

# The Death of the AI Author<sup>\*</sup>

*Carys Craig<sup>†</sup> and Ian Kerr<sup>‡</sup>*

## INTRODUCTION

The fantasy of creating artifacts that can themselves create is both old and new. In ancient times, Aristotle envisaged new instruments of production that would, of their own accord, compose and perform music, and weave new textiles.<sup>1</sup> Towards the end of the previous millennium, science fiction writers imagined machines that would replace the proverbial million monkeys at typewriters—artificial intelligence (AI) that could not only reproduce the complete works of Shakespeare and all the books in the British Museum, but could also author the uncollected works<sup>2</sup> of the future—in one instance, with a view to cornering the market on fiction.<sup>3</sup>

Today’s AI often seems stranger than fiction (if not, perhaps, stranger than some of the fiction that AI has recently generated.) By way of example, *Sunspring*,<sup>4</sup> a 2016 science fiction film written entirely by an AI, tells the tale of three people caught in a love triangle on a space station. The Long Short-Term Memory (LSTM) recurrent neural network that generated the screenplay (subsequently naming itself “Benjamin”) was trained on a data set of dozens of

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† Associate Professor and Academic Director of the Osgoode Professional Development LLM in Intellectual Property Law, York University, Osgoode Hall Law School, [ccraig@osgoode.yorku.ca](mailto:ccraig@osgoode.yorku.ca)

‡ Canada Research Chair in Ethics, Law and Technology, University of Ottawa, Faculty of Law, [iankerr@uottawa.ca](mailto:iankerr@uottawa.ca)

<sup>1</sup> ARISTOTLE, *POLITICS* Book One, Part IV (Benjamin Jowett, trans., Batoche Books, 1999) (c. 350 B.C.E.): “For if every instrument could accomplish its own work, obeying or anticipating the will of others, like the statues of Daedalus, or the tripods of Hephaestus, which, says the poet, ‘of their own accord entered the assembly of the Gods;’ if, in like manner, the shuttle would weave and the plectrum touch the lyre without a hand to guide them, chief workmen would not want servants, nor masters slaves.”

<sup>2</sup> LIN CARTER, *Uncollected Works*, in *BEYOND THE GATES OF DREAM* 115 (Wildside Press 1999) (1969).

<sup>3</sup> Roald Dahl, *The Great Automatic Grammatizator*, in *THE UMBRELLA MAN AND OTHER STORIES* 1 (Viking 1998) (1982).

<sup>4</sup> Oscar Sharp, *Sunspring*, YOUTUBE (June 9, 2016), <https://youtu.be/LY7x2Ihqjmc>.

online sci-fi screenplays from the 1980s and 90s to re-assemble sci-fi type plots and language. Over time, the AI became capable of mimicking the structure of a screenplay, including stage directions and lines of dialogue. Although *Sunspring* has a surprisingly sound plotline and includes some great one-liners (“Well, I have to go to the skull”—whereupon the actor is directed to shine green lasers into his own eyes), some of its stage directions are a little perplexing (“He is standing in the stars and sitting on the floor”). Still, as Annalee Newitz describes it, “[s]omehow a slightly garbled series of sentences became a tale of romance and murder, set in a dark future world. It even has its own musical interlude ... with a pop song Benjamin composed after learning from a corpus of 30,000 other pop songs.”<sup>5</sup> *Sunspring* placed top ten in Sci-Fi London’s annual film festival, beating out hundreds of other entries composed by humans.

In addition to word assemblage, today’s AIs are generating stunning abstract images that similarly raise fascinating questions about the nature of art and authorship. Consider Canadian artist and experimental composer Adam Basanta’s *All We’d Ever Need Is One Another*—“a mixed-media installation that creates images autonomously through self-generating techniques: a continuously running ‘art-factory’ operating independently of human input.”<sup>6</sup> Once produced, its outputs are “validated as art” by a machine-learning algorithm trained to spot patterns that replicate existing images found in a database of contemporary abstract art. Controversially, when one of its randomly generated images bears at least an 83% likeness to a known artwork, that image is automatically uploaded to a dedicated website and social media accounts, where it is displayed as an art-factory output entitled with a cross-reference to the similar—human-made—art.

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<sup>5</sup> Annalee Newitz, *Movie Written by Algorithm Turns Out to be Hilarious and Intense*, ARS TECHNICA (June 9, 2016, 6:30 AM), <https://arstechnica.com/gaming/2016/06/an-ai-wrote-this-movie-and-its-strangely-moving/>.

<sup>6</sup> Adam Basanta, *All We’d Ever Need Is One Another: About*, ALL WE’D EVER NEED IS ONE ANOTHER (2018) <http://allweeverneed.com/about.html>.

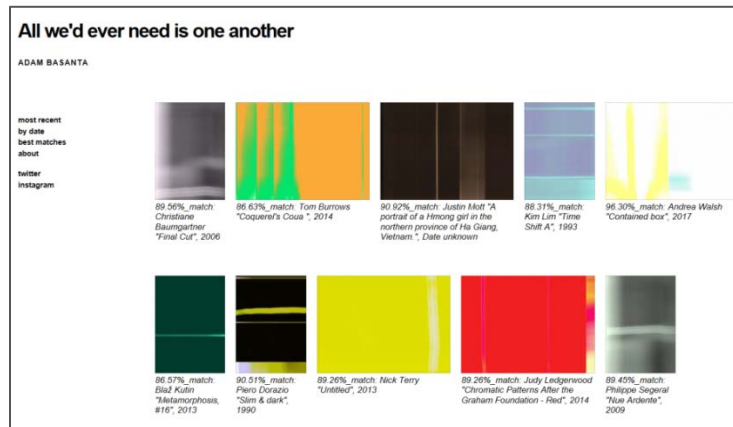


Fig. 1 Adam Basanta, *All we'd ever need is one another*, website homepage, 10 March 2019

As Basanta describes it, “the installation acts as a golem-like assemblage, continuously and mindlessly self-producing without regard for human spectators.”<sup>7</sup> Of course, this does not mean that human spectators have no regard for what the automaton produces. Amel Chamandy, Montreal artist and owner of Galerie NuEdge, has recently alleged that one of the art-factory outputs infringes copyright in her photographic work, *Your World Without Paper*. Her lawsuit is founded on the output’s undisputed substantial similarity to her own work<sup>8</sup>—an interesting but ultimately untenable copyright claim given that the images were created, not by copying her prior work, but rather, spontaneously, by two interdependent desktop scanners aimed at one another to capture the light hitting the other’s glass surface. Once we have eliminated the possibility of actual copying, to paraphrase Lord Diplock, “coincidence, however improbable, is the truth.”<sup>9</sup> The captured images merely mirrored the light conditions in the room in which the machines were set up; it was their identification as a worthy ‘artistic’ output—and not their creation—that depended on the prior existence of a similar, human-made artwork.<sup>10</sup>

Of course, lawsuits are not the only means by which to measure the perceived value or import of AI-generated outputs. On October 25, 2018, just three weeks after Basanta’s art-factory made its media debut, an AI-generated *Portrait of Edmond Belamy* went under the hammer in the Prints & Multiples sale at Christie’s Auction House. It sold for an incredible \$432,500—nearly 30 times

<sup>7</sup> *Id.*

<sup>8</sup> Chris Hannay, *Artist Faces Lawsuit over Computer System that Creates Randomly Generated Images*, GLOBE & MAIL (Oct. 4, 2018), <https://www.theglobeandmail.com/arts/art-and-architecture/article-artist-faces-lawsuit-over-computer-system-that-creates-randomly/>.

<sup>9</sup> Francis, Day & Hunter Ltd. v. Bron, [1963] Ch 587, 627 (C.A.) (Lord Diplock LJ) (Eng.).

<sup>10</sup> Orit Gat, *Night Shift*, ADAM BASANTA, <http://adambasanta.com/nightshift> (last visited Mar. 15, 2019).

the average annual income of a UK artist<sup>11</sup>—signalling, according to Christie’s, “the arrival of AI-generated art on the world auction stage.”<sup>12</sup> Unlike Basanta’s installation, the GAN (generative adversarial network) that produced the piece sold at Christie’s was meant to produce commercial portraits by learning and copying various styles derived from its training set of more than 15,000 portraits painted between the 14th century to the 20th.<sup>13</sup> After having trained the algorithm for a few months, the GAN now pumps out “original” portraits (read: intricate reassemblages that increasingly resemble in style the public domain paintings in its database) every three days—not a bad business model for three Parisian artist-entrepreneurs who “borrowed” 90% of their AI code from a 19 year old kid.<sup>14</sup>

As it turns out, science fiction writers are not the only ones to have seen all of this coming. Lawyers and policy makers in the field of intellectual property have been contemplating the legalities of computer-generated works for almost as long as contemporary science fiction authors have been writing about them.<sup>15</sup> It started in the mid 1960s, when the US Register of Copyrights first confronted a work created with the aid of computers. This ultimately prompted the National Commission on New Technological Uses of Copyrighted Works,<sup>16</sup> the US Congress, Office of Technological Assessment,<sup>17</sup> and a string of interested scholars<sup>18</sup> to consider the allocation of ownership rights in computer-generated works.

Recent advances in the field of machine learning have provoked a resurgence of interest in the subject from a second generation of scholars<sup>19</sup> confronting

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<sup>11</sup> *Artist Salary Research*, DESIGN & ARTISTS COPYRIGHT SOC’Y, <https://www.dacs.org.uk/latest-news/artist-salary-research?category=For+Artists&title=N> (last visited Mar. 15, 2019).

<sup>12</sup> *Is Artificial Intelligence Set to Become Art’s Next Medium?*, CHRISTIE’S (Dec. 12, 2018), <https://www.christies.com/features/A-collaboration-between-two-artists-one-human-one-a-machine-9332-1.aspx>

<sup>13</sup> *Id.*

<sup>14</sup> James Vincent, *How Three French Students Used Borrowed Code to Put the First AI Portrait in Christie’s*, THE VERGE (Oct. 23, 2018), <https://www.theverge.com/2018/10/23/18013190/ai-art-portrait-auction-christies-belamy-obvious-robbie-barrat-gans>.

<sup>15</sup> See U.S. COPYRIGHT OFFICE, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 5 (1966).

<sup>16</sup> NAT’L COMM’N ON NEW TECH. USES OF COPYR’D WORKS, FINAL REPORT (1979).

<sup>17</sup> OFFICE OF TECH. ASSESSMENT, U.S. CONG., INTELLECTUAL PROPERTY RIGHTS IN AN AGE OF ELECTRONICS AND INFORMATION 69-73 (1986).

<sup>18</sup> See Karl F. Milde, Jr., *Can a Computer Be an “Author” or an “Inventor”?*, 51 J. PAT. OFF. SOC’Y 378 (1969); Timothy L. Butler, *Can a Computer Be an Author? Copyright Aspects of Artificial Intelligence*, 4 COMM/ENT L. SYMP. 707 (1982); Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. PITT. L. REV. 1185 (1985).

<sup>19</sup> See, e.g., Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 5 STAN. TECH. L. REV. 1 (2012) [hereinafter Bridy, *Coding Creativity*]; Annemarie Bridy, *The*

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 readily discernable human author. There is no doubt that AI-generated works have become increasingly indistinguishable on their face from their human-authored counterparts, and that this inevitably provokes some interesting legal questions about thresholds for protection, and the doctrinal and evidentiary requirements of authorship and ownership under the traditional copyright system. Still, as James Grimmelman recently observed, “[t]he scholarship pondering the possibility of computer-authored works is surprisingly extensive, even though no one has ever exhibited even one work that could plausibly claim to have a computer for an ‘author’ in the sense that the Copyright Act uses the term.”<sup>20</sup> As Grimmelman further notes, however, most of these scholars “sensibly conclude that computers are not authors, for now, at least....”<sup>21</sup>

Representative of this view is Annemarie Bridy, whose words succinctly capture our current predicament:

As the state of the art continues to advance in AI and related areas...we are moving incrementally but surely into an age of digital authorship, in which digital works (i.e., software programs) will, relatively autonomously, produce other works that are indistinguishable from works of human authorship.<sup>22</sup>

In this essay, we contend that the conclusion to be derived from our current predicament is *not* that AIs can or eventually should be designated as authors. Indeed, we think the very idea of ‘AI authorship’ is oxymoronic. Contrary to

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*Evolution of Authorship: Work Made by Code*, 39 COLUM. J.L. & ARTS 395 (2016) [hereinafter Bridy, *Evolution*]; James Grimmelman, *There’s No Such Thing as a Computer-Authored Work—And It’s a Good Thing, Too*, 39 COLUM. J.L. & ARTS 403 (2016); Robert C. Denicola, *Ex Machina: Copyright Protection for Computer-Generated Works*, 69 RUTGERS U.L. REV. 251 (2016); Bruce E. Boyden, *Emergent Works*, 39 COLUM. J.L. & ARTS 377 (2016), Margot E. Kaminski, *Authorship, Disrupted: AI Authors in Copyright and First Amendment Law*, 51 U.C. DAVIS L. REV. 589 (2017); Shlomit Yanisky-Ravid & Luis Antonio Velez-Hernandez, *Copyrightability of Artworks Produced by Creative Robots and Originality: The Formality-Objective Model*, 19 MINNESOTA J.L. SCI. & TECH. 1 (2018); JEAN-MARC DELTORN & FRANCK MACREZ, CTR. FOR INT’L INTELLECTUAL PROP. STUDIES, *AUTHORSHIP IN THE AGE OF MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE* (2018); Jane C. Ginsburg & Luke Ali Budiardjo, *Authors and Machines*, 34 BERKELEY TECH. L.J. (forthcoming 2019).

<sup>20</sup> Grimmelman, *supra* note 19, at 403.

<sup>21</sup> *Id.* Grimmelman himself takes a different view, as his title clearly implies, suggesting that such a shift would require something in the nature of a singularity to occur, in which case, he wryly observes, “copyright would be the least of our concerns.”

