

# Study on the Copying of Kizil Grotto Murals and the Perception of Rock Color Creation

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**Abstract**—Based on the author's on-the-spot investigation of "Kizil Grotto murals" in Xinjiang and the status quo coping of some of the grotto murals, this paper gives a new interpretation of the "bent-ironwire" line drawing art of the Kizil Grotto murals. The author is greatly inspired in rock color creation techniques and much of her reflection on the material expression of grotto murals and rock color creation is triggered off in this process.

**Keywords:** Kizil Grotto murals, copying; bent ironwire, rock color creation

## I. INTRODUCTION

Kizil Grottoes, also known as Kizil Thousand-Buddha Grottoes or Hese'er Grottoes, is located in the valley 9000 meters southeast of Kizil Township in Baicheng County (the ancient state, Qiuci), Xinjiang Uygur Autonomous Region. It is a site of Buddhist art with distinct local characteristics. In June 2013, UNESCO listed the Kizil Grottoes in Baicheng County, Xinjiang as a world cultural heritage site. At this point, the grottoes cultural heritage in Xinjiang appeared for the first time on the world cultural heritage list, at the same level with Dunhuang Mogao Grottoes. As is known to all, the "ancient Silk Road" is a miniature of the cultural and artistic diversity of the ancient east and west. As the cultural and trade center of the Silk Road, the ancient kingdom of Qiuci, located in the traffic throat of the north road of the Silk Road, naturally became fortress of eastern and western cultural transmission.

## II. THE "BENT-IRONWIRE" LINE DRAWING ART OF THE KIZIL GROTTO MURALS

The Kizil Grottoes fresco is a collection of cultural elements from ancient civilizations such as Greece and Rome, Persia, India and China, and is the crystallization of eastern and western culture and art. Although it has been thousands of years since they were created and most are mottled, broken or damaged, they still maintain bright color today, with all their ancient verve which is enough to make a person enchanted.

The Kizil Grottoes mural paintings can be divided into the following themes: jātaka, karma stories, stories of Buddhism, dharma preaching paintings, astronomical maps,

Maitreya preaching paintings and so on. Among them, the subjects are mostly Buddha's life, Buddha's biography and stories of karma, etc., and the pictures are full of life breath of people of all ethnic groups. The lines are vigorous, well-proportioned, meticulous, and very rich in decorative meaning. Among them, the "bent-ironwire" line drawing art is one of the most representative artistic features of Kizil Grotto murals. Appearing repeatedly in the Kizil Grotto murals, this kind of artistic expression form not only plays a certain limitation on the frame of the picture, it also has certain aesthetic value in its own sake. In addition, combined with the expression method of "unevenness-shading" masterly, it produces rich mural effect.

According to the analysis of relevant data, the formation of the "'bent-ironwire'" lines really came from the absorption of the mathurā Buddha statue style in Gupta Period in India. The most typical feature of the mathurā Buddha statue style in Gupta Period in India, known as "buddha in wet cloth", is frock clinging to the body. With parallel U-shaped fine lines, the cloth looks semitransparent, faintly presenting the outline of the whole body. Yet in the Kizil Grotto murals, there is the identical effect in the expression of lines, which are "tight, vigorous and like "bent ironwire".<sup>1</sup> In the image of Buddha, bodhisattva and support monk, one can also see masters' efforts to show the image feature of thinned cloth clinging to the body through the thickening of lines and tight rhythm sense. The fine texture of drapery clings to the ups and downs in the body, making the cloth seem wet and close to skin and the subject like just from a bath. This is very similar to the painting style of "Cao Zhongda-style Garment Lines", with which the painted subject looks like having just got out of water.

