The Innovative Research of Visual Art Form in the Environment of Digital Media

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Keywords: Digital Media; Augmented Reality; Visual Arts

Abstract. With the development of digital media, people's perceptions of the image, watch, cognitive and analysis mode has changed. The introduction of digital media technology, make visual language more rich, innovative visual aesthetic form, which has a far-reaching influence on the visual subject. Articles on digital media and visual art in the context of theory analysis, put forward opinions for the development of digital media. This article by the context of digital media by way of information, which is based on analyzing the change of from visual forms, visual thinking, visual media, visual culture and other aspects of the further research of visual art innovation. Of the new media leads to changes in the form of traditional media to make in-depth analysis, explore the augmented reality technology applied in the visual arts innovation, open up a new perspective of theoretical research of visual art innovation.

Introduction

The spread of visual transmission of the information society has become the most important way. The emergence of new media on the concept and method of a direct impact on visual communication, visual form and characteristics, the spread of the media and content, the way to convey the image, the creation of the producers and consumers' experience of feelings are so great changes have taken place, and with the development of new media technology and constant innovation. Today's digital new media centered on Internet media, the emerging network media from the real-time interaction, nonlinear, hyperlinks, and other aspects to expand the traditional way of media communication, it extends the comprehensive perception of human beings. The great power of the mass media in the information society. New medium in a sense is a kind of new language, a kind of experience in coding, a kind of machine vision. New media make up our new understanding of the real world. The carrier of film digital technology is rapidly changing form and means of transport. Digital means of production, digital viewing environment, interactivity, nonlinear narrative gradually changed the traditional viewing habits, give a person with a brand new audio-visual and psychological feeling, more comprehensive experience image area to the audience.

Digital media art concept

Medium is the basis on which art living. Art and media are inseparable relationship since ancient times, in a sense, the history of media is about the new media art imagination to the use of new media art practice, to reflect the new media art criticism history, corresponding results concentrated embodied in new media art. Digital technology involved in the art field, which provides a new platform for artists to create in all aspects, the art form of innovation and diversification. Digital media art is the human's rational thinking and perceptual thinking of art together, on the basis of the digital technology and modern communication technologies of new art form. It can be defined as using the computer and participate in or part of the creation of digital technology, also can be defined as digital art is the art of new media art in the creation, loading, communication, appreciation and criticism behavior such as art, with computers and the Internet as a technology support, innovation of new art form, the aesthetic feeling, experience and thought had a profound change. Artists by building in digital information processing platform, on the basis of using the computer as the core of all kinds of digital information processing equipment, to describe and
implement your own creation thought, finally realizes the works of art creation, based on digital technology relying mainly on network through various media related to digital technology will work to the audience and provides audiences with participation, interactive way to appreciate the art of aesthetic process.

New media artist Christa Sommerer and Laurent Mignonneau created "Life Space" (1997), as shown in figure 1, created the image processing based on artificial Life and the continuous development of the new interactive art language of the program. The system provides the audience with a more flexible interaction design. User to input a paragraph of text, this text into genetic code, designed by artist's "text to image editor" into a three-dimensional autonomous behavior of the biological and genetic code and user interaction determines the biological body formation, behavior changes and living conditions, and the mutual influence and role.

Figure 1. Digital media works -- Life Space

And single phase difference between traditional art type, digital media art language USES the advanced technology, flexible use of various digital media, it is based on computer digital platform created a variety of media art style, become the emerging field of art, highly combines art, digital technology and mass communication characteristics. Digital media art on the basis of media technology, covers many art forms, including digital movie art, digital TV, digital image art, digital design, digital animation art, digital game art, digital devices, digital music, art, network art, multimedia art, etc. Digital media art formed its own unique form of expression and artistic language.

Digital media to visual art innovation function analysis

The innovation of the visual arts, from the human instinct of visual needs and desires. People in the process of artistic creation of image in the image culture atmosphere, under the background of visual culture, people receive information and to know the world of image produced dependence, at the same time the image culture has certain recreational, replication and commercial, form a big impact to the traditional aesthetic concept and culture. In the context of digital media, the visual arts innovation is mainly manifested in the following aspects:

Innovation is the perfect combination of art and science of visual art. The perfect combination of art and technology to promote the sustainable development of the digital media art. In today's rapid development of Internet, remote transmission, transmission technology, real-time interactive from copying to share a breakthrough, pay attention to participation and sharing, is a development innovation process. With the support of network media, new media art can reflect more humanized communication situation; Artistic style is more humanistic, tradition and nature. In the fashion, popular with the support of science and technology, the development of new media art and constantly improve the consumption rate, it reflects the new information age art an integral part of culture.

Virtual art innovation, is the image to the innovation of the visual world in the world. Virtual art is no longer confined to the imitations of real things and replication, pay more attention to the construction of artistic conception of the world, to provide more intuitive, multi-dimensional experience. Virtual artistic conception is the creator in two-dimensional or three-dimensional space
association and imagination into full play, into the inner world of illusion world, reconstruction based on space-time construction of space and time. Virtual art is the change of the schedule, make the person at the same time get more experience. Cross-border multidimensional innovation of visual information. Visual art innovation is not only artistic style and form, style and form is form of innovation, innovation is a new discoveries, ideas and artistic conception of art, is also a new visual grammar and language of art, which is the carrier of the spirit. The new art is given by art form of innovation, the innovation spirit visual language, life and aesthetic temperament and interest.

**The application of augmented reality technology in the digital media**

Augmented reality is a lot of famous university and research institutions at home and abroad, the research focus in recent years one of the. Is the position and angle of a real-time computing camera images, combined with the corresponding image technology, the technical reconstruction of a world based on users in the real world, and the perfect combination of virtual and real world information and interaction in augmented reality environment, its basic principle as shown in figure 2. The user can see together exist in the real environment and enhance the information picture or space, which can enhance the information is generated by computer graphics, 3D virtual images or text message. Augmented reality technology can not only enable us to obtain the information of the real world, will also be added to each person's feelings and experiences. Advertising communication, augmented reality technology is widely used in outdoor media advertising creative, which will change from the content and form of advertising a lot of outdoor media dissemination effect.

![Figure 2. The basic principle of augmented reality technology](image)

Augmented reality cognitive experience, emotion experience, aesthetic experience from the three dimensions based on digital multimedia advertising design, through the experiment and investigation, to verify its superiority in promoting consumer awareness and consumption consciousness, therefore, consumers in the travel process, not only can have a deeper understanding of the commodity, can also through better emotion experience and aesthetic experience the satisfaction of higher product. Most importantly, the augmented reality technology as a new technology of rapid development, has been widely concerned, its superior aesthetic characteristics and interaction characteristics would influence the digital media technology. Enhance the combination of reality and digital multimedia advertising will become the development direction of the new digital advertising.

**Conclusion**

The rapid development of high and new technology and application, make the concept and connotation of the art in the application of new materials and new forms of expanded, and to predict the end to the traditional concept of art and the establishment of new art concept prototype. In the
digital media environment, the art language to express will be more new media art characteristics. In the context of visual culture in the development of globalization, digital is not only technology, but also a visual information for new way of thinking and way of life. In the context of digital media, the visual arts innovation both in technology and new media art forms, the concept of creative reconstruction, including traditional visual medium to medium, a new visual media materialized and the old and the new visual media across media everything and personalization. In the new economic environment and the context of globalization, the visual syntax innovation also embodies the sustainable development in the art of cross-cultural, industrialization in the construction of the deep.

References