The Development Trend of Contemporary Art Design Under the Wave of Digital Technology

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Abstract: In the 21st century, the development of digital technology is getting faster and faster, which not only affects our lives, but also brings unprecedented convenience and prosperity to our art and design. Starting from the real environment under the background of digital technology, this paper analyzes the characteristics of digital art design, and looks forward to the future development of art design under digital technology. Digital technology and art design complement each other, making art design more quickly integrated into our modern life, and have a far-reaching impact in all fields of art and design.

Keywords: digitalization, art design, future development

1 Introduction

Art design applies aesthetic concepts to relevant designs in life, so that design can play an aesthetic role on the basis of practical functions. [1]In the digital age, the interaction between people is mediated by Internet media, and the speed of information dissemination is getting faster and faster, changing the traditional concept of art and the way it is shared with the public. The emergence of digital technology has improved the efficiency of art design, reduced design time and production costs, made art design more convenient into our daily life, and let more people feel the beauty of art.At the same time, the two-sided impact of digital technology on art and design is also worthy of our continuous exploration and research.

2 Digital technology concept

With the continuous development of society, digital technology has become more and more familiar, but its concept and scope are still relatively vague. It seems that it is still an advanced technology, but there is still a lack of clarity on how it is applied and what role it plays in art and design.Digital technology refers to the beginning of the invention of computers, so that the Internet, cloud computing, artificial intelligence and other digital technologies continue to appear, so that the cost continues to decrease, so that digital technology from science to practice, forming a complete digital value chain. [3]Now digital technology has begun to be applied in various fields, promoting the development of related industries, thereby promoting the prosperity of society.

[2]It is worth mentioning that digital technology has also begun to intervene in art and design.

From the perspective of contemporary development and people's needs, traditional design methods can no longer adapt to the trend of contemporary times and people's aesthetic needs. Therefore, in this era of universal networking, our designers should also change their thinking, try to start from science and technology, so that art design can make progress with the assistance of digital technology, provide convenience for designers, and at the same time make art design can serve the public.

[7]Progressive artistic concepts go hand in hand with advanced science and technology, changing the way art is shared and created. In the current social context, artists and designers not only regard digital technology as an auxiliary tool in design work, many designers are changing the traditional concept of art design through this powerful digital technology as a medium of art and design, so as to create more eye-catching, interactive and immersive art and design works.Contemporary art design has undergone earth-shaking changes, art began to come to life,and the enjoyment of art is no longer the privilege of a few, and the general public can feel the charm of art design anytime and anywhere.And can actively participate in art design work, no longer as passive acceptance as before.

3 Characteristics of digital art design

[5]The development of art shows that artists are always looking for new ways and mediums to express their artistic ideas. After the Industrial Revolution, new artistic expressions and concepts have sprung up, various avant-garde movements have challenged traditional artistic concepts, and the emergence of digital technology has also challenged the previous artistic design concepts, which has undergone great changes compared with the previous expressions of artistic design.First of all, the form of art design is more diversified, secondly, digital technology greatly reduces some repetitive basic work of designers, improves the efficiency of design, and finally the application of digital technology further promotes the relevance of art design work to other disciplines,make its development process more integrated.

3.1 Diversity of forms

The integration of digital technology and contemporary art design has enriched the expression of design to a certain extent. Design workers use digital technology to collect materials, process data, or use artificial intelligence to make simple designs in the process to provide ideas for their own creation, which are the convenience brought by the development of digital technology to art design. [6]It makes the development prospects of contemporary art design more broad, for example, 3D printing technology, four-dimensional three-dimensional space, interactive design, emotional design, etc., breaking the limitations of people's thinking and broadening the scope of art design to serve people. Promote the form of contemporary art design to be more diversified, rich and emotional.These interesting forms have promoted the development of related industries, making more people willing to understand and explore art and design.

China has a vast territory and a long history, and there are many intangible cultural heritage items, but some intangible cultural heritage items have not been well protected and promoted due to various factors of the development of the times, which requires our designers to publicize them. From the traditional form of propaganda, the scope of dissemination is limited

and the form is single.At this time, our contemporary designers can choose digital technology to collect data, establish a database, organize and store physical and cultural materials. Digital preservation technology can collect and record intangible cultural heritage information more comprehensively and truthfully, and strengthen archive management. For example, 3D modeling of virtual scenes, digital photography and other technologies can be used to investigate the physical objects in intangible cultural heritage items from multiple aspects and angles, analyze their appearance, sound, appearance, movement, geographical environment and social background at that time, and then reproduce the original form of intangible cultural heritage items to the greatest extent through digital technologies such as modeling, rendering, scene restoration, etc., and build a database to make up for the lack of content and data leakage caused by the inheritance process, so as to better let more people know our Chinese intangible cultural heritage culture.

