

Art: It's All Just Iterative Fakery

Why Do We Care About Imagery Created by Artificial Intelligence?

Can technology topple art? If computers can do visual art using AI — indeed, producing imagery that ends up being sold in the \$400,000s at auction at Christies, or taking first prize in Colorado's state fair — what does that mean for the future of all of humanity's arts? Just because I haven't yet heard that artificial intelligence has produced weaving, jewelry, or pottery doesn't mean it isn't about to start

happening. Perhaps

you should be

thinking of

Michelangelo's David

when contemplating

what should be the

input to an AI system

being trained for

sculpture (3D

printing).



All images created by the AI service called Midjourney

I have been contemplating the intersection of technology and visual art, but when it comes to the appreciation of visual art, I have to say that I am rooted casually among the common man. I have lots of education, but I didn't do art school and somewhat regretfully know only the rudimentary outline of

art history, and so I approach art with the naif's unblemished idiocy as to what constitutes good art. So, apparently, do AI image-generating systems.

I can't, for example, pause reflectively before a piece of art in a gallery and find myself contentedly thinking, "Oh, this shows the essence of simplicity — I recognize the O'Keefe influence, except in corners where a little frieze of Mondrian rakes undergirded by a mitigating dollop of Pollock." (Clearly, this kind of art has yet to make it into a museum, heretofore through no fault of AI.)

I'd have to look it up if I wanted to understand the impact on art forms of earlier technologies, such as developments that revolutionized 7th century porcelain glazing, or drove the orient to invent multi-color block printing in the 8th century.

Oddly enough, however, I try to create meaningful and interesting imagery almost daily — photographs, or at least visual art starting with the camera, that I would like to call artful. And in my work creating imagery, I recognize that I live in a time during which once



again technology clearly is unseaming some of the fabric of digital art — particularly, if not only, for the creators of it. The disruption looks to ripple through the artistic world, especially for those who make visually creative art, if we can for the moment overlook the reaction of the viewer or everyman consumer of art.

Photoshop, to fix on one example, now has a filter which accepts textual prompts and renders an image it associates with the terms of the prompt using artificial intelligence.

Type in “cityscape with tall buildings under blue sky,” and that is more or less what will be rendered in a pixel layer for you to use. But who, how, or what created that visual thing? Who owns it? Further, is it art? Does it literally cypher the leading edge of doom of the visual artist?



Significantly, we are still at the advent of this ability. Its virtuosity has yet to fully amaze us. Two decades from now, how gleefully real would its rendering be of an Edvard Munch painting of Donald Trump? You know what I’m talking about. We probably would only be able to know it wasn’t an original based on date of creation.

Faced with the now wide-spread use of online image-generating services such as Midjourney, how do we answer questions such as, is the imagery rendered by artificial intelligence art? More fundamentally, is there something sanctimonious about art on which the computer-generated art tramples? Will it reshape the creation of visual art so deeply as to render the direct human touch unnecessary?

Not long ago, there was a similar debate about whether or not photographs were art. Let me point out that the ineluctable train that has been photography has chugged blithely through nearly 200 years of the debate, eventually handing out cameras essentially to everyone on the planet, and art seems thriving these days nonetheless.

Let's also acknowledge that in some artistically aseptic way, the photograph, after all, has in all forms been made by a machine using scientific processes — guided by the artist. Back in the day, some formidable skeptics truly expected that it would certainly decapitate art, as artists and critics of the era declaimed. Baudelaire writes in *Salon* in 1859 that photography "...will soon supplant or corrupt it [art] altogether, thanks to the stupidity of the multitude which is its natural ally."



As I've said, you could count me in that multitude. Whether or not something visual is/was art would have been the proverbial toss up for the 19th-century me, and comparing painting with photography like comparing eating apples with eating oranges — both some kind of fruit, lots of which taste good.

That debate over the photograph as art lasted for a while. Cameras were in widespread use at the end of the 1800s — stunning to now know they have been around almost 200 years, being invented in the late 1820s — with practitioners like the Pictorialists of the 1880s exercising intentional classicist control over scene, posing, and dark room processing to achieve formally-softened compositions — recognized eventually as making art.

The photorealist portrait industry was proof that high-quality (and to begin with, expensive) imagery could result from a repeatable mechanical technique in studio after studio. Eventually, with Stieglitz's international museum exhibition of photography in 1910, photography was ceremonially ordained art. The debate, after half a century, put to bed. By as early as the 1850s, however, there was a price to pay. Production of the photographic calling card became affordable and widely distributed which led to a drop in hand-painted portrait commissions.

