

# Research on the application of overlapping technique in the relief mural design

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**Abstract.** This paper focus on the artistic expression of overlapping technique in the relief mural design. Starting from the expressive effect, this paper analyzes the decoration and layering, the beauty of movement and rhythm, the aesthetics and style of relief mural through overlapping techniques. Through its special expressive form, relief mural can realize the transformation from plane to three-dimensional mural, and it can get diversified development with the integration with other artistic techniques. And relief mural effectively broadens the creative field of public art.

**Keywords:** Overlapping techniques; Relief mural; Artistic expression; Applicant.

## 1. Introduction

Relief sculpture is a kind of sculpture, while mural is the art on the wall, that is, the painting that people paint directly on the wall. The concept of relief mural belongs to sculpture as well as mural. The difference is the expressive technique. The expressive technique of relief mural is rich, and this paper mainly focuses on the overlapping technique. Different materials and expressive techniques are used to decorate in different conditions. The advantages of the overlapping technique, such as the sense of layering and the beauty of movement and rhythm, make this technique dynamic and youthful so that it can be applied to campus decoration. Overlapping technique is just one of the many techniques of relief mural. This paper will provide the public more knowledge about relief mural.

### 1.1 Background of the selected topic

In primitive society, humans carved various figures on the walls to record things or convey messages, which were the earliest murals. According to historical records, during the period of Emperor Wu of Han, people painted statues of gods in Sweet Spring Palace, and during the period of Emperor Xuan of Han, people painted statues of heroes in Kylin Court, which are also murals. And in today's modern urbanized world, any traditional art form is constantly innovating in the new era, such as color contrast, deconstruction, mixing and matching, etc. The same is true of relief mural, which can also cross the border into relief, oil painting, traditional Chinese painting, fiber, comprehensive materials and other art fields. mural is public art. As a new type of painting in the field of contemporary art, overlapping mural inherits the cultural heritage of traditional mural painting, and skillfully integrates new contemporary factors, developing a unique artistic form of the times. Compared with traditional murals, the function and presentation of murals have a certain modern aesthetic value. Contemporary interactivity and commercial values are integrated into the ornamental and decorative aspects of traditional murals, thus producing a new artistic value and cultural value. Therefore, overlapping technique is applied to present a new form of murals.

### 1.2 Research Significance

Development needs inheritance and promotion. Nowadays, not many people are engaged in relief mural, a traditional industry. In addition to be taught in professional colleges and universities, relief murals are passed on in a way taught by master-apprentice learning. Most people are unfamiliar and curious about this art form of mural. The art of relief mural was originally created to serve the upper class of feudal society, which was rare among ordinary people. Therefore, in ancient times the users of relief murals were the ruling class of feudal society, representing the dignified status and nobility. Nowadays, with the development and progress of society, this traditional art form is no longer the

exclusive enjoyment of the ruling class, but it is closely related to the life of the general public. This art form can be found in both public and private spaces for decoration.

## **2. The artistic expression of overlapping technique in relief mural design**

As the name suggests, relief mural is a visual art between painting and sculpture, and it shows a kind of visual effect with certain thickness and layering. Relief mural presents a structural space that is compressed by space, and various related materials can be used to present different artistic expressions. In the long history of accumulation, its artistic expression forms also presented a variety of features.

The focus of this paper lies in the transformation from flat murals to thick three-dimensional murals, that is, the design effect and artistic style expressed by the overlapping technique. The design effect is produced through overlapping of flat murals to show beauty of decoration and layers. In different overlapping ways, the sense of movement and the beauty of rhythm of murals are created so as to produce the special effect and extraordinary artistic style of relief murals.

### **2.1 The overlapping technique constructs the decorative and layered sense of relief murals**

The flexible use of overlapping techniques can produce different decorative and hierarchical sense. In the design of relief murals, the unique decorative charm will appear if several flat figure with a certain thickness are superimposed.

Generally, the enhancement of layering plays the role of highlighting the main body, making the tableau with primary and secondary relations and spatial hierarchy. And the part with the strongest layering will produce multiple areas with the same height in sight, which mainly gives the tableau a sense of balance and rhythm, and can also produce more than one visual center of the tableau. While, the spatial hierarchy is reflected in different layers of overlay. By means of a certain thickness of scaled sheet superposition, the volume and thickness of the mural can be increased, and different number of superposition will produce different sense of layers. Generally speaking, more attention should be paid to the superposition of the main body, while less to the auxiliary elements or backgrounds. If there are many subject images, it needs to be flexibly determined according to the visual contrast of primary and secondary, so as to enrich the artistic form of relief murals.