[8]The Duanmen Digital Museum established by the Forbidden City is an example, allowing the public to intuitively feel China's ancient architecture and traditional culture through digital technology, generating an immersive visual experience on the screen and obtaining interactive experience through games. Through some digital equipment and other equipment, the audience can immerse themselves in the Forbidden City, interact with the characters in the palace, appreciate ancient cultural relics from multiple angles, view the former residence of the emperor, and get a more interesting and rich experience.This immersive approach to art and design is a major breakthrough from previous forms of artistic design expression.

3.2 Efficiency of the process

As we all know, the emergence of computers has brought great convenience to human beings, and digital technology is directly related to the development of computers, so it is imperative to combine digital technology with art design. Human beings are the creative subjects of thought, so they will inevitably invest their emotions and thoughts in the creative process, and the introduction of digital technology can help designers complete their creation, broaden their thinking, greatly improve the comprehensive ability of designers, and further promote the integration between digital technology and art design. It also greatly saves the time and cost of the design process, so that art design can better serve human beings.

For example, digital technology can be used to copy and paste patterns a lot, or to communicate with AI online during the design process to generate broader ideas. Now many sculptors use ZBrush software to design sculptures on computers, which helps artists create high-quality characters, creatures and environmental models with unique sculpting tools and powerful painting functions, which are widely used in games, animation, film and television and other media industries. With the blessing of digital technology, art design reduces the output of manpower and the workload of art design staff, and improves the efficiency of art and design work.

3.3 Comprehensive development

Design is originally a comprehensive discipline, and the current art design has a stronger interaction than the previous art design, because different disciplines are applied in the design process to better serve mankind. Today's digital technology has been used in different art categories, which can integrate pictures, text, images and other elements according to actual

needs, giving design more forms of expression, so as to better express the design effect, breaking through the limitations of traditional design.

For example, digital technology is very different from traditional painting, which can make the picture richer and more peculiar effects, any bold idea can be realized, and timely dissemination to the audience. There are also traditional TV media, the communication method is relatively single, can only be transmitted to the audience from visual and auditory, and the current 4D technology can bring people tactile feelings at the same time, so that the audience has an immersive experience. Make the exchange of information between people more convenient and timely, free from the limitations of time and geography. This involves a combination of multiple disciplines, so the development of digital technology in the future will certainly involve more and more discipline expertise，It requires cooperation between people of different professions and constantly absorbs the achievements of human development civilization, so as to break through the expression of traditional art design, so that people can feel art anytime and anywhere in daily life, so that the world of our daily life becomes an aesthetic world.

3.4 Interactivity of design

Today, with the continuous development of the times, the number of people who appreciate art has increased significantly, and it has a strong mobility. In addition to the previous on-site appreciation, visiting different art forms, etc., modern people hope to interact with art and design works, and feel the charm of art immersively, which also enhances the interaction of contemporary art and design development to a certain extent, which is closely related to the development of digital technology. The development of digital technology provides a broader platform for art design, but at the same time, it also puts forward higher requirements for art and design works, because more and more people can rely on the information platform to participate in art design, and art design works must make correct guidance for people's spiritual life.In addition, the interactivity of art design makes the design staff need to fully consider the user's individual needs and real experience when designing, and the perspective of design is transferred from the perspective of the product to the user's needs, so that users can feel the details of the design at any time, so as to better display the art design works, enhance the ornamentation of the works, stimulate the user's enthusiasm for the works, and thus improve the value of the art design works.

In fact, the interactivity of design has been reflected in many cases in life, it is different from traditional design, only focusing on the form of design, interactive design is first of all to plan and describe the behavior of things. For example, with the improvement of modern living standards, the incidence of lifestyle diseases such as diabetes and obesity is increasing year by year, and a large part of this is due to the unhealthy food we eat. Whenever our body ingests unhealthy foods, our bodies react and we crave those foods even more, which leads to overeating. In this regard, Mealody offers a pleasant solution by combining musical stimulation with a system of intelligent algorithms that use music algorithms to control our eating and drinking in an immersive audio experience. Multisensory perception studies have shown that slow tempo and soothing music are more controllable in the pace at which we eat, allowing people to focus more on tasting the taste of food and appreciating their surroundings, which can lead to more satiety prompts and thus reduce the intake of unhealthy foods. It's a liveable and fun way to better manage our diet, and it also encourages healthier ways to eat,

demonstrating the importance of interactivity in art design.

