Дизайн: тенденції, практика, перспективи
Design Trends, Practice and Prospects

UDC 721.021

CONCEPT OF CONSUMING IDEAS WITH ARTIFICIAL INTELLIGENCE IN ART

V. VASYLENKO, P. ZIEMTSOVA
National Aviation University

Artificial Intelligence AI has permeated almost every aspect of our lives, from self-driving cars to virtual assistants, and it is now making its presence felt in the realm of art and design. The fusion of AI and creative expression has given birth to a new paradigm in the art world, challenging traditional notions of creativity and human authorship. In this essay, we will explore the fascinating world of art and design created by AI, examining its impact on the art community, the creative process, and the questions it raises about the nature of art itself.

Artificial intelligence in art and design is not a recent development. It has been steadily evolving for several decades, with early experiments in computer-generated art dating back to the mid-20th century. However, recent advancements in machine learning, deep learning, and neural networks have propelled AI's capabilities to unprecedented heights. These AI systems, often referred to as "creative AI," are now capable of generating music, poetry, visual art, and even fashion designs.

One of the key factors enabling AI to create art is the development of sophisticated algorithms. Generative Adversarial Networks GAN`s, Recurrent Neural Networks RNNs, and other AI models have been used to generate art and design. GANs, for example, consist of two neural networks, a generator, and a discriminator, that work together to produce and evaluate creative output. This interplay between creation and critique mimics the creative process in humans.

One of the remarkable aspects of AI-generated art is its ability to draw inspiration from various art styles and artists. AI algorithms can be trained on vast datasets of artwork from different periods and cultures, enabling them to create pieces that reflect the aesthetics of renowned painters like Van Gogh or Picasso (fig.1). This adaptability allows AI to produce a wide range of styles, from abstract expressionism to classical realism.

Fig. 1. An AI-developed painting in the style of Van Gogh

AI-generated art has sparked both enthusiasm and controversy within the art community. On one hand, it has opened up new avenues for creativity and artistic exploration. Artists can collaborate with AI systems to augment their own creative processes, leading to innovative and hybrid artworks. On the other hand, it has raised questions about authorship and the role of the artist. Is the AI creator the programmer, the machine itself, or a combination of both?

The advent of AI in art and design also brings forth ethical dilemmas. Copyright and intellectual property issues become more complex when AI systems create art. Who owns the rights to AI-generated works, and how can they be protected? Additionally, concerns about bias and discrimination in AI-generated content have emerged, as AI models may unintentionally perpetuate cultural stereotypes present in their training data.

The future of AI in art and design holds tremendous potential. AI can be used to enhance human creativity, offering tools that help artists visualize their ideas or generate new concepts. It can also democratize art by enabling individuals without traditional artistic skills to create meaningful and aesthetically pleasing works. Moreover, AI-powered art may continue to push the boundaries of creativity, challenging our preconceived notions of what is possible in the realm of human expression.

Art and design created by artificial intelligence represent a fascinating convergence of technology and creativity. The rapid advancements in AI algorithms and the ability to mimic and even transcend human artistic expression are reshaping the art world. While AI-generated art raises complex questions about authorship and ethics, it also offers exciting opportunities for collaboration and innovation. As we navigate this evolving landscape, it is essential to strike a balance between embracing the potential of AI in art and design and addressing the ethical and philosophical challenges it presents. In doing so, we can harness the power of AI to enrich and expand the boundaries of human creativity.

Reference

1. Resolution with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL) (European Parliament, 16 February 2017) URL: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+ REPORT+A8-2017-0005+0+DOC+XML+V0//EN (дата звернення: 07.11.2018).

2. Brodbeck L. Morphological Evolution of Physical Robots Through ModelFree Phenotype Development/ URL: https://journals.plos.org/plosone/ article?id=10.1371/journal.pone.0128444 (дата звернення: 04.11.2018).

3. Coeckelbergh M. Robot rights Towards a social relational justification of moral consideration // Ethics and Information Technology. – 2010. – Vol. 12. – P. 209-211. URL: https://link.springer.com/article/10.1007/s10676-010-9235-