

Teaching AI Ethics: Copyright

leonfurze.com/2023/04/04/teaching-ai-ethics-copyright/



This is the 4th post in a series exploring the nine areas of AI ethics outlined in this original post. Each post goes into detail on the ethical concern and provides practical ways to discuss these issues in a variety of subject areas. For the previous post on Truth, [click here](#).

This is the first in the ‘intermediate’ level of posts for Teaching AI Ethics. At this level, the concepts start to become more complex. This might be because the information is harder to access, or because the ideas become more philosophically complex.

Copyright is a hugely contentious aspect of the current wave of Artificial Intelligence, particularly in the field of AI image generation. As AI continues to advance and both artists and laypeople produce creative works, questions are cropping up about who owns the copyright to those works. With AI it’s possible to create “original” art, music, and literature, but the line between what human-generated and AI-generated is increasingly blurred. This post explores some of these ethical concerns surrounding copyright and AI.

Here’s the original PDF infographic which covers all nine areas:

[Leonfurze_com_AIEthics](#)

Copyright and image generation

I'm starting with image generation because it has been the most public and most contentious aspect of AI and copyright. For a quick scan of how problematic the area is, you only have to do a quick search of whether AI artists can copyright their work. Here are some of the results:

In some cases, it's an outright "no". In others, it seems but be a "no, but...". And in the final example, it's a hard no with a side of litigation, as companies like Stability AI (behind Stable Diffusion) and Midjourney find themselves on the receiving end of lawsuits.

What's the big deal?

So why is AI image generation so contentious?

The primary reason is based on how these models are trained. In order to build an AI image generator, the developer must use millions or even billions images. Stable Diffusion, for example, was trained on around 2.3 billion images. Many of these images have been "scraped" from the internet without the consent of the original creators.

This leads to problems with attribution, and with the potential for these AI image generators to reproduce art in another artist's style. I'm sure you've seen posts already with AI generated art in the style of Van Gogh or Rembrandt. However, it also applies to living artists and photographers whose work has been scraped from sites like artstation and Flickr.

There's the additional problem of whether the current copyright laws extend to work created "by a machine". Although AI images are generated by a human controlling the input via the prompt, it has been argued that the actual image is created by the AI, and not the human. This throws a legal roadblock in the way of copyrighting AI art.

US law states that intellectual property can be copyrighted only if it was the product of human creativity, and the USCO only acknowledges work authored by humans at present. Machines and generative AI algorithms, therefore, cannot be authors, and their outputs are not copyrightable.

https://www.theregister.com/2023/03/16/ai_art_copyright_usco/



Jason Allen's *Théâtre D'opéra Spatial* won first place in the Colorado State Fair, until the artist revealed it was generated in Midjourney and declined the prize. Since then, the artist has not been able to get copyright status for the work.

Writing, film, and music

Although the bulk of the conversation around AI and copyright has centred on the visual arts, the conversation has also arisen in text generation, film, and music.

The same human authorship requirement for copyright protection under the current US law means that an AI-generated writing is likely either a public domain work immediately upon creation or a derivative work of the materials the AI tool was exposed to during training – the text found in the dataset.

The ownership of the rights in such a derivative would depend on various issues, including the dataset for training the AI tool (of which there are many variations, depending on the model used), its components, and the similarity between any particular work in the training set and the AI work.

We're yet to see many real discussions around copyright in film and music, but with AI generated film technologies just around the corner, we surely will. AI can already synthesise realistic versions of existing artist's voices, like the example below which went viral last week:



