Research on the Association of Digital Media Art and Cultural and Creative Industry

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Abstract: With the rapid development of computer today, digital media art has also developed accordingly. Under the background of rapid economic development, the cultural industry has also made great progress, but the corresponding requirements are also put forward for the cultural industry. As the main competitiveness between countries, the development of cultural industry is of great significance to the development of cultural industry around the world. In the process of the development of cultural industry, the correlation between digital media and the development of cultural and creative industry, which plays a very important role in the development of cultural industry.

Keywords: Digital Media Art, Cultural and Creative Industry, Relevance.

1 INTRODUCTION

Under the background of increasing cultural resources, the development of digital media art has been promoted to some extent, and at the same time, the cultural and creative industry has also ushered in brand-new development opportunities ^[1]. For the cultural and creative industry, it consumes relatively little resources, and the degree of environmental pollution is relatively small. Due to its own advantage of high added value, it has a large space for development ^[2]. In addition, driven by digital media art, the development of the current cultural and creative industry has undergone corresponding changes. Based on this situation, this paper analyzes the relationship between digital media art and the development of cultural and creative industry.

2 AN OVERVIEW OF THE DIGITAL MEDIA ARTS AND CULTURAL AND CREATIVE INDUSTRIES

2.1 An Overview of Digital Media Art

Digital media art is a product produced by the combination of technology and art. It is mainly an emerging industry dominated by technology and supplemented by art. It is also an interdisciplinary discipline combining computer science and traditional movement. The main purpose of the development of digital media art is to cultivate talents with good scientific quality and artistic accomplishment, so that they can create innovative works of art through computer software and corresponding design tools. Its characteristics are as follows: (1) media integration. Digital media art works are different from traditional works of art, and they are mainly created through computer technology and digital technology. For example, on the electronic map, the work fully embodies the integration of digital media art, but also adds color to people's lives. (2) Editable and replicability. For the art works created by computer multimedia, its production process needs to use some data information, and these data information can be edited and copied accordingly. But the works created in this way are often doubted by people, believing that this way buries the value of the art works to some extent. However, after the emergence of virtual reality, people have redefined the reality and virtual reality, making it the perfect combination of the editing and reproduction of real art and virtual art works. (3) Interaction and participation. With the development of the Internet, the distance between digital media art and the public has been shortened. People can appreciate and evaluate the works of art through the Internet platform, which has changed the traditional form of art appreciation, to a certain extent ^[3].

2.2 Overview of the Cultural and Creative Industries

Cultural creativity is a kind of industry produced by the combination of science and technology and art. It can integrate its own opinions and ideas into the artistic works. It can not only promote social development, but also create a kind of urban culture with unique artistic color. The characteristics are shown in Table 1.

number	characteristic
1	Uncertainty of the demand
2	Providers of creative products are very concerned about their own products
3	Need to integrate a variety of skills, creative product design elements are very rich
4	It is different and unique
5	Focus on vertical differentiation
6	Affected by the time factors
7	Continuity and long-term profitability

Table 1. Characteristics of cultural and creative industries

3 THE DEVELOPMENT STATUS OF DIGITAL MEDIA ART AND CULTURAL AND CREATIVE INDUSTRIES

3.1 The Development Status of Digital Media Art

As far as China is concerned, digital media art started relatively late, which makes a big gap between China's digital media art and other countries. However, due to the relatively rich cultural and artistic elements in China, coupled with the rapid development of China's hardware and software industry, it has laid a foundation for the development of China's digital media art. In addition, with the support of the Chinese government, China's digital media art has also ushered in a brand-new development opportunity. Especially during the "11th Five-Year Plan" period, it presented a leapfrog development mode, which not only promoted the upgrading of the cultural industry structure, but also promoted the development of China's social economy to a certain extent ^[4]. However, compared with other countries, the market share of digital media art in China is relatively low, and it is relatively backward in terms of creativity, content and technology.

3.2 The Development Status of Cultural and Creative Industry In China

In recent years, China's creative industries and industry have developed rapidly with the support of the state, especially in Hong Kong and Taiwan. Of course, the development of Shanghai, Beijing and other regions has also achieved corresponding results, especially in the Shanghai region, they have taken their own advantages to seize the highland of the development of cultural and creative industry.

And also gradually established a variety of creative industry bases and parks.

4 THE CONNECTION BETWEEN DIGITAL MEDIA ART AND THE DEVELOPMENT OF CULTURAL AND CREATIVE INDUSTRIES

4.1 The Development of Digital Media Art Plays a Huge Role in Promoting the Cultural and Creative Industry

In the process of digital media art design, it contains relatively many design content, such as advertising design, visual design, etc., and more modern technologies are applied in the design process, such as computer technology, big data technology, etc. In the development process of cultural and creative industry, digital media art is usually taken as a booster. The main reason is that digital media art not only has a strong creative ability, but also has the corresponding comprehensive value, which promotes the leap-forward development of cultural and creative industry to a certain extent ^[5].

For the current cultural and creative industry, it involves a relatively wide range of fields, and is rich in content. Under the role of digital media art, it provides a corresponding carrier for cultural and creative products, making them more unique, and increasing the added value to a certain extent. For example, in the rise of recent years, the essence of the Taobao enterprise in recent years is to combine some cultural elements of the Palace Museum with modern cosmetics to produce cultural and creative products with Chinese cultural characteristics, as shown in Figure 1.