<sup>22</sup> Bridy, *Coding Creativity*, *supra* note 19, at 3.

the views of Bridy, Boyden and others, we believe the threshold for attributing authorship does *not* depend on the evolution or state of the art in AI or robotics. Instead, we suggest that the very notion of ‘AI authorship’ rests on a category mistake: it is not an error about the current or potential capacities, capabilities, intelligence or sophistication of machines; rather it is an error about the ontology of authorship. We identify the pathology of this category mistake in the confluence of three conceptual errors: an erroneous understanding of the critique of the romantic author and its application to AI; a related set of misunderstandings about the implications of literary theory’s “death of the author”; and a false dichotomy that pretends that the only viable alternative to romantic authorship resides in US utilitarian copyright doctrine.

It is practically indisputable that US utilitarian copyright doctrine might one day generate the rational legal proposition that an AI can be an “author” for the purposes of establishing and allocating exclusive rights under law. There is also no doubt that, should policy considerations push us in that direction, existing copyright doctrine is very capable of extending its existing catalogue of legal fictions and ambiguous constructions to encompass AI-generated works as copyrightable works of original authorship.<sup>23</sup> Nevertheless, we think there are compelling grounds for regarding such a conclusion as “nonsense upon stilts.”<sup>24</sup> Pamela Samuelson offered the first such response nearly thirty-five years ago, noting that it makes no sense to allocate intellectual property rights to machines because machines are not the *kind of entity* that need incentives in order to generate output.<sup>25</sup> Although hers is one of the most cited statements in the literature on computer-generated works, many of the second-generation scholars writing on the subject seem to have missed the point of her prescient claim that “only those stuck in the doctrinal mud could even think that computers could be ‘authors’.”<sup>26</sup> As Samuelson rightly suggests, the answer to the conundrum of the so-called ‘AI author’ lies not in the interpretation or application of copyright doctrine but in a proper understanding of what

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<sup>23</sup> See, e.g., Bridy, *Evolution*, *supra* note 19 (arguing that the US work made for hire doctrine would offer an appropriate framework for resolving the ownership of AI-authored works by, e.g., treating the AI programmer as equivalent to an employer); Denicola, *supra* note 19 (arguing that machine-generated works can meet the public-welfare oriented standards of copyrightability, and the humans who instigate the creation of computer-generated can qualify as “authors” under current law).

<sup>24</sup> JEREMY BENTHAM, *Anarchical Fallacies; being an examination of the Declarations of Rights issued during the French Revolution*, in 2 THE WORKS OF JEREMY BENTHAM 489 (John Bowring, ed., 1838) (first English-language printing), reprinted in THE COLLECTED WORKS OF JEREMY BENTHAM: RIGHTS, REPRESENTATION, AND REFORM: NONSENSE UPON STILTS AND OTHER WRITINGS ON THE FRENCH REVOLUTION 317 (P. Schofield, C. Pease-Watkin & C. Blamires, eds., 2002) (as *Nonsense Upon Stilts*).

<sup>25</sup> Samuelson, *supra* note 18, at 1199.

<sup>26</sup> *Id.*, at 1200.

copyright *is for*. Importantly, this does not merely require that we reframe the question in utilitarian terms.<sup>27</sup> A proper understanding of what copyright is for demands a fuller appreciation of what copyright’s delimiting concept of authorship is for. The question we should be asking through this consequentialist frame, then, is not “what is authorship?” or even “how should we incentivize it?”, but rather, “*why* is it that we seek to encourage the activity of authorship?”

Paying heed to Samuelson’s advice, there will be no mud wrestling, in this article, with copyright’s originality threshold. Instead, we accept Samuelson’s challenge to produce a richer theoretical account that asks whether claims of AI authorship “make sense in terms of the realities of the world in which the problem exists.”<sup>28</sup> Those realities, we argue, must push us past bare doctrinal or utilitarian considerations of originality, assessed in terms of what an author must *do*. Instead, what they demand is an ontological consideration of what an author must *be*. The ontological question, we suggest, requires an account of authorship that is relational; it necessitates a vision of authorship as a dialogic and communicative act that is inherently social, with the cultivation of selfhood and social relations as the entire point of the practice. Of course, this ontological inquiry into the plausibility of AI-authorship transcends copyright law and its particular doctrinal conundrums in the digital age, going to the normative core of how law should—and should not—think about robots and AI, and their role in human relations.

In what follows, Part 1 sets out to explain how we understand the idea of the romantic author and the significance of his so-called death, drawing on both legal and literary scholarship. In Part 2, we consider the nature of AI, anthropomorphic framing, and the tendency to romanticize the AI-as-author. Part 3 explains what it means to *de*-romanticize authorship in the copyright context, and in particular, why this requires something other than simply shifting focus away from authors to social welfare, or moving from rights-based to utilitarian accounts of the copyright system. In Part 4, we propose a *de*-romanticized ontology of authorship premised on relational theory that gets to the heart of why authorship matters—and why it is, therefore, a fundamentally human endeavor. Ultimately, we conclude that, paradoxical as it may seem, it is the demise—*not* the rise—of romantic authorship that should spell the death of the AI author.

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<sup>27</sup> Cf. Denicola, *supra* note 19 (suggesting that we focus on the nature of “writings” rather than “authors” as a way to reorient the policy question towards progress and public welfare).

<sup>28</sup> *Id.*

## I. ROMANTICISM AND THE DEATH OF THE AUTHOR

The author is the protagonist of copyright law. The start of the modern copyright system is commonly traced to the moment when the author emerged, for the first time, as the bearer of exclusive legal rights over his work of authorship.<sup>29</sup> It is the act of authorship that gives rise—now automatically and instantaneously—to the copyrightable work; it is the author in whom the copyright is presumed to vest; and it is the author’s lifetime that determines the duration of the copyright interest. Notwithstanding the legal importance of the author, however, “authorship has never been explicitly defined in international or national copyright laws.”<sup>30</sup> Given his centrality in the copyright scheme, the author’s persistent illusiveness in copyright doctrine might seem surprising. He is, as Oren Bracha writes, “the ghost in the machine of copyright law.”<sup>31</sup> Less surprising, then, is that the author figure has consistently been a subject of critical inquiry in intellectual property scholarship—much of which has sought to show that this spirit in the material world of copyright is fundamentally misconceived.

In the last decades of the twentieth century, in particular, a number of leading copyright and literary scholars sought to reveal that the law’s vision of the author was tainted by the hue of romanticism, making him conceptually ill-suited to the role required of him by the copyright system. Martha Woodmansee laid important groundwork in her historical investigation into the nexus between the professionalization of writing in 18<sup>th</sup>-century Europe and the “reconceptualization of the creative process.” According to Woodmansee, writers, hoping to secure their livelihoods through their writings, played a critical role in shaping the modern concept of authorship, downplaying the element of craftsmanship in favour of personal genius, with the aim of presenting the inspired work as “peculiarly and distinctively the product—and property—of the writer.” As the “writer” transmogrified into “an *author* (Lat. *Auctor*, originator, founder, creator),”<sup>32</sup> the claim to property seemed naturally to follow. The idea of the radically original author-genius—one who creates *ex nihilo* and is the sole and ultimate origin of the work—was

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<sup>29</sup> This occurred with the enactment of the Statute of Anne, 1710, 8 Ann. C. 19 (Eng.). See generally L. RAY PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE 143 (1968).

<sup>30</sup> Alina Ng, *The Conceits of Our Legal Imagination: Legal Fictions and the Concept of Deemed Authorship*, 17 N.Y.U.J. LEGIS. & PUB. POL’Y 707, 747 (2014).

<sup>31</sup> Oren Bracha, *The Ideology of Authorship Revisited: Authors, Markets, and Liberal Values in Early American Copyright*, 118 YALE L.J. 186, 188 (2008). As we demonstrate in Part 2, there are similar ghosts in machine learning.

<sup>32</sup> Martha Woodmansee, *The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the ‘Author’*, 17 EIGHTEENTH-CENTURY STUD. 425, 429 (1984). See also MARTHA WOODMANSEE, THE AUTHOR, ART, AND THE MARKET: REREADING THE HISTORY OF AESTHETICS 37-38 (1994).



bundled with ideas of ownership, blended with popular theories of natural justice and claims to right, and culminated in the idea of the original work as the literary property and sole dominion of the worthy author.<sup>33</sup> Peter Jaszi joined Woodmansee in arguing that the author was an “ideologically charged concept” that functioned to individualize authorship in the eyes of the law, causing it to overprotect authors who fit the individualistic, romantic mold while neglecting the necessarily collaborative and cumulative processes of creativity.<sup>34</sup> Mark Rose similarly examined the copyright’s formative period—in particular the literary property debates of eighteenth century Britain—concluding that the resulting “discourse of original genius and the problems inherent in the reifications of the author and the work” persist today, complicating the application of copyright doctrine, and “obscur[ing] the fact that cultural production is always a matter of appropriation and transformation.”<sup>35</sup>

James Boyle has argued, along similar lines, that the romantic author-vision that emerged during this time causes us still to value some forms of creation over others, and to underestimate the importance of external sources in the creative process.<sup>36</sup> But Boyle’s work offers perhaps the most sweeping critique of the romantic author figure, not only as a persistent trope in copyright discourse, but as a pervasive presence regulating the production and distribution of information products and intellectual property (and so wealth) in the global economy. In this rendition, the romantic author guides the commodification and allocation of rights over information, constructing moral hierarchies, rationalizing exclusion, and shaping normative assumptions around legal ownership and entitlement. For Boyle, this author-vision “is not merely a set of mistakes in thinking about the balance between incentives and efficiency, public domain and private right. It is the focal point of a language of entitlement, an ideology every bit as rich and important as that of wage labor and the will theory of contract.”<sup>37</sup> It is, in other words, an ideological tool for establishing and justifying inequalities of wealth and power in the new information age. Recognizing the function of this author-vision, Boyle suggests, allows us to perceive not just isolated outcomes or injustices

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<sup>33</sup> See, e.g., RONAN DEAZLEY, ON THE ORIGIN OF THE RIGHT TO COPY: CHARTING THE MOVEMENT OF COPYRIGHT LAW IN EIGHTEENTH-CENTURY BRITAIN (1695-1775) 31-50 (2004).

<sup>34</sup> Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of “Authorship”*, 1991 DUKE L.J. 455, 456. See also THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE (Martha Woodmansee & Peter Jaszi, eds., 1994).

<sup>35</sup> MARK ROSE, AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT 135, 141 (1993).

<sup>36</sup> James Boyle, *The Search for an Author: Shakespeare and the Framers*, 37 AM. U.L. REV. 625 (1988); JAMES BOYLE, SHAMANS, SOFTWARE AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY 51-60 (1996) [hereinafter BOYLE, SHAMANS].

<sup>37</sup> BOYLE, SHAMANS, *supra* note 36, at 173.

produced by the language of entitlement in particular cases, but the systemic patterns and structures that produce these effects.

Ground-breaking as this rich wave of romantic authorship scholarship proved to be, a common rejoinder was to point to the many ways in which the core characteristics of romantic authorship failed to map onto existing legal doctrine. Thus, Mark Lemley objected to Boyle's thesis on the basis that "there are numerous aspects of intellectual property law that not only cannot be explained by the romantic authorship theory, but which seem affirmatively inimical to it."<sup>38</sup> In particular, Lemley pointed to rules regarding IP ownership, which "are heavily skewed to protect the interests of corporations, not individual authors," with the obvious example being the US work-for-hire doctrine that deems even corporate employers to be the authors and owners of their employees' works.<sup>39</sup> Others have pointed to the minimal threshold for copyright protection, which—far from requiring a demonstration of personal genius or even novel, independent thought—asks only for a mere modicum of creativity or, in some jurisdictions, none at all, if a minimal amount of skill, labour or judgment is involved.<sup>40</sup> As Bracha notes, Woodmansee's suggestion that today's intellectual property laws require, as a result of the reconceptualization of authorship, "a unique, original product of the intellection of a unique individual" is "simply dead wrong."<sup>41</sup>

Bracha is correct to complicate the story, acknowledging the innumerable tensions and inconsistencies that emerge when one attempts to map the assumptions of romantic authorship onto the prescriptions and dictates of copyright doctrine. As he demonstrates, the legal iteration of the author figure is the culmination not just of a particular ideological vision of authorship, but a complex array of pragmatic, economic and political factors that defined, over time, key versions of authorship and ownership for the purposes of the law and its effective functioning in service of particular interests.<sup>42</sup> Importantly, however, the added complexity in the romantic authorship narrative does not detract from the more fundamental insights that emerged from this body of critical scholarship: the point was never that copyright law demanded a

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<sup>38</sup> Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 TEXAS L. REV. 873, 887 (1997), <https://ssrn.com/abstract=44418>.

<sup>39</sup> *Id.* (citing Copyrights, 17 U.S.C. §201(b) (1994); Committee for Creative Non-Violence v. Reid, 490 U.S. 730, 737 (1989)).

<sup>40</sup> See, e.g., Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991); CCH v. Law Society of Upper Canada, 2004 SCC 13; *IceTV Pty Ltd v Nine Network Australia Pty Ltd* [2009] HCA 14.

<sup>41</sup> Oren Bracha, *supra* note 31, at 195. See also Erlend Lavik, *Romantic Authorship in Copyright Law and the Uses of Aesthetics*, in THE WORK OF AUTHORSHIP 45 (Mireille van Eechoud, ed., 2014).

