The Analysis of the Color Composition and Function of Chinese Shadow Puppetry Art

Xu Ying

School of Humanities and Arts, Hunan International Economics University, Changsha 410205, China phoebe_xuy@163.com

Abstract: Shadow puppetry art is a traditional folk art in China. Its simple color and exaggerated character modeling is its key characteristic. This article originally analyzed the color aesthetics of shadow puppetry art from the perspective of its color source, color composition, and color function.

Keywords: Shadow puppetry art; color composition, color aesthetic, graphic design

1. Introduction

Shadow puppetry has appeared all over China. Shadow puppetry is an ancient and simple folk art in China. It uses animal fur to carve props and then uses light projection technology to project them onto a standing white curtain for performance. This ancient art contains sculpture, painting, sound, performance, and other aspects of the art form. This paper mainly analyzes the Chinese shadow play art color source, color composition, and color function. Figure 1 are some examples



Figure 1: Some examples of shadow puppet picture

2. The source of colors

As a unique art form, shadow puppetry is characterized by vivid artistic shapes and gorgeous colors. Give priority to red, yellow, green, black, white, namely people say commonly "multicolored". In ancient times, the five colors were used as the positive colors, which was closely related to the cosmology of "five elements" in metaphysics. Shadow play color in the past can be generally used from the nature of the ore and plant color, this unique color method makes shadow play color purity is very high. In ancient China, artists mainly used two methods to extract colors, one was extracted from minerals and the other was extracted from plants. Table 1 lists the five colors of minerals examples.

3. Color composition analysis

As mentioned above, shadow puppetry in China is mainly composed of five colors. Using modern software, the author has carried on the color analysis to the 50 comparisons has the tabular picture, mainly according to the color curve and the color level two aspects to analyze.

3.1. Color curve

In a computer each pixel is represented by a combination of 3 colors: Red, Green, and Blue, that

means each RGB color can have a value from 0 - 255, and combining these three colors with varying levels in each channel will result in all the colors you can see in your image. If all three channels have a value of 255 - then the resulting color will be pure white. If all three channels have a value of 0 - then the resulting color will be pure black. If all three channels have the same value, then you will get a shade of gray.

Color	Mineral images	The name of the mineral
Red		Hematite
Yellow		Yellow Stone
Cyan		Lapis lazuli
Black		Carbon black
White		White mica

Table 1: Some resources of the colors come from minerals

As can be seen from the color curve, among the shadow puppetry props, green elements are applied mostly in the dark area, followed by blue. In the lighter parts of the picture, the color is slightly redder. So the whole bright part tends to be a mix of red and green, which is yellow, and the color tends to be warm. This has a lot to do with the fact that shadow puppets are mainly derived from the inherent color of animal fur.

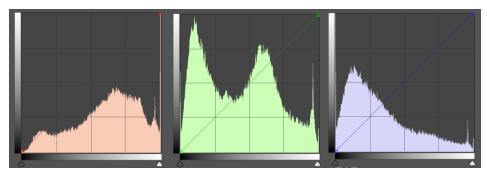


Figure 2: The color curve average value of red, green, and blue

3.2. Color gradation

From the analysis of color gradation, we can see that the color gradation of shadow puppetry props has no obvious mutation, the color change is mild, and the color contrast is not very strong. Shadow puppetry props are painted and filled with the inherent color, and repeatedly baked and dyed, so that the color is rich and calm, strong contrast, beautiful but not gorgeous, with a strong national traditional decorative style.

4. The function of shadow puppetry's artistic color language

4.1. The symbolic of the color

Symbol of color language refers to the use of one thing to refer to another thing. Color is very intuitive in people's aesthetic activities, and a certain color often expresses a specific content, which is the symbolic nature of color, which is more obvious in shadow play. The color rules of shadow play are

mainly dominated by the folk traditional concept of five elements and five colors. The philosophy of yinyang and five elements in China mainly refers to gold, wood, water, fire, and earth, which correspond to greenwood, white gold, red fire, black water, and yellow earth. These colors are specific to the color language of shadow play, and their symbolism is more detailed and diverse.

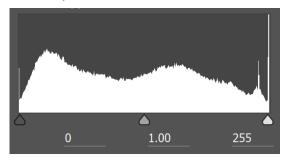


Figure 3: The color gradation average value as a whole

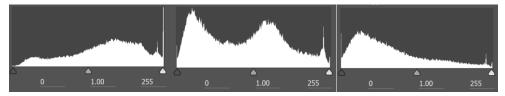


Figure 4: The color gradation average value of red, green, and blue

First of all, in the image of shadow puppetry, color is used to enrich the image of the figure and distinguish the identity and personality characteristics of the figure. For example, in the facial colors, red symbolizes the loyalty and justice of the figure, black symbolizes the bravery and frankness of the figure, yellow symbolizes the cunning of the figure, white symbolizes the beauty or treachery of the figure, and green generally symbolizes the grotesque figure.

Color	the five elements	symbolism
White	Metal	Fair or false
Cyan	Wood	grotesque
Black	Water	The most direct
Red	Fire	Loyalty and justice, joy and jubilation
Yellow	Earth	Character cunning
		Symbolizing power and wealth,

Table 2: Ancient Chinese colors and elements correspondence

Secondly, in the scene modeling of shadow play, the use of color is also rich in symbolism. For example, in the palace building and other grand scene color processing, it is multi-purpose bright and gorgeous color to show, doors and Windows and pillars with red, tile supplemented with green to match, with the overall color relationship to symbolize and show its magnificence, majesty spectacular.

