

## Research on Weaving Characteristics and Artistic Performance of Sichuan Bamboo Weaving Paintings

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**Keywords:** Bamboo weaving painting; Weaving characteristics; Artistic performance

**Abstract:** This work first analyzed characteristics of bamboo weaves and pattern performance based on investigating in bamboo weaving painting origins, such as Qingshen, Zigong, Leshan, Pingle and Chengdu. In addition, it summarized application characteristics of basic categories and typical weaves in bamboo paintings. It also summed up the basic law of weaving effect on the pattern of light and shadow levels. This work aimed to improve the performance capability of bamboo weaving paintings, promote the technology progress of bamboo weaving paintings design, and motivate the inheritance and development of bamboo weaving paintings.

### 1. Introduction

China has a long history with a large number of ethnic groups and rich folk culture, which constitute a magnificent Chinese cultural system. Bamboo weaving paintings are traditional folk handicrafts in Qingshen, Zigong, Qionglai and other places in Sichuan. They have a long history and are well-known at home and abroad with high appreciation and collection value. Their representative products are Zigong Gongfan and Qingshen bamboo weaving paintings with great value, so that they need increasing emphasis on cultural protection and artistic heritage.

### 2. Technical Process of Sichuan Bamboo Weaving Painting

Sichuan bamboo weaving paintings are preferably made of bamboo with a length of 60-80 centimeters and soft silk (mostly Cizhu). Bamboo strips are soft and satin-like, bright and transparent after the processing of anti-corrosion, anti-mildew and anti-mite. After dyeing and painting, these extremely thin bamboo pieces with only 1 inch are divided into 12 to 16 wires or even 24 wires by being cut carefully with row needle. Then these bamboo filaments are used to pass through different threads, guides, presses, spells and other weaving skills. Finally, they can form patterns based on specific weaving rules through using the principle of jacquard weaving, and they can also be used to weave famous calligraphy, rare paintings, poetry prefaces, interesting essays, famous sayings, banners and couplets through the real and false natural changes, which are traditional handicrafts of Sichuan, as shown in Fig. 1.

In the process of making bamboo weaving paintings in Sichuan, the ancient and modern calligraphy and paintings are selected as the manuscript. Principles of jacquard textiles and more than 20 kinds of weaving techniques such as wire drawing, picking wire and star are also be used to carefully weave and decorate by hand. This kind of bamboo weaving painting is a combination of creative thinking skills, belonging to the elegant works; while the festive bamboo, pure Chinese bamboo, pure English bamboo, English-Chinese bamboo, graphic and text bamboo, and other simple bamboo paintings belong to delicate works. These works are made of elegant materials, particular colors, fine workmanship and fancy decoration, which are highly ornamental and collectible. From the collections of collectors and museum collections, the exhibition halls of bamboo art treasures are dazzling, the bamboo paintings and crafts on the walls are not spliced, and the weaving workshop props are varied, making people linger. There is also vivid panda, vigor flying eagle, two dragons frolicking with a pearl, invisible Guanyin, bridge and pavilion, spring and

waterfall, graceful girls, portrait of great man, celebrity signatures, poetry songs, and even comic strips and sketches.



Fig. 1. Bamboo Painting "Chinese National Treasures"

### 3. Weaving Characteristics and Artistic Performance of Sichuan Bamboo Weaving Paintings

#### 3.1. Weaving characteristics of Sichuan bamboo weaving paintings

The most widely used weaving in bamboo painting is the Sanyuan weave. Most of the bamboo paintings use this kind of weave to form the main body, and then use other weaves for partial decoration or special style.

##### 3.1.1. Stain weave

Stain weave is widely used in bamboo weaving painting, and is generally used to represent the block surface pattern, which is the main weave that constitutes the picture in bamboo paintings. The bamboo weaving paintings with stain weave are smooth and even, with bright luster and soft hand feelings. The individual points on the adjacent two bamboo filaments are far apart, the interweaving points are less, and the distribution is evenly dispersed. In the actual hand-knit process, the number of bamboo filaments that stain weave needs to lift is the least, and its operation is simpler and more convenient. In the existing bamboo weaving paintings, there are applications from five-shaft satin to sixteen-shaft satin, depending on the size of the pattern and the level of color.

