Dear US Copyright Office:

As a small business owner, writer and illustrator, I will try to limit the scope of my comments on artificial intelligence issues to those issues which I feel personally qualified to comment on. There are several questions raised which I hope to address.

Cultural Impact (Questions 20, 21)

It is my understanding that copyright, in the US constitution, was intended to promote the proliferation of creative works, in order to benefit the culture of the nation as a whole, by ensuring that artists (meaning creatives that produce any sort of copyrightable content) are able to make a living from the fruits of their labor.

It seems clear to me that certain uses of Generative AI stand at cross-purposes with this intention.

Although Generative AI is clearly capable of producing unique combinations of words or pixels, which may be useful in some applications* purely for their mere uniqueness (just as a randomly generated number has its uses), regardless, these works do not contain any true original thought.

The concept of original thought is elusive enough that many AI proponents deny its existence; claiming that their machines operate via the same process as a human mind when it comes to absorbing and synthesizing information, and therefore that the output of such a machine should be considered in the same way as human-authored content.

However, since the US constitution only protects human-authored works, this claim should be rejected out of hand. (Indeed, to claim the human mind operates in the same way as any machine is to accept philosophical determinism, a philosophy which it isn't the government's place to adopt and would also nullify large portions of lawmaking in general if taken to its logical conclusion.)

Instead of containing original thought, AI generated works contain coincidentally unique combinations of attributes from the works they have digested. Because no particular attribute or structure is new, the outputs of these machines never surpass their inputs in any way.

As a result, Artificial Intelligence generated content is incapable of benefiting the culture of the nation as intended by the framers. Instead its mass adoption would lead to cultural stagnation. Any forward motion or cultural evolution in art could be led only by the human artists whose work is fed into it – and these same artists would not be able to make a living! Once their work was published, it could be immediately digested to expand the breadth of the AI, rendering the artist "obsolete" by their own actions.

So, not only does AI stagnate the culture, but it also impedes the ability of artists to profit from their labor.

*I am speaking of the generation of content with minimal complexity such as the use of ChatGPT in copywriting titles, headlines, and slogans

**Notably "Fractal Noise" by Christopher Paolini

*** https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=1002&context=all_fac

Personal Examples (Question 2)

As an illustrator, I have personal experience with income loss and observing others who've experienced income loss in my industry due to generative AI. In the past, professional illustrators, photographers and/or designers were often paid to make book covers (the only alternative being for the book's author to try their own hand at it or attempt to barter). Today however, many authors in the indie sector (and sometimes even in the professional sector!**) are using AI generated book covers. These covers look extremely generic and similar to other covers published in the past. Regardless, many of these covers represent a lost commission. Such a book was promoted recently on Instagram within my indie publishing circles, for example.

The other sense in which I have personal experience is that my own art has been scraped for these training models. Artstation was scraped for these images at a time when my images were hosted on the website, and although I've "opted out" my work from future pickings, only works posted since the opt out feature was introduced are protected, and works posted prior to the scrape were potentially included in the dataset of generative AI models that are now running.

Similarly, my writing posted on the Archive of Our Own, though not related to my business ventures, is still my intellectual property, and the entire AO3 was also scraped by generative AI. Because I post fanfiction as well as publish for-profit original works elsewhere, it is plausible that my "writing style" could be learned from my fanfiction and mimicked by these AI, undercutting my original fiction and therefore affecting profit.

However, another big issue is also moral rights. I feel that AI style mimicry could also implicate the moral rights of an artist. For example, my reputation could be damaged if AI was used to create work, sold with the assistance of having my name attached to it (eg. "in the style of Evelyn M. Lewis") but without my consent and containing content that is against my values, such as pornography etc. While it's true this has always been possible for an artist skilled in mimicry to accomplish, AI has made it considerably easier, much like music piracy did not have to be legislated extensively before the age of digital file sharing.

Authorship of AI Works (Question 18)

As for the authorship of AI works, if the machine cannot be attributed the authorship, this leaves open the question of who is to be considered the author.

My argument is that the human who enters the prompt into the AI cannot be considered the author of the work. In this case the prompter is more akin to a client requesting alterations and refinements to a commission. This is an analogy which I am quite familiar due to my work as an illustrator. The process is remarkably similar. The machine generates ideas on a prompt and narrows them down to subtler and subtler variations based on user choice.

