A Study on the Development of the Metal Mural

JING Gang[a],*

[a] College of Horticulture and Landscape Architecture, Southwest University, Chongqing, China.  
*Corresponding author.

Supported by the Fundamental Research Funds for the Central Universities "the Research Project Research on the Modality of the Metal Mural" (XDJK2013C074).

Received 5 September 2015; accepted 11 November 2015  
Published online 26 December 2015

Abstract
With the progress of human civilization, the appearance and development of the metal mural have provided people with dissimilar aesthetic perceptions and played diverse roles in different historical periods. And the application of different metallic materials in designing and producing murals has extended people’s perceptions in production and living, enriched the modeling language and manifestations of murals, and put forward higher demands for the exploration and promotion of new technique and technology. While beautifying the environment, the metal mural also enhances the artistic value of its own and the practical significance of metals. Starting with elaborating the origin of the metal mural, this paper discusses its development situation and current problems, and then advances some views on its advancement and innovation.

Key words: The metal mural; Development; Present situation study

INTRODUCTION
Using materials with different attributes into the design of murals makes materials no longer only a role of the media, but an organism with extraordinary activity. Especially the utilization of attributive characteristics of different materials into the process of creation has had a profound influence on the development of murals both from the aspect of manifestation mode and that of the creative concept. The metal mural is an important expressive form of the relief mural. With the advent of metallic materials and the advancement of processing technology, the metal mural has kept on developing. Whether in the past or at present, the visual and aesthetic perceptions that the metal mural has provided are of great significance. In a sense, the development history of the metal mural has witnessed the development process of metallic materials, since metallic materials are not only a carrier of the manifestation of the metal mural, but also a tool and an expressional language for presenting it. Moreover, the diverse manifestations and visual effects the metal mural has presented are attributed to a variety of metallic materials with the respective attributes that can only be processed by certain technology. Creating according to the attributes of materials has become a significant feature of the metal mural that makes it distinct from other forms of art.

1. THE ORIGIN OF THE METAL MURAL
As is well known, the origin of painting can be dated back to the ancient Stone Age when our ancestors kept records by carving things on stones. As a form of painting, the mural grew up along with the rise of the tradition of portraying totems and icons on the walls in temples and coffin chambers in the slave society. However, the mural had not become an independent form of painting until entering the period of feudal society when a large number of diverse patterns and images appeared on various containers and architectural ornament in palaces. With the continuous development of human civilization, the two-dimensional painting had failed to meet the aesthetic
needs of the public, hence the revolution of art from two dimensions to three dimensions had started. The relief, as a form of semi-two-dimensional art, came into being then at the right moment. We can regard murals as the basis of the creation of reliefs, or in reverse, we can define reliefs as a form of the artistic expression of murals. They are two forms of art with much reciprocity between each other: the perceptions of two-dimensional murals built on the optical illusions could be transformed into that of three-dimensional reliefs, and the three-dimensional models and shapes of reliefs could also appear skillfully and vividly on the print media through two-dimensional murals and provide people with endless imagination. As a concrete manifestation of the material using of murals, the metal mural is not only an expansion on the application of metallic material, but also give the manifestation mode of murals in boundless space for its further development.

According to related materials and archaeological studies, the use of metallic materials in Chinese murals generates from the gilding technique applied, though with a small amount of metal then, in the Dunhuang frescoes made in Northern Wei Dynasty. As to the Dunhuang frescoes made in Tang Dynasty, it can be found that metallic materials had been used on a large scale (Chu, 2003). Thus, it indicates that the metal mural did not come into being overnight. Although metallic materials have long been regarded as an expressional language of murals, metal murals produced then, confined by the limited technology and the monotonous processing method at that time, are mainly made of gold leaves, bronze and iron, which makes the metal mural a relatively luxurious cultural product in the slave society and the feudal society with underdeveloped technology and repressed culture pattern, untouchable for ordinary people. Therefore, it has been doomed that the metal mural would be difficult to promote over large areas and at large scales in such a social environment at that time.

Up to the present, the materials we are talking about for using metallic materials into murals’ creation mostly refer to the generic term of metals and alloy materials. And the main manifestations of the material quality of the metal mural is that: almost all metallic materials are solid with lattice structure and high ductility, good conductors of heat, and of a surface with metal-specific color and luster, and their metallic performances could be changed through being made into metallic compounds or being combined with other non-metallic materials to form alloy. Except precious metals, the chemical properties of all metals are relatively active, which are readily oxidized to rust and led to corrosion (Li, 2007). Meanwhile, since most metallic materials are of high ductility and high pliability, which are easy to stretch, flatten, bend, or twist, but not easily cracked, we have identified that most of the metal material are of high plasticity and relatively suitable for applying into murals’ production.

