



Research on the Audience's Cognition and Preference of the Styles of Chinese Landscape Paintings

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Abstract. The main purpose of the research is to explore the audience's cognition of the styles of Chinese landscape paintings through a case study of Chinese landscape paintings. Taking five landscape paintings of different styles created by the author at Hongcun Town of Huangshan as samples of the research, 127 respondents from the online community were invited to take part in the research. Eight styles were selected such as elegant and primitive, composed and powerful, ethereal, vigorous and smooth, wild and cold to describe the styles of Chinese landscape paintings and evaluate the ordinary audience's cognition of these styles. The results indicate: 1. The twelve styles introduced in the ancient theory of painting can be used as evaluation criteria for the contemporary Chinese landscape paintings, which are positively related with the preference of the works. 2. The twelve styles show certain clustering effects, which can generally be divided into two categories. 3. The artistic conception of the works is highly related with the preference of the works.

Keywords: Chinese landscape paintings · Cognition of styles · Difference of preference

1 Introduction

As a sentence in the Analects of Confucius goes, "The benevolent like mountains and the wise like waters". Chinese landscape paintings have secured a special position in the world's history of arts for their profound artistic conception, unique painting language, delicate and diversified styles and charm, image-based expression. They are either grand and marvelous, elegant and lofty, luxuriant and mild, silent and peaceful, or as vibrant as a surge of cloud, or as quiet and tranquil as a mirror. Bing Zong, a painter of Song of the Southern dynasties said, "One can comprehend the Tao when his mind is quiet and peaceful, one's mind can travel far when he is appreciating paintings while sitting or lying". Xi Guo of Song Dynasty said in his works *The Elegance of the Bamboo and Spring*, "The people of the world have reached a conclusion that we can walk, observe from a height, enjoy sightseeing or find habitat in mountains and

waters.” Chinese landscape paintings feature an elegant and attractive style, which are not only artistic creations full of aesthetic appeal, but also a carrier for men of literature and writing to express their feelings and aspirations. As a unique product of ancient civilization, Chinese paintings carry the spiritual characteristics and aesthetic kernel of Chinese culture and manifest the humankind’s cognition of the nature, society and other associated areas such as philosophy, literature and arts. However, in terms of international propagation, the spreading and exporting of Chinese painting works have been emphasized, while the promotion of the spirit of Chinese paintings has been neglected. It is insufficient in width and depth [1, 2]. Chinese paintings convey feelings and ideas, with which scholars and literati express their feelings, pursue aesthetic appeal, emphasize “artistic conception” and “romantic charm”, manifest certain personality charm and humanistic spirit, and the heart and feelings of the painters [3]. In different periods, influenced by the social culture, the aesthetic connotation unique to Chinese paintings have found different expressions and comprehensions [4]. The audience of Chinese paintings are mainly scholars and literati who emphasize romantic charm and even advocate that romantic charm can be comprehended but cannot be explained. This seriously limits its propagation. As time passes, Chinese paintings are not so popularized among the common audience. Wu [5] pointed out that, due to the unique way of creation, elegant aesthetics system and limited means of Chinese paintings propagation, the general public has fallen into an aesthetic dilemma of Chinese paintings as global digitization is speeding up. We should carry on the efforts on aesthetic education of Chinese paintings and further their promotion and spreading. Therefore, Chinese landscape paintings are known as a symbol of elegance for their high artistic and cultural value. Besides, most of them are an expression of images, pursuing a realm of a vivid artistic conception, emphasizing resemblance in spirit but neglecting the forms. This has caused certain difficulty to the common audience in appreciating the works. While aesthetics is being promoted among all people, how should we make the common audience better appreciate and spread the traditional culture? There are many factors influencing the audience’s perception and cognition of artworks, of which style is a key one and an important and complex topic. On the cognition of the styles of Chinese landscape paintings, the current research mainly covers the following aspects.

