

# Application of digital media art in exhibit design

Yu Zhang<sup>1, a \*</sup>

<sup>1</sup>Jilin Engineering Normal University, Changchun, Jilin 130052, China

<sup>a</sup>email: zhangyu2105@163.com

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**Abstract.** In this paper, interactive experience design and virtual reality technology and its application in modern display. The research discusses the concept of modern display design new displacement phenomenon. Digital media arts background modern display design, features, performance methods and basic types. The development of modern display design has a role in fueling, enabling a better understanding of how digital art is rendered in modern display design. Because of analogy, exhibition design and other modern art design art have a variety of related, so it has a multi-dimensional, multi-faceted character. Modern display design features from its own natural properties. Its function, purpose, means and methods are all constitute an important factor in modern display design. Exhibition design has also created modern special laws.

## 1. Introduction

In recent years, digital art and new media art has begun to infiltrate into various fields around us which of these new circumstances the use, including digital photography, digital imaging, digital animation, digital TV and e-books [1-3]. The Internet content and information and entertainment service industries involved in digital media arts include digital advertising, digital painting, graphic design, exhibition design, electronic games, remote education and even public media system of the whole society [4, 5]. Today a cross-media, has a unique new art form art form and language) digital media art is more and more perceived by people are using [6].

The digital era has people's daily life, learning and a variety of information integration [7]. Effective dissemination of information on cultural construction has a decisive role in the information [8, 9]. The quickest and most effective means of communication is inseparable from the modern exhibition. Digital media art in a variety of high-tech information technology allows the greatest degree of spread of modern display activities [10]. Exhibition place is the information highly concentrated [11]. It brought together a large number of logistics and information flow, where the public can receive information, feedback information, to think in entertainment, watching the access to knowledge. Science and technology and culture and art of the ever-changing modern exhibition design so have more and more possibilities and advantages, it will also become the most effective and efficient information dissemination way [12].

Modern display design should be with the times, it has the characteristics of the times, and the application of science and technology are inseparable, are reflected in scientific and technological development. It belongs to the rational science and technology, and belongs to the romantic art. No matter what year it is designed to show all show its unique flavor of the times.

## 2. Theoretical basis of digital media art exhibit design

Digital media art refers to digital technology and modern media technology, will integrate the new art form emotional thinking of people's rational thinking and art. Digital media art because it is a cross-disciplinary, involving broad industry sectors, so its wooden body not only has artistic charm of its own, while also have other means of expression applied technology and computers. It also includes our lives in a variety of works in various media by means of digital art or art created. Around us as digital movies, digital audio and video, digital display design effects, digital graphic design as well as a variety of cartoon rage and a variety of online games. The biggest difference between digital media arts and other art forms of its manifestation, or the creative process will be part of, or all of the

use of digital media, scientific and technological means, and this is our main difference between digital media art methods and other media art forms.

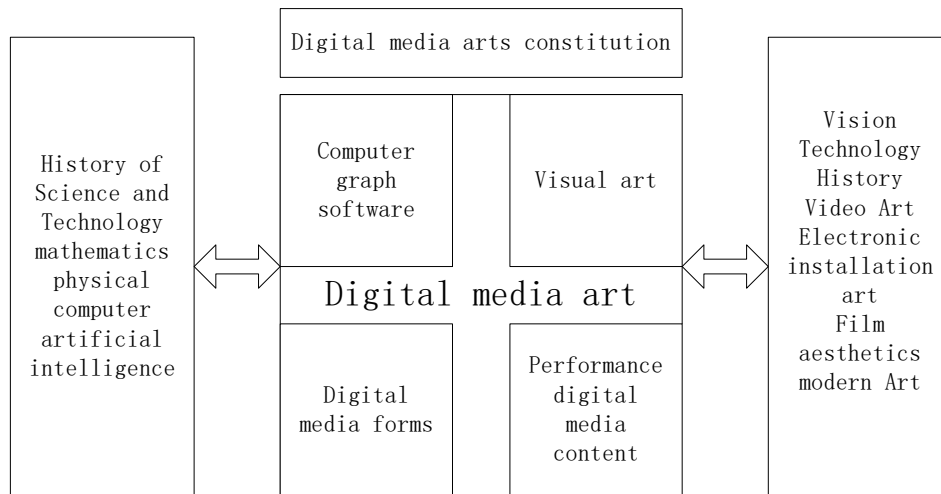


Figure 1. Digital media constitute art graphic

Digital media art and design is based on a digital media arts, visual arts, design, computer graphics and media technology disciplines intersect, which is its wood and content. Figure 1 illustrates the digital media arts discipline connotation and extension. Digital media arts is a concept of development, it will not stay on that media forms, including not stop the media forms of digital technology platform, but the basic trend is currently its development is the integration of media, mainly for the digital, interactive, broadband, mobile and humane.