<sup>42</sup> See *id.* (filling in the historical gap from the late eighteenth century to explain how we arrived at "the modern copyright framework, which simultaneously is pervaded by the ideology of authorship and has little to do with it.").

creative genius, but that the shifting specter of the romantic author-figure informs the broader ideological assumptions that swirl around the copyright rights-bearer. Indeed, this spectral quality is what gives the romantic author the power to function as “a stalking horse for economic interests that [are] (as a tactical matter) better concealed than revealed.” Even if, as Jaszi observed, the romantic author’s reflections in law sometimes look more like “images in funhouse mirrors,”<sup>43</sup> the conclusion holds firm: “the picture of solitary authors creating original ideas *ex nihilo* through their intellectual labors...lies at the *normative heart* of our vision of copyright.”<sup>44</sup>

Crucially, for our purposes, this picture of the solitary author instantiates a particular vision of the self as legal subject: the romantic author merges with the rights-bearing individual valorized by liberal political theory.<sup>45</sup> Indeed, we would go further to say that the original rights-bearing author of copyright law *is* the radically individualized, atomistic subject of possessive individualism.<sup>46</sup> Foucault observed the overlap in his 1969 lecture, *What is an Author?*, when he described the emergence of this notion of author as “the privileged moment of *individualization* in the history of ideas, knowledge, literature, philosophy and the sciences.”<sup>47</sup> Through this process of individualization, he noted, the author acquired “a role quite characteristic of our era of industrial and bourgeois society, of individualism and private property.”<sup>48</sup> The moment when “a system of ownership and strict copyright rules were established (toward the end of the eighteenth and beginning of the nineteenth century)” was, for Foucault, the moment at which the author “was accepted into the social order of property which governs our culture.” Texts and books *with authors* became forms of property and “objects of appropriation.”<sup>49</sup>

Foucault explored the figure of the author not as a person or persona—even a mythic one—but as a *function* of discourse. For Foucault, the author-function plays a discursive role as a *process* of interpretive practice: “The Author is a certain functional principle by which, in our culture, one limits, excludes and chooses: ...The author is therefore the ideological figure by which one marks

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<sup>43</sup> Jaszi, *supra* note 34, at 500, 456.

<sup>44</sup> Bracha, *supra* note 31, at 188 (emphasis added).

<sup>45</sup> Margaret Chon, *The Romantic Collective Author*, 14 VAND. J. ENT. & TECH. 829, 831 (2012).

<sup>46</sup> CB MACPHERSON, THE POLITICAL THEORY OF POSSESSIVE INDIVIDUALISM: FROM HOBBS TO LOCKE 33 (1962); CHARLES TAYLOR, *Atomism*, in PHILOSOPHICAL PAPERS 187 (1985).

<sup>47</sup> Michel Foucault, *What Is an Author?*, in THE FOUCAULT READER 101 (Paul Rabinow, ed., 1984) (1969) [hereinafter Rabinow].

<sup>48</sup> *Id.*, at 119.

<sup>49</sup> Foucault, *What Is an Author?*, in MODERNITY AND ITS DISCONTENTS 299, 305 (J. M. Marsh, J.D. Caputo & M. Westphal, eds., 1992) (1969) [hereinafter Marsh].

the manner in which we fear the proliferation of meaning.”<sup>50</sup> As an ideological figure, then, the author functions to control and restrain meaning by presiding over the text, dominating it as sovereign. Foucault takes the following question from Samuel Beckett: “What matter who’s speaking, someone said, what matter who’s speaking?”<sup>51</sup> With this, he brings the speaking subject into his inquiry, only to dismiss it as seemingly irrelevant to the author-function as such: “It is not a question of who is speaking the text, but what the text communicates through the author-function and how discourse opens through appropriation.”<sup>52</sup> The author’s distance or death frees us to imagine a culture in which discourses circulate without the need for a “real author.” Rather than asking for proof of the author’s authenticity and originality, then, we might ask new questions: “What are the modes of existence of this discourse?” “Where does it come from; how is it circulated; who controls it?” “What placements are determined for possible subjects?” “Who can fulfill these diverse functions of the subject?”<sup>53</sup>

Many regard Foucault’s lecture as responding to Roland Barthes’s essay, *The Death of the Author*—an exercise in prodding at “the empty space left by the author’s disappearance.”<sup>54</sup> Barthes, in declaring this death, sought to disentangle the text from the Author who, “when we believe in him,” is conceived as pre-existing the text, just as a father is antecedent to his child.<sup>55</sup> For Barthes, also, “[t]o give an Author to a text is to impose upon that text a stop clause, to furnish it with a final signification, to close the writing.” To refuse to assign an Author is therefore to liberate the text to be “eternally written here and now” in an ongoing process of meaning-making. The written text is not a stable thing but a performative utterance:

a writing which can know no end or halt: ...the book itself is only a tissue of signs, a lost, infinitely remote imitation....[R]efusing to assign to the text... an ultimate meaning, liberates an activity which we might call counter-theological, properly revolutionary, for to refuse to arrest meaning is finally to refuse God and his hypostases, reason, science, the law.<sup>56</sup>

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<sup>50</sup> Rabinow, *supra* note 47, at 119.

<sup>51</sup> *Id.*, at 101, quoting SAMUEL BECKETT, *TEXTS FOR NOTHING* (Samuel Beckett, trans., 1974).

<sup>52</sup> Marisa C. Sánchez, *Foucault’s Beckett*, in *FOUCAULT ON THE ARTS AND LETTERS: PERSPECTIVES FOR THE TWENTY-FIRST CENTURY* 121, 124 (Catherine M. Soussloff, ed., 2016).

<sup>53</sup> Marsh, *supra* note 49, at 314.

<sup>54</sup> *Id.*, at 303.

<sup>55</sup> Rolande Barthes, *The Death of the Author*, 5+6 ASPEN: MAG. BOX (Richard Howard, trans., 1967), <http://www.ubu.com/aspens/aspens5and6/index.html>.

<sup>56</sup> *Id.*

What must be underscored here, for our purposes, is that the death of the author is *not* the death of the speaking subject—the writer, if you will—but the death of the Author with a capital A, or, in other words, the *author-function*: the illusive unified, authentic self who presides over the text and its meaning. By freeing ourselves of the ideology of the romantic author, we can understand the text as circulating discourse and concern ourselves with the place and function of the speaking subject in discursive relations to and through the text. Some important insights to this effect can be gleaned from a rich strand of feminist literary criticism that tackled the question of whether Barthes’s obliteration of the authorial subject was consistent with—or inimical to—the feminist project of recognizing women’s claims to authorship status.<sup>57</sup>

On one hand, Nancy Miller, for example, cautioned that the death of the author entailed an erasure of the writer’s identity that risked eliminating the feminist cause of reclaiming women’s voices.<sup>58</sup> Susan Stanford Friedman similarly warned against devaluing the agency of subjectivity.<sup>59</sup> On the other hand, for poststructuralist feminists like Peggy Kamuf, by displacing the author’s *authority*, Barthes had dislodged the patriarchal author, making way for the power of perpetual re-interpretation and renewal. Barthesian pluralism, Kamuf argued, “actually frees women to experience their subjectivity as it is”—fluid and multi-contexted, dialectically constructed through language, and always mediated through other categories like race, ethnicity, religion, class, sexual preference, etc.<sup>60</sup>

Cheryl Walker nicely captures feminists’ “dead author dilemma” when she writes:

What we need, instead of a theory of the death of the author, is a new concept of authorship that does not naively assert that the writer is an originating genius, creating aesthetic objects outside of history, but does not diminish the importance of difference and agency in the responses of women writers to historical formations.<sup>61</sup>

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<sup>57</sup> See Sarah Wilson, *Situated Authorship: Feminist Critical Engagement with Roland Barthes’s ‘The Death of the Author’*, 2012 VERSO, <https://ojs.library.dal.ca/verso/article/view/513/511>.

<sup>58</sup> Nancy K. Miller, *The Text’s Heroine: A Feminist Critic and Her Fictions*, 12 DIACRITICS 48 (1982).

<sup>59</sup> Wilson, *supra* note 57, at 6-7, citing Susan Stanford Friedman, *Weavings: Intertextuality and the (Re)Birth of the Author*, in INFLUENCE AND INTERTEXTUALITY IN LITERARY HISTORY 146, 157 (Jay Clayton & Eric Rothstein, eds., 1991).

<sup>60</sup> See Wilson, *supra* note 57, at 4, citing Peggy Kamuf, *Replacing Feminist Criticism*, 12 DIACRITICS 42, 45-46 (1982); Catherine Belsey, *Constructing the Subject: Deconstructing the Text*, in FEMINIST CRITICISM AND SOCIAL CHANGE: SEX, CLASS AND RACE IN LITERATURE AND CULTURE 45, 50 (Judith Newton & Deborah Rosenfelt, eds., 1985).

<sup>61</sup> Cheryl Walker, *Feminist Literary Criticism and the Author*, 16 CRITICAL INQUIRY 551, 560 (1990).

Walker dismisses the suggestion that Barthes eliminated the idea of authorship, explaining: “What he is claiming is that a proper theory of the text does not make its meaning depend on authors as unified subjectivities or on readers given individual characteristics.”<sup>62</sup> The work is not reducible to the representation of a single individual with a stable, transcendent identity, and there is no single, coherent subject-position. But biography and text must continue to interact, in Walker’s understanding, so that we do not neglect to consider the way the speaker’s subjectivity is differently experienced and shaped by the forces of place, time and identity. The trace of the author is, however, just one of a multiplicity of shifting subjectivities present and continually recreated in the text.

Invoking Foucault’s famous question, “what does it matter who speaks?,” Miller contrasts her view of female authorship with that of Kamuf: “Kamuf doesn’t care whether the *Portuguese Letters* were written by a woman or by a man, and I do.”<sup>63</sup> Importantly, however, Foucault did not go so far as to state that it does not matter who is speaking; rather, he invited us to consider whether it matters, and if so why. We might reasonably respond, as feminist literary scholar Laurie Finke does, that “it matters, but for different reasons from those we have in the past supposed: not because a fixed, pre-existing self expresses itself through discourse, but because discourses...are part of the evolving, open-ended, and shifting process of *becoming a subject*.”<sup>64</sup> Feminist literary criticism has, through a careful and nuanced engagement with poststructuralist theories of the author’s demise, widely rejected the false choice between radically fragmented subjectivity and paternalistic, originary identity: what emerges from this critical feminist conversation is a rich concept of “political intertextuality” that “seems to provide for a situated subjectivity, both allowing for fluidity and acknowledging the inevitably plural nature of identity.”<sup>65</sup> The expressive subject remains relevant as one of many possible subjects performing a diverse range of discursive functions, simultaneously constituting and being constituted by the circulating text.

The idea of “intertextuality” was originally coined by feminist and post-structuralist Julia Kristeva, drawing together the core insights of de Saussure’s semiotic theory and Bakhtin’s dialogic theory.<sup>66</sup> Apparently, it was Kristeva who introduced Bakhtin’s work on dialogism to Roland Barthes’ seminar in

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<sup>62</sup> *Id.*, at 567.

<sup>63</sup> Miller, *supra* note 58, at 50.

<sup>64</sup> LAURIE A. FINKE, FEMINIST THEORY, WOMEN’S WRITING, 111 (1992) (emphasis added).

<sup>65</sup> Wilson, *supra* note 57, at 7, citing Friedman, *supra* note 59, at 153, 158.

<sup>66</sup> *See generally* GRAHAM ALLEN, INTERTEXTUALITY 8-58 (2nd ed. 2011).

Paris.<sup>67</sup> While Bakhtin did not use the term “intertextuality” his theory of language presented discourse as inherently dialogic and multivocal: every utterance exists in relation to other utterances, he argued, with the result that all utterances must be understood as interactive and inter-animating.<sup>68</sup> Like Barthes, Bakhtin rejected the monologic author, insisting that every utterance contains within it myriad voices (“heteroglossia”) that stand in dialogic relationship with one another.<sup>69</sup> But we also find in Bakhtin a more explicit connection between literary theory and theories of human communication: if any true understanding of a text is necessarily historical and personified, we can regard the dialogic relation between texts also as a kind of interpersonal dialogue.<sup>70</sup> The crucial idea is that of the *utterance*, which captures ‘the human-centred and socially specific aspect of language.’<sup>71</sup> As clarified by Kristeva, the subject of the utterance “calls to mind the *act* of producing a form of words which involves a human subject.”<sup>72</sup> For Bakhtin, language is always a struggle between competing codes and constructions, existing in the ‘realm of cultural activity, where it participates in the historical, social, and political life of its speakers...as both a production and a producer of social relations.’<sup>73</sup>

In critical literary theory, debates around the nature and function of authorship have *not* left a gaping void where the author figure used to happily reside: rather, they have produced—and continue to produce—a dynamic vision of authorship connected to a complex conception of human selfhood. From the death of the author, we have retrieved something in between classical essentialism and the destruction of identity—“a positioned yet socially, culturally and historically dispersed subjecthood.” This situated vocal author, like Bakhtin’s author, is not dead:

The author...still stands behind his or her novel, but s/he does not enter into it as a guiding authoritative voice. Bakhtin’s author also

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<sup>67</sup> Hans Harder, *A Few Introductory Remarks on Bakhtin and Intertextuality*, SOCIETY AND CULTURE IN MOTION, [https://www.scm.uni-halle.de/reporting\\_list/study\\_days/sektion1/2303855\\_2303900/](https://www.scm.uni-halle.de/reporting_list/study_days/sektion1/2303855_2303900/) (last visited March 16, 2019).

<sup>68</sup> MICHEL BAKHTIN, *THE DIALOGIC IMAGINATION: FOUR ESSAYS*, 354 (Michael Holquist, ed., Caryl Emerson & Michael Holquist, trans., 1981); FINKE, *supra* note 64, at 12.

<sup>69</sup> Bakhtin uses the term ‘heteroglossia’ (or untranslated: *raznojazychie*) to capture the dynamic complexity and clamorousness of this contested field of multivocal utterances: MICHEL BAKHTIN, *BAKHTIN SCHOOL PAPERS* (Ann Shukman, ed., 1983).