2. THE DEVELOPMENT SITUATION OF THE METAL MURAL

A significant symbol of Italian Renaissance started in the middle of the 14th century is its contribution to the promotion of aesthetic. Through the baptism of Renaissance, people’s living style and aesthetic consciousness had been profoundly influenced by the dramatic growth in architecture, painting, sculpture, music and poetry. Moreover, science and technology had advanced by leaps and bounds during the Industrial Revolution in the 18th century when various new materials, especially metal materials, had appeared and been widely applied in industrial production, which had provided a boost for the metal mural, as a form of art, to enter people’s production and living in a variety of patterns. The Cubism Movement in art circles beginning at the end of the 19th century has exerted profound influences on artistic creation, and still is influencing it today. Modern metal mural also succeeded over the prevailing of Cubism. Especially the continuous innovation, development and wide application of technology and new materials over the last one hundred years have infused new vitality into the artistic language inherited and carried forward since thousands of years ago. The changes of living style brought about by technology, the profound changes of ethos led by culture, and the continuous influences on cognition exerted by concepts have determined that the role of materials in artistic creation should no longer appear as a simple carrier of the content, but an organism with extraordinary activity, which could even participate in creation with its own uniqueness. This has had a profound impact on the creation of murals, both expressive methods and creative concepts. Modern metal mural almost has subverted the modeling language and presentation techniques used in traditional mural art, and gradually formed a combination of sculpture and other metal technology, such as casting, forging. To put it more precisely, modern metal mural has formed its own unique styling language and decorative language, has developed into an independent art form of space expression.

From the 18th century to the mid-20th century, China had undergone the baptism of the transformation from a feudal society to a semi-colonial society, and then a socialist society. During this period, the metal mural, though had gained little advancement in folk, had obtained a lot from the economic trade and cultural communication between the Chinese government and European countries. Therefore, it can be found that in the ornament of palace architecture in Qing Dynasty, such as on furniture, walls, and dragon columns, a large quantity of metallic materials have been used for their dignified and graceful visual effects. After the Third Plenary Session of the 11th Central Committee of the Communist Party of China, the economy of China had made a lot of development, and accordingly the living standards of the Chinese people had
been significantly improved. In 1979, new artistic works, represented by the large mural group in Beijing Capital International Airport, emerged, indicating that the artistic creation in China was ushering in another spring. And in the eyes of people today, the emergence of those works is still the epoch-making significance.

From ancient to modern times, the transformation of the metal mural comes down to the use of materials. In the past, metallic materials were simply attached to the reproduction of the content of murals. As it has developed, nowadays metallic materials are the practice for highlighting the structure and figure, image design and material attributes. As for modern metal murals, the main consideration of the material using focused on the proper application of texture, attribute, color and luster, as well as the varied relations of artistic vision and spatial organization (Wang, 2004). And in recent several National Exhibition of Fine Arts, the use of new metallic materials can be found in most selected mural works. And the wrought copper mural—The Grand Three Gorges, created by Chinese artist Liu Shuguang and now located in the new building of the Chongqing Municipal Committee of Chinese people’s Political Consultative Conference—is one of the finest examples of the combination of metallic materials and the mural art.

With the advancement of technology and the continuous improvement of living standards, people’s requirements on dwelling environment have been further promoted. The metal mural attached to spatial environment has not only to adjust itself to the ever-changing diversified environment, but also has to cater to the developing general attributes of modern architecture, especially for the exterior, of which the building materials are of innumerable varieties, sizes, colors, etc., and the new characteristics of the surrounding materials, such as light weight, high intensity and highly decorative. All of these factors have decided the closely-connected and mutually-effected relations between the design and production of the metal mural and environmental space. In the actual process of designing and producing, the content design of the metal mural is strongly linked with the comprehensive application of materials, hence understanding and interpreting materials become the entry point into designing and producing metal murals.