- a. Twelve styles were selected from the *Twenty-four Styles of Chinese Paintings* to evaluate the audience’s cognition of the styles of Chinese landscape paintings;
- b. The audience’s preference and cognition of different styles of Chinese landscape paintings.

2 Literature Review

2.1 Inheritance of Painting Theories

He Xie of South Qi Dynasty proposed in *Six Principles of Chinese Painting* (around 490 AD), “There are six techniques of Chinese painting, which are lively spirit and charm, brush using techniques, shaping in resemblance to real objects, use of colors

according to the category, management of positions and imitation of existing works.” These six techniques, as important principles for the evaluation and commenting of Chinese paintings, have been carried on and developed by theorists and authors of later generations and times. Huaiguan Zhang of Tang Dynasty proposed in the *Notes on Evaluation of Painting Works* (around 725 AD) that like the beauty of a person, the beauty of Chinese paintings is reflected in three levels, namely, spirit, bone and flesh. Xiufu Huang of Song Dynasty proposed in *Four Qualities* (1006 AD) that Chinese paintings have four qualities, “elegance, spirit, wonderfulness and vigor”. Daochun Liu of Song Dynasty proposed six requirements and six advantages in *Comments on Famous Paintings of Song Dynasty* (around 1080 AD), “The so-called requirements are sufficient spirit and charm, mature pattern and system, rational changes, smooth and glossy colors, natural and smooth transition and absorbing the merits and abandoning the shortcomings. The so-called six advantages are being rough but following the law of brush and ink applying, being uncomplicated in brush applying techniques but conveying talent, being exquisite and smart but displaying force and strength, being wild and bizarre but showing rationality, applying no ink but achieving a dyeing effect, flat painting to display length.” Yue Huang of Qing Dynasty proposed in *Twenty-four Styles of Chinese Painting* (around 1,800 AD), “The so-called twenty-four styles of Chinese paintings are spirit and charm, ingenious, elegant and primitive, vigorous and smooth, composed and powerful, harmonious, tranquil and far-reaching, simple, unconventional, odd, free, incisive, wild and cold, clear and open, spiritual, natural, secluded, clear and bright, robust and straight, brief, prudent, refreshing, ethereal and graceful” [5]. The aforesaid indicate that the principles of ancient China for the commenting and evaluation of paintings kept changing, enriching and growing and reached the peak in Qing Dynasty. Other than these painting theories, there are also many arguments of other painters and scholars which will not be stated here due to the limitation of space. The arguments on landscape paintings include *Preface to Landscape Paintings* by Zong Bing of Song of Southern and Northern Dynasties, *Narration on Paintings* by Wei Wang of Song of Southern and Northern Dynasties and *Notes on Brush Applying Techniques* by Jing Hao of the Five Dynasties. Considering that the research is mainly focused on the styles of landscape paintings, the *Twenty-four Styles of Paintings* by Yue Huang of Qing Dynasty is selected.

2.2 Inheritance of Cultural Implications

Nowadays the demands of customers in products have shifted from attention to pragmatic functions and appearances to a pursuit of the meanings and recognition behind the products, or the ideas and concepts, lifestyle or spiritual resonance conveyed by the works [7]. Liao [8] pointed out that the ultimate purpose of designing products is to provide customers with material functions, and more importantly a sense of security. Cultural information is infused into design to meet the spiritual demands of customers and highlight the cultural meanings of the works and carry forward cultural aesthetics. Cultural meanings and aesthetics are important attributes of products. Cultural meanings are expressed by applying cultural symbols (cultural elements) [9]. Barthes [10] pointed out, “cultural code” or “cultural symbol” is one of the functional codes of narrative texts. Chen and Yang [11] argued that by creating and applying cultural

codes, we can promote the renewal and regeneration of culture and achieve differentiation and hierarchy. Such kind of differentiation can continue to be created in the use of codes and promote the cultural level. Cultural meanings are transformed and applied and turned into various concrete manifestations, which are well received by the audience and strengthen the recognition by customers or increase the added value. This is the application of cultural industry as well as where the values of knowledge economy lie. Creating cultural values is itself a process of digesting knowledge, creating forms, defining audience and cultural marketing, which requires a foundation of broad and deep cultural background [12].

