

Research on Digital Transformation and Recreation Strategy of Finished Art

Xiaodie Zhao

College of Sciences, Soochow University, Suzhou, Jiangsu 215127, China

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Abstract: With the advent of the post industrial era and the information society, the ideological trend of postmodernism rises. This trend of thought is not only a criticism of traditional philosophy, but also a new world outlook and methodology, and deeply affects our modern people's life attitude and way. At this time, digital technology is developing rapidly. Combined with this postmodern trend of thought, it not only brings technological progress and changes in creative form, but also a new thinking mode around visual experience. The digitization and scientization of art not only lies in the change of surface form, but also has evolved into a super medium, connecting the real world and the virtual world, and has become a new way and means for us to transform our world. However, while the way of artistic creation has been expanded unprecedentedly, there are also many problems, especially the transformation problem that must be faced in creation, which needs our further study.

1. Introduction

Digital technology refers to the technology of expressing, transmitting and processing all information through electronic computers, optical cables, communication satellites and other equipment using two digit codes of 0 and 1. Digital technology generally includes digital coding, digital compression, digital transmission, digital modulation and demodulation. Traditional art forms mainly use tangible media as a means to depict the eternity of time and space, reproduce people's real life and convey the feelings of creators; Digital art design uses virtual computer network as creative media to transmit information. With the continuous expansion of the scope of network communication, the content of network communication also provides unique creative ideas for creators. Digital art design has become a tool and means of art creation, and its digitization also has the characteristics of surpassing time and space.

In recent years, with the continuous development of culture and art, both in breadth and depth, the art of life and the art of life have gradually brought culture and art into people's work and life. At the same time, science and technology are changing the whole process. How to make the culture and art industry embrace digitization?

2. Methodology

2.1 Characteristics of Digital Technology

The creation and communication media of digital art design are mainly computer and network, and its main form of expression is the digital creation and communication of information. Compared with traditional art forms, the informatization of digital art design is an ideology without entity, which is identical with traditional art forms. However, compared with traditional art forms, digital art design is more vulnerable to the influence and restriction of real material life. At present, we must make full use of the digital art design of computer for creation and display, so as to achieve and realize the artistic effect that people want.

The continuity of digital art design mainly refers to the continuous transformation and innovation of the content and form of original works by computer technology. Generally speaking, once the traditional art design works are formed, there is no transformation and innovation, but the works of digital art design are often updated. The multimedia of digital art design refers to the integration of traditional artistic expression into digital art design, which effectively realizes the combination of static and dynamic artistic expression. This multimedia expression method not only retains the static language symbols in traditional art, but also integrates the characteristics of dynamic performing art elements in digital art.

2.2 Traditional Image Change of Digital Art

The influence of digitization on literature and art is first reflected in its change of the traditional form of literature and art. Since modern times, print media with text as the core, photographic media based on image, film media centered on image and radio and television media for long-distance transmission of sound and image have formed modern mass media. In the past, these media coexisted independently and were incommensurable, but in the digital age, different media were presented to the public in digital form, such as photos into digital images, images into digital images, etc. Digitization makes different media forms belong to the same. Books, CDs and DVDs that used to be storage intermediaries for literature, music and movies are transformed into digital signals and presented through readers and display screens, which truly realizes media integration.

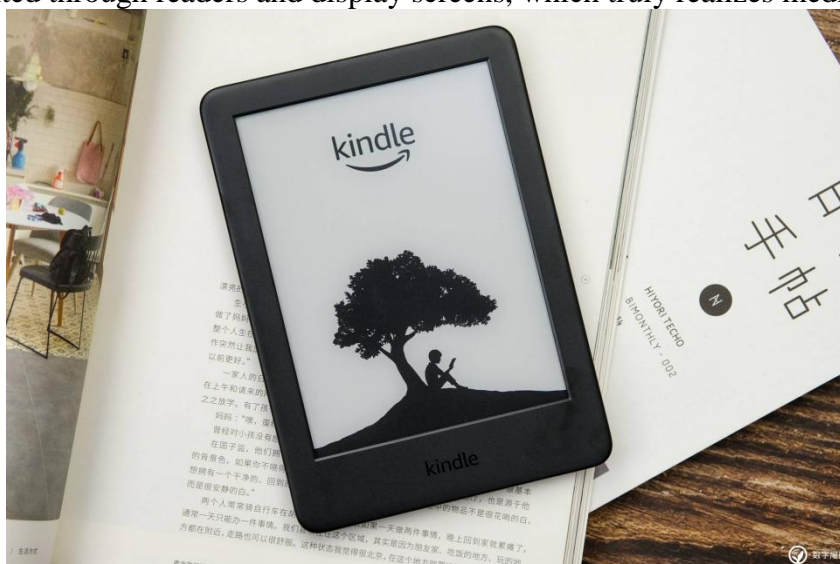


Fig.1 Kindle e-Reader

Digitization has also changed the literary creation itself. Taking digital film as an example, it not only changes the shooting and projection media from film to digital, but its special effects have greatly changed the way of film shooting and production.

