Research on the Color Representation of Dunhuang Mural Art

Yan Liang, Diansheng Guo

School of Art and Design, Lanzhou Jiaotong University, Lanzhou, Gansu, China, 730070

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Abstract. Dunhuang fresco art is one of the essence of traditional Chinese culture, Dunhuang murals also plays an extremely important role in our traditional culture heritage. It is Chinese huge treasure trove of art, whether it is her size, quantity or content is huge and colorful. In the face of the colorful Dunhuang frescoes, we cannot help but be deeply attracted by its diversity of the form and rich picture. In its artistic creation, the most attractive is its color. Therefore, this paper makes a systematic study on the performance skills of Dunhuang frescoes in color.

Introduction

In the Dunhuang Grottoes there are many historical art treasures in the history of Chinese art has an extremely important role. Through the Mogao Grottoes as the main body within the scope of the ancient Dunhuang Grottoes, which contains Dunhuang City, Gansu Province, the West Thousand Buddha Cave and the Mogao Grottoes, and Anxi County, East Thousand Buddha Cave and Yulin Grottoes. And not only the study of the deepest, most representative and the highest artistic value are the Yulin Grottoes and Mogao Grottoes. Dunhuang City in the southeast of 25 kilometers of Mausoleum on the cliff is the Mogao Grottoes, and the north and south about 1600 meters long. Was built in the sixteen countries before the Qin Jian Yuan two years, began in 366 years, after the Six Dynasties of the Northern Dynasties, Sui, Tang, Five Dynasties, Xixia, Yuan, Qing and other ages, to now have 1600 years of history. And still exist in the 735 caves which still preserved a lot of countries that period of more than 45,000 square meters of murals, mud color painting 2415. And in the Anxi City, 75 kilometers south of the practical rural environment is Yulin Cave, located in the Yulin River Canyon on both sides of the cliff above. And now also exist in the 42 caves which also preserved a lot of the murals of that period, is the world's largest existing, content and its rich Buddhist art holy land.

As early as the twentieth century, there are artists in the thirties to Dunhuang, copy Mogao Grottoes murals. In 1944, the Dunhuang Art Institute was established, and today the art work of Dunhuang has been sixty spring and autumn. The copy group of the year gradually developed into the present research institute, with the horizon, research, carries forward the vast world of innovation, summed up a lot of experience and research results, to the future study laid a solid foundation. Now we from a new perspective to study the Dunhuang murals, the use of Dunhuang murals color pigment production process and materials, drawing modern murals, in order to reproduce the glory of Dunhuang.

Dunhuang fresco famous, its color makes the grotto art more colorful. From the artistic point of view Dunhuang murals are heavy color painting, rich color is the basic elements of its content, so the Dunhuang fresco color performance method research is particularly necessary. And the modern fresco material selection and production process to make recommendations. Research color, at present in the design field has a ready-made color theory system, as the theoretical system "color composition" is the study of Dunhuang fresco color theory foundation. This paper uses historical aesthetics to examine the color characteristics of Dunhuang frescoes in different dynasties, using color composition theory to analyze the color arrangement of Dunhuang mural, find the connection between its color configuration law and modern color theory, and how to use this theory to develop traditional mural color Concept, and carry forward the traditional heavy color painting, and finally the modern color theory, Dunhuang murals color distribution law and its unique color techniques applied to the practice of modern mural painting.
The Use of Color Structure in Dunhuang Frescoes

The Use of Black, White and Gray Highlights the Mystery of the Screen. In the Dunhuang murals in the most attention is the black and white regulation, and its main manifestation in the use of hook line, chapter white and blooming black and white effect. In the third corner of the Yulin Grottoes "Samantabhadra" change, is to use a single black line to complete, the background is the ink landscape, the white as the background, so that the organization of the line into a gray tone. And sometimes even in order to explain the creation of the screen, it will be very bright colors, will use a part of the heavy color as a box, the text on the subject.

