Conference paper: Erickson, K (2023) IP in the Generative AI multiverse. Gikii Conference, 7-8 September 2023, Utrecht University, Netherlands.

Abstract:

This paper considers the prospects for intellectual property law and regulation under conditions of the "multiverse", a popular trope in science fiction. Using the "classical" many-worlds multiverse portrayed in the 2022 film, *Everything, Everywhere, All At Once*, we explore scenarios related to advances in Generative Al. While traveling to different worlds remains in the realm of science fiction, Gen Al might make possible a "simulated multiverse" in which a computer system operator could generate infinite innovative solutions, test and refine them.

These multiverse scenarios are evaluated through the lens of two prevailing justifications for intellectual property: a utilitarian justification and a personality theory interpretation. Both justifications are challenged by multiverse conditions. The utilitarian justification is confronted by a radical oversupply of innovation. Information glut and congestion are exacerbated by intellectual property rights, as would-be licensees are encouraged to "generate around" owned solutions. Optimal solutions are buried under alternatives whose utilities are unknown *a priori*. Individualised solutions are likely to predominate over consensus standards, with welfare implications. Natural rights justifications for intellectual property connect innovation rewards to one's innate personhood. The personhood-innovation link is broken by the multiverse, which permits the import of "invasive species": innovations that did not originate locally and are orphaned from the socio-technical context of their creation.

Possibilities for regulation of innovation in multiverse conditions are discussed. Law and policy must be attuned to unexpected power differentials and distorted incentives introduced by multiverse-like developments. Who gets to observe, how quickly and with what indexing capacity become key dimensions of inequality in a world where everything is available all at once.

Author Bio:

Kristofer Erickson is Professor of Social Data Science, CREATe, University of Glasgow. Email: Kristofer.erickson@glasgow.ac.uk

Link to Conference presentation:

https://www.create.ac.uk/blog/2023/09/21/ip-and-the-generative-ai-multiverse/