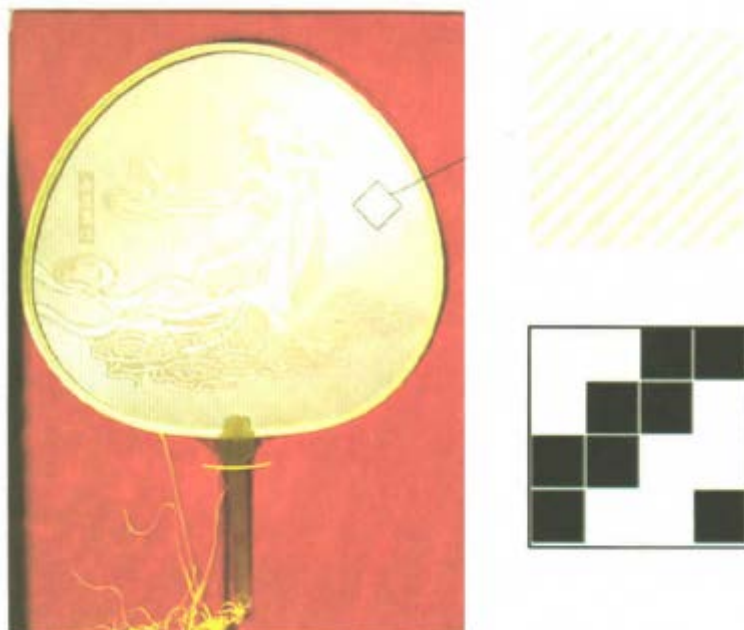


Fig. 2. "Fairy Lady Magu Congratulates the Queen of Heaven on Her Birthday"

### 3.1.2. Twill weave

The twill weave is characterized by twill weaves on the surface made by weave points, which is used to weave bamboo paintings. Its hand feeling, firmness and luster are between satin and plain weave. Gongfan often uses twill weaves as its unique background ornament. For example, the Gongfan "Fairy Lady Magu Congratulates the Queen of Heaven on Her Birthday" (Fig. 2) uses 2/2 twill weaves. Bamboo paintings also use it to represent small-area block patterns, in addition, 2/1 twill weave and 3/1 twill weave are also commonly used.

### 3.1.3. Plain weave

Plain weave is the most basic and simple weave. It adopts 1/1 weaving method, with many interweaving points and large amount of weaving labor. In the weaving process, it is prone to gaps or bulges due to frequent buckling. It is not often used in the composition due to its monotonous pattern and dim color. The plain weave is stiff and has a tight structure, so it is often used as a drawing edge to make its edges tight and not run, as shown in Fig. 3.

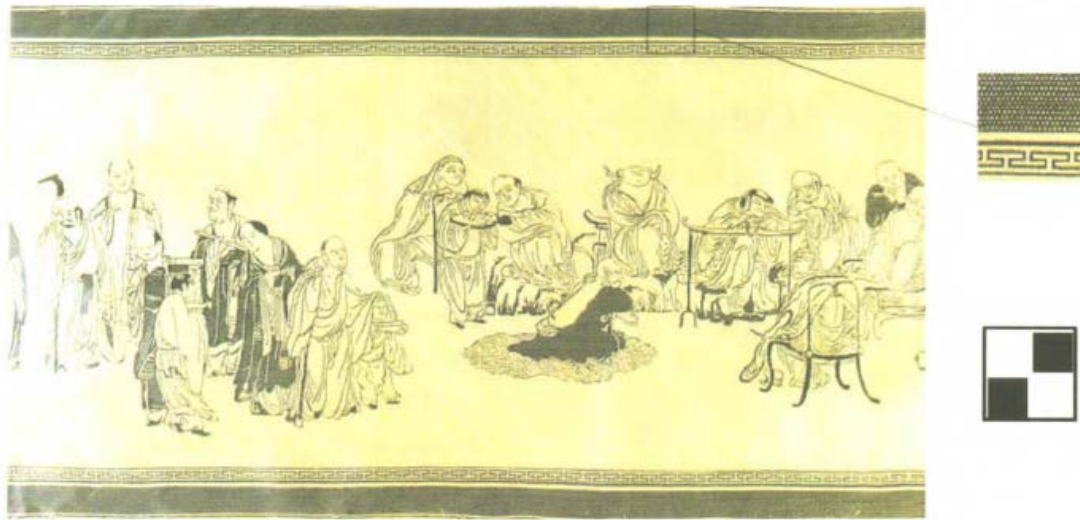


Fig. 3. Partial View of the "Five Hundred Arhats"

