I am Ethan Stanley. I am submitting as an individual. I have worked as a freelance 2D artist, and I have a PhD in physics.

In my PhD studies, I had colleagues who worked with machine learning algorithms that were similar to the modern generation of AI. Those algorithms could be trained to solve problems and fit data that no human could, but my colleagues never suggested that they were "intelligent" and never tried to force them into everything. But those algorithms were not going to transform the global economy.

I will respond to the four points in the notice of inquiry.

1) The use of copyrighted works to train AI models.

The majority of AI models use massive datasets scraped from the internet with no regards to copyright. The original artists are almost never contacted or compensated. The biggest issue is the sheer numbers involved, such as the Stable Diffusion AI uses 2.3 billion images.

This widespread scraping can be easily seen when AI generate content that is clearly undesirable, such as stock photo watermarks. Even without prompting the AI with the words "stock photo" or a company name, it can output such watermarks [https://photutorial.com/stable-diffusion-watermarks-investigation/].

It can also be seen when in the rare case that the dataset is public. Investigations have found photos from personal medical records in one publicly available dataset. The people involved had no idea their photos were included, and they had no way to have them removed. The EU's GDPR give its citizens some protections, but American citizens have none

 $[\underline{https://arstechnica.com/information-technology/2022/09/artist-finds-private-medical-record-photos-in-popular-ai-training-data-set/].$

Only after significant public pushback spearheaded by original artists have AI makers started to implement safeguards for artists, but this is still insufficient. These safeguards are not widely implemented or standardized, so even if one model follows them another might not. Additionally, these safeguards are typically opt-out, meaning the artist has to learn the option exists and manually enable it. Lastly, because the majority of AI models are private or proprietary, the effectiveness of these safeguards are impossible to verify.

Because AI safeguards are so insufficient, artists and researchers have begun looking into ways to protect the art itself. Researchers at the University of Chicago have developed software called Glaze, which modifies art to prevent AI from learning artistic styles, and are working on software called Nightshade, which would modify art to cause AI to misassociate words such as creating a picture of a cat when prompted for a dog. These are award winning projects because of just how widespread the problem is [https://glaze.cs.uchicago.edu/].

Because of the speed and ease with which AI can create content, original artists must be protected and compensated or they will inevitably be devalued and replaced. This would be devastating to industries, companies, and individuals. It is already blatant. In early October, one artist stated that they had worked with a client regularly for years, but recently it had become rare. Then the artist was contacted by the client for a rush job because "their in house AI technician was too busy, and they therefore had no choice but to find an artist" [https://twitter.com/_Dofresh_/status/1709519176367210663].

AI model creators will insist it is unnecessary or even impossible to contact, credit, or compensate all of the original artists involved, but we should not ignore copyright violations, privacy invasions, or other issues simply because there are too many.

2) The copyrightability of material generated using AI systems

The contribution of the human prompter in AI-created works is limited at best. The dominant factors are the AI, its training data, and literal randomness. Because so much of the final image is out of the hands of the human prompter, they should not be awarded copyright protection.

The vast majority of AI content uses the massive datasets that that were commercially produced by teams of people who worked for months or years. For example, when ChatGPT wanted to create a new AI model, it outsourced the work to a team of three dozen workers in Kenya. That work was expected to last for a year, but it fell apart because it involved processing traumatic and illegal content [https://time.com/6247678/openai-chatgpt-kenya-workers/]. Even if an individual added additional training data to target a specific topic or style, the model would still be built upon tens of thousands of hours of others' work (and likely millions or billions of hours of original artists' work).

Even if an AI model were personally trained, the AI introduces an additional layer of randomness. One of the core pieces of AI content generation is called a seed. It is a random number that randomizes certain parts of the AI, and it allows the AI to avoid creating the exact same content for a prompt each time [https://aivatapi.com/what-is-seed-in-ai-image-generators/]. To the human prompter, it is nothing but a number. There is no way for the prompter to know how the seed is going to influence the final image. Moreover, if multiple prompters end up using the same seed, then they will end up creating similar images. Human artists can create similar images because they have similar training, inspiration, or styles, but AI prompters can create similar images because they happened to be using the same random number.