2.3 Presentation of Styles

Lin [13] pointed out that only works with distinctive styles can be competitive in the market. In terms of artistic creation, different intentions of the authors will create different characteristics. Such kind of difference is classified as some feature or image based on its characteristics, which is also known as “style” [14]. The works with the same style display some common elements in external representations or techniques, carry on some common rules and share some common characteristics and image perception [15]. Arts are a manifestation of culture, while style is the most distinctive characteristic of the culture [16]. The research of styles is an exploration of the similarity and difference of works [17]. After a group of people encodes the external forms of styles and images, the internal feelings and meanings of styles and images are interpreted by a systematic mechanism analysis and summary [18]. The judging of styles is a process of categorizing. After each example of the categories undergoes the action of paradigm effect, the best paradigm will be taken as the prototype. By exploring the paradigm and prototype of styles, it helps us understand the logic behind the construction of styles and images [14, 19, 20]. The designers encode the meanings on the basis of external forms, materialize the cultural characteristics and meanings and create the cultural images and identification of the products. Customers experience the symbolic significance and culture by perceiving and decoding the external forms [21]. Lin and Lee [22] pointed out that artists express their creative concepts by internal transformation and external forms and the artists and the audience establish a positive exchange as the works are appreciated and understood by the audience.

3 Methodology

3.1 Research Subject

The author has created 24 Chinese landscape paintings of Hongcun, Huangshan, Anhui, which display traditional and modern styles. Experts were invited to classify these works into five categories based on their styles. Experts were invited to vote on the works of each style. The works that got more votes than others were selected to represent the style. So 5 landscape paintings were selected, which were labeled as P1 to P5.

3.2 Questionnaire Design

The *Twenty-four Styles of Chinese Paintings* by Huang Yue were adopted, which include spirit and charm, ingenious, elegant and primitive, vigorous and smooth, composed and powerful, harmonious, tranquil and far-reaching, simple, unconventional, odd, free, incisive, wild and cold, clear and open, spiritual, natural, secluded, clear and bright, robust and straight, brief, prudent, refreshing, ethereal and graceful. 12 experts (3 professors, 6 associate professors, 3 doctoral students) were invited to select 12 styles considered by them as the most important. A total of 13 styles were selected by more than 6 of the experts, which were in sequence: style and charm, simple, ingenious, unconventional, secluded, ethereal, vigorous and smooth, tranquil and far-reaching, spiritual, clear and bright, elegant and primitive, prudent and refreshing. Based on the interpretation of each principle given in the painting theory, the above principles were explained with words which are easy to be understood by the common audience and retain the original meaning. Common respondents were invited to perform a test to further correct and modify those difficult to understand. So the following results were obtained in the end, disposition and charm, simple and naive, creativity and ingenuity, extraordinary and refined, deep and profound, concise and smart, heavy and smooth, modest and foresighted, natural, clear and bright, classical and elegant, prudent and particular, realistic and imitated.

Since disposition and charm is a general evaluation of the works, the other 12 descriptions were taken as the evaluation criteria for the styles of landscape paintings and labeled in sequence as f1 to f12. The respondents were asked to score the five landscape paintings on a five-point scale. They could score 5 if they believed that the works were most consistent with the evaluation criteria, and score 1 for the works that were most inconsistent with the evaluation criteria. Finally, the respondents were asked to pick a favorite one from the works.

