

# **Research on the Construction of China's Foreign Communication Image from the Perspective of Virtual Reality Art**

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*Abstract:* With the rapid development of virtual reality technology in China, virtual reality art has also received increasing attention. The creation and display of virtual reality artworks not only demonstrate China's innovation and technological strength, but also help to promote Chinese culture and image. The cultural elements in virtual reality works of art can enable audiences to better understand Chinese culture and enhance international cultural exchanges and understanding. Virtual reality works of art can be exported to the international market as cultural products, promote the spread and awareness of Chinese culture on a global scale, and build the image of China as a great country.

Keywords: Virtual Reality Art; Image of a Great Power; Intelligent Communication

#### 1. Introduction

The emergence and development of virtual reality technology provides people with new ways and means of visual, auditory, tactile and other sensory experience, and also brings great opportunities for artistic creation and communication.

At the same time, with the rise of China on the international stage, more and more people began to pay attention to China. In this context, virtual reality art can become a new way to display Chinese culture, art and image through the creation and dissemination of virtual reality art works, and at the same time, it can also use the advantages of virtual reality technology to improve the effect of external communication and influence.

# 2. Concept definition and characteristics of virtual reality art

## 2.1 Concept definition

Virtual reality art is a collection of transformation and re-creation of artistic content by technology. Its art scene covers the audio-visual field of traditional art, and through human-computer interaction technology, it enters the novel sense of touch, taste and even directly connects to the brain through the brain-computer interface. Its The essence is the digital creation of people's artistic feelings. <sup>[1]</sup>Virtual technology expands the boundary of human artistic creation, neither the physical space boundary nor the type boundary of perceptual information exists anymore. It requires inspiring human thinking and data-based machine operations to find a way for human-computer integration. In the research on the construction of China's external communication image, virtual reality art can be regarded as an important means and tool of communication, which is used to present the image of Chinese culture, history, and cultural industries. In the contemporary era of rapid development of new media, virtual reality art can quickly spread the image of China as a cultural power in a sensual way, and truly realize the cultural "going out" strategy.

This study "Construction of China's external communication image from the perspective of virtual reality art" focuses on the research of advanced technological means such as VR and other virtual reality art, and is committed to the research of virtual reality art in the field of international communication for the construction of China's image as a major country. As a means, discuss the image construction strategy of Chinese culture and art to the outside world, including image cognition, communication channels, communication strategies and other aspects.

## 2.2 Features

The integration of virtual reality art into the construction of China's external communication image mainly presents the following three characteristics. They enrich the content expression, space expansion and narrative extension of China's external communication

image, spread China's image of a great country, and promote the international communication art and China's Traditional Culture.

First of all, virtual reality art has the characteristics of communication across time and space, media, culture and human cognition.

Crossing the boundaries of time and space: Virtual reality art can present various time and space dimensions such as ancient times, future worlds and fictional scenes, allowing viewers to cross the boundaries of time and space and experience different histories and cultures. Across media forms: VR art can be disseminated through various media forms, including VR head-mounted display, flat display, video and other forms, so that different audiences can contact and understand virtual reality through the media they are accustomed to Art. <sup>[2]</sup>Across cultural and language differences: The content presented by virtual reality art can transcend specific cultural and language backgrounds, and be conveyed and expressed through visual and experiential language, so that audiences from different countries and regions can enjoy similar sensory experiences. Beyond the limitations of human cognition: Virtual reality art can present imagination and experience beyond human cognition, allowing audiences to explore unknown areas through the form of art, and perceive a deeper philosophy of life and emotional experience.

Second, virtual reality art has a strong sense of immersion. It allows users to experience the virtual environment immersively and obtain strong sensory stimulation. In the research on the construction of China's external communication image, virtual reality art can show the charm of China's natural scenery, history and culture by creating realistic virtual scenes, so that foreigners can have a deeper understanding of Chinese culture and history.

