

Research on the Application of New Media Video Installation Art in Display Design

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Abstract. In modern times, new media video devices are used in large numbers in display design, which better reflect the "interactivity" and "conductivity" of images and people, and make the content of images more plentiful and complete. With the evolution of time and the diversification of new media, image devices have become an indispensable way for modern designers to express art, and this "moving" space makes the "illusory" closer to reality and more removed from reality. Today, in our daily lives, we often see new media video installations, where we can interact with images in a sea of abstract art and communicate more effectively and accurately to the audience. As you can imagine, new media image installations have become a new way for the audience to feel about art.

Keywords: new media \cdot video installation art \cdot display design \cdot application

1 Introduction

Along with the innovation of information technology and the integration of various new media forms, the creation of new media artworks and their expression has undergone an all-around innovation. At the same time, along with the advancement of technology, the public is no longer satisfied with only a single, traditional way of communication, but more often incorporates it into a whole new perspective. As a new media design, the new media video installation relies on computer software and hardware, and its key lies in interactivity, which transforms participants from passively and unilaterally receiving output signals to interactive participation of both sides in the analog and output signals, increasing the fun of the game. In the display design boom of recent years, many artists and designers are trying to combine display design with new media interactive devices to immerse the audience and allow them to experience the meaning of the display more deeply.

2 Related Overview

2.1 Definition of New Media Video Installation Art

New media video installation art, a form of multimedia artistic expression. Compared to traditional video installation art, new media video installation art is an artistic expression using multimedia as a medium. Compared with traditional video installation, its

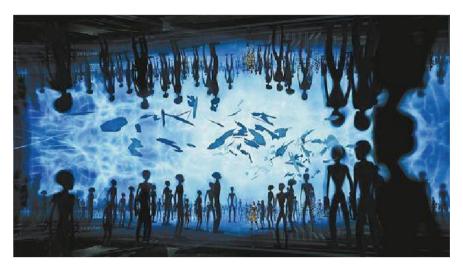


Fig. 1. Interactive impact installation artwork "Saga"

most important feature is integration and spanning. It is a kind of image that can cause interactivity among the audience, which can realize both the reproduction of realistic images and the display of virtual images. The interactive connection devices it uses are trackballs, input devices, infrared sensors, video input devices, etc. In the process of creating interactive video installation art, the artist wraps his work with high technology and new media to make his work present a more intense experience and novelty, so that his work presents an interactive state, thus achieving the transformation from creative thinking to the creator to the "activity" of both the creator and the audience. The aim is to transform the creative thinking of the creator into the "activity" thinking of both the creator and the audience [1].

On the picture is the new media video installation artwork "Saga", which is so incredible to view just from the picture. The image is magnificent and powerful. The four-dimensional image world drags people from "illusion" and "reality" to cross each other (Fig. 1).

2.2 Display Design

Display design, in short, is to present a designed artwork in a certain form so that more people can see it. The word "display" does not mean that the artwork is placed randomly, but it is measured from the perspective of the artwork, the content, the color, and many other aspects. Through the display style, it is possible to highlight the subject matter of the artwork, and it is also possible to further enhance the visual experience of the audience with the embellishment of the display style.

3 Design Application and Analysis of New Media Video Installation in Display Design

3.1 The Advantages of New Media Video Installation in Display Design

The use of new media video installation in display design allows the audience to appreciate the artwork and to touch and visualize the impact in reality so that the audience's body can feel the immersive nature of the design work. In today's society, with the advent of the digital media era, the use of 3D stereoscopic and four-dimensional scene layouts allows artworks to obtain a more realistic visual effect, and in terms of the audience body's perception and understanding of the work, it also allows the audience body and the artwork to create a real emotional effect and artistic experience between the communication [3].

With the emergence of new media video installation, the audience will no longer be passive and forced but can analyze the essence of artworks from different angles through multimedia functions such as hearing, touch, and smell, and discover the creative inspiration of the designer, thus improving the audience's appreciation and enthusiasm for artworks. Display design through the application of new media video installation will have the following characteristics:

(1) Fun

The presentation of the new media video installation can change the monotonous way of viewing and let the audience understand the design ideas and messages that the designer wants to express more easily and faster interestingly and interactively.

(2) Audience as the Main Body

Designers no longer simply launch their artistic creations to express their ideas, they will more often focus on the personal experience of the audience subject, by guiding them and enhancing their interest and hobby in art, so that they can become manipulators of design themselves and thus get infinite pleasure [3].

