

# Proceedings of the 2nd International Conference on Language, Art and Cultural Exchange (ICLACE 2021)

# Mural Art in the Context of New Media: A New "Crossover" of Mural Art Driven by Artificial Intelligence

Shengju Li<sup>1</sup>, Zhenzhu Wang<sup>1,\*</sup>

<sup>1</sup>Shanghai university, Shanghai, China

\*Corresponding author. Email: 1603175449@qq.com

#### **ABSTRACT**

Abstract: At present, the development of artificial intelligence technology has entered a new stage and become a hot topic of concern. In the field of design, the participation of artificial intelligence reconstructs many aspects of the design process, from computer-aided design to changes in the combination of computation and design depth, design problems oriented to complex agents and human-machine intelligence deep collaboration in the design process. These changes and problems generate new demands for intelligence. It also gives birth to a lot of new theories, new models, new products, new methods and new forms of business, leading to the reform of design thinking and method system. Subsequently, mural art takes the express train of artificial intelligence technology development, and collides with it to produce many new sparks -- new media mural art. In the context of the new media, the development and application of computer technology make the artists can use when writing means more rich, but because of various art styles between close to blend with each other, and on the creative consciousness and creative ideas can begin to learn from other art forms in the relevant approach and creation grammar to enrich the mural creation process and techniques.

**Keywords:** new media, Murals, Computer technology

## 1. NEW CONCEPT OF MURAL ART IN THE CONTEXT OF NEW MEDIA

Mural painting, as the name implies, is the combination of "wall" and "painting", namely on the wall through painting or craft means to complete the painting. The mural mainly refers to the painting that decorates the building wall surface, namely the painting, sculpture and other modeling techniques or technological means, the painting that is made on the natural or artificial wall surface, is divided into indoor mural and outdoor mural. Generally speaking, the traditional mural refers to a static, two-dimensional painting form that is directly painted on the wall. It is combined with architecture and technology, and is expressed on the carrier of architecture in a realistic, concrete, abstract, symbolic and allegorical form. With spiritual function and material function that is through the building itself to proclaim a spiritual consciousness to people with the building's soil surface to form an art form of environmental space.

Compared with traditional mural paintings, the prominent feature of modern mural art in the context of

new media is the use of modern digital technology to create video art, digital art and interactive art. It can be seen that the development of murals and the progress of science and technology are closely linked. Among them, the technological revolution and the popularization of new media promote the gushing out of various contemporary art trends, and the art categories with technical characteristics as an important factor have produced unprecedented artistic effects. Nowadays, with the effective application of the Internet and digital technology, the addition of programming system decoration, interactive technology of 3D projection, light painting and other media, the medium of murals has been expanded. [1]





Figure 1 Naked eye 3D projection digital technology mural, South Korea



Figure 2 The Guanyin Bridge in Chongqing ,China

From the point of view of the media of mural painting, after absorbing the characteristics of other disciplines, it is more diversified and tends to be integrated in the development. Such as South Korea's LG electronics manufacturers in January 2014, shows a building wall projection (as shown in figure 1), the use of the open hole 3 d projection digital technology, the entire building's exterior wall as image depends on the carrier, clinical release stunning murals feast, changeable light animation effects in combination with building a carrier, makes people in the process of our appreciation of the senses in

fault, Bring people to shock the audio-visual enjoyment.Recently, a 3D spaceship displayed on an LED screen at The Guanyin Bridge in Chongqing (as shown in figure 2),China, has become a hit on WeChat, with viewers calling it "cool". The spaceship on the screen is shown in 3D, which is very realistic. The expression of such new media art shows the artistic quality of individuality, interaction, interest, publicity and cultural connotation. The broad concept of mural painting has gradually shifted from "two-dimensional and static painting" to multiple forms, such as three-dimensional and dynamic. The "integration" of murals is not only a form of materials, but also a synthesis of technology and skills. The application and reception range of the media materials of murals has been extended to "infinite".

## 2. THE NEW FEATURES OF MURAL ART IN THE CONTEXT OF NEW MEDIA

## 2.1Diversity

In the context of new media, the diversity of mural art is mainly reflected in the diversity of media means, artistic style and production means.

Way in media, new media of the development of digital technology for the mural art express offers a variety of forms of media, the mural works is reflected in the actual wall only no longer, can through the computer 3 d control system as well as projection technology and arbitrary dropping the body above the surface of a, and the traditional murals can be only use pen, paint to hand paint on the wall.

In terms of artistic style, different historical periods, different regional cultures, different materials and crafts, and different space requirements make the modern mural art inevitably present a variety of styles and features. The constant change of modern living environment, the increasing enrichment of human culture, and people's pursuit of spiritual life will surely give birth to more and more novel mural art forms.

In terms of the means of making, the means of making murals can include drawing, carving, inlaying, welding, weaving and so on. On the basis of inheriting the traditional material technology, the modern fresco has been constantly exploring and practicing the emerging new media and new technology. For example, projection, device, digital chip programming control and so on digital methods. [2]

## 2.2 Openness and sharing

Openness is the basic characteristics of new media art, the basic characteristics, make up the openness of the context of the new media modern mural art, also means the mural art itself because of the cultural philosophy is open, aesthetic activity is open, creative process is open,



and, more importantly values must also be open. This openness is directly reflected in many aspects, including the mural works can include film, television, painting, sculpture, drama, music, poetry, dance, as well as the creator and the co-existence space between creator and digital media. Therefore, the new artistic form under the open concept is inevitably the result of the integration of multi-cultures, and only with the integration of various cultures as the starting point can it be presented as a new style different from the past.

