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IMPOSSIBILITY OF EMERGENT WORKS' PROTECTION IN U.S. AND EU COPYRIGHT LAW

Matt Blaszczyk*

"The challenge of modernity is to live without illusions and without becoming disillusioned." —Antonio Gramsci[1]

Protection of emergent works is impossible. Without an author, there is no expression of ideas which can be original, and thus no copyrightable work. Indeed, the whole system of copyright law, its conceptual building blocks of idea-expression dichotomy, originality, authorship, and the concept of a protectable work operate in the notation of human creativity. Emergent works fall outside of copyright's positive ontology, being akin to ideas, facts, or subject-matter predicated by technical considerations, rather than authorial creativity. In other words, they do not exist as things in law and thus cannot as such be owned. Rather, like any idea, they can be transformed through creative expression of an author—possibly becoming works, but also not being authorless or emergent anymore. This is argued as a matter of the U.S. and EU legal doctrines, the international framework, and copyright theory.

* LL.M. Georgetown University Law Center; LL.B., Dickson Poon School of Law, King's College London and the Center for Transnational Legal Studies, London. I am grateful to Professors Gregory A. Scopino and Madhavi Sunder for their support, and to all of the NC JOLT editors and staff, particularly, Melissa Zaleski and Sophia M. Vouvalis, for their assistance throughout the editorial process. Most of all, I would like to thank my parents for their unwavering support: *Mamo, Tato, dziękuję.*

[1] ZYGMUNT BAUMAN & EZIO MAURO, BABEL 61 (2016) (quoting ANTONIO GRAMSCI, QUADERNI DAL CARCERE (1971)).

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I. INTRODUCTION

Protection of *emergent works* is impossible. *Emergent works* are "works of *apparently creative expression* that arise from the operation of a program but cannot be traced directly to a human source."[2] While emergent works can theoretically encompass subject matter factually created in a variety of circumstances, the

[2] Bruce Boyden, *Emergent Works*, 39 COLUM. J.L. & ARTS 337, 379 (2016) (emphasis added).

core case considered in this Article is the supposed autonomous outputs of artificial intelligence ("AI"). The extent of human involvement in the creative process demarcates *emergent* or computer-generated works from those where technology is used as a mere tool in the hands of the purported author, often referred to as *computer-aided* or *computer-assisted* works.[3] In the case of emergent works, there is no human author, and therefore there can be no copyright protection. This argument is framed as a matter of copyright theory, the international legal framework, and the copyright doctrines of the United States ("U.S.") and the European Union ("EU").

Without a human author, there is no expression of ideas that can be original, and thus no copyrightable work. Indeed, the whole system of copyright law—its conceptual building blocks of idea-expression dichotomy, originality, authorship, and the concept of a protectable work—operate in the notation of human creativity.[4]

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[3] These distinctions, just like the question of copyrightability of works where the involvement of machines makes authorship contestable, are not novel, as they have been asked for decades. *See* U.S. COPYRIGHT OFF., SIXTY-SEVENTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 4 (1965); U.S. COPYRIGHT OFF., SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 4–5 (1966); NAT'L COMM'N ON NEW TECH. USES OF COPYRIGHTED WORKS (CONTU), FINAL REPORT OF THE NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS 43–46 (1978); U.S. OFF. OF TECH. ASSESSMENT (OTA), INTELLECTUAL PROPERTY RIGHTS IN AN AGE OF ELECTRONICS AND INFORMATION 69–73 (1986).

[4] *See* Daniel J. Gervais, *The Machine as Author*, 105 IOWA L. REV. 2053, 2079 (2020); Patrick Zurth, *Artificial Creativity? A Case Against Protection for AI Generated Works*, 25 UCLA J.L. & TECH. 1, 3 (2021) (writing "one common thread" of jurisdictional variations of copyright regime emerges: "copyright is based on an anthropocentric perspective. Authors are considered to be human."). Indeed, it seems that the laws of most jurisdictions require human authorship. Andres Guadamuz, *Artificial Intelligence and Copyright*, WIPO MAG. (Oct. 2017), https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html [https://perma.cc/KL3Y-XLHP]. *But see* Annmarie Bridy, *The Evolution of Authorship: Work Made by Code*, 39 COLUM. J.L. & ARTS 395, 399–400 (2016) [hereinafter *Evolution of Authorship*] (claiming that there is no requirement of *human* authorship in American copyright law); Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 5 STAN. TECH. L. REV. 1 (2012) [hereinafter *Coding Creativity*]; Shlomit Yanisky-Ravid, *Generating Rembrandt: Artificial Intelligence, Copyright, and Accountability in the 3a Era—The Human-*

Emergent works fall outside of copyright's positive ontology because such works are akin to ideas, facts, or subject matter being predicated by technical considerations, rather than authorial creativity. In other words, they do not exist as *things in law*—which, in copyright, are called "works"—and thus, cannot be owned. Rather, like any idea, they can be transformed through creative expression of an author and possibly become works but would cease being authorless or emergent at that point.

This Article demonstrates that the ontological building blocks of copyright—idea-expression dichotomy, originality, requirement of human authorship, and the concept of a protectable work—allow for the law to form its own reality, demarcating the rules of the game and determining what acts can bring about particular legal consequences, i.e., what is necessary to obtain copyright in a work.[5] Copyright law is a human artifact, a product of a particular moment in the history of ideas which creates its own fictional world, a conventional domain, which in turn ascribes particular words and acts with copyright's own specific meaning.[6] The requirement of an original human expression allows us to assess the legal validity of a particular act. For example, consider a person launching an AI system to generate a particular subject matter as the program's output. Once we determine affirmatively that a person factually caused that output to be, the next inquiry is whether that person's

Like Authors Are Already Here—A New Model, 2017 MICH. ST. L. REV. 659 (2017); Margot E. Kaminski, *Authorship, Disrupted: AI Authors in Copyright and First Amendment Law*, 51 U.C. DAVIS L. REV. 589 (2017).

[5] Jason Grant Allen, *Law's Virtual Empires: Game Analogies and the Concept of Law*, *in* CONCEPTUAL JURISPRUDENCE 267, 272 (Jorge Luis Fabra-Zamora & Gonzalo Villa Rosas eds., 2020) (arguing that both the law and games are "domains of social reality constituted by rules"). For a famous account explaining law's normativity in a similar way, see Joseph Raz, *Normative Systems*, *in* PRACTICAL REASON AND NORMS 107 (1999).

[6] Allen, *supra* note 5, at 272; *see also* Andrei Marmor, *Law as Authoritative Fiction,* 37 LAW & PHIL. 473 (2018); Robert M. Cover, *Foreword: Nomos and Narrative*, 97 HARV. L. REV. 4 (1983).

contribution was of such quality to make them the output's author in law; simply put, did they do enough?[7]

As will be shown, copyright's causal inquiry and the whole of copyright's game derives its meaning from the notion of human creativity,[8] which permeates the doctrine, the international treaties, copyright's theory, and the underlying philosophical assumptions.[9] Emergent works do not fit into this picture at all as non-authorial, non-creative contributions need to be discounted as legally irrelevant.

This Article argues that copyright *cannot* provide protection to AI-generated works as a matter of normative coherence of the law and expands more specifically on how such emergent works cannot be protected under U.S. and EU copyright laws.[10] Protecting AI-generated works under copyright law is conceptually impossible, involving a degree of self-contradiction that undermines the integrity of the law.[11] To be clear, this argument is not concerned with the political or philosophical question of whether emergent works deserve protection or whether robots should be granted rights

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[7] Allen, *supra* note 5, at 282. For a classic treatment of factual versus legal causation, see HERBERT L. A. HART & TONY HONORÉ, CAUSATION IN THE LAW (2d ed. 1985).

[8] *See* LUDWIG WITTGENSTEIN, PHILOSOPHICAL INVESTIGATIONS (1953) (writing that the meaning of rules, even of such "games" as mathematics or linguistics, depend on the social context, on the use, and shared practice).

