Research on Virtual Image Technology in Landscape Sculpture

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Abstract: The virtual image uses its digital technology to intervene in the real field. Due to its characteristics of virtuality, space-time, conceptuality, freedom, and cross-border nature, the multiple construction methods make the artistic creation space more abundant expression possibilities. This is not only a continuous exploration and extension of the boundaries of sculpture, but also an artist's tribute to the times. Hegel believes that "the way of thinking is influenced by the advancing traditional trends of thought and the material conditions of the time." Then I think we might as well regard virtual images as the materials given to us by the times, which reflect the times because they are born in time. The certain nature of the characteristics not only contains the algorithms that can be achieved by modern technology and computer technology, but also implies the concept of the fusion in the torrent of the times. Landscape sculpture is a physical space with material substance, multidimensionality, touch and accessibility, and interaction with people, combined with virtual images as a virtual medium with diverse expression methods and great creative space, the two intervene in each other The art form can bring people a full range of feelings-visual, auditory, tactile, multi-constructed sense of time, space, etc., so that people can break away from the state of being invisible enslaved by the online landscape to think and re-draw modern people. Distance from real life. The locality of the landscape sculpture itself also achieves the artist's purpose of intervening in the environment to communicate with the audience, opening a dialogue space for the unconscious group that exists in the landscape society.

1. Introduction

In the 1960s, the era of Western capitalist consumption came, and the proletariat gradually transformed into a middle class and occupied the mainstream of society. When material life was greatly enriched and spiritual entertainment was fully satisfied, people's ways to understand the real world were obscured. Was built. "Landscape, originally meant to be a visual and objective scenery and scene to be displayed, but also means a subjective and conscious performance and show. Debord used it to summarize the new characteristics of contemporary capitalist society he saw. The dominant nature of contemporary social existence is mainly embodied in a kind of displayed vision." In Debord's theory, this social mode of enslaving people in the invisible is undoubtedly a cover for the true existence of society. As Debord said: "Today, images have become a material force in social life. Like economic and political forces, contemporary visual culture is no longer seen as merely reflecting and communicating the world we live in. He also In creating this world. "People seem to have reached a consensus in creating landscapes and consuming landscapes, and regard the covering of the real scenery as a stage for the meaning of life. Commodities, as a tool for capitalists to exploit the surplus value of laborers, have been greatly utilized in the spectacle society and multiplied indefinitely. In the early stage of capital society, the proletariat was only the object of squeezed surplus value, and there was no quality of life outside of work. Not to mention the right to freely choose goods. With the increasing economic development and the improvement of living conditions, coupled with the increasing growth of labor unions, the proletariat has gradually awakened, giving birth to a new type of capital game-laborers seem to have the identity of

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consumers and have full freedom to choose materials. In essence, it is still the object of consumption, just changed to a less naked model, and the surplus value is fully squeezed out of unconsciousness, even including their own leisure time outside of production. People's value is here. Time is to realize the production-consumption cycle of the landscape society. The controller behind creates such a scene to manipulate the public, but people are accustomed to it, numb and repetitive, sinking and even contented. Looking around, almost all the situations in every corner of life have been carefully sketched and designed.

2. The Artistic Expression Characteristics of Virtual Images

"Digital technology can be integrated into almost all new media art today, and digital technology has endless possibilities for graphics processing." Any visual image formed in the human brain can be generated by a computer to generate binary codes and be integrated, edited, and reorganized., Which constitutes the material created by the artist. In contemporary society, due to the digital nature of information, the artistic thinking mode and exploration methods have undergone tremendous changes. When combined with digital technology, an information medium with infinite development space, the burst of creativity is immeasurable. Digital art is an art form with virtual characteristics. At this point, it expands the single operation mode and operation process of physical art into multiple constructive art creation processes. Through digital editing, artists can try a variety of expression effects that are difficult to achieve with physical art, thereby constructing an art form beyond the existing language model of physical art, such as Ann Jenkins' projection installation work "Untitled" in 1996. The projection of the blade across the palm of the hand and leaving blood on the hand; American media and performance artist Robert Whiteman projected the image onto the daily necessities, for example, in his 1996 work "Low Tide", the red image Projected onto the bathtub water surface, the bathtub looks as if it is filled with blood. A woman climbs into the bathtub, and the blood fades on her body until it becomes menstrual; Paul Sermon (1994) In the "Telematic dreaming" series exhibited on-site at "Ik+de Ander" in Amsterdam, Netherlands, the artist uses a video camera to project an image of a person lying on a bed onto a double bed, and then uses a second video camera to put the The video projection of one person and the video of the second person lying on the same bed are captured and transmitted to the monitor beside the bed for real-time playback. The aim is to replace the sense of touch with the sense of sight, and use the virtual characteristics of the image to bring substantial Sensory experience.

