# The Subjective Value of Artistic Creation in the Age of Artificial Intelligence

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*Abstract*—**While the development of Artificial Intelligence (AI) provides a new creative medium for art, its rapid development and powerful creative function has also triggered the fear and thinking of skeptics in the art world, or it is horrified that the final aura of humanity and the artistic creation of the subject will be destroyed or alienated by fragmented and noisy technology — will the artistic creativity of human beings be subverted in the uniqueness of this world? With this question, reviewing the history of art development, from the analysis of the logic of history and the motivation of development, it can be firstly seen that the establishment and transformation of a new art paradigm is largely the social transformation and production caused by the advancement of technology and media. Under the cooperation mechanism of large industrial division of labor in the 20th century, the artistic value was redefined, and the expression of ideas became the core of modern art, post-modern art and the core of historical art narrative. Since then, art has ceased to be merely a visual issue, but a product that is closely related to the overall environment of society and is influenced by society. Even if AI can create art as good as the original, from the perspective of the history of art development, there is no logical law to follow the development of human art. Its developmental characteristics are completely broken with the existing art rules. Therefore, it is difficult for AI to replace the value of human creation art today and the foreseeable future, both in terms of practical technical and philosophical concepts. However, with the development and change of society as a whole, if the development of technology in the future transcends the control of human beings, if the humanistic value system on which human art is currently living is dying because of the development of technology, the underlying structure of human society will be qualitative. The changes will also lead to the complete reshaping of the definition of art. Today, when art is at the beginning of the confrontation between its own humanistic tradition and AI development, the thinking of art must pay more attention to human reality from a more macro level. Maintaining the subjectivity of human art should become the core concept of contemporary art creation.**

*Keywords—AI; artistic creation subjectivity; technical ethics*

## I. Introduction

In recent years, AI has achieved extraordinary results in many fields that were previously considered as requiring to be controlled by high intelligence, such as Go, driverless cars, news editing, TV anchors, Google Translate, and so on. These advances are exciting, but they also raise general concerns. In the field of artistic creation, the breakthrough attempts of AI in visual performance in recent years are also causing extensive thinking and discussion in the art world — can AI create art have social and spiritual significance? Will the value of art face disintegration in the era of AI due to the involvement of new technologies? Will AI redefine "art"? As a contemporary artist, how should one use art to respond to the changes and challenges brought by AI?

## II. The Core Value of Contemporary Art — Concept

### A. The Turn of the Study of Contemporary Art History

Since the 1980s, the main trend of the study of contemporary art history theory has become a theoretical exploration that is more inclined to sociology — from the observations limited to the interior of art to the outside of art.

Art is no longer an update of the media, nor is it to reproduce a philosophical concept through an updated form, but to reproduce the context in which it determines the production of art and art. Art becomes a criticism of this cultural and political context. So, art theory has become the cultural and political linguistics of the same kind. Discussing the meaning of a work of art is largely equivalent to discussing the specific cultural and political identity that the work reproduces and the cultural and political ecology and context associated with it.

Taking the discussion of the value of modern art as an example, the social background of the industrial revolution and the establishment of the bourgeois republic became the starting point for the writing of modern art history. The theory of modern art revolves around technological innovations and the changes in social production methods that began in the mid-19th century. How do the changes from painting tools, production and supply, and media to media influence the study of artistic creation? Demonstrate and write that contemporary art is different from the past. It's a unique value system.

### B. The Core Value of Contemporary Art

Impressionism is considered to be a turning point from classical art to modern art. The study of Impressionist art value by modern art theory focuses on the close connection between technology, society, and art.

First of all, the Impressionist works represent the emerging bourgeoisie that emerged with the industrial revolution from the theme and thought; the agency sales system of the capitalist free market gallery gradually replaced the previous sponsorship system with the church and the nobility as the main body; the perfection of photographic technology and the standardized production of paints due to the rise of the modern chemical industry have also had an important impact on the occurrence and development of Impressionism. Modern art has opened up profound changes in interaction with new technologies and new social forms.

In 1912, the Ford Motor Company created the automobile assembly line as a symbol, and the capitalist efficient industrial-scale production scene kicked off in the world in the 20th century. Correspondingly, in 1917, Duchamp created the famous ready-made "Fountain" (works from the factory's batch production). It is clear that there is a direct and close connection between the ready-made art of Duchamp and the mass production of modern industry. Throughout the 20th century, a large number of cheap industrial products manufactured with the rapid development of industrial production methods appeared as landscapes in modern cities with similar appearances and were filled with the daily life of urban residents. People are producing there and spending there. Artists who also live in the city naturally become a part of the art production and art consumer industries. This quickly led to the development of the art of assembly with Duchamp as the source, redefining art in a completely broken posture in the writing of art history. The core value of the work of art has since been transformed into the expression of ideas behind the object.

