New Mission of Visual Arts Education under the Impact of ChatGPT

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Abstract: With the rapid development of artificial intelligence technology such as ChatGPT, visual arts education is facing an unprecedented impact. The emergence of ChatGPT has changed the way of information acquisition and art creation, and has had an impact on the traditional visual arts education model. Through comprehensive analysis of relevant literature, field visits to many art colleges and interviews with teachers and students, this study explores this topic in depth. The research shows that under the impact of ChatGPT, mere skill teaching can no longer meet the needs of students to adapt to the future society. In the new era, the mission of visual arts education is to change the concept of talent training and put the cultivation of emotional experience, creative thinking and art and humanities knowledge at the core, so as to enable students to stand out in the new technological environment.

Keywords: Visual Arts; ChatGPT; New Technology; Arts Education

1. Overview of ChatGPT

ChatGPT is an AI-powered chatbot with a super-powerful data repository that communicates like a human. In 2015 Musk and a group of internet elites founded OpenAI with the goal of building "universal" bots and chatbots that use natural language. Their goal is to build "universal" robots and chatting robots that use natural language, and to develop machines that learn and think like people. Based on machine models that can operate on big data, they introduced the Generative Pre-trained Transformer (GPT), which is able to understand and process human written language. This intelligent system is also capable of generating evolutions with its own encoder into new data models, creating new samples that do not exist in the database.[1] In this continuous generation process, ChatGPT then almost all of the human knowledge collection, writing essays, novels, scripts almost anything, it is too versatile! As long as your instructions are given in enough detail, even running the code is no problem, which saves people a lot of time.

Throughout the development of ChatGPT, it has gradually evolved and improved. In June 2018, GPT-1 with 117 million parameters was launched, which is a great milestone in the evolution of AI (Artificial Intelligence). While intelligent learning machines in the past had to annotate the learning content in advance, GPT-1 is able to automatically generate conversations in different scenarios without annotating the text, and it also automatically recognizes each task, the to facilitate the combination of unsupervised and supervised language comprehension tasks. In February 2019, GPT-2 with up to 1.5 billion parameters went live to facilitate multi-task learning of unsupervised language reaches. This version did not innovate too much on the previous version, but just used more data. After getting stronger, GPT-2 shows a wider range of adaptability and performs very well in multiple task scenarios. The biggest contribution of GPT-2 is that the massive data and parameter models can be automatically generated and migrated to the relevant tasks. In May 2020, OpenAI Inc. released the GPT-2 with 175 billion relevant parameters, GPT-3, an even more powerful intelligent system than the last two generations.GPT-3, as an unsupervised execution language model (now often called a self-supervised model), is capable of performing almost most of the latest tasks in natural language processing technology, such as researching how to solve problems, understanding text, natural language reasoning, question processing techniques, article topic generation, and automatically answering questions, etc. By this time, GPT was already relatively mature and had the status that AI should have. on November 30, 2022, ChatGPT

officially released its beta version to the public, truly realizing the complete autonomy of using AI technology to generate content (AI Generated Content, or AIGC for short), including code generation, video generation, text Q&A, and image generation. On March 14, 2023, OpenAI released GPT-4, which dramatically improved its accuracy, and the ability to read images became more precise. Today, ChatGPT is still evolving and more powerful products may be released in the future.

So, ChatGPT has gone beyond its original design goal of being a chatbot or a tool with excellent algorithms, and has become a living, evolving digital life form. Not only that, developers have also given it three superpowers - digital content twinning, digital editing and digital creation. This makes us wonder: as AI technology continues to make new breakthroughs, art will face great challenges[2]

2. ChatGPT Challenges the Boundaries of Traditional Art

ChatGPT has emerged to impact art learners. It is able to proactively understand the real needs of art learners and use all the knowledge it has to generate new, even unique answers for them. This omnipotent answering ability can take you to appreciate the art works you want to know, can teach you the methods of art creation, can help you write an art activity program, and can also help you solve other queries in your mind ...... almost anything that an ordinary art worker can do, it can be completely competent. In addition, a non-professional art enthusiast, he can use ChatGPT to help them write copy to write code, use blender to access ChatGPT to do the game modeling, use Mid journey to do illustration design, suddenly overnight, art students in the university of the knowledge learned the hard way, those they were once proud of their skills, have been replaced by machines. Machines are already so powerful, so is it still necessary for students to study art? In the future, art students and how to break the situation.AI although the art students have brought a certain impact, but also provides them with more opportunities and challenges.

