

Conceptual Innovation of the Art Development of Digital Media Library

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Abstract: In the 21st century, under the background of the rapid development of globalization and information society, the intervention of science and technology has brought endless innovation and possibility to art creation. The important position of new media in the management of digital library. In order to keep up with the pace of the rapid development of science and technology, library management must also innovate, and the establishment and continuous innovation and improvement of digital library are particularly important. New media art has become an important part of contemporary visual art. In the context of the current era, the sharp contrast between the rapid development of the digital media industry and the lag of digital media art education requires us to carry out the concept transformation and innovation of “injury”. The innovation of digital media art creation methods relies more on the combination of scientific and technological innovation, scientific theory and innovative ideas. At present, there are three main forms of digital media art: interactive digital media art, algorithmic digital media art and digital media art based on artificial intelligence. The advancement of science and technology and the innovation of ideas will become the driving force for the development of digital media art. Creative industry and information design will be the mainstream of digital media art. Digital media art will bring new ideas and new visions of art innovation. This paper studies and analyzes the development prospects and status of digital media libraries and how innovative ideas can promote the artistic development of digital media libraries. It is hoped that the public will have an objective understanding of the art development of the digital media library and understand the development of conceptual innovation and digital media art. The importance of promoting the common development of cultural and creative industries and digital media.

1. Introduction

The library, as the name suggests, refers to a large-scale collection of books, but due to the wide

number of books, the energy and material resources spent both in infrastructure maintenance and daily management are very large. The more the quantity, the higher the cost. As the pace of people's life accelerates, such facilities can no longer meet the basic human life needs. Therefore, digital libraries have emerged at the historic moment to adapt to the evolution of The Times and meet the reading needs of modern people.

Digital media art is constantly developing and progressing, so it is difficult to have a clear definition of digital media art. Digital media art was born from the concept art in the 1960s and appeared in the 1970s. "Communication", "cooperation" and "participation" not only attract the attention of artists in the process of digital media art creation, but also are the key to affecting aesthetic value, meaning and emotional experience. (Herro, D. (2015)). Digital media art is very different from "old media" art. From conceptual design to conceptual design. Visual arts, from performances to installations. (Jordan, AB (2016)).

The current concept of digital media art mainly consists of three dimensions: the first is the perspective of time advancement. Many scholars believe that digital media art appeared later than the "old media art" such as painting and sculpture. (Moreno, A., Navarro, C., Tensch, R., & Zerfass, A. (2015)). However, the time-consuming digital media art will make the study of art mere formality, so few scholars support this view. Secondly, the perspective of media technology development. Those who hold this view include the Australian contemporary art magazine Correa, T. (2016). Digital media art is a very broad term. Its main feature is the use of advanced technical language in art works. These technologies include virtual art created by computer, Internet and video technology, image art, and multimedia direct assembly and behavior (Casemajor, Nathalie, Couture, Stéphane, Maurio, & Goerzen, et al. (2015)). Digital media art is a technicalized art, which is a general term for artistic exploration and practice by means of comprehensive use of various scientific and technological means (Dezuanni, M. (2015); Church, S. H. (2017)). Finnemann, N. O. points out that the emergence of video, sound and interactive devices has changed the artistic creation form. These new artistic styles, which are different from the traditional media such as computer, image, network, digital imaging technology and other advanced achievements, are mixed and integrated and developed into digital media art (Finnemann, N. O. (2014)). The third dimension, from the perspective of the development of art form itself, holds that digital media art is a new type of art which is produced after the integration, promotion and development of science and technology and art form. Evans, G. pointed out that digital media art refers to the use and display of new technologies related to digitalization and information dissemination (computers, cameras, mobile phones, etc.), with interaction as its main formal feature, and participation in practical activities in the related fields of culture, guild, politics and aesthetics (Evans, G. (2015)). Art theorists have a mainstream understanding of digital media art. They interpret "media" as "media", and "new media art" as an artist's exploration of the new art world. (Gantz, W., Lewis, N., Galily, Y. (2014)).

