Caryn Chong (October 2023)

Comment for Artificial Intelligence and Copyright Notice:

I'm writing this comment from my perspective as a freelance artist that has been exposed to the effects that generative AI is having on both the artist community, and the public as a whole. Although the issues I talk about mainly apply to image generative AI, these concerns could also be applied to text and video generative AI, as there are parallels in the process of producing and monetizing such works. I will be addressing General Question (1) from the Artificial Intelligence and Copyright Notice about my views on the potential risks of AI technology, and how the use of this technology is currently affecting/likely to affect the public. Towards the end of the comment, I will also write some suggestions pertaining to the regulation of generative AI.

Generative AI is a powerful tool, but it is exploitative in its current form. What's concerning is how easy it is for generative AI to collect training material from the public (and often without the need for consent); and from these training materials, generative AI is able to output, for example, an unlimited number of images/text from a single prompt. This ease of output is something that can be abused by unrestrained parties.

Refer to **Attachment2_Observation of AI growth.pdf** for an observation of how easy and fast it is for generative AI to pervade an online marketplace.

This ease of generative AI output affects mine and other less established artists' livelihood by oversaturating the market with products made with generative AI, thereby decreasing the visibility of less established creators to potential clients and audiences.

I would argue that this is an instance of unfair competition where an AI user overwhelms the competition by inhibiting their (the competition's) visibility through the (AI user's) sheer volume of products.

For artists who wish to preserve the integrity of art and not rely on generative AI, the quick and effortless way AI generated images are taking over the art space feels very invasive and violating. It is invasive in a way that it is getting increasingly difficult for anyone to find human-made works in online platforms and social media, and it is violating in a way that artists' (and their peers') works have been sampled as training material for image generative AI without their consent.

(You may refer to **Attachment3_Sentiments_on_genAI.png** to see a collection of Tweets containing the general sentiment of the art space pertaining to image generative AI.)

This is just one small part of the problem that generative AI currently poses to the art community. While it makes it harder for audiences and potential clients to find human-made works, the growing number of AI-generated images (and related texts) pervading the internet makes it harder for artists to find legitimate and accurate images of a subject matter for research and reference.

(You may refer to **Attachment4_pinterest flooded with AI art.png** to view screencaps of a subreddit thread on Reddit about the sentiments of artists with regards to searching for references in a platform being flooded by AI-generated images.)

The tendency of generative AI to depict inaccurate representations of a subject matter will affect the overall quality of new works (both human-made and AI generated) going forward as it becomes harder and harder to find accurate and true sources. Please note that oftentimes, a person who is unfamiliar about a subject would be unable to pick out any inaccuracies or mistakes that would otherwise be obvious to an expert on the subject. When even human creators are unable to tell what is the right and wrong way to depict a subject, this is how inaccuracies/mistakes on a subject will propagate.

This brings us to another concern that will affect the public, regardless of whether they have access to information on the internet or not – a new influx of misinformation AND disinformation.

The easily-accessible free versions of generative AI have the tendency to 'hallucinate' and create false representations and/or narratives through images and text.[1] Even the paid generative AI tool ChatGPT-4, which claims to have mitigated hallucinations, is still not immune to hallucinations.[2] People who are unaware of generative AI (and its effects) may unintentionally spread misinformation. These could be anyone, from the young and old, to influencers and people with jobs who deal with information like journalists and reporters.[3]

The darker side of it would be the spread of more disinformation by malicious individuals. Generative AI may be used to create more convincing disinformation through the use of AI-generated voice, videos, images, and text to create a wholly-convincing false narrative in the form of AI-generated videos and articles. It is already happening in some capacity and it would only get worse if there are no regulations and it becomes harder to tell if something was AI-generated.[4]

I am aware that some of these concerns may not be applicable to Copyright Law, but I hope to emphasize the dangers that Generative AI could inflict on everyone if it is misused and abused.

As much as I do not want it, Generative AI is likely to stay. I could only offer some suggestions on how generative AI could be regulated for the protection of human-made works. Some of my suggestions could be taken as responses to the questions (in brackets) presented in the Artificial Intelligence and Copyright Notice.