Watch Video At: <https://youtu.be/y7r6PAkFRfU>

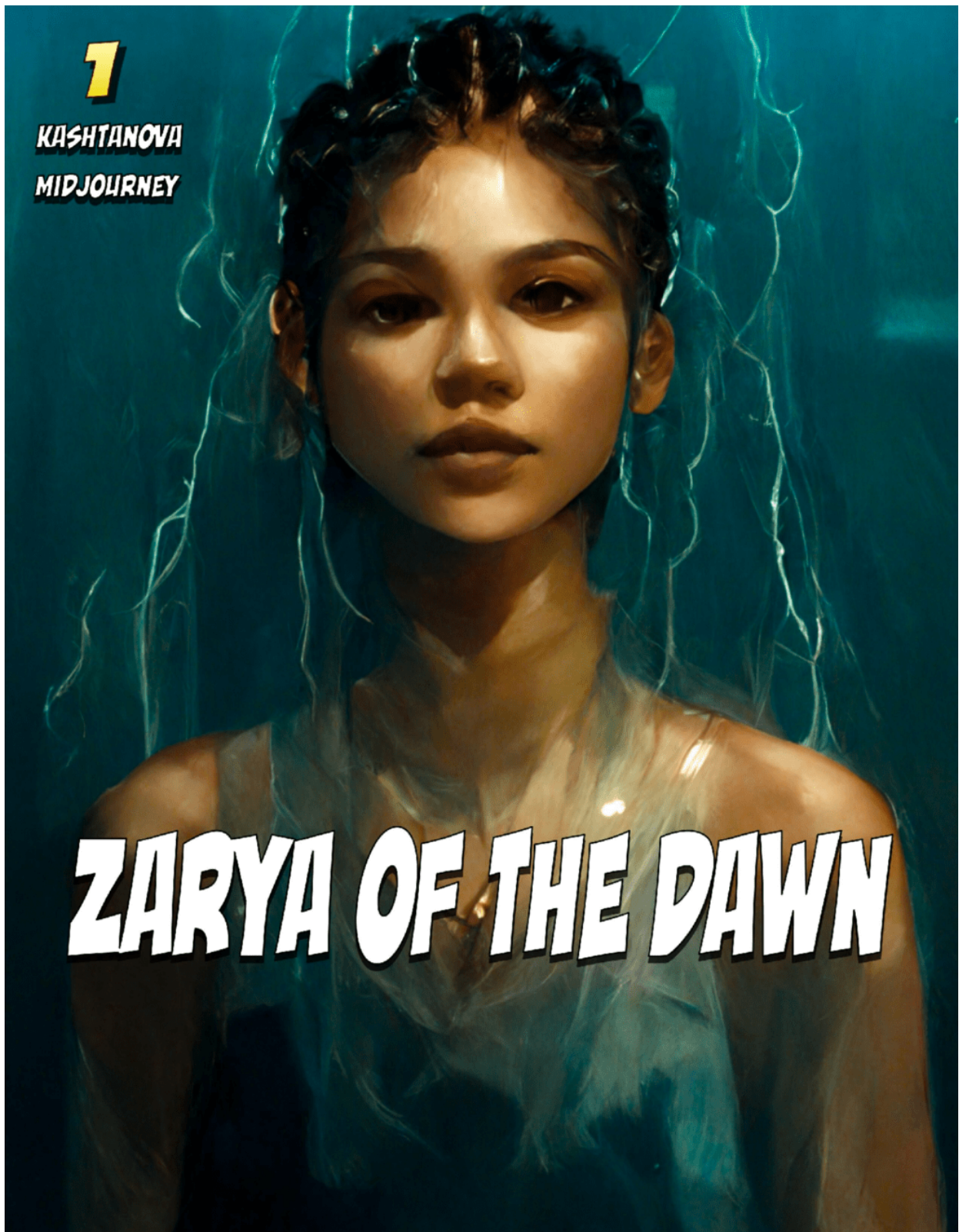
Case Study: Zarya of the Dawn

In February 2023, the US Copyright Office revoked copyright protection for images created using the AI-powered Midjourney image generator for the comic book “Zarya of the Dawn” and issued a new copyright registration covering only the text of the work and the *arrangement* of images and text. The justification for this decision was incomplete information in the original copyright registration, which failed to disclose that the images were created by an AI model. The Copyright Office argued that the images in the work generated by Midjourney were not the product of human authorship and thus not copyrightable. Despite Kashtanova’s claim that she had “guided” the structure and content of each image, the Copyright Office argued that Midjourney, not Kashtanova, originated the “traditional elements of authorship” in the images.

Kashtanova’s attorney argued that every aspect of the work was authored by Kashtanova, with Midjourney serving merely as an assistive tool. However, this argument was rejected by the Copyright Office, which provided additional analogies to explain why Kashtanova was not the creator of the images, including the idea of hiring a human to create images using descriptions and performing a text-based image search on the internet.

Kashtanova reacted to the letter by framing it as an overall win for AI-augmented artists. The ruling protects the comic book’s story and the image arrangement, which “covers a lot of uses for the people in the AI art community.” However, she expressed disappointment that the Copyright Office did not agree to recognise her copyright of the individual images. Kashtanova believes the output of a Generative AI model depends directly on the creative input of the artist and is not random: individual images produced by Midjourney are a direct expression of her creativity and thus copyrightable.

The decision means that AI-generated imagery, without human-authored elements, cannot currently be copyrighted in the United States. The Copyright Office's ruling on the matter will likely hold unless it's challenged in court, revised by law, or re-examined in the future. The decision may eventually be reconsidered as the result of a cultural shift in how society perceives AI-generated art, allowing for a new interpretation by different members of the US Copyright Office in the future. AI-powered artwork is still a novel and poorly understood technology, but it is rapidly becoming a feature of digital art.



Cover of *Zarya of the Dawn*. Image via https://en.wikipedia.org/wiki/Zarya_of_the_Dawn

Each of these posts will expand on the original and offer a few suggestions of how and where AI ethics could be incorporated into your curriculum. Every suggestion comes with a resource or further reading, which may be an article, blog post, video, or academic article.

1. Legal Studies: What is the current legal stance on AI copyright in your country?
2. English and Literature: How does the use of AI to generate content challenge traditional notions of authorship and creativity, and what are the ethical implications of this challenge?
3. Computer Science: What ethical considerations should be taken into account when designing AI systems for copyright enforcement?
4. Philosophy: What ethical theories can be applied to the use of AI in copyright enforcement, and how do these theories inform debates over the balance between copyright protection and free expression?
5. Business and Economics: How does the use of AI affect the market for creative works, and what ethical issues arise from these effects?
6. Media Studies: What implications might AI have on the creation and copyrighting of film?
7. Visual Arts: How does the use of AI in creating art raise questions about copyright and intellectual property rights? What ethical considerations arise when using AI to produce artwork?
8. Music: Is it possible to copyright an artist's voice?

The next post in this series will explore the implications of AI and privacy and what companies are doing – or not – to mitigate the huge impact of AI. Join the mailing list for updates:

Got a comment, question, or feedback? Get in touch: