An Analysis of Color Design of Face Mask Art for Visual Perception

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1. Introduction

Art Master Mr. Chang Da-ch'ien once said: “Simple lines and colors can fully disclose the personality and age of the characters in the drama and even their performance of loyalty, wickedness, virtue, and malice. What a profound painting it is” (Chang Geng, 1995). In more than 200 years of the development course of Beijing opera, face mask art has been developed unique and colorful features in order to express the personality of one character and break the limitation of real faces of humans (Cai, F.L., 2009).

Moreover the application of face mask art includes the colors used, evolving from the three colors (black, white, red) in the early days more diversity as time passes. Nonetheless prior to the evolution to such variety of colors, the three colors were the only ones used before to present the story plots and features of the roles through face mask with successful completion of effect and performance on stage. This simple color distinction for the nature of roles and influence on the audience senses are the main perspective to be probed by the study. Under limited conditions, the change of simple colors brought on the area of face will bring people different sensation and perception visually.

2. Literature Review

2-1 Origin of Face Mask Art

People living in the early days painted on their faces as an expression of deterring natural enemies and proving the identity and status. Nonetheless the action of painting on the face evolved into a decoration function. Therefore the occurrence of face mask art at the beginning was divided into two forms, where one was to decorate on face masks while the other one was the direct and real decoration implemented on the face which the study emphasizes. The earliest decoration carried out on the face was the performance for opera.

Later the face mask eventually extended to more artistic approach and during the 2008 Beijing Olympic Games, makeup artists integrated the Chinese opera face mask with the modern painting-based cosmetics design. The emergence of face mask art originated from the people on opera stage towards audience underneath. Such consideration was also derived with visual acceleration of fast identification and distinction, which draws one step further to the visual pattern design.

2-2 Formation of Artistic Patterns for Beijing Opera Face Mask

The roles in Beijing Opera represents figures in the society and hence distinguish loyalty, wickedness, virtue, malice, and ugliness very clearly. The roles emphasize on the building, gender, age, and personality of image. The role types were simplified but there were more than 10 types when identified by Sheng - male role, Dan - Female Role, Jing - Painted Face Male and Chou (Wang, S.Z., 1996). However under such conditions, different face mask types have been developed with changes in figure image, figure characteristics, nickname or personality.

(Figure 1)

The types of Beijing Opera Face Masks has derived into 20 types, including whole face, three tile face, cross face, one sixth face, male character, floral face, …. (Zhao M.L., 1999). However these are just face mask styles. The number of role images derived from the face masks today could be formed by over one hundred types. Particularly the presentation of role diversity was incorporated, while the generation of various face-masks formed the root of face mask art research. (Figure 2)

2-3 Painting Structure of Beijing Opera Face Mask

There are three types of painting skills, including hooking face, wiping face and rubbing face.

Beijing opera face masks are mostly used on Jing (male...
character) and Chou (clowns), which comes with certain forms in the style, color and type, which can be divided into forehead, eyebrow, eye socket and corner of the mouth on one face mask (Cai, F.L. 2009). It is easy to discover from the overlapping analysis of more than 20 styles of face masks and 14 types of composition patterns and the finding of changes that the painting position of these patterns or totems can be divided into the following five blocks, namely from the cheek to around the nose, lower nose to around the lips, eye contour, and upper forehead and jaw.

These five blocks, the future research method will also apply this structure as the existence of constant variable for the research experiment.

### 2.4 Color Psychology of Beijing Opera Face Mask Art

People’s sensitivity experience on objective matters will be affected by colors, where different colors trigger various visual sensations or associations, known as color psychology (Ou, X.M., 1998). In the development of Beijing operas, the earlier faces only featured three colors, namely black, white and red in order to adapt to open performance. These three rare colors need to guide viewers with the cognition and perception of the characters by making corresponding changes of stories on the face. (Hong, H.J. & Wu, Y.C., 2012). The meanings represented by the three colors as set up in Beijing opera.

### 3. Research Method

The style structure of face masks is fixed. Moreover, the study will explore into the use of three colors in the early days, analyze the face masks created by the three colors in the early days, and the changes in coloring area, in order to conduct questionnaire survey on Kansei syntax. The analysis of question operation results undergoes SPSS statistics software to analyze and compare the factors for interaction and homogeneity through the general linear repeated quantity and multi-variance analysis. The repeated quantity analysis (Table 1) does not conform to spherical shape due to the Mauchly spherical shape testing results p <.05 with significance results, which hence requires Greenhouse-Geisser test and is assumed to be spherical shape. The following Analysis displays the 21 emotion factors having significance and interact with the images (F [20 ,200]=2.64, p<0.05, ε =.57), indicating that different images will result in significant difference of emotions. For the multi-comparison of multi-variation analysis (Table 2) the comparison between the 19 emotion descriptions and the three color distribution with different areas shows that seven emotions come with significance, namely anger, terror, disgust, timid, suspicion, excitement, and anxiety.

### 4. Discussion and Conclusion

After the analysis of the method by the black, white, red three colors, in different combinations of color area, with black and red in the area 80% and 40% have a more significant feeling of change, red for anger, anxious, excited. Black for the horror, disgust, bad people's face feel. And the proportion of 60 when the red and black will give a good image, and white in the face area of 60% will give people more anxious feeling, and 80% and 40% is no . It suggests that the area of main color on the face mask will indeed affect people’s emotion and perception, but the influence is not necessary greater as the ratio increases but it will depend on the ratio of colors.

### 5. List of References