Digital technology not only provides a driving force for innovation in the development of the country and society, but also brings innovation to artistic creation. It is an innovative result of the research and practice of people's artistic communication and expression connection through digital technology interactive media (Hutchings, T. (2017)). Under the current trend of global science and art integration, the ideological performance of all kinds of art can be expressed through innovative technology, which is different from the traditional art creation method and the mass experience art method. Nowadays, more and more digital art products appear in the public's field of vision. Their unique forms and methods also have a profound and far-reaching impact on people's lifestyles, values, and aesthetic concepts. This paper studies and analyzes the development prospects and

current status of digital media and how innovative ideas promote the development of digital media art. It is hoped that the public can have an objective understanding of digital media art and understand the development of conceptual innovation and digital media art. The importance of promoting the common development of cultural and creative industries and digital media.

2. The Composition of Digital Media Art

Digital media art is an art form in which visual art, design, computer graphics and media technology intersect, and digital media art also has the attributes of mass culture and social services. Therefore, digital media art is characterized by design, visual arts, media culture, computer technology, and social services. First of all, digital media art itself is a creative activity that requires artists or designers to create and present visually beautiful works of art or service products based on human needs and artistic design rules, and based on digital media time and space. And develop human artistic creativity and imagination.

2.1. The Technical Layer of Digital Media Art

The styling and presentation of digital media art relies on computer technology, especially computer graphics and software technology. Digital media art mainly involves the application of computer graphics in the field of art, especially the application of graphic images and animation software technology. Software, at the core, is a collection of algorithms and programming. They have a friendly and "humanized" interface, graphical tools and operating environment, creating a more natural and convenient design space for artists and designers. Algorithm languages, editing logic, and arithmetic formulas are all hidden in the "background." Digital media technology mainly studies theories, methods, technologies and systems related to the acquisition, processing, storage, dissemination, management, security, and output of digital media information. Digital media technology is an interdisciplinary and technical field that combines digital information processing technology, computer technology, digital communication and network technology. Digital media technology integrates text, sound, graphics, images and other information through modern computing and communication means, making abstract information a perceptible, manageable and interactive technology.

2.2. Media Layer of Digital Media Art

Compared with traditional media, digital media is a new media form developed from newspapers, radio, television and other traditional media. It uses digital technology, network technology, mobile technology, through the Internet, wireless communication network, cable network and other channels, as well as computers, mobile phones, digital TV terminals, to provide users with information and entertainment. The characteristics of digital media are interactivity and instantaneity, mass and sharing, multimedia and hypertext, personalization and community. As far as the media itself is concerned, it is a valuable information carrier. The carrier has certain audiences, the time of information transmission, the conditions of transmission and the space conditions of psychological reaction of the audiences.

2.3. Digital Media Art Application Layer

It is an indisputable fact that digital media art involves multiple disciplines and a wide range of

applications. The "pyramid" structure can be used to deeply understand the application of digital media art, as shown in Figure 1. Digital media art is a historical product of the digital technology art concept media revolution. Because computer graphics, visual art and media culture and communication constitute the three sides of the "pyramid" of digital media art, the social service and application of digital media art belong to the other side. According to the proportion of the current personnel engaged in digital media art and the artistic quality and technical level of the creator, the "pyramid" is roughly divided into three levels of application. The first level is the social information service industry, including digital photography and wedding photography. Photography, video and digital video disc services, personal web design, text layout and digital image design, e-book design, etc., this level has a large number of people and a wide range of services, but its technical content and requirements for creators are common service standards. The second level belongs to the information service of industrial design standards. This level requires high creators' artistic quality and technical level. Its services include electronic publication design for publishing houses, multimedia CD design, corporate website design, industrial products. The third level of design, film title design, print advertising design, packaging and design is the lowest, but the requirements for the creators' technical content, artistic level and grasp of the media and market are the highest. Refers to smart entertainment products and advanced digital entertainment products Design and development, such as digital film editing and special effects, games and other digital entertainment products network design and planning, digital painting and digital media art, digital TV program director and production and other services.

