the research implications, limitations, and scope of future research.

## REVIEW OF *BAOFUJIN* COLOR PAINTING

### Carrier of Color Painting: Structural Characteristics of Huizhou Architecture

Traditional Huizhou architecture is characterized by brick and wood mixed structures; the main body of the building adopts a woodwork frame, and the two sides constitute brick "horse head" walls (Shao et al., 2019). The Huizhou region is located in the humid, mountainous area of southern Anhui (H. Fang, Ji, Chu, Nie, & Wang, 2023). The interior of a building typically lacks a ceiling, completely exposing the beam system, to maintain the long-term stability of the building's main wooden structure (Xiao Zhang, Li, & Bi, 2021). This approach facilitates air circulation in the internal upper-shelf structural space of a building and enhances the service life of the beam structure. Furthermore, the exposed wooden beam structure facilitates the maintenance, repair, and replacement of the building structure when damaged (Xiong & Su, 2014). The absence of ceilings in the interior structure of traditional buildings in the Huizhou region is called *Cheshang Mingzao* (彻上明造) (Figure 2). In the ancient Chinese architecture book, "*Yingzao fashi*," the practice of building traditional wooden buildings without ceilings or with flat dark, directly exposed building superstructures is called *Cheshang Mingzao* (Liang, 2013).

Figure 2. *Cheshang Mingzao* Architectural Structure: The Practice of Exposing the Wooden Beam System in the Interior of Huizhou Buildings (Source: Photographs by the author in Huizhou Jixi Museum)

Huizhou architecture uses the structure of *Cheshang Mingzao*. Many exposed Huizhou architectural beams must be enhanced for their decorative function, and ordinary horizontal and vertical beam forms can no longer satisfy the aesthetic requirements of Huizhou architecture. Therefore, a crescent moon-shaped beam frame (Figure 3) with a highly decorative function was used in Huizhou. Although beams themselves have decorative functions, decorating the beams in the Huizhou architecture adds unique painted patterns and wood carvings on the wooden element surfaces (Sun, 2022). Among the Huizhou beam decorations, *Baofujin* color painting is prevalent, and its style is unique. This is the most important decoration method among the decoration categories of Huizhou traditional architectural color painting.

Figure 3. Moon-beam-shaped Beam Frame (Source: Photographs by the author in Huizhou district)

### Formation Period of Color Painting: Song and Yuan Dynasties (960–1368)

During the Song dynasty (960–1279) in China, brocades were wrapped around the building beams to decorate the internal structure and internal space of buildings (Chen, 2016). Similar to textiles, brocades require high stable storage conditions. Therefore, preserving the brocade pattern for a long period is difficult when the material is used for decorating architectural beams. In ancient times, the large-scale use of brocades was expensive. Thus, it took time for the adoption of these brocades to become widespread. Consequently, architectural paintings imitating the composition and color scheme of traditional brocades were incorporated into folklore as alternatives to brocade textiles for decorating the building interiors. This type of architectural structure color painting decoration that imitates the brocade art is a prototype of the *Baofujin* color painting. Field research clarifies that *Baofujin* color painting was developed at the end of the Song dynasty (1127–1279). Although no actual colored paintings from the Yuan dynasty (1271–1368) remain in the Jiangnan region, traditional architecturally colored paintings during this period were influenced by Islam and Tibetan Buddhism, leading to the development of new decorative motifs. Official-style color paintings have shown a trend toward the popularity of blue and green *Xuanzi* color paintings (Ji, 2017).

### Development Period of Color Painting: Ming and Qing Dynasties (1368–1911)

During the Ming (1368–1644) and Qing (1636–1911) dynasties, the handicraft industry in the Jiangnan area flourished, along with the traditional textile industry, which burgeoned with multiple brocade fabric styles (W. Wang, Wei, Wang, Zhang, & Ren, 2021). The flourishing textile industry provided several compositional and ornamental references for *Baofujin* color paintings that imitated textiles, thereby promoting further development of the architectural color painting patterns of *Baofujin* paintings in the Jiangnan area.

Huizhou merchants, also referred to as "Hui merchants," were one of the four traditional merchant groups in ancient China, and their influence spread across the Jiangnan region (H. Wang, Wu, & Humphreys, 2022; McDermott, 2020). The trade exchange between Huizhou merchants brought economic prosperity to the Huizhou region and reintroduced the architectural color painting pattern of *Baofujin* prevalent in the Jiangnan region (Schlesinger, 2020). Huizhou merchants were so rich that they invested considerable financial resources in constructing family houses and ancestral halls (Yeqian Zhang, 2023). Among these resources, more than half of the budget was used to decorate the interior of the buildings. A popular adage in the Huizhou region was "light renovation and heavy decoration." Thus, many traditional architectural *Baofujin* color-painting patterns were preserved because the traditional cultural domain during that period promoted the decoration of building structures. Furthermore, the characterization of *Baofujin* color paintings varies across different periods (Table 1). Therefore, this study focuses on the Huizhou region in southern Anhui to encompass sufficient case studies. These cases provide effective and high-quality support for the progress of this study.

