# Research on the Color Expression Characteristics and Influencing Factors of Chinese Watercolor Painting Under the Background of Cultural Integration

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Abstract: Watercolor has shown great vitality in China. In an open and integrated cultural environment, how to enrich the language form and enrich the national style while taking into account its own artistic characteristics has become an academic "proposition" and a new challenge for the development of watercolor today. Based on Chinese watercolor works, this paper analyzes the color performance characteristics and influencing factors of Chinese representative watercolor paintings in recent ten years based on image analysis, so as to explore the rapid development path of watercolor painting in China, hoping to help expand the research and development of Chinese watercolor.

Keywords: Chinese Watercolor, Painting Color, Performance Characteristics, Cultural Integration, Influencing Factors

#### 1. INTRODUCTION

In today's globalized cultural background, the exchange and integration in the field of art has become a trend. As an important part of Chinese art, Chinese watercolor painting is also constantly absorbing and integrating elements of western culture, forming a unique color expression characteristic. In the nearly three centuries since watercolor was introduced into China, it has experienced different stages of development, such as imitation, learning, internalization and innovation (Chen, 2020). As a kind of foreign painting, watercolor has gradually formed a national style with national spirit, full of Chinese culture and Oriental aesthetic interest in the process of blending with Chinese local culture. The expression form of watercolor painting works lies in "water" and "color". The painter's use of expressive color is an important transformation of "color" into "water", painting on paper, and melting into the viewer's heart. It is also an

important way to convey emotion. Expressive color makes natural color change in thousands of ways, which greatly enhances the appeal of watercolor painting language. Watercolor painting is characterized by the beauty of water rhyme. The flexible, transparent and changeable water quality provides unexpected effects for the use of color, and expands the space for the formal expression of watercolor art. Color expression is an important artistic medium for creating watercolor paintings, which shows artists' emotion and aesthetic pursuit (Zhou, 2020). The study of the color expression characteristics of watercolor painting is helpful to understand the artistic pursuit and aesthetic concept of Chinese painting, affect the atmosphere and emotional expression of the picture, and provide reference for the future art development. In the context of globalization, the study of the color expression characteristics of Chinese watercolor painting will help promote the exchange and integration of Chinese and Western art, and promote the diversified development of world culture.

# 2. RELEVANT LITERATURE REVIEW AND CURRENT SITUATION

The profound origin of Chinese watercolor painting and "water" stems from the power of water to nurture life and the noble character of water in ancient culture. Water is not only the source of life, but also the intersection of spirit and material. In Chinese traditional culture, water is endowed with rich symbolic meanings, such as clarity, purity, flow and change. Therefore, as a painting form with water as the main medium, watercolor painting has an indissoluble bond with water. The color expression of watercolor painting is closely related to the use of water. The characteristics of water determine the diffusion, integration and transparency of color, providing infinite creative space for painters (Liuyongjian, 2020). In traditional Chinese ink painting, water is also an important medium, but compared with watercolor painting, its color application is relatively single. However, with the introduction of Western watercolor painting, Chinese painters began to explore how to combine the essence of traditional ink painting with Western watercolor painting techniques to create watercolor painting with Chinese characteristics. In the 1980s and 1990s, the development of Chinese watercolor painting ushered in a turning point. With the increase of foreign exchanges and the opening of the art market, Chinese painters began to be exposed to more western painting concepts and techniques, and thus carried out in-depth exploration and innovation on the color performance of watercolor (Zhangmiaomiao, 2018). Watercolor works in this period are bolder and richer in the use of color, and pay more attention to the form and visual impact of the picture. In this process, many painters have studied and tried from many levels. In terms of media, Shang Hui began to try to use watercolor paper with different textures and colors to obtain different color effects (Fuxijuan, 2020; Huang, 2019; Shang, 2019; Yeyuchen, 2020; Zheng, 2020). In terms of techniques, they drew lessons from some techniques in Western painting, such as wet painting, superposition, etc., and combined with rendering, dot dyeing and other techniques in traditional Chinese painting to create a unique style of watercolor painting. In terms of color concept, Zheng Gong began to pay attention to the knowledge of color contrast, harmony and color psychology to enhance the visual effect and emotional expression of the picture (Xuxiaoqing, 2018; Zheng, 2020). In addition to exploring in painting practice, some painters also began to study the color performance of watercolor painting in theory. Xuyadi summed up some rules and skills about the use of color in watercolor painting through the comparative analysis of traditional painting and western modern painting (Liujinxin, 2023; Wang, 2020; Xuyadi, 2020), as well as the in-depth observation of China's natural landscape and human environment. These theoretical studies not only provide guidance for the further development of Chinese watercolor painting, but also provide important academic resources for the international art community to understand Chinese watercolor painting. In general, the color expression of Chinese watercolor painting has experienced a development process from traditional to modern, from single to multiple. In this process, Chinese painters continue to break through the shackles of tradition, absorb the essence of Western painting, and innovate in combination with local cultural characteristics. Today, Chinese watercolor painting has formed a rich and colorful appearance and become an indispensable force on the world art stage.

