Application of Rock Color in Modern Public Decorative Art
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ABSTRACT
This article first traces the widespread use of rock color represented by natural mineral color in the early religious art of human, especially in the art of grotto paintings in the early days of China. The traditional Chinese color system that it symbolizes is also promoted by the art and design world today, and illustrates the modern attributes of rock color from the perspective of social development and transformation. Rock color has been applied to several large public decorative arts in recent years as an example, which proves that it has great practical significance. Then the author continued to expand the rock color material system, the rock color expression forms and expression techniques were continuously enriched, and a large number of rock color reserves were accumulated. These aspects demonstrated the realistic conditions for the future development of public color decorative arts. It is an inevitable trend for the development of Chinese art that rock color is applied to the future public decorative arts.

Keywords: rock color, public decorative art, cultural attributes

I. INTRODUCTION
After nearly 30 years of exploration in the Chinese mainland, rock color paintings have made a lot of achievements in the country through the use of mineral materials for artistic creation and teaching practices by artists, and have been recognized and supported by industry experts. Rock color's material beauty reflects strong Chinese (Eastern) cultural attributes. Although Japanese paintings naturally come to mind when talking about rock color paintings, Japanese paintings are influenced by Chinese Tang Dynasty paintings (especially ancient Chinese cave paintings), which Japanese artists cannot deny. In Japan, the use of mineral materials has continued to current days and has developed into a category of art with its national characteristics. They also often use rock color to create large-scale decorative murals and barrier paintings. The picture uses a large amount of gold foil as the base, the overall gold is brilliant, and the color is rich in modern decoration. The painting form is unique and has a typical oriental meaning. Professor He Jiaying, vice chairman of the China Artists Association, said: "The development of modern Chinese rock paintings is based on the exploration of ancient Chinese mural language and the study of contemporary Japanese painting." Rock color's art blends eastern and western painting languages, breaks through the shackles of traditional painting concepts, and gains a great degree of freedom in expression. With the rise of China's economic strength and the enhancement of cultural self-confidence, the revival of national culture and art is advocated. This rock color art form, which has Chinese cultural attributes and represents the traditional Chinese color system, will be reactivated and bloom with a strong vitality. Today, as a most traditional “new” art form, rock color is not only used by artists in his own creations, but also as a “new” type of design medium that is sought after by the modern design community.

II. HISTORY OF ROCK COLOR PUBLIC DECORATIVE ART
The sociality contained in the rich artistic form of ancient grotto murals is a cultural carrier with rich humanistic connotation. The excavation and construction of ancient cave murals, whether officially funded or privately funded, are mostly built in places of public activities, and the purpose is to educate the people with religious content on the murals. The worship service of the people and large-scale pilgrimage activities are public activities, which highlight their public nature. The art forms of these ancient murals should belong to the early public decorative art category of human beings. Based on the influence of ancient murals on today's Chinese art, people have studied more on the materials, colors and expression methods of murals.

At the beginning of human civilization, mineral pigments, as a kind of natural and noble natural
painting material, were used in various arts related to human activities. Whether it is the paintings of the Lasco caves in prehistoric France, or the cave paintings of the Altamira caves in Spain, or the rock paintings in various provinces in China, they are mostly drawn with hematite powder blended with animal glue or animal blood, mainly reflecting early human-beings' survival and sacrifice public activities. With the rise and development of Buddhism, from the frescoes of Ajanta Grottoes in India, to the frescoes of Kizil Grottoes in Xinjiang, to the frescoes of Mogao Grottoes in Dunhuang, are all historical examples of mineral pigments used as painting media in public decorative arts.