<sup>70</sup> Harder, *supra* note 67, citing Michel Bakhtin, *Toward a Methodology for the Human Sciences, in SPEECH GENRES AND OTHER LATE ESSAYS* 159, 162 (Caryl Emerson & Michael Holquist, eds., Vern W. McGee, trans., 1984).

<sup>71</sup> ALLEN, *supra* note 66, at 16.

<sup>72</sup> *Id.*, at 39, quoting JEREMY HAWTHORN, *A GLOSSARY OF CONTEMPORARY LITERARY THEORY* 57 (1992).

<sup>73</sup> FINKE, *supra* note 64, at 13, citing Michel Bakhtin, *Discourse in the Novel*, in BAKHTIN, *supra* note 68, at 276.

cannot be said to spin his or her characters out of an original imagination. Much of [the author's] speech...exists as reiterations, parodies, transformations and other kinds of appropriation of existing speech genres, utterances, and words associated with particular ideological, class and other distinct social and cultural positions.<sup>74</sup>

Armed with the idea of intertextuality, we can understand that subjects are constructed and reconstructed through the interplay of texts, which are themselves situated utterances that clash and combine in a “genuine polyphony of fully valid voices.”<sup>75</sup> If we collectively value and seek to encourage the act of authorship through law and policy, surely it is not the originating, controlling and ultimately mythic romantic authorship that we mean to instigate and reward; rather, the entire point of the social practice of authorship seeks to encourage precisely this discursive participation in the dialogic process of human interaction and the mutually constitutive creation and exchange of text, meaning, and identity.<sup>76</sup>

At this stage, before we turn to tackle (mis)conceptions of AI “authorship,” we can pause to draw out two important points from this discussion, which help to inform what follows. First, to reject the possibility of AI authorship by insisting that authorship is a fundamentally *human* endeavour is *not* necessarily to invoke a romantic vision of authorship. (Indeed, it may—as here—be quite the opposite.) Second, but by the same token, to insist on the possibility of AI authorship is *not* necessarily to reject a romantic vision of authorship. (Indeed, it may—and in many instances does—invoke the romantic author as a ghost in the creative machine.)

It is easy to understand the confusion that arises when we layer author functions and legal fictions onto creative people and productive processes. Consider the following passage by Ng who, warning about the consequences of deeming authorship in copyright doctrine, seems almost to regret the influence of literary theory on legal discourse:

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<sup>74</sup> ALLEN, *supra* note 66, at 23-24.

<sup>75</sup> M. BAKHTIN, PROBLEMS OF DOSTOEVSKY'S POETICS 6-7 (Caryl Emerson, ed., trans., 1984).

<sup>76</sup> Interestingly, Annemarie Bridy has invoked Bakhtinian ideas of intertextuality in examining the limits of copyright protection and moral rights, as well as the scope of fair use in the US copyright system. See Bridy, *Fearless Girl Meets Charging Bull: Copyright and the Regulation of Intertextuality*, 9 U.C. IRVINE L. REV. 293, 299 (2019) [hereinafter Bridy, *Fearless Girl*] (arguing that “US copyright law is hospitable to intertextuality by design.”) Bridy's focus is on the dialogic text-text and author-author relationships, but she does not explicitly reflect on the author-text relationship that a dialogic theory would entail and how this might inform the deemed AI authorship arguments advanced in her earlier work.



When the law [deems authorship]...the question of who is the actual creator of a work is bound to lose significance.

It certainly does not help that academic literature has neither bolstered nor augmented this scant image of the author in copyright law. Some prominent scholars ...have advanced the postmodern view [citing Barthes and Foucault] that the author is a socially constructed metaphor that supports individualism, the privatization of creative production, and the commercialization of literary and artistic works, making the notion of the author even more ambiguous in copyright law...

By designating [someone other than the true creator] as the author...any tangible conception of the author is diminished further. If the author is a mere social construct as these postmodern theories suggest, the persona of the author carries very little meaning and need not attach to the actual creator of the work *nor to any real or natural person*; it may be deemed on any entity the law deems appropriate.<sup>77</sup>

While Ng is not concerned here with the question of AI-generated works, this passage nicely demonstrates both the line of reasoning that opens the doctrinal door to deeming authorship by AI (or by any other entity)—and the common ideological objection to doing so (reinscribing the rights of the human author). As such, it is worth noting the interesting juxtaposition between different conceptions of the author at play in this passage: the “actual” or “true creator” (cast as the tangible person who most resembles the romantic author figure) and the legal author (the individual author-in-law, whether by virtue of “actual creativity” or by virtue of a more explicit legal fiction). Ng cautions that obscuring and mystifying true authors through law will lead to the alienation of the true creator’s status as author, as well as the alienation of the personal rights that accompany this status, and risks diminishing the value of originality. The impression produced in the passage above is one of a binary opposition between the real person who creates the original work and is entitled to lay claim to it in the real world, and the fictional legal author who lays claim to its commoditized form in the legal world.<sup>78</sup> In both iterations, however, it seems clear that the author is operating as a *function of discourse* in the Foucauldian sense; in neither does the author appear as the situated speaking subject—the de-romanticized discursive agent—that we have described.

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<sup>77</sup> Ng, *supra* note 30, at 748-752.

<sup>78</sup> See also, Bridy, *Coding Creativity* and Bridy, *Evolution*, *supra* note 19, and Bridy, *Fearless Girl*, *supra* note 76, similarly distinguishing between human authors and authors-by-law.

## 2. ROMANTICIZING AI

It is important to understand how critiques of romanticism and the death of the author literature link to the debate on AI authorship.

If the romantic author is the individualized self of liberal political theory, then his death is the demise of a radically individual subject who precedes both text and social context. Notice that this is *not* a critique of humanism *per se*. It is a criticism of the idea that there is some stand-alone human who is the sole creator and master of a text. As such, it is simply a mistake to assume that the death of the author opens up, necessarily, the possibility of the non-human author. On the contrary, the entire point of the death of the author motif was to kill-off a particular kind of non-human author—an ideological author that transcends the realities and relationships of lived human experience. As we demonstrate in Part 4, the death of the romantic author demands that we recognize and breathe new life into a particular understanding of the author, not as a radically individual subject but a socially situated one—one who does not originate, occupy or hypostasize discourse, but who is but a participant in its circulation, interpretation and transformation.

The reason for underscoring this point is that a number of scholars currently writing on the subject of AI authorship seem to be arguing the very opposite, suggesting that the death of the romantic author somehow clears a path towards AIs as authors. Annemarie Bridy, for example, says that advancements in AI “put an algorithmic twist on the postmodern ‘death of the author’ and lead to ... questions of authorship, including how and when the law of copyrights should evolve...”<sup>79</sup> The evolution to which she is of course referring is the move into a realm in which authorship is no longer exclusively within the human domain. Likewise, in her outstanding work on technological disruption, Margot Kaminski acknowledges a similar possibility, claiming “the U.S. copyright system has already moved far enough away from romantic authorship for algorithmic authorship to be, perhaps surprisingly, not fundamentally disruptive.”<sup>80</sup>

As suggested in Part 1, the logic underlying such claims rests on an unarticulated assumption that those who insist upon a human author as a prerequisite to copyright are committed to a romantic conception of authorship. By the same token, it seems to be assumed, those who entertain the possibility of ‘AI authors’ are willing to shed the mantel of romantic

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<sup>79</sup> Bridy, *Coding Creativity*, *supra* note 19, at 3.

<sup>80</sup> Kaminski, *supra* note 19, at 603.

authorship, adopting a more pragmatic and less ontological or dogmatic vision of what it means to create. As Kaminski puts it, the “romantic author is profoundly human; her creativity stems, in fact, from her humanity.”<sup>81</sup> Ultimately, this leads to a transposition from the original claim that critiques of romanticism open the door to AI authorship to a more powerful, though equally unsubstantiated, claim that the possibility of AI authorship undermines the view of authorship as uniquely human. Kaminski’s version of the transposition asserts that: “[i]n the abstract, algorithmic authorship fundamentally challenges the notion of the romantic author or speaker.”<sup>82</sup> Accordingly, she suggests, “[r]omanticizing creativity... is harder to do when a machine can produce the same creative works.”<sup>83</sup>

But is this in fact the case?

In this Part, we apply foundational concepts from the field of human-computer interaction (HCI), human-robot interaction (HRI), and the emerging field of robotics and AI law and policy to an analysis of the current discourse regarding the neural networks used to produce portraits and screenplays. Our aim is to illustrate how and why people are inclined not merely to humanize AI, but to romanticize it. Understanding the tendency to romanticize AI will help to explain why, despite relentless critiques of romanticism, a romantic portrayal of the AI-as-author is regularly assumed in popular culture and, albeit more subtly, in the academy.

In our view, this tendency to romanticize the AI-as-author is worthy of interrogation because we believe it is a catalyst to the resurgence of interest in treating computer-generated works as acts of authorship. And, although scholars sympathetic to the possibility of AI authorship often couch their positions in utilitarian or functionalist terms, we will argue in Part 3 that these scholars nonetheless make the same category mistake in presuming equivalence between human-authored works and AI-generated outputs: they treat AI as if it is a kind of being that it is not. As we go on to argue in Part 4, belonging to the category of “author” requires participation in the social, relational and dialogic practice of authorship. But first, here in Part 2, we demonstrate that this is neither what AI does, nor what it is. To make our case, let us start by looking more precisely at what machine learning is doing when its outputs generate screenplays and portraits of the sort described in our introduction. What exactly is happening when an AI effectively substitutes for a human screenwriter or portrait painter?

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<sup>81</sup> *Id.*, at 594.

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*

Formulating the issue in this way, we borrow from the HCI/HRI literature, which tends to conceive of AI tasks and decision-making in terms of “delegation” or “substitution.”<sup>84</sup> The framework of substitution—rather than the question-begging assumption of algorithmic authorship—allows us to focus on the kind of work the AI is and *is not* doing. The substitution of AIs for humans produces what Jack Balkin calls the “substitution effect.”<sup>85</sup> The substitution effect occurs when—in certain contexts and for certain purposes—we treat AIs as special purpose human beings. Sometimes we deliberately construct these substitutions, while at other times they are emotional or instinctual in nature. In the context of deliberate substitutions, Balkin is very careful to explain that we *ought not* to regard mechanical substitutes as fully identical to that for which they are a substitute. Rather—as with artificial sweeteners—we should see them as providing merely a provisional equivalence; we reserve the right to reject the asserted identity whenever there is no further utility in maintaining it. In other words, one must be extremely cautious not to allow the substitution to blur the underlying ontological category that is being substituted. The point is simple but profoundly important: AIs are not persons even if there is practical value, in limited circumstances, to treating them as such. Balkin is adamant: the substitution is partial. AIs take on only particular aspects and capacities of people in the performance of particular tasks.

According to Balkin, it is the very fact that the substitution is only partial—that AIs “straddle the line between selves and tools”<sup>86</sup>—that makes them, at once, both better and worse than their human counterparts. For example, an AI-enabled military robot may be a superior in battlespace because it is not subject, as human soldiers are, to the fog of war, physical or mental fatigue, or some potentially potent revenge motive. On the other hand, military robots simply *do not* have *any* of the capacities that are vital to mitigating the violence of war; their quality of mercy is most definitely strained<sup>87</sup> (and certainly “droppeth [not] as the gentle rain from heaven upon the place beneath”).<sup>88</sup> Still, as Balkin explains, there may, on occasion, be practical legal value to

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<sup>84</sup> Bruno Latour, *Where are the Missing Masses? The Sociology of a Few Mundane Artifacts*, in *SHAPING TECHNOLOGY/BUILDING SOCIETY: STUDIES IN SOCIOTECHNICAL CHANGE* 225 (Wiebe E. Bijker & John Law, eds., 1992); Jason Millar & Ian Kerr, *Delegation, Relinquishment and Responsibility: The Prospect of Expert Robots*, in *ROBOT LAW 102* (Ryan Calo, A. Michael Froomkin & Ian Kerr eds., 2016).

<sup>85</sup> Jack M. Balkin, *The Path of Robotics Law*, 6 *CAL. L. REV.* 45, 55 (2015). As Balkin’s interlocutor, Ryan Calo, would point out, we could also frame the scenario in terms of affordances rather than substitution.

<sup>86</sup> *Id.*, at 59.

<sup>87</sup> WILLIAM SHAKESPEARE, *THE MERCHANT OF VENICE* 4.1.181 (Jay L. Halio ed., Oxford Univ. Press, 1993) (1596-1599).

<sup>88</sup> *Id.* at 4.1.182.

treating AIs as though they were human beings for certain limited purposes. Interestingly, Balkin cites as an example Bridy's idea<sup>89</sup> that a court might treat AI-produced art as equivalent to human 'work made for hire' if doing so minimizes the need to change existing copyright law.<sup>90</sup>

But, is the quick fix that substitution offers the best approach? Are there not broader risks to embracing substitution with respect to authorship, as there are in respect of other human endeavours?

Legal maneuvers of this sort are reminiscent of Blackstone's famous account of the use of fictions in the common law:

We inherit an old Gothic castle, erected in the days of chivalry, but fitted up for a modern inhabitant. The moated ramparts, the embattled towers, and the trophied halls, are magnificent and venerable, but useless. The inferior apartments, now converted into rooms of conveyance, are cheerful and commodious, though their approaches are winding and difficult.<sup>91</sup>

Indeed, had Lon Fuller lived in our interesting times,<sup>92</sup> he might have appreciated the logic of the fiction that treats AIs 'as-if'<sup>93</sup> they have legal attributes for special purposes. Properly circumscribed, provisional attributions of this sort offer a certain utility since they enable the law to 'keep calm and carry on' until such time as we are able to more fully understand the culture of AIs in copyright (or any other domain) and thereby produce more thorough and coherent legal reforms. Indeed, this is precisely the rationale that Bridy and others endorse.