Technology pushes art forward, and as far as art itself is concerned, the art model centered on reproduction is even more forced into a corner. Shenzhen Dafen Village is a replica market, the local workers do not understand painting, each person may complete his best a localized assembly operation, in the past this replica has a market because he is handmade work, the work has the traces of the oil painting, the quality of the oil painting is still all perceptible. But with the emergence of AI, it can independently complete a variety of world-famous paintings of artwork reproduction work, but also accurately express the author's style, which forces the reproduction art industry must be transformed as soon as possible. It is worth mentioning that in 2016, there was a project called The Next Rembrandt, in which they studied all of Rembrandt's portraits, used AI to extract various elements of Rembrandt's paintings such as the eyes, texture, and light contours, and then used AI to paint a portrait that did not exist among Rembrandt's works. The work looks like Rembrandt's painting style, but Rembrandt never painted such a portrait. To make it look more realistic, the staff also used 3D technology to create the surface of the painting, which is textured and looks very much like an oil painting. This project is done by the technology company and the museum together, but where the cost of this technology can be reduced and mass production, the replica industry in Dafen Village will certainly be replaced.[3]

Let's come back to the artist, the artificial intelligence technology represented by ChatGPT is impacting on the artist on one hand, and on the other hand, it is empowering, or becoming a super tool. The most important characteristic of an artist is to have a distinct human charm and a rich personal imagination. In the digital age, the jobs of people engaged in some mechanical work may decline, and the number of ordinary artists is even smaller, for example, in the past, it was necessary for illustrators to stay up all night to draw for ten days, but now it is handed over to artificial intelligence, and the picture will be ready in a few seconds, and it will give you a few sets of drawings, so that you can pick in the middle. Artificial intelligence is a huge impact on the ordinary illustrators who do board drawing, under the impact of artificial intelligence, the value of painting as a human being is discounted, it will make the artist's sense of dignity, the sense of respect is deprived of, so

that the artist will be worried about their own ecological position in society has become mediocre; Artificial Intelligence may not be able to create a particularly direct impact on the easel drawing in the short term, and the group of artists who have already stood at the top of the pyramid. They will not be impacted, not only will not be impacted, will also be AI to help improve the efficiency of creation, if the inspiration is exhausted, you can let the artificial intelligence to imitate their own style of painting, generating countless drafts, this time the artist has to do is to go from countless drafts to screening, screening, modifying these drafts, and then painted it on the shelf, painted on the canvas, so that it can greatly improve the artist's production. But for the average painter, the development of artificial intelligence is not necessarily a good thing. Because artificial intelligence makes the technical threshold of becoming an artist become lower, even lower than the threshold of contemporary art after the rise of another order of magnitude.[4] ChatGPT is really a big change in technology, but also a big change in thinking. In the future, the biggest way out for artists may still only be in the direction of conceptual development, and the road of technology can basically be said to be blocked, and there is no future.

In conclusion, in recent years, technologies such as Artificial Intelligence, Metaverse, and ChatGPT have been widely used in the lives, and these technologies have changed traditional cognition and facilitated people's lives. In the future, new technologies will continue to be introduced, and it will become more convenient for human beings to acquire knowledge. Since knowledge has become so accessible, It is not very meaningful for children to spend time learning art knowledge and copying art works. Then art teachers need to change the way they teach, to impart the knowledge that children most urgently need

3. In the Face of the Challenges of ChatGPT, Art Education Should Adhere to a New Mission

The rapid development of artificial intelligence technology represented by ChatGPT has made human art challenged. In the face of increasingly powerful artificial intelligence, if children are allowed to compete with future robots, it is undoubtedly a battle that will be lost. However, artistic emotion, creative thinking, and artistic and humanistic knowledge, these are likely to be the last line of defense for human artists to defeat robots. Only by training children to become creative human beings can art education be able to gain a foothold in the future competition with robots. Therefore, in the face of increasingly powerful AI intelligent technology, art education should insist on its uniqueness.