[9] Jack M. Balkin & Reva B. Siegel, *Principles, Practices, and Social Movements*, 154 U. PA. L. REV. 927, 928–30 (2006) (writing that legal principles understood as "norms of conduct that express values" have particular *imagined scenes* behind them, and therefore principles "are intelligible and normatively authoritative only insofar as they presuppose a set of background understandings about the paradigmatic cases, practices, and areas of social life to which they properly apply. A principle always comes with an *imagined regulatory scene* that makes the meaning of the principle coherent to us.") (emphasis added).

[10] *See, e.g.*, Neil MacCormick, *Coherence in Legal Justification*, *in* THEORY OF LEGAL SCIENCE 235 (Aleksander Peczenik et al. eds., 1983).

[11] This argument does not necessitate a methodological commitment. Although this Article relies on legal positivism of Joseph Raz and further reference could be made to Hans Kelsen's approach of completeness and consistency, this is also the essence of Ronald Dworkin's law as integrity theory. *See* Julie Dickson, *Interpretation and Coherence in Legal Reasoning*, STAN. ENCYCLOPEDIA OF PHIL., https://plato.stanford.edu/archives/win2016/entries/legal-reas-interpret/ [https://perma.cc/E358-XHW5] (last modified Dec. 2, 2016).

in general.[12] Additionally, the conclusions are not contingent on either AI optimism or pessimism.[13] Rather, it is from the normative dimension of copyright law—what copyright values in its causal inquiry—that this Article argues against the possibility that emergent works are capable of protection under copyright law.

Part I argues that human authorial creative expression forms a common theoretical basis of both U.S. and EU copyright law, owing its origin to modernist enlightenment philosophy, with its anthropocentric, rationalist, and romantic roots.[14] In this way, despite all of the sometimes-overstated differences between the Anglo-American copyright regime and the European *droit d'auteur*, they are regimes with a single source and ultimate normative justification,[15] making protection of emergent works impossible. Part II follows copyright theory with copyright doctrine, examining international treaties and U.S. and EU law, to conclude that

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[12] *See* WENDELL WALLACH & COLIN ALLEN, MORAL MACHINES: TEACHING ROBOTS RIGHT FROM WRONG (2009); DAVID J. GUNKEL, ROBOT RIGHTS (2018); SAMIR CHOPRA & LAURENCE F. WHITE, A LEGAL THEORY FOR AUTONOMOUS ARTIFICIAL AGENTS (2011).

[13] *See, e.g.*, Eliezer Yudkowsky, *Pausing AI Developments Isn't Enough. We Need to Shut it All Down*, TIME (Mar. 29, 2023, 6:01 PM) https://time.com/6266923/ai-eliezer-yudkowsky-open-letter-not-enough/ [https://perma.cc/XZ7S-57AC]; Raffi Khatchadourian, *The Doomsday Invention*, NEW YORKER (Nov. 23, 2015), https://www.newyorker.com/magazine/2015/11/23/doomsday-invention-artificial-intelligence-nick-bostrom [https://perma.cc/AN4U-MPMD] (discussing Nick Bostrom and similar authors).

[14] This is not obvious. The authors cited above, *supra* note 4, and I find a common ground of several jurisdictions and a stable principle of copyright law. *But see* ISABELLA ALEXANDER, COPYRIGHT LAW AND THE PUBLIC INTEREST IN THE NINETEENTH CENTURY 298 (2010) ("[While there is an] abyss at the heart of copyright law—its lack of a universally accepted, morally sustainable and philosophically consistent foundation . . . this void has existed in copyright law from the time that the first cases were brought under the Statute of Anne.").

[15] Jane C. Ginsburg, *A Tale of Two Copyrights: Literary Property in Revolutionary France and America*, 64 TUL. L. REV. 991, 994 (1990) ("[T]he differences between the U.S. and French copyright systems are neither as extensive nor as venerable as typically described."); Jane C. Ginsburg, *The Concept of Authorship in Comparative Copyright Law*, 52 DEPAUL L. REV. 1063, 1063 (2003) ("Much of copyright law in the US and abroad makes sense only if one recognizes the centrality of the author, the human creator of the work."); Zurth, *supra* note 4.

emergent works' protection conflicts with the law of each respective jurisdiction. Part III applies the frameworks directly to emergent works, discussing how recent U.S. case law, decisions issued by the U.S. Copyright Office, EU jurisprudence, and scholarship collectively show they cannot be protected.

II. THEORETICAL IMPOSSIBILITY OF EMERGENT WORKS' PROTECTION

An individual who expresses ideas in a fixed medium is an author.[16] If the ideas are expressed in an original way, the author may have created a copyrightable work. The work is an intangible thing which the author appropriates, removing it from the public domain and transforming nature through his creative act.[17] Anything that has not undergone an authorial and expressive process culminating in a work of sufficient originality (the classic examples being facts, ideas, and nature) comprises the "public domain." It is owned by everyone and no one.[18] That which does not constitute authorial, original works, remains in the realm of ideas and is a non-entity in the law's eyes. This is copyright's ontological framework, which informs the process of causation (i.e., how one becomes an owner), but more fundamentally, which constitutes the reality that exists "in the law and for the law."[19]

The concepts of the idea-expression dichotomy, originality, and authorship of a work are politically and philosophically contentious. They all depend on and invent the myth of the constitutive natural

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[16] TANYA APLIN, COPYRIGHT LAW IN THE DIGITAL SOCIETY 85 (2005) (explaining that the author of a copyrighted work is the person who creates the work).

[17] Bernard Edelman, *The Law's Eye: Nature and Copyright*, *in* OF AUTHORS AND ORIGINS: ESSAYS ON COPYRIGHT LAW 79, 83 (Brad Sherman & Alain Strowel eds., 1994).

[18] Anupam Chander & Madhavi Sunder, *The Romance of the Public Domain*, 92 CALIF. L. REV. 1331, 1338 (2004) ("Central to most definitions of the public domain is the notion that resources therein are available broadly for access and use. Just as property consists in a varying bundle of rights revolving around a central right to exclude, the public domain consists in a varying bundle of rights revolving around the right to access and use.").

[19] BERNARD EDELMAN, OWNERSHIP OF THE IMAGE: ELEMENTS FOR A MARXIST THEORY OF LAW 38 (1979).

person, the sovereign or possessive individual,[20] whose figure characterizes and is created by the modern law.[21]

What does this look like in practice? Imagine a photographer who takes snapshots of nature, for example, of a landscape. Nature, in itself, is unowned or owned by everyone; it is part of the public domain.[22] Reproducing photographs of nature, just as it exists, does not constitute appropriation.[23] Originality—that is, creative expression—allows an author to imprint the natural reality with his genius through the making of creative choices[24] so that nature is "brought out of its 'disinterested detachment' " and becomes one's own work.[25] The author is then someone who "augments" by translating himself onto the nature and transforming it.[26] Ideas and exact copies devoid of this originality are "no-property."[27]

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[20] *Id.* at 13; *see* Mark Rose, *The Author as Proprietor: Donaldson v. Becket and the Genealogy of Modern Authorship*, *in* OF AUTHORS AND ORIGINS: ESSAYS ON COPYRIGHT LAW, *supra* note 17, at 23, 28 (defining the modern author as a proprietor, the originator and the first owner of the work, institutionalized by copyright, which not only provides profit to authors, but also "produces and affirms the very identity of the author as author"); THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE 1, 6 (Peter Jaszi & Martha Woodmansee eds., 2006) (applying Macpherson's possessive individualism to characterize the concept of authorship).

[21] *See* Gustav Radbruch, *Law's Image of the Human*, 40 OXFORD J. LEGAL STUD. 667, 680 (2020) ("The development of the individual human being as a legal subject corresponds to the individual human being as a legal object."); *see also* ALAIN SUPIOT, HOMO JURIDICUS: ON THE ANTHROPOLOGICAL FUNCTION OF THE LAW, at ix (2017) (arguing that the anthropological function of the law lies in constituting people as rational beings by linking their biological and symbolic dimensions).