In short, digital technology promotes the interactivity of art design, so that modern art and design works can better communicate and communicate with users, so that art and design works can fully meet the needs of different groups of people and conform to the preferences of contemporary people. It also provides more inspiration and direction for designers, and enhances the vitality of artistic design works.

4 The future development trend of art design under the wave of digital technology

[4]It is almost inevitable that the development of art design will be affected by digital technology, but at the same time as applying digital technology, we should have a more comprehensive and in-depth understanding of digital technology to avoid art design becoming homogeneous and vulgar.Therefore, for the future development of art and design under the wave of digitalization, I believe that at least two aspects should be paid attention to, the first is the integration of national spirit, and the second is the healthy and reasonable use of digital technology,Finally, the comprehensive ability of designers should be improved.

4.1 Integrate traditional cultural connotations

With the progress of society and the development of science and technology, the application of digital technology in modern art design will become more and more extensive and deep, but in the process of development, designers can not ignore the value of traditional Chinese culture, should reasonably introduce it into traditional art, which not only helps to break through the bottleneck of traditional art, but also helps traditional art to the world stage.

The Chinese nation has a long history of development, from bronzes from the Shang and Zhou Dynasties to furniture and embroidery in the Ming and Qing dynasties, which have a decisive influence in the world, and also influence art and design from all aspects. Now in the context of the rise of digital technology, art designers can use digital technology to integrate text, images, music, animation and other elements to make art design present better results.For example, the use of animation special effects to express Chinese landscape painting now gives traditional culture a sense of the times and freshness, which is more conducive to the true integration of traditional culture into the public context, and makes digital technology an important carrier for disseminating traditional culture,So that our traditional Chinese art and culture can have a broader platform.

4.2 Rational use of digital technology

The wide application of digital technology has turned our lives upside down and brought a lot of help to art and design. However, at the same time, there are some risks and challenges that may bring some harm to our lives if they are not exploited. For example, information leakage makes privacy difficult to protect, algorithm recommendation aggravates the phenomenon of "information cocoon", etc., some designers in order to obtain short-term benefits, the use of digital technology to mislead teenagers, intelligent design saves a lot of basic work, but also caused the emergence of many low-quality designs to reduce the public's aesthetic

standards.And to a certain extent, it has caused some designers to rely on digital technology, resulting in a decline in thinking ability, which is not conducive to the improvement of design level.

For these problems, we should learn to make rational use of digital technology, improve digital governance capabilities, create a good digital ecology,always think of it as a tool for our design, not as a master of design. ensure that digital technology and production and life always move forward in the direction of benefiting society and serving the people, so that more and more people can enjoy a healthy and portable digital life,Improve people's aesthetic level and promote the development of contemporary art design.

4.3 Improve the comprehensive ability of designers

The further development of digital technology has also put forward better requirements for the comprehensive ability of our designers. Compared with the previous traditional design, designers should not only understand the content related to art design, but also have a certain understanding of the development of information technology, only in this way can they adapt to the requirements of the times and promote the continuous development of art design.

First of all, it is necessary to organize designers to actively participate in the training of digital technology and have an in-depth understanding of the development of digital technology, so that they can effectively combine digital technology and artistic design in their future work; Secondly, for those who have mastered digital technology, they can also take a variety of ways to enhance their writing ability and artistic literacy, and can have more creative inspiration in the design process; Finally, the school is an important place for cultivating talents, in the school we should actively promote the cooperation between various disciplines, break the barriers between disciplines, so as to improve the comprehensive ability of students, reserve talents for the development of China's art and design, and form our own talent team.

5 Conclusion

The emergence and application of digital technology has had an important impact on modern art design, changed the traditional way of sharing art design, and is conducive to the efficient dissemination of art design, thereby expanding the communication of art design, so that art design can serve more people, and further get public awareness, sharing and discussion. Through the analysis of the characteristics of digital art design, it is not difficult to find that digital technology will have major changes to art design in the continuous application and development.

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