3.1 Artistic Emotional Experience should be Emphasized

Art is a special way for human beings to express their emotions. The emotions expressed in human art have unique cultural and artistic value, although the anthropomorphic human development of artificial intelligence is getting better and better, the machine began to have a human emotional performance, but after all, it can't completely replace human emotions, because human emotions have richness, culture, uniqueness and other factors, which only human beings have are factors that can't be reproduced by the machine.[5] When technology replaces art skills, people's own experiences, emotions driven by the creation of works of art is particularly valuable, they are rich sources of artistic inspiration and imagination, but also the artist will be emotionally moved into the object, giving life to the object, enhance the cultural value of art is an important support. For example, Van Gogh's classic "Crows in the Wheatfield", he was in that kind of special depression, and even want to commit suicide in the atmosphere of grief and anger to create a painting, as a result, he went back to the soon to commit suicide, that kind of emotional tipping point, that kind of art burst of imagination, this kind of unique experience that only human beings have, and only human beings can create works of art, artificial intelligence cannot be reached. Of course, it's possible that many people say otherwise. Spielberg made the movie "Artificial Intelligence", the child has feelings, through a hair to find the love of his mother. If artificial intelligence develops to that stage, it can clone the genes of Picasso, Van Gogh, Da Vinci, and Qi Baishi through algorithms, then I believe it will be able to make Xu Beihong's horse, Qi Baishi's shrimp, and Van Gogh's sunflower, even if it develops to that stage. I

believe that art will have a more advanced form to show. Therefore, no matter how powerful the development of artificial intelligence in the future, what human beings need to do is to enrich their own emotions, so that people are more like people, so that human art will have eternal value.

For all kinds of art, the empathy that a work of art generates with its audience is one of the most important factors in art's transcendence of the machine. Emotion is the intermediary system between the artist and the object of artistic expression. The artist gives emotion to the art object through thinking and expresses it in the language of art. After appreciating the art work, the audience obtains the emotional value of the art work and generates empathy, which is the process of art being accepted and the process of art creation being completed.[6] For example, Picasso's masterpiece "Guernica" expresses the event of German air attack on the Spanish town Guernica, the picture adopts the combination of cubism technique and realistic art, showing women moaning in pain, broken arms, cows tilting their heads and neighing horses ...... The painter accuses the brutality of fascism with exciting artistic language, and Rendering a tragic color, expressing the author's protest against the war action and mourning for the dead innocent people. Picasso can paint this great work has to say that life gave him a deep emotional experience, the author experienced the environment of war, which inspired his resentment, so that he could express it so naturally and vividly. If there is no deep emotion, how can it be so? Traditional Chinese bird and flower paintings, such as Zhu Da's orchids, Zheng Banqiao's bamboo, Zhang Daqian's lotus, etc., it is difficult to say how superb techniques are shown in the paintings, and how profound the ideological significance of the works, but the aesthetic taste and emotional factors conveyed by the works are worthy of attention. The process of appreciation is the process of recognizing and feeling the emotions, thoughts and memories that the artist has given to the work, which is why the works created by human artists can deeply move us. This emotional factor represents the uniqueness of human beings and the value of the species, and the emotional factor can only be maximized in the art forms created by human beings. It can be said that the artistic value of human creation is the free expression of human emotions and the unique experience of life.

In the age of artificial intelligence, art education cannot just teach a skill, but more importantly, an emotional cultivation. What is actually achieved through the education of beauty is the enlightenment of love, which has been confirmed in the art practice. Children are able to build a self-esteem and self-confidence through painting, music or other artistic expressions, so that they can use art as a medium to communicate emotionally with their parents, to find good friends, and to have confidence in their future development, then the education of love and emotion has been deeply fused with art education. Stimulate the value of human emotions from life, enrich the students' artistic emotional experience is to get the depth of life experience and extensive life experience as the foundation, only emotionally rich people, in order to maintain the human value in the competition between people and machines to maintain the maximum differentiation, turning competition into cooperation, so that human-machine cooperation in the art of people still have human emotions and the flavor of art. If every art teacher can understand this truth, then in this rapidly changing era, they can firmly establish the goal of art education, stick to the curriculum for students' life experience and emotional accumulation, and truly provide all children with appropriate and meaningful art education.

