COLLABORATIVE DISCUSSION 2: LEGAL AND ETHICAL VIEWS ON ARTIFICIAL NEURAL NETWORK (ANN) APPLICATIONS

Maria Ingold
12693772
Unit 10
Machine Learning
University of Essex Online
19 January 2025

CONTENTS

SUMMARY POST	3

SUMMARY POST

In the four years since Hutson's (2021) paper on generative Artificial Intelligence's (AI) large language model (LLM) impact on writing, Open AI's Generative Pretrained Transformer (GPT) has advanced significantly. However, as seen in Table 1, AP English Language scores have improved less than AIME 2024 competition math, a key growth area for o3 (Bind AI, N.D.; OpenAI., 2023; OpenAI, 2024).

TABLE 1 | OpenAl GPT AP English scores versus AIME 2024 (Competition Math)

	GPT-3.5 (November 2022)	GPT-4 (March 2023)	GPT-40 (May 2024)	o1 (December 2024)	o3 (early access December 2024)
AP English Language and Composition	2 (14 th -44 th)	2 (14 th -44 th)	58.0%	58.0%	
AP English Literature and Composition	2 (8 th -22 nd)	2 (8 th -22 nd)	65.7%	68.0%	
AIME 2024 (Competition Math)			13.4%	83.3%	96.7%

Hutson's (2024) update examines the difficulty of objectively assessing creativity. Automated detection of the absence of plagiarism does not imply creativity, linguistic originality does not imply good, and human judging is subjective. While Wafa et. al. (2024) demonstrated that ChatGPT improved human ideating in science fiction writing, concerns about AI replacing writers was a key component of the Hollywood writers' strike (Timsit, 2023). Furthermore, factual writing, like news, remains susceptible to hallucinations despite mitigation techniques such as Retrieval-

Augmented Generation (RAG) or reinforcement learning from human feedback (RLHF), which may increase bias (Naminas, 2025).

Exacerbated by the lack of transparency, a major concern is the loss of creative revenue due to potential training on copyrighted data, such as the New York Times suit against OpenAI (Wiggers, 2024). The United Kingdom's "Copyright and Artificial Intelligence" consultation is currently exploring the conflict between advancing AI innovation by training on copyrighted material and weakening the creative sector without fair compensation (CMS Legal, 2025).

While AI can help creative ideation, its writing requires critical assessment, and there remain consequences for both AI innovation and the creative sector.

REFERENCES

Bind AI (N.D.) *ChatGPT o3 vs o1 Preview vs o1 Mini: Which one is better?* Available from: https://blog.getbind.co/2024/12/24/chatgpt-o3-vs-o1-preview-vs-o1-mini-which-one-is-better/ [Accessed 19 January 2025].

CMS Legal (2025) Copyright and AI: how is the UK government proposing to strike a balance between the creative industries and AI sector? Available from: https://cms-lawnow.com/en/ealerts/2025/01/copyright-and-ai-how-is-the-uk-government-proposing-to-strike-a-balance-between-the-creative-industries-and-ai-sector [Accessed 19 January 2025].

Hutson, M. (2021) Robo-writers: the rise and risks of language-generating AI, *Nature* 591(7848): 22–25. DOI: https://doi.org/10.1038/D41586-021-00530-0.

Hutson, M. (2024) Al writing is improving, but it still can't match human creativity, *AAAS Articles DO Group* [Preprint]. DOI: https://doi.org/10.1126/SCIENCE.ZG4E4PE.

Naminas, K. (2025) *LLM Hallucination: Understanding AI Text Errors in 2025* | *Label Your Data*. Available from: https://labelyourdata.com/articles/llm-hallucination [Accessed 19 January 2025].

OpenAI. (2023) GPT-4 Technical Report. Available from: https://arxiv.org/abs/2303.08774v6 [Accessed 22 December 2024].

OpenAl (2024) Learning to Reason with LLMs. Available from:

https://openai.com/index/learning-to-reason-with-llms/ [Accessed 22 December 2024].

Timsit, A. (2023) *Hollywood studios and writers have a strike-ending deal. What's in it?* Available from: https://www.washingtonpost.com/style/2023/09/27/wga-contract-details-writers-strike-deal/ [Accessed 5 May 2024].

Wiggers, K. (2024) OpenAl accidentally deleted potential evidence in NY Times copyright lawsuit (updated), TechCrunch. Available from:

https://techcrunch.com/2024/11/22/openai-accidentally-deleted-potential-evidence-in-ny-times-copyright-lawsuit [Accessed 22 December 2024].