(3) Timely and Artistic

New media video installation art is getting closer and closer to human life, and its own immediacy and field characteristics are getting stronger, so it is more suitable for the requirements of theme and timeliness in exhibition design. In today's rapid development of modern science and technology, art has become closer to life and more derived from life. The emergence of new media has allowed more people to take the path of art, allowing more people to take a path of their own.

3.2 Strategies and Methods of Creating New Media Video Installations in Display Design

Display Project Data Collection and Integration

In the early stage of display design, we have to first grasp all the important data related to the project, to have a general basic understanding of the overall display effect shown.

The next step is to introduce the overall concept and planning status of each display project in the pavilion. We generally take the display place as the focus, on the plane, on the plane, three-dimensional composition to carry out the design of the dissection. For the arrangement of the whole space, to do a good job of macro control, to ensure that in the form of expression to achieve perfect unity.

Through the use and analysis of new media video installations, we mastered the relationship between the integration and interpenetration of both art and technology on two levels. It allows the audience to experience the most intuitive sensations in a new way. To obtain the above user experience, the designer generally needs to accomplish the following.

- (1) Have a deep understanding of what is to be presented;
- (2) Mastery of new media image installation technology;
- (3) The ability to have an overall grasp and overall control of the various elements of the display site;

Only if the above three conditions are met, the display design of the new media video installation can be organically integrated with the whole display and can enhance the audience's participation, cognition, and thoughtfulness [4].

Select the Theme

There are also fundamental differences in the design ideas and concepts of the venue under different scenarios of the pavilion. In the beginning, when accepting a display project, draw its boundaries and scope and make a classification plan for it.

For example, in a business-oriented project where the distributor is targeting the market, the display is designed mainly to promote the product so that it meets the customer's needs and thus increases sales. In technical exhibitions, most of them use interactive videos to demonstrate the idea of technology. In the exhibition of the history museum, it is linked to the roots of history, the background of historical development from ancient times to the present is analyzed, and its content is integrated with the environment to form an atmosphere of artistic expression that shows it skillfully, and its spirituality and development process as cultural heritage are displayed to the fullest so that the audience can fully experience, explore and hunt for the spiritual needs The exhibition is a good example of how to satisfy the spiritual needs of the audience. We analyze the contents of the exhibition and summarize them. A comprehensive summary and analysis of the data, as well as an analysis of its content and outreach.

Propose Creative Ideas

The emergence of new media video installations has made the creative concept of the work more complex and professional. This requires not only the designer's mastery of the entire artistic elements but also the creator's extensive knowledge and professional skills in various fields. The core of the new media video installation is "art", and its purpose is not only to display an excellent technological achievement but more importantly, to display an object itself, therefore, to build a complete and consistent solution for the whole display, it is necessary to have a complete and relevant design concept.

Focus on Audience Groups

Exhibition design is audience-centered, and all artistic creation is based on the audience's

feelings as the starting point so that the audience and art creation will enter a realm of "interaction" under the role of the new media video installation. We actively implement the concept of audience-centered services, establish interactive and mutually beneficial relationships with audiences for different exhibition environments, and improve the retention of audience resources [5].

Choice of Media and Medium

In the creation of new media images, the subject of the audience tends to feel the artistic expression in the form of sight, touch, hearing, and smell. Traditional multimedia, often too single in terms of innovative effects and the image of the art form displayed, video, images, and lighting are all controlled separately, making the overall artistic effect very fragmented. In the new media video installation, the use of 3D animation, 3D stereo, perception, and other interactive digital on will make the whole exhibition more reasonable and can achieve digital automatic configuration and personalized settings.

Implementation of Display Works

After the design is completed, the installation, commissioning, and display must be carried out at the display site. Within the exhibition site, a variety of factors must be taken into account to cope with the various types of unexpected conditions that arise in the exhibition. Especially in the use of modern equipment for safety, as well as fire prevention, disaster prevention, and theft prevention, the safety of the audience must be ensured. The performance must also be precise to achieve the desired result that a work of art is intended to convey. And in the subsequent exhibition, it will become an integral part of the exhibition.

4 Conclusion

Currently, new media technology is developing rapidly and society is continuing to evolve. Throughout the course of human development, advances in technology have had a significant impact on the development of art. Interactive video installation works are the result of both the development of an information society and the fusion of technology and contemporary art. But no matter how advanced the technology is, no matter how complex the presentation, what the new media video installation uses and conveys is always the interaction and communication with the audience. In the process of visual design, it is also designing and foreseeing the behavior of the audience. Therefore, the new media image installation is not only a technical means, but also a means of artistic creation of communication, and the new media image installation brings more and better possibilities to the exhibition design, which can greatly meet the needs of customers.

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