[22] Edelman, *supra* note 17*,* at 83–86. Public domain, in the conventional view, constitutes the "opposite" of property, the "outside" of copyright law. *See* James Boyle, *Foreword: The Opposite of Property*?, 66 LAW & CONTEMP. PROBS. 1, 1 (2003); *see also* Jessica Litman, *The Public Domain,* 39 EMORY L.J. 965, 968 (1990) (defining the public domain as a "commons that includes those aspects of copyrighted works which copyright does not protect").

[23] EDELMAN, *supra* note 19, at 43.

[24] *Id.* at 51.

[25] Edelman, *supra* note 17, at 83.

[26] *Id.* at 83–86.

[27] *See* Carol M. Rose, *Cold Corpses, Hot News, and Dead IP: The Reasons for and Consequences of a Legal Status of No-Property*, 57 HOUS. L. REV. 377, 379 (2019).

Using the photographer illustration above, this suggests that there are three necessary conditions for a work to be copyrightable: (1) a human author, (2) expression of an idea, and (3) originality. An emergent work lacks each of those conditions. It has no author and thus, no expression or originality. It is a non-entity in the eyes of copyright law, which must remain in *res communis*, belonging to all. The proceeding Sections provide a theoretical outline of these conditions showing that the doctrinal conclusion of the impossibility of copyright protection in emergent works is inevitable.

A. Idea-Expression Dichotomy

Copyright protects the expression of ideas rather than the ideas themselves—the latter are as "free as air."[28] This is the foundational principle of copyright law, or its cliché.[29] The idea-expression dichotomy, similar to originality, provides a "crucial means whereby copyright law limits the scope of the author's entitlement in light of the public domain."[30]

Both the U.S. and the EU recognize the idea-expression dichotomy. In the U.S., the idea-expression dichotomy was codified by statute[31] and recognized as a constitutional requirement by the Court in *Feist Publications v. Rural Telephone Service Co.*[32] In the

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[28] Fendler v. Morosco, 171 N.E. 56 (N.Y. 1930).

[29] SAS Inst. Inc. v. World Programming Ltd. [2013] EWCA (Civ) 1482 [20], [63], [2014] R.P.C. 8 [20], [63] (Lewison LJ) (finding that functionality of computer programs is not protectable, as it is not an expression of an idea, and noting that "[i]t is a cliché of copyright law that copyright does not protect ideas: it protects the expression of ideas . . . for the purposes of copyright what is relevant is not the intellectual creation itself, but the expression of the intellectual creation.").

[30] Abraham Drassinower, *A Rights-Based View of the Idea/Expression Dichotomy in Copyright Law,* 16 CAN. J.L. & JURIS. 3, 4 (2003) (offering a rights-based account of the idea-expression dichotomy and a defense of the public domain).

[31] 17 U.S.C. § 102(b) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.").

[32] Feist Publ'ns v. Rural Tel. Serv. Co., 499 U.S. 340 (1991); *see also* Jane C. Ginsburg, *No Sweat Copyright and Other Protection of Works of Information After Feist v. Rural Telephone*, 92 COLUM. L. REV. 338, 339 (1992) ("[T]he *Feist*

words of Justice Brennan, this distinction constitutes the "essence of copyright."[33] Similarly, the EU has invoked the dichotomy in a number of instruments and in the Court of Justice of the European Union ("CJEU") jurisprudence.[34] Therefore, the importance of the idea-expression dichotomy cannot be overstated.

The dichotomy between ideas and expressions has become notoriously criticized, since it poses considerable difficulty in other areas of copyright.[35] Nonetheless, this Article is concerned with a narrower question than most commentators. The ontological split between ideas and expressions stems from the recognition that what has not been expressed by an author cannot be appropriated because it does not exist in the eyes of copyright law.[36] An interlinked

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Court's sweeping declarations of constitutional limitations on Congress' copyright power put in issue the respective roles of the Court and Congress in defining not only the contours and key terms of copyright law, but also the scope of Congress' authority to provide for intellectual property protection under other constitutional sources of legislative power.").

[33] Harper & Row Publishers v. Nation Enters., 471 U.S. 539, 589 (1985) (Brennan, J., dissenting); *see also* Whelan Assocs., Inc. v. Jaslow Dental Lab'y, Inc., 797 F.2d 1222, 1237 (3d Cir. 1986) (stating that the court's goal is to "advance the basic purpose underlying the idea/expression distinction").

[34] For a short overview, see Roberta Mongillo, *The Idea-Expression Dichotomy in the US and EU*, 38 EUR. INTELL. PROP. REV. 733 (2016).

[35] *See, e.g.*, Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930) ("Nobody has ever been able to fix that boundary, and nobody ever can."); Peter Pan Fabrics, Inc. v. Martin Weiner Corp., 274 F.2d 487, 489 (2d Cir. 1960) ("[N]o principle can be stated as to when an imitator has gone beyond the 'idea' and has borrowed its 'expression.' Decisions must therefore inevitably be ad hoc."); Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of "Authorship,"* 1991 DUKE L.J. 455, 465 ("[T]he idea/expression line has proved difficult or impossible to draw in practice."). For a recent British overview of those difficulties, see Patrick Masiyakurima, *The Futility of the Idea/Expression Dichotomy in UK Copyright Law*, 38 INT'L REV. INTELL. PROP. & COMPETITION L. 548 (2007). For a thorough critique of the American applications of the dichotomy, see Edward Samuels, *The Idea-Expression Dichotomy in Copyright Law*, 56 TENN. L. REV. 321 (1989).

[36] Designers Guild v. Russell William Upholstery Ltd, [2001] 1 All ER 700 ("[T]here is no copyright in ideas because they are not literary works."). This thinking has informed not just the EU but also old British case-law. *See* Kenrick v. Lawrence, (1890) 25 QBD 99; Merch. Corp. of America v. Harpbond, [1983] FSR 32; Masiyakurima, *supra* note 35, at 552. This has been elegantly explained by Drassinower:

proposition is that an appropriation of what one did not express himself would be a misappropriation: if not of the creation of another (infringement), then of what one does not deserve (through the original, expressive creation).[37] Indeed, if copyright is framed as any legal right—as correlative to obligation—then an usurpation of a right without desert must be a wrong to another; in this case, the community represented through the public domain, or every author as an equal party.[38] At the same time, it is necessary for creative freedom; in the U.S., this is guaranteed by the First Amendment.[39]

> It is expression, not ideation, that renders thought a matter of right, that plunges thought into the field of intersubjectivity. On this view, the reason that copyright law refuses to protect ideas is that ideas can be said to enter the sphere of right, of relations between persons, only as expressed….[one] cannot claim an entitlement to her thoughts… any more than… that her bare intention to possess an object, in the absence of an unequivocal and publicly recognizable manifestation of that intention, is sufficient to constitute another person's obligation to refrain from using the allegedly possessed object.

Drassinower, *supra* note 30, at 15 (footnotes omitted). Elsewhere, Drassinower writes that idea is *animus* while expression is *factum*, to use property law analogies. *See* Abraham Drassinower*, Capturing Ideas: Copyright and the Law of First Possession,* 54 CLEV. ST. L. REV. 191, 196 (2006); *see also* Wendy J. Gordon, *Copyright as Tort Law's Mirror Image: "Harms," "Benefits," and the Uses and Limits of Analogy*, 21 J. LEGAL STUD. 449 (1982) (exploring similarities between copyright and different areas of the law of torts).

[37] As Lord Bingham put it:

> [T]he law of copyright rests on a very clear principle: that anyone who by his or her own skill and labour [sic] creates an original work of whatever character shall, for a limited period, enjoy an exclusive right to copy that work. *No one else may for a season reap what the copyright owner has sown*.