Table 1. Developmental Characteristics of *Baofujin* Color Painting over Different Eras

| Temporal context | Characteristics of the era | Developmental status |
|---|---|---|
| Song dynasty | Distinct and self-contained color painting techniques | Formation of *Baofujin* color painting Categories of *Baofujin* color painting were established |
| Yuan Dynasty | Influenced by elements of religious art | Focused on *Xuanzhi* color painting |
| Ming Dynasty | Advancement and development of the textile industry have affected the forms of expression in color painting | Unprecedented development of color painting art |
| Qing Dynasty | Economic prosperity of the Jiangnan region | Color painting craftsmanship became increasingly refined |
| Republic of China period | Social change | *Baofujin* color painting began to decline, while official color painting continued |

Source: Compiled and designed by the author.

Existing literature has extensively discussed the carriers and era characteristics of the Huizhou traditional *Baofujin* color paintings, and the research mainly focuses on the protection and restoration of traditional architectural heritage. However, most studies only focus on the building structure itself, lacking attention to the color painting decoration inside the building. In addition, research on the Huizhou traditional *Baofujin* color painting is still insufficient. Therefore, the existing literature has not fully revealed the various design features of *Baofujin* color paintings, and this gap provides space for exploration in this study.

## METHODS

This study employed qualitative research using a combination of fieldwork, observations, and semi-structured interviews to collect data. Data were divided into primary and secondary categories, wherein the former were obtained through fieldwork, observational research, and semi-structured interviews.

### Field Study

The field study was conducted in May 2023, with survey sites concentrated in the southern part of Anhui Province and the northern part of Jiangxi Province, including Jixi County in Xuancheng City, the entire Huangshan City area, and Wuyuan County in Jiangxi Province. These areas are located in the traditional Huizhou region. The field study included images of *Baofujin* color painting obtained during observational research. During the observation period, 753 photographs were captured using the Sony ILCE-7M4 and Canon 5D Mark II cameras. The Sony 24–70 mm G2, Sony 70–200 mm G2, Sony 16–35 mm F2.8G, and Canon 17–40 mm lenses were used. The observation notes were transcribed into PDF documents using an Epson L320 scanner.

### Semi-structured Interviews

For the semi-structured interviews, three experts on traditional Huizhou architectural craftsmanship were selected as participants. Semi-structured interviews were approved by the Human Research Ethics Committee USM (23090712). The validity of qualitative research interviews lies in the richness of the data, and when the focus is on obtaining data-rich participants to illustrate the research, three participants are sufficient.

In order to ensure the richness and validity of the data, this study adopted purposive sampling, and the interviewees were selected only from experienced traditional painting craftsmen. Each participant had more than 25 years of experience in traditional Huizhou architectural craftsmanship and demonstrated extensive practical

and theoretical expertise. The selection of participants ensured a comprehensive understanding of the research topic within the context of the inheritance and preservation of intangible cultural heritage sites. The entire interview process with the three experts was recorded, and consent was obtained in advance. An iPhone 12 Pro Max device was used as the recording device. All the preliminary data for this study were stored in separate folders on a MacBook Pro 2020 computer. The computer was encrypted, and access was restricted to research participants to ensure data security.

### Secondary Data

Secondary data were obtained from the existing literature on *Baofujin* color painting and gathered from sources such as Google Scholar, China National Knowledge Infrastructure, the library and databases of Universiti Sains Malaysia, UNESCO website, China Huizhou History Museum, Anhui Provincial Library, China Intangible Cultural Heritage Network, and Anhui Intangible Cultural Heritage Network.

This study adopted a unified observational strategy from a three-dimensional pattern perspective, integrating traditional architectural color paintings with the traditional architectural structures they decorate. B. Li (2018) presented a three-dimensional spatial carrier decorated with a traditional pattern. This perspective suggests that traditional architectural color paintings are designs applied to three-dimensional architectural structures rather than flat patterns initially designed on a two-dimensional plane. A three-dimensional perspective helps in performing a comprehensive analysis of traditional architectural color paintings and their overall visual effects. The pattern depends on the three-dimensional space of the carrier form and exhibits the characteristics of a three-dimensional pattern. Patterns decorated on the surface of three-dimensional carriers cannot exist independently of the three-dimensional space provided by the carriers. Therefore, examining the artistic value of an architectural color painting solely from a flat pattern perspective may be inadequate. Combining the three-dimensional form provided by the carrier with the patterns is necessary when observing traditional decorative patterns on a three-dimensional carrier (B. Li, 2018).