# 3. RESEARCH METHODS AND OBJECTS

#### 3.1 Research Methods

First, an extensive literature review was conducted, and a large number of relevant research data on Chinese watercolor painting in the context of cultural integration were collected. By combing these documents, this paper systematically analyzes the evolution process of Chinese watercolor painting in color performance, as well as the characteristics of watercolor painting works in different periods and styles in color application. On this basis, using the method of empirical research, this paper makes an in-depth observation and analysis of Chinese watercolor works. This paper discusses the specific impact of cultural integration on the color performance of Chinese watercolor painting.

### 3.2 Research Object

In the past ten years, we have carefully selected a series of representative Chinese watercolor works as the research object. These works show innovation and influence in the use of color, and become outstanding representatives of contemporary watercolor painting. In the process of research, pay special attention to those artists who break through the shackles of tradition and dare to explore new techniques. Their works not only show originality in the use of color, but also inject new vitality into the whole field of watercolor painting. These works come from different artistic genres and styles, including both the exquisite description of realism and the free expression of abstractionism. Whether in theme selection, composition layout or color application, they all show unique insights and practices. Specifically, some works successfully create the atmosphere and emotion of the picture through the unique color matching and application. The research works of this time are shown in Table 1.

Table 1: Watercolor Works and Authors

Table 17 (Accepted to 17) of the and 11 of the		
Name of Work	Author	Year
Bath Above the City	Wanghongyun	2015
Everything in the Sky - Auspicious Snow	Meng Xiande	2018
A Rider on a Folding Bike	Liu Bing	2020
Impression of Loess High Slope	Xiaoyaping	2020
Wuhan 2020	Min Sihan	2020

#### 4. ANALYSIS OF COLOR PERFORMANCE CHARACTERISTICS

# 4.1 Analysis of Color Expression Characteristics of Bath Above the City

In the surrealistic style of urban landscape watercolor painting, the sky presents inverted bowl shaped clouds, in sharp contrast to the traditional sky scene. The clouds are mainly white and gray, and the edges gradually become thin, merging with the surrounding gray sky. The urban building complex has clear lines and bright colors. There are obvious red, green and blue on the roof, adding to the breath of life. The overall color is dark, which may symbolize gloomy weather or heavy atmosphere. The visual

tension between bowl shaped clouds and urban landscape gives people a mysterious and uneasy feeling. The aircraft and kites in the picture add dynamic and story. The whole painting creates a unique visual effect through surreal composition and calm color application. This watercolor painting presents a surrealistic style, and has certain characteristics in color expression: (1) color matching: the picture is dominated by cold colors, and the distant sky and clouds use gray and white to create a gloomy atmosphere. At the same time, there is a strong contrast between the clouds and the city below. The purity of the clouds and the complexity of the city are intertwined, producing an unreal visual effect. (2) Contrast of light and shade: the clouds in the upper part of the picture are bright, while the cities in the lower part are darker. This contrast of light and shade strengthens the stereoscopic sense and depth of the picture, and also highlights the theme of cloud tray in the picture. (3) Color saturation: the overall color saturation of the picture is not high, which is consistent with the characteristics of watercolor painting and can show delicate gradients and layers. Some of the colors of the city are lower saturated, probably to highlight the purity and brightness of the clouds. (4) Color image: the artist may convey a surrealist concept through the use of color, that is, clouds, as a part of nature, are in opposition to man-made cities. The use of cool colors strengthens the conflict between nature and man-made, as well as the thinking caused. On the whole, this painting takes advantage of the transparent nature of watercolor, and constructs a surreal picture through the color matching of cool colors and the control of saturation, which is thought-provoking.