If you make an intelligent, detailed, thought-provoking prompt and give it to different AI models with different training data or different seeds, then you will get different images because the AI is the dominant factor. This is similar to if you give the same prompt to different human artists, and there is no question that the artist holds the copyright there.

3) Potential liability for infringing works generated using AI systems

Widespread acceptance and usage of AI will likely create legal questions and court cases at a mass scale. As said above, AI can create content that is clearly recognizable as copyrighted like stock photo watermarks [https://photutorial.com/stable-diffusion-watermarks-investigation/].

Even if AIs create sufficiently distinct content the majority of the time, that is by luck rather than design, and the sheer speed at which AI can create content will lead to a deluge of court cases. This is easily seen by the fact that two years ago, AI essentially did not exist, and today, AI is everywhere.

If left to individual court cases, solving AI disputes would be nightmarishly complicated and expensive. For example, in AI, there are multiple layers of people involved such as the end user (who types in the prompt), the model maintainers (who train the AI), the server administrators (who provide the computational power), the dataset maintainers (who provide training images), and possibly even more.

Because of all the layers, it will inevitably lead to passing the buck and sending victims in circles. For example, as said above, one AI dataset included photos from private medical records, but because the dataset provided web addresses to the pictures rather than the pictures themselves, the creators argued they had no liability [https://arstechnica.com/information-technology/2022/09/artist-finds-private-medical-record-photos-in-popular-ai-training-data-set/].

To avoid a mishmash of individual precedents set by individual judges based on individual cases, there must be a broader legal framework. It must protect artists' copyright and individuals' privacy. When researching AI dataset collection issues, one comment by a user named dwrd on Ars Technica stood out to me: "My sister treats any photograph of her children like it contains nuclear launch codes. I'm starting to understand why."

4) The treatment of generative AI outputs that imitate the identity or style of human artists

As an artist, this is one of the biggest concerns I have, but I recognize it is where I have the least protections. I have worked for years and put in thousands of hours of work to develop my style. I have made many intelligent, deliberate decisions in the development of my style.

The current generation of AI is profoundly dumb. It cannot understand the law or make the decisions necessary to mimic an art style in a healthy and distinct way. It can only copy a style wholesale.

People are hesitant to believe that AI is dumb, but that is due in part to a psychological factor called automation bias [https://en.wikipedia.org/wiki/Automation_bias]. There are many examples.

- AI can be filled with nonsensical biases, such as one resume-filtering AI prioritized candidates named Jared who played lacrosse [https://qz.com/1427621/companies-are-on-the-hook-if-their-hiring-algorithms-are-biased].
- AI can create content that is blatantly inaccurate or inappropriate, such as one AI-created article suggested tourists to Ottawa visit "cannot miss" attractions like the local food bank. It even suggested "going into it on an empty stomach" [https://arstechnica.com/information-technology/2023/08/microsoft-ai-suggests-food-bank-as-a-cannot-miss-tourist-spot-in-canada/].
- AI can copy things that no human artist ever would, such as one AI included meaningless scribbles in the corners of its images mimicking signatures [https://www.artnews.com/artnews/news/signatures-lensa-ai-portraits-1234649633/].
- AI can mindlessly learn from bad data (which includes other AI-created data) and eventually breakdown in a process called model collapse [https://www.businessinsider.com/ai-modelcollapse-threatens-to-break-internet-2023-8].

The current generation of AI is not trying to create its own style that is based upon existing artists' styles. It is not trying to be similar but creatively distinct. This should not be thought of as "What if two human artists had a very similar style?" but as "What if one human artist made every effort to copy the style of another artist to the point that they were indistinguishable, and what if that artist even advertised using the name of the other?"

These are new questions that need new answers and protections, such as how the recent Hollywood writers' strike set new standards for AI use in their industry [https://www.wired.com/story/us-writers-strike-ai-provisions-precedents/].