3.3 Respondents

127 valid questionnaires were obtained, including 38 males (29.9%) and 89 females (70.1%). 43 of them aged between 20 and 29 (33.9%), 33 aged below 19 (26%), 21 of them aged more than 50 (16.5%), and 15 respondents aged between 30 and 39 and another 15 aged between 40 and 49. Their professional backgrounds: 67 in arts and design related majors (52.8%), 20 from other majors (15.7%), 17 from the majors of calligraphy and painting (13.4%), 13 studied liberal arts (10.2%), 10 studied science and engineering related majors (7.9%). Their education level: 63 were undergraduates (49.6%), 23 with other education levels (18.1%), 22 masters (17.3%) and 19 doctors (15%).

4 Research Results and Discussion

4.1 Reliability and Validity Analysis

The validity analysis reveals that the KMO coefficient is .921, a relatively high value, Sig value is .000, highly significant, the eigenvalue is 7.11, which can interpret

60.404% of the variances of predefined purpose. The factor loading of each question ranges from .387 to .799 and the communality ranges from .150 to .638. The questionnaire presents a good construct validity. The reliability analysis of the questionnaire is made to evaluate the internal consistency of each perspective of the questionnaire and the reduction of Cronbach's α in each dimension after a single question is deleted, which is used as a reference standard for the selection of questions and evaluating the reliability of the questionnaire. The analysis of the questionnaire reveals: the Cronbach's α is .916. The total correlation between each perspective of styles and characteristics and the correction of a single question ranges from .358 to .742. The Cronbach's α after the deletion of a single question ranges from .906 to .913, which indicates that the internal consistency of the questions is rather high and the choice of questions is reasonable.

4.2 Analysis of Styles of Works

A matrix was established with the original data. The mean score of the five landscape paintings in 12 different styles was worked out. Through MDS analysis (Fig. 1), our purpose was to analyze their distribution by employing the perceptual mapping and study the cognitive space of five landscape paintings and 12 styles. The results of MDS analysis reveal that the stress coefficient is .02431, less than 0.25, which indicates that the stress coefficient and adaptability are very good. The determination coefficient RSQ is .98801, near 1.0. Therefore, in assigning the original attribute data, it shows a rather high conformity, indicating that two dimensions are suitable for depicting the spatial relation between the five works and 12 styles [23].

