

# Research and Application of Color in Hui Style Architecture

Yankao He<sup>1,\*</sup>

<sup>1</sup>Wuhan Textile University, Wuhan, Hubei 430073, China

\*Corresponding author. Email: 749850248@qq.com

## ABSTRACT

Hui style architecture is one of the most important traditional architecture schools in China, which has a long history and unique regional characteristics. Among them, the color of the Hui style architecture has a profound cultural deposits and unique style. The formation of the Hui style architectural color system is affected by various reasons such as geography, culture and production technology, which is also the crystallization of the wisdom of the ancients and the integration of production technology, providing the most intuitive template for the inheritance of traditional buildings and the innovation of contemporary characteristic buildings.

**Keywords:** Hui style architecture, color, architectural color

## I. INTRODUCTION

This thesis analyzes the reasons for the formation of Hui style architectural colors from multiple angles, understands the cultural background and connotation of Hui style architectural colors, and explores the aesthetic significance of Hui style architectural colors. Finally, it discusses the influence of Hui style architectural colors on modern architectural design, and the reference and development of modern architectural design and space design to the color and form of Hui style architecture.

## II. HUI STYLE ARCHITECTURE AND COLORS OF HUI STYLE ARCHITECTURE

### A. Hui style architecture

Hui style architecture is a school of ancient architecture with a long history. Hui style architecture

is popular in southern Anhui and often appears in the south of the lower reaches of the Yangtze River. Among them, Wuyuan and Huangshan areas still have many well-preserved ancient Hui style buildings. With its unique style, rigorous structure and long history, it has been matured and perfected by the continuous development and improvement of the people of Huizhou. In ancient times, Huizhou was hilly and mountainous, so transportation there was inconvenient, and the relatively closed geographical environment gave birth to unique Huizhou culture and Huizhou architecture. (as shown in "Fig. 1")



Fig. 1. Unique Huizhou architecture.

### B. The characteristics of Hui style architectural colors

The characteristics of Hui style architectural colors can be simply summarized as black, white and gray. It is the most straightforward and concise summary of the structural characteristics of Hui style architecture: gray

black fish scale tiles, tall Ma Tau Wall and gray walls, which is simple and elegant, graceful and brief.

Hui style architecture will retain the essence of the color of the building materials, the roof is covered with black tiles, and the walls are decorated with pale grey.

The main color of the Hui style architecture is the contrast of black and white, supplemented by gray tones of different degrees and different color systems, which are interspersed with cool colors such as dark blue and dark green, and are accompanied by warm colors such as brown and ochre. The overall tone presents a sense of calm, distant and lingering, peaceful but not dull, and the architectural colors contrast and blend with the surrounding environment to bring out the best in each other.

### **III. REASONS FOR THE FORMATION OF HUI STYLE ARCHITECTURAL COLORS**

#### *A. Regional environment*

Huizhou is located in the south of Anhui, and the terrain is mostly mountains and hills. It belongs to the subtropical monsoon climate, which is warm and humid. Although the light is sufficient, it is rainy and humid in summer. Huizhou villages are scattered in the plains, leaning against the mountains, and often surrounded by mist, just like splashed-ink landscape, which is full of poetic flavor. While clouds and rains form poetic beauty, they will also have a certain adverse effect on the building. Therefore, the outer wall of the Hui style building will be painted with a white layer of lime, so that the building can withstand the wind and rain and will precipitate out unique figures and patterns after a long period of disrepair, which in turn greatly increase the beauty of the building.

#### *B. Building materials*

There are "three carvings" in the manufacturing process of Hui style architecture, which are brick carving, stone carving, and wood carving. Therefore, the materials of Hui style architecture are mainly bluestone, clay and trees. When selecting materials, the texture, quality and figures and pattern of the material are very particular. Hui style architecture likes to use wood, and it is also extremely simple when handling wood. It retains a large proportion of log color and is close to nature and fresh, bright and clear. Huizhou is located in the southern Anhui region, and the weather there is affected by the monsoon and there are often plum rains. Out of consideration for drainage and moisture protection, the outer walls are built with blue bricks, the wall space is whitewashed with white mortar and together with blue black tiles constitute the dominant hue of Hui style architecture: quiet and distant, simple and elegant. When processing materials, craftsmen first consider retaining the natural beauty of the raw materials, and then removing the parts of the raw materials that lack aesthetics or have flaws, so that the texture, form and color of the materials are more delicate and wonderful. When making the lacquer process at last, craftsmen choose a light varnish to cover the surface of the material, keep the original color of the material as much as possible, and protect the