## III. THE REALITY AND FUTURE OF AI INVOLVED IN ART

### A. Technology and Art

In 2001, British artist David Hockney in the book "Hidden Knowledge", through detailed arguments, proved that many Western artists' paintings have been done with optical equipment since the 15th century. One of the examples includes Hans Holbein (1497-1543) painting "Ambassador", he believes that Holbein used optical equipment in the creation of this painting. Undoubtedly, in the history of Western art, the advancement of science and technology has always provided new means for artistic creation, directly or indirectly acting on the establishment and change of the art paradigm. But nowadays, after the human society enters the era of AI, the cumulative effect of the rapid advancement of science and technology brings a positive influence to artists, but it also increasingly triggers the fear and thinking of skeptics. The unique value — perhaps the last position of the human aura, will it be erased by technology?

### B. The Reality of AI Involved in Art

The development of AI needs to include three basic elements: first, AI is based on the simulation of human neural networks; second, the improvement of computer computing power; third, the connection with the Internet, the acquisition of big data. With the development of brain neuroscience and computer science, especially with the Internet and large databases, AI is rapidly involved in the medical, automotive, e-commerce, games, industry, agriculture, logistics, media and other fields of human society.

In the past, people used scientific knowledge and instruments to aid in painting and observation. It began with a vision and finally vision. However, AI involved in artistic creation is not limited to vision. It is involved in human thinking. It simulates the human visual thinking mechanism and performs image learning, analysis, recognition, and even artistic image creation. Art creation has always been regarded as a unique ability of human beings. It involves complex human emotions, life experiences, etc. But today, the uniqueness of this ability is being questioned and challenged by the development of science and technology.

- In 2012, the Department of Computer Science at Rutgers University established AAIL. The AI artificial painter CAN (Creative Adversarial Networks) was created by the University's Computer Arts and AI Laboratory, the Department of Art History at the Charles of Charleston, and the Facebook AI Institute. After learning more than 80,000 modern paintings, CAN has produced paintings that are different from traditional art genres. Many of these paintings look very abstract. There have been surveys that allow humans to score the intent, meaning, and visual structure of the paintings. The results show that the computer's creative score is higher than that of human artists.

- In 2016, Google's Quick Draw can quickly and automatically recognize what objects a user draws. Another Auto Draw developed by Google can help users perfect their own sketches to make them more perfect and vivid. In the same year, Google hosted The Art of Neural Network, an art exhibition of AI "Deep Dream" at a gallery in San Francisco. The AI curation project "Recognition" won the IK Prize established by the Tate Gallery in 2016.

- In 2017, during The Double 11 Shopping festival of Taobao, Ali's AI designer "Lu Ban" realized the design of 8,000 posters per second through database learning.

- In 2018, Sotheby's acquired Thread Genius, an AI research and development organization, to establish image recognition and recommendation technology to recommend suitable artworks for collectors.

- In 2018, the 7th British "The Lumen Prize" gold medal was also awarded to a nude painting drawn by AI. In the second half of the year, the first AI work "The Next Rembrandt" that was sent to the auction house was sold for $432,500.

These are the epitome of the application of AI technology in the field of art. Today, AI has been able to create a completely abstract work without reference to specific

imagery. They quickly sparked debate in the art world. These arguments include: In addition to artificially simulating the existing style of art history, can AI create art with social and spiritual significance? Will AI replace artists? Will AI redefine "art"?

## IV. THE PRACTICAL OBSTACLES OF AI IN ARTISTIC CREATION

### A. One View Is That AI Cannot Replace the Artistic Value of Human Creation in both Today and the Foreseeable Future, Both Technically and Philosophically

Firstly, in general, the value of art lies in the creativity of art. Although the AI production "The Next Rembrandt" uses very complicated computing technology and image recognition technology, even if it creates a work that is close to the original, it is at most a replica.

Secondly, art is not only a visual problem, but it is also the product of the comprehensive influence of the entire human society. The political, cultural, economic reality and people's understanding of them will affect the art paradigm.