Designers Guild v. Russell William Upholstery Ltd., [2001] 1 All ER 700 (emphasis added).

[38] Drassinower, *supra* note 30, at 9, 17–18 ("[I]deas . . . cannot be [owned] *in a manner consistent with another's equal dignity as an author*; that is, in a manner consistent with another's claim to *his* original expression."); *see also* Wendy J. Gordon, *Of Harms and Benefits; Torts, Restitution, and Intellectual Property*, 21 J. LEGAL STUD. 449 (1982) (employing the Hohfeldian right-obligation lens to analyze copyright).

[39] *See* Alfred C. Yen, *A First Amendment Perspective on the Idea/Expression Dichotomy and Copyright in a Work's "Total Concept and Feel*,*"* 38 EMORY L.J. 393 (1989).

In summary, without an *author* who *expresses* an idea in an *original* way, there is no copyrightable work. The expression requirement, just like originality and its necessitation of creativity, stems from the Enlightenment cognitivist account of rationality—the capacity to reason which, in the classic words of William Warburton, distinguishes "man" from the "beasts" (or robots, as one may add today).[40] In this way, the law not only affirms the individual as a creator, but also the very place of humans in the social and ontological universe, the owners of the world,[41] to which "expression provide[s] a narrative of legitimacy and len[ds] its structure to matters such as the rules of originality."[42]

This is exactly what the post-humanist movement in continental philosophy criticized: the fact that modernity "creates two entirely distinct ontological zones: that of human beings on the one hand; that of nonhumans on the other."[43] Nonetheless, the philosophical mainstream remained cognitivist-rationalist, believing that only the human cultural animal can think, recognize general concepts and ideas, and express them.[44] The split also exists between postmodern

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[40] WILLIAM WARBURTON, A LETTER FROM AN AUTHOR 2 (1747). For a discussion of mental labor in early copyright law, see BRAD SHERMAN & LIONEL BENTLY, THE MAKING OF MODERN INTELLECTUAL PROPERTY LAW: THE BRITISH EXPERIENCE, 1760–1911, at 15–16 (2003). For a legal and philosophical history of the dichotomy, see Amy B. Cohen, *Copyright Law and the Myth of Objectivity: The Idea-Expression Dichotomy and the Inevitability of Artistic Value Judgments*, 66 IND. L.J. 175, 198–211 (1990); Amaury Cruz, *What's the Big Idea Behind the Idea-Expression Dichotomy? Modern Ramifications of the Tree of Porphyry in Copyright Law*, 18 FLA. ST. U. L. REV. 221 (1990).

[41] SHERMAN & BENTLY, *supra* note 40*,* at 36.

[42] *Id.* at 55.

[43] BRUNO LATOUR, WE HAVE NEVER BEEN MODERN 10–11 (1993); *see also* NIKLAS LUHMANN, OBSERVATIONS ON MODERNITY 23 (1998) ("The history of European rationality can be described as the history of the dissolution of a rationality continuum that had connected the observer in the world with the world.").

[44] JUSTIN E. H. SMITH, IRRATIONALITY: A HISTORY OF THE DARK SIDE OF REASON 57–62 (2019); *see* Paul Sheehan, *Postmodernism and Philosophy*, *in* THE CAMBRIDGE COMPANION TO POSTMODERNISM 20, 26 (Steven Connor ed., 2006) ("[D]ebates [questioning] anthropocentrism have never been more than peripheral concerns in the mainstream of the anglophone world.").

literary theory, which has proclaimed the "death of the author,"[45] and copyright, which preserves modernist assumptions.[46] Again, the "poststructuralist critique of authorship appears . . . to have had no significant influence on copyright."[47] Rather than die, copyright lives, and its romantic preconceptions continue to inform judicial interpretation of statutory texts. The law remains modernist, liberal, and anthropocentric. Authorless and unoriginal works, such as those generated by AI, fall outside of this schema, just like facts or ideas.

B. The Author

Authorship is arguably the most "central, and certainly the most resonant, of [copyright's] foundational concepts."[48] In the U.S., authorship is a statutory requirement for protection.[49] Although the

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[45] *See* Ronald Barthes, *The Death of the Author*, *in* THE RUSTLE OF LANGUAGE 49 (Richard Howard trans., 1986); *see also* Lionel Bently, *Copyright and the Death of the Author in Literature and Law*, 57 MOD. L. REV. 973, 973 (1994) ("Barthes argued that, once published, the text is no longer under the control of the author and that the author is irrelevant. [Accordingly], the text is merely a product of other texts . . . Individual authorship of works is to be replaced by intertextuality.").

[46] Price and Pollack wrote that the law consciously does not follow the postmodern literary theory. They do not dismiss the legal conception as wrong but rather ask if the law rightly *requires* a different conception of authorship than literary studies do. Monroe E. Price & Malla Pollack, *The Author in Copyright: Notes for the Literary Critic*, 10 CARDOZO ARTS & ENT. L.J. 703, 703–07 (1992); *see also* Bently, *supra* note 45, at 981 (describing the Saunersian argument that "even if Barthes were 'right' and the author is dead, law does not have to accept this 'truth,'" given the different goals of literary theory and copyright law). *See generally* DAVID SAUNDERS, AUTHORSHIP AND COPYRIGHT (1992). This insight should be clear enough: just like the law in liberal democracies does not follow determinist philosophers in claiming that a man does not have free will cannot be responsible for their actions in both private and criminal law, so copyright believes a man can be responsible for their own creations. *See, e.g.*, Galen Strawson, *The Impossibility of Moral Responsibility*, 75 PHIL. STUD.: AN INT'L J. FOR PHIL. ANALYTIC TRADITION 5 (1994); *cf., e.g.*, Smith v. Armontrout, 865 F.2d 1502, 1506 (8th Cir. 1988) (stating that criminal law makes a fundamental "moral and legal assumption" that people have "free will within broad limits").

[47] Bently *supra* note 45, at 977–78.

[48] Jaszi, *supra* note 35, at 455; *see also* THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE, *supra* note 20.

[49] 17 U.S.C. § 102(a) (stating that copyright subsists only in "works of authorship"). *Id.* § 201(a) (copyright is owned initially by "the author or authors

concept has a long pedigree, the modern understanding of authorship is also modern in origin, only dating back to eighteenth-century debates.[50] At that time, the pre-modern "inspiration" became translated into "original genius" found within the author's mind.[51] This became the justification, and currently remains a framing conceptualization, of copyright: an author owns a proprietary interest in the objects that may well be owned by someone else only because the specific *form* originated from that author's mind.[52] The right, then, was found not in the materiality of objects, in their "physical foundation," but in their transcendence, as an emanation of authorial intellect.[53] This is the principle that underlies both American[54] and European[55] copyright jurisprudence. The romantic conception of a solitary, individual creator is a "culturally, politically, economically, and socially constructed category rather than a real or natural one."[56] But to admit an ideological tint of copyright law is not to invalidate it. Rather,

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of the work"); Peter Jaszi, *Is There Such a Thing as Postmodern Copyright?*, 12 TUL. J. TECH. & INTELL. PROP. 105, 109 (2009) ("[B]elief in the claims of authorship emerged as the grand narrative that justifies and explains [copyright].").

[50] Martha Woodmansee, *The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the "Author,"* 17 EIGHTEENTH-CENTURY STUDS. 425, 425–26 (1984).

[51] *Id.* at 427.

[52] *Id.* at 438 (noting that Fichte called this an "exception to . . . natural law"). This conflict of rights is still seen igniting the "copyright is not property" debate waged by both American and European property scholars and in tensions brought out by the "copyleft" movements. *See* Pascale Chapdelaine, *The Property Attributes of Copyright,* 10 BUFF. INTELL. PROP. L.J. 34 (2014) (providing a critical overview of the debate); *see also* Jessica Litman, *What We Don't See When We See Copyright as Property*, 77 CAMBRIDGE L.J. 536 (2018). *See generally* Neil W. Netanel & David Nimmer, *Is Copyright Property? — The Debate in Jewish Law*, 12 THEORETICAL INQUIRIES L. 241, 241 (2011) ("Is copyright a property right? Common law and civil law jurists have debated that issue for over three centuries.").