Figure 1: Bath above the City by Wanghongyun

4.2 Analysis on the Color Performance Characteristics of the Universe - Auspicious Snow

The painting depicts a quiet rural landscape covered with snow. The foreground is water and trees. The water surface reflects the surrounding snow, and the edge is covered with dark green trees and shrubs. The middle shot shows the farmhouse and the hills. The snow on the farmhouse roof and the warm color on the walls blend with the surrounding snow. The background is mountains and sky. The mountains are covered with snow, and the color is lighter than the foreground. The sky is a mixture of lavender and gray. The whole painting uses cold colors to convey the feeling of winter, and warm color buildings add warmth and vitality. The picture shows the texture and luster of snow and the hazy feeling of mountains through exquisite watercolor techniques. The overall feeling of peace and tranquility reminds people of the warmth of the interior and the beauty of the outdoors in winter.

This watercolor painting depicts a snow scene in winter. The color characteristics are analyzed as follows: (1) color temperature: the picture is dominated by cold colors, and large areas of white and light blue create a cold winter atmosphere. The hills and houses are covered with snow, showing the unique tranquility and purity in winter. (2) Shading: through the shading of the snow, the painter successfully displayed the texture and light effect of the snow. For example, the shadow part on the hillside uses a darker blue gray, while the highlight part of the snow keeps the original white of the paper. This contrast makes the picture vivid and hierarchical. (3) Color saturation: the overall color saturation is low, which is related to the quietness of natural colors in winter. But on the houses and trees, you can see some warm colors, such as ochre and brown, which add a touch of vitality to the cold scene. (4) Color harmony: the color transition in the picture is very natural. From the distant mountains to the nearby houses, the color changes from deep to shallow, from cold to warm, forming a harmonious visual effect. Such a transition not only presents a sense of space, but also strengthens the quiet and peaceful atmosphere in winter.

(5) Emphasis on details: Although the overall color is relatively uniform, the painter still highlights details through subtle color changes, such as snow on the roof, cooking smoke, etc. The addition of these details makes the picture more story and life.

In general, this watercolor painting shows the tranquility and beauty of the winter scenery through subtle color matching and careful shading, giving the viewer a peaceful visual enjoyment.



Figure 2: Meng Xiande's "Everything in the Universe - Auspicious Snow

## 4.3 Analysis of Color Expression Characteristics of a Folding Cyclist

This watercolor painting shows the old man sitting on a tricycle. The old man wore traditional clothes, smiled and relaxed. The tricycle is sturdy and practical, with daily supplies. The background is a typical European town landscape, including buildings, hills and blue water. The sky is orange red, and the plane flies in it. Seagulls add a dynamic feel. The picture is colorful, from the sky to the water, to the clothes and tricycles of the elderly, forming a colorful picture. The reflection on the water surface is both realistic and abstract. The whole painting conveys a quiet and happy atmosphere of life. The painting shows a vivid scene with its rich details and color application. The following is an analysis of the color characteristics of this watercolor painting: (1) color contrast and harmony: the color contrast in the picture is strong, and the warm color sky in the background is in sharp contrast to the cold color objects in the foreground. This contrast not only highlights the central figure and the foreground, but also makes the buildings and the sky in the background more vivid. (2) The layering of color: from the orange color of the sky to the brown color of the building, to the reflection of the water surface and the clothes of the people, the color is clearly layered, forming a rich visual effect. This level also increases the depth of the picture, allowing the viewer's eyes to swim through the picture. (3) Details: on the face and hands of the characters, the painter used warm colors to show the vitality of the characters. The wrinkles on clothes and the light and shadow effect on bicycles are also carefully reflected through subtle changes in color. (4) Emotional expression: color is not only a visual expression, but also the transmission of emotion. The color of the sky above the picture is intense, which may indicate the sunset or some

dramatic weather change, giving people the feeling of time passing or changing. (5) The combination of nature and man-made objects: through the buildings and bicycles reflected on the water, the painter skillfully combines natural colors with man-made objects. The reflection of the water surface is not only a visual ornament, but also a high-level skill in the use of color. On the whole, the painting creates a scene full of stories through the use of exquisite colors and clear-cut techniques of expression, which makes people feel the natural beauty and humanistic flavor integrated in the picture.