Thirdly, how to understand the historical changes of art and predict the paradigm shift in the future is the biggest obstacle to artificial art creation. Beginning with modern art, the form of art and the criteria for judging the value of art have been different from the profound and broken changes of the past, and this change is "no trace" and cannot be given according to AI. The mindset is produced. For the current "smart" AI "painter" CAN, the project team has different requirements for its creation than the existing style. At the same time, the difference between the new style created and the history of art must be kept at a certain level. Within the scope, otherwise, the creative results may be judged not to be art. The transformation of the art paradigm, in reality, does not follow such principles. Just like Leonardo da Vinci (1452-1519), it is difficult to predict and understand Duchamp (1887-1968) anyway, but today they are all included in the art history. Therefore, according to the current information processing mode of AI, the data collected in the art history is analyzed and summarized, and the future of art cannot be predicted, and artworks with unique philosophical connotations, material forms, and visual styles cannot be created.

At last, the current definition of art, its foundation first refers to the creation of human beings, and it is essential to meet the spiritual needs of human beings. After the Renaissance to modern society, mankind spiritually needs pure art created by a human and with humans as the main body. This is not only a philosophical expression of "art" but also a statement of its social function. So, art is the product of a thorough human society.

### B. Intelligence Involves the Future of Art

Another opinion is that AI cannot always be the object and mirror of human beings. AI produces artistic creation that is independent of human beings, defining its unique artistic value.

- The AI and art hat are talk about today, and often fall into a misunderstanding: often compare the works created by AI with the works created by artists. But why do machines have to be expressed and created like people? Human artists construct their own artistic language through their own life experiences, cultural contexts, and epochal contexts, but the creativity of the machine is related to the data and algorithms it can involve and does not need to go through life after human beings. Creation, this is a different logic from the art creation rules of people. AI can completely build another set of independent art value judgment systems.

- When the first robot Sophia was granted citizenship, it means that the relationship between the person and the machine has changed. In the future, highly developed AI and humans may develop an equal relationship. When AI evolves to a very advanced level, machines produce emotions, understand aesthetics, and can express themselves, creating a true robotic citizen with an individual will. AI has a human society, including politics, Culture, economy and other factors that influence the process of art history to make comprehensive and sufficient judgment, AI will certainly build another set of independent art value judgment system.

Whether the work created by AI can be called art, depends on the definition of art, but the definition of art is an expanding concept. If the humanistic system on which art depends and the capitalism and liberalism on which it is established die out because of the development of science and technology, the underlying structure of human society undergoes qualitative changes, and all current operational mechanisms such as labor, value, and economy may need to be Re-establish. Under the trend of AI and economic and social resonance, the art world will undergo tremendous changes and reshape the boundaries of art.

## V. THE SUBJECTIVITY AND VALUE OF HUMAN ART

### A. The Crisis Facing the Subjectivity of Human Art

AI has begun to become an unpredictable existence of human beings. In the future, the subjectivity of artistic creation may be replaced by AI.

The understanding and shaping of AI aren't only a scientific issue, a philosophical issue but also an ethical issue and a social-political issue. The knowledge system and even the value system that human beings have will be greatly impacted and challenged by the rapid development of science and technology. When people think about the coming moment of the humanistic tradition of human beings and the future of AI created by human beings, some existing social structural ills continue. On many levels, human beings are not well prepared to deal with the impacts and challenges that such a new technological revolution may bring to human ethics, human behavior, and human beings.

Algorithms are everywhere. They distinguish between winners and losers. Algorithms become ideas embedded in

the code, but algorithms are not objective, real, and scientific. People inject bias into the algorithm by selecting the data people collect, which means they can codify gender discrimination or any other bias. The algorithm won't make things fair. Moreover, with the advent of super-algorithms, algorithms can predict people's desires, manipulate people's emotions, and even make decisions for us. Will humans fall into a digital dictatorship?

The biggest events in 2018 are all related to technology — SpaceX rockets, China landed on the moon, the first genetically edited baby in human history was born in China, countries tightened policies on the Internet, Google assistants can imitate Humans call without being identified, and Internet companies are listed and disbanded (SpaceX project has announced in the past few days that it will reduce hundreds of employees in at least seven SpaceX plants, the layoffs are expected to cut 10 % of employees, the main types of layoffs are like skilled workers, engineers)... These events remind us once again that this round of new technological revolution — AI, biological revolution is unprecedented in depth and breadth as a holistic changing the cultural ecology of human modern civilization, it is rushing into or even becoming a reality of human daily life.