Natural mineral color, as the main representative of early rock color media, has irreplaceable cultural value and meaningful aesthetic charm. As an artistic medium with historical memory, rock color is not only concentrated in the early public art forms of human beings, but also a traditional art form with oriental cultural attributes. Therefore, its existence and development have great historical value in contemporary Chinese art and design. When people think it the other way round, rock color also has great practical significance for the research, protection and restoration of ancient murals. Hou Liming, former director of the Dunhuang Academy of Fine Arts, talked about the historical origin of rock color paintings. He said, "Because of conditions, most of the past facsimiles were gouache facsimiles, which are different from the raw materials of caves. Some experts think that the spirit of facsimiles is the same when looking at the works, but the texture it shows is different." Therefore, although the old generation of artists are very good at facsimiling the murals, they always felt that they lacked a sense of historical thickness that the natural materials of the rock color naturally exude. Rock color's research and protection of ancient murals can not only restore the original features of ancient murals due to the natural properties of this material, but also be easy to replicate the long-term preservation of copy products because of the stability of this ore material.

III. THE MODERN ATTRIBUTES OF CHINESE ROCK COLOR

The modern transformation of Chinese society and cultural phenomena should be synchronized. Dr. Zhang Xiaoling, deputy director of the China National Academy of Painting, once said: "The occurrence and growth of Chinese rock paintings are at a strategic opportunity period for the development of Chinese culture .... The emergence of rock color paintings can be regarded as one of the signs of the national Renaissance and one of the ways of the construction of the subject of Chinese contemporary art .... Chinese rock color is a new form of painting with Chinese cultural attributes." With the continuous improvement of national political and economic strength, the self-confidence of national culture will also continue to increase, and Chinese art will play a more independent and important role in the world art stage. As a representative of the oriental color system, rock color will also exude cultural charm with more oriental characteristics. It will develop in parallel with the scientific color system constructed by the West. This is a social need and a need of the times. The 24-color system and 48-color system of Western colors cannot accurately express the aesthetics of colors in the East, and more rich national colors will be replaced. For example, in the red category, people no longer simply divide colors into crimson, scarlet, and pink, but have more rich and specific names: blackish red, purplish red, garnet, cerise, peach and so on. Their specific raw materials are: hematite, cinnabar, red coral, agate, garnet and other natural ore. The colors made with them are not only beautiful and everlasting in color, but also very vivid and popular. China's large and complete traditional five-color system will be more systematically applied to modern public decorative arts. Since then, public decorative design works with more national characteristics and cultural connotations will also be produced.

Modern rock color refers to the medium based on the grinding of natural ore into particles of different thicknesses and blending animal gums. It can be drawn on paper, cloth, board, wall, metal and other materials. It has the aesthetic qualities of material existence and natural quality, and it also embodies the same Eastern philosophy concept of materiality. In neighboring Japan, they made in-depth research and re-creation of this artistic medium with the most oriental cultural attributes. The variety is quite complete, forming a complete system with the most complete varieties and the finest auxiliary materials. In addition to the natural mineral color, they have also developed artificial "new rock" (a high-temperature crystalline glaze), water-dried color (synthetic mineral), and mica color. There are thousands kinds of colors.

In recent years, some Chinese painting materials institutions have in-depth research on the traditional production methods of mineral pigments in ancient China. They have also exchanged and cooperated with Japan to learn the Japanese "rock painting tools" production technology. From Jiangsuxu Hall and Jinbi Building, which only make pigments for traditional Chinese paintings, Tianya Painting Materials, Totem Painting Materials, Jinyuan Sunshine and other professional production institutions have been developed to provide painting materials for Chinese modern rock color creation. The painting materials produced are of good quality and rich in variety. There are also dozens of professional metal foil
manufacturers, mainly in Nanjing, such as red gold foil, cold gold foil, brass foil, copper foil, pure silver foil, aluminum foil, and color foil, which can provide quite comprehensive metal decorative media for painting, craft design and decoration processing. In addition, in the process of Chinese contemporary art practice, contemporary artists represented by Zhu Jin have incorporated the concept of “five colored soil” into the category of rock color, which has greatly expanded the types of rock color soil media. They personally collect various types of colored soils that can be used in the nature, and carry out panning, processing, and classification in the traditional way to produce excellent, subtle and simple and diverse soil media. In this way, with the continuous expansion and improvement of the Chinese rock color media system, it will be fully utilized in the subsequent field of public decorative art design. Modern rock color, with its unique production methods, aesthetic pursuits and form means, will bring new visual impact to the future public decorative arts, and will certainly carry more modern cultural and art attributes.