material while adding the finish and beauty of the material. The selection and processing of Hui style architectural materials have laid the natural, gentle, and simple colors of Hui style architectural materials. It is different from the ancient buildings in the north, which are "thick and heavy in colors", like using red paint and gold lacquer on the surface of the material. Hui style architecture pursues the natural color of materials in the treatment of materials. Analogous to the treatment of furniture in Scandinavia in the west, it also values the beauty of nature. However, the Hui style architecture is more decorative while focusing on function, which can be said to be the perfect combination of artificial beauty and natural beauty.

#### *C. Political reasons*

The ancient Chinese feudal society had a strict hierarchy, and there was a clear differentiation in the use of color decoration. Ordinary civilians were prohibited from using resplendent and magnificent colors for decoration. The rulers of the feudal period paid attention to the development of agriculture and ignored the development of commerce. The status of businessmen in this period was very low. Therefore, Huizhou people who were good at doing business tried to avoid using colorful walls and they used low-key and elegant white walls. This simple color style constitutes the rich levels and rhythmic beauty of the Hui style architectural complex. The blue tiles and white walls create a sharp contrast. Today, after hundreds of years of wind and rain, the gray walls are covered with mottled lines and patterns, forming a simple beauty. The cold white wall and the warm brown pattern on the wall form a strong contrast between warm and cold, creating a unique style of Hui style architecture.

#### *D. Cultural reasons*

The founders of Neo-Confucianism were born in Huizhou, and to some extent Huizhou is also the birthplace of Neo-Confucianism. Confucianism was the main idea of rulers governing the country in ancient times and was highly respected, so Huizhou was deeply influenced by Confucian culture. Zhu Xi advocated the natural and flat aesthetic concept, and ancient Huizhou was one of the regions with the largest educational audience at that time. Under the influence of Zhu Xi, many Huizhou people and bachelors resisted the complex and gorgeous colors, and tended to calm, the neutral way of achromatic color, creating the simple, elegant and clean facade style of Huizhou architecture. Especially in the early days, the color decoration of Hui style architecture was very concise, which kept a lot of the original colors of the building materials and maintained the Confucian values that deprecated decoration and advocated the simplicity and nature. At the same time, in the ancient Huizhou area where the style of literature prevailed, the rule of Confucianism made Huizhou people highly respect the ethics of

feudalism, which was reflected in the distinctive "memorial gate" of the Hui style architecture. The memorial gates are generally exquisite stone or wood carvings, and the blue black building stones and timber have become a major color feature of Hui style architecture. Taoism was also one of the ideological theories admired by feudal rulers at the time. The Taoist idea of "harmony between man and nature" also had a strong impact on the design concept of the Hui style architecture, and the location was particularly prominent. In choosing the location of the building, the Taoists analyzed the appropriate address based on the mountains and waters, which were places generally surrounded by mountains and misty rain forests, adjusting the harmony and unity of nature and architecture.

*E. Aesthetic reasons*

Against the background of green mountains and rivers, the Hui style architecture has formed a quiet, distant and peaceful atmosphere, which has nurtured the life style of the Huizhou people: down-to-earth and going into business while walking around. In their aesthetics, architecture should be as harmonious with the world as they are. The ancient Hui style architecture has been baptized by the precipitation of history. Although the white walls have been mottled and faded, the black tiles have been covered with moss, which is not what they were before. But it presents a rich sense of architecture and a heavy sense of history.