And now the online germination of publicly-available AI tools that generate visual works tweaks the feelings of many that visual art is once again being force-marched up to its dark threshold. A present-day example can be found in Tomasz Trzebiatowski's 2022 YouTube video titled *I Say NO to Artificial*



Intelligence Photography. Trzebiatowski is founder and editor-in-chief of online and print magazines devoted to photography including *FujiLove Magazine*. He spearheads a many-tentacled print and online community devoted to photography. His voice rings out with the apprehension of the current era's Baudelaire.

In the video, he draws a line between artistic modification and creation, between the ability to use Photoshop to modify portions of an image versus an image which feels wholly manifest by artificial intelligence. His concern is understandably that of the creator. He reasons that his modifications — for example, painting out the unwanted telephone pole by using Photoshop's "Content-Aware Fill" — make art or help complete art, while the computer's creations do not. In fact, he is worried that AI bypasses and

strips away the human processes that in this case make art of photography.

How Does AI make images, and Is It Art?

To gauge how we might think about this, let's glance quickly to what the Pictorialists did with photography that satisfied critics that their photography was art. This seems appropriate because it is a blending of human and machine. An intent of their work was to incorporate concepts from classical art (paintings) into the straightforward realism of the photograph. They may be thought to have been working to reproduce a prior form of art in their photographs. I sense that their use of the era's available composing and darkroom techniques suggests they would have been happy to employ these to erase an unwanted telephone pole.

They employed various efforts of lighting, composition, and darkroom toning to craft moody and unique-to-the-time images.

They used allegorical staging and props, oriented models to face particular ways in particular scenes, including with back



to camera, often shot to create soft and gauzy lighting conditions, and they applied by hand homemade emulsions and pigments to special papers to bring forth moody work.

All such steps transformed a straightforward photograph into expressive art. Their intentional acts of borrowing introduced heretofore unseen but intentionally artful images. As what seems to be true with all art, it was at least in part the novelty of these highly-stylized representations, exhibiting more than what was by then the well-known realism of photographs, that helped shape the view that they were art.

The art purist could argue that these photographers were individuals making use of the technology, framing the camera lens, posing the models, applying the finishing touches in the darkroom. All of these steps, therefor, came from the mind of the artist. Can this be said, they might ask, of imagery created by AI? I believe that they might argue that it is not an individual's art, but actually consensus art.

This is due to how AI creates the striking visuals it does. In vogue now is an AI process called Stable Diffusion, which represents a milestone in AI image generation because it can offer image generation to the masses in a way that does not sacrifice computational speed or image quality. I call its products "consensus art" because of how it has been trained on many millions of images to understand and produce images.

The general steps to create computer-generated text-to-art begin when a user enters a textual prompt. The computer separates each term into a computational token which represents the meaning of the term. If the input text was “a cat with a bow on its head,” the computer would be able to understand many fundamental linguistic principles such as that the word “a” has the meaning one — a single cat and a single bow. Even that a cat does have a head.

The semantic transformation produces by an array of numbers — called tokens, and after this transformation, the image generation part begins. To do this part, the computer must know beforehand what kind of imagery is associated with the tokenized meanings. To be able to do this, the computer has been trained on unimaginably vast numbers of images-term associations from all over the web.

In simple terms, the image-generation step takes a blank canvas and repeatedly adds more information to it, guided by the array that represents the user’s intended meaning and all the information about the tokens it has been trained on.

What Are the Big Conundrums?

There is nothing sanctimonious about art. Nothing inviolate. Nothing pure.

Give the server a textual prompt

What is art? And why is art? Because there is that curious, inventive, and automatic expression of mankind's that both encapsulates and causes culture, art is in a sense an integral urge, a life force circulating within humanity. We see it arise as cave drawings some 34,000 years ago, and it seems it will only die when the human race itself dies.

Humanity is gifted with an instinctive reaction to the world we inhabit such that, without trying, art comes chameleon-like to us, forcing us to communicate and delineate that which amazes us in ways that amaze or please us. This inspired and inspiring expressiveness cannot be lashed to a rock by anything, including technology. If anything, the impact of technology will do the opposite of cripple the arts. It will be a new critical stimulus, providing another unavoidable springboard, a jumping off place for new art.

