

CAN GENERATIVE AI REPLACE REAL ARTISTS?

Shumilina O.Y.

Belarusian State University of Informatics and Radioelectronics, Minsk, Republic of Belarus

Likhtarovitch I. I. - senior lecturer of the department of foreign languages

Annotation. With the advancement of technology and the creation of more powerful circuits and devices, the evolution of artificial intelligence has become possible. And today, AI has a huge number of abilities, including the ability to generate its own content. However, how does this affect different professions? In particular, how does Generative AI, with the ability to create its own art, affect artists?

Keywords. Artificial intelligence, Generative artificial intelligence, art.

Introduction. With the development of Generative artificial intelligence, humanity got a whole new range of opportunities and perspectives. While AI as a branch of science and technology began its history in the 1950s, Generative AI, as a subfield of AI, was developed much later. Thus, one of the first prototypes of Generative AI we might consider ELIZA, the first chatbot created in 1966 by MIT professor Joseph Weizenbaum. However, even though the program created the illusion of understanding the user's input by applying pattern matching and substitution methodology, in reality it did not, and the first actual breakthrough in the Generative AI field was made in June 2014 with the introduction of Generative Adversarial Networks (GANs) by Ian Goodfellow and his colleagues. With the development of computer science and the creation of more powerful and capable devices, significant changes in the AI field have become possible. And today we have extremely sophisticated and versatile generative AI models such as Generative Pre-trained Transformer 4 (GPT-4), launched on March 14, 2023, which existence greatly impacts and transforms our everyday lives.

Main part. If just a century ago people could only dream of a system that was capable to perform various tasks on its own, today it has become routine, and artificial intelligence not only performs simple manipulations but also has the ability to create its own content on a human level. Modern AI is writing stories and essays, drawing pictures, doing animations and videos, and making music. AI's work is not only decent, but often it's really high quality. There is even an example of a picture made with the help of AI winning an actual art competition. In 2022, Jason M. Allen won a Colorado State Fair contest with his work, «Théâtre D'opéra Spatial» [1]. The author mentioned using Midjourney, an AI program that turns a text into images.

The case thrilled crowds and quickly became popular on the Internet. And it only once again confirmed the power of AI.

The variety of abilities and the amount of potential AI possesses are both marvelous and concerning. With its help, such tasks as structuring and analyzing data, optimizing production processes, or detecting defects can be really simplified; their price and the time required to complete them can be reduced by hundreds, if not more, times. Not to mention the plurality of prospects in science progress. The most important fields of knowledge for humanity, such as medicine, biology, astronomy, etc., can be studied on a much deeper and more complex level with the help of AI. And that's only a part of AI's advantages; however, when the excitement of such discovery backs off, a row of questions pops up. Along with the technical problems, for example, the high costs of creating and maintaining the necessary equipment, moral issues can't be ignored as well.

The dilemma of AI and human coexistence has been concerning crowds since the introduction of the term «artificial intelligence» in the 20th century. This is evidenced by the statements of various scientific and cultural figures of that time. An example of this can be seen in the words of Alan Turing, who was an English mathematician and computer scientist. «It seems probable that once the machine thinking method had started, it would not take long to outstrip our feeble powers, » he said during a lecture in 1951. «They would be able to converse with each other

to sharpen their wits. At some stage therefore, we should have to expect the machines to take control». And nowadays, with the insane improvement of AI technologies, more and more attention is being paid to this issue. Social media is abuzz with heated discussions about the future of artificial intelligence. While regular users are scared of the possibility of artificial intelligence taking over the world, Generative AI is already a real concern for artists today. Thus, H&M, the Swedish fashion retailer, has been using generative AI to trial designs for its Conscious Exclusive collection [2]. Is this the end of professional content creators? Certainly, there are various rumors and opinions floating around. And artists' fears are not unfounded; however, even though AI is cheaper and simpler to use, it still lacks creativity. Most average users can still easily define an AI-generated picture. So, at the moment, artificial intelligence is not suitable for doing quality, original work that fulfills its function.

Though it doesn't mean AI is always going to be so plain, after years of training, it definitely has the possibility to evolve a lot and acquire that very creativity. But even if AI is capable of creating perfect content, it will still need someone to control and define that quality. This means that the artist as a profession may disappear, but it will come out eventually in a different form and retain its fundamentals. Thus, there is no point in worrying because the artistic field will remain in one shape or another.

But what about real art? How is AI changing the content which purpose isn't in practical needs, which purpose is even difficult to determine with words? Even though AI can make really impressive pieces of media, it will never be art. The whole point of this kind of activity is to express yourself and your feelings through words and colors, which artificial intelligence as we know it is not yet capable of.

Nevertheless, the idea of a self-aware AI with an actual mind isn't off the table. And there are now active attempts to create similar systems that are just like human beings. And if one day scientists manage to create such a robot, it will be a revolution in the entire history of mankind. Though art would be the last concern in that case, it's still worth mentioning. The creation of a self-aware system will impact every part of our lives; art wouldn't be an exception. But the question is, if an artificially created machine can produce art with profound meaning and understanding on a human level, is it art? Is there any value to art if it can be reproduced and created by a non-living being? Or is the art created by a robot still considered human art? The answers to these questions are ambiguous and will only be revealed in the future.

However, besides the mentioned rivalry, we should not forget about the possibility of artificial intelligence and real artists coexisting. AI can be a great help for content creators. It can make a significant contribution to reducing the time and resources needed to do the job, leaving only the creative part of the task to the artists. This, in turn, will increase the productivity and quality of content creation. Consequently, the prospect of a healthy collaboration between artificial intelligence and artists is not hopeless either.

Conclusion. So, to answer the question of whether AI can replace human artists, if we talk about art as any type of content creating for any practical purposes, such as illustrations, code, emblems, promotion videos, then in some way, it's probably yes, but if by the term we mean true art, without any practical purpose, it is very unlikely, because the whole point and value of art is in emotions and feelings, which, fortunately or unfortunately, AI is not capable of experiencing. But, just like a couple of centuries ago, the idea of AI was unimaginable, today we find the possibility of a self-aware system very difficult to realize. Who knows, though? Maybe just in 50 years, machines will be able to feel just like humans do, and the whole concept of art will no longer exist.

References

1. An A.I.-Generated Picture Won an Art Prize. Artists Aren't Happy. [Electronic resource] / Kevin Roose. – The New York Times., 22.09.2022. – Mode of access : <https://www.nytimes.com/2022/09/02/technology/ai-artificial-intelligence-artists.html> – Date of access : 04.02.2024.
2. Best Generative AI Applications for each Industry. [Electronic resource] / Harry Nguyen. – Techvify., 12.12.2023. – Mode of access: <https://techvify-software.com/generative-ai-applications/> – Date of access: 04.02.2024.