**IV. PRACTICAL SIGNIFICANCE OF HUI STYLE ARCHITECTURAL COLORS ON MODERN ARCHITECTURAL SPACE DESIGN**

The colors of traditional Hui style architecture are more stable, clear, simple and contrasting. Black, white and gray of different degrees and different color systems are the main colors of Hui style architecture. The overall color of the building and nature are

harmonious and unified, creating a simple and elegant high-level beauty. Modern architecture attaches importance to personal emotions and straightforward feelings, emphasizes style expression, and the use of colors is rich and gorgeous with a certain visual impact. However, compared with Hui style architecture, the use of this color in modern architecture can't withstand the precipitation of history and it will lose its former luster as time goes by, and it will appear impetuous due to the lack of tranquility. However, the color of Hui style architecture will add lasting appeal with the progress of history.

Therefore, the facade design of this case follows the simple, neat and clean features of Hui style architecture with whitewashed white walls and stacked black tiles. At the same time with the ancient style and ancient charm, it maintains the simplicity of the overall building. The use of colors in the overall building highlights a black-and-white contrast and ink poetry. The building is enclosed in a Chinese-style courtyard landscape and contains three major elements: green plants, stone scenes and water scenes. The appearance of these elements greatly enriches the color of the building space, but it doesn't cover the surface of the building; instead, it embellishes or complements the building, so that the landscape and the building itself create a peaceful and harmony color atmosphere. The green plants in the landscape symbolize vitality, the water and stone landscapes symbolize calm, and the combination of movement and static greatly enriches the changes in the rhythm of the space. When the night comes, the cold light of the lamp strip is reflected on the calm water, and the warm light of the ground lamp is scattered on the green lawn, adding a mysterious and dreamy feeling to the landscape; at the same time, the yellow light is reflected on the white wall like a curtain, making the night view of the whole building soft and warm. (As shown in "Fig. 2")



Fig. 2. "Qingfeng" homestay1.

The use of Hui style color in the modern interior space retains more of a traditional beauty. The colors of the Hui style are innovative while inheriting the traditional design, and are more closely integrated with modern life. At the same time, they also pay attention to

the display of the interior colors of the Hui style in the modern interior space. Black, white and gray are the constant theme of Hui style architecture. When used in the interior space, they will bring a feeling of tranquility. With the semi-open glass sliding door and

indoor long window, the small scene path in the courtyard is directly in the eye, giving people a sense of freedom in the mountain pastoral. Grey is the mean color between black and white, and the "golden mean" pursued in Confucianism reflects a plain idea. The gray in the room is high-grade gray with different color levels. It gradually advances and changes softly, exuding a high-level beauty. When Hui style color is used in modern interior design, it conveys flat but not ordinary feeling. The color of the interior space is basically attached to the material, and when it comes to the material of the Hui style architecture, the brick, wood and stone stand in the breach. When these three materials exist in the interior space, the natural sense of affinity will surround the entire space. The light logs are fresh and elegant, and the deep logs are quiet and unadorned earthy. The indoor blue bricks are different

from the outdoor ones. Relatively speaking, there is more cleanness and less vicissitudes. This less vicissitudes is just right, making the indoor color atmosphere more warm and comfortable. White suspended ceilings and walls can broaden the space visually and make the space brighter. White is a neutral color, and the fault tolerance rate is extremely high in the color matching of the indoor space. It is simple and elegant, and it is used in the indoor space in combination with black and gray colors to enrich the overall space with contrast and change. The colors of the Hui style architecture itself have different levels of beauty. In conjunction with the lighting of the modern interior, it is both cold and warm; and a combination of cold and warm gives people a different visual experience and feeling in the heart. (As shown in "Fig. 3")



Fig. 3. "Qingfeng" homestay 2.

The color of the interior space in this case also adheres to the color concept of Hui style architecture. The color tone of black and white gray is used to form the indoor color frame; the neat and clean wall space is embedded with the dark metal window frame to form a strong vision contrast; and then blue, gray and brown household items are used to balance the color atmosphere of the space. The design of the interior space is similar to that of Hui style architecture, focusing on the original ecology of the building

materials and retaining the original wood color of the furniture. The light-colored bamboo curtains present a fresh and elegant feeling, and the brown bedside table and floor present a thick and calm feeling. Whether it is architecture or interior, this is how Hui style architecture works. It returns to innocence with thickness and elegance; it is gentle and profound, leading people to endless aftertastes. (As shown in "Fig. 4")



Fig. 4. "Qingfeng" homestay3.