### Research Steps

Step 1: Perform documentary research, conduct an in-depth investigation of established research on Huizhou's *Baofujin* color painting, and collect information on the cases of existing color paintings to pave the way for fieldwork.

Step 2: Travel to Huizhou to observe the historical remains of the *Baofujin* color painting in depth, experience the regional climatic environment, and capture photographs to record the contents of the color painting and the surrounding environment of the buildings.

Step 3: Use observational notes to register the functionality and internal structural features of historical buildings.

Step 4: Analyze the artistic themes and compositional forms of the *Baofujin* color painting and summarize their rich artistic themes and special compositional forms.

Step 5: Conduct semi-structured interviews with each selected interviewee for one hour each, covering traditional artisan process steps, artistic themes, compositional forms, and suggestions for the protection and transmission of cultural heritage sites. In-depth communication with interviewees can provide detailed step-by-step information on the craftsmanship of the *Baofujin* color painting, provide an understanding of the views of ancient construction experts on the inheritance of color painting techniques, and increase the depth and richness of the research data. The interviews validate the observational data and ensure credibility.

## RESULTS AND DISCUSSION

### Craftsmanship process of Huizhou's Baofujin color painting

The general craftsmanship process for traditional Chinese building color paintings was regulated during the Northern Song dynasty. In particular, Li Jie wrote a book on ancient Chinese architecture, *Yingzao Fashi* (营造法式), volume 14, which describes the first general color painting system (Liang, 2013). For ease of comparison, Table 2 presents the authors' compilation of the general steps before the application of the architectural color painting described in the *Yingzao Fashi*.

Table 2. Compilation of the Color Painting Production Process Recorded in the *Yingzao Fashi* (营造法式)

| Craftsmanship steps | Specific content |
|---|---|
| Step 1 | Apply a base color to the architectural component and sketch the outlines of artistic elements |
| Step 2 | Continue adding different colors |
| Step 3 | Outline the blocks of color with lines (dark or light) |
| Step 4 | Add shading along the edges of the blocks of color |

Source: *Yingzao Fashi* (营造法式)

Through observational research, it was found that the painting styles and methods of *Baofujin* color paintings vary in complexity for different types of Huizhou buildings. However, in the painted decoration of the interior of the same building, all styles and painting methods are employed harmoniously and uniformly.

Through literature research and semi-structured interviews, the painting procedures of Huizhou *Baofujin* color painting can be divided into 9 steps: Step 1 focuses on polishing and smoothing the surfaces of wooden components that need to be painted. Locations with large gaps can be levelled by inserting small wooden wedges. Finally, the surfaces of the wooden components are cleaned with a wet cloth (W. Chen, 1989). In Step 2, the detailed dimensions of the wooden parts are measured, including the length, width, and height. Furthermore, an equal-scale sketch of the color painting is drawn based on the actual shape of the wooden structure. In Step 3, the colors of the blocks on the sketch are designed and marked with color numbers. These numbers correspond to the color numbers of traditional Chinese pigments.

In Step 4 (Figure 4), holes are poked in the sketch, using a needle, in the order of the position of the draft lines; this step is called *Zhapu*. Next, the corresponding wooden structure is covered with an equal-scale sketch with holes punched in the same manner as the color paintings are drawn. A talcum powder bag is then used to tap the sketches in the same order as the holes punched into the sketches. This step is termed *Paipu*. The talcum powder in the bag is imprinted onto the wooden structure using fine holes on the sketch, forming a colored sketch on the wooden structure's surface. This step can be interpreted as creating an imprint of the sketch on the wooden structure surface, which facilitates the next step of drawing lines on the building structure based on the position of the powder.

Figure 4. Fourth Step in the Traditional Craft of the *Baofujin* Color Painting: *Zhapu* and *Paipu* (Source: Photographs by the author)

In Step 5, the lines are traced along the surface of the chalk lines on the wooden structure, and the outline shapes of all the contents expressed in the color painting are sketched. Next, according to the sketched lines, the corresponding area is filled with the color (Figure 5A). The coloring process must ensure the uniformity of the color in the block, and the color must dry before proceeding to the next step. In Step 6 (Figure 5B), the edges of the block are traced. An additional line is added to the single-line border of the color blocks to create the effect of a double-line border. The dark-colored block edges trace light lines, whereas the light-colored block edges trace dark lines, to create the effect of contrasting shades of color between blocks (Ji, 2017).