IV. THE STATUS QUO OF CHINESE ROCK COLOR PUBLIC DECORATIVE ARTS

With the revival of Chinese society, culture and economy, and the continuous improvement of public aesthetics, artists and designers have put forward new requirements for the innovation of public decorative arts’ creative concepts, the diversification of expression forms, and the cross-border research of media materials. The study of cross-border material applications and materials science is a major issue that public decorative art needs to tackle today. Thinking with materials has become a unique concept and method of its artistic creation. Rock color art has emerged in the Chinese art world today due to its immortal material beauty. The gem-like material texture and mottled multi-layer color texture constitute its unique artistic charm. And through the years of creative practice and teaching arrangement of rock color artists, the materials of rock color are more diversified and the expression techniques are more abundant. It can be thickly painted or thinly dyed; it can be figurative or imagery; it can be fine and subtle, or it can be magnificent and hearty. At the same time, it can also be combined with fibers, ceramics, lacquer, and metal crafts in terms of production process and form performance. These qualities are exactly what modern public decorative arts need.

As early as 2000, Professor Hu Wei, the material and performance studio of the Central Academy of Fine Arts, led a team of students to undertake decorative murals in the lobby of the Changfu Palace Hotel in Beijing in the form of rock color. Later, in national large-scale mural exhibitions, there have been some attempts to apply rock color to public mural creation. In 2013, Shaolin Temple actively commissioned the China Academy of Art to create murals for it. Under the leadership of Vice President Wang Zan, he organized more than 20 authoritative experts and graduate students from the Department of Chinese Painting and the Department of Mural Art of the China Academy of Fine Arts. Professor Wang Xiongfei said: "This mural project is an exploration and attempt of traditional Chinese painting materials in contemporary mural creation, and it is also a revival of the traditional mural form after two hundred years of disappearance in modern times. It has epoch-making significance." The murals of "Buddhist Zen Heart" and "Juvenile Spring and Autumn Pictures" representing "Zen Ancestral House" won the gold and silver prizes of the 3rd National Mural Exhibition respectively. The following year, "Buddhist Zen Heart" won the gold award again at the 9th China (Yiwu) Cultural Expo. In 2016, "Hemudu Culture" drawn by the rock color team of the Chinese Academy of Fine Arts was shortlisted for the project of Chinese civilization and history art creation projects. Under the leadership of Professor Hu Mingzhe, the high-level research class of rock paintings of the Central Academy of Fine Arts in 2015 was designed by the Hubei Institute of Fine Arts to design the rock paintings of Wuhan Metro's Julong Avenue Station. The mural has a total length of 60 meters and a height of 3.2 meters. It fully displays the prosperous scene of Panlong City from the aspects of geography, politics, military, art, folklore and other aspects. This is the first attempt to combine rock color material with modern craftsmanship. It appeared in October 2016 and was liked and affirmed by the people of Wuhan. In 2019, the rock color team of the Central Academy of Fine Arts once again worked together to create a series of rock color murals "Acoustic Resonance of Water and Clouds" in the Wuhan Metro Zhiyin Station. The mural is a total length of 60 meters and a height of 3.2 meters. It fully displays the prosperous scene of Panlong City from the aspects of geography, politics, military, art, folklore and other aspects. This is the first attempt to combine rock color material with modern craftsmanship. It appeared in October 2016 and was liked and affirmed by the people of Wuhan. In 2019, the rock color team of the Central Academy of Fine Arts once again worked together to create a series of rock color murals "Acoustic Resonance of Water and Clouds" in the Wuhan Metro Zhiyin Station. The mural is a total length of 60 meters and a height of 3.2 meters. It fully displays the prosperous scene of Panlong City from the aspects of geography, politics, military, art, folklore and other aspects. This is the first attempt to combine rock color material with modern craftsmanship. It appeared in October 2016 and was liked and affirmed by the people of Wuhan. In 2019, the rock color team of the Central Academy of Fine Arts once again worked together to create a series of rock color murals "Acoustic Resonance of Water and Clouds" in the Wuhan Metro Zhiyin Station. The mural is a total length of 60 meters and a height of 3.2 meters. It fully displays the prosperous scene of Panlong City from the aspects of geography, politics, military, art, folklore and other aspects. This is the first attempt to combine rock color material with modern craftsmanship. It appeared in October 2016 and was liked and affirmed by the people of Wuhan. In 2019, the rock color team of the Central Academy of Fine Arts once again worked together to create a series of rock color murals "Acoustic Resonance of Water and Clouds" in the Wuhan Metro Zhiyin Station.
important practical significance for the future development of public decorative arts. Imagining that if the wall paintings of the Capital Airport that smashed the national art world at that time were painted with rock colors, this batch of works will not only be more dazzling in material color, but also make these great works in the history of Chinese public art more immortal.