Figure 3: A Folding Cyclist by Liu Bing

# 4.4 Analysis of Color Performance Characteristics of Impression of Loess Plateau

This watercolor painting depicts the magnificent landscape of sandy landform. The first half of the picture is a desert cliff, with rich color levels, from light yellow to dark orange to white, showing the ups and downs of the terrain and the texture and color of the stratum. The cliffs are smooth in lines and clear in layers, formed through weathering and erosion. The highlight on the top of the cliff in the sun enhances the warm feeling of the desert. At the bottom is the dark ground, which forms a contrast with the cliff, making the landscape more three-dimensional. Dark colors may represent shadows or different geological formations. The whole painting captures the changes of natural light and geomorphic details through watercolor techniques, showing a quiet and powerful natural landscape. The contrast of color brightness and temperature conveys the feeling of time passing and natural sculpture. This watercolor painting depicts a

magnificent Canyon or desert landform. The color features are as follows: (1) color selection: the screen mainly uses warm colors, and the layers of orange, yellow and ochre constitute the main body of the desert landform. These warm colors convey the hot and dry climate conditions. (2) Layers and textures: through different color depths and mottled rendering techniques, the artist successfully expressed the layers and textures of rocks, allowing people to feel the ups and downs of the landform and the traces of erosion. (3) Light and shadow effect: the transparency of watercolor allows the painter to simulate the effect of light on the rock surface through the superposition of colors. The brighter area at the top may represent the place with direct sunlight, while the dark part forms shadows, enhancing the three-dimensional sense. (4) Color saturation and contrast: the color saturation in the picture is high, especially in the part depicting the desert surface. The color contrast is distinct, which not only presents the richness of the landform, but also enhances the visual impact. (5) Background and foreground processing: the background part of the picture uses a relatively soft and fuzzy processing method, which is in contrast to the clear and distinctive landform in the foreground, and increases the far-reaching sense of space. (6) Creation of emotion and atmosphere: the warmth of the overall color and the richness of the layers create a sense of grandeur in the wilderness, which makes the audience feel the shock of standing on the edge of the canyon. This painting presents the magnificent and rugged desert landform through the exquisite use of color and the expression of the sense of hierarchy, which makes the viewer have a strong visual and emotional experience.



Figure 4: Xiaoyaping's Impression of Loess High Slope 13

## 4.5 Analysis of Color Performance Characteristics of Wuhan 2020

This watercolor painting shows a quiet urban landscape. The picture is hazy, and the color is soft and tends to be cold, giving people the feeling of early morning or dusk. In the foreground, the buildings are stacked, and the outline is looming in the fog. The colors are mainly light gray and beige, with occasional bright yellow embellishment, adding vitality and layering. To the left of the center, there is a bridge extending to the fog in the distance.

Tall buildings and skyline can be identified in the distant view. The whole city feels calm and leisurely, as if it were stagnant at this moment. The painting captures the quiet beauty of the city at a specific time, and shows the transparency and color level changes of watercolor. This watercolor painting shows the quiet side of the urban landscape. he color characteristics are analyzed as follows:

- (1) selection of colors: the painter used a large number of neutral colors, such as gray and brown, with light yellow and light green embellishments, to create a calm and realistic impression of the city.
- (2) Contrast of light and shade: the overall brightness of the picture is relatively balanced, but by strengthening some specific areas, such as the top of trees and the bright part of buildings, the painter skillfully shows the change of light and the passage of time.
- (3) Color saturation: on the whole, the color saturation is low. Compared with the steel forest in modern cities, such a color selection is softer and easier to arouse the audience's resonance and emotional association.
- (4) Harmony and balance of color: Although the color is relatively single, the painter creates a rich and harmonious visual effect through subtle color difference and transparent layering. The buildings, bridges and distant skyline of the city are treated with similar colors, reflecting a unified visual style.
- (5) Construction of the sense of space: the painter expresses the profound sense of space through the gradual change of color and the change of transparency. For example, the color of nearby buildings is relatively concentrated, while the buildings and bridges in the distance are more diluted, which enhances the perspective effect of the picture. (6) Creation of emotional atmosphere: the use of this color makes the picture appear quiet and meditative, as if it is telling the other side of urban life not noisy and busy, but quiet and pause. Through delicate color matching and shading, this watercolor painting depicts a peaceful and detailed urban landscape, which makes the audience feel the beauty of the city and may also trigger deep thinking on urban life.