Specifically, the use of overlapping technique cannot be separated from the processing of tableau elements and the way of overlapping. Generally, there are two cases, one is the superposition of two or more elements with different levels for tableau elements, the other is the superposition of two or more same elements with the same levels, while superposed with different ways, such as the superposition of central axis, horizontal and vertical superposition, as well as displacement. In short, on the basis of ensuring that overlapping elements can be identified, each element can play a certain role, creating a visual expression that looks complicated and changeable. Even very simple elements or the same elements can enrich people's visual perception by overlapping. The more layers are superimposed, the stronger the sense of thickness is, and vice versa. In a word, the change of thickness can produce different volume and spatial layering. Therefore, the change of vision should be judged based on the space position and area of the elements.

The decorative and layered sense of overlapping technique can reflect the strong and weak changes through various materials and ways. For example, Spanish artists used overlapping techniques to weave paintings of silk fabrics (Figure 1); In the contemporary era, the most popular is to use diatom mud to create relief murals, also known as "scraping putty". Through the accumulation of layers, murals have a three-dimensional sense both in vision and in real touch. (Figure 2)



**Figure 1.** Weaving paintings



**Figure 2.** "Scraping putty"

## **2.2 The overlapping technique creates a sense of movement and rhythmic beauty of relief murals**

The repeated beauty produced by overlapping technique can often produce dynamic effect in visual. In the process of overlapping, many design works will be influenced by visual elements. In this case, it is necessary to master the most basic skills or special techniques in order to realize creative ideas. On the premise of not changing the overall layout, the overlapping technique is used appropriately according to the theme content to form a sense of movement and rhythm, which are reflected scaling in terms of direction and size, from large to small, from right to left or overlapping with other elements. While accurately transmitting the content information, this can present a richer visual picture. Even the same visual elements or the same type of visual elements can show a different visual effect, with the emphasis on the changes after overlapping.

For example, some abstract figures and some moving curves and straight lines in the mural work Bent Shape-shifter are enlarged or reduced by overlapping to reflect the sense of movement and the beauty of rhythm. When the curves are overlapped from right to left, it will form the visual effect that the curves move towards to right; when the human figures in the middle are overlapped upward from the middle, it will form the visual effect that people move forward. As shown in Figure (Figure 3):



**Figure 3.** Dynamic visual effects

### 2.3 The overlapping technique creates aesthetic and stylistic features of relief murals

The content of art works must be presented by means of certain tools and materials and certain ways of expression, so as to become art works that can be appreciated by people. Each art form has its own special way of presentation, its own characteristics and features, so art forms vary, as do the meanings and styles of artistic expression. The overlapping technique is the theme of this study. By means of overlapping technique, the similar shapes are repeatedly overlapped to add the layers, showing a special effect. Different light and shadow effects are reflected by overlapping directions. For example, the largest similar shape is the bottom, the smaller similar shapes are gradually superimposed upwards, forming the highest in the middle. Or from right to left, layer by layer, superimposition are reduced or enlarged, forming the rhythmic beauty of the water ripple shape, transforming the plane form into the three-dimensional dynamic relief mural form so as to form a unique dynamic effect.

Murals can also combine the concave-convex technique of relief, that is, the concave-convex surface formed by hollowing out. The hollow concave surface and the overlapping convex surface form a prominent contrast, which enhances the tableau effect and shows a unique style. The bottom of the mural is made of quartz sand with rough texture in the hollowed-out concave surface, which makes it thicker and more textured, and also enhances the overlapping and ups and downs of the tableau, forming a special effect and unique style of this work.

### 3. Summary

Among the various production techniques of relief murals, the expression techniques that this paper focuses on are overlapping and concave-convex hollowing out. However, no matter which technique is used, it is appropriate as long as it can express the author's thoughts, achieve rich visual effects and give viewers a certain visual impact. Nowadays, with the increasingly developed modern science and technology, people can use more new techniques to show a relief mural work. For example, the latest 3D printing technology can realize pure machine carving, with fine details. Despite the progress of science and technology, to some extent, hand-made works are superior to machines. The application of overlapping techniques in relief murals is not rare. In the future creation, we can apply the sound and photoelectric technology of the new era to enrich the picture. In the future, the new era of sound and photoelectric technology can be used during the creation to enrich the tableau.

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