2.3 Digital Technology Stimulates the Innovation of Literary Works

Digitization not only reshapes the form and creation of literature and art, but also constantly stimulates the innovation and creative potential of literature and art. Digital cultural products are convenient for transmission and storage, reducing the creation threshold. People can not only receive a large amount of information, but also fully participate in cultural production. In the digital age, cultural and art production organizations pay more attention to building a social application platform, on which users are both consumers and content producers. For example, at the beginning of its birth, network literature is different from the production and sales chain in which writers write, publishing institutions print and distribute, and obtain income through copyright. Online writers usually rely on readers' clicks and rewards to get income. From the perspective of producers, cultural products are no longer created only by professional and institutional writers and artists. Everyone can write from the media and take short videos; From the perspective of consumers, platform big data will customize more personalized content according to the acceptance habits of the audience. In the digital age, the value of “experience” is more prominent, and experience determines the communication effect to some extent. Through big data mining and other methods, drawing experience from effect evaluation, feeding creation and realizing the rapid iteration of cultural products are the prominent characteristics and significant advantages of digital enabling cultural creation.

2.4 Advantages of Digital Art Compared with Traditional Art

Compared with traditional art, digital art also has incomparable advantages in transforming the whole art, but digital art works are different. Because digital art has the characteristics of repeated copying, people can copy and transform the whole art works by using digital technology, which can not only completely preserve the form of original works, It can also be transformed into other works of art according to people's preferences, and the global sharing of art can be realized through the network. In addition, the design means of digital art can also enable mankind to share the art left by their predecessors from generation to generation, and leave space for future generations to continue to create on the basis of sharing “originality”, so as to make art obtain sustainable development.

The wide application of digital art makes the relationship between traditional art and real life and between art digitization and daily environment more close. The combination of traditional art and digital technology makes the application of digital art more extensive and powerful. Moreover, digital art also provides people with new production and life skills, which has a significant impact on their production and life. Only based on real life can art obtain its own value and realize sustainable development.

3. Case Analysis

3.1 Bill Gates's Crbis Image Company



Fig.2 Bill Gates's Corbis Image Company

As early as the early 1990s, before the Internet was popularized, Bill Gates had registered an image company called Corbis in Seattle. At that time, the company did not have a clear business direction and positioning, but based on Gates' expectations for the future: he believed that people would be keen to buy art on the Internet and put it at home for decoration in the future. So he decided to build a digital image library, provide images to publishers, advertising design companies and filmmakers, and establish the most comprehensive image mobile phone library through the development of technology platform. In the digital world, provide image services to global customers, help them express their concerns, and provide after-sales services such as intellectual property management.

Since 1991, Corbis has digitized the collection data of a museum and established the Corbis collection library in 1992. Then, Corbis has gradually signed agreements with the National Art Museum, the Philadelphia Art Museum and the Hermitage Museum in St. Petersburg to collect their art works in Corbis. The image supply industry foreseen by Gates has indeed made great profits today. Corbis gradually began to buy copyright and accumulate photographer and artist resources. Now, as one of the largest visual information resources in the world, the company provides comprehensive digital documents of art and photographic works collected by the world's public and private. Apple also released a CD-ROM called "virtual art museum" in 1992 and provided it to 1000 universities, schools and museums around the world free of charge. Although the "virtual art museum" is not connected to the network and cannot be updated in time, it can allow users to select different works in the virtual exhibition hall of the CD program to see the detailed introduction of the works.

Corbis is the earliest Virtual Art Museum in the world. It is an extension of the physical art museum to the virtual space and an exploration of the ideal space of the future art museum. It discusses the most avant-garde and futuristic space concept of the art museum and presents the known and unknown experience of our life in an invisible public domain woven by the network and mobile terminals, From the perspective of visitors, present their thoughts on the new living environment, that is, the networked society. By paying attention to users' visits in the virtual environment, support the visit, education and other related activities of the physical Art Museum, inherit the display, education, entertainment and research mission of the physical Art Museum, and jointly promote the entity, virtualization and interaction with the audience, Completely break through the old exhibition planning and exhibition system.

Digital art works continue to be intelligent with technological changes, but we also see resistance to the changes brought about by technology. Digital projection, led and other technologies emphasize the physical quality of art. As digital art reaches its peak, people will return to what they can touch and feel. Why? Because social media will continue to drive the art world. People tend to

share personal experiences on social media rather than general things they find in the digital world. Interactive and experiential art will play a more important role in the art world because people like to participate in what they share. Social media will push art to a higher level, so it will become more accessible.