Figure 5: Min Sihan's Wuhan 2020

## 5. INFLUENCING FACTORS OF COLOR EXPRESSION CHARACTERISTICS OF CHINESE WATERCOLOR PAINTING UNDER THE BACKGROUND OF CULTURAL INTEGRATION

### 5.1 Blending of Eastern and Western Artistic Styles

When discussing the development of Chinese watercolor painting, what cannot be ignored is the profound impact of the blending of eastern and Western artistic styles (Huwenna, 2023). Chinese watercolor painting actively absorbs the elements of Western watercolor painting in technology and form of expression, especially in the capture and expression of light and shadow, as well as the mixing and layering of colors. This kind of reference and integration is not a simple imitation, but a kind of creative absorption and re creation. In this process, Chinese watercolor painting has not lost its traditional essence - the unique oriental artistic conception and the outpouring of pen and ink emotion. They are injected like fresh blood, making the color expression of Chinese watercolor painting not only stay in the visual vividness and richness, but also endow the works with profound cultural connotation and emotional expression. Therefore, when appreciating a Chinese watercolor painting full of light and shadow changes, we are not only appreciating the charm of color, but also experiencing an exchange and dialogue between eastern and Western artistic aesthetic spirit (Mengxiande & Zang, 2023). Through such artistic practice, Chinese watercolor painting has become a vivid case of the blending of eastern and Western cultures. It shows how the art world can promote the innovation and development of local art forms through

reference and integration in the context of globalization (Zhaozhengyang & Tan, 2023).

## 5.2 Expression of Subjective Emotions

In the context of cultural integration, the color expression in Chinese watercolor painting increasingly reflects the expression of subjective emotions. This expression is not only reflected in the emotional symbolic meaning of color, but also in the painter's subjective adjustment and control of color (Liuxinyi, 2023). Through the use of color, Chinese Watercolor Painters can show their emotions and mood, as well as their perception and understanding of the natural and human environment. Color not only carries the symbolic meaning, but also becomes a tool for artists to convey their personal emotions and inner world. In traditional Chinese painting, color is often used to express natural beauty and emotional charm in an introverted and implicit way (Zhumengyuan, 2023). However, in the current era of cultural integration, Chinese Watercolor Painters tend to reflect their unique perspective and deep feelings about the world around them through the subjective adjustment and free use of color. This direct expression of emotion can be a deep admiration for the natural landscape, a delicate reflection on social phenomena, or a true record of personal experience. In this process, color has become a bridge connecting the artist's heart and the outside world. Through the ingenious combination of contrast, harmony, warmth and shade, watercolor painting is endowed with unique personality and emotional power (Li, 2023). Therefore, when examining a Chinese watercolor painting, we are not only appreciating the color beauty on its surface, but also experiencing an emotional resonance, which comes from the artist's sensitive capture and creative expression of color. Such emotional expression is a significant feature of the development of Chinese watercolor painting in the context of cultural integration, and also its unique charm on the global art stage.