The open cultural concept refers to the cultural concept conveyed by a mural work "different people have different opinions, and different people have different cultural concepts for the same work, and the conveyed spirit brings different meanings to each person.

Open aesthetic activity means that the aesthetic activity of mural art is open under the premise of new media art. In the process of mural creation, it should not only belong to or be re-defined. In the aesthetic vision of some people, the aesthetic space that new media can expand is undoubtedly more open than that of traditional media.

With the open creation process, in the creation process of murals, artists can not only modify their works themselves, but also have the right to participate in, modify and improve their works by means of the network platform. Artist issued after the work, the work is not only used to watch, but another beginning, the viewer is not only to simple comment on the surface of the work, and it allows the recipient to participate in interventional work content and even allows you to add or change the environment, and it's worth noting that these participants joined the subjective opinion of version can be regarded as a new work. In this case, the open art creation process is not limited to the cooperation of members in the traditional art creation process, but more lies in the infinite derivative ability contained in each work. The modern mural with full derivative ability will certainly show a new look of modern mural art with the intervention of new media technology. Only in this way can the modern mural art creation truly realize the integration between the creation of beauty and the examination of beauty, thus bridging the gap between the creation subject and the aesthetic subject.[3]

The realization of openness also reflects the sharing of mural art in the context of new media. Artists and viewers can create works at the same time. Through the platform of new media, the sharing of the creation process is realized, and the works can be copied and modified indefinitely.

### 2.3 Flexibility

New digital media technology for the mural creation brought greater flexibility, no matter what kind of art performance to the restriction of the media material, but in the new media as materials and basic language form, not only can show the existing existing in the material world, and to explore some virtual did not exist in the material world, It can satisfy the desire of freedom of artistic expression to the greatest extent. However, it needs to be made clear that digital technology, as a tool that can be used freely and flexibly in many forms of art, can only become an art when its flexibility rises to the freedom of the rational level of art, and the possibility of becoming an art will not become a fantasy.

New media of this flexibility also embodies a kind of humanism, the Internet as a platform for people to break the boundaries of time and space, regardless of time and place of flexible display works, and communication, communication, people are free to play in this area, and creation, people's thought also fully enjoy the "democracy", "humanism" in this fully reflected, It is also an inevitable trend that new media technology is injected into mural creation[4]

# 3. REFLECTIONS ON THE CREATION OF MURALS GIVEN BY NEW MEDIA

Nowadays, new media technology has enhanced the publicity, virtuality and man-machine interaction of murals. The "interaction" of murals can be changed from static, one-way and passive behavior to active, active and two-way behavior. In the era of artificial intelligence, the interaction between the public and the mural works expands the participation of the public, which is a new opportunity brought by the intervention of new media. New media provides new space for mural painting, which makes mural creators need to have keen insight to feel the current society, life, concept, technology dynamics, and respond to the diversified development of the market.

The author believes that as a public art mural, to coordinate People's Daily living environment from a human perspective is the way to realize the artistic value of the mural. While providing convenient public service facilities for people's life, urban development also highlights the problems of human and social space, such as population plot ratio, crowded buildings, urban traffic and so on. On the premise of not transforming social space, improving the relationship between human and space through mural service, realizing the optimization of public space, and coordinating and improving the relationship between human and space are exactly the ultimate purpose of the author's discussion on the application of new media mural. [5]

#### 4. CONCLUSION AND PROSPECT

New media mural is a new form of artistic expression based on the rapid development of digital information technology such as human-computer interaction technology and virtual technology. Its works are the perfect combination of science and technology with the



duality of art and technology at the same time. But at present, the research on new media murals at home and abroad is relatively rare, especially the research on the rules and characteristics of new media murals is relatively few, the relevant information, books and plaques are scarce, and these rules and characteristics are exactly what fish need us to summarize and summarize. Because only by summarizing the rules and characteristics of new media murals can we better guide its creation. At the same time, with the rapid development of information technology, the superiority of digital technology has not been fully excavated so far. The perfect combination of pure artistic beauty and technology will make the performance range of art on the wall broader, richer and more contemporary.

Innovation is the soul of a nation's progress. The innovation of art works not only requires new thinking and new perspectives, but also needs to break the traditional thinking set and visual habits. The development of mural painting has reached an unprecedentingly difficult situation. How to ensure the innovation of modern mural painting art design under the condition of integrating the elements of The Times in a large area is an important subject facing the mural designer. Schumpeter believed that technological innovation is to introduce an unprecedented "new combination" of production factors into the production system, which includes introducing new products and introducing new technologies. Therefore, the innovation of art works on the wall is bound to be inseparable from strong technical support. New media technology in terms of involvement with the creation of painting works, on one hand we should see the new technology, new media, new tool of intervention for the creation of the mural works has brought unprecedented opportunities, but also to the murals workers has brought more challenges, comprehensive and in-depth thinking and research the opportunities and challenges to the development of mural enormous power.

#### REFERENCES

- [1] Xiaoyuan Long. Digital art. Beijing: Peking University Press [J]. 2001
- [2] Qiong Wu. Innovative design thinking in the era of artificial intelligence [J]. Decoration,2019(11):18-21.
- [3] Jun Lai, Xiaowang Su. Explorating the "trend" of digital future -- taking the development of new media murals as an example [J]. Art Education, 2016(02):258.
- [4] Zhou Lu. New Trend of Wall Art -3D Digital Mural Research [D]. Southwest University,2010.

[5] Jianhan Zhou. Reflection on Artitic Creation in the Age of Artificial Intelligence [J]. Modern and Ancient Cultural Creation, 2020(35):44-45.