### 3.1.4. Other weaves

In addition to the above three types of weaves, derivative weave and dobby weave are also often used in bamboo paintings, such as floating long lines, diamond twill, crepe weave and fret weave. As shown in Figure 2, the floating length is used to express the contours of the crepe wrinkles and the streamers of the scorpion, which not only gives a bright and concise design effect, but also makes it easy to weave during operation and reduces the workload. The painted part in Figure 3 is decorated with a fret weave, which not only has a color transition between the light background and the dark plain weave, but also makes the pattern more Chinese classical. In addition, in some works, a large number of crepe weaves are used due to their evenly distributed interlaced points. The uniform distribution of interweave points and the crepe effect of irregular interweave of two-color bamboo silk are used to present the light and shadow changes of the figure's face. The even and delicate interweave particles make the picture level transition naturally harmonious and fully reflect the sketch style of the original work.

## 3.2. The artistic performance of Sichuan bamboo weaving paintings.

In the weaving jacquard weave, edges of the pattern should be hooked to make the flower and the ground clear, so as to get a clear outline of the pattern. Compared with textile yarns, bamboo weaving paintings have thicker warp and weft, so the edges are rougher. As shown in Figure 2, the bamboo pattern has a large number of plain welts. The clothes worn by the fairies, the wrinkles and the edges of the ribbons have a moire outline. These flat welts make the edges of the pattern delicate and clear. The fairy's nose and chin are hooked freely to achieve a flexible change in the

edge of the pattern and get a realistic face curve. Most bamboo paintings use this method to hook the pattern since its transition is smooth and natural and the contrast is obvious. However, some bamboo paintings do not pay attention to the hooks, such as the panda outline in Figure 1, the edges are not hooked at the junction of warp satin and weft satin, and the outline of the picture is not delineated. The edges of the pandas are thick, and they look vivid and natural.

The characteristics of color and light in bamboo paintings can be divided into two categories based on their color characteristics: one is represented by Gongfan, whose color of latitude and longitude bamboo is close or consistent with light colors, and the pattern is looming; the other is represented by Qingshen bamboo weaves, which have a large color difference of the latitude and longitude, and the pattern is obvious. The most common one is the combination of black and white bamboo. When bamboo paintings are exposed to light, each piece of bamboo wire floating on the surface will produce reflection. For the first type of bamboo painting, since the color of the latitude and longitude bamboo wire is not easy to distinguish, jacquard patterns are usually selected with different weave patterns and twill weaves, so that the pattern can show the effect of bright flowers and dark flowers. As shown in Figure 2, the ground part adopts 2/2 lower right twill weave, and the flower part adopts the structure of satin weave, plain weave and floating long line. When the long floating line is too long, the method of free weaving wires and flat weaving wires are adopted, so that various weaves can produce different luster to reflect the ground and flower pattern of the braided fabric. The changes in the color and shade of the second type of bamboo painting are mainly reflected by the different number of colored weaving points in the unit area of different weaves. When the floating length line is a continuous colored weaving point, the color is the purest. Between the length of latitude float and the length of longitude float, the color depth is related to the average floating length: the larger the average float length is, the purer the color is, the better the brightness is; the larger the average float length is, the deeper the color is, the longer the average float length is, the lighter the color is. In this way, even a simple two-dimensional interlacing of black and white bamboo yarns can exhibit different color transitions and realistic stereoscopic effects.