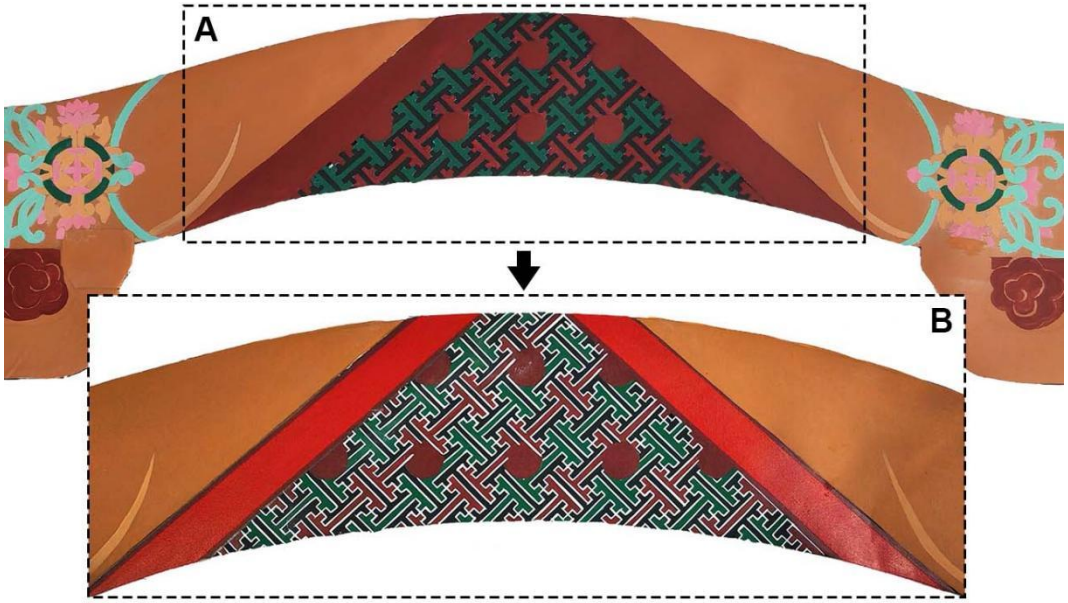



Figure 5. Figure A shows the fifth step of the craftsmanship process, tracing the lines and filling in the large blocks of color. Figure B shows the sixth step, where dark and light contour lines are traced to enhance the color contrast of the image (Source: Drawn by the author)

In Step 7, the composition is designed based on the need to remove some of the right angles from the geometric shapes that have right angles in the colored painting. First, single-or double-line concentric circles are drawn to remove the right angles using the endpoints of the right angles as the center of the circle. Second, the details of the removed right angles are sketched, including a variety of floral motifs (Figure 6). In Step 8, all the details are colored. After this step, the details of the picture are checked to identify defects, repair and correct any problems in the picture, and complete the painting of all color elements (Figure 7). In Step 9, the picture is allowed to air dry. Then, the colored painting on the wooden surface is covered with a protective layer. Tung oil is a paint-binding medium with good resistance to high temperature, corrosion, and water. After oxidation, tung oil forms a flexible and strong film on the surface of the building components (W. Zou & Yeo, 2022). Furthermore, gum alum water can be used as a protective layer; architectural colored paintings protected with gum alum water exhibit high gloss and transparency, making the painting colors more vivid. In summary, the protective layer can protect the colored painting from the regional climate environment and prolong its preservation time. At this point, all *Baofujin* color-painting craftsmanship processes are completed (Table 3).

Figure 6. Seventh Step Removes the Right Angle and Draws a Circle to Draw the Detailed Pattern (Source: Drawn by the author)