[53] Woodmansee, *supra* note 50, at 443.

[54] The classic cases are Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884) and Bleistein v. Donaldson Lithographing Co, 188 U.S. 239 (1903).

[55] *See, e.g.*, Case C-5/08, Infopaq Int'l v. Danske Dagblades, 2009 E.C.R. I-06569; Case C-145/10, Painer v. Standard VerlagsGmbH, 2011 E.C.R. I-12533.

[56] Jaszi, *supra* note 35, at 459.

authorship is an element of modern, liberal jurisprudence, just like other concepts constitutive of the rights bearing individual.[57] Furthermore, the concept is not necessarily a description of the world of facts, but a normative creation of institutional facts by the law.[58] Therefore, the author has a fundamental role in copyright law.[59] Without the author, there can be no expression, no originality, and no work. *Ex nihilo nihil fit*.[60]

In fact, there are two arguments for emergent works' inexistence under copyright theory of authorship: (1) the subject matter in question is not an authorial work because the subject matter is not an expression and cannot be protected, or (2) the subject matter is an authorial work and thus not an emergent work. Indeed, some have argued that there are no "works" without authors, i.e., never is the authorial link between the output and the work severed, at least in

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[57] *Id.* at 470 (noting how both Hobbes and Locke associate authorship with the sovereignty of the individual, the individual who controls the created environment, informing the "era of pre-industrial capitalism"); *see* Michel Foucault, *What is an Author?*, *in* 2 AESTHETICS, METHOD, AND EPISTEMOLOGY 205, 205 (James D. Faubion ed., Robert Hurley et al. trans., 1998) (" '[A]uthor' constitutes the privileged moment of individualization in the history of ideas.").

[58] ANDREI MARMOR, PHILOSOPHY OF LAW 2 (Scott Soames ed., 2011) ("Laws do not purport to describe aspects of the world; they do not consist of propositions about the way things are. In one way or another, laws purport to affect or modify people's conduct, and mostly by providing them with reasons for action.").

[59] Indeed, it is telling that authorship is a legally underdefined concept, understood through the supply of expressive, original contribution. Boyden, *supra* note 2, at 380. While authorship is the *sine qua non* for an idea to be expressed, analytically there can be authorial subject matter which is not original. This distinction is of little importance, since such subject matter will not be protectable, anyway pursuant to 17 U.S.C. § 102.

[60] The dictum that *nothing comes from nothing*, originally iterated by Parmenides, is a principle of logic and of causation. Readers may be familiar with its discussions in the law of torts. *See, e.g.*, Pierre Widmer, *Ex Nihilo Responsabilitas Fit, or the Miracles of Legal Metaphysics*, 2 J. EUR. TORT L. 135, 135 (2011). The logical corollary of a lack of an author or rightful owner able to assert his right is that the output rests in the public domain. *See* Albert Kocourek, *The Hohfeld System of Fundamental Legal Concepts*, 15 ILL. L. REV. 24, 36 (1920) ("Where one has no right to, or claim upon, the act of another, the other may do as he pleases. Ex nihilo, nihil fit.").

practice.[61] Following this line of thinking, James Grimmelmann proposed to locate the necessary authorial creativity in the selection of rules a program will follow.[62] At the same time, arguably neither the user who merely presses the button allowing for the program to operate, nor the programmer who created the program (but not the output) supply a sufficient degree of creativity for the copyright to subsist. However, some argue that the definition of process is enough, or alternatively, that further slight modifications of the output constitute sufficient creativity to warrant copyright protection.[63]

C. Originality of the Work

Copyright law in the U.S. and the EU protects only original works of authorship.[64] Specifically, it recognizes only certain types of relationships as giving rise to the necessary qualities that enable us to label a work "original," with originality playing the role of a fundamentally causal concept.[65] While the existence of an author is necessary for a work to be original in both the U.S. and the EU, something more is needed for a work to qualify for copyright protection. Originality's role in copyright is analogous to that of possession's role in property law, delineating the mode of acquisition, i.e., what a person must do to appropriate, and therefore

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[61] *See* James Grimmelmann, *There's No Such Thing as a Computer-Authored Work – And It's a Good Thing, Too*, 39 COLUM. J. L. & ARTS 403, 403 (2016) ("[N]o 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.") (footnotes omitted).

[62] *Id.* at 408.

[63] Grimmelmann himself would allocate copyright anyway for pragmatic reasons. *Id.* at 412–13.

[64] 17 U.S.C. § 102(a) ("Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression."); Case C-683/17, Cofemel—Sociedade de Vestuário SA v G-Star Raw CV, ECLI:EU:C:2019:721, ¶ 29–30. For an overview, see Elizabeth F. Judge & Daniel Gervais, *Of Silos and Constellations: Comparing Notions of Originality in Copyright La*w, 27 CARDOZO ARTS & ENT. L.J. 375 (2009).

[65] Brad Sherman, *Appropriating the Postmodern: Copyright and the Challenge of the New*, 4 SOC. & LEGAL STUD. 31, 34 (1995).

become an author.[66] Similar to how in property law the concept of possession determines when nature—be it land or wild animals[67]—comes to be one's personal property, in copyright law, the role of possession is played by originality, stemming from the idea-expression dichotomy. Even though a particular subject matter may physically exist, that does not mean it belongs to someone or that it exists as a matter of law as appropriated or appropriable.

Interpreted through metaphors of human, authorial creativity, originality provides limits on *causation in law*—that is, whether the acts of a putative author are of such character as to allow for the appropriation of the work—if not *in fact*, since one can factually lead to the creation of subject matter without making an original expressive contribution.[68]

Importantly, the law is, and always has been, using the notation of creativity and anthropocentrism. Even in pre-modern copyright law, "what intellectual property law protected was the creative or human element embodied in the resulting product."[69] Later, in the modern British period, creativity's language faded, but it reappeared

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[66] Abraham Drassinower, *Capturing Ideas: Copyright and the Law of First Possession*, 54 CLEV. ST. L. REV. 191, 191 (2006).

[67] *See* Pierson v. Post, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805); *see also* Popov v. Hayashi, No. 400545, 2002 WL 31833731 (Cal. Super. Ct. Dec. 18, 2002); CAROL M. ROSE, *Possession as the Origin of Property*, *in* PROPERTY AND PERSUASION: ESSAYS ON THE HISTORY, THEORY, AND RHETORIC OF OWNERSHIP 11 (1994); Richard A. Epstein, *Possession as the Root of Title*, 13 GA. L. REV. 1221 (1979). That an object exists in material reality but not necessarily in the law's eyes is a further demonstration of law creating its own "game" or "world" as explained above.

[68] *See* Shyamkrishna Balganesh, *Causing Copyright*, 117 COLUM. L. REV. 1, 1 (2017) ("[C]opyright law embodies an unstated yet distinct theory of authorial causation, which connects the element of human agency to a work of expression.").

[69] SHERMAN & BENTLY, *supra* note 40, at 46–47.

in the guise of originality,[70] returning most recently as the dominant narrative with the Europeanization of the law.[71]

Contextualizing further, the invention of the concept of *work* in copyright law—that is, some intangible expression of an idea which can be abstracted from the object, in a token-type way—was not possible using simple possessory language of Lockean philosophy.[72] However, its inventory was later updated, so that the picking of apples from trees and farming the land turned into the labor of the mind.[73] German philosophy moved things forward: Johann Gottlieb

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[70] *Id.* at 200–02 ("Whether it is called essence, personality, creativity or mental labour, [sic] it is clear that modern law has been unable to suppress the creative or mimetic nature of intellectual property law."); *see also* Rose, *supra* note 19, at 47–52 (observing that the two senses of originality, it being uncopied from another, and stamped by a person, i.e., his creative genius, appear already in Hargrave); MARK ROSE, AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT 126 (1993).

