Communication Strategy of Chinese Traditional Culture Based on VR / AR Technology

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Abstract: With the continuous development of society, science and technology have made great progress and renewal. At present, the most popular and influential AR / VR technology has had a very significant impact on the whole social life. In the process of technological innovation, a variety of high and new technologies such as computer graphics, simulation technology, multimedia technology and artificial intelligence technology are used. In this technology environment, simulate the real human sensory space, make people feel the corresponding picture in the virtual world through the functions of personal visual, auditory, tactile and other sensory organs, and interact with the virtual space in real time through language and gestures, so as to create a personalized multi-dimensional information space. The theme of this paper is to clarify the application of AR / VR technology in the dissemination of Chinese traditional culture. The research form is the combination of Chinese traditional culture and modern high-tech content to study its deeper theoretical and practical significance.

1. Introduction

In recent years, with the increasing maturity of VR / AR technology, it has been applied to more and more industries. VR / AR technology is a relatively perfect virtual reality technology, which can realize the effective integration with various industries and fields. In recent years, with the acceleration of economic globalization, the spread of Chinese traditional culture around the world has become an inevitable trend of the times. VR / AR technology is a global emerging technology, which is also welcomed by the public in the process of use. Therefore, the integration of VR / AR technology and the dissemination of Chinese traditional culture is the general trend.

2. AR Technology and VR Technology

AR technology is also known as reality enhancement technology. The data information it sees is partly true and partly false(see Figure 2). It brings virtual information such as three-dimensional model, sound and text, as well as information such as era background and humanistic environment into the real world. AR technology is mainly to let people perceive the picture, then present the computer advanced interface, provide users with a kind of multi-dimensional information, and then let users interact with the virtual space, so as to achieve better data analysis, so as to ensure that their corresponding decision-making is more scientific and reasonable.

VR technology, also known as virtual reality technology, when a user wears a display, he will fully enter the virtual world. When a user turns his head or walks around, the virtual world he sees will also change with the change of eye position and angle, giving people a feeling of being in the environment. Another word closely related to virtual reality technology is telepresence. Virtual reality technology can make users feel virtual, deceive users' brains and make users believe that they are in a world.

When discussing these two technologies, the differences between them are mainly reflected in two aspects: interaction and technology.

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Figure 1 AR imaging technology.

2.1. Interactive distinction

Since VR equipment establishes a pure virtual scene in the process of use, it is more about the communication and interaction between users and the virtual environment, and the relevant equipment used are often position trackers, data gloves, etc., while AR equipment combines reality and virtual to bring virtual information into the real world, To better obtain real information, however, AR devices often need to be equipped with cameras to shoot basic pictures, so as to realize the display and interaction of virtual pictures based on the captured pictures[1].

2.2. Technical differences

There are still technical differences between VR and AR devices in the use process. VR technology is equivalent to a production process, creating a virtual scene for users so that they can get the corresponding experience[2]. In other words, in the use process, it often needs the exertion of various virtual technologies, among which various games are the most common. For example, in the process of improving some traditional games, It will use VR technology to upgrade and establish a virtual scene, which will be experienced by users. In the process of using VR technology, we mainly focus on whether the experience of virtual scene is good, and the connection with real scene is not very close. That is to say, VR devices pay more attention to the entry experience in the process of using. In the process of using AR equipment, it adopts some related technologies that can emphasize and restore human visual function. For example, in the process of using AR equipment, it can automatically recognize some things or track objects. In other words, in the process of adopting AR technology, the user does not manually identify external things, but has AR equipment to restore the surrounding real scene by 3D modeling. When restoring, it will not be disconnected from the real scene. Therefore, there are great differences in the use of technology between the two, one focusing on virtual and the other on reality.

3. The Current Situation and Problems of the Dissemination of Chinese Traditional Culture

In recent years, great changes have taken place in the lives of our people. Compared with the past, it can be said that unprecedented changes have taken place. Of course, this is closely related to the development of science and technology. With the rapid development of science and technology, new media technology has also been innovated to a certain extent. The enrichment of mass entertainment means and the change of human social life style have brought great challenges to the inheritance and development of Chinese traditional culture.

3.1. Single means of publicity and display

Chinese traditional culture is broad and profound and worth inheriting. Therefore, entering the new society needs new ways to continuously help the further development and dissemination of

traditional culture. Through the investigation and Research on the past traditional cultural communication methods and current situation, it can be seen that in the past communication process, there was a lack of new communication means and methods. As the mode of communication is not updated, there will be some problems in the actual communication process, such as the communication effect can not meet the actual needs and affect the actual appeal of Chinese traditional culture, which will eventually make the communication of Chinese cultural tradition in a passive state and hinder the promotion and dissemination of traditional culture.

