Are Artificial Intelligence Models Artists?

Analyzing the Discourse Surrounding AI Art and its Legal Implications

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Introduction:

The recent advancements in artificial intelligence technology have coalesced in the past five years and have already had a significant impact on humans' work. In particular, the advent of text-to-image-models allowed the general public to create artificially generated pieces of art. This phenomenon isn't limited to visual art; AI-generated music and singer replications have also raised questions about personal ownership and identity. While there are some telltale signs of whether something is AI generated or not, we can assume these will only become harder and harder to spot as AI-generated imagery becomes more difficult to differentiate between non-AI-generated images. When an artificially generated image won the Sony World Photography Award, the recipient, Boris Eldagsen, refused to accept the award he had won, stating, "They are different entities. AI is not photography." (Vallance, 2023). This then raises the question: At what point is AI -generated art considered to be "truly" art? If AI art is equivalent to human created art, then it stands to threaten the livelihood of thousands of artists worldwide in varying disciplines. But if AI art is not truly art by definition, there must be a domain in which human artists uniquely exist and rise to the occasion. It is in this domain where this paper will analyze discourse surrounding copyright law in the intersection of artistry and artificial intelligence

To understand whether AI imagery can be considered art, it is necessary to have a baseline understanding of how AI imagery works, and what we can consider to be art in itself. Although the definition of art is already a contentious topic in the world of philosophy, the goal here is to reconcile potentially conflicting intuitions on how art created by non-humans can still retain the properties of art. We will aim to explore at least one view of art, and how it relates to at

least one of methods of generating imagery, and compare the two to see whether this image generation methodology fits within this specific definition of art.

Stable diffusion is a method in which the user can enter in text prompts, and the stable diffusion model will output an image. The first main step is the forward process where an image is transformed into random pixels to train a model so that it can learn certain patterns. These patterns are encoded with text and associated with each other. So if the word "sunset" in an image's tags seems to be associated with deep oranges, the model eventually learns to use the color orange in prompts that involve sunsets. This is done with many images so the model can then have a good understanding of word associations that exist within the internet. The next step is the reverse process to actually generate an image. It takes a text prompt and starting off with random pixels, the model de-noises the pixels through the patterns it has learned before. By building off of the text associations and reversing the process we go from random pixels to a fully created original image. (Rombach et al., 2021)
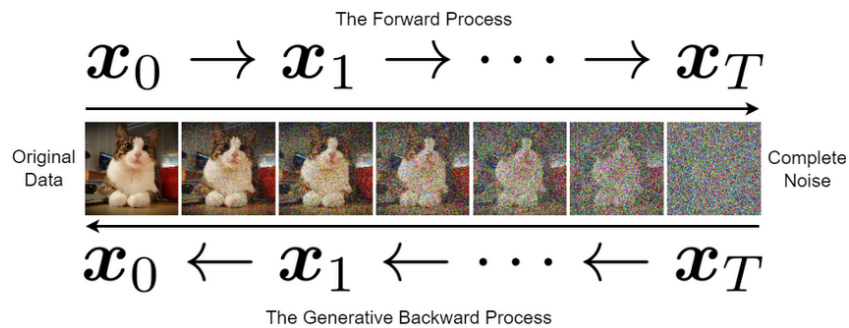

Figure 1: The image of the cat has random pixels gradually adding noise in the Forward Process. If the cat were to be generated from a text input, the opposite would occur and the resulting image would be the output taking random noise and gradually adding more and more fidelity. The credit of the used images is for Arash Vahdat. (Vahdat, 2024) (Ghojogh & Ghodsi, 2024, 1)

Technical Topic:

Looking at Kant's view on art as a larger part of his view on aesthetics, an analysis of the contrast between Kant's view of art and AI art will follow. Kant emphasizes the fine art of a genius as "a kind of presentation that is purposive in itself and, though without an end, nevertheless promotes the cultivation of mental powers for sociable communication." (Kant, section 44, 46) (Adajian, 2007). One of the main points of interest in Kant's theory is the necessity of a genius to create a higher "fine art." These works of fine art must be created by his concept of "genius." In his understanding of how fine art is produced, he emphasizes that artists cannot simply learn a process and follow some set of rules to create something beautiful. This stems from Kant's belief that no precise rules can define true artistic creation (Adajian, 2007). Rather, truly great artists must bring something unique and original to inspire others rather than a replicable process. However, he also specified that rules must still be governed as "every art presupposes rules," and the objects of art serve as a "standard or rules by which to judge." (Kant, 46). Because this results in a paradox, Kant proposes the "genius" in which "nature gives the rule to art" (Kant, section 46) (Adajian, 2007). Such an artist with his "genius" would be able to create works of art subconsciously that are seen as beautiful. They wouldn't be able to explain why they created this work of art or even know how they were able to do so, but they would do so all the same. This inexplicable-ness of the creation process is Kant's view of the "genius." (Adajian, 2007)