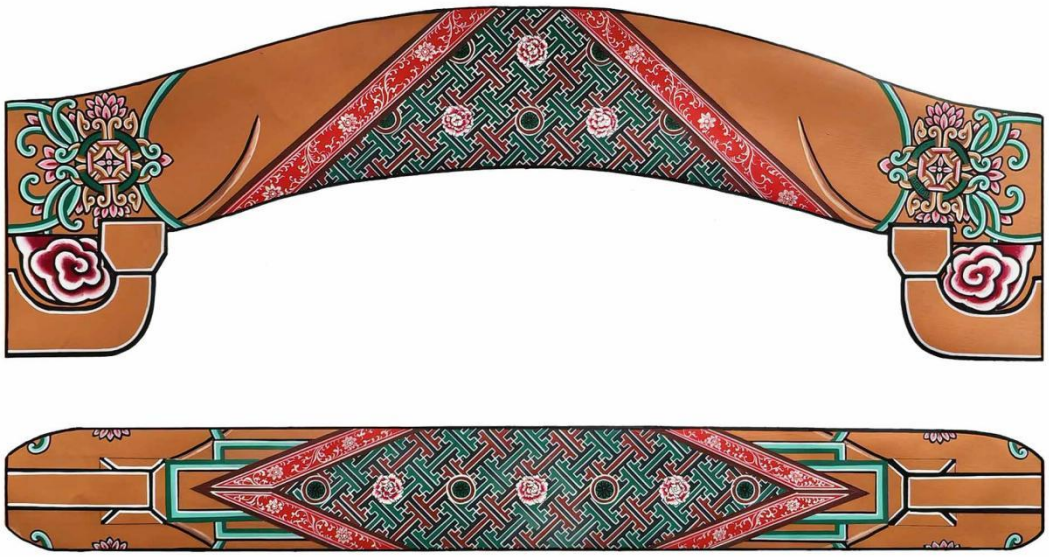


Figure 7. Completion of all Elements of the *Baofujin* Color Painting (Source: Drawn by the author)

Table 3. Huizhou's *Baofujin* Color Painting Craft Processes

| Craftsmanship steps | Name | Specific content |
|---|---|---|
| Step 1 | Polish the surface | Polish and smooth the surface of wooden components that must be painted and cleaned with a wet cloth |
| Step 2 | Measure the detailed dimensions | Include the length, width, and height. Then, draw an equal-scale sketch of the color painting based on the actual shape of the wooden structure |
| Step 3 | Design color | Mark them with color numbers |
| Step 4 | *Zhapu* and *Paipu* | Use a needle to poke holes in the sketch in the order of the position of the draft lines<br>Use a powder bag containing talcum powder to tap the sketches in the same order as the punched holes in the sketches |
| Step 5 | Line sketch | Sketch out the outline shape of all content expressed in the color painting and fill it in |
| Step 6 | Trace the edges | The dark color block edges are traced by light lines, and the light color block edges are traced by dark lines to create the effect of contrasting shades of colors between the blocks |
| Step 7 | Remove some of the right angles | Draw single-line circles or double-line concentric circles to remove the right angles and draw the details in the removed right-angle area using the endpoints of the right angles as the center of the circle |
| Step 8 | Fill all the details with color as required | Check the details of the picture to identify any defects, repair and correct the problems in the picture, and complete the painting of all color elements |
| Step 9 | Cover with a layer of protection | Wait for the picture to air dry, cover it with a layer of protection in color painting on the wooden structure, and create a protective layer using tung oil |

Source: Produced by the author based on interviews.

Unlike the traditional craftsmanship process of color painting recorded in the *Yingzao Fashi*, Huizhou architectural *Baofujin* color paintings do not require the application of a base color or primer layer on the wooden structure. Huizhou is located in the mountainous area of southern Anhui, where precipitation is high, and the climate is humid. The existence of a primer layer will isolate the moisture in the wooden structure of the building, which can lead to rotting. Furthermore, Huizhou district architectural color painting rarely employs the method of leaching out white powder and application of gilding. Instead, it employs a flat-paste gold process. The gilding process is divided into four steps: applying primer, applying color, pasting gold, and polishing.

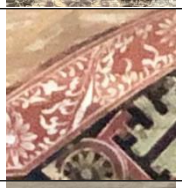
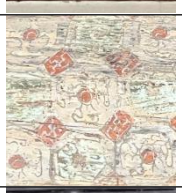
### Artistic Theme of the *Baofujin* Color Painting

Through literature research, field observation and semi-structured interviews, the artistic theme content of the *Baofujin* color painting design characteristics was obtained. As an artistic work, the overall visual effect of

color painting is constrained by both artistic themes and compositional forms (Carneiro, Da Silva, Del Bue, & Costeira, 2012). Both traditional Huizhou architectural color paintings and traditional Chinese ornamental patterns contain artistic themes and motifs. Any type of artistic motif can be placed in the main or supporting position in the picture depending on the narrative needs of the artistic theme. Organizing the development of an artistic motif and exploring its prototype are necessary when there is no clear theme in the pattern. Furthermore, B. Li and Hao (2015) mentioned that exploring the logical path of an overall theme through artistic theme prototype interpretation and the unveiling of the lineage that runs through the art matrix is necessary for analyzing the significance of the main subject.