3. Reasons and Status Quo of the Involvement of Virtual Images in Landscape Sculpture

In contemporary sculpture space, the attempt to combine sculpture and image in addition to borrowing images to supplement and expand the entity of sculpture, such as using the sculpture as a curtain to give the sculpture greater expressive power in the way of projection, or embedding the image in a certain part of the sculpture To make it related to sculpture, there are some new attempts accompanied by modern technology, such as 3D modeling to reproduce virtual space in real space, or use AR (Augmented Reality), VR (Virtual Reality) (Reality) operation to insert virtual space into real space to construct a real space with multiple appeal and interactivity, simulate real scenes with virtual space and even construct unreal scenes that can give people a super-real experience, in order to break through and expand the sculpture Restrictions on expression in space and time. The above attempts are not only the continuous exploration and extension of the boundaries of sculpture, but also the artist's tribute to the times. The reconstruction and combination of cross-border elements such as sculpture, installation, video, sound, light and shadow, coupled with the exponentially increasing speed of media and technical means, have all become the source of materials and help for artists in their creation. Hegel believes that "the way of thinking is influenced by the advancing traditional trends of thought and the material conditions of the time." Then I think virtual images can be regarded as materials given to us by the times, just like mud and paint in ancient times, virtual images It is born in time, so it reflects a certain nature of the characteristics of the times, including algorithms that can be achieved by modern technology and computer technology, and it also implies the concept of mixing in the torrent of the times. From this point of view, the use of virtual images for artistic creation and sculpture creation is more expressive and logical and persuasive. As a material space that can interact with humans, landscape sculpture is undoubtedly a good medicine for inviting people to transcend existing lifestyles and viewing methods. The physical substance, multidimensionality, touch and accessibility of landscapes, combined with The narrative authenticity of the depiction of real objects in the virtual image and the reconstruction and transcendence of the artist's personal subjective world imagination enable the artist to produce an artistic effect that completely transcends its simple superposition in the process of comprehensive use of multiple elements. The virtual image medium the transformation and application in space is also inseparable from the participation of the audience. This kind of communication and interaction between people and the environment is the original intention of the landscape artist's creation. The model builder and the social changer is also the artist's intervention in the world. Of the heart.

4. The Possibility of Combining Virtual Images with Landscape Sculptures

In recent years, virtual images have become increasingly closely integrated with landscape sculptures, not only because images bring more free changes to the landscape, but also related to the dazzling needs of modern people. People in the city have become increasingly numb to images under the shining of billboards and neon lights, and they need colorful and dazzling landscape shows to attract attention. If landscape sculpture is regarded as a game of space, then virtual images are games that simulate spatial relationships on a plane. This is especially true in the past explorations of virtual image intervention devices, sculptures, and landscapes. Artists mostly try to use virtual images to simulate changes in space and make the space variable. They often make virtual images exist independently on a plane or occupy a space, and radiate and influence the audience by simulating the real space in the virtual world. Make the image cover the sculpture to achieve a new visual impact. Using the sculpture as a curtain to give the sculpture greater expressive power by means of projection, or embedding the image in a certain part of the sculpture to make it have a relationship with the sculpture is the main form of virtual image combined with landscape sculpture. These two forms of combination are recombining traditional sculptures with light as a medium, and virtual images are also a kind of light medium. The medium is the information, and the optical medium is no exception. This combination form seems to use the sculpture as the paper for recording in writing, where the optical medium becomes the main body and the sculpture becomes the background. No matter how gorgeous the entire show is, it cannot conceal the fact that the sculpture has become an accessory facility here, losing its original meaning. In this scene, although the virtual image brings new forms and additional meaning to the landscape sculpture, the sculpture in this situation is like a three-dimensional projection screen. The virtual image becomes the subject and interpreter in the landscape. When the image disappeared, the whole landscape ended and appeared pale and tasteless. Therefore, how to balance the relationship between the landscape sculpture and the virtual image and make them the subject of each other is worthy of discussion here. (It should be emphasized that this kind of work should not be called a video work, but a kind of landscape installation.) Therefore, the author tries to make some breakthroughs in the creative exploration of the graduate study stage, trying to make the landscape sculpture and virtual the images achieve each other and each other.

5. Conclusion

In this era when people are about to be swallowed up by virtual life, the heavy sense of precipitation, the permanent sense of space and the real care of the landscape that can be integrated into the sculpture entity can make people temporarily escape from this fascinating being online. The state of invisible slavery of the landscape provides an outlet for communication between the real environment and the permanent spatial entities. Landscape sculpture is just a moderator under the background of this era. The real landscape can arouse a comprehensive sensory experience. The solid earth, sunlight and wind are the eternal materials that shape the space in the rapidly changing

urban environment, and are full of show culture. In the cramped urban space, everyone needs to stretch their minds and bodies, feel nature, sort out their thoughts, and return to reality. Landscape sculptures are multi-perspective, touchable, and accessible, with a sense of space and even a sense of time after being combined with images-these the omni-directional feeling not only makes people impressed, but also refreshes the real good memories in life. It can also re-narrow the distance between modern people and people and real life. The way to get closer is precisely A way to combine landscape sculpture entities with virtual images. The audience's multiple sensory experiences, interesting intervention in the environment, real offline interaction, and the artist's subjective creation and guidance all make people withdraw from reflection, return to themselves, and return to nature from the commodity fetishism immersed in the landscape society as a result, contemporary landscape sculpture has a richer expression approach and presents a more comprehensive and wonderful appearance.

References

- [1] Lin Yuan (2011). Research on Digital Virtual Landscape Sculpture--Landscape Art and Digital Technology. China Building Decoration, vol. 2, no. 9, p. 240-241.
- [2] Lv Xiaohong, Sun Yu, Liu Ning (2020). Application research of virtual imaging practice in medical imaging technology teaching. Modern Distance Education of Chinese Medicine, vol. 18, no. 13, p. 15-17.
- [3] Guo Yanlong, Zhang Yanxiang (2017). Research on the Application and Promotion of 3D Stage Virtual Image Technology in Huangmei Opera, Hui Opera and Animation Opera. Science Technology and Innovation, vol. 6, no. 2, p. 11-12.
- [4] Liu Ning, Lu Xiaohong, Zhang Xianglin (2020). Research on the application of virtual teaching method in medical imaging technology teaching. Chinese Continuing Medical Education, vol. 12, no. 7, p. 19-21.
- [5] Qian Chunye, He Bai, Zhang Hui (2012). Application and research of virtual instrument technology in medical imaging experiment course. Value Engineering, vol. 6, no. 25, p. 242-243.