Deconstruction of Virtual Reality Technique in Digital Media through the Perspective of Receptional Aesthetic

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Abstract: This paper explains virtual reality technology as a means to express digital media art. It combines the concept of "receptional aesthetics" with the virtual reality technology in digital media. Through man-machine interaction, the sense of immersion and diversity in virtual reality technology, the paper analyzes and explains the interactive relationships between digital media artists, works of art and spectators. "Receptional aesthetics" concept used in digital media art, enables us to further understand the value of digital art.

Keywords: Virtual Reality Technique; Digital Media; Receptional Aesthetic; Man-machine Interaction; Sense of Immersion; Diversity

Virtual reality technology as a new technology introduced into digital media caused the revolution of visual art. With the development of computer graphics and image technology, the fusion of science and art has reached a peak. At the same time, it makes contemporary artists have a new thinking of social aesthetic framework, and the mass has a new requirement toward media art.

1. Virtual reality technology become rising star of digital media technology

With the combination of computer technology and art, the viewer has a new requirement of media toward their means of expression. Virtual Reality becomes a rising star of digital media technology. Virtual reality technology is a comprehensive technology which combines computer graphics, image processing, artificial intelligence, man-machine interface technology. It can let users gain the experience of enter the role through creating a computer generated simulated environment. Virtual reality technology generated from the desire of interaction with 3D animation techniques, but different from the 3D animation techniques. 3D animation techniques rely on computer by broadcast 24 to 25 frames a second. It does not have any interaction with viewers; the viewer can only accept the aesthetic consciousness of the director passively. However through virtual reality technology, computer calculates according to the viewer's need and provide information in the whole space, the viewers can follow their own routes. This technology can make the viewer immersion in a virtual world naturally.

The participation of virtual reality technology in the media art has broken the traditional and single appreciation of works of art. The viewers do not have to wander in a specific space of scene and the artists do not have to generate solid works of art. In reality, visitors may not be able to visit all the sites due to physical reasons such as fell tired which bring a lot of regrets. In the "virtual scene", visitors can easily sitting on the chair, visit scenes they are dreaming of, and enjoy the infinite joys.

2. Deconstruction of Virtual Reality Technology by Receptional Aesthetic

Usually traditional media only penetrates artists’ aesthetic consciousness, including feelings, evaluation, etc., but the viewers have to experience a process of understanding from an intuitive perception to rational acknowledgement. The traditional media broadcast platform can not be interactive with viewers and timely adapt to the viewers’ feedback. It can not maintain the aesthetic value stability of art. With virtual reality technology digital media realizes man-machine interaction and makes up the shortages of traditional media. The core concepts of which are from Receptional aesthetics.

2.1. The Concept of Receptional Aesthetic

Receptional aesthetics originated in Germany, Jauss proposed it in 1967 and it was introduced to China in the 1990s. It is a kind of readers oriented theory aims to explain the phenomenon of literature. It focuses on the process of reader’s acceptances and effects, and explains the dialectical relations between author, article and readers[1]. The implementation of aesthetic ideas in digital media is realized through the virtual reality technology. It deepens viewers’ understanding of works of art and promotes the development of digital media art.

As a new media toward audience digital media adopts the concept of receptional aesthetic. Virtual reality technology as a means of expression of digital media enriches the innovation of works of art and makes it more popular within the mass. Previously while studying the traditional media works of art with receptional aesthetic, creators and the works are regarded as the media...
center, while ignoring the viewers’ feelings and also ignoring the accumulated aesthetic experiences of the audiences, which caused the values of artistic works lack of stability. The implementation of virtual reality technology in digital media make creators pay more attention not only to the viewers’ conscious thinking but also to their unconscious thinking, thus form a surreal, superconsciousness art. It provides viewers a good platform to understand and echo with the works of art.