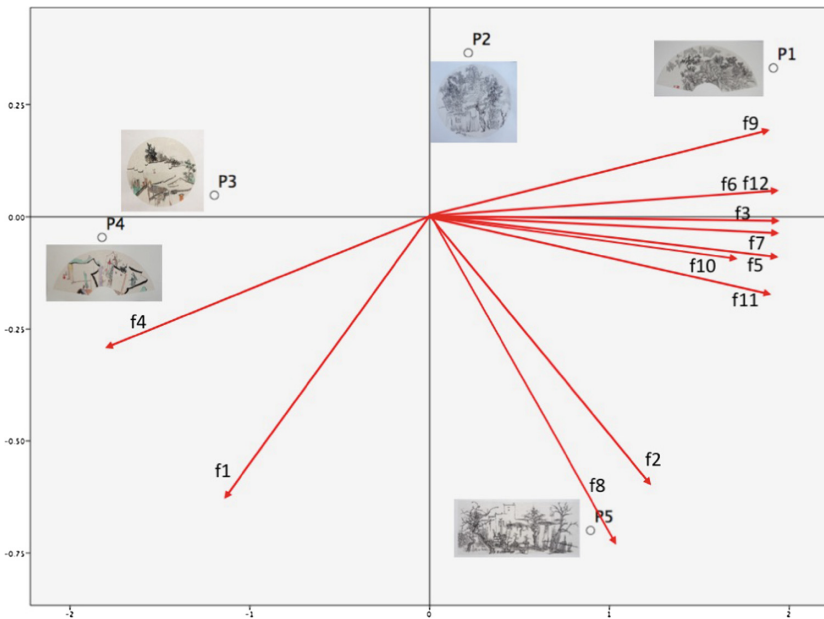


Fig. 1. MDS spatial distribution map of 5 landscape paintings and 12 styles

The two-dimension spatial axial diagram of the five works is shown as Fig. 1. The included angle of the axial diagram of each style was analyzed with multiple regression to obtain the cognitive spatial maps of 12 styles. It reveals: (1) The 12 styles are distributed in the first, third and fourth quadrants, of which f6 (vigorous and smooth) overlays with f12 (realistic and imitated). (2) P3 and P4 rest in the second and third quadrants and form a cluster, which shows similar attributes in styles. (3) P1 and P2 rest in the first quadrant, sharing some common attributes. However, their spatial distribution indicates that their styles are different to a certain extent. (4) P5 stands in the fourth quadrant alone, whose style is distinctively different from that of the other works.

After drawing a spatial map of attributes, the degree of style attributes of each landscape painting was further explored. The distance between the vector projection point from landscape paintings to the attributes and the original point was worked out. The OD distance in the MSD map is the distance from landscape paintings to the level of attributes. The formula for working out OD distance is shown in Fig. 2. The value of $b2/b1$ is the slope of the vector. The vector projection of D on the original point shows the strength of characteristic, with the vector contributing to the attributes of the works [24].

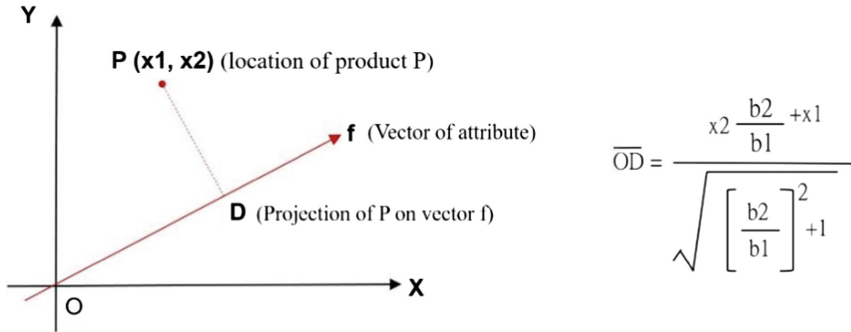


Fig. 2. OD distance formula function



Table 1 shows the OD distance value of each of the 9 landscape paintings in the 8 vectors of style attributes. Taking vigorous and smooth (f6) as an example, P1 is the highest and its distance is largest in the twelve style attributes f1 to f12 and is highest in simple (f1), unconventional (f3), secluded (f4), ethereal (f5), modest and foresighted (f7), clear and bright (f9), classical and elegant (f10), prudent (f11) and realistic and imitated (f12). In the ingenious (f2), P4 and P5 are the highest and the distance is the same. In spiritual (f8), P5 is the highest.

The exploratory factor analysis was employed to test the relations between the potential variances and twelve style attributes. The eigenvalue of the two factors is bigger than 1 and the total variance is 77.887, shown in Table 2. Two clusters are formed, one being f7, f5, f12, f6, f10, f3, f9, f11 and f4, corresponding to the works P1; the other being f8, f1, f2, corresponding to the works P5. The styles of the two clusters display internal correlation. The works most prominent in each style attribute and their average score are also listed in Table 4, which indicates that P1 is highest in f1, f3, f4, f5, f6, f7, f9, f10, f11 and f2, P5 is highest in f2 and f8, but lowest in f1, which means that this style is stronger.

Table 1. Distance between projection point from five landscape paintings to style attribute vectors and the original point