V. RESERVE FORCE OF CHINA ROCK COLOR PUBLIC DECORATIVE ARTS

"The people are not only the creators of art, but also the consumers of art. Without the popular basis, paintings cannot form a wide range of aesthetic styles and cultural interests, nor can they affect the cultural process of society, let alone contemporaneity.” Therefore, in order to have great public works of decorative art in Yancai, it is necessary to first cultivate talents in this field.

In 2000, Guangzhou Academy of Fine Arts opened a rock color course in the Department of Decorative Arts and Design. Later, a formal rock color laboratory was set up on the new campus. The teaching environment and teaching equipment are very superior, with a total area of 500 square meters. The overall teaching purpose is to train composite professionals with comprehensive material craft creation, design and planning skills in public art and related fields. Professor Wan Xiaoning of Guangdong Academy of Fine Arts said, “The teaching of decorative arts design focuses on the decorative expression of rock paintings. In teaching practice, the use of materials are relatively loose, especially the use of metal foil, because the performance of the language of the material is quite decorative, which is the focus of teaching.” There are as many as 32 sessions of rock color high-level seminars organized by the Ministry of Culture and the Chinese National Culture Promotion Association (later organized by the Rock Art Institute of the Chinese Academy of Fine Arts). Most of the traineees are teachers from major professional institutions in China, especially professional teachers in art design. After returning to their teaching posts, they will inevitably convey the techniques of rock color’s production and oriental color aesthetics to their students. Whether it is a traditional major in decorative art design or a mural art design, or even a modern public art design major and a comprehensive material painting major, they will apply rock color’s knowledge system to their own design creation. This force cannot be underestimated. As this force is more deeply involved in various public decorative art social practice activities, it will certainly form a mainstay in the future Chinese art and design community.

VI. CONCLUSION

As mentioned above, rock color, the oldest “new” art form, has a strong advantage in being applied to modern public decorative arts mainly based on two-dimensional planes, and it has irreplaceable superiority especially in inheriting the art of religious murals. In turn, due to the limitations of the two-dimensional perspective, modern public decorative arts have a strong demand for texture and color performance in order to enhance their expressive power. And rock color art is making up for its description with natural material texture and gem-like bright colors. With the rapid development of modern urban culture, new requirements for rock color’s public decorative arts have also been put forward: first, how to emerge from the traditional mural art of ancient times and find a way to rejuvenate from the Japanese painting system, which has both the characteristics of the Chinese nation and the aesthetics of modern cities; second, how to get rid of the limitations of traditional materials and serve modern outdoor large-scale public arts; and third, how to overcome the inherent situation of the two-dimensional model and try to perfectly integrate with three-dimensional and three-dimensional works.

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