## III. THE COPYING OF KIZIL GROTTO MURALS AND THE PERCEPTION OF ROCK COLOR CREATION

### A. A reinterpretation of "lines"

On July 19, 2010 to August 29, the author had the opportunity to participate in the art exploration "Source Tracing in Qiuci — Academic Exchanges of Chinese Rock-

<sup>1</sup> Liu Tao. Discussion on the Related Issues of the "Bent-ironwire" Line Drawing in the Qiuci Grottoes [J]. Journal of the New Academy of Art, 2009, No. 05. Page 56.

color and Heavy-color Painting and Glue Painting on Silk Fabric" organized by the author's instructor, Prof. Zhang Xiaolu, and made field visits to Kizil Grottoes, Simsim Grottoes, Kizilgaha Grottoes, Kumtura Grottoes, etc. in Xinjiang. After paying special attention to the Kizil Grotto murals, thanks to the understanding and support of the leaders of Qiuci research institute, we were able to conduct a one-month on-site copying and current situation research on the local mural paintings in caves No. 186 and No. 189 of the Kizil Grottoes ("Fig. 1"). This experience of investigation and copying made the author greatly inspired in the creation skills of rock painting, which triggered her reflection on the material expression of grotto murals and the creation of rock painting, and she benefited a lot from it. In the status quo copying of the grotto murals, the essence of the traditional murals can be directly absorbed from the aspects of color composition, modeling and texture expression. At the same time, in the process of status quo copying, many technical difficulties emerged. While solving these problems, the author further enriched the expression language of rock painting. They all let me experience the unique charm of contemporary rock color art, such as using the existing techniques to reproduce the mural image broken and using the effect of metal foil oxidation to present rich color changes after historical traces, etc.



Fig. 1. The author in the work site of Kizil Grottoes copying.

Among them, status quo copying has been made to the Cave No. 189 of the Kizil Grottoes (this work is collected by the Qiuci Research Institute in Xinjiang); and the reproduction of Cave No. 186 of the Kizil Grottoes "Śakro devānām indrah and His Families" gave the author a new experience and interpretation of contemporary rock painting ("Fig. 2"). Due to the serious damage to the murals in Cave No.186, there were many scratches on the wall base, which also made the copying difficult. Under the guidance of Prof. Zhang Xiaolu, the author stepped out of the traditional painting form — simple line drawing, and tried to use some contemporary rock color techniques and materials to express this traditional mural with a thousand-year Buddhist spirit. This is also her first attempt to integrate tradition and

modernity, and a baptism that she has experienced in the thinking of rock color creation.



Fig. 2. Copy of the mural in Cave No. 186 of the Kizil Grottoes, "Śakro devānām indrah and His Families".

Of course, at the beginning of copying the murals in the caves No. 186 and No. 189 of Kizil Grottoes, the author was also thinking about the following things. Since it was a copy of the status quo, whether the selection of materials should be consistent with the original mural, including the copy of the original mural wall, substrate, pigment layer, oxidation layer and the most external layer of dust and so on? In addition, in the making process, is it necessary or not to inherit the traditional techniques of classical grotto fresco so as to grasp the nature and characteristics of the fresco materials? In particular, the imitation of effect of color change, color layer shedding and oxidation of metal materials, will endow contemporary rock painting with a unique picture language. In order to make the base material consistent with the original murals, the author used the orthod she collected around the Kizil Grottoes. After elutriation, lixiviation and drying in the sun, combined with the San Qian Ben glue, the mixture was painted on the hemp paper, which was then used as the base layer of the copy. After it got dried, a layer of clam meal was applied. Such base is the same as the white backing material on the wall of the grottoes in nature. In the selection of pigment, according to the relevant data analysis of pigment in Kizil Grottoes, lapis lazuli was used to make blue, azurite to make green, cinnabar to make red, hematite to make brown, and clam meal to make in the place of gypsum, and the adhesion media is San Qian Ben glue, basically consistent with the original mural in terms of material.