3.2 Creativity Should Be a Priority for Arts Education

In the face of the challenges posed by artificial intelligence, visual arts education must undergo a new revolution. In the digital age, the meaning of the existence of art education is to help students acquire artistic thinking, which is a novel way of thinking about problems and analyzing them. Artistic thinking here is not only about the mastery of crafts and skills, but also about stimulating imagination and creativity, finding more interesting ideas, and prompting students to make their artistic activities aesthetically interesting. With the advantage of artificial intelligence, creative thinking can stimulate the desire to create new things and give people the opportunity to try to explore new ways of creation. For example,

ChatGPT can provide students with creative and inspirational support, providing insights and ideas for art creation. Art is a subject with no standard answers compared to other science and culture courses, and everyone's understanding of art varies. ChatGPT can provide a variety of examples for students to learn from, allowing different students to differentiate their learning and helping them to better understand art, which gives students the opportunity to explore and experiment freely.[7] Art is inherently experimental, and creating art is also an important way to cultivate children's spirit of experimentation and help them gain inspiration and expand their minds. Children who have been exposed to good art education from an early age, who know how to be original, full of individuality, and who dare to be creative have important developmental potential, and are more capable and confident of adapting to the development of the new era.

In today's highly developed technology, art works with creativity are the height that artificial intelligence cannot reach at present. Although AI software is used as an auxiliary tool, it can greatly free human hands, but the real decision of the value of the art work is not a high degree of restoration of different artistic styles, nor is it a complex and fine picture effect, but the unique ideas and creativity of the work, is behind the picture, the creator's independent thinking and in-depth exploration of different topics. For example, Command the AI tool to draw a shrimp, and it can draw a variety of different types of shrimp. But it may not be able to draw the shrimp of Qi Baishi, and then for example, you input to draw a woman, I also believe that all kinds of women will be displayed in front of you, but can the AI draw the woman under Picasso? I believe that certainly can not draw, human imagination and creativity is the machine can not be replaced. At present, the ability of ChatGPT actually depends on the amount of data in the database, which is essentially a kind of copying and processing of second-hand information. It will not produce any new insights and new cognition, and does not have critical thinking, which means that ChatGPT can not yet creatively give the correct answer beyond human cognition, and can only provide the most reasonable expression among the many existing answers. As long as children have creativity, decisiveness and their own

ideas, have a constant flow of innovation, and are always able to create something new and fresh outside of the AI database, Artificial intelligence can be easily harnessed and not have to worry about being replaced by AI. For art education, it is still important to cultivate children's creative thinking, after all, imaginative and creative talents are the social elite in any era.

The emergence of ChatGPT is a great opportunity for arts education to reinvent itself, from the pursuit of knowledge and skills to the cultivation of children's individual artistic creativity. In order to master artificial intelligence, children should have the ability to criticize the known world, think and create the unknown world. The acquisition of this ability requires an emphasis on the child's ability to ask questions, with the help of which the child's imagination and ability to think out of the box are developed. Good questions are far more important than good results, and with divergent thinking, this creativity is likely to be stimulated and the beauty and mystery of human art will live on forever.[8] Fostering creativity in children is a powerful signal given by the times, if teachers and parents give children to choose how to make the child draw like, how to draw well, then he can no longer cope with the social landscape of the future, because the tools have been artificially intelligent to such an extent, as the user, the human attributes, the value of the human being needs to be more differentiated. However, this characteristic of differentiation needs to be cultivated by teachers. Not only that, the interdisciplinary and inter-professional teaching mode is also an excellent way to cultivate creativity, and unite with different disciplines and specialties, inspire them to create through the form of brainstorming, and gain a sense of achievement and satisfaction in active exploration, and then develop their thinking and practical ability. Creative thinking is the glue that integrates different knowledge, and at the same time, it is necessary to keep the creativity of art at all times, If this uniqueness is replaced by machines and and human beings can't hold the last line of defense, human art will surely be annihilated.

3.3 Knowledge of the Arts and Humanities Should be Strengthened

While technology is driving the development of society at a high speed and bringing us convenience in life, humanism is gradually being lost. Because science and technology usually solve the problems of "what to do" and "how to do", but "what is the meaning of doing" is the field that humanism is best at solving. Therefore, since the 20th century, with the progress of science and technology, Husserl, Heidegger and other famous philosophers began to reflect on and criticize the spiritual crisis brought by technology. This has to alert people to the fact that the progress of science and technology may lead to the loss of human morality. [9] Now that the age of intelligence, dominated by big data and logical algorithms, has arrived, the over-obsession with science and technology will erode people's sensitivity to humanistic knowledge such as morality and law, weakening their chances of extracting information from the fields of humanities and social sciences, and depriving them of the ability to perceive the world. In this way, "human beings risk being downgraded from designers to chips, then to data, and finally dissolved and dispersed in the flood of data, like a piece of clay in a rolling torrent." If there really comes a day when machines become uncontrollable and artificial intelligence controls humans, then humans become slaves to technology. Therefore, In order to avoid machines controlling humans, the faster technology develops, the more attention should be paid to what is the essence of a human being, emphasizing the kernel value and humanistic care of the original narrative nature of art, and the ultimate purpose of art creation is to trigger the viewer's thinking, so that the viewer can get the spiritual solace, and to realize the power of poking the human heart directly. It is in the cold contrast of AI that the humanistic spirit of love, emotion and happiness is particularly precious, and these human values can never be replaced by artificial intelligence.