Humanity is in an era of unprecedented technology-led. And AI is not just an abstract and objective development of technology, but a presence that is deeply influenced by business and technology companies.

In this context, does the apparent standardization and "diversification" that comes from technology divergence bring about new totalitarianism? Mature surveillance technology does not only appear in authoritarian governments but also in democratic governments.

The capitalist mode of production is the continuous reorganization of the relationship between people and people through the use of production tools. A new word, Techlash (technical back-up, or technical boycott, or whipping tech company), born in 2013, was selected for the 2018 Oxford Dictionary of the Year. This word refers to criticism and resistance from large circles of technology giants. On May 18, 2018, Google updated its code of conduct, removing the company's usual motto "Don't be evil" and replacing it with "Do the right thing." If "evil" is a description of a certain consensus in the past, is the future "correct" criterion being formulated by Google?

The same cannot be ignored is the care of the real situation of people in the virtual state. Virtual technology gives people the possibility of being detached from reality, but at the same time, it also has new social realities such as monitoring, body extension, and alienation, cognitive contraction, and broadening… Technology promotes communication between people, but it cuts off the relationship between people and the world to some extent.

### B. The Significance of Maintaining the Subjectivity of Artistic Creation

Physicist Richard Feynman points out humans know the two types of drivers in the world: driven by concepts (epistemology) or by tools (science and technology). "If our human exploration and discovery is driven by the 'concepts', then people tend to explain the old things with new angles; if they are driven by 'tools', people will use old ideas to explain new discoveries."

Artists need to maintain a keen sense of the times and a general understanding of the times. Most contemporary artists who pay attention to and apply new technologies still stop thinking about the enthusiasm and vitality of mass media, consumerism and cutting-edge technology activated by the digital age, and indulge in the creation of dramatic effects of works, trying to mobilize A variety of perceptions create a very powerful visual impact. "Interactiveness" and "Immersive Participation" have become one of the most important and popular features of chaotic modernism. But as Jean Baudrillard and Santa Claus pointed out, this sensory stimulus is actually completely empty and meaningless. In the "Landscape Society" published by Marxist Guy Debord in 1967, this "spectacle" theory was also discussed from the perspective of linguistics. He believes that the "visual effect-oriented 'scene' display subverts the value of the original system. The 'scene' uses visual floods to impact the audience's perception system and draws the audience's attention to try to discern the real thing. Pursue change and excitement."

The development of contemporary art has gone far beyond the visual field. The development of technology goes far beyond the image-centric field. In addition to big data and AI, profound changes are taking place in a wider range of fields such as biotechnology, nanotechnology, new energy, and new materials. The topic of technical ethics such as data privacy, data dictatorship, AI, human-machine integration, and genetic rewriting is no longer a professional topic in a specific category, but a universal topic concerning every natural person.

Today, the artist's imagination of the future cannot be limited by the current scientific and technological reality. Experience and entertainment are the best strategies for cultural capitalism. For us, perfect intelligence must include compassion and morality. Everything is not important, but the only thing that matters is the body of life. Especially in the era of technology out of control, technology has its ethical issues. In the face of these ethical issues, everyone has to rethink how life is going, and in what direction life will go. Let us imagine an AI personal political attitude selector. After hearing about the Las Vegas shooting incident, it collected public opinion based on big data. After statistics, it suggested that the owner condemn the criminal. However, this is neither anger nor conscience. AI can defeat Li Shishi and Ke Jie, but if it can't be excited about Mozart and Beethoven, it doesn't start for a whisper and a good poem. Then it is just computing power. Artistic creation should take care of human reality from a more macro level, and maintaining the subjectivity of human art is the value of current art creation.

## VI. CONCLUSION

In the foreseeable future, AI will become an important parameter for changing the art of both the paradigm and shaping the new paradigm of art. AI provides us with another kind of imagination and cognition of art. In the foreseeable future, there will be a dynamic balance between human and AI. The two will define and shape each other. Art and artists will undergo tremendous changes due to the continued involvement of AI. Just as the appearance of photography and film in the 19th century changed the course of art history to a large extent, the Art Nouveau paradigm is to circumvent the art and its logic directly created by these visual machines and to talk to it at a deeper level. And develop in interaction. The relationship between human creation and AI confirms the mirror theory of Jacques Lacan (1901-1981). There is never a real self. People always feel and shape themselves through changes in the outside world, and build new ones with technology. But technology is never decisive. Technology always opens up the possibilities of countless broad prospects in front of humans, but it does not determine which possibilities humans choose to achieve.

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