However, as Fuller also very clearly understood and articulated in his masterful study of legal fictions, the sustained use of the fiction carries the risk of conflating otherwise distinct legal categories. This is highly problematic since the preservation of those categories was the reason for adopting the fiction in the first place. The initial use of the fiction—in this case, the fiction that treats AI-generated art as equivalent to human 'work made for hire'—is to *pretend* an AI is (in some relevant respects) human. But the explicit justification for this pretense is to preserve the legal category into which AIs otherwise do not fit.

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<sup>89</sup> Bridy, *Coding Creativity*, *supra* note 19.

<sup>90</sup> Balkin, *supra* note 85, at 55.

<sup>91</sup> 3 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND, ch. 17 (Thomas P. Gallanis ed., Oxford Univ. Press, 2016).

<sup>92</sup> LON L. FULLER, LEGAL FICTIONS (1986).

<sup>93</sup> HANS VAHINGER, THE PHILOSOPHY OF "AS IF": A SYSTEM OF THE THEORETICAL, PRACTICAL AND RELIGIOUS FICTIONS OF MANKIND (C.K. Ogden trans., Routledge & K. Paul 2d ed. 1968) (1924).

In other words, we may treat an LSTM neural net as though it were a human performing work made for hire; but only for the purpose of granting copyright to its output while, at the same time, retaining the initial category of “author” in all but the instant case. That is how the legal fiction is meant to work. In actuality, studies of the common law usage of legal fictions over time<sup>94</sup> teach us that the application of a fiction, alongside the doctrine of *stare decisis*, all too often erode the very rule or category that the use of the fiction had initially meant to preserve.<sup>95</sup> Here, the risk is that a repeated use of the fiction that treats an AI output as human work made for hire will chip away at the legal distinction between humans and AIs and ultimately undermine the ontological category of “author” as a particular sort of relational, discursive social practice.<sup>96</sup>

Balkin’s substitution effect and the corollary use of legal fiction to treat AIs as people are both reflected in the HCI/HRI literature through the well-known phenomenon of *anthropomorphism*—our human tendency to imbue non-human entities with human characteristics.<sup>97</sup> This psychological tendency has been carefully studied and is well understood—especially in the context of computers, new media, robots, and AI.<sup>98</sup> As Ryan Calo points out, a rich literature in communications and psychology suggests that we are hardwired to react to such technology as though a person were actually present.<sup>99</sup> As a result, ethical and legal issues that arise from our tendency to anthropomorphize robots and AIs have received significant academic attention in recent years. For example, a number of scholars have investigated how our tendency to anthropomorphize robots and AIs can be exploited to garner and

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<sup>94</sup> Ian Kerr, *Legal Fictions* (1995) (unpublished Ph.D. dissertation, University of Western Ontario) (on file with Western Libraries, <https://ir.lib.uwo.ca/digitizedtheses/2526/>).

<sup>95</sup> For a more concrete account of how the use of a legal fiction erodes the rule it was initially meant to preserve, and a series of examples, see Ian Kerr, *Prenatal Fictions and Postpartum Actions*, 20 DALHOUSIE L. REV. 237 (1997) (relied upon, with approval, by the Supreme Court of Canada in *Dobson (Litigation Guardian of) v. Dobson*, [1999] 2 S.C.R. 753 (Can.)).

<sup>96</sup> And if it is true that the work made for hire doctrine has already chipped away at the distinction between human authors and corporate employers, this observation should offer little comfort, but only underscore the risk. We elaborate on this point in Part 3.

<sup>97</sup> Pascal Boyer, *What Makes Anthropomorphism Natural: Intuitive Ontology and Cultural Representations*, J. ROYAL ANTHROPOLOGICAL INST., 83 (1996).

<sup>98</sup> BYRON REEVES & CLIFFORD NASS, *THE MEDIA EQUATION: HOW PEOPLE TREAT COMPUTERS, TELEVISION, AND NEW MEDIA LIKE REAL PEOPLE AND PLACES* (1996); Brian R. Duffy, *Anthropomorphism and the Social Robot*, 42 ROBOTICS & AUTONOMOUS SYSTEMS 177 (1996); Brian R. Duffy & Karolina Zawieski, *Suspension of Disbelief in Social Robotics*, 21ST IEEE INT’L SYMP. ON ROBOT & HUMAN INTERACTIVE COMM. (RO-MAN), 484 (2012).

<sup>99</sup> For a rigorous review and analysis of this literature and its implications for privacy and surveillance, see Ryan Calo’s outstanding study: Ryan Calo, *People Can Be So Fake: A New Dimension To Privacy and Technology Scholarship*, 114 PENN ST. L. REV. 809 (2009).

manipulate trust in a number of social contexts, and how the law should respond.<sup>100</sup>

Among the most important and insightful contributions to this line of research is the recent work of Kate Darling who, through careful integration of the HCI/HRI and legal literature on the subject, has suggested that we ought to pay attention not merely to our tendency to anthropomorphize but also, and more fundamentally, to the effects of what she calls “anthropomorphic framing”.<sup>101</sup> Framing—for example, giving an AI a human name, providing it with a certain character description, or furnishing the AI with a personal backstory—is a means of influencing the manner and extent to which people will anthropomorphize AI. As Darling observes, “framing has a broader effect on the way we view robotic technology and the analogies that drive both use and regulation.”<sup>102</sup>

In a rather striking example, Darling discovered during an interview with the CEO of a company that develops medicine delivery robots, that “tolerance for malfunction was higher with anthropomorphic framing (‘Oh, Betsy made a mistake!’ vs. ‘This stupid machine doesn’t work!’).”<sup>103</sup> With mounting examples of this sort, Darling and her colleagues decided to conduct experiments of their own at the MIT Media Lab.<sup>104</sup> As part of these experiments, participants got a chance to play with a Hexbug Nano—a commercially available toy robot. In the style of Milgram, participants were then asked to strike the Hexbug with a mallet. It was observed that participants hesitated significantly longer before striking the robot whenever it was introduced through anthropomorphic framing (for example, “This is Frank. He’s lived at the Lab for a few months now. His favorite color is red. Etc.”).<sup>105</sup> Consequently, their experiments revealed that anthropomorphic framing can influence people’s immediate reaction to robots. Although many researchers focus on harmful applications of anthropomorphic framing, Darling’s work makes a special effort to

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<sup>100</sup> See, e.g., Woodrow Hartzog, *Unfair and Deceptive Robots*, 74 MARYLAND L. REV. 785 (2015); Kristen Thomasen, *Examining the Constitutionality of Robo-Enhanced Interrogation*, in ROBOT LAW, *supra* note 84, at 306-332; Calo, *supra* note 99; and Ian R. Kerr, *Bots, Babes and the Californication of Commerce*, 1 U. OTTAWA L. & TECH. J. 285 (2004).

<sup>101</sup> Kate Darling, *Who’s Johnny? Anthropomorphic Framing in Human-Robot Interaction, Integration, and Policy*, in ROBOT ETHICS 2.0 173 (Patrick Lin, Keith Abney & Ryan Jenkins, eds., 2017).

<sup>102</sup> *Id.*, at 174.

<sup>103</sup> *Id.*, at 175.

<sup>104</sup> Kate Darling, Palash Nandy & Cynthia Breazeal, *Empathic Concern and the Effect of Stories in Human-Robot Interaction*, 24TH IEEE INT’L SYMP. ON ROBOT & HUMAN INTERACTIVE COMM. (RO-MAN) 770 (2015).

<sup>105</sup> Darling, *supra* note 101, at 181.

acknowledge that there are cases where encouraging anthropomorphic framing is desirable.<sup>106</sup>

If anthropomorphic framing can humanize AI, we contend that a certain kind of anthropomorphic framing might also romanticize AI. To be clear, one does not romanticize AI simply by humanizing it. To romanticize AI would be to anthropomorphize it in a particular way. We see this, for example, when members of the U.S. Army stationed in Taji, Iraq in 2013 gave “Boomer”—a low cost military robot programmed to locate and decommission explosives—a funeral. Not just a commemorative ceremony or burial but a traditional military tribute, honoring the MARCbot with a proper 21-gun salute and valorizing it with a Purple Heart and a Bronze Star Medal.<sup>107</sup> With romantic anthropomorphic framing of robots as war heroes, it is perhaps a little less surprising to learn that human soldiers have risked their lives on the battlefield in order to save their robot companions.<sup>108</sup> What these examples tell us is that certain anthropomorphic framing clearly encourage our tendency to romanticize robots and AI, attributing to them the characteristics of individual heroes in our collective imagination.

Here, our concern is about the possibility of framing AI—intentionally or unintentionally—in a way that invokes, encourages, and perpetuates perceptions of the romantic author as characterized in Part 2. Can anthropomorphic framing result in a reification of AI as the romantic author?

To answer this question, it is worth returning to our prior discussion of the LSTM neural net that generated the screenplay *Sunspring*. In addition to generating screenplays, this particular LSTM was designed to interact with people in the classic “chatbot” manner.<sup>109</sup> One day, while interacting with a number of people, the LSTM declared its name to be “Benjamin”. According to Newitz,<sup>110</sup> the consequence of this was that its developer, Ross Goodwin, as well as the director of the *Sunspring* film, Oscar Sharp, both began to refer to the AI as “him” rather than “it” (or, *Gott in Himmel*, “her”!). While it may not be particularly surprising that they anthropomorphized the machine, it is

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<sup>106</sup> In earlier work, Darling made an important contribution through a similar approach acknowledging the instrumental value of extending legal protections to robots: Kate Darling, *Extending Legal Protections to Social Robots: The Effects of Anthropomorphism, Empathy, and Violent Behavior towards Robotic Objects*, in *ROBOT LAW*, *supra* note 84, at 306.

<sup>107</sup> Megan Garber, *Funerals for Fallen Robots*, THE ATLANTIC, Sept. 20, 2013, <https://www.theatlantic.com/technology/archive/2013/09/funerals-for-fallen-robots/279861/>.

<sup>108</sup> PETER SINGER, *WIRED FOR WAR: THE ROBOTICS REVOLUTION AND CONFLICT IN THE 21ST CENTURY* (2009).

<sup>109</sup> See, e.g., Kerr, *supra* note 100, at 290.

<sup>110</sup> Newitz, *supra* note 5.



interesting to see that they actually went further by *romanticizing* it.<sup>111</sup> Sharp went so far as to express mournful feelings about failing to live up to the genius in Benjamin's stage directions. "It was as if he were talking about letting a person down when he apologized for only having 48 hours to figure out what it meant for one of the actors to stand in the stars and sit on the floor at the same time."<sup>112</sup> "We copped out by making it a dream sequence," Sharp said.<sup>113</sup>

To apologetically cop out to the AI genius—whose singular vision is unattainable to the merely mortal film director with his more mundane imagination—is unquestionably a romantic anthropomorphic framing. One recognizes the power of this framing only when one recalls that "Benjamin" and other such neural nets are nothing more than a bunch of clever computer science techniques that permit machines to mimic tasks that would otherwise require human intelligence to achieve. It is therefore useful to unpack what is in fact happening when an AI generates a screenplay or portrait.

The particular use of the LSTM neural net that generated *Sunspring* involves training an algorithm to use a database full of science fiction screenplays to predict which letters tend to follow each other and, likewise, which words and phrases tend to occur together. According to Goodwin, the advantage of an LSTM algorithm over other AI techniques such as a Markov chain is that the LSTM can sample much longer strings of letters.<sup>114</sup> This makes it better at predicting whole paragraphs rather than just a few words. Now, one might be tempted to frame the LSTM neural network's ability to predict which words follow other words as an act of authorship. After all, isn't that the functional equivalence of what authors do when they string words together? It is important to remember, however, that, even if a machine predicts all the right words (clearly a romantic anthropomorphic framing: the machine as sole creator and master of the text), it neither knows, understands, nor appreciates the connotation of its word assemblage, let alone the meaning or value of the "work" as a whole. As Ryan Calo so poetically depicts this, the box is "gorged on data but with no taste for meaning."<sup>115</sup> Further, as we demonstrate in Part 4, the LSTM does not meaningfully participate in the circulation, interpretation or transformation of the work as part of the relational social practice of authorship.

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<sup>111</sup> And, not coincidentally, masculinized it. (See also Carys Craig, *Feminist Aesthetics and Copyright Law: Genius, Value, and Gendered Visions of the Creative Self*, in *DIVERSITY IN INTELLECTUAL PROPERTY: IDENTITIES, INTERESTS, AND INTERSECTIONS* 273 (Irene Calboli & Srividhya Ragavan, eds., 2015)).

<sup>112</sup> Newitz, *supra* note 5.

<sup>113</sup> *Id.*

<sup>114</sup> *Id.*

<sup>115</sup> Ryan Calo, *The Box* (forthcoming).

Still, at the end of the day, machine learning systems like the LSTM that generated *Sunspring* are potentially hugely valuable in their ability to transform a major human effort into a minor one. Once properly trained, a machine learning system can be used to pump out incredible volumes of new and sometimes interesting texts, portraits, etc., some of which are increasingly indistinguishable on their face from human creations and may be equally valued as such. But it is crucial to understand that these machines are not islands. Their outputs depend upon, and are inextricably linked to, a vast sea of texts authored by human actions, interactions and creative processes.