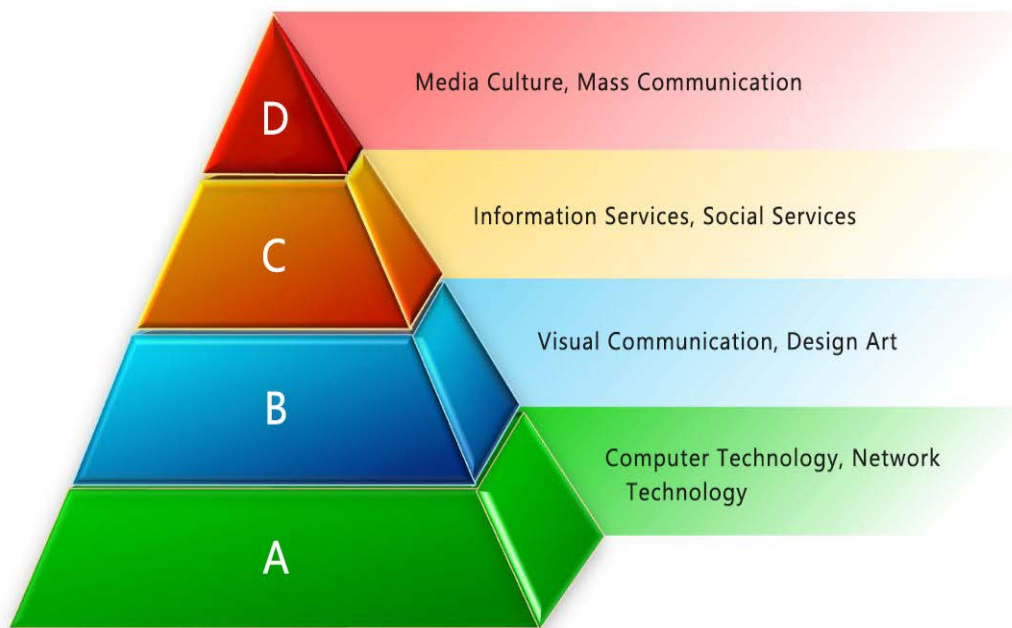


Figure 1: The "Pyramid" Model of Digital Media Art

3. Aesthetic Appeal of Digital Media Art

The orientation of application interface is the way that digital active images create elements in form, which is in line with the content of some aspect in the wide application level of digital media

art, and then create aesthetic value in the media art achievements in this field. Recognizing the current flourishing digital media cultural environment is an opportunity to examine the current development of cultural and creative industries from the perspective of the times. It is also a pulse of the times for creators to grasp. On this basis, we should not neglect how to grasp the unique law of aesthetic value generation under the digital media environment when we regard digital image art as the core chain that runs through the category of digital media art and understand the digital dynamic effect system as the key element of dynamic visual form creation. On this basis, digital media art also has the aesthetic appeal of the audience.