## 2.1 Dynamic analysis of digital media art exhibit design

With the spread of human activities in the historical development of mass media in promoting the technological revolution has experienced progress and integration again and again, each of the emergence of new media are an eclectic mix of old media, but also is a former there exists in the form of a media actuator and incentives. Structure and spatial spread of human society is undergoing a series of changes. According to the theory of dynamical systems, it will set up between the digital media art exhibition display design and a series of economic relations. Digital media art and exhibition economy feedback model system is shown in Figure 2.

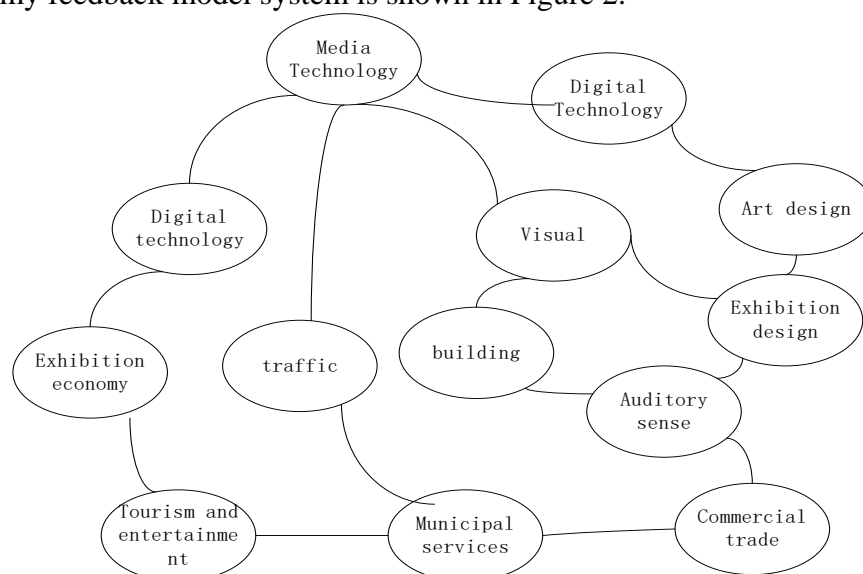


Figure 2. Digital media art and exhibition economy feedback system dynamics model

Development and progress of science and technology of digital media technology and jointly promote the development of digital media arts industry, the development of digital media art show

will lead to design in performance style. Display richer content, show the effect will continue to be developed to further enhance the good display design effect while audiences will leave a good vision, hearing new experience, visitors to deepen memory, increasing the total number of demographic groups, and exhibitors the number in a certain sense determines the economic profit of the exhibition space, the number will increase to drive forward the development of construction, transportation, tourism, entertainment, commerce and trade, municipal public services and other related industries.

### 3. Digital media arts in modern exhibit design

#### 3.1 Interactive experience design

Interactive experience designed to offer is that you can enjoy playing at their own initiative involved to understand articles in contact, experience the fun of it in the exchange process, ultimately in the whole process of information transfer and communication, it has become a modern display an important part of the design, but also demonstrate the performance characteristics of the design of the era. Figure 3 is the "source of power" in the German Pavilion of Shanghai World Expo, which is the most representative of the German Pavilion designed interactive experience, we can say it is the embodiment of the best exhibits of modern interactive experience design . "Source of power" is a huge metal sphere, it was suspended in 12-meter, three-hall Cloister structure, which has a diameter of a sphere three meters and weighs about 1.23 tons, the ball's surface installed over 400,000 light-emitting diodes, the entire hall can accommodate a total of about 700 visitors. Figure 4 showed the Nike creative window design.



Figure 3. "Source of power" Shanghai Expo



Figure 4. Nike creative window design

In the rapid development of modern display design interactive experience designed to produce conforms to the requirements of the times and people's needs, it is a product of the information age. To experience what is often enables people to produce real sense, and can stay in the brain for a long time, it has a profound impression. A good interactive experience designed after people meet basic material needs, the pursuit of a higher level of spiritual and emotional needs. Interactive experience is designed to people, objects, spatial relationship of these three, it is linked to emotional things and to produce new visit and learn. Its essence is to ask people to visit and study the process of active involved in the interaction, and comment is called a interactive experience is the need to influence each other, both practical and cognitive.

#### 4. Summary

Digital media art in our lives brought great convenience, but it is undeniable that brought some negative effects, but we must first recognize the positive sense that it gives us, but also do not avoid its side effects. Through continuous development of digital media art to make it more practical for the public service. Modern display design in today's fast pace of development, life and consciousness is constantly changing, people are constantly thinking aesthetic improvement. Modern display design must keep up the pace of progress, in line with the psychological needs of the public, with the perfect combination of digital media art, will rely on a variety of display technology into the design, the final advance in development, in advance of its continuous improvement.

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