		P1	P2	P3	P4	P5
Simple	f1	1.39	0.42	-0.66	-1.10	-0.04
Ingenious	f2	0.94	-0.15	-0.79	-1.11	1.11
Unconventional	f3	1.91	0.21	-1.20	-1.82	0.91
Secluded	f4	1.89	0.34	-1.09	-1.70	0.56
Ethereal	f5	1.85	0.17	-1.20	-1.80	0.98
Vigorous and smooth	f6	1.93	0.24	-1.19	-1.82	0.85
Modest and fore-sighted	f7	1.89	0.20	-1.20	-1.82	0.93
Spiritual	f8	0.63	-0.22	-0.62	-0.84	1.04
Clear and bright	f9	1.93	0.30	-1.15	-1.78	0.69
Classical and elegant	f10	1.84	0.16	-1.19	-1.80	0.99
Prudent	f11	1.79	0.13	-1.18	-1.77	1.03
Realistic and imitated	f12	1.93	0.24	-1.19	-1.82	0.85

Table 2. Factor analysis of the 12 styles

Fundamental Relations	Factor Loading		Works	Style Attributes
	Factor1	Factor2		
Modest and foresighted(f7)	.997	.032	 <p>P1</p>	Modest and fore-sighted
Ethereal(f5)	.992	.097		Ethereal
Realistic and imitated(f12)	.991	-.070		Realistic and imitated
Vigorous and smooth(f6)	.989	-.068		Vigorous and smooth
Classical and elegant(f10)	.983	.110		Classical and elegant
Unconventional(f3)	.982	.013		Unconventional
Clear and bright(f9)	.948	-.261		Clear and bright
Prudent(f11)	.946	.180		Prudent
Secluded(f4)	-.892	.419		Secluded
Spiritual(f8)	.407	.823		 <p>P5</p>
Simple(f1)	-.585	.777	Simple	
Ingenious(f2)	.614	.746	Ingenious	
Eigenvalues	9.346	2.145		
% of Variance	77.887	17.877		
Cumulative %	77.887	95.764		

4.3 General Evaluation of the Works

The general evaluation of the spirit and charm of every work is shown in Table 3. The comparison of the average values indicates that $P1 > P5 > P2 > P3 > P4$, the average scores of P1 and P5 being the highest. The respondents were asked to select a favorite one from the five works. The result is shown in Table 4, which indicates $P1 > P5 > P3 > P2 > P4$. The popularity of the works is relatively consistent with the ranking of the scores of spirit and charm in Table 3, which indicates that the evaluation of the spirit and charm of works by the respondents is correlated with their preference of landscape paintings to a certain extent.

Table 3. The Ranking of the Degree of style and charm











Rank	1	2	3	4	5
No	P1>	P5>	P2>	P3>	P4
Product					
Mean Scores	4.024	3.740	3.598	3.449	3.370

Table 4. The favorite one from the works

Rank	1	2	3	4	5
No	P1>	P5>	P3>	P2>	P4
Product					
N (%)	35 (27.6)	33 (26)	25 (19.7)	21 (16.5)	13 (10.2)

5 Research Conclusion and Suggestions

Only The evaluation results of five landscape paintings by the 127 respondents reveal that:

- a. The twelve styles show certain clustering effects, of which the styles modest and foresighted, ethereal, realistic and imitated, vigorous and smooth, classical and elegant, unconventional, clear and bright, prudent and secluded are classified in a category, while spiritual, simple and ingenious are classified in the other category;
- b. The twelve styles are effective for the evaluation of the styles of landscape paintings. The works most popular among the audience got higher scores in the aforesaid twelve styles, which show positive correlation;

- c. The styles spiritual, clear and bright are two typical styles. Their scores are correlated with the preference of the audience in landscape paintings;
- d. The audience's evaluation of the spirit and charm of works is highly correlated with their preference in the works. The top evaluation criteria which have been carried on for thousands of years from the ancient theories on painting are still applicable in the contemporary era.

Suggestions: The evaluation criteria for works in the ancient painting theories of China are mostly straightforward evaluation and cannot cover all style aspects, which still need to be further explored to perfect the evaluation criteria of the styles of Chinese landscape paintings. Besides, the current research is only an exploration into the audience's cognition of the styles. More researches need to be done on how the twelve styles contribute to the overall cognitive difference of the respondents and how respondents with different backgrounds perceive the styles of landscape paintings.

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