Here are suggestions for how AI-generated works may be regulated with regards to the creative field:-

1. Require the AI user to acquire a license to monetise generative AI works.
2. (Question 28) Require that every AI generated output must be labeled or publicly disclosed as AI. The purpose of this is to help mitigate misinformation. For AI-generated images, the generated images may come with an overlaying text stating the AI-generation tool used. Additionally, AI-generated images should come with metadata that state that it was made with an AI-generation tool, if applicable.
3. (Question 10) Similar to how stock images work, datasets could be acquired by the developers of image generative AI systems via the purchase of images/photos from artists. These datasets could then be sold to AI users who wish to acquire the rights to generate images from said datasets.
4. Ideally, AI users should not have the option to upload their own images to train generative AI models as it could be easily exploited. But should that option remain, then it should only be limited to: (1) Images that the AI user has the rights to use; (2) Images/photos created/taken by themselves without the use of generative AI; and (3) Public domain works.
5. AI users also should not be able to quote any specific artist's name in a prompt in order to replicate an artstyle. General definitions of art styles may still be acceptable. (Though, as we've seen in **Attachment3_Sentiments_on_genAI**, despite Dall-E 3 implementing that feature, there will be people who wish to bypass it.)

Unfortunately due to my limited knowledge, I cannot come up with suggestions on how such regulations may be implemented practically or technically. However, Google has recently released an experimental generative AI feature in its search engine (called SGE) with safeguards that are somewhat in line with my suggestion for Question 28 regarding AI-generated images, plus extra features that I hadn't considered:

"*While AI can open new and exciting possibilities, we also recognize the need to introduce this technology in a responsible way. That's why we're building safeguards into this experience and blocking the creation of images that run counter to our prohibited use policy for generative AI, including harmful or misleading content. And every image generated through SGE will have metadata labeling and embedded watermarking to indicate that it was created by AI. The image generation capability is only available in English in the United States, to people who opted into the SGE experiment and who are 18 years or older.*

We also have an upcoming tool called About this image that will help people easily assess the context and credibility of images. For example, it might show you when a similar version of this image may have first been seen by Google; or show you other pages on the web that use a similar image, including news or fact checking sites."[5]

While it's good that Google is implementing safeguards to minimize the risk that generative AI may bring, I'm not sure about how and where the training data for their generative AI is sourced. Google also admits that there may still be hallucinations from their generative AI outputs, due to

the nature of LLMs.[6] It's a small step towards the regulation of generative AI, though the outcome of this experiment remains to be seen.

It may take years before we come to regulate generative AI to a point that is safe and non-exploitative for everyone, though the faster it happens, the better. At the end of the day, I still believe that despite all these safeguards and regulations, people will find a way to use generative AI to exploit others.

After all, we cannot trust people to be responsible.

Thank you for taking the time to read my comment. May there be a favorable outcome for the future of mankind and the internet.

Links to references:

[1] Hallucination (artificial intelligence). (2023, October 16). Wikipedia. https://en.wikipedia.org/wiki/Hallucination_(artificial_intelligence)

[2] Patrick Hymel, MD. (2023, April 13). Kubrickian HALlucinations – Using Chat GPT-4 for Clinical Research Review and Synthesis. LinkedIn. https://www.linkedin.com/pulse/kubrikian-hallucinations-my-deep-dive-using-chat-gpt-4-hymel-md

[3] Will Knight. (2023, October 05). Chatbot Hallucinations Are Poisoning Web Search. WIRED. https://www.wired.com/story/fast-forward-chatbot-hallucinations-are-poisoning-web-search/

[4] Alexandra S. Levine. (2023, October 12). In A New Era Of Deepfakes, AI Makes Real News Anchors Report Fake Stories. Forbes. https://www.forbes.com/sites/alexandralevine/2023/10/12/in-a-new-era-of-deepfakes-ai-makes-real-news-anchors-report-fake-stories/?sh=5a784b1257af

[5] Hema Budaraju. (2023, October 12). New ways to get inspired with generative AI in Search. Google. https://blog.google/products/search/google-search-generative-ai-october-update/

[6] Srinivasan Venkatachary and collaborators. (2023, October). A new way to search with generative AI - An overview of SGE. Google. https://static.googleusercontent.com/media/www.google.com/en//search/howsearchworks/google-about-SGE.pdf