The fog on the south wall is the frescoes of the 428 Cave in the northern part of Dunhuang Mogao Grottoes. In the medium-sized soil on the red at the end of the configuration of the bright light gray and white and low brightness of the black, the brightness of the configuration is the long tune; with a larger area of simple and gray soil red with no color, its degree of saturation is emphasized; the use of black and white gray is not the same as the colorless color of the hue in the red soil zero contrast to the overall picture effect has a rough mad, majestic and lively feeling. The 254 caves of the Northern Wei and this color are very similar, for example, in the larger area is not the same as the level of gray with a degree of saturation with the degree of blue and white. In the Dunhuang murals in the religious sacred, black and white use of the increase in the mystery of the screen, black characters, white animal and other images make people more Buddhist beliefs "obsessed", more loyal.

The Use of Contrast Color and Background Color. Dunhuang murals color arrangement in the traditional color under the control of the law, are the hue of the strong contrast as the main body. There are two contrasting color configuration, that is, the color ring on the distance of 180 degrees color configuration and 120 degrees of color configuration. In contrast to the hue, the hue ring is 120 degrees away from the red and blue contrast color configuration, with a strong hue, as well as strong, powerful, lively and rich color effects. In contrast, this picture is a low emphasis, there is a large area of black and brown and dark and dark red color in the bright white color, although the color is darker, but the contrast is very strong, in the feeling on the very explosive and majestic. According to the degree of saturation, the use of the gray tone of the way, there is a large area of colorless with bright blue and dark red, gives the feeling very restrained, quiet. And this color configuration is not easy to form the formation of a unified and it is easy to cause irritation and confusion, in the visual cause of fatigue. This figure in improving the contrast effect and the impact of the visual impact is the use of what kind of techniques and colors, in order to complete not only harmonious unity and contrast to the strong effect of the first, to improve the color area, with a larger area of red with a smaller area of the blue; second, will be very strong contrast between the color barrier, in black and blue with black and white; The purity of the color is diminished, the color of the color and brightness were improved, the use of relatively dark red and very bright blue.

The Use of the Same Color. Yuan Dynasty on the 95th corridor on the tiger head to powder for the end, deep purple and red and red and red orange configuration. Hue for the hue on the ring about 90 degrees similar to the color configuration: the brightness of a large area of the foundation with the low lightness of the configuration of the long tune; saturation for a large area of the colorless and bright colors of the gray configuration the effect of this configuration is bright, lively, full, positive, calm and majestic, compared with both considerable strength, but also the sense of reconciliation. Zhongtang 158 cave in the curly pattern, the hue of the green and yellow configuration, color ring on the 90-degree within the similar color configuration: the brightness is the foundation of the high brightness and light green and yellow embellishment on the low Brightness of the black, for the high length; color is the color of the foundation and the black and the color of the center of the yellow and green configuration, for the gray tone; its effect is rich, both active and quiet and generous, both bright and strong Without losing the feeling of elegance and harmony. This type of color arrangement is harder to find in Dunhuang. This is mainly because the ancient Chinese common is the "five-color change" color matching law.

The Specific Color Configuration in Dunhuang Fresco. The most common color is the foundation or the bottom of the mud through the red, green and blue with three. Green and red
complement each other, blue and red is a contrast relationship, three colors in the set when the hue in a strong contrast, it is colorful magnificent. King of the armor in the color of the armor is red, with blue and green ribbon embellishment, the color appears bright and calm, reflecting the dignity of the king. Dunhuang Grottoes are not very pure soil with red and blue and green with a strong light effect, the color is gorgeous noble.