It is worth mentioning that in the Suzhou Museum, designed by the master architect Ieoh Ming Pei, the color concept of the overall architectural design is consistent with the color concept of Hui style architecture. The Suzhou Museum adopts Suzhou garden-style design thinking and builds a modern

building frame structure on the basis of traditional gardens. The different three-dimensional spatial structure and shape make the whole building very concise and modern. The changing and concluding of the building makes the space full of cadence and rhythm. The matching of white walls and black tiles is

exactly the same as Hui style architecture. Although the manufacturing process of the building is a modern process, it still reveals the ancient style and ancient charm. A large part of this is due to the color matching of the building. The white wall reflects the landscape in the garden. A slight contrast between the rockery and the white wall is an elegant landscape picture. The black blue frame divides the structure of the building on the one hand, on the other hand achieves a balance between traditional ideas and visual experience. The



Fig. 5. Suzhou museum.

The Hui style architectural system is an integral part of Chinese architectural design history and an important part of Chinese traditional culture. The color motif of the Hui style architecture is like Chinese splashing ink landscape painting, full of Chinese characteristics. Whether it is structure, shape, color matching or space division, it is worth learning and references. It is like a treasure waiting for people to dig. If a country's design is to be strong, it must be based on the nation; it's necessary to innovate on the basis of the nation, and design their own excellent buildings. As designers of the new era, it's needed to retain the cultural connotation of the nation and create own architectural style.

## V. CONCLUSION

The architectural school of Huizhou is an important part of Chinese architectural culture, and the use of color is the essence of it, which contains rich humanistic connotations in Huizhou. It is the crystallization of the hard work and wisdom of countless Huizhou people and craftsmen. It has been the improvement and development of countless generations of Huizhou people and craftsmen before reaching today's achievements and heights. The color system of Hui style architecture deeply influences the design of contemporary architectural spaces and interior spaces. Discussing and researching the colors in Hui style architecture and applying them to modern architectural design are not only the inheritance of traditional Hui style architectural culture, but also the

design ideas of most traditional architecture schools in China are interlinked, but there is a certain difference in the intercommunication, which is also one of the important reasons for the prosperity of Chinese traditional architectural culture. The design colors of Suzhou Museum and the architectural colors of the Hui style have such similarities and differences. (An example of partial space in the Suzhou Museum mentioned above is shown in "Fig. 5")

exploration and development of modern architectural aesthetics.

## References

- [1] Song Jianming. Color Design in France. Shanghai: Shanghai People's Fine Arts Publishing House, 1999: 106-126. (in Chinese)
- [2] Li Dali, Li Meng, Huang Yan. Color Foundation and Application. Heilongjiang: Heilongjiang Science and Technology Press, 2007:93-115. (in Chinese)
- [3] Zheng Xiaoying. The Foundation of Color Design. Heilongjiang: Heilongjiang Fine Arts Publishing House, 2006:68-85. (in Chinese)
- [4] Zhou Wei. Research on the Environmental Planning and Design of Huizhou Ancient Residential Village [D]. Wuhu: Anhui Polytechnic University, 2013. (in Chinese)
- [5] Yu Xinying. Ink Artistic Conception of the Light Environment of Huizhou Residential Buildings [J]. Decoration, 2008 (2): 45-47. (in Chinese)
- [6] Wang Yue. Research on Huizhou Culture and Regional Environmental Art [D]. Wuhan: Wuhan University of Technology, 2003. (in Chinese)
- [7] Li Shuo. Research on the Artistic Characteristics and Application of Huizhou Gardens [D]. Wuhu: Anhui Polytechnic University, 2014. (in Chinese)
- [8] Lu Yong, Zhang Wei. Architectural Design and Aesthetic Orientation of Huizhou from an Ecological Perspective [J]. Journal of Zhengzhou University of Aeronautics (Social Science Edition), 2013 (3): 146-150. (in Chinese)
- [9] Pan Guxi. History of Chinese Architecture [M]. Beijing: China Construction Industry Press, 2005. (in Chinese)
- [10] Fan Yanbing. Chinese Hui Style Architecture [M]. Beijing: China Construction Industry Press, 2006. (in Chinese)