Thirdly, the symbolic color language of shadow play art is also reflected in the auspicious implication of color. Shadow puppets are gorgeous and straightforward in color. Red symbolizes prosperity and happiness in the day, while yellow symbolizes wealth. All these reflect the unique aesthetic taste of folk art and the people's pursuit of auspice. Because of the exploitation and rule of China's feudal society for thousands of years, the laboring people have been living in the oppression circle at the bottom of society for a long time, resulting in their rebellious psychology deep in their hearts. Therefore, people have changed their simple expectations and wishes, such as thriving population, praying for good luck, and favorable weather, into the color, symbolized auspicious in folk art.

4.2. The decoration of color

Decorative color is a concept relative to realistic painting color. Decorative color has its unique aesthetic characteristics, one of the most important characteristics is planarization and subjectivity. Shadow puppetry has the characteristics of planarization, and its color is reflected in the way of flat painting, so shadow puppetry color language has the characteristics of decoration.

Adornment color emphasizes color tone and overall coordination of the screen, can according to the personal subjective feeling to any process of one's bent, adornment color without being limited by the

objective image inherent color, but also on the use of color is not arbitrary, but in writing concise, generalization, contrast and harmony, exaggeration, and so on.



Figure 5: The five elements in ancient China

First of all, the folk shadow puppetry art mostly uses the contrast strong complementary color, the color is vigorous and composed, gorgeous but not artificial. For example, shadow puppets usually use red and green as the main colors, and red and green are both contrasting and complementary. Such bright contrast color through the shadow puppeter to its proportion reasonable control, in the shadow puppetry, formed a school of harmonious coexistence scene. It can be seen that the contrast between cold and warm is also one of the techniques used by shadow puppeteers.

Secondly, in addition to color contrast, shadow play colors will use different shades of color to reconcile the main body. "Harmony" refers to two meanings: one is the process of adjustment, collocation, and combination of different, contrasting, or opposite things to make them into a harmonious whole; To pursue visual harmony, the folk shadow play art often uses the color of different lightness to harmonize the overall shape. To sum up, the application of color in folk shadow play art takes flat painting as the coloring method and contrasts and harmonizes to meet aesthetic needs. All these aspects are similar to decorative colors. Therefore, shadow play color is decorative, which makes shadow play not only active on the bright screen as a performing art, but also as a static art for people to collect.

4.3. The individualism of color

This subjective color is the true reflection of people's inner feelings. Human emotional color is the instinctive color impulse from the heart. As the core of color expression, it plays a strong role in people's color perception and imagination. Therefore, through the study of color issues in folk art, we can more clearly grasp the most essential and core artistic spirit in painting color. As a treasure of folk art, shadow puppetry is characterized by vivid, transparent, simple, and lively images, which have important reference value and research value.

Color can affect people's visual, psychological, physiological, and other aspects of emotional feelings and experience, this feeling and experience with each person's different and different. At the same time, shadow puppeteers do not stick to the colors of the characters, but add their understanding, and combine the different characteristics of different characters to arrange the use of colors, to express the personality of the characters. For example, the face of life, dawn horn do not apply powder, the face of the clown at ink, and as guan gong red face to show integrity and bravery, black to show honesty and honest, etc. These are not only the symbolic embodiment of shadow puppetry's artistic color language but also the best interpretation of its subjectivity. Artists rest on an understanding of the blend in their feelings in the color, the filmmaker who were compared in different colors, or adding or reducing or aggravate or dodge, comply with the psychological reaction of subjective consciousness of adjustment and transformation, the color of the shadow play modeling whole display a harmonious and beautiful visual enjoyment.

5. Conclusion

Generally speaking, the color language of shadow play art has the following three characteristics: symbolic, decoration, and individualism.

Shadow play colors have certain emotions. The colors in shadow play contain people's psychological sustenance for a better life. Shadow play artists hope to use colors to convey their subjective emotions, which reflect the understanding and application of folk colors by folk artists for a long time. Therefore, the color language of shadow play art, like other forms of folk art, is characterized by distinct subjectivity. People choose colors from their perspectives and give colors meanings based on their thoughts, feelings, preferences, and other aspects. This subjective color not only expresses the artist's feelings but also conforms to the aesthetic taste of the people, which has been the majority of the people's love.

In conclusion, the color language of shadow play is symbolic, decorative, and individual. The three characteristics are closely related and inseparable, which together constitute the unique color rendering system of shadow play art.

Acknowledgements

A scientific research project of Hunan Provincial Department of education, research on Inheritance and innovation of digital media in Hunan shadow puppet art (No. 18c1099). Hunan Social Science Foundation, research on Hunan Cultural Spirit from the perspective of art theory (No.: 412020).

References

- [1] Birrell A. Chinese mythology: an introduction. JHU Press, 1999.
- [2] Chen F P L. Chinese shadow theatre: history, popular religion, and women warriors. McGill-Queen's Press-MQUP, 2007.
- [3] Chen F P. The Temple of Guanyin: A Chinese Shadow Play. Asian Theatre Journal: ATJ, 1999, 16(1): 60.
- [4] Evarts A B. Color symbolism. Psychoanalytic Review, 1919, 6(2): 124-157.
- [5] Gage J. Color and meaning: Art, science, and symbolism. Univ of California Press, 1999.
- [6] Hsu S W, Li T Y. Planning character motions for shadow play animations. Proc. CASA, 2005, 5: 184-190.
- [7] Lam T K, Talib A Z. Shadow image and special effects implementation techniques for virtual shadow puppet play. Methods, 2010, 10: 12.
- [8] Talib A Z, Osman M A, Tan K L, et al. Design and development of an interactive virtual shadow puppet play. International Conference on Arts and Technology. Springer, Berlin, Heidelberg, 2011: 118-126.
- [9] Yu H C. A cross-cultural analysis of symbolic meanings of the color. Chang Gung Journal of Humanities and Social Sciences, 2014, 7(1): 49-74.