My Reaction to the Question: Will "AI" Threaten Artists?

By Joseph Juma

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Let's just start by specifying - I don't really like calling MLAs "Al", and these contemporary "art" MLAs I like to avoid this with even more so because it allows people who aren't well-educated in the topic mathematically to conflate the mechanisms at play as being somehow in the same mechanical capacity as humans and that's just not true. If you want to argue that current MLAs can be conscious, I am here to tell you that their generative networks are at best heteormorphic to a similar network representation of an organic network, but only represent a subset and are not topologically equitable other than via that morphism. If you're not really sure what that means, that's fine. The fact is that the heavily public "Al" research is willfully ignorant of topological analysis between their neural networks and mathematical models of biological neural networks, and much of the research that equates the two does so by contouring their approach to reach a desired outcome. This is to say: """Al""" as a field is full of people who want the current technology to be greater than it is and there is a lot of money in it not falling into another Al winter so people lie, and those lies are from well-educated people in the field, so then people outside the field believe them and you have a perpetuated lie.

So, I'm going to call the Art ""AI"", Mechanical Artists (MAs). So, we can rewrite this question as, "Will MAs threaten artists?" Well, what if I said yes? "I believe MAs will threaten artists." I would be right. What if I said no? "I don't think MAs are able to threaten artists." I would be right. If I take either stance, there are outcomes which I can look at and say, "See! I was right!" Why? Because I made an overly broad claim, with only qualitative specifiers and no metrics. If even one artist loses work to an MA, then the "are threatened" stance is true. If even one artist is able to outperform an MA in some area, then the "are not threatened" stance is also true. This is the root of a problem we suffer from where people make claims that are very easily proven true, allowing for a self-confirming bias.

Instead, let me refine the questions.

- 1. Will current MAs threaten sculptors? No, they use pixel based diffusion algorithms which generate down-resolution images and then mostly scale up, repair, and expand upon them. This is not an algorithm which translates to the concept of sculpture unless first translated to voxels, and then you would need to create an additional robot which would be able to turn a voxel model of a sculpture into a real sculpture. Yes, 3D printing would allow this in plastics, and very expensive ones in metals, but you would require a much more specialized device for, say, cutting marble like the old masters. I believe the cost of the human sculptor is more efficient than the cost of the Mechanical Sculptor at the moment, and current technology is not there. However, it could go there, and then it would come down to the costs versus throughput versus artistic capacities of the Mechanical Sculptor versus the Human Sculptor.
- 2. Will current MAs threaten painters? No, for the same reason they do not threaten sculptors. Yes, there are a handful of robots which can paint, but I ask you to take a look at the brush-work and precision found in many of the old impressionists work. There is a precision of stroke, mixture of color and choice of brush texture, tip and orientation which all must be accounted for. Are these unlearnable to MLAs? No, they are quite able to be learned, yet they are not the same technique as the current MAs, and, again, a mechanical device with associated engineering costs is required. This relegates it to the same question: once developed, yes maybe it will be a threat, but it becomes a question of costs versus output.
- 3. Will current MAs threaten digital concept artists? Yes. The concept artist takes ideas which they've learned over life references and uses them along with a conveyed prompt to create abstract pieces of art representing an idea. This is exactly what the MAs do, however the MAs still lack certain semantic mechanisms. This means the MAs are not able to be *precise* but they can be very *general* and even have innovative ideas. For example, because many people who are human artists have an implicit understanding of the boundaries and perceived discrete nature of objects, we are beholden to drawing things with that bias, and MLAs of the diffusion sort do not understand what an "object" is. They are a collection of pixels forming patterns to an MA, and these give rise to formative patterns that do not need to know explicit objects so much as patterns. Therefore you get *freedom from the discrete thing* which is its own creative aptitude that lends some very interesting

- proclivities to MA art. Here in the early stages of MA, we will find this refreshing it is something new in a sea of rehashings and then later we will find it boring. This actually begs an interesting question.
- 4. If the overprevalence of a style creates a saturation of that style which then makes it boring, will we grow bored of MA art more rapidly than human art due to the pure ease with which it is created and easily shared? Surely if there is so much of the things which make MA art currently unique and it is so easily accessible, then the flood gates are open and we will soon grow bored of it. This should, in a few years, relegate contemporary MA art to a *purely technical* domain, rather than an *aesthetic* domain. This is to say: it will be useful for concept art, but not terribly enjoyable to look at in its own right unless you are enamored with it's unique *style*. This isn't unlike with how many people will look at a classical painter's work and say, "so what", yet others will see the precise efforts and knowledge going into and be enamored. I imagine I will always find there to be some joy, personally, in the diffusion algorithm, but I find far more joy in the Pythagorean theorem for being a complex relationship between the Euclidean distance metric, Unit Circle and triangular relations.

Returning to the original point, these questions should outline a trend: MAs will not harm the economic prospects of most artists at present. They will lower the barrier to the creation of pictures in a certain style generally representing an idea, and as they improve will provide us the ability to more easily create art with less mechanical skill. However, that is just how technology has been, and, honestly, the same can be said for everything. Machine Learning Algorithms, MLAs, by way of Alan Turing's original theories, will eventually have aptitude to replace the output products of any intelligent human behavior. This means that writing, music, visual art, theatre, architectural, mechanical and electrical engineering, and even software development are all subject to this eventual replacement by MLAs or various AI. This means that, in the future, certain jobs which exist and are paid well now, will not exist or be as well paid. Taken out of the context of "Al", and instead in the context of "Technology", that's just how it has always been. There used to be people whose entire jobs was to keep records and tabulate those records - bookkeepers, which Rockafeller, yes the oil baron, did as his first job as a teenager and was well paid for. We now have Microsoft Excel, and various spreadsheet software that do those much more effectively, automatically, and largely for free.

The question is not "if AI will threaten the economics of a field", but "when" - it is inevitable, and this question is honestly quite useless as nobody knows the answer until it is imminent. I'm not a betting man, but I will bet that it will at least begin to become more prevalent in the next 10 years, and already has begun the last two or so. A far more useful question is this: "How will we change our economic and social policies in a world where AI have removed the value of all labor work?" - after all, until this point our species has heavily relied on labor as an asset which has value, and AI technology marks the devaluation of labor. Without a valuable asset with which to exchange for currency, the average person is left without means to engage in their economy, and subsequently that same person is denied a life.

So, I implore you to stop with your social media drivel fueled by the grind to acquire followers so you can make money or acquire clout. Your words lack meaning because they are making a spectacle of a natural process. You might as well be posting YouTube videos saying, "I painted my room, will it dry?" - it's unremarkable that this thing is happening, because it is a natural thing that happens and is not a particularly beautiful thing. When was the last time you watched the sunset? Did you know that over your lifetime, due to the dynamic orientations of Earth, various planets, the Sun and all, and the average lifespan that you will never see the same sunset twice? That's a natural phenomenon worth observing in my opinion. The remarkable thing is to post a YouTube video saying, "I discovered a way to make my paint dry faster, with an even coating!" - a solution to the problems implicit in the naturally occurring thing. Who knows, the MAs might start making YouTube videos, TikToks and social media content next.

Actually, I know that they've already started.

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