

Artistic Reflection on Artificial Intelligence Digital Painting

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Abstract: Material media is the premise and foundation of artistic creation. It can not only determine the classification of works of art, judge the different aesthetic styles of works of art, but also have a profound impact on the thinking and techniques of creators. The mechanical nature of AI painting's own expressive techniques limits its diversified selection of painting materials and the setting of brush parameters, and its works of art are unable to achieve the vivid and humanized expressive style of traditional painting. As a product of science and technology, with the continuous development of science and technology and the passage of time, the artistic content of works will increase. Digital technology should be regarded as a tool and means for artistic creation. Only the perfect combination of digital technology and traditional painting forms can be conducive to the innovative development of art and the sustainable development of science and technology and humanities.

1. Introduction

Artificial intelligence technology provides artists with new favorable conditions for artistic creation. The integration of computer technology and art has led to the innovation of artistic form and diversification of development, resulting in new media art. New media art mainly refers to the artistic works created by means of new scientific and technological tools such as image equipment, computer, network, multimedia equipment and so on. New media art is different from painting in traditional sense. It is a new kind of artistic creation based on new thinking and research of traditional artistic creation. Compared with traditional art, AI art has more extensive connection with people's life, and AI painting art is moving towards the mainstream art form. Thus, AI painting transforms two-dimensional or three-dimensional graphics into computer-displayed painting art through computer mathematical algorithms. With the updating and progress of computer hardware technology and painting software technology, the creative forms, skills, expressive means and style characteristics of AI painting art are gradually moving towards diversification and rapid development.

2. The relation between artificial intelligence painting and traditional painting

2.1. Traditional painting form

As an ancient art form, traditional painting has formed its own unique creative mode and artistic

concept. It uses a variety of modelling elements to form a picture or image, creating an artistic image with a certain sense of texture and space. Traditional painting has gone through various stages from germination to initial development and even high maturity. After entering the 19th century, Traditional paintings introduced new artistic concepts and artistic expressions on the basis of inheriting the national painting tradition. Artists continue to reform and innovate, transforming traditional painting from classical to modern. In the art teaching method, it has also developed from the early teacher-apprentice teaching to the college teaching form. With the development of science and technology and art, it also promotes the progress and transformation of traditional painting in painting materials, painting skills and forms, teaching methods and aesthetic ideas.

2.2. Characteristics of artificial intelligence painting

Artificial intelligence painting has strong plasticity, virtuality and diversity, timeliness and extensiveness, and dependence on advanced technology, as shown in Figure 1 below.

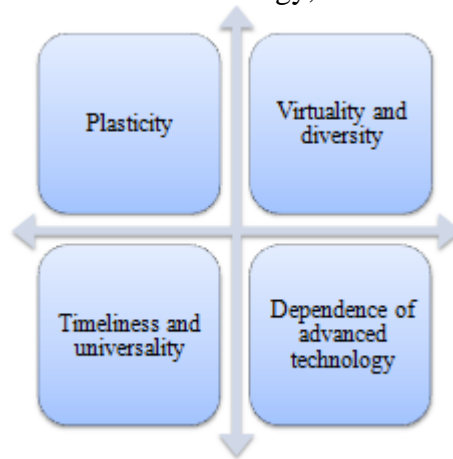


Figure1. Characteristics of artificial intelligence painting

3. The relation between artificial intelligence painting and traditional painting

Artificial intelligence painting and traditional painting form are interrelated and different, which are interdependent and complementary. Their existence provides a variety of visual aesthetic choices for human beings and meets the diversification of people's needs.

3.1. The interrelation between artificial intelligence painting and traditional painting

The technique theory of traditional painting art is the theoretical source of AI painting art. For example, the methods and steps of AI painting creation, the allocation and grasp of various color tones, etc. all come from the technical theory of traditional painting art. Different artistic concepts of traditional painting schools and styles play a guiding role in the selection of AI painting performance subjects and the expression of artistic techniques. Therefore, there is a direct relationship between traditional painting schools and the formation of AI painting style.