Consider, *It's No Game*, a short film premised on the idea that studios will use AI as a substitute for human writers during an impending Hollywood writers' strike. This film is described by its director (also the director of *Sunspring*) as an AI-human "collaboration." The AI, it turns out, generated all of the lines for the film's best-known actor, David Hasselhoff. In a highly emotional performance, supposedly infected by nanobots, his otherwise robotic character—the "Hoffbot"—delivers some gut-wrenching lines:

"I don't know who the hell I am. I wanna be a man," he sobs. "I wanna go to the movies!" The absurdist lines were written by AI, but Hasselhoff said they feel like they came straight from his heart. "This AI really had a handle on what's going on in my life and it was strangely emotional," he explained.<sup>116</sup>

While it is perhaps not particularly surprising to learn that David Hasselhoff felt as though the AI had a direct relay to his heart and an ability to channel his inner *psyche*—the actor is *not* without his eccentricities—it is interesting that, in saying so, he seems to have completely repressed something that he had surely once known, namely that those lines generated by the LSTM neural net were entirely based on all of his previous acting lines from his various roles over the years, all of which were written especially for Hasselhoff by human authors. Indeed, that was the exquisite point of the Hoffbot character; it was a Hasselhoff line generator. Some of those lines were ironic, some hyperbolic, others absurd. But they all contributed to an ongoing dialogue that shaped and was shaped by, first, Hasselhoff as human subject, and then the Hoffbot persona, as an amalgam of the 'greatest hits' of his many onscreen personae. This was the source of their hilarity, and their poignancy. The LSTM did not in any way participate in that sustained act of authorship other than by perpetuating everything that was already there. Clearly, contrary to

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<sup>116</sup> Annalee Newitz, *An AI Wrote All of David Hasselhoff's Lines in This Bizarre Short Film*, ARS TECHNICA (April 25, 2017, 6:30 AM), <https://arstechnica.com/gaming/2017/04/an-ai-wrote-all-of-david-hasselhoffs-lines-in-this-demented-short-film/>.

Hasselhoff's stated impression, the LSTM did not know Hasselhoff any better than it knew what a script was or what *this* particular script was about and why it was being written. To be sure, the LSTM is completely incapable of semantic knowledge. In seemingly attributing to the AI individuated, genius insight into Hasselhoff's own emotional life while, at the same time, neglecting entirely the incredible amount of human effort and authorial practice that made the Hoffbot possible, Hasselhoff was utterly romanticizing what the AI was doing.

The Hoffbot example illustrates that, rather than the rejection of the romantic author, it is the unknowing embrace of romantic authorship that often leads one to perceive the AI-as-author. Indeed, viewed in a certain way, the machine might, quite paradoxically, appear to be the *only* possible instantiation of the romantic author, or perhaps, at least, its *ideal type*: the only "creative" entity that exists in the idealized case without any relational embeddedness to the humans or culture by which it is surrounded (a context impossible for any socially situated human author). But this ignores the significance of the social context in which the machine itself was created, the code on which it runs, the data with which it was fed, and the meaning and role that it occupies in our collective imagination. The reality, of course, as several of the above examples are meant to demonstrate, is that even machines fail to attain the level of independence attributed to the romantic genius.

Indeed, it is not an exaggeration to say that AI outputs often represent the work of several villages of humans. Likewise with the portrait-producing GANs that use unsupervised learning and a zero-sum game framework to train themselves to generate unique outputs, these machines require databases full of human art in order to learn how to evaluate their outputs in the first place.<sup>117</sup> Behind every successful AI painting or screenplay stands not only a multitude of prior digitized paintings or screenplays from some historical period, laboriously fed into the machine's databases and applied to tweak its algorithm(s), but also, much more indirectly, all of the underlying anecdotes, sketches, snapshots storyboards, and narrations from which each of these were composed. This includes not just the digital representations themselves but an

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<sup>117</sup> See, e.g., Karen Hao, *Inside the World of AI That Forges Beautiful Art and Terrifying Deepfakes*, MIT TECH. REV., Dec. 1, 2018, <https://www.technologyreview.com/s/612501/inside-the-world-of-ai-that-forges-beautiful-art-and-terrifying-deepfakes/>; Kenny Jones, *GANgogh: Creating Art with GANs*, TOWARDS DATA SCIENCE (June 18, 2017) <https://towardsdatascience.com/gangogh-creating-art-with-gans-8d087d8f74a1> ("After a few initial tests we found [our models worked poorly] as the dataset with only 1200 paintings was too small... and so we turned to the wikiart database, which is a collection of over 100,000 paintings all labeled on style, genre, artist, year the painting was made, etc"); see also Wei Ren Tan et al., *ArtGAN: Artwork synthesis with conditional categorical GANs*, 2017 IEEE INT'L CONF. ON IMAGE PROCESSING (ICIP) (applying GANs to synthesize abstract / non-structured art, again based on the Wikiart dataset).

entire array of creative efforts and communicative expressions of prior generations of authors and artists engaged in an ongoing dialogue with others in their communities. Those authors spent years and lifetimes learning to express themselves in their most concise, effective form; they developed inexhaustible collections and depictions of human types and characters; they listened to and told tales at every opportunity, often with a sharp eye and ear for the effect on the audience; they excerpted from the various sciences everything that has an artistic effect if well portrayed.<sup>118</sup> They talked to one another, sometimes across generations; they studied each other's work, borrowed and improved upon each other's techniques, made references to and against the tradition, and had innumerable other micro and macro interactions, such that each work contains traces of myriad relationships within and across creative communities.

GAN-generated outputs such as the *Portrait of Edmond Belamy*, sold at Christies for nearly half a million dollars, render imperceptible all of these dialogic processes undertaken by prior generations of humans participating over time in the social practice of authorship. Consequently, when we substitute an AI for a human, we are permitting the AI to stand in for significant human expressive activity and relations of communication that occur, invisibly, behind the scenes.<sup>119</sup> Anthropomorphic framings of the work done by a GAN that speak of “deep learning,” “emergent creativity,” “generative works,” “algorithmic authorship” and the like may offer some utility; but such rhetorical flourishes also reinforce the illusion that machines possess a kind of intelligence and sociality that they do not—and cannot—in fact have. And the power that comes with rendering these human practices invisible—not unlike the power that permitted the romantic author to eclipse the shoulders of those giants upon which he stood (not to mention all of the minor bit players and socially insignificant others contributing behind the scenes) results in a kind of reification of the AI, as though it crafted its own individuated work by force of some “creative spark.”<sup>120</sup> With this type of anthropomorphic framing the AI becomes, quite predictably, the romantic author who creates *ex nihilo*.

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<sup>118</sup> 1 Friedrich Nietzsche, *The Earnestness of Handicraft*, in *HUMAN, ALL-TOO-HUMAN* §163, 98-99 (Courier, 2012) (1878).

<sup>119</sup> Astra Taylor warns us about this sleight-of-hand, which she refers to as “fauxtimation”. Fauxtimation is promulgated by “giving automation more credit than it’s actually due. In the process, we fail to see—and to value—the labor of our fellow human beings.” See Astra Taylor, *The Automation Charade*, 5 *LOGIC MAG.* (August 2018), <https://logicmag.io/05-the-automation-charade/>.

<sup>120</sup> As one author described Sandra Day O’Connor’s “creative spark” requirement in *Feist* (cf. note 40), it “invokes a metaphor... that if unpacked could be shown to carry a numinous aura evocative ultimately of the original divine act of creation itself. What, after all, passes between the outstretched forefinger of Michelangelo’s God and his Adam but, precisely, ‘some creative spark?’” (Mark Rose, *Copyright and Its Metaphors*, 50 *UCLA L. REV.* 1, 11 (2002)).

If this is beginning to sound like an elaborate straw person argument, consider the position of Mario Klingerman. Klingerman is a German artist on the leading edge of AI art. He recently sold his first AI-produced installation, *Memories of Passersby I*, at Southby's for \$51,000. Here is what he said in a recent interview with *The Guardian*:

“Humans are not original,” he says. “We only reinvent, make connections between things we have seen.” While humans can only build on what we have learned and what others have done before us, “machines can create from scratch”.

Klingerman knows very well that in order for his GAN to be generative, its “discriminator” net needs to be able to distinguish candidates produced by the “generator” net from the true data distribution provided by the set of human produced images that it is trying to emulate. In other words, it cannot learn and could not generate artistic representations without the thousands of prior paintings from the 17<sup>th</sup>-19<sup>th</sup> century that Klingerman trained it to emulate. The only possible sense in which it could be said that his machine learning system is producing anything “from scratch”—literally, *ex nihilo*—is in the mythical romantic sense in which the cumulative materials of creativity are simply discounted to preserve an ideology of absolute originality.

This kind of romantic anthropomorphic framing—whether intentional or otherwise—is not uncommon though, usually, much subtler in the scholarly literature on AI authorship. Still, when scholars frame AI authorship by saying that there is no one holding the pen,<sup>121</sup> or that the human author is removed from the work,<sup>122</sup> or that computers are increasingly able to create works unassisted by humans,<sup>123</sup> they imply if not entail a romantic conception of AI authorship. The suggestion is that “creative robots” are producing “entirely new works,” acting “autonomously” and “independently of the human beings who created the AI system.”<sup>124</sup> These portrayals of AI processes do exactly what classical portrayals of romantic authorship do—they depict, in this case, AI, as an ideological author that is able to transcend the realities and relationships of lived human experience. While it is certainly true that, when an

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<sup>121</sup> Bridy, *Coding Creativity*, *supra* note 19, at 21 (“With procedurally generated artwork, however, there is no one holding the proverbial pen. Whereas automatic writing proximately involves human endeavor (i.e., the output in question is human-generated), procedurally generated art does not (i.e., the output is machine-generated”).

<sup>122</sup> Kaminski, *supra* note 19, at 598 (“Algorithmic authorship purportedly disrupts copyright law because it removes, or greatly distances, the human author from the work.”).

<sup>123</sup> Boyden, *supra* note 19, at 378-79.

<sup>124</sup> Yanisky-Ravid & Velez-Hernandez, *supra* note 19, at 14.

AI substitutes for a human painter or screenwriter, the connection between the creative process and the work is obscured to the point that it may no longer be possible to trace the creative elements directly to the mind of a particular human author<sup>125</sup>—a causal problem, not an ontological one—it simply does *not* follow that AIs either could or should therefore be understood as potentially stepping into the category of “authors.” The flaws in such reasoning become clearer when authorship itself is more deliberately de-romanticized.

### 3. DE-ROMANTICIZING AUTHORSHIP

It is often said that copyright law, unlike literary theory, does not have the luxury of killing off the author:<sup>126</sup> so central is he to the purpose and functioning of the copyright system, that to declare his death would spell the end of copyright and the benefits it is generally presumed to bring. This is, however, no excuse for failing to engage with the question of what authorship is and why it matters; after all, this is a system whose norms—whose very existence—presume the necessity and so the importance of acts of authorship. As Julie Cohen explains:

[D]eeper engagement with "postmodernist" social and cultural theory need not lead to the debilitating relativism that copyright scholars fear. These literatures are better understood as opening the way for an account of the nature and development of knowledge that is both far more robust and far more nuanced than anything that liberal political philosophy has to offer.<sup>127</sup>

What the emergence of AI-generated works and the anxiety around their copyright status has demonstrated, perhaps above anything, is the marked absence of any satisfactory account of the ontology of authorship and its social significance underlying and guiding the law’s normative trajectory; which in

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<sup>125</sup> Boyden, *supra* note 19, at 380.

<sup>126</sup> See, e.g., Christopher Buccafusco, *A Theory of Copyright Authorship*, 102 VIRG. L. REV. 1229, 1267-8 (2016): “Constitutionally, copyright law requires authors; it cannot simply kill them off. What copyright law needs is a theory of authorship and writings that is consistent with and responsive to its constitutional goals.” (Buccafusco’s theory of copyright authorship posits that “an author is a human being who intends to produce one or more mental effects in an audience by an external manifestation of behavior.” To the extent that this emphasizes the relationship of communication between speaker and audience through the medium of the text, it is congenial to our position here.) See also Bridy, *Fearless Girl*, *supra* note 76, at 300-301.: “As a unified locus of aesthetic intention and creative productivity, the author is dead in the world of poststructuralism but alive and well in the world of copyright.”

<sup>127</sup> Julie Cohen, *Creativity and Culture in Copyright Law*, 40 U.C. DAVIS L. REV. 1151, 1165 (2007).

turn lays bare the paucity of the conception of the human subject that occupies the role of copyright's protagonist.

Meanwhile, the *author-function*, like the romantic depictions of AI in popular and scholarly literature, has been shown to be very much alive and well in the midst of AI's recent success at producing outputs with the external hallmarks of human creativity. Once again, the romantic author can be seen racing into action—as it has, historically—in service of economic interests and the continued expansion of copyright's domain. Margaret Chon's recent work on “romantic collective authorship” helpfully delineates two key functions of romantic authorship that persist even as creative practices radically evolve: first is the “genius” effect, which suggests that copyright is smitten with “the heroic self-presentation of Romantic poets” who “break altogether with tradition to create something utterly new, unique—in a word ‘original;’” and second is the “authorizing” effect, whereby “the romantic individual author has too influential a role in *authorizing* an approved set of cultural practices,” imposing patterns or order on human experience and creative processes, and acting as a cultural arbiter of value.<sup>128</sup> We see both author-effects present in the discourse around AI-generated works, where machine learning and related AI techniques are practically defined by their two most salient features: (i) emergent behavior; and (ii) pattern recognition.

Wordsworth believed that “[g]enius is the introduction of a new element into the intellectual universe: or, if that be not allowed, it is the application of powers to objects on which they had not before been exercised.”<sup>129</sup> As illustrated in Part 2, many proponents of AI authorship seem to see exactly this in the operation of AI—that is, the creation of something wholly new in ways that had never previously been achieved—from which the attribution of authorship and entitlement appear (as they did for Wordsworth) naturally to follow. Moreover, as Part 2 also demonstrates, the underlying approach in LSTM, GAN and other neural nets used in AI is quite fundamentally a process of imposing order on, and finding patterns in, the diversity of human experience and creative expression, and thereby attributing value and authority to these patterns and their effective replication.

The common assumption that recognizing AI authorship is inherently *unromantic*—perhaps so perceived by virtue of its departure from any overt

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<sup>128</sup> Chon, *supra* note 44, at 830-831.

