

Session 6: Detailed Outline

Artificial Intelligence and Copyright: The Rise of the Machines

Panelists:

- Robbie Allen, Founder and Executive Chairman of Automated Insights;
- Annemarie Bridy, Professor of Law at the University of Idaho and Affiliate Scholar at the Stanford Law School Center for Internet and Society;
- Robert Kasunic, Associate Register of Copyrights and Director of Registration Policy and Practice at the U.S. Copyright Office.

Moderator:

- Dr. Carys Craig, Associate Dean & Associate Professor at Osgoode Hall Law School, York University; Academic Director of Osgood Professional Development LLM Program in Intellectual Property Law.

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1. Overview

Copyright protects original works of authorship. It has long been understood that the concept of “originality” provides a threshold requirement that must be met in order for copyright to vest in a work. It has generally been assumed that “authorship” is therefore to be defined in relation to the process of producing a work that qualifies as “original” for copyright purposes. *See Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991). In this sense, it might be said, authorship and originality have always been correlatives in copyright law: one connotes the other. *Cp. Sands & McDougall Pty Ltd v Robinson*, Issacs J. [1917] HCA 14 (Austl.); *see also Desktop Marketing* (2002) 119 FCR 491, 532. With the rise of intelligent machines, however, the copyright system is confronting the question of how to treat seemingly original works of expression that are not the product of “authorship” in the traditional sense—that is, works that bear the external hallmarks of creativity but that have no *human* “author.” The “authoring” of works, in whole or in part, by artificial intelligence [AI] is not the stuff of some distant science fiction—it is already happening. Machine-generated works have become increasingly indistinguishable from their human-authored counterparts. This new and rapidly evolving reality does not fit

comfortably within the traditional confines of copyright law, the anchoring assumption of which has always been that creativity is an essentially human endeavor. As a matter of both policy and doctrine, the question of what constitutes “authorship” for copyright purposes must now be considered not only with a view to “originality,” but also with a view to *what* an author must *be*. The answer will surely have significant consequences for copyright law, for the developmental trajectory of artificial intelligence technologies, and so for the future of society at large.

The many issues presented by the rise of machine-generated works can be helpfully separated into three broad conceptual frames. First, there is the foundational matter of copyright law’s complex relationship with—and responsiveness to—innovations in creative technologies. (While it is widely agreed that copyright law should be drafted and developed in a technologically neutral fashion, the challenge of future-proofing the law cannot be met simply by turning a blind eye to the transformational effects of paradigm shifting technologies.) Second, the rise of machine-generated works necessitates a descriptive inquiry into the availability and interpretation of existing copyright doctrine, and the extent to which it already encompasses or excludes these new modes of AI authorship and creativity. Third, this new reality presents a larger prescriptive question: namely, whether and to what extent copyright law *should* offer protection to AI-generated works. (This necessitates related normative inquiries into the nature of the rights-bearer; the need for incentives to be offered through intellectual property structures; and the role of the public interest and the public domain in circumscribing copyright’s reach).

This interdisciplinary panel will aim to address key copyright issues through each of these frames: foundational, descriptive, and prescriptive.

2. The Current State of Play

The discussion will begin with an overview of the current state of play. As Robert Denicola writes, “[w]hatever the future holds, artificial intelligence is already an active participant in the creative process.” Denicola’s article, *Ex Machina, Copyright Protection for Computer Generated Works*, 69 Rutgers U. L. Rev. 251 (2016), offers an excellent snapshot of the many kinds of works, from marketing books and journalism to music and movies, that owe their origin primarily to computers—and the problems that they present for copyright law. Over the past several decades, copyright law has been able to maintain a reasonably workable distinction between computer-assisted and computer-generated works. For the former category, the notion of technology-as-tool enabled copyright law to recognize the user of the technology as the author behind the resultant work. Where the technology effectively creates the work rather than merely assisting in its creation, however, the law has been far less clear. Certain jurisdictions have now enacted specific provisions that allocate copyright ownership in such cases, essentially creating a legal fiction of authorship, vesting copyright in a party who is not the author in fact. In the United Kingdom and New Zealand, for example, copyright in computer-generated works (defined as works “generated by a computer in circumstances such that there is no human author”) vests in “the person by whom the arrangements necessary for the creation of the work are undertaken.” *Copyright, Designs and Patents Act 1988*, c. 1, s. 9 (U.K.); *Copyright Act 1994* cl 5(2)(a) (N.Z.).

In other jurisdictions – including the United States, Australia, and (it would seem) Canada – the persistent requirement of a real human author behind a copyrightable work renders such works, at least arguably, uncopyrightable and thus within public domain *ab initio*. See U.S. Copyright

Office, *Compendium of U.S. Copyright Office Practices*, §306, §313.2; *Telstra Corporation Ltd v. Phone Directories Company Pty Ltd* [2010] FCA 44 (Austl.).