[71] *See infra* Section III.C.

[72] The very early attempts to legitimize copyright were rooted in John Locke's philosophy. Locke wrote that what is unowned can be appropriated legitimately through one's labor. Thus, when a person gathers apples from trees in the woods, or farms an unowned land, he appropriates them by "adding something more"—his labor. *See* JOHN LOCKE, SECOND TREATISE OF GOVERNMENT, §§ 27–32 (1690); *see also* WILLIAM ENFIELD, OBSERVATIONS ON LITERARY PROPERTY (1774). Indeed, in the history of English copyright, the objections to laboristic natural rights theory led to defending copyright on a "new aesthetic perception designating the work as an original creation recognizable by the specificity of its expression . . . combin[ing] the uniqueness of form, the author's genius, and the inalienability of his ownership" dominated late eighteenth-century discourse. The advocates of copyright thus turned to the philosophy of Becker, Kant, Fichte, and Herder, which "resulted in a new definition of the work . . . no longer characterized by the ideas embodied . . . but by its form . . . the particular way in which an author produces, assembles, expresses, and presents concepts." This act of original creatorship allows the text to "transcend[] the circumstantial materiality of the book . . . acquir[ing] an identity immediately referable to the subjectivity of its author," and thus gives foundation for the "author-function"—and modern copyright. Roger Chartier, *Figures of the Author*, *in* OF AUTHORS AND ORIGINS: ESSAYS ON COPYRIGHT LAW, *supra* note 17, at 7, 14–15. On the difficulties with justifying copyright within John Locke's theory of property, see Cezary Błaszczyk, *Lockean Intellectual Property Refuted*, 32 SCIENZA & POLITICA 161 (2020).

[73] Rose, *supra* note 20, at 35 ("Mental labour, [sic] rather than manual labour, [sic] gives property 'in the doctrine itself rather than in the ink and paper . . . and thus was not limited to one material object.' ") (footnotes omitted). Modern

Fichte's concept of the form, the philosophy of Immanuel Kant and Georg Wilhelm Friedrich Hegel, as well as the broader aesthetic reflection of Arthur Schopenhauer and Friedrich Schelling. Their contributions all helped to make *real* out of that which was not real.[74] Their philosophical ideas all operated in the notation of the human creative mind. The notions of a work, originality, and idea-expression dichotomy are thus deeply interlinked institutional fictions, with each defining the contours of the other.[75] Thus, their ideas emphasize that, absent an authorial contribution, the work as an intangible thing distinct from a material object simply does not come into being.

III. DOCTRINAL IMPOSSIBILITY OF EMERGENT WORKS PROTECTION

Originality, in general, has been interpreted differently across jurisdictions,[76] and in Europe particularly, it has been shrouded in doctrinal disagreement.[77] While all jurisdictions, by necessity, exclude non-human or non-expressive creations from the realm of

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Lockean justifications of copyright continue to use the concept of creative labor. *See* Wendy J. Gordon*, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property,* 102 YALE L.J. 1533 (1993).

[74] *See generally* JAMES ELKINS & DAVID MORGAN, RE-ENCHANTMENT (2009) (discussing how modernist aesthetics re-enchant the world by recounting how Friedrich Schelling wrote that "art opens . . . the holy of holies . . . separation of the real and the ideal" and by discussing Arthur Schopenhauer's *The Metaphysics of Fine Art* claim that separation of form from matter is essential to the work of art—thus, what the world lost by abandoning theology, it gained in the aesthetic experience).

[75] *See* Brad Sherman*, What Is a Copyright Work?*, 12 THEORETICAL INQUIRIES L. 99, 120 (2011) ("[A] copyright work is better seen as a quasi-object or hybrid that is both tangible and intangible at the same time").

[76] We can distinguish four families of standards of originality, ranging from the most restrictive to the most generous: (1) The EU author's own intellectual creation; (2) The American *Feist* "minimal degree of creativity" standard; (3) The Canadian CCH standard of non-mechanical and non-trivial exercise of skill and judgement (4) The UK skill and labor standard. *See* Judge & Gervais, *supra* note 64, at 377.

[77] John Smyth, *Originality in Enlightenment and Beyond*, *in* ORIGINALITY AND IP IN THE FRENCH AND ENGLISH ENLIGHTENMENT 175–76 (Reginal McGinnis ed., 2009).

protection, one only needs to examine American and European doctrine to see this. However, before doing so, it is important to first have an overarching understanding of the international framework.

A. The International Framework

The international copyright framework, most importantly consisting of the Berne Convention ("Berne"),[78] the Agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS"),[79] and the World Intellectual Property Organization Copyright Treaty ("WIPO Copyright Treaty," "WCT"),[80] espouses a distinctly anthropocentric tradition. Grounded in modernist philosophy and strictly adhering to the idea-expression dichotomy, these instruments harmonize the minimum standards of protection pertaining to authorial expressive works, and place emergent works such as works generated by AI, outside of the international framework. This is significant because both the U.S. and the EU are signatories of each of the agreements which means that international copyright's anthropocentrism influences their respective domestic legal interpretations. Thus, any attempts to go beyond the international copyright framework's boundaries are both conceptually[81] and practically misguided.[82]

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[78] Berne Convention for the Protection of Literary and Artistic Works, September 9, 1886, *revised at* Paris July 24, 1971, 1161 U.N.T.S. 3 [hereinafter Berne Convention].

[79] Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) [hereinafter TRIPS Agreement].

[80] WIPO Copyright Treaty, Dec. 20, 1996, S. TREATY DOC. NO. 105-17 (1997), 2186 U.N.T.S. 12.

[81] Indeed, Sam Ricketson called the British statutory provisions "anomalous." Sam Ricketson, *People or Machines: The Berne Convention and the Changing Concept of Authorship*, 16 COLUM.-VLA J.L. & ARTS 1, 29 (1991); *see also* Jane C. Ginsburg, *People Not Machines: Authorship and What it Means in the Berne Convention*, 49 INT'L REV. INTELL. PROP. & COMPETITION L. 131 (2018).

[82] Daniel J. Gervais, *The Internationalization of Intellectual Property: New Challenges from the Very Old and the Very New*, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 929, 929–30 (2002) ("[I]t makes little sense to adopt rules to protect them without taking account of the laws and practices of other nations-and of the work of international organizations. This is nothing new. Protecting only

The leading scholars of international copyright law have argued that the whole framework, starting with Berne, is incompatible with granting copyright in emergent works, such as those generated by AI, because emergent works are not original as understood by the *intellectual creation* conceptual scheme.[83] Sam Ricketson and Jane C. Ginsburg, the authors of a leading treatise on international copyright, wrote that originality is an implicit requirement of the Berne concept of a work,[84] while the essential requirement of the concept of authorship is an "intellectual creation."[85] Thus, it appears that "[a]ll the discussions and negotiations concerning the Berne Convention . . . clearly show that originality is closely tied to the act of intellectual creation."[86]

Indeed, although the famously impenetrable text of Article 2(1) of Berne, which defines literary and artistic works, does not make originality an express condition of copyright subsistence, a landmark judgement of the CJEU, *Infopaq International v. Danske Dagblades*,[87] interpreted this requirement as implied by Berne's Articles 2(5) and 2(8).[88] This interpretation accords with the

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domestic (or national) works or inventions would be counterproductive: it increases unfair competition from unprotected foreign works and inventions.").

[83] *See* Ricketson, *supra* note 81.

[84] 1 SAM RICKETSON & JANE C. GINSBURG, INTERNATIONAL COPYRIGHT AND NEIGHBOURING RIGHTS – THE BERNE CONVENTION AND BEYOND 403 (2d ed. 2006).