3.2. The difference between artificial intelligence painting and traditional painting

Material media is the premise and foundation of artistic creation. It can not only determine the classification of works of art, judge the different aesthetic styles of works of art, but also have a profound impact on the thinking and techniques of creators. The mechanics of AI painting's own

expressive technique makes it limited in the diversified selection of painting materials and the setting of brush parameters, and its works of art can not achieve the vividness and humanization of traditional painting's expressive style, which makes digital painting lack affinity and psychological recognition in the eyes of the public. Nevertheless, as a product of science and technology, with the continuous development of science and technology and the passage of time, the artistic content in the works will continue to grow, the accumulation of historical and cultural heritage will continue to deepen, and it will certainly form its own unique aesthetic value and be recognized and accepted by people.

4. The influence of artificial intelligence technology on painting creation

Art and science and technology are two different ways for people to understand and reflect the objective world. Science and technology, as a driving force for social development, is realized through extensive application and integration with human society. The mutual penetration of science and technology and art promotes the development of art and the innovation of form. Science and technology has become the carrier of artists' social, cultural and spiritual world communication, thus providing a new way of thinking for contemporary artistic creation. The application of artificial intelligence technology in painting art has changed not only the painting materials and tools, but also the artists' thinking and creative concepts. It has changed the process of painting creation and expressive techniques, and produced new works of art different from traditional painting forms.

4.1. Enrich artists' creative thinking

The application of digital technology and the emergence of digital network platform have changed the artists' creative concept, making the artists' creative thinking not limited to a specific historical period or a certain kind of subject matter, but because of the rich creative subject matter, it has laid the foundation for the enrichment of artistic works. At the same time, it makes the artists' creative ideas freer, more conducive to the direction change of exerting their imagination and creativity, and further broadens the artists' vision. This shows that AI technology has had a profound impact on contemporary artists and further broadened their creative thinking space.

4.2. Makes artists' creative thinking more epochal

With the continuous development of science and technology, the innovative application of artificial intelligence technology not only enriches and charms artistic language, but also makes artists' creative thinking more contemporary. With the development of artificial intelligence technology, the visual experience of painting has entered a new field. People's requirements for visual experience have been further improved. Painting works are no longer satisfied with the effect of two-dimensional pictures. Artificial intelligence technology enhances the interaction between people and art. It breaks people's understanding of the art of painting and deepens their perception of visual experience of painting. Artists are always sensitive, so artificial intelligence technology makes artists' creative thinking more epochal.

5. The countermeasure of perfecting artistic character of artificial intelligence painting

5.1. Enrich artists' creative thinking

With the development of the artificial intelligence painting art market and the further expansion of the scope of supervision, this makes the content supervision facing a severe test, in this case, if

we continue to use the old methods of traditional art management is difficult to deal with. The diversified communication mode of the new media art market needs to be regulated by diversified management system. Therefore, the relevant departments should study the corresponding management system to guarantee the rapid and healthy development of AI painting art industry. We will further establish and improve the industry's self-discipline mechanism, build a healthy cultural atmosphere, improve relevant laws and regulations, and strengthen the protection of intellectual property rights.

5.2. Strengthen the theoretical research of artificial intelligence painting art

Because of the late start in the application of artificial intelligence technology, the development level is relatively backward, especially in the basic theory of artificial intelligence painting art research is still in the initial stage. The development of AI painting art needs the guidance of theory. Therefore, it is necessary to strengthen the research of painting theory and establish a scientific theoretical system. The results of these theoretical studies have a strong guiding role in improving and enriching the theory and practice of Chinese painting art, so as to make this kind of painting art develop healthily.

6. Conclusions

Science and technology has always been the driving force of social development, but also promoted the innovation, reform and development of art. The integration of AI technology and traditional painting art forms not only broadens artists' creative thinking, but also directly promotes the change of painting subject, creation means and expression. Therefore, we should not only conform to the scientific and technological achievements brought by the development of the times, but also recognize the drawbacks brought by the era of artificial intelligence to the development of art. We should regard digital technology as a tool and means for artistic creation and not rely entirely on science and technology. Only the perfect combination of digital technology and traditional painting forms can be conducive to the innovative development of art and the sustainable development of science and technology and humanities.

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