In the study of Kizil Grotto murals, the author also found that the tools for outlining in Kizil Grotto murals were

mainly "reed pen" and "brush pen". The "reed pen" was once found in the Kizil Grottoes. Yet some of the lines have subtle changes in shape and are elastic and thus should have been painted with a brush. Throughout the Chinese traditional painting, "line" occupies a very important position. From the beginning of the copying of the mural in Cave No. 186 of the Kizil Grottoes, "Śakro devānām indrah and His Families", the author had been paying great attention to the "bent-ironwire" line drawing of the murals in Kizil Grottoes. Yet in the process of gradual painting attempts, the author started to notice, "Aren't the mottled scratches in the murals a new form of 'line'? How to use different expression techniques and textures to deal with the scratch and "bent-ironwire" line drawing ran through the whole process of her study on the status quo of murals. One pursues the painting rule of "strength should be put force at both the first stroke and its finish, with wrists straighten up; the pneuma should be consistent, and the last stroke should not be giddy". The other presents the freewheeling and new trail-blazing characteristics of the new era. And this change in thinking mode and integration is the challenge facing contemporary rock color painting. Eventually, after much thought, and inspired by the "grooving method" of the Kizil Grotto murals (because in the process of drawing murals, it is easy for thick mineral pigment to cover the images at the bottom, and the use of "grooving method" can affirm and define the image form), the author chose to stack the scratches, with the orthod collected by our own near the Kizil Grottoes as the material. While the process of stacking was boring, the author was full of anticipation for the unpredictable results. After the stacking, the author applied silver foil and aluminum foil on the places to be whitened. While applying the foils, no attention was paid to the presence of scratches, with foils applied in whole piece or randomly. Then a thin layer of clam meal was used to cover the foils, which produced very rich color changes. Where there was aluminum foil, there was cold white, and where there was silver foil, there was warm white, because aluminum foil, compared with silver foil, turns to present cold. And where there is no foil, there is the background color — orthod. At last, with appropriate polish with abrasive paper on the placed being stacked, the scratches appeared naturally, immediately producing a mottled texture. The mint ribbons of the two celestial beings in the painting were polished after applying a layer of Zirconium copper green on the originally white base. This gave me a "surprise" — on the edge of the scratch, in addition to a green edge, the bottom also shows a layer of white edge, creating a rich sense of space, and this subtle change was also recognized by the instructor. This work was finished in this repeated stacking, piling up, polishing, coloring, thin covering and shading. A practice of copying pictures as this was, it befitted the author a lot. In terms of how to reproduce the broken appearance of the murals with the existing techniques, the author holds that it is necessary to break the traditional aesthetic customs and old understanding (including the creation concepts, material consciousness and expression techniques, etc.), and try a variety of materials, techniques with an unconventional thinking, to as to pursue the vividness and change of the painting.

In the process of the status quo copying of the Cave No. 186, the author deeply felt that it was possible for contemporary rock color art to be integrated into the new creative thinking mode, which is exactly in line with the requirements of today's diversified international culture and art era, and is also the purpose of her discussion on Kizil mural materials and techniques.

#### *B. Transforming from control to openness*

The so-called control refers to limiting the feeling and picture firmly in the past experience or the original design without any relaxation. In the practice of copying the Kizil Grotto murals, and in the traditional Chinese concept of meticulous brushwork painting, line is the most important decisive factor, and line modeling is an important means of figure painting modeling. Color is only adjunct or complement to a line. No matter in heavy-color or light-color painting, the painter usually outlines the frame first, and then makes the specific coloring and cover coloring in line with the lines. Line serves as the frame of modeling, also framed all colorific sensibility, randomness and flexibility. The copy work of the Cave No. 186 in front of the author, for example, had been caught in the traditional line frame at the very beginning of copying. People can often hear others saying that "it is really difficult to make a rock color painting". Actually, the so-called "difficulty is no more than the befuddlement at the failure to seek new effect under old concept.

In the practice of copying grotto murals, the rich visual effects of rock color, the uncontrollable characteristics and the long production process often make many effects not clear at a glance, and accidents appear from time to time. At this time, the most important thing to overcome is the psychology. It is necessary to be peaceful when handling all the accidental effects, and only when always holding an attitude of appreciating everything can one make some findings in the painting. So whenever the author is in a damned situation in her rock color painting, she tells herself that this is no more than a discrepancy between the original idea and experience, and maybe it is this kind of "failure that can be transformed to opportunities to be used. At this moment, only when changing the original thinking, giving up the original experience, and accept the new feeling, and adapt to the new material with an open mind, can the creator make everything "easy".