Huizhou's *Baofujin* color painting patterns have inherited the characteristics of Ming-style architectural color paintings (Chen, 2016); these patterns are primarily based on traditional brocade patterns, adding different artistic elements according to demand when decorating buildings. These artistic elements added to the brocade are important symbols of the theme of color painting art. Through observational analysis, the artistic themes of the *Baofujin* color painting in the Huizhou region can be classified as floral ornamentation, plant ornamentation, animal ornamentation, textual themes, and special symbols. Table 4 shows the artistic elements found in the color painting during the field study, which were compiled, summarized, and thematically categorized by researchers. Among them, the floral ornamentation theme had the largest range of use, followed by the animal motif theme. A small number of surviving colored paintings retain text and special symbolic art themes. The floral theme had eight artistic elements, including sunflowers, lotuses, and peonies. The plant theme had five elements, including pine trees, curly grass, and *Ganoderma lucidum,* a type of fungus. The fauna theme comprised eight elements, including dragons, phoenixes, and cranes. The theme of Chinese character art has three different elements, including the Hui and Wan patterns. The theme of special artistic symbols has four elements, including the Ruyi and cloud patterns.

Table 4. Huizhou's *Baofujin* Color Painting Artistic Themes Classification

| Artistic theme | Artistic elements | Representative example image | Image source |
|---|---|---|---|
| Floral | Sunflower, lotus flower, peony, chrysanthemum, crabapple flower, lily, and gardenia |  | Zhuyu Residence, Wanan Town, Huangshan City, Anhui Province |
| Plant | Pine tree, curled grass pattern, twining branch pattern, willow tree, and lingzhi |  | Baolun Pavilion, Chengkan Town, Huangshan City, Anhui Province |
| Fauna | Dragon, phoenix, crane, magpie, mandarin duck, egret, golden pheasant, and sika deer |  | Confucian Temple, Jixi County, Xuancheng City, Anhui Province |
| Chinese characters | Hui Zi pattern<br>Wan Zi pattern<br>Shou Zi pattern |  | Gaoyang Bridge, Tangmo, Huangshan City, Anhui Province |
| Special artistic symbol | Ruyi pattern, cloud pattern, lock pattern, copper coin pattern |  | Cheng's Three Residences, Tunxi District, Huangshan City, Anhui Province |

Source: Compiled and designed by the author based on observational research.

Although only one artistic theme exists for a single *Baofujin* color painting, many different themes can be used for all *Baofujin* color paintings decorating the same building. Different art theme images can select the same combination of ornamental elements as the background. Observing specific cases revealed that the number of artistic elements used in the pattern design should not be considerably high when combining different artistic

themes of *Baofujin* color paintings. The overall decoration of *Baofujin* color paintings must be considered comprehensively to ensure the unity and harmony of all color painting images in the overall decoration. The overall beam space of the *Baofujin* color paintings should be maintained in sequence, with clear priorities and the sense of a staggered order, to ensure that a single picture is rich in layers.

Observational analysis revealed that a large number of auspicious artistic elements are applied in *Baofujin* color paintings (e.g., the lotus, symbolizing purity and nobility; peony, wealth and elegance; Mandarin ducks, happiness; and lock patterns, unity and stability). Furthermore, this confirms that the people living in Huizhou are good at incorporating auspicious concepts into objects or phenomena and conveying auspicious meanings through graphic symbols and text pronunciation (Ren, 2021). Therefore, the artistic themes used in Huizhou's *Baofujin* color painting have strong symbolic meanings (Hou & Li, 2015), and the auspicious meanings embedded in these artistic themes symbolize the aspirations and blessings of the Huizhou people for a better life (Z. Huang & Huang, 2020).

### Composition Form of *Baofujin* Color Painting

This study identifies the compositional patterns within the *Baofujin* color painting design characteristics based on findings from literature review, field observations, and semi-structured interviews. Color paintings must be conserved to maintain their compositional form and craftsmanship (Ji, 2017). Huizhou's *Baofujin* color paintings are decorated on the moon-shaped beams of the upper frames of traditional buildings. However, wooden beams of the Huizhou traditional architecture are special, and the beams themselves are moon-shaped beams that are formed with decorative functions. Huizhou architectural wooden structure decoration efficiently employs wood carvings; therefore, the composition of Huizhou's architectural *Baofujin* color painting at the beginning of the design completely considers the shape of the beam and wood carving decorations, thereby showing rich decorative layers and high decorative skills. The observational study confirmed that Huizhou's *Baofujin* color painting is rich in content elements and composition-free. The free form of the color painting composition and complex decorative process highlight the deeper artistic value of Huizhou's architectural color paintings. Furthermore, Huizhou architectural color paintings are found on beams, purlins, and rafters, with *Baofujin* as the main design style. However, *Baofujin* is only one aspect of the architectural decoration from the perspective of the overall composition of the beam framework.