2.2. Receptional Aesthetic – Man-machine Interchange Through Virtual Reality Technique

With “receptional aesthetics” principle, through virtual reality technology, with the light, sound, rays of light, electronic video and interactive devices etc, we created digital “virtual exhibition hall” which realized man-machine interactive exhibition. The use of virtual reality scene mobilized the readers’ initiative toward the works of art in receptional aesthetics. After the publication of literature, if it adapt to the society or fail to meet with the readers’ expectation become an important basis of its aesthetic value[1].

Mean while with virtual reality technology and digital media as a means of carrier, viewers are able to modify and recreate the works of art according to their will and needs. It can effectively promote its art aesthetic value. In a virtual museum, one can see rare animals and plants and to touch and view their life habits, growth habit, the area and the temperature, etc. At the same time, virtual reality system will immediately simulation and adjust the temperature at the same time. The viewers’ awareness and subconscious change constantly and naturally regards themselves as part of the scene, thus the fiction became real.

2.3. Acceptional Aesthetics – the immersed sense of virtual reality technology

The initiative of viewers of acceptional aesthetic also reflects in one of the characteristics of virtual reality - the sense of immersed. Through the media, the viewers express their wishes, virtual reality system responds to the desires and to simulate an environment which meets their desires. Thus led the viewers totally immersed in it.

The digital “virtual space” we generated by making the super computer 3D animation, virtual voyage of outer space starts here: the viewer enter the outer space in spacecraft with a remote control device. He can set the area, temperature, etc. At the same time, virtual reality system will immediately simulation and adjust the temperature at the same time. The viewers’ awareness and subconscious change constantly and naturally regards themselves as part of the scene, thus the fiction became real.

2.4. Acceptional Aesthetics - the diversity of works of art

It is hard to imagine having art works without the viewer's participation. Acceptional esthetics emphasis on the key role of readers in the development of literary. It reveals the influence of the readers’ consciousness toward works. The viewers’ aesthetic consciousness shall participate in art works created by virtual reality technology. Artist works, artwork for viewers of different ages, genders, regions, nations, and in different historical periods produce different aesthetic value; the deep meaning of art works will gradually be discovered. Using the virtual reality technology to create virtual environment and virtual art has altered the single mode of artist works creation. Further more not only the artist but also the viewers are participated in the creation process, this will cause the various outcomes of the works of art. For example, 3D virtual reality network game. Using digital technology to design props will make the people’s living to a whole new world. With virtual reality equipments the real action can be captured and transferred to computers. Actors wear clothing with sensors and stick the joints with the light reflects pints. These points will be caught and identified by camera. While actors are taking action the light reflects will also move with the action. This computer can capture the movement through calculation and with the action of optimizing software we will get performances of actors. Processing these movements through 3D software (3D MAX and MAYA) these movement will be endowed to virtual characters of the game, so that the virtual characters can make the real movement and induce participants’ sense of participation.

Virtual reality games provide participants a platform to interactive with the works. Works without participants devotion the roles are not complete. But the author only provides the concept and the premise, and the participants are the one to complete the story. They change the stories and result according to their fond. So different participants will form a different story and the end, thus enhance the beauty and aesthetic value of art.

Acceptional aesthetics believe literature art has two poles one is art, the other is aesthetic[1]. Art is the creation of author, aesthetic is realized through the readers’ feedback with social characteristics. Virtual reality technology used in digital media is the combination of art and aesthetic. The viewer immersion in a virtual world, and achieve a certain purpose according to your own desire. It embodies the man-machine interactive character of virtual reality technology, realizing the aesthetics of works of art. "Virtual world" created with virtual reality technology is the integration and mutual enhance of art and the viewers.
3. Conclusion

Virtual reality technology has broken the linear flow pattern of the artist - the viewer's. With mode of two-way feedback spatial patterns toward artists creations. The mode fulfill the mass’ desire of freely interact with media. In order to ascend art aesthetic value, with ideas of receptional aesthetic into digital media will promote the application of virtual reality technology in digital media. We will further understand the value of digital works of art. But receptional esthetics idea has its shortcoming, it over emphasizes decisive of beyond artists and the works. We should effectively combine and balance the artist aesthetic consciousness, the aesthetic value and the viewer's aesthetic orientation and make sure the value of art works stable.

References