3. CURRENT PROBLEMS OF THE METAL MURAL

The creation of modern metal mural focuses more on the beauty of materials themselves, and endows them with certain aesthetic significance, so as to realize the appeal and expressiveness of the creation. Part of creators ignores the influences the content of creation has exerted on the ambiance and aesthetic appreciation, blindly pursuing the high-end, groovy, and striking visual effects in using material. And that is where a misunderstanding lies in the creation of the metal mural. Affected by the present social environment, the metal mural which is widely considered to have bright prospects is also faced with many problems. Firstly, compared with other art categories, the size and scale of the metal mural are usually larger, so it accordingly has higher demand for the space and environment. And the metal mural usually makes public appearances in the form of public art, hence the work presented should meet the general aesthetic needs of the mass. In fact, it is too difficult for a mural work to meet the universal aesthetic requirement in a society which is currently in a phase of social transformation and has diverse cultural levels and aesthetic consciousness among people. Secondly, another obstacle limiting the development of the metal mural is creators’ timeworn thoughts and lack of innovative awareness. If the creator only confine himself stubbornly to the stale creating technique and aesthetic thought, rather than free himself sufficiently from old ideas and seeks to innovate, he/she can never produce a representative masterpiece. Thirdly, the particularity of materials of the metal mural has decided that its cost of creating is far more expensive than that of other art forms, which in turn have weakened the motivation of creators. For those creators, using familiar traditional materials means that they could have a clear idea of the final effects of processing, whereas using unfamiliar new materials means that they may confront more uncontrollability during the process of producing. The big risk and high cost make creators do not dare to easily start producing a metal mural. Fourthly, the creation itself is also influenced by sponsors’ wills, most of which are to chime in with a certain topic or subject. Once those wills dominate the original intention of the creating group, all the works produced by the group will become monotonous and lose their appreciating value and symbolic significance as artworks. Fifthly, in pursuit of pure maximal profits, some creators do not hold an upright attitude towards creation from the very beginning. Resorting to insincere means as imitation and plagiarism, the works of those creators are certain to be lack of artistic vitality and appeal.

4. FURTHER EXPLORATION ON THE DEVELOPMENT OF THE METAL MURAL

The creation process of the metal mural has to take the environmental constraint on its modality into consideration. As a kind of public art, the metal mural has to be linked up with environment effectively. Hence the creation process of the metal mural is not only a continuous process of condensing the design intention, but also a process of interpreting the space environment in the process of selecting materials and implementing the creation. Facing a particular setting environment,
designers should make their design ideas both in harmony with the environment, vividly and specifically presenting elements of the space environment, and fit in with the humanistic feelings of the building elevation, expressing certain design thoughts with different composition forms.

Different materials with different quality have endowed the metal mural itself with different social attributes and aesthetic values, and different processing techniques and technology have provided a precondition for the full play of the different senses of beauty. The process of producing also become the fusion process of artists and materials’ quality, during which the emotion, talent and skill of creators are able to be brought into full play and eventually give birth to artworks with not only unique artistic value of metal materials but also distinguished personal style. Of particular importance is to regard the charm of material quality as an essential condition for forming creators’ unique work style, and further giving a boost to promote and sublimate the value and meaning in materials themselves.

The success of a metal mural depends on whether the creator can precisely master and utilize the materials. In the actual process of designing and producing, recognizing and understanding the attributes, decorative properties and fundamental feature of materials have a direct influence on the final effects of processing. During the course of creating a metal mural, different properties of metallic materials, such as gold, silver, bronze, iron, combined with different creating technique of creators with different style and personality, can present diverse texture, attribute, color and luster on the final product (Li, 2007). Meanwhile, in the process of creating and producing, the varied relations of space volume and spatial organization, constructed by the position of figures and the shape of contours, make creators, while getting to know more about metallic materials, improve their design thinking on metallic materials, which in turn could provide a real boost to the application of metallic materials into the creation of metal murals and further to promote the development of the metal murals, instead of just be more familiar with the attributes and producing technique of this kind of materials.

CONCLUSION

In summary, metallic materials with different attributes present people with different visual perceptions, and different kinds of processing technology suitable for different metallic materials are of their unique language forms. So the in-depth exploration and innovation of the attributes and aesthetic perceptions of metals can help expand creators’ thoughts on the metal mural. In the creation of metal murals, taking the harmonious relations between works and their surroundings into consideration is of the same importance as considering the harmony and unity between shapes and materials. At present, the metal mural has no longer been limited to traditional materials and craftsmanship, but developed into the reformation of a variety of material art and building environment. Existing as a kind of public art, the metal mural has to meet the demand for the harmonious development of the social productive forces and productive relations. It is necessary for creators to possess the spirit of advancing with time and be bold in innovation, otherwise they would be faced with the risk of being eliminated by the era and by the society. Thus, this requires creators to cast aside the extrinsic elements’ influences on the basic ethics of artistic creation and carry out meticulous investigation and surveys from all sorts of different aspects in the entire work of designing and producing metal murals, so as to realize the using functions of metal murals and their materials and further to make the mural adapted with the aesthetic needs on them. Only in this way could creators present works with unique attraction that could not only create a harmonious aesthetic atmosphere to promote the cultural value around them, but also facilitate the continuous development of the metal mural, give a full play to its marvelous artistic charm.

REFERENCES