3. The Technology Perspective: The AI Author

Panelist Robbie Allen is the Executive Chairman at *Automated Insights*, the creator of a public natural language generation platform that allows users to generate human-sounding narratives from data, making it easy to produce millions of personalized reports, articles and narratives in the time it takes to write just one. Allen will share his experience and perspective regarding the current state of AI technologies, their authorial capacities and their real potential to produce works that are truly creative in the same sense as those crafted by human beings. As an AI entrepreneur, Allen will also share his insights on the current state of the AI industry, as well as his views on the relevance and importance of copyright protection as a source of incentives for businesses and venture capitalists to create or invest in AI development.

4. The View from the Copyright Office: The Human Author

Robert Kasunic is Associate Register of Copyrights and director of registration policy and practice for the United States Copyright Office. Kasunic will describe and explain the current position of the Office of Registration Policy and Practice (which advises the Register of Copyrights on questions of registration policy and interpretations of the copyright law) on the registrability of AI-authored works. In particular, Kasunic will canvass the justifications available for restricting copyright to human-authored works even in the absence of any explicit definition of “author” in the applicable domestic laws and international treaties. Focusing on the nexus between copyrightability and human authorship in the US context, the discussion will touch on both the continued salience of romantic conceptions of the “author,” and the constitutional purpose of copyright to “Promote the Progress of Science and useful arts.” *U.S. Const.* art. I, § 8. As Pamela Samuelson suggested in her prescient article, *Allocating Ownership Rights in Computer-Generated Works*, 47 *U. Pitt. L. Rev.* 1185, 1227 (1986), a truly instrumentalist approach might put the focus not on who creates and owns copyright, but rather on what and who requires incentivization in order to advance copyright’s goal of furthering progress. Withholding copyright’s incentives from computer-generated works that provide the same public benefits as human-authored works would seem to require a justification more ideological than utilitarian.

5. A View from the Legal Academy: The Author-in-Law

Annemarie Bridy, a professor of law at the University of Idaho and affiliate scholar at the Stanford Law School Centre for Internet and Society, published an important article in on computational creativity and the limits of the idea of “authorship” in copyright law in 2012. In *Coding Creativity: Copyright and the Artificially Intelligent Author*, 2012 *Stan. Tech. L. Rev.* 5, 24 (2012), she argued that computers can—withstanding copyright law’s historical emphasis on human authorship—still be regarded as a “works of authorship” because of their “*nexus to human creativity*.” Bridy concluded that the US work made for hire doctrine would offer an appropriate framework for resolving the ownership issue in respect of AI-authored works, not least because it is already an accepted legal fiction that bypasses the author-in-fact to vest copyright elsewhere on the basis of a policy choice: “With respect to works of AI authorship, treating the programmer like an employer—as the author-in-law of a work made by another—would avoid the problem of vesting

rights in a machine and ascribing to a machine the ability to respond to copyright's incentives." *Id.* at 26. Denicola challenges this conclusion, noting that computers are no more "employees" than they are "authors," and questioning the utility of ascribing authorship-in-law to the programmers rather than the users of the creative software. *See* Denicola, *Ex Machina, supra*, at 283. It is also notable that the US work for hire doctrine is, internationally, quite anomalous in this respect. In Canada, for example, copyright ownership vests automatically in the employer, but the human employee is legally recognized as the author for the purposes of copyright duration, the vesting of moral rights, etc. *Copyright Act 1985*, s. 13(3) (Can). Professor Bridy will present her views on the appropriate use of legal fiction to re-allocate authorship and copyright ownership in light of the policy considerations at play in the case of AI-created works.

Panel Discussion and Q&A:

Following the panel presentations, panelists will engage in a moderated discussion with one another about the particular issues on which they agree and disagree, and will respond to comments and questions from the audience. Further issues to be addressed in discussion may include, for example: the need or preference for *sui generis* legal and incentive structures to be developed for AI creativity outside of the traditional confines of copyright law; the need for further regulation around the use of copyright-protected materials and data sets in the creation and programming of AI machines; concerns around the democratic implications of encouraging or rewarding AI-authored content in the case of journalism and (fake) news; copyright's complicity in the replication and perpetuation of social bias through AI.

Recommended Reading:

Annemarie Bridy, *The Evolution of Authorship: Work Made by Code*, 39 Colum. J.L. & Arts 395 (2016), available at <https://journals.cdrs.columbia.edu/wp-content/uploads/sites/14/2016/06/8-39.3-Bridy.pdf>)

Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 2012 Stan. Tech. L. Rev. 5 (2012), <https://web.law.columbia.edu/sites/default/files/microsites/kernochan/09.materials-Bridy.pdf>)

Robert Denicola, *Ex Machina, Copyright Protection for Computer Generated Works*, 69 Rutgers U. L. Rev. 251 (2016), <http://www.rutgerslawreview.com/wp-content/uploads/2017/07/Robert-Denicola-Ex-Machina-69-Rutgers-UL-Rev-251-2016.pdf>)

Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. Pitt. L. Rev. 1185 (1986), available at <https://scholarship.law.berkeley.edu/facpubs/1067/>)