Thinking about the above questions also means answering the meaning and value of learning about the arts and humanities. Especially in contemporary times, artificial intelligence has been able to reproduce all kinds of world-famous paintings well and quickly, as long as you know how to operate the machine, you can also become a painter. Then, the value of people is embodied in the form of providing cultural significance, through the form of art to express the understanding and feeling of the world, the development of this ability needs to emphasize the learning of art and humanities knowledge, improve individual artistic cultivation, and understand the changing trends of visual arts. If you don't know what styles are available or which style should be used, how can you talk about creating art works with cultural connotations? The significance of learning art and humanities knowledge is to let people begin to think rationally about art after acquiring certain knowledge of art and humanities, and then use the tools to create new and innovative art with cultural connotations. Hegel's prediction of the "end of art" may be realized today. Consider the invention of photography in the 19th century. The impact of the traditional Western realistic art, when the head-on blow to the four words, classical realistic master Angell even submitted a written protest to the French officials, claiming that photography is just copying the signs. Not art, in order not to be photographed to kill, painters have begun to explore the heart from the realistic, seeking a more diverse expression, only to produce the Impressionism, Fauvism, Cubism. The invention of photography made art technique lose its place, and the emergence of artificial intelligence has blocked the road of art technique. The history of mankind is a history of culture, and there is a close connection between art and history, philosophy and politics. Many classic works of art in the history of art are inspired and intuited by the artist's own profound humanistic qualities; the history of mankind is also a history of technological development, and the emergence of TV, digital, and AI has continuously expanded the boundaries and language of art. In the change of technology, art has not been strangled by the new technology but has gained greater freedom. [10]

With the emergence of ChatGPT, art education should gradually get rid of the embarrassing situation of high skills and low aesthetics, and emphasize the learning of artistic and humanistic knowledge. For the "net generation" student group, teachers can use the power of artificial intelligence technology to enhance interaction and cooperation. In the curriculum and content, art and humanities

knowledge and intelligent technology are combined to promote the cultivation of interdisciplinary thinking and ability. For non-art majors, the study of relevant art and humanities knowledge is added to general education, so that students can form a relatively high art and humanities literacy and make art education more three-dimensional and comprehensive. In addition, image literacy training is also a way to cultivate art and humanities knowledge. Nowadays, all kinds of pictures and movies fill people's lives, and images are closely integrated with life. In art education, teachers need to develop students' graphic interpretation skills, which can trigger their thinking after looking at an image. Image literacy is not a simple, natural process of looking at an image; there is cultural information behind the image, and it requires teachers to guide them to discover the ideas, meanings, etc. expressed in visual images and to be able to take the initiative to construct connections. In other words, art is interconnected with social culture and social aesthetics, rather than existing in isolation. Teachers should teach students the ability to understand the cultural meaning behind an image, which is a meaningful symbol, rather than a simple pattern. However, people's understanding of images still varies greatly due to cultural factors. Therefore, art education should also teach students to learn to read the cultural meaning behind images, focus on the training of students' ability to read and recognize images, and acquire knowledge of art and humanities.

5. Conclusion

Art education has always been a work that pays attention to people's inner world, and it is the people-oriented that makes art education and artificial intelligence different. What will determine the future development of art education is not AI technology, but the thought and determination of all mankind to create a better future. The future does not belong to robots, but to the new human beings who will dominate them. In this new era, the traditional art education ideology and mode must be changed, adhere to the emotional value,

creative thinking and humanistic knowledge of art education, cultivate children's more advanced thinking and ability, and let them solve problems with the help of AI, instead of being held hostage by the flood of AI. In the future, it is not AI that will replace you, but those who know better how to harness AI.

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