Section I. Names

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Intellectual Property and AI

Section II. References

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Section III. Technology Issues

Generative AI has been the buzzword for the last few years, from being used by students on paper, by professionals to write emails, or as a tutor. The results are impressive. These services can write essays, answer questions, and generate images with near-human quality. These platforms use Machine Learning which through a training process takes a dataset and creates a neural network that based on some input, or prompt, can generate an output. The massive datasets are used to train these generative AI platforms, often filled with copyrighted material. Two primary issues exist with this, first is it wrong to train AI on media without the author's consent? Then we must ask what the world looks like with platforms generating art, writing papers, and making the creators whose data was used to train these AIs possibly irrelevant. Is it just another case of machines entering the factory, a social readjustment, or will most jobs disappear with no replacement? This paper will primarily focus on the first question, however, to understand that question we must touch on aspects of what an automated would look like.

The amount of copyright material used to train these models is immense. ChatGPT, a generative AI platform run by OpenAI, required a corpus of over 570 GB of text, over 300 billion words (Hughes). Part of the training corpus included public-domain text from old works of literature. More prominent is data scraped from websites like the New York Times and Reddit to recent works of literature and books --- all copyrighted. Most details about the training set for Chat GPT are a trade secret. OpenAI has revealed very few details of the composition of the training data.

Currently, most legal analyses do not find AI infringing on copyright. Works created by generative AI are in the public domain. In August of this year, Thaler v. Perlmutter (Perlmutter refers to the copyright office), the DC district court ruled that Dr. Thaler's creation which came from generative AI was not copyrightable (Zirpoli). The training issues are more ambiguous, many ongoing lawsuits exist against various AI platforms. The justification of Fair Use comes from The Authors Guild, Inc. v. Google, Inc. where the court determined it was legal for Google to use the full text of works to improve search results, which were algorithms using machine learning (Stewart). Currently, there are a significant amount of cases questioning this precedent and whether it applies to generative AI due to the possible effect on the incomes of the artists. One instance where infringement can occur with AI is when used to imitate other copyrighted works. Characters such as Micky Mouse are copyrighted (Zirpoli). Generating these characters or environments and styles of copyrighted works likely is illegal. While no precedent exists, most AI platforms have taken steps to prevent this kind of infringement. OpenAIs states that DALL-E, its image generation platform, rejects prompts for imitating living artists (Zirpoli). If we look from just a legal perspective, a student is more than welcome to use generative AI in their projects as long as they do not use it to try to generate works in the style of an artist whose work is not yet in the public domain. While this will get you past lawsuits, morality does not originate from legal concerns. Immoral actions are often legal and illegal things moral. Next, we will analyze the effects of AI on communities and provide a utilitarian and deontological perspective on this issue.

Section IV. Stakeholders & The Human Values at Stake

There are three stakeholders present. We have the artists/creators whose works train the AI, the startup owners and individuals creating these services, and lastly the users of the AI services, in our case students.

For the artist, their livelihood is at stake. Except for the few stars who make it, being an artist does not pay well. For many, using their work without consent could prevent them from making ends meet, and as these platforms improve possibly their job.

The AI startups fear their products would not provide as relevant and quality results leading to fewer jobs, reduced competition, and loss to foreign competitors. If AI platforms must compensate copyright holders, another business expense is added that incumbents may be able to pay but would prevent upstarts from disrupting the market. These restrictions could prevent American companies from innovating as fast as companies in markets such as China, where these regulations do not exist, posing a national security risk.

The consumers of the AI products would lose out on being able to use services such as ChatGPT to write emails and automate everyday tasks. Generative AI has shown promise as a personal tutor and as an asset in understanding topics taught in school. AI could balance

inequalities between students who can pay for aid like tutors and those who do not have the same support structures.

Section V. Utilitarian Analysis

Looking at the net harm and gain, the use of Generative AI seems justified. Currently, using creative's works as training data does not harm the artist. The quality of results from generative AI does not compare with human creations. A stock image from Getty could not be replaced by one from Stabe Diffusion or DALL-E. The incentive for copyright still exists through the desire for human-created works that, at present, are substantially better quality. The only harm caused to the artist is self-inflected, from his belief he owns the works and should control them. The possible upsides to generative AI are enormous, from AI tutors to more personalized instruction, AI could reduce inequality and create a more cohesive society. While we must temper the upsides with the risks of students using it to cheat and fail to learn, this issue does not relate to intellectual property. Instead, it falls to platforms and instructors to ensure the proper use of these services. It would seem Students' use of generative AI to aid in instruction is justified.

This analysis is slightly flawed as it fails to look at the future of AI. Today few jobs are being removed by generative AI, however, the progress made in the last few years has been exponential, and in a few years, whole industries may reshuffle. In a future where all these artists and creators become jobless some compensation should exist.

Section VI. Deontological Analysis

For both the Deontological analysis, I will focus on the more general question, of training AI on copyrighted material is Immoral. For deontologists like Kant, circumstances do not affect the moral quality of an action, lying is still lying and immoral even if attempting to protect someone's life. If training AI on copyrighted material is wrong, it would still be wrong if used to save lives, let alone help students as the consequences of the action have no weight in an action morality.

Copyright law originated to protect authors, and to help ensure more works would be created. This development follows closely from Locke’s social contract. Along with Locke, we can use Rawls's veil of ignorance to understand copyright development and its applicability to generative AI. Rawls's veil of ignorance creates a space where no one knows where they will end in society, no one would know if he were to be an artist, an AI startup owner, rich, or impoverished. In this space discussions on the ideal society can take place without our individual biases. Here it would likely be agreed that some form of copy protection would needed as anyone could end up an author or an artist. They’d want guarantees that their possible career can feed them. With copy protection established, we can now try to frame the question with AI. Generative AI has shown to be very effective at generating segments of code and images nearly identical to the products trained upon, especially if prompted right. There already is a significant

corpus of works in the public domain which would provide data freely available to train upon. Going back to our thought experiment, I think the collective people in this space would choose to require the artist's permission to use in training data. The artist is providing a service for these for-profit companies, helping them make a product. These companies are monetizing other people's work, creating a product that in the future could reduce the need for the artist's work. Surely they'd have to adjust their business model, but based on just the cost of computing power to train the larger models, these people are in positions to be able to spend millions to compensate creators.

Section VII. Conclusion

With utilitarianism, it is possible to justify training data on copyrighted material, yet it fails the higher bar set by many deontological thinkers. I believe generative AI platforms should compensate authors for their work. They are providing a product to these giant corporations who have the money to provide some compensation. However, care must be taken to ensure this bar doesn't stifle innovation to the point where the social benefits of AI, such as the democratization of education, do not occur.