3.1. Integrative Emotional Path

The phenomenon of science and technology merging into art has become commonplace in the eyes of people surrounded by digital cultural products. However, if we think a little at the academic level, we find that there seems to be a paradox implied in it. As two important aspects of human culture, science and technology are related to human rational creativity, and have the inherent nature of fully following objective inevitability; while the emotional creation of art is blooming on the basis of life experience, in the extreme pursuit of spiritual freedom, and has the essence of psychological expression activities. So under the current historical background, whether it is necessary to determine the logic which should be followed by the development of digital media by distinguishing the primary and secondary factors when integrating the mathematical logic and formal logic separately under the conditions of many natural differences? Obviously, this one-sided dualistic perspective can easily lead people to fall into the paradox trap which is difficult to integrate the two, but the art of digital media is flourishing. The fact of prosperity has prevented it from breaking through. In the process of digital art integration technology, emotion has become the "gatekeeper" of art. Although the development of digital media technology has brought unprecedented freedom of time and space in creation, only when the task of constructing "emotional expression" is completed, the road to art can be unimpeded. In the case of dynamic presentation of digital media art, the starting point of technological force is to take human or personified subject as the goal. For example, when describing the same type of dynamic, disaster movies often make digital special effects of huge buildings collapse. The role of this dynamic image is to explain the scene and the accompanying environment at most. In the "collapse moment" which involves the emotional entanglement of the characters, the dynamic often behaves very differently, during which there are always feelings of distress or life-threatening, as well as fighting for justice to save people in distress. The spiritual connotations in digital technology are used to exaggerate the extension of dynamic moments, or to show the dynamics in space from multiple perspectives.

3.2. Following Art Rules

Different from the former, the existence of media technology in art can not be solved by identifying the entry point of the two. What it concerns is who should lead in exploring the healthy development direction of art in creation. When technology exists in the field of art, whether it should first conform to the law of art or attach more importance to its original law of technology. Looking back on history, the emergence of media technology has indeed exerted a great influence on art, especially in the field of production and dissemination of works of art, and also on the creative process and symbol system in specific art categories. Never before has any kind of art completely occupied the territory of another art by means of media technology, nor can it be said that there is any law in accordance with a certain media technology. And the art that develops is

determined by technology. "When media technology starts and exists for the sake of art, it has actually left the technical ontology and become a part of art." What technology is good at is to provide new means and methods of creation for art. Although it plays a certain role in the formation of the law of a certain kind of art, this force is always right, and can never surpass the aesthetic appeal of human beings to art, nor can it replace the social, era and cultural concepts that determine the artistic nature of a certain category. In a word, no matter how science and technology intervene, it is not the level of technology that can measure and determine the aesthetic quality of spiritual production content, but the "essence of existence appears in the eternity of its life". It reveals how history and life can achieve a certain degree of transparency, and opens up a new dimension of their own nature and situation in the artistic experience, and endows activities with the meaning of human life. The artistic law summarized in this process. Similarly, in the dynamic presentation of digital media, how to exert imagination and ability to convey emotions and spiritual intentions determines that works will fall into the quagmire of special effects or use media technology to build a platform to deduce the new aesthetic effect.

3.3. Multidimensional artistic expressions

Art comes from life and is more important for the cultivation of talents in the field of digital media art. Marxism believes that practice is an objective and material activity of human beings to transform the world. The artist's creative source relies on the affluence of life. In the process of creative design of various professional art, it is necessary to use the corresponding artistic expressions that it needs. In the process of material change, it is also necessary to use various corresponding artistic expressions. In this way, if students are not able to master the characteristics, performance, attributes and laws of their creations as the source of artistic creation, and they do not skillfully understand the specific expression techniques of each subject, it is impossible to convey in the field of digital media art. Complete your own artistic emotions and artistic concepts to complete your own work. Therefore, artistic expression is a direct link between aesthetic understanding, artistic understanding and abstract cognition. Only by constantly practicing and accumulating in life can we create different forms of artistic expression.

4. The Mainstream of Creative Industry Development of Digital Media Art

4.1. Data Survey

In this paper, 500 people were randomly surveyed to study people's awareness of digital media and their preference for the development of digital media, so as to study innovative ways of digital media. In the way of investigation, besides using the traditional paper questionnaire, this paper also draws lessons from the current popular big data thinking, uses the network electronic questionnaire, Wechat public platform survey and other new media survey methods, and strives to expand the sample while ensuring the relative authenticity of the survey, so as to grasp the status quo of art cognition and teaching of art digital media in middle schools in China more comprehensively.



The results of the survey on the understanding of digital media art show that only 143 people choose to know or compare digital media art, accounting for 28.6% of the total number, 127 people choose to know general knowledge, accounting for 25.4%, while 172 people do not know or understand digital media art, up to 34.4% of the total number. Unknown accounts for 11.6% of the total. The proportion of specific survey results is shown in Table 1.