3.2. Poor integration of publicity means and artificial intelligence technology

As far as the current means of traditional culture communication is concerned, it can not effectively apply the emerging intelligent technology and traditional culture publicity. One of the most common manifestations is that the digital communication mode is too old. In the era of artificial intelligence, there are more and more emerging technologies, but these emerging technologies have not been widely used in the process of inheriting China's excellent traditional culture. For example, the application of VR / AR and VR technology discussed in this paper, although science and technology have developed rapidly, these technologies have not been fully integrated into the communication of Chinese traditional culture, which has a certain restrictive effect on the improvement of communication path.

3.2. Lack of depth in shaping cultural connotation

When traditional culture is spread through digital communication, some of its essence and connotation are often submerged and abandoned in the process of communication. With the increasingly serious social material consumption, the impact of money on people's spiritual world can not be ignored. In order to combine communication technology with the inheritance of traditional culture, we must comprehensively examine this problem and comprehensively explore the spiritual and cultural losses brought by digital communication. Only in this way can the world better understand the excellent connotation of Chinese culture.

4. New Path of Cultural Communication

4.1. Creating a new pattern of Chinese traditional culture

In the process of spreading Chinese traditional culture based on VR / AR technology, we must first determine its fundamental goal and create a new pattern of intangible cultural heritage. Due to the inheritance of Chinese traditional culture, China has realized the integration of theory and technology. For example, digital technology is used for data extraction, storage and sharing in intangible cultural heritage, and this concept has been gradually realized in social life, which lays a solid foundation for the display of digital and virtual reality Museum in the future. On this basis, collect and store data to better facilitate the later big data evaluation, conduct specific evaluation on different projects, and compare data projects from multiple latitudes, so as to form diversified communication and protection schemes and better promote the communication of Chinese traditional culture.

4.2. Transformation from appreciation to experience

For the Chinese material cultural heritage, the close combination with VR technology in the process of inheritance can better realize cultural inheritance. Moreover, the adoption of VR technology can better promote the dissemination of Chinese traditional culture, make the development of the digital era provide more possibilities for the dissemination of Chinese traditional culture. At the same time of cultural communication, we can better establish a virtual cultural space, so as to make up for the regrets caused by different spaces during cultural inheritance, give people a better sense of being on the scene, give better play to the inheritance of intangible cultural heritage, and users can better experience the unique charm of Chinese traditional culture.

4.3. Using AR technology and VR technology to spread Chinese traditional culture

At present, 3dmax modeling, 2D interface, engine programming and other technologies are mainly used to shape the content of Chinese traditional culture. Of course, mobile terminals should be designed to identify the environment and unlock the content through scanning. Then users can obtain the corresponding information through the mobile terminals they wear. Virtual scenes will appear on the mobile phone screen (see Figure 2). The display of this content itself is relatively three-dimensional, For the audience, it can also better improve their interest in the inheritance of traditional culture, enhance the interest of Chinese traditional culture, and better enable users to understand the value of traditional culture.
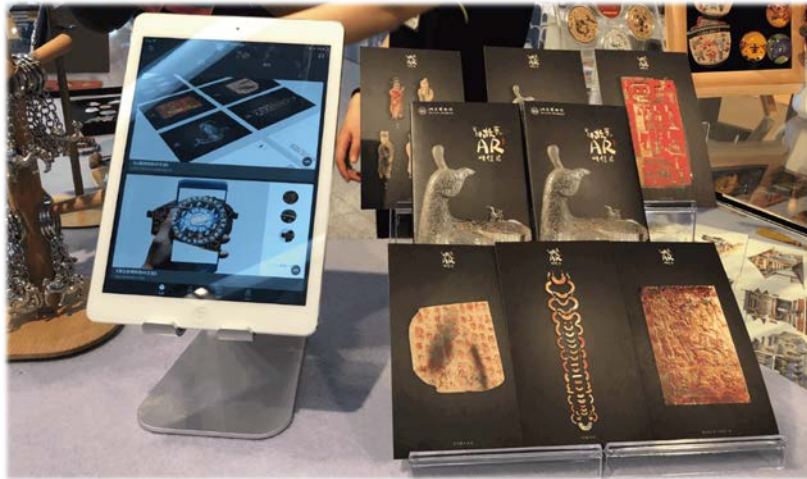

Figure 2 Mobile terminal imaging technology.

5. Conclusion

With the continuous development of science, technology and society, all fields in the process of social progress begin to combine with emerging science and technology, which is the development trend of the times. The dissemination of Chinese traditional culture should be continuously inherited in any era, and its essence is worthy of continuous absorption and application from generation to generation. At present, there are practical problems in the mode of traditional cultural communication that do not adapt to social development. We should closely follow the development trend of the times, combine the dissemination and development of Chinese traditional culture with virtual reality technology, and create new ways and means of cultural dissemination through high-tech technology to better complete the inheritance and development of Chinese traditional culture.

References

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