3.2 Pixels Noir Lumi e Re 2019, Interactive Installation of Digital Art Master Miguel Chevalier



Fig.3 Pixels Noir Lumi e Re , Miguel Chevalier,2019

This is the work “landscape - Paris - Saxony” by digital art master Chevalier. He discusses various changes in Saxony city and its territory through video and digital media, which are related to the development of Paris - Saxony large science and technology center, which brings together famous schools and universities in southwest France, leading scientific research institutions The most advanced laboratories and R & D centers of major industrial companies. The artist used a camera to survey the downtown area of Saxony, covering the university campus and the countryside around the Saxony plateau. He also photographed the saklai plateau natural area with a UAV, which is composed of grain fields, grasslands, horticultural and vegetable greenhouses and forests, forming a plant palette to show the local agricultural biodiversity. Compared with other urban projects, this is one of the particularity of this land.

These images of contemporary architecture and urban landscape are then integrated with 3D imaginary architectural elements. The result is a network grid between reality and fiction, which is the real metaphor of these changing neighborhoods. With the development of these neighborhoods, these neighborhoods will become more and more complex. These two digital video works show how to transform a form of reality into a new imagination, or how to create an illusion from reality. The mixture of real and virtual has created a “meta city”, which has transformed a new form of contemporary life between growth and continuous renewal.

Whether the landscape is urban landscape or natural landscape, human beings delimit the landscape (viewpoint and structure) at the same time, live in the landscape, change the landscape and give it rhythm. However, mankind is also the result of historical, economic and political processes, providing many “forms”, “age, situation and behavior”.

3.3 Verus art's 3D overhead printing process



Fig.4 Verus Art's 3d Overhead Printing Process

This is an elevated printing process using 3D digital technology created by a team called verus art, which can safely and accurately reproduce the strokes of our favorite artists. Firstly, this technology solves the security problem of painting species. Arius technology painting digital system is jointly designed with the leading Museum protection department for these exquisite and valuable assets. It constructs a portable system to ensure that valuable oil paintings do not leave the museum; In the process of digitization, the 3D mapping system can make hundreds of millions of measurements without touching the painting surface. Each data point measurement includes the color and height of the painting surface, so as to achieve a finer level of detail than human hair. Through the data pipeline specially designed by Arius technology, the mapping data will be converted into 3D digital model and into a format suitable for overhead printing. One of the many components of this digital stage is the color management process and technology of Arius technology, which is unique overhead printing, and ensures that the copied color is as close to the original painting as possible, and the final replica is lifelike through proprietary full-color overhead printing.

Although 3D printing art and modeling are still in their infancy, artists have found new applications of 3D printing technology in their works. Visionary and futuristic artists and creative professionals have used 3D printing to design art installations, modern sculptures, and the possibilities of character and prop design are endless.

First of all, its advantage is that it can stimulate the creativity of artists and give birth to new art forms. It acts as a magic portal between imagination and realistic reality. Like artists, 3D printing can break through the Convention and provide amazing and enlightening works of art. Second, it can be dynamically customized. Art is dynamic. This drive has led to custom design in most forms of creative art. 3D printing provides a fast, reliable and agile solution in this custom design driven application. Creative professionals such as filmmakers, game designers and set designers have begun to reap the benefits of 3D printing in their works. Third, this kind of artwork is easy to copy. Many artwork and styles depend on replication components, which is part of its creative expression. Replication can be tedious and error prone and tangled. 3D printers can help artists overcome this challenge and focus on the overall situation. But finally, 3D printing art is the revival of unlimited design possibilities. It gives artists and designers the power of technology that can stimulate imagination. In addition, 3D printers in the new era have fewer design restrictions.

4. Conclusion

Xi Mu, President of China Academy of art Economics (Li Keran Painting Academy), believes that the development of the whole art industry has experienced a difficult process of business transformation in recent years. At the beginning, the organization of digital scene service followed the traditional idea of art e-commerce. However, with the construction and development of digital

scene and the rapid development of digital infrastructure, some problems that were difficult to solve before have been overcome.

Nowadays, with the gradual construction of digital scenes and the continuous establishment of new infrastructure, the digitization of the art industry faces three major problems:

First, asset digitization and data capitalization. “Digitization of art assets” and “capitalization of data resources” are the basic points for studying the digital development of culture and art industry. Ximu said: “don't regard data as a superficial phenomenon that simply reflects the development of things. It is actually a resource that can be changed into assets under certain conditions”.

Second, based on the promotion of new business forms. “Art e-commerce” has entered the second stage of development. In the past, art e-commerce was more based on a display and trading platform based on Internet technology to accurately manage customer data and needs; New art e-commerce is a comprehensive service platform based on digitization, which manages customers' credit and provides users with stronger credibility.

Third, capital market and factor market. Ximu believes that the development of modern industries is mostly inseparable from the capital market and factor market. In terms of capital market, we should consider IPO, package and sell assets to listed companies, merger, etc. In terms of factor market, we should consider how to reduce costs and optimize asset allocation, and realize the transformation of resources into assets with the help of factor platform.

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