#### **4. Protection and Inheritance of Sichuan Bamboo Weaving Paintings**

As a treasure of Chinese culture, Sichuan bamboo weaving paintings should be carried out in accordance with the inheritance, so as to ensure their vitality. However, as far as the current situation is concerned, there are certain problems existing in the protection and inheritance of Sichuan bamboo weaving paintings. It is necessary for the relevant departments to do a good job in response to the work, so as to improve the quality of their inheritance and to carry forward the bamboo painting techniques. The specific contents are as follows.

##### **4.1. There are no successors**

Due to the change in people's employment concept, the vast majority of young people go out to work and do not want to engage in bamboo crafts, resulting in that the majority of senior weavers who can master bamboo crafts are old people. Faced with a lack of successor and reserve talent, governments at all levels should vigorously support bamboo artists, broaden the space for the survival and development of bamboo art, and pass on valuable cultural heritage from generation to generation.

##### **4.2. Low degree of marketization**

Due to the acceleration of the modernization process and the change of consumer concept, industrial products have gradually replaced many bamboo weaving products. They are even in a difficult situation of unmarketable. Therefore, bamboo weaving artists are supposed to actively go to the market, and vigorously propagandize, display, and promote bamboo weaving art, so that the majority of collectors can recognize their artistic value and collection value. Only by developing a vast art market, bamboo art can have vitality; only by cultivating a vast art market, bamboo art can further flourish and develop; only by expanding the market scale can it achieve better publicity and

let more people understand and learn Sichuan bamboo weaving paintings.

#### **4.3. Support is not enough**

At present, the government has not invested enough in the special funds for cultural heritage, and the organization has held relatively few activities. Therefore, the government should establish an effective mechanism for inheriting and innovating bamboo crafts from the height of protecting and promoting intangible cultural heritage. For example, it can increase investment in special funds for bamboo crafts, actively organize bamboo heritage inheritors to conduct study, exhibitions, performances, and sales to help them sort out development ideas, do a good job in marketing and promotion, and give strong support in transportation, places, and funds, so that bamboo artists have greater room for survival and development. Bamboo art is a valuable intangible cultural heritage of the Chinese nation. It is the crystallization of the wisdom of folk artists. The whole society should care about the inheritance and development of bamboo art, and provide a good platform to enter the art market, so that the art of Qingshen bamboo weaving art can be passed down from generation to generation and burst into a new artistic wonder in new ages.

#### **5. Summary**

Bamboo weaving paintings determine the color and brightness of light and shade through the choice of bamboo color and weave. Among them, Gongfan uses light color as the latitude and longitude, and uses different weaving grains and different twill weaves to form different shades of light and dark lines and layers. The relationship among average floating length, the closeness of weaves and the luster can be used to realize the combination design of bamboo weaving paintings, making the pattern look unique.

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#### **References**

- [1] Noice, H. , & Noice, T. . (2006). Artistic performance: acting, ballet, and contemporary dance.
- [2] Kline, F. . (2002). Artistic performance and ascetic practice. *Spiritus A Journal of Christian Spirituality*, 2(2), 173-179.
- [3] Zhao, Z. R. , Sun, W. H. , Sui, X. M. , & Zhang, X. F. . (2018). Study on bamboo gluing performance numerical simulation. *IOP Conference Series Materials Science and Engineering*, 292.
- [4] Bell, M. J. . (1976). Tending bar at brown's: occupational role as artistic performance. *Western Folklore*, 35(2), 93.
- [5] Fredette, B. W. . (1995). What is the relationship between artistic performance and visual proficiency?. *Art Education*, 9.
- [6] Petersson, G. , & Nystrom, M. . (2011). Music: artistic performance or a therapeutic tool? a study on differences. *International Journal of Music Education*, 29(3), 229-240.
- [7] Vallet, C. . (1998). 511 the effects of stress and individual personality on an artistic performance. *International Journal of Psychophysiology*, 30(1–2), 197.
- [8] Gerhart, G. L. . (0). Effects of evaluative statements on artistic performance and motivation. *Studies in Art Education*.
- [9] Bicknell, J. , Alter, D. , Anantawan, A. , & Mckeever, P. . (2013). Disability and artistic performance: reconsidering rehabilitation and assistive technology. *Arts & Health*, 5(2), 166-174.