Table 1: Understanding the media art

Understand the status	Know well	More understanding	General	Don't know much	Don't understand
Number	46	97	127	172	58
Proportion (%)	9.2%	19.4%	25.4%	34.4%	11.6%

Digital photography, digital painting, digital animation, online games, 3D printing and other five forms of digital media works of art are sorted according to the degree of preference. This paper also adds image photos and image objects to the design of topic options, which helps the respondents to better choose their favorite digital media works of art. Different types of digital media works of art are shown in Table 2. The results of the survey are shown in Figure 2.

Table 2: Table of works of art in different types of digital media

Digital photography	Digital painting	Digital animation	Online game	3D printing
				

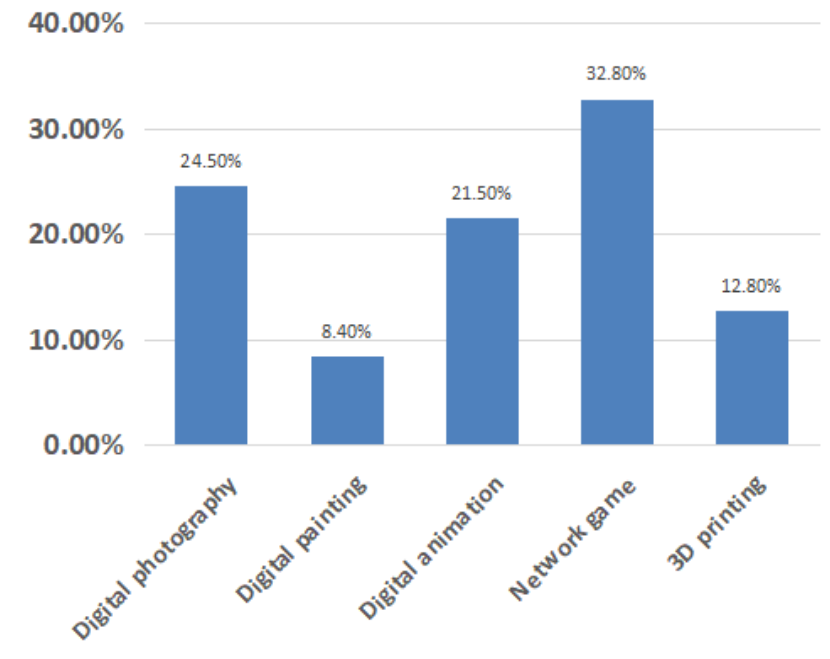


Figure 2: The favorite art work ratio survey

The digital media art form is online games, accounting for 32.8%, followed by digital photography, accounting for 24.5%, the third is digital animation, accounting for 21.5%, the fourth is 3D printing, accounting for 12.8%, and finally digital painting, accounting for 8.4%. Thus, as the most common digital media art in daily life, online games and digital photography are deeply loved by people, and film and television animation is also an art form that people are keen on. It is worth noting that with the continuous warming of 3D printing in China, the emerging digital media art 3D

printing is gradually being paid more attention and attention. The use of digital media can easily create some virtual contexts, and through the interaction with the audience, the important purpose of increasing the impression of the audience and inspiring the audience. In order to meet this context requirement, digital media art practitioners should pay attention to the application of virtual elements in the creative process, strengthen the innovation of virtual art, and enhance the audience's visual and appreciation experience. On the one hand, grasp the development trend of virtual technology. The emergence of virtual technology has further expanded the digital media context. Therefore, digital media art practitioners should strengthen the study of virtual technology knowledge, grasp the development trend of virtual technology, and fully prepare for the innovation of virtual art. On the other hand, master the virtual art innovation ideas. The innovation of virtual art is more flexible and changeable. Therefore, digital media art practitioners should master virtual art realization methods, virtual art elements and related expression techniques, research and summarize a feasible innovative idea, and realize virtual art to better innovate.