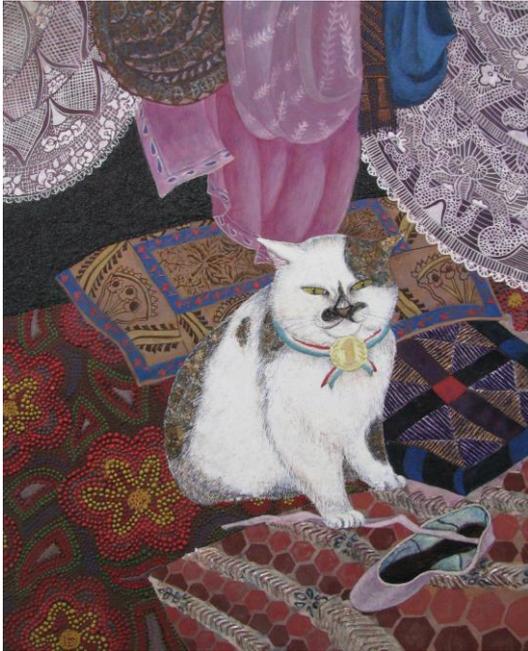


Fig. 3. A work of rock painting, "Nergo · Dream".

In the authors' earlier works, she often felt daunted to use many expression techniques just to "protect" some of the shapes that she thought nice. Although she could feel that the traditional set of framework no longer applied to the needs today, she just felt it hard to break through the original habit. The work "Nergo · Dream" ("Fig. 3") is a turning point of her creating career (this work was selected by the "Source Tracing in Qiuci — Academic Exchanges of Chinese Rock-color and Heavy-color Painting and Glue Painting on Silk Fabric"). The original idea about the white kitten in this work was also to complete it only through simple outlining, drawing and cover coloring. Yet when this was finished, the author found she fail to express the spirit of the kitten — dreaming of becoming a ballet dancer. The kitten was not highlighted while the background got more vivid. There was no solution come up until many days later. The author shifted her thinking pattern. Since there are many foils in the background, like in the blue-purple pillow with a pink border on the right of the kitten and the white stripes in the red-grid carpet, why can't there be any in the spots of the kitten? This can not only echo the image, but also improve its vividness. Therefore, she found some pieces of vulcanized silver foil and selected some brown ones with different hues. Once handled, the picture found the interlocking relationship between images, and the character of the little white kitten got well presented.

The experience from this painting is, when not able to lift from a state of disorder in any way, the creator may find a new harmony to turn the tables by giving up the original ideas and conform to his or her feeling about the picture. The time when the inharmony turns to harmony is when a new sense of beauty is produced. It is this transformation of thinking that makes the author full of expectations and

aspirations in the process of painting and resolutely accept all kinds of challenges.

In short, she treats the studio as a laboratory, a place for visual and technical experiments. The ordinary life, the common utensils, the paper on the drawing board, the tools in hand all makes her feel the pleasure of communication and the pleasure of creating.

#### IV. CONCLUSION

Through the transformation of media and the innovation of techniques, contemporary rock color art contributes to a series of changes in the contemporary Chinese painting: new painting methods, new modeling language, new ways of thinking and new artistic concepts are more suitable for contemporary tastes and aesthetics than ink and wash painting. Therefore, it is not entirely out of nostalgia to re-examine and decipher the formation, evolution and evolution of the artistic language of Kizil Grottoes. On the one hand, it is necessary to be based on the study of traditional Chinese paintings, especially the ancient grotto murals, and get familiar with various materials and techniques of expression through copying. On the other, it is important to learn from others with a humble attitude "how to create rock color paintings out of Buddhist frescoes", which is a diversified art form with national characteristics and inclusive of "different cultures". Clear about this, in the context of international economic integration and cultural and artistic diversification, contemporary rock color painting can certainly meet the needs of the times and show the colorful real life.

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