Dunhuang Murals Color Techniques

**The Hook Line Color is an Important Part to Maintain the Dunhuang Fresco.** In Dunhuang murals in the use of hook line coloring method is very much, such as the North Wei 201 Cave, 203 cave statues and so on. Hook line color method refers to the basic completion of the murals, with darker colors of ink, the lines will be blurred again sketched again, so that more sense of the line three-dimensional, the industry called "wake pen." Wake the color cannot be too deep otherwise it will be separated from the overall feeling of the murals. At the same time we should also pay attention to the lines when the beauty and intensity of lines, so that lines feel more natural, able to match the hue in the fresco, so that the whole piece of mural looks more harmonious. General mural painting in the overall wall will be painted background color background, and then painted in the other colors above. After the completion of the outline of the line, according to the different body line for the border, with a small pen on the characters outside the background color area to fill, within the contour line for a separate color. In the way to fill the filling method, it is very careful, it cannot be stained color and it cannot cover the original shape of the surrounding image.

**The Blooming Method Is An Important Way to Use Three-Dimensional Sense of Color in Dunhuang Mural.** Blooming method called "convex method", blooming method is the Dunhuang frescoes use color three-dimensional sense of the important method, which from the Western convex method to absorb the nutrition, to melt in the traditional Chinese painting blooming method, rich mural techniques, created both decorative and three-dimensional style and unique character image. Dyeing requires two kinds of pens, one for dipping, one for dipped in water. Dyeing first with a color pen to fill the color, and then followed by a pen to color stains open, from deep and shallow to no, so the color will appear more layered. In Dunhuang murals, this way is the main coloring method.

**The Bone Painting Reflects the Artistic Concept of "Freehand".** Dunhuang frescoes are usually classified as heavy brushwork, that is, hook line color. But the Dunhuang frescoes in the neat style also has a more freehand frescoes, such as the frescoes without the use of bone color, in the Dunhuang 154 Cave West wall of the Buddha on the north side of the landscape painting landscape is the use of no bone painting, the screen scene horizontal column tower arrangement, plus slender lines to describe the clouds, making the screen has a free and decorative. Another example is the 290 cave center tower, the south side of the boxed curly pattern, with a pen concise, the description of the petals and leaves simple and full of freehand, completely unlike the other hook line color method, although it belongs to the heavy brush class, but its ideas inherited the concept of our art "freehand".

**The Stack Gold Leaking Powder Method Makes the Screen More Shiny Color.** Dunhuang fresco creation from the Northern Wei Dynasty to the Yuan Dynasty, the scope of its golden application is the most extensive. Deposited gold techniques are coated with gold, gold, leaching powder and other methods. Tu gold is the golden powder and glue into a mixture of fine mud, and then dip the pen coated with a pen. Its process is also very simple just use the pen to describe on the line. When the strength of the pen with a different color is the thickness of the different thickness, finish is not the same. Toner is mainly used for small area of the description. Gold is a way of drawing a pattern with mud. Paste is the first brush on the glue, and then paste the gold foil, and then expose the gold foil paper, and finally with a pen slowly brushing in one direction. The biggest feature of gold paste is: bright shiny bright, not through the background color. But its accumulation will also cause uneven brightness and this approach is more practical for large-scale drawing.

**Flat Painted Color Method Shows the Image of the Image Evenly.** Flat coating method, also known as "single line flat coating" such as Dunhuang Mogao Grottoes Northern Wei 132 Cave, flat
coating method in the murals is a very common way. Its shades of change will not be great, so the main use in a large area of coloring. Generally only need to use brushes and brushes to brush back and forth on it. In the murals, the use of materials is stone green, stone green, cinnabar and other particles pigments. As the material is relatively thick, so do not blooming, a lot of murals will use this method to express the image of the object. This method in the use of time, to adjust the tone evenly, and must be flat along the same direction, the color will not pressure line and it will not leave the gap, but will not leave the pen mark.

Conclusion
The study of the color performance of Dunhuang frescoes makes us have a deeper understanding of the history of the development of the frescoes, study the connection of the contemporary culture and art, and then expand the ancient paintings of the entire western region, and even extended to the "Silk Road", learning and innovation Dunhuang murals color expression and rendering techniques, the creation of contemporary mural artists is very important.

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References