# 5.3 Reflection of Natural Environment and Social Background

When studying the color characteristics of Chinese watercolor painting, we must extend the perspective to the influence of natural environment and social background on the use of color by artists. Chinese Watercolor Painters show their deep insight and sensitivity to nature in their works. They draw inspiration from the colors of the four seasons and the changing light and shadow of the weather, and apply the colors of these natural elements to the canvas (Zhong, 2023). For example, the vigorous

mountains and rivers, delicate flowers and birds, and magnificent celestial phenomena are not only the imitation of external forms, but also the capture and reproduction of the breath of the natural environment. At the same time, the reflection of social environment and historical background also occupies an important position in Chinese watercolor painting. With the advancement of urbanization, high-rise buildings, busy streets and complex interpersonal relationships in modern cities have also become the theme of Watercolor Painters (Yanghonglin, 2023). They use color to describe the landscape of cities and towns in the process of urbanization. Through the contrast of cold and warm colors and the combination of light and dark colors, they describe the vitality and rhythm of the city. At the same time, they do not forget to capture those traditional lifestyles and humanistic feelings that remain in the wave of modernization. Such artistic practice not only enriches the expressiveness of Chinese watercolor painting, but also makes it an important window to understand China's social changes and cultural development. Through the use of color, watercolor painting has become a multi-dimensional media to reflect social phenomena. It has not only visual appeal, but also ideological depth and social value (Liuhaichao, 2023). Therefore, when examining these works, we are not only appreciating art, but also reading colorful social stories. This feature is a unique cultural symbol and social record of Chinese watercolor painting in the global art field.

# 5.4 Aesthetic Concept of Oriental Charm

The color expressiveness of Chinese watercolor painting is closely related to its deep-rooted traditional aesthetic concept, which embodies a profound oriental charm. In the Oriental art tradition, color is not only the decoration of the surface, but also an important carrier to convey emotion and express philosophy (Xumengyao & Chen, 2023). This aesthetic tendency has been particularly reflected in Chinese watercolor paintings. While pursuing the beauty of the picture, artists pay more attention to creating the overall atmosphere of the picture through color and conveying deeper emotions and thoughts. In practice, this is usually manifested in the careful design of color coordination and the ingenious use of contrast, making the picture not only visually harmonious, but also dynamic and hierarchical. In addition, the depiction of the natural and human environment in Chinese watercolor painting also reflects the inherent characteristics of oriental aesthetics. The artists expressed the idea of harmonious coexistence between man and nature through the delicate description of natural landscapes and the accurate capture of humanistic

scenes. In the use of color, this charm is reflected in the preference for mild and implicit color and the ability to reflect subtle changes in nature through color changes (Luan, 2023). To sum up, in Chinese watercolor painting, color is the key element to construct the oriental charm. The emotional atmosphere of the picture and the depiction of nature and humanity created by artists through color are not only visual enjoyment, but also spiritual touch. This use of color makes Chinese watercolor painting unique in the global art field and appreciated by the world.

### 5.5 Attempts at Technological Innovation

In the context of contemporary art, technological innovation has become an important driving force to promote the progress of Chinese watercolor painting. With the development of painting materials and technology, Chinese Watercolor Painters continue to explore new painting materials and techniques, and apply these technological innovations to the creation of traditional watercolor paintings. These new materials and technologies, such as high-quality watercolor paper, durable bright pigments and diversified brushes, have greatly expanded the scope of color expression of watercolor paintings, enabling painters to more freely express the delicate gradual change and rich levels of color. Technological breakthroughs have not only improved the visual effect of works, but also promoted the innovation of watercolor language (Liujiandong, 2023). Artists have challenged the traditional boundaries of watercolor painting through experimental material applications, such as the use of mixed media or the exploration of non-traditional tools. Such an attempt not only enriches the visual effect of the picture, makes the work more vivid and contemporary, but also provides more possibilities for conveying more complex themes and emotions. Therefore, it can be said that, driven by technological innovation, the color expression of Chinese watercolor painting is undergoing a profound change. These innovations not only enhance the expressiveness of watercolor painting, but also open up new horizons and paths for the future development of Chinese watercolor painting. This spirit of exploration and innovative practice of artists will undoubtedly continue to promote the development of Chinese watercolor painting towards a more diversified and international direction.

#### 6. CONCLUSION

Through the in-depth analysis of the color application of representative

Chinese watercolor works in the past decade, we can see that these works have their own uniqueness in the use of color. Painters use color to express emotions, create an atmosphere, and show the beauty of nature and humanity, which has injected new vitality into the development of Chinese watercolor painting. The innovation and practice in the use of color in these works not only enrich the artistic language of watercolor painting, but also provide valuable experience and Enlightenment for the future development.

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