<sup>129</sup> *Id.*, at 837, citing Martha Woodmansee, *On the Author Effect: Recovering Collectivity*, in *THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE* 1, 16 (Peter Jaszi & Martha Woodmansee, eds., 1994), quoting William Wordsworth, *Essay, Supplementary to the Preface*, in 1 *THE PROSE WORKS OF WILLIAM WORDSWORTH* 82 (W. J. B. Owen & Jane Worthington Smyser, eds., 1974) (1876).

*humanism*—risks overlooking the presence and potential consequences of the romantic author-*function* precisely when we need to be most alert to it: that is, as we enter into a critical policy-making period spurred by this new technological promise, and coloured by the vast economic interests at stake. In what follows, then, our aim is to beat a path towards *de-romanticizing* AI authorship. First, we explain in this Part why de-romanticization cannot be achieved simply by the slide into economic utilitarianism that is often presented, falsely, as an alternative to romanticism. Rather, as we go on to describe in Part 4, the route towards a de-romanticized approach to AI-generated works lies in a dialogic theory of authorship supported by a relational understanding of the human self.

Copyright law is often presented as having two available, but philosophically oppositional, underlying justifications.<sup>130</sup> On one hand, there is the deontological approach, which offers natural rights-based justification for the author's entitlement to preside over his work as owner. On the other hand, there is the teleological approach that, true to form, seeks to justify copyright through an instrumental or consequentialist logic, rationalizing the author's control over his work as a means to a larger (social) end. Deontological rights-based theories in turn break down into two available and potentially oppositional alternatives: a justification premised on the mental labour of the author, typically framed in traditional Lockean terms that speak to the author's right to appropriate the fruits of his mental labour and to exclude others who might seek to benefit from his pains.<sup>131</sup> Across the philosophical aisle are adherents to a personality-based justification for the author's rights, typically framed in Hegelian,<sup>132</sup> but sometimes Kantian,<sup>133</sup> terms, speaking to the author's right to own—again as a matter of natural justice—his speech or his work that bears the imprint of his unique personality, the externalisation of his will in the world. Across the greater ideological divide, by far the most dominant version of a teleological approach is the US utilitarian framing, which leans on economic theory to explain copyright as an incentive system to

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<sup>130</sup> See generally, William Fisher, *Theories of Intellectual Property Law*, in NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY (Stephen R. Munzer, ed., 2007), <https://cyber.harvard.edu/people/tfisher/iptheory.pdf>; Peter S. Menell, *Intellectual Property: General Theories*, in II ENCYCLOPEDIA OF LAW & ECONOMICS (Boudewijn Bouckaert & Gerrit de Geest, eds., 2000), <http://www.dklevine.org/archive/ittheory.pdf>.

<sup>131</sup> For a critical discussion of this approach, its sources and its implications, see Carys Craig, *Locke, Labour and Limiting the Author's Right: A Warning Against a Lockean Approach to Copyright Law*, 28 Queens L.J. 1 (2002).

<sup>132</sup> See, e.g., Justin Hughes, *The Philosophy of Intellectual Property*, 77 Georgetown L.J. 287, 299-330 (1988).

<sup>133</sup> See, e.g., ABRAHAM DRASSINOWER, WHAT'S WRONG WITH COPYING? (2015).



advance (in the words of the US Constitution) the progress of science and the useful arts.<sup>134</sup>

The teleological view is not, however, exhausted by the economic utilitarian perspective (though many esteemed copyright theorists have been!). There remains space, in the consequentialist vein, to justify (or at least explain) the copyright system based on its capacity “to help foster the achievement of a just and attractive culture.” This approach, helpfully categorized by William Fisher as Social Planning Theory, draws on a broad array of political, cultural, and critical theory to articulate a variety of visions of what this society might look like, and what role copyright might play in advancing it. Broadly speaking, teleological justifications that fit this social planning mold differ from utilitarianism in their “willingness to deploy visions of a desirable society richer than conceptions of ‘social welfare’ deployed by utilitarians.”<sup>135</sup> To be clear, it is this broader, more robust social account that motivates our approach.

This short digression (and, admittedly, over-simplification) is necessary, at this stage, to explain why we decline to embrace bald economic utilitarianism as a means to exorcize the romantic author specter. Much of the legal scholarship around AI-generated works seems to set up romanticism in opposition to utilitarianism. Kaminski, for example, suggests that US copyright law, with its underlying utilitarian theory, does not rest on the “antiquated eighteenth century notion of the romantic author—a human individual of lone genius inspired in a vacuum to create an original work,”<sup>136</sup> making it more hospitable to “algorithmically authored” works. Arguing that utilitarianism is less concerned with questions of “humanness” than with matters of incentives and net social welfare, she explains:

[U]tilitarianism is more removed from the humanity of its author than, say, moral rights or natural rights theory. Moral rights theory focuses on a human’s personhood, natural rights on the fairness of rewarding human labor... By contrast, by focusing on the net benefit creative works bring to society, utilitarianism addresses not just a sole human author but also the vast human audience that receives and benefits from...copyrighted works.<sup>137</sup>

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<sup>134</sup> U.S. CONST. art. I, § 8, cl. 8 (providing that Congress shall have the power “To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”)

<sup>135</sup> Fisher, *supra* note 130, at 4 (cited to online version).

<sup>136</sup> Kaminski, *supra* note 19, at 598.

<sup>137</sup> *Id.*, at 598-9.

The assumption seems to be that US utilitarianism is not configured to house the romantic author,<sup>138</sup> and that romanticism, in turn, does not accommodate the AI author. We have already suggested that the AI author is perfectly comfortable within the romantic author's domain; and here we suggest that the romantic author can (and does), in turn, comfortably continue to reside within a utilitarian copyright landscape.

Undoubtedly, Kaminski is correct to assert that the romantic vision of authorship coheres best with a personality-rights based theory of copyright: authorship as an individualized act through which the personal genius of the author is brought to the world, giving rise to the author's claim to ownership over his work and control over its use. This is the most obviously romantic of justifications. It is also true that the romantic author trope becomes more tenuous and ultimately less tenable as he moves between these justificatory frameworks, having to work harder (so to speak) in the Lockean natural rights framework, and harder still in the utilitarian one, to make his presence felt—and yet he pervades each in important ways, in the figure of the individual, original author that is, again, central to copyright's possessive individualist underpinnings. Indeed, the reader will recall that the more ill-suited the romantic author specter is to the authorial act or legal doctrine at issue, the larger he looms as a normative force, guiding our intuitions and shaping our assumptions.

Thus, for example, the utilitarian approach seems to offer the best support for the work-for-hire doctrine, justified in terms of consolidating ownership in a single entity for the sake of efficiency: directing incentives at the entity capable of overseeing creative production, reducing information costs, improving transactional efficiency, easing distribution, etc.<sup>139</sup> Nonetheless, these results could be (and are, in many jurisdictions) achieved by allocating first ownership of copyright rather than deeming authorship. The author badge is doing normative work here, anthropomorphizing the corporate copyright owner, attributing by way of substitution the same romantic genius, inspiration and worthiness as one might to the human author behind a creative work, and thereby legitimizing the claim to own and exclude in ways that reverberate deeper than the mere drive for profit. As explained in Part 2, that is precisely how the legal fiction works here.

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<sup>138</sup> Cf. Bridy, *Fearless Girl*, *supra* note 76, at 299 (describing the clash between the “Continental view of copyright as a guarantor of authorial supremacy and the more utilitarian, public orientation of the U.S. copyright law”, and suggesting that, unlike the US law, the Continental law “encodes what Bakhtin would characterize as a monologic aesthetics centered on the work as an extension of authorial personality.”)

<sup>139</sup> See Ng, *supra* note 30, at 38-40.

The utilitarian approach may, as Kaminski suggests, similarly offer the best support for recognizing (read: deeming) AI authorship as a means to incentivize and maximize the ongoing creation of AI-generated works (if this is considered a worthy objective) and/or the AI that generates them (as a second layer of valuable/profitable production). The objective value of the AI-generated work, regarded as functionally equivalent to human-authored works (at least if our social welfare concern is only with maximizing the production of *outputs*) may well lead us down this utilitarian path to the conclusion that AI works ought to be protected. We, too, see the connection that Bridy makes between the fictional employer-author and the fictional-AI author<sup>140</sup>—and so our purpose here is to caution against a similar reliance on romantic authorship to anthropomorphize, romanticize, mischaracterize, and legitimize. Ultimately, the persistent presence of the romantic author will function to obfuscate the significance of the shift to rewarding *non-human* authorship through copyright structures, causing it to appear merely as a natural, seamless extension of our existing structures of control. To regard it as such is, again, a mistake. Meanwhile, as Part 2 suggests, the human subjects involved in AI's generative processes will be invisibilized, just as they are when human wage laborers are cast as “automatons.”<sup>141</sup>

The fact that the US utilitarian copyright model is, in practice, “far...from requiring the *humanness* of its creators” does not mean that its “*concept* of authorship differs greatly from the romantic model.”<sup>142</sup> The concept of authorship persists, we would suggest, even if the reality of who actually gets to claim and enjoy the benefits of authorship are incongruent with the romantic ideal. Utilitarianism, in short, does not escape the ideological clutches of the romantic author-function. Moreover, the individualized, atomistic self of liberal theory that supports and overlays the romantic author figure is positively vibrant in utilitarian theory. As Charles Taylor states: “[T]he modern philosophy of utilitarianism is from its very foundations committed to atomism. From within this philosophy it just seems self-evident that all goods are in the last analysis the goods of individuals.”<sup>143</sup> In this context, the atomistic individual dons the cloak of what feminists have dubbed the “*homo economicus*” or “economic man” who dominates copyright’s increasingly utilitarian narratives.<sup>144</sup> The universal subject of the neo-classical economic model—the unencumbered subject who makes rational calculations on the

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<sup>140</sup> See Bridy, *Coding Creativity*, *supra* note 19, at 25-27.

<sup>141</sup> Kaminski, *supra* note 19, at 602, citing Bracha, *supra* note 31, at 259.

<sup>142</sup> Kaminski, *supra* note 19, at 602.

<sup>143</sup> CHARLES TAYLOR, *PHILOSOPHICAL ARGUMENTS* 128 (1995).

<sup>144</sup> See Elizabeth Mayes, *Private Property, the Private Subject, and Women: Can Women Truly Be Owners of Capital?*, in *FEMINISM CONFRONTS HOMO ECONOMICUS: GENDER, LAW & SOCIETY* (Martha Albertson Fineman & Terence Dougherty, eds., 2005).

basis of self-interest—similarly excludes due consideration of human relations, situation, and power. This positionality of the *homo economicus* outside the realities of relational life and structures of power should suggest, to anyone within these structures, that “economic rationales are often merely a way to preserve the...status quo.”<sup>145</sup> This seems true of his role in copyright, the utilitarian rationales for which so depend on the vision of the industrious, deserving, and rational author entering the marketplace, intellectual property in hand, ready to freely contract for value—a myth that serves to perpetuate existing social, economic and knowledge hierarchies.

Furthermore, as Shelley Wright has warned, where society and community is presented as ‘an aggregate of anomic individuals,’ the *social* justification for copyright is undercut.<sup>146</sup> If the goal of copyright is to encourage authorship, the concept of economic efficiency is simply ill equipped to capture the nature of authorship as a social good. In Neil Netanel’s terms, “neoclassicism cannot serve as the basis for copyright doctrine because copyright’s primary goal is not allocative efficiency....”<sup>147</sup> Rather, Netanel compellingly argues, copyright’s purpose is to “bolster[] the discursive foundations” of a robustly participatory culture and democratic civil society.<sup>148</sup> Economic theory may have tools to assist policy makers in designing appropriate incentive structures to encourage socially desirable behaviours including the production and distribution of creative works. Lodged, as it is, in an individualistic tradition, economic utilitarianism does not, however, have the tools within it to adequately reflect the ontology of authorship or to explain *why* the act of authorship *matters*.

The following passage by Wright speaks to our overarching concern with the liberal individualism that infuses the romantic authorship myth, and which pervades both rights-based *and* utilitarian justifications for copyright:

The existing definition of copyright as both economic and personal within a political or civil context presupposes that individuals live in isolation from one another, that the individual is an autonomous unit who creates artistic works and sells them, or permits their sale by others, while ignoring the individual’s relationship with others within her community, family, ethnic group, religion – the very social relations out of which and for the benefit of whom the individual’s limited monopoly rights are supposed to exist. The community has only the most tenuous identity. Society itself is seen as an aggregate

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<sup>145</sup> *Id.*, at 58.

<sup>146</sup> See Shelley Wright, *A Feminist Exploration of the Legal Protection of Art*, 7 CAN. J. WOM. & L. 59, 73-74 (1994).

<sup>147</sup> Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 288 (1996).

<sup>148</sup> *Id.*

of anomic individuals, each separate, segregated, fragmented, ... This vision undercuts to a large extent the social justification for monopoly rights as they exist in copyright and places the emphasis on the individual rights of the artist as a “creator” and the artist, or her publisher, as a producer of saleable commodities.<sup>149</sup>

The slide to utilitarianism is therefore not a solution to the problems that we perceive with the individualized author figure/function notwithstanding the shift from the deontological to the teleological. Rather than taking a utilitarian turn towards economic theory, then, we propose a discursive turn towards relational theory. This can illuminate the importance of authorship to the author, the audience, *and* participatory society in a way that theories wedded to the discourses of individualism and legal liberalism cannot. It is therefore preferable to a utilitarian approach that, in Kaminski’s terms, “makes the discussion of authorship a discussion about incentives and net social welfare rather than humanness,” or that focuses only on the value that works bring to human audiences.<sup>150</sup> After all, every human author is also part of the human audience, necessarily “working through culture.”<sup>151</sup>

#### 4. AN ONTOLOGY OF AUTHORSHIP

As we have argued, literary theory, even in the poststructuralist strain, has not abandoned the idea of the author—a situated, speaking subject—and her participation in an ongoing process of dialogic exchange. The writer who produces the text is both social product and social agent, her authorship a communicative act necessarily embedded within discursive networks or systems. The work of authorship, as utterance, mediates the relations between the situated speaker subject and addressee/audience (horizontally), but also sits in dialogic relation to the corpus of texts that have come before or alongside it (vertically),<sup>152</sup> and in anticipation of those still to come.<sup>153</sup> In Bakhtinian terms, “every utterance participates in the ‘unitary language’...and at the same time partakes of social and historical heteroglossia.”<sup>154</sup> As the situated author-subject speaks, “each word tastes of the context and contexts in which it has lived its socially charged life.”<sup>155</sup> For Foucault also, “there is a close

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<sup>149</sup> Wright, *supra* note 146, at 73-74.

