Generative AI: Imagining a Future of AI-Dominated Creativity

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On DALL-E, GANs, and how generative AI is reshaping creative authorship, credit, and value.

AI-generated media has reached an explosive tipping point. Even before the debut of OpenAI's ChatGPT electrified the internet, the research laboratory captured the attention of the art and design world for its generative AI system, DALL-E, allowing anyone to create images of anything their heart desires by simply entering a few words or phrases.

Over the past months, more than a million users have signed up to use DALL-E beta, and the company is further expanding its reach by offering an API so that creators, developers and businesses can integrate this powerful technology and further explore its creative potential. Meanwhile, AI-generated work continues to disrupt other corners of the cultural landscape, from the six-figure sale of the generative portrait at Christie's in 2018 to this year's controversial awarding of a top prize to an AI artwork in a contest for emerging artists.

The arrival of AI creations in the highest echelons of the art world and the proliferation of user-friendly AI software like DALL-E 2, Midjourney and Lensa have renewed debate over creative production and ownership, and prompted attempts to provide practical answers to questions previously relegated to the realm of theory: What differentiates a machine-made painting from a work of art? How do we — as creators, curators, collectors, consumers — assign meaning and value to art? And perhaps most critically, what impact will generative-AI technology have on the future of human creativity and artistic expression?

The instability of art

As Walter Benjamin wrote in "The Work of Art in the Age of Mechanical Reproduction," the modern world's reproductive and creative technology causes all art to be divorced from its primal, ritualistic and sacred contexts, making the editing and copying and remastering of art a constant feature of art itself, so that in the modern world, art no longer speaks to eternal concepts of beauty and aesthetics but to constant flux and instability that is always mutable and changeable.

For AI-generated art, this instability is reflected in the liquid, malformed, lo-fi and sometimes unsettling qualities of the works that generative adversarial networks (GANs) produce.

Unsurprisingly, there has been significant backlash from artists and creators, many of whom argue that generative art is plagiaristic and that it threatens human artists' creative agency and livelihoods. Others, like celebrated designer Jessica Walsh, are less concerned with such anxieties: "There will always be backlash whenever a tool threatens people's jobs," says Walsh, "But the reality is that AI is already here,

and it will continue to have an exponentially large presence in the creative world."

In the music industry, for example, digital modification has become the norm: musicians like Brian Eno and Aphex Twin gained notoriety over the past few decades by using tape loops and computers to create ambient or generative music, while sampling is a cornerstone of popular genres of modern music like hip hop, pop and electronic music. In 2022, most of the best-selling artists in pop music used autotune and compression to varying degrees in their music, essentially correcting the organic anomalies of the individual human voice.

Credit where credit is due

Much of the debate has centered on the question of credit and creative authorship: Who is the artist of works produced by an algorithm, written by a coder and remixed with photo editing software? Although we don't typically credit the underlying tools used to create — such as Photoshop, specific hardware, font foundries or autotune — that standard may already be changing. Many AI-generated artworks even bear the creator's "signature" — often a garbled string of code or text — in just the same manner as a human artist signs their name to indicate authorship.

The rise of AI-dominated imagery has prompted tech giants like Adobe, Microsoft and Canva to launch their own generative product features — and while the massive image hosting site Getty Images has proclaimed that no AI-produced content will be allowed on its servers, the platform admits that moderation of this policy will rely on users to report images suspected of being "fake."

And so, with this swift diffusion of generative AI into creative and commercial landscapes, might we enter a world where a little editing via AI, such as a film photographer editing scans in Lightroom or using filters, becomes so commonplace as to be a subtly coercive requirement of producing art at all? Or, as defenders of generative AI predict, will the technology prove to be empowering for artists, driving creative innovation through increased production capacity and accessibility?

Another framework through which we might attempt to understand or predict the future social role of AI in creative industries is the debate over the production and consumption of genetically modified organisms (GMOs) in the food we eat. In the same way that we certify the products we consume as being organic, or GMO-free, will there come a day when we declare our creative works as being wholly generated, partially augmented, or crafted with zero digital technology?

Maybe the better question is: Will we be able to tell the difference between AI-generated work and art created by a human — and will we care? A 2017 Rutgers study showed that the majority of participants were unable to distinguish a clear preference for human works over AI-generated ones. Perhaps where taste is concerned, the perceived ability to distinguish AI from human endeavor could be the marker of refinement and distinction.

Where will generative AI art take us?

If we value creativity and that which is inherently human, will we see a day where machine-generated creativity dominates, and purely human-oriented creativity holds a higher cultural and economic value? Or, as with the music industry, will the normalization of AI instead break down the artificial/human creative binary, fundamentally reshaping consumer preferences and public attitudes surrounding the production and consumption of art?

In his almost century-old "Work of Art" essay, Benjamin suggests that it is in the nature of art to outpace the formal limits of the technical paradigm in which it was produced; in that way, art is not a function of technology, but a generative force behind it, driving innovation and desire for a world that does not yet exist.

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