A comparative analysis with more thoroughly documented official *Xuanzi* color paintings is necessary because of the lack of documented records of folk-style color painting compositions. Figure 8 shows that the official *Xuanzi* color painting composition includes multiple parts, such as the center of the beam (*Fangxin*), boxes (*Hezi*), and hoop heads (*Gutou*). Most studies classify the overall composition of *Baofujin* color paintings based on the compositional forms of *Fangxin Baofujin*. However, there are multiple compositional components in Huizhou's *Baofujin* color paintings. Therefore, the issue of compositional forms in the architecture of Huizhou *Baofujin* color paintings deserves further attention to clarify their compositional forms.

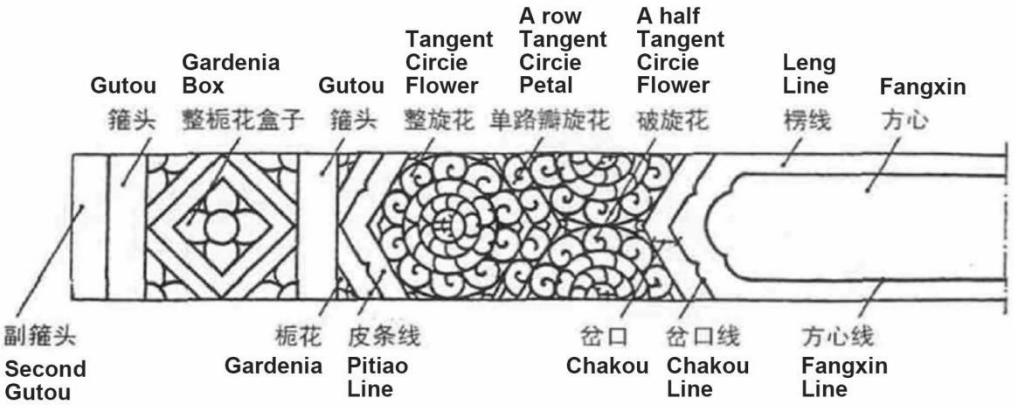



Figure 8. Official *Xuanzi* Color Painting Composition [Source: Hand-drawn drawing from Jiang (2014), translated by the author]

Observational analysis revealed that the composition of the Huizhou *Baofujin* color painting is diverse and can be explored in two parts: The composition of the *Baofujin* color painting contains *Zhaotou* lines and *Hezi* patterns (Figure 9). The main feature of this composition is that it contains *Zhaotou* and *Hezi* patterns, and adopts a segment composition. The composition is a square *Baofujin* color painting centered on the surface of the moon-shaped beam, and the two ends of the moon-shaped beam are painted with *Zhaotou* and *Hezi* patterns.

After a comparative analysis, this composition shows similarities with the official-style architectural color painting and considers the composition of the official-style *Xuanzi* color painting as an example. The compositions of *Zhaotou* and *Hezi* patterns in the *Baofujin* color painting show a compositional segmentation similar to that of the official-style color painting (Figure 10). The composition of an official-style painting must be empty at both ends of the beam frame to determine the position of *Zhaotou* and *Hezi* patterns, and the main picture of the color painting is centered on the surface of the beam frame (Jiang, 2014). However, the relationship between *Baofujin* color painting and the official color painting of mutual influence must be clarified as a representative of folk architectural color painting.

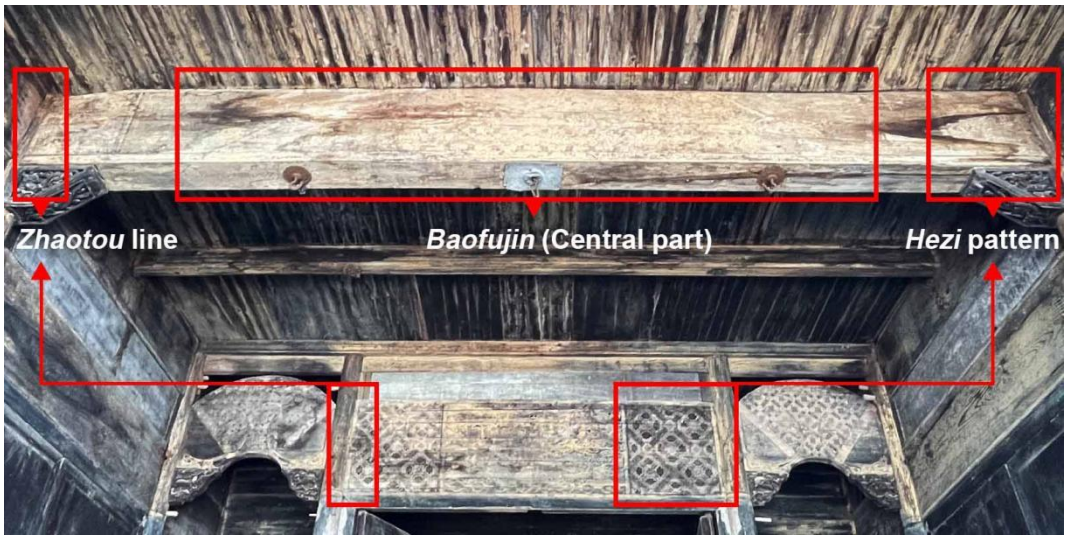



Figure 9. Segment Composition—The Composition of the *Baofujin* Color Painting Containing the *Zhaotou* Line and *Hezi* Patterns (Source: Photographs and design by the author)