[85] SAM RICKETSON & JANE C. GINSBURG, INTERNATIONAL COPYRIGHT AND NEIGHBOURING RIGHTS – THE BERNE CONVENTION AND BEYOND ¶ 7.03 (3d ed. 2022). Importantly, however, the authors recognize that "Berne does not expressly speak to the question whether national laws may deem as an 'author' the human or judicial entity at whose behest and expense a work is created." *Id.* ¶ 7.04. This is of obvious relevance in regard to the comparative difference in approaching "works for hire" in civil and common law jurisdictions but applies *ceteris paribus* for the purposes of this Article.

[86] Daniel Gervais, *The Compatibility of the "Skill and Labour" Originality Standard with the Berne Convention and the TRIPS Agreement*, 26 EUR. INTELL. PROP. REV. 75, 76 (2004) (arguing that the old UK standard of originality based in the concept of skill and labor was incompatible with both the Berne Convention and TRIPs) (emphasis omitted); Daniel Gervais, *Feist Goes Global: A Comparative Analysis of the Notion of Originality in Copyright Law*, 49 J. COPYRIGHT SOC'Y U.S.A. 949, 971–73 (2002).

[87] Case C-5/08, Infopaq Int'l v. Danske Dagblades, 2009 E.C.R. I-06569.

[88] *Id*. ¶¶ 3–5.

scholarly consensus; Ricketson and Ginsburg rely on the text of Articles 2(3) and 2(5) of Berne.[89] The former clarifies that "translations, adaptations, arrangements of music and other alterations of a literary or artistic work shall be protected as original works,"[90] while the latter uses the notion of "intellectual creations."[91] This leads us to recognize that in the Berne framework, "literary and artistic works are not protected 'as such,' but rather as intellectual creations of an author."[92] Other commentators have further argued that the "personality of the author has to be visible in the creative result,"[93] and even that "creativity and originality are the two faces of the single requirement . . . set out by [Article 2(3)], which demands that the work . . . 'reflects the personality of its maker.' "[94] This is important not only because authorless, emergent works clearly fall outside of the conception of originality that the Berne Convention devised, but also because, as a matter of principle, nation state courts interpret domestic legislation in accordance with the Berne Convention provisions. [95]

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[89] RICKETSON & GINSBURG, *supra* note 85, at ¶¶ 8.03, 8.76 ("a clear indication that 'intellectual creation' is implicit in the conception of a literary or artistic work is to be found in article 2(5)."); *see also* PAUL GOLDSTEIN & P. BERNT HUGENHOLTZ, INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE 177 (2019).

[90] Berne Convention, *supra* note 78, at 34.

[91] *Id.*

[92] Justine Pila, *The Authorial Works Protectable by Copyright*, *in* ROUTLEDGE HANDBOOK OF EUROPEAN COPYRIGHT LAW 6 (Eleonora Rosati ed., 2020) (citing CLAUDE MASOUYÉ, GUIDE TO THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS (PARIS ACT, 1971) (1978)).

[93] ELEONORA ROSATI, ORIGINALITY IN EU COPYRIGHT: FULL HARMONIZATION THROUGH CASE LAW 63 (2013).

[94] Caterina Sganga, *The Notion of "Work" in EU Copyright Law After Levola Hengelo: One Answer Given, Three Question Marks Ahead*, 41 EUR. INTELL. PROP. REV. 415, 416 (2019).

[95] For English case law on this, see SAS Inst. v. World Programming [2013] EWHC 69 (Ch), ¶ 27 (Arnold LJ) ("[P]utative copyright work must be a literary or artistic work within the meaning of Article 2(1) of the Berne Convention."); The Jade [1976] 1 All E.R. 920, 924; *see also* Richard Arnold, *Joy: A Reply*, 10 INTELL. PROP. Q. 1, 14 (2001). In the United States, treaties constitute the "supreme Law of the Land," in accordance with the Supremacy Clause. U.S. Const. art. VI, cl. 2. However, some treaties or, at the very least, their provisions, are deemed non-self-executing thus do not take direct effect as federal law but

The international framework defines not only originality, but also authorship in anthropocentric terms, making emergent works a misnomer. According to Ricketson and Ginsburg, the " 'spirit of Berne' . . . reserves the Convention's *raison d'être* to the promotion of human creativity,"[96] which is visible both in Berne's text and the ideas of its drafters,[97] espousing a "personal" and human-centered conception of authorship.[98] It is for this reason, that:

> If the human intervention in producing these outputs does not exceed requesting the computer to generate a literary, artistic, or musical composition of a particular style or genre, the human users do not contribute sufficient 'intellectual creation' to meet minimum standards of authorship under the Berne Convention.[99]

Moreover, one can see the very same conceptual framework transposed into TRIPS by virtue of Article 9(1), which requires adherence with Articles 1 through 21 of Berne and its appendix. Scholars further argue that even Berne's *travaux préparatoires* were incorporated by implication into TRIPS.[100] Finally, not only does

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need to be transposed through statutory enactment and judicial interpretation. *See* Medellín v. Texas, 552 U.S. 491, 505 n.2 (2008); *see also* Jean Galbraith, *Making Treaty Implementation More Like Statutory Implementation*, 115 MICH. L. REV. 1309 (2017). This latter category applies to the Berne Convention. *See* Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, § 2(1), 102 Stat. 2853 (Oct. 31, 1988); Golan v. Holder, 565 U.S. 302, 335 (2012) ("Congress determined that U.S. interests were best served by our full participation in the dominant system of international copyright protection. Those interests include ensuring exemplary compliance with our international obligations, securing greater protection for U.S. authors abroad, and remedying unequal treatment of foreign authors."); Eldred v. Ashcroft, 537 U.S. 186, 206 (2003) (citing Shira Perlmutter, *Participation in the International Copyright System as a Means to Promote the Progress of Science and Useful Arts,* 36 LOY. L.A. L. REV. 323, 330 (2002)) ("[M]atching th[e] level of [copyright] protection in the United States [to that in the EU] can ensure stronger protection for U.S. works abroad and avoid competitive disadvantages vis-à-vis foreign rightholders.").

[96] RICKETSON & GINSBURG, *supra* note 85, ¶ 7.16.

[97] *Id.* ¶ 7.13 ("Convention's drafters and revisers implicitly took for granted that 'author' refers to natural persons.").

[98] *Id.* ¶ 7.14.

[99] *Id.* ¶ 7.16.

[100] *The Compatibility of the "Skill and Labour" Originality Standard with the Berne Convention and the TRIPS Agreement*, *supra* note 86, at 79 ("One can . . .

Article 9(2) transpose the idea-expression dichotomy to the text of TRIPS, but Article 10, which pertains to computer programs and compilations of data, uses the language of intellectual creation as the limitation of the protectable subject matter. Analogous language of intellectual creation was adopted by Article 5 of the WIPO Copyright Treaty,[101] which also preserves the idea-expression dichotomy.[102]

To conclude, the essence of the international copyright framework is that a human author's expressive act is necessary for copyright's subsistence. The very goal of Berne, and by implication of the other instruments, was to incentivize human creativity. This is not surprising; historically, Berne's drafters were influenced by naturalism, which roughly translates to the increasingly popular notion that copyright is a tool that protects human rights.[103] Emergent works, including the works generated by AI, by definition, fall completely outside the framework's scope of reciprocal protection.[104] While the international treaties harmonize only the minimum standards of protection[105]—i.e., each jurisdiction can, in principle, decide to protect more than the international framework demands—any jurisdiction's attempt at granting copyright to

refer to the Berne travaux préparatoires to interpret the meaning of the word 'original' in the Berne Convention as incorporated into TRIPs.").

[101] WIPO Copyright Treaty, *supra* note 80, 2186 U.N.T.S. at 154 ("Compilations of data or other material, in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations, are protected as such.").