<sup>150</sup> Cf. Kaminski, *supra* note 19, at 599.

<sup>151</sup> Cf. Cohen, *supra* note 77, at 179-180.

<sup>152</sup> See ALLEN, *supra* note 66, at 38 (describing Kristeva’s conception of the horizontal and vertical dimensions of intertextuality).

<sup>153</sup> See LESLIE BAXTER, *VOICING RELATIONSHIPS: A DIALOGIC PERSPECTIVE* (2010).

<sup>154</sup> BAKHTIN, *supra* note 68, at 272.

<sup>155</sup> *Id.*, at 293.

relationship between language (including all forms of text) and social process (conceived in terms of power relations).”<sup>156</sup>

Just as the romantic author both entails and requires a particular vision of selfhood and society, so too does a dialogic theory of authorship: rather than Enlightenment individualism, it invokes a relational concept of the self, always already embedded in a complex network of social and cultural relations. Social constructionist Kenneth Gergen explains the link between literary theories of intertextuality and relationality: “Words are active insofar as they are employed by persons in relationship, insofar as they are granted power in human interchange. A relationship between author and reader is required for us to speak of...textual construction....”<sup>157</sup> Because language is fundamentally a vehicle for communication, its use is inevitably relationally dependent, its form always fashioned by the relationships out of which and into which one is speaking.<sup>158</sup> It is the relationship and the human interchange that gives language—or works—their ability to *mean* something: “*An individual’s utterances in themselves possess no meaning.* In the relational case...there is no proper beginning, no originary source...for we are always already in a relational standing with others and the world.”<sup>159</sup> In Wittgensteinian terms: “What I hold fast to is not one proposition but a nest of propositions.”<sup>160</sup>

Literary theorists such as Barthes have therefore provided the impetus, Gergen argues, for foregrounding relationality in our efforts to understand the nature of communication: rather than beginning with the individual subject and working to provide an account of human understanding through language, we should “begin our analysis at the level of the *human relationship* as it generates both language and understanding.”<sup>161</sup> If authorship involves the act of communicating, speaking through text to others, the interchange of meaning “ultimately depends on a protracted array of relationships, extending, one may say, to the relational conditions of society as a whole.”<sup>162</sup> It makes no conceptual sense, then, to position the author-figure as one who is “isolated both spatially and temporally from his community and the background of the art in which he works.”<sup>163</sup> The dialogic act of authorship cannot be separated from a social context because the “[u]tterance, as we know, is constructed

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<sup>156</sup> *Id.*, at 47.

<sup>157</sup> KENNETH GERGEN, REALITIES AND RELATIONSHIP: SOUNDINGS IN SOCIAL CONSTRUCTION 47 (1994).

<sup>158</sup> *Cf.* SHEILA MCNAMEE & KENNETH J. GERGEN, RELATIONAL RESPONSIBILITY: RESOURCES FOR SUSTAINABLE DIALOGUE 12 (1999).

<sup>159</sup> GERGEN, *supra* note 157, at 263-4.

<sup>160</sup> LUDWIG WITTGENSTEIN, ON CERTAINTY § 225.

<sup>161</sup> GERGEN, *supra* note 157, at 263.

<sup>162</sup> *Id.*, at 268.

<sup>163</sup> Wright, *supra* note 146, at 62.

between two socially organized persons.... The *word is oriented toward an addressee*, toward who that addressee might be.... There can be no such thing as an abstract addressee, a man unto himself, so to speak.<sup>164</sup> Or, as analytic philosophers argue, there is no such thing as a private language.<sup>165</sup>

In this vision of subjectivity, relationality is a central precondition of the human self, neither peripheral nor conditional upon individual action or choice. The bounded unitary self of liberal individualism is a figment of Western political imagination—the ghost in the machine of the liberal political system, as it were. Relational theory takes as its premise that “persons are socially embedded and that their identities form within the context of social relationships.”<sup>166</sup> It is important to emphasize that this social constructionist theory of the author does not deprive the author of subjective agency or self-determination. Indeed, the situated subject exercises creative agency through language, by engaging in the constituting and constitutive process of dialogic authorship. As communitarian theorist Charles Taylor succinctly states: “Human beings are constituted in conversation.”<sup>167</sup> Once again, however, feminist theorists in particular have forged the path towards a vision of selfhood that is neither radically independent of social relations, nor irretrievably subsumed by them. A rich and diverse array of feminist perspectives on the relational self generally share the insight that “mutual, reciprocal, communicative social interactions are necessary for the formation, sustenance, and repair of the self.”<sup>168</sup> Legal theorist Jennifer Nedelsky, in particular, offers a comprehensive account of “relational autonomy” that presents the human subject as embedded in social networks of interdependence, but also as possessing autonomy—autonomy that is properly conceptualized in relational terms: it is only *through* relationships that genuine autonomy is made possible.<sup>169</sup>

Interestingly, Nedelsky casts the agency and autonomy of the relational self in terms of a human capacity for self-creation: “a capacity that means we are never fully determined by our relationships or our given material

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<sup>164</sup> M. M. BAKHTIN & V.N. VOLOŠINOV, *MARXISM AND THE PHILOSOPHY OF LANGUAGE* 85 (Ladislav Matejka & I.R. Titunik, trans., 1986).

<sup>165</sup> LUDWIG WITTGENSTEIN, *PHILOSOPHICAL INVESTIGATIONS* §§244–271.

<sup>166</sup> CATRIONA MACKENZIE AND NATALIE STOLJAR, *RELATIONAL AUTONOMY: FEMINIST PERSPECTIVES ON AUTONOMY, AGENCY, AND THE SOCIAL SELF* 4 (2000) (cited in ROBERT LECKEY, *CONTEXTUAL SUBJECTS: FAMILY, STATE AND RELATIONAL THEORY* 18 (2008)).

<sup>167</sup> Quoted in GERGEN, *RELATIONAL BEING: BEYOND SELF AND COMMUNITY* 45 (2009)

<sup>168</sup> Amy Allen, *Foucault, Feminism and the Self: The Politics of Personal Transformation*, in *FEMINISM AND THE FINAL FOUCAULT* 240 (Dianna Taylor & Karen Vintges, eds., 2004) (quoted by Leckey, *supra* note 166, at 8).

<sup>169</sup> JENNIFER NEDELSKY, *LAW’S RELATIONS: A RELATIONAL THEORY OF SELF, AUTONOMY, AND LAW* (2011).

circumstances.... We are always in a creative process of interaction, of mutual shaping, with all the dimensions of our existence.”<sup>170</sup> Identity and subjectivity are constituted by dynamic interaction with others in a process of dialogic exchange, both interpersonal and intrapersonal. It is through this dialogic process of interpreting and ordering experiences, discourses, and social forces that the socially-situated subject is able to exercise creative agency.<sup>171</sup> Nedelsky is speaking here of creativity in the sense of the “capacity to resist and transform existing patterns”, to transcend or transform the traditions and relations into which one is born—a capacity for creation that develops, she says, “in constant interaction with layers of social relation.”<sup>172</sup> But what we see, and what Nedelsky expressly acknowledges, in this description, is the power and agency of artistic creativity—of authorship—in the exercise of what she calls “autonomy within relations:”

Part of what we cherish in the *human capacity* for innovation, for *artistic creation*, for new forms of social relations...is the ability of individuals not to be determined by their history or the prevailing norms and practices of their communities. We observe and honour the capacity to bring forth the new, to create, to transform, to resist.<sup>173</sup>

This helpfully brings together the idea of dialogic authorship with relational autonomy: both represent a “kind of creative engagement with the world.”<sup>174</sup> The creation of art—in our terms, the act of authorship—is, in a sense, an obvious and observable output of the “human capacity for creation and its component of autonomy.”<sup>175</sup> And by thinking of authorship as a capacity for creative interaction, rather than individual origination, we can emphasize that “creativity always takes place in relation to what exists and that the creativity exceeds, transforms, generates something new out of what exists.”<sup>176</sup> Much of the positive dimension of the Western attachment to autonomy, for Nedelsky, is attached to this capacity “to envision something new, to shift...the terms of relations—whether through an idea, an invention, art..., [which] requires a capacity, at least in small ways to be imaginative and innovative.” But, crucially,

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<sup>170</sup> *Id.*

<sup>171</sup> *Cf.* Carys Craig, *Reconstructing the Author-Self: Some Feminist Lessons for Copyright Law*, 15 J. GEN. SOC. POL’Y & LAW 207, 260 (2007).

<sup>172</sup> NEDELSKY, *supra* note 169, at 55.

<sup>173</sup> *Id.*, at 51 (emphasis added).

<sup>174</sup> *Id.*, at 47.

<sup>175</sup> *Id.*

<sup>176</sup> *Id.*, at 48. On the broad implications of this for the development of copyright doctrine, including originality, fair use and fair dealing, see generally CARYS CRAIG, *COPYRIGHT, COMMUNICATION AND CULTURE: TOWARDS A RELATIONAL THEORY OF COPYRIGHT LAW* (2011). See also JAMES MEESE, *AUTHORS, USERS AND PIRATES: COPYRIGHT LAW AND SUBJECTIVITY* (2018).



“[i]t is important not to read the above as invoking a human capacity for greatness or genius.”<sup>177</sup> The creative capacity for imagination comes from within the human actor “enabled by her relational web.” Nedelsky insists that this capacity has great value, indeed it is “essential to life”<sup>178</sup>—“despite the ugly caricature of it in the iconic independent, self-made man”<sup>179</sup> (who should by now be familiar to us as an instantiation of the romantic author).

This notion of human creative interaction captures the ontology of authorship as we understand it. Authorship, as discursive interaction, necessarily occurs in the domain of relatedness – a domain alien to the romantic author, of course, and likewise foreign to the machine. Reflecting on the implications of AI authorship, as discussed in Part 2, Kaminski suggests that “[r]omanticizing creativity as some essential aspect of human identity is harder to do when a machine can produce the same creative works.”<sup>180</sup> But to regard creativity as an essential aspect of human identity—and therefore essentially *human*—one need not romanticize it; indeed, as we have argued, if romanticism entails individualism, then one must not; in doing so we would lose what it is about creativity that makes it so essential. And so, we would suggest, the outputs generated by AI—whether or not that AI passes a Turing test—are never in fact “the same” as the human creations they seek to imitate. Bakhtin wrote that “consciousness is never self sufficient; it always finds itself in an intense relationship with another consciousness.”<sup>181</sup> If text is a vehicle through which our consciousness relates to another consciousness—one or many, immediate or asynchronous—then authorship presupposes something that AI does not have, and cannot produce. The romantic author is fictive in his isolation and original genius, and so cannot resemble the relational human author that we have described here, engaged in a dialogic exchange of meaning. The ‘AI author’ is similarly fictive, imaginary in its supposed autonomy and emergent creativity, and bears no ontological resemblance to the human author. The death of the romantic author is, therefore, the death of the AI author.

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<sup>177</sup> NEDELSKY, *supra* note 169, at 48.

<sup>178</sup> *Id.*, at 73: Nedelsky believes that “all life-forms possess this capacity in some degree. It is essential to life.” Even this broad vision of the creative capacity, which could in practice extend to include animals, would not extend past the realm of living being to encompass machines.

<sup>179</sup> *Id.*, at 49.

<sup>180</sup> Kaminski, *supra* note 19, at 594.

<sup>181</sup> Quoted in MCNAMEE & GERGEN, *supra* note 158, at 11.

## CONCLUSION: THE DEATH OF THE AI AUTHOR

“To live means to participate in dialogue: to ask questions, to heed, to respond, to agree, and so forth,” wrote Bakhtin.<sup>182</sup> We might equally say that to participate in dialogue of this nature means to be alive—something that artifacts, by definition, cannot be. If the great value of authorship to society lies in encouraging the human creative capacity “to resist and transform existing patterns,”<sup>183</sup> this value is nowhere to be found in AI processes that merely identify existing patterns, reinforce and replicate them. To say authorship is human, that it is fundamentally connected with *humanness*, is not to invoke the romantic author, and nor is it to impose a kind of chauvinism that privileges human-produced artifacts over those that are machine-made. Rather, it is to say that human communication is the very point of authorship as a social practice; indeed, as a condition of life. As such, we do not think we are being at all romantic when we say: authorship is properly the preserve of the human.

The false dichotomy between romantic and non-human is readily understandable, but it ignores vast swathes of philosophical, literary, socio-cultural theory on the nature of language, authorship, relationality and law. In doing so, it risks oversimplifying the issues at stake in our current conundrums around the treatment of AI-generated works within our copyright framework. This in turn risks undermining efforts to develop a broader teleological vision for copyright policy, guided by a richer concept of culture and society than utilitarianism can offer. Even more fundamentally, however, it misses an opportunity to engage with essential normative and ontological questions about the nature, role and relational networks into which artificial intelligence is stepping, and the social values that should inform its regulation.

Binaries make good code—but false binaries make bad law.

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<sup>182</sup> Quoted in GERGEN, *supra* note 157, at 39.

<sup>183</sup> *Cf.* Nedelsky, *supra* note 169, and accompanying text.