Third, virtual reality art can realize the communication of human-computer integration. Virtual reality art can interact with the audience through virtual reality headsets, handles and other equipment to achieve an immersive sensory experience. IViewers can affect things in the virtual scene by controlling handles, moving their bodies, etc., and even have dialogues and interactions with virtual characters, so that the audience has a feeling of being in it and co-existing with the virtual scene. This kind of human-computer integration communication also helps to deepen the audience's understanding and cognition of virtual reality art, thereby improving the effect of art communication

# **3.** The development and status quo of virtual reality art for the external communication of the image of China as a great power

The development of virtual reality art has turned the interactive concept in the past artistic creation into reality, and developed various forms of expression; network technology has made multi-person collaboration a reality, expanding the channels of artistic creation and communication. The interpenetration of art and technology has given birth to unique, future-oriented artworks, and thus updated the traditional art research theory and expression techniques.

Virtual reality art can be disseminated through multiple channels such as the Internet, mobile devices, and virtual reality head-mounted displays. It is not limited by time and space, allowing more people to understand and experience the charm of virtual reality art. "Along the River at Qingming Festival 3.0" jointly created by Phoenix Satellite TV and the Palace Museum, with the help of virtual reality technology, has created a multi-level interactive immersive experience space that integrates 8K ultra-high-definition digital interactive technology, 4D dynamic images, and many art forms . <sup>[4]</sup>This immersive interactive experience breaks the opposition between audiences, cultural relics, and scrolls, and is named "high-tech interactive means. The artistic expression method allows the audience to feel the emotion and artistic conception conveyed by the work personally. "Along the River During the Qingming Festival 3.0" is a high-tech interactive performance integrating culture, art and technology. Through the use of virtual reality, big data analysis, artificial intelligence and other advanced technologies, it shows the treasure of ancient Chinese urban culture - the historical background, cultural connotation and architectural style of "Along the River During the Qingming Festival". This not only demonstrates the charm and depth of Chinese traditional culture, but also demonstrates the strength and innovative ability of China's technological development, which will help shape China's image as a great country.

#### 4. Current issue

First of all, the dilemma we face is the problem of "information cocoons". The public's aesthetic level is uneven, and the artistic vision is individual. It is even difficult to judge whether it is artistic taste or inherent stereotypes that guide their selection and understanding of artworks and their interpretation of China's national image.

Secondly, virtual art may have a high threshold in the process of external communication. The use of cutting-edge technology contains basic material thresholds. Without the help of high-precision virtual equipment and digital extraction of their own information, ordinary audiences can neither appreciate the true style of artworks nor enjoy high-quality personalized services. <sup>[5]</sup>Constructing social imbalances, including art appreciation, makes the aesthetic orientation of art face the risk of elitism and circle formation.

Third, cultural misunderstanding may be caused in the process of foreign communication of virtual reality art. Virtual reality art often needs to express specific cultural images and emotional experiences, but these images and experiences may cause misunderstanding and controversy due to cultural differences, and even have a negative impact on the country's image.

#### 5. Development strategy

In the face of uneven public aesthetics, it is necessary to improve the artistic literacy and professional level of creators and curators, and to tell Chinese stories and describe Chinese history and culture with artistic language that meets the public aesthetics. Therefore, it is necessary for the government, enterprises and academic institutions to work together to increase investment in the field of virtual reality art, support technical research and personnel training, and create more innovative and influential virtual reality art works.

Strengthening international cultural exchanges and promote virtual reality art works to the international market. The government can use various international cultural exchange platforms to organize virtual reality art exhibitions and performances to show the innovation and uniqueness of Chinese virtual reality art to international audiences and avoid the risk of elitism and circle formation.

Guiding the development of virtual reality art in a direction with more Chinese characteristics. China has a long cultural history and rich cultural resources. Through the mining and application of traditional Chinese cultural elements, virtual reality art can make Chinese virtual reality art more local characteristics and cultural connotations, so as to better display China's cultural heritage and artistic creativity.

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