

A.I. Think, Therefore I Am: Ownership and Copyrights over A.I.-Generated Artworks

Earlier this year, a digital artwork created through an Artificial Intelligence (“AI”) program won first place in a digital art competition in Pueblo, CO. The artist explained that he created it by submitting terms to a computer program called Midjourney. While he did not misrepresent his methods, even signing the piece “Jason M. Allen via Midjourney”, much controversy has arisen out of his artwork. Artists and experts have been taking sides, confronting larger issues of the ownership and legitimacy of AI-generated art.

As the world becomes ever more automated, the use of AI is increasingly commonplace. The use of AI in creating artwork of all forms has been advancing and improving for the last 50 years. Very recently, AI programmers have been experimenting in using machine learning to approximate human creativity. They have been successful to the point that experts may be unable to differentiate a manmade work from an AI-generated one. Machine learning is a method by which programmers submit data to a program and the AI uses mathematical algorithms to draw conclusions from that data. Programmers can then tweak the algorithms to modify the conclusions the AI may draw. Deep learning is a cutting-edge extension of this process, which replaces some of the hands-on programmer work with an artificial neural network (“ANN”). An ANN uses layers of algorithms to imitate the logical connections made in the human brain. It allows an AI program to build on past connections it has made and change its approach autonomously, growing to solve more complicated problems without human interference.

Who are the “authors” of works created in this semi-autonomous process? Who should be able to copyright them? Can this be called genuine “creativity” and “art” in the same way as manmade works? Modern understandings of what constitutes an “author” under Copyright law require an owner to be a human who uses their subjective judgment to compose a work and controls its execution. Current scholarship recognizes parties that may meet these requirements in this instance to include: the current AI user, the original programmers of the AI, or the works could reside in the public domain.

Under traditional “authorship”, perhaps one’s first instinct is to allow the user of a program to copyright any resulting work. This relates to other instances of technology being used as a tool to execute an artist’s vision, such as photography. However, the novel aspect of this issue is that AI programs are more autonomous than any technological “tool” in history. In the scenario mentioned above, a Midjourney user may enter a phrase as simple as “man in field”. In response, Midjourney produces a unique work compiled from millions of images. While this human input is not negligible, particularly if the user further edits the piece, deep learning has led to software that is more autonomous than even Midjourney, if not completely so. As AI programs progressively require less user input, it makes less sense to give a user rights over works they did not meaningfully contribute to.

Rights to copyright could be given to the programmers who spent tens of thousands of hours creating the AI itself. While a programmer clearly invested her subjective judgment in the AI’s basic algorithms, her control over the AI and its production is thereafter very limited. What separates programmers from, for example, an artist that creates a reusable print, is that the programmer may not understand exactly how the AI reaches its result. In programming AI to create artworks, the programmer is instructing the program to follow rules and apply concepts that she cannot clearly articulate. In the same way that a human can easily recognize a bird but may struggle to explain exactly how and

why we recognize it as a bird, deep learning allows programmers to instruct an AI to follow certain styles, aesthetics, or the idea of “originality” even though they may not be able explain those concepts in words. The AI is then able to learn how to follow these instructions on its own. In starting this process, programmers give the AI the power to create infinite works. Should programmers have rights to these works when their involvement is thus limited?

Of course, AI works could automatically belong to the public domain. The issue with this, as with all works that flow automatically to the public domain, is it gives little incentive for innovation in the field of AI. As the creation of AI is arguably one of the most time-consuming yet vital and up-and-coming areas of technology, this is an extremely important consideration.

Courts have been hesitant to address the issue of ownership in AI-generated works, managing to substantially avoid doing so thus far. However, as AI becomes more ingrained in everyday life, this issue will become unavoidable and will require a resolution.

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