4.2. Innovation Trend of Digital Media Art Creative Industry

Cultural and creative industries have undergone significant changes. They are affecting and changing the face of traditional cultural industries. The modern cultural industry is actually a huge "industrial group". They are based on large-scale replication technology, fulfilling the widest dissemination function, and stimulated by commercial motives and the intermediary of the economic chain. And save two basic links to infiltrate, turn originality into resource development, turn preservation into display, and lay the whole process on top of modern intellectual property. At present, cultural industry entities and core industries such as culture and entertainment, online games, advertising consulting, press and publishing, radio and television, audio and video, network and computer services, tourism, and education are developing rapidly. Closely combined with digital media, a new wave of "digital creativity" has been formed. For example, science fiction blockbusters incorporate the latest digital media technology to create fantastic digital scenes are shown in Figure 3.



Figure 3: Science fiction movies into fantasy scenes

Digital media art represents a kind of "new vision" and "new thinking" of artistic innovation. However, digital media art is not exclusive of tradition. Just as Einstein's theory of relativity can not replace the classical Newtonian mechanics, digital media art can not replace traditional art. They are

parallel, complementary, learn from each other and develop together. Therefore, all the classics of digital media art that can be handed down are the crystallization of science and art that can fully embody human feelings, wisdom and philosophical ideas. Digital media art is not only a new group of wonderful skills, it has the ability to create works of art that reflect profound ideas and inspire people. With the passage of time and technological progress, human beings will grasp the "digital media art" more accurately, and the expressive power of digital media art will be further strengthened, and may even produce effects and technologies that other media can not produce. For example, holographic representation technology and more realistic virtual environment technology. These will further promote the development of digital media art to a new field.

5. Conclusion

With the advancement of science and technology, the development of digital media libraries will become faster and faster, and the perspective innovation of artistic development will become the mainstream culture of the new century, which means that people will face the challenge of transcending traditional value experience (including artistic concepts). The future world will be composed of real physical world and digital media art. Society. Today's society has entered the peak period of digital media art development. Only by timely adapting to the needs of the times and constantly updating the technology and creative ideas can digital media art better serve people and bring more benefits to people. This paper concludes that the main points can be achieved in accordance with the development of the times.

5.1. Innovative Thinking

New technologies and new art call for new thinking and new theories. It is far from enough to simply and independently consider new technologies and new art in accordance with past art theories, technical theories, artistic thinking, and technical thinking. The connotation of "innovative thinking" as used herein refers to a mode of thinking that expresses a certain subject with a different way of thinking or a unique method from the past. It is also a general term for various forms of thinking that are creative and capable of innovative results. . In innovative thinking, there are many factors that influence the results of innovative thinking, such as intuition, emotion, association, inspiration, insight, etc. These factors can even play a decisive role. If a common thing in life is placed in a new place, given a new name and a new perspective, it means that its meaning has changed.

5.2. Digital Media Artistic Expressions with Diversity Features

The expression objects selected in the expression process of traditional art mainly challenge the objective world, and the objects expressed by digital media art are subjective worlds. This form of expression presents a certain diversity of characteristics. Through the use of digital media art, various artistic creation style ideas can be inherited, and other new fields have been broadened through the use of accounting technology. Such as collage reorganization, time and space reversal, and virtual and reality.

5.3. The Idea of "Life is Art" in the Process of Modern Art Development

"Life is art" is a core idea in the development of modern consciousness. In the old society, the

cognition of "art is only a feast of privileged spirit" has made breakthroughs with the progress of the times, and it has made people better. Liberated from traditional aesthetic values. More and more people are beginning to realize that everyone can create art, and art lovers are beginning to transform toward the participants. Art has also become a project that everyone can participate in. People's views on digital media art have also undergone a major change with the changes in the role of participants, which in turn has promoted the development of digital media art in the direction of popularization.

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