Figure 10. Comparison of the Segment Composition of the *Baofujin* Color Painting and *Xuanzi* Color Painting [Source: Photographs and design by author, hand-drawn drawing from Jiang (2014), translated by the author]

In the second part, the *Zhaotou* and *Hezi* pattern color painting compositions were not utilized. As shown in Figure 11, this composition adopts a central composition that highlights the main vision and demonstrates the freedom and versatility of Huizhou's *Baofujin* color paintings. The central composition shows that *Baofujin* decorates the center of the beam, and the patterns at the two ends of the beam are distributed symmetrically. However, this composition completely differs from previous ones in that the symmetrical motifs at the two ends of the beams are painted with free-form auspicious motifs rather than being limited to the *Zhaotou* and *Hezi* motifs. Therefore, only the *Baofujin* color painting pattern was drawn in the visual center of the moon-shaped beam. The free space on both sides of the wooden beam surface was drawn with symmetrically distributed auspicious motifs. Considering the composition of Jixi Literature Temple's internal *Baofujin* color painting as an example, the *Baofujin* color painting is a pattern composition without the *Zhaotou and Hezi* patterns. The *Baofujin* color painting is drawn in the visual center of the beam frame, and the two ends of the beam frame are decorated with symmetrically distributed *Ruyi*, clouds, and grouped flower patterns.


Figure 11. Central Composition Form: *Baofujin* is Decorated in the Center of the Beam, and the Patterns at the Two Ends of the Beam are Distributed Symmetrically (Source: Photographs and design by the author)

Simultaneously, an orderly perspective–space relationship is formed between the beam frame members because of the complex structure of the Huizhou architectural beam system. Thus, the rich variety of auspicious decorations in the orderly three-dimensional space highlights the diversity of the content elements of *Baofujin* color paintings. The large number of colored paintings on the beams and frames invariably enhances the performance and content of the colored paintings. The three dimensions of the paintings represent the rich humanistic atmosphere and highly developed social economy of Huizhou. However, these two color painting composition methods still need to focus on the overall composition design of all beams inside the building when considering the composition of a single-beam frame component. This enables different paintings on the beams to echo each other, forming an upper shelf-space in the building with *Baofujin* color paintings that display a harmonious and unified sense of well-ordered beauty (Ji, 2017).

## CONCLUSION

This study accomplished its research objectives by employing a combination of field surveys, observational studies, and semi-structured interviews. It systematically explored the artistic design features of Huizhou's *Baofujin* color painting, including the artisanry process, artistic themes, and composition form, with the aim of supporting the inheritance and revitalization of this traditional architectural decorative art. The study results showed that:

1. The process of creating a *Baofujin* color painting follows a traditional artisanry procedure involving nine steps. The complex and delicate artisanry process of color painting and the use of gold materials reflect the highly developed social economy and the persistent pursuit of humanism.

2. The artistic themes of the color paintings are profound and diverse, divided into five themes: floral, plants, fauna, Chinese characters, and special artistic symbols. Each theme contains several artistic elements that have auspicious meanings and symbolize the Huizhou people's aspirations for a better life.

3. The *Baofujin* color painting is composed of segments and central forms. The *Zhaotou* and *Hezi* patterns can be used to identify the composition of a *Baofujin* color painting. The two special forms of composition show strong regional cultural characteristics, indicating the gradually increasing influence of the official-style architectural color painting on the folk style.

Owing to the severe fading of *Baofujin* architectural color painting, the observational phase of this study could not confirm the original color schemes used in the painting. Consequently, this aspect was not addressed in this study, and future studies should explore these color issues.

This study provides important insights into the design characteristics of Huizhou *Baofujin* color painting, offering valuable references for future creation and restoration practices. It holds practical significance for the protection of regional intangible cultural heritage.

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## DECLARATION OF INTEREST STATEMENT

The authors report there are no competing interests to declare.

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## ETHICAL DECLARATION

**Conflict of interest:** No declaration required. **Financing:** No reporting required. **Peer review:** Double anonymous peer review.