*I am speaking of the generation of content with minimal complexity such as the use of ChatGPT in copywriting titles, headlines, and slogans

**Notably "Fractal Noise" by Christopher Paolini

*** https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=1002&context=all_fac

Consider the analogy: A client commissions a cake. They give the baker a prompt: "I want a cake that looks like a mermaid." The baker then sketches a cake that looks like a mermaid. The client then specifies, "that's good but she needs to have one hand in the air and blue scales." The baker makes a cake shaped like a mermaid with one hand up and blue scales. The client then specifies further alterations such as a pearl necklace or different shaped eyes, doing his best to describe what he wants.

Having gone through this sort of process many times as an illustrator, I know that it does not entitle my clients to IP ownership over my artwork, nor do they get any claim over the "elements of authorship" because of engaging in this process.

Generation Process From a User Perspective (Questions 7, 7.1, 12)

One AI Generation engine with relative transparency with regard to its generative process is an early generative engine known as Artbreeder.

Artbreeder is well known for its process of fusing together 2 images of the human face in order to create a 3rd image with the appearance of a "child" or offspring of the "parents". Here is the process by which image creation works in Artbreeder.

1. A user uploads an image of a human face.

2. The image is processed by Artbreeder's servers. This involves the image being interpreted or read by Artbreeder, in an attempt to determine where the various facial features are and map it onto its programmed understanding of a face like a rubber mask onto a wireframe.

3. The AI attempts to reconstruct the image from its stored data. The reconstructed image is shown to the user.

4. The stored image, which is now encoded as a series of features or "genes", can be cross-bred with other images that are integrated into the AI.

5. These cross-breeds can be themselves bred with other cross-breeds, creating a complex "family tree" or lineage. The entire family tree and all the ancestors of the image are all visible on the user end within Artbreeder, so that it is possible to view every image from which your image descends.

6. Furthermore, however, just because 2 pieces are cross-bred does not mean the end result is 50/50, but may be 75% one and 25% the other or so forth, as directed by the user.

This at least proves that it is theoretically feasible to determine the degree to which a particular work contributes to a particular output from a generative AI system, since it has already been done by Artbreeder. Artbreeder has also created and implemented a reasonable documentation system for this process. I believe this process even gives rise to a plausible remuneration structure.

When I uploaded an image to Artbreeder, I used an image of a man wearing makeup that was specifically designed to defy facial recognition by computers, and was intrigued to see the

*I am speaking of the generation of content with minimal complexity such as the use of ChatGPT in copywriting titles, headlines, and slogans

**Notably "Fractal Noise" by Christopher Paolini

*** https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=1002&context=all_fac

reconstruction of the image fail spectacularly. I think that this proves my theories are correct and that the AI does store the original image in the form of a copy.

Comments on the Opt-Out Model (Question 9)

If people have any rights whatsoever to exclude their work from generative AI, they must have these rights by default.

The opt out model is antithetical to copyright law as it currently stands. Under US copyright law, people have copyrights by default, and do not have to register anything to automatically possess exclusive rights to their intellectual property, whereas in the opt-out model, people have to assert these rights to get them. (Copyright registration exists to prove ownership, not to acquire ownership.)

More broadly, it's antithetical to the US constitution in general, which assumes people have their rights by default and those rights should be respected unless they've been actively *waived*.

Furthermore, any discussion of a universal opt-out model creates undue burden on the copyright holder, since not all venues of art are major social media platforms. Any opt-out scheme has to take into account people who host their own domains. Is it reasonable to demand every artist acquire the technical knowhow to create opt-out flags before they have the right to protect their art? What about retroactively, such as art posted prior to the data collections that have already occurred?

In the extreme end of this, opt-out schemes have to account for fringe scenarios, such as if a representative of OpenAi walked past your painting exhibition and started taking photos with the intent to train AI on them. You can quickly see then that the concept of opt-out and red flag signals are extraneous to the discussion of what rights the copyright holder has.

Note: The concept of opting out, and what constitutes affirmative user consent, has already been extensively litigated with regards to internet cookies***.

Thank you for considering my thoughts on this subject.

*I am speaking of the generation of content with minimal complexity such as the use of ChatGPT in copywriting titles, headlines, and slogans

**Notably "Fractal Noise" by Christopher Paolini

*** https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=1002&context=all_fac