Figure 1 Palace Museum lipstick

In the process of designing such cultural and creative products, it is necessary to carry out the corresponding color design. The quality of the color is directly related to the quality of the leveling, especially the color in the ancient buildings has the corresponding cultural atmosphere, which can convey the symbolism of cultural information.

Generally speaking, the color of the object surface observed by the human eye is determined by the intensity of the three primary colors of red, rate and blue of the light in the incoming human eye. Generally, colors can be represented by the following formula:

$$C = rR + gG + bB(0 \le r \le 1; 0 \le g \le 1; 0 \le b \le 1)$$

In formula: r, g, b represent the intensity of the three wavelengths of light, respectively, which is also called the three-stimulus value of color, mainly representing the RGB system of color. In the 24-bit computer display of the full color surface, with three bytes respectively, each value has 256 levels. All black (0,0,0); white, (255,255,255), pure red (255,0,0), green (0,255,0), and pure blue (0,0,255).

4.2 Cultural and Creative Industry Provides a Platform for Digital Media Art Design

As far as China's digital media art is concerned, its development is relatively late, and it has gradually entered into people's vision from 2000 [6]. At present, although its development process is only more than 20 years, but its development speed is relatively rapid, and now it has formed a variety of digital media art and design forms. For example, computer technology and multimedia technology combined form the Internet platform. Although these digital media arts are relatively backward compared with other countries, the cultural and creative industry of the Chinese market can develop rapidly due to the advantages of China^[7]. Because of this, the demand for digital media art and design talents has also been increased. In order to meet the development needs of digital media art, most universities in China have gradually established the major of "digital media art design", and included it in the major of education technology. In addition, under the background of the expanding scale of the cultural and creative market, the public demand for cultural and creative products is also gradually increasing, and a large number of professionals are needed to support them [8]. Therefore, under the development of cultural and creative industry, it not only promotes the development of digital media art, but also improves the educational level of digital media technology to a certain extent. In general, the relationship between digital media art and design and the development of cultural and creative industry presents a complementary and common development relationship.

5 SPECIFIC APPLICATION METHOD OF DIGITAL MEDIA ART DESIGN IN THE CULTURAL AND CREATIVE INDUSTRY

5.1 Adopt Digital Media Art and Design Means to Improve the Beauty of Urban Cultural and Creative Works

For cultural products, need to be through a variety of media channels to present it in the public view, this not only requires cultural products have the corresponding beauty, but also have a

certain three-dimensional sense, so as to deepen the public impression of cultural products, at this time, need to make full use of digital media art design means. For example, a factory in Australia, which is a commercial complex, has an aesthetic architectural design style, as shown in Figure 2. In the design process of the factory, the designer adopted the digital media art design means, to make the whole building bright in color, and also to depict a lot of artistic modeling, completely presenting the cultural characteristics of the Australian city.



Figure 2 A special shopping mall in Melbourne, Australia

5.2 Adopt Digital Media Art and Design Means to Improve the Economic Value of Cultural and Creative Works

In the process of cultural creative industry development, cannot leave the technical support of digital media resources, that is to say, need to use digital media art to create products, so as to enhance the artistic value of products, but also can optimize the structure of cultural creative industry, to promote the economic benefits of cultural creative industry has a very important role. For the current stage of China's film and television culture industry, its development has entered a stable state, which is all attributed to the digital media art ^[9]. Under the role of digital media art, the original concept of design can be presented through dynamic pictures, which not only effectively improves the aesthetic feeling of the picture, but also enhances the special effects of the picture to a certain extent ^[10]. In this way, the public can get a more complete visual enjoyment, which not only promotes the development of the cultural industry to a certain extent. Therefore, in the development process of cultural and creative industry, great importance should be attached to the application of digital media art, so as to provide impetus for the development of cultural and creative industry.

5.3 Adopt Digital Media Art and Design Means to Improve the Innovation of Cultural and Creative Products

In the process of cultural and creative industry development, we need to pay attention to its innovation. Therefore, in the process of creating cultural and creative products, it is necessary to make full use of media art means, integrate some innovative methods and ideas into cultural and creative products, and present more innovative, creative and cultural content to the public, so as to enhance the innovation of cultural and creative products.

In the design process of some cultural and creative products, it is usually necessary to use digital media art design means and use different modules to present the design content. At this

time, each module is needed to be designed separately to meet the design needs of cultural and creative products for different modules. For example, in the design process of some environmental protection public service advertising, can be used by digital media art design into the shape of ice cream (as shown in figure 3), through the shape of ice cream to present the impact of climate environment changes on the earth, so not only can deepen the impression of the public, but also can inspire people's awareness to protect the environment.



Figure 3. Design of environmental protection public service advertisement

5.4 Adopt Digital Media Art and Design Means to Improve the Cultural Nature of Cultural and Creative Products

In the development process of cultural and creative industry, it is necessary to combine it with digital media art, so that cultural and creative products can have the corresponding interest and diversity, which plays an important role in improving the cultural nature of cultural and creative products.

Some dynamic works with cultural creativity can be designed through digital media art means. Compared with traditional static works, such dynamic works with cultural creativity can better reflect the cultural nature of the cultural industry.

For example, in the Mogao Grottoes in Dunhuang, the film " Dream Buddha Palace was launched to the public through the digital exhibition center. In the creation process of the film, did we make full use of the digital media art and the current advanced technology to fully combine culture and art.

6 CONCLUSION

For now, the cultural creative industry development has made corresponding achievements, and social and economic structure has changed, in order to be able to further promote the development of our cultural creative industry, need to make full use of digital media art, and clear the correlation between the two, this to promote the development of our country cultural creative industry plays an important role.

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