It seems quite clear that AI art seems to violate this principle on the surface. Surely only a human must be in the equation to be granted some explicable genius by nature. And the existence of deterministic (but very difficult to unravel) algorithms seems to undermine the ability for Kant's understanding genius to exist. While stable diffusion itself is more of a black

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box algorithm due to random seeding and weight changes, the process itself is entirely deterministic. (Rombach et al., 2021). The neural network learns the weights and is complex to the point where it's difficult to visualize and understand the exact process step by step to humans. However, given the exact same inputs, parameters, and random seed, the output image would be the exact same. In this sense, it seems impossible to make the argument that the subsequent art generated does not adhere to a certain set of rules. Therefore, Kant's understanding of fine art and "genius" would be impossible to apply to stable diffusion.

Seeing how there seems to be some philosophical support for our initial intuition for whether AI can create true art, it's important to also analyze how the STS effects ripple out. In the capstone research project, I will be conducting a survey of different stakeholders alongside regulation in the United States.

STS Topic:

The following will be a discussion of what different stakeholders are saying in the field. These will include what artists believe, what AI pioneers believe their research can provide, what regulatory agencies are proposing or have already enacted, and lastly the current discourse on the laws surrounding AI art in the United States.

To analyze all of these different viewpoints, it can be easily understood if viewed from the incentives of each group. For artists, should they see AI as a threat, it would be beneficial for them to tightly regulate the use of AI art to preserve their economic stability and to avoid displacement. This is because if anyone is able to outsource any artistry work to an AI that follows their specifications and can iterate much quicker than a human being, there becomes little incentive to hire a real human artist. This is especially the case when in the case of works of

art in the service of "background images," or other anything that's not meant to be directly appreciated for its artistic worth. In the age of the internet, there are countless places where artists can make a living creating images. For example, AI art could be used to create "profile pictures" in which the user would associate a picture of themself with their account. But by running their face through an artificial intelligence model, they could create incredibly high fidelity versions of themselves in many styles such as a "Disney character" or a "DaVinci painting." This is even more prevalent when currently living artists have their art being used as training data so that anyone can seemingly generate works of art from the artist faster than the artist can. In this case, many artists are calling for regulation on training data, and there is even research to obscure pieces of art to datasets. (Shan, 2023)

These seem to directly oppose the incentives of AI art providers and monetizers, which largely come from large corporations such as OpenAI and DALL-E where users can generate images at a small cost. For the companies that provide the computing infrastructure to run AI programs, they are incentivized to have people use their services as much as possible for monetary gain. Oftentimes these companies also use cloud computing infrastructure from other companies as well (Moss, 2024), and those cloud computing providers are also incentivized to have large companies pay for their services. For art regulators and lawmakers, ideally they have little to no vested interest in the space as well, and simply create the best environment that allows both artists and AI companies space to thrive and innovate. What's important is to analyze the distinction to where the actual law applies. For instance, in the case of copyright infringement, copyright protection requires three key elements. The work "must be (1) fixed in a tangible form of expression; (2) an 'original work;' and (3) created by an author." (Caldwell, 2023) Currently the biggest point of contention is whether AI art falls under the category of "authorship." The

Copyright Act requires that copyright be attached to "original works of authorship," (*Copyright Act of 1976, 17 U.S.C. § 102(a).*, 1976). In this case, it's important to define who is an author in this case and whether that author must be human, and the legal ramifications of such a definition.

Conclusion

By conducting a discourse analysis on current sentiments of differing stakeholders, we can then analyze and provide recommendations moving forward. By collecting prominent artist sentiment or statements from organizations that represent artists, we can understand the needs of every party and come to a more equitable solution for all. In the modern day, art is often created solely for the purpose of filling space or serving as a backdrop. While it's ideal that these backdrops or backgrounds have some level of true beauty, the reality of the world is that the audience of every artist is not looking for fine art. And the fact that AI image generation *can* actually pass as human created art, even to skilled artists, bodes poorly for this generation of new artists (Vallance, 2023). This creates significant displacement for human artists and raises questions about our society's need for art. This research paper will look at the different incentives in place and attempt to give suggestions for future legislation that will create a solution that not only allows artists to express themselves without fear of their livelihood, but also allow tech companies to fully explore the space of artificial intelligence and its potential benefits unhindered by regulation.

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