[102] *Id*.

[103] Ricketson, *supra* note 81, at 34 ("The human-centered notion of authorship presently enshrined in the Berne Convention embodies a fundamental human right, namely that of the creator over the work he or she creates. There are sound philosophical foundations for this right, and it has been enunciated in article 1 of the Convention from the very start . . . [i]t also receives more recent and specific endorsement in the International Covenant on Economic, Social and Cultural Rights.") (footnotes omitted).

[104] *Id.* at 29 ("I am by no means convinced that such productions should be entitled to any protection at all, but there can be little doubt that they lack the necessary requirements for recognition as works of authorship under the Berne Convention.").

[105] TRIPS Agreement, *supra* note 79, 1869 U.N.T.S. at 301, 33 I.L.M. at 1199.

emergent works would be symbolic at best due to the lack of reciprocal protection.

B. U.S. Copyright Law

The 1976 Copyright Act provides that copyright subsists "in original works of authorship fixed in any tangible medium of expression."[106] The Act then lists the categories of protectable subject matter, just like other common law jurisdictions typically do.[107] Importantly, the authorship and originality requirements appear in the codification of the idea-expression dichotomy. Specifically, the Act prescribes that "[i]n no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."[108]

1. Originality

American copyright originality jurisprudence typically begins with a discussion of *Burrow-Giles Lithographic Co. v. Sarony*.[109] The case concerned lithographs that had allegedly infringed on the rights of a photographer whose work they were based on. The Court first defined the author as one "to whom anything owes its origin; originator; maker; one who completes a work of science or literature."[110] The Court then held that copyright can subsist in photographs "so far as they are representatives of original intellectual conceptions of the author."[111] Just like the European

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[106] 17 U.S.C. § 102(a).

[107] *Id. But see* Pamela Samuelson, *Evolving Conceptions of Copyright Subject Matter*, 78 UNIV. PITT. L. REV. 17, 57 (2016) (arguing that other types of intellectual creations may be eligible for protection if they satisfy copyright's originality and fixation requirements). Importantly, Samuelson relies on the human communication criterion, i.e., "whether [the work] communicates intellectual content (that is, original expression) to a human audience" as one of the most important factors in extending the closed list. *Id*.

[108] 17 U.S.C. § 102(b).

[109] Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884).

[110] *Id.* at 58. Notably, the *Burrow-Giles* case closely follows the language used in the *droit d'auteur*. *See* Case C-145/10, Painer v. Standard VerlagsGmbH, 2011 E.C.R. I-12533.

[111] *Burrow-Giles*, 111 U.S. at 58.

cases, guided by the notion of creativity, the Court considered how a photographer can embody his intellectual conception in taking a picture.[112] In another classic case, *Bleistein v. Donaldson Lithographing Co.*,[113] the Court followed suit, emphasizing that:

> The [work] is the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man's alone. That something he may copyright unless there is a restriction in the words of the act.[114]

Further, in *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*,[115] the Second Circuit found that originality means that "the particular work 'owes its origin' to the 'author.'"[116] Originality does not require a large measure of novelty; the author must simply contribute "something recognizably his own" for the copyright to subsist.[117]

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[112] *Id.* at 58–59; *see also* Deming Liu, *Of Originality: Originality in English Copyright Law: Past and Present,* 36 EUR. INTELL. PROP. REV. 376, 386 (2014) ("[While the] copyright provision of the U.S. Constitution was based on the Statute of Anne 1710 and the English common law, [it is] similar to that of some continental European countries to the extent that it requires an element of creativity with respect to originality.").

[113] Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903).

[114] *Id.* at 300.

[115] Alfred Bell & Co. v. Catalda Fine Arts, Inc., 191 F.2d 99 (2d Cir. 1951).

[116] *Id.* at 102 (quoting *Burrow-Giles*, 111 U.S. at 57–58).

[117] *Id.* at 105 ("A copyist's bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations. Having hit upon such a variation unintentionally, the 'author' may adopt it as his and copyright it."). In another case preceding *Feist*, the Seventh Circuit made the following distinction:

> A work is creative if it embodies some modest amount of intellectual labor. A work is novel if it differs from existing works in some relevant respect. For a work to be copyrightable, it must be original and creative, but need not be novel . . . Although the requirements of independent creation and intellectual labor both flow from the constitutional prerequisite of authorship and the statutory reference to original works of authorship, courts often engender confusion by referring to both concepts by the term "originality." For the sake of clarity, we shall use "originality" to mean independent authorship and "creativity" to denote intellectual labor.

Baltimore Orioles, Inc. v. Major League Baseball Players Ass'n, 805 F.2d 663, 668 n.6 (7th Cir. 1986).

Then came *Feist Publications, Inc. v. Rural Telephone Service Co.*,[118] a decision as fundamental for today's understanding of originality as it is controversial.[119] This case centered upon whether factual compilations were protectable. As a threshold matter, the Court found that "[o]riginality is a constitutional requirement."[120] Thus, for a subject matter to qualify, it must be "original to the author," meaning "that the work was independently created by the author" and that it "possesses at least some minimal degree of creativity."[121] This *modicum of creativity* threshold entails that only those works or parts of the work which embody authorial creativity will be protected.[122] Additionally, the Court found that a factual compilation could be copyrighted, in so far as the compilation "feature an original selection or arrangement of facts," but limited the copyright protection "to the particular selection or arrangement."[123] In proclaiming this, the Court found that mere labor and expense—investment of the "sweat of the brow"—is not enough.[124]

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[118] 499 U.S. 340 (1991).

[119] *See, e.g.*, Brian L. Frye, *Against Creativity*, 11 N.Y.U. J.L. & LIBERTY 426 (2017).

[120] *Feist*, 499 U.S. at 346.

[121] *Id.* at 345. The independent creation question is, of course, often litigated in cases of supposed infringement. For our purposes, it is enough to understand that "if by some magic a man who had never known it were to compose anew Keats's *Ode on a Grecian Urn*, he would be an 'author,' and, if he copyrighted it, others might not copy that poem, though they might of course copy Keats's." Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 54 (2d Cir. 1936). As for the second requirement, our understanding is difficult to dispute, either. As Justice Gorsuch opined, "the unequivocal lesson from *Feist* is that works are not copyrightable to the extent they do not involve any expression apart from the raw facts in the world." Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc., 528 F.3d 1258, 1265 (10th Cir. 2008). Indeed, some cases call originality the requirement of "expressive authorship." *See, e.g.*, Kelley v. Chi. Park Dist., 635 F.3d 290, 292 (7th Cir. 2011).

[122] *Feist*, 499 U.S. at 348 ("Originality remains the *sine qua non* of copyright; accordingly, copyright protection may extend only to those components of a work that are original to the author.").

[123] *Id.* at 350–51.

[124] *Id.* at 353, 358 ("'Sweat of the brow' courts thereby eschewed the most fundamental axiom of copyright law— that no one may copyright facts or ideas." Contrarily, "to merit protection, the facts must be selected, coordinated, or

The underlying theme of the *Feist* understanding of originality is that the idea-expression dichotomy reigns supreme, and that facts and ideas cannot be owned.[125] Authorial originality brings subject matter into the law's eyes and turns it into expressions of one's mind. The same goes for processes or instructions,[126] universal elements such as silence or a lack of expression,[127] a commonplace trope or *scenes a faire*,[128] and historical facts[129]—do not owe their origin to any author and thus cannot be owned. Courts will also deny copyright if the idea and expression are merged, that is, "when that idea is incapable of being expressed, as a practical matter, in more than one or a small number of ways."[130] In this way, originality

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arranged 'in such a way' as to render the work as a whole original."); *see also* Comput. Assocs. Int'l v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992) ("*Feist* teaches that substantial effort alone cannot confer copyright status on an otherwise uncopyrightable work. As we have discussed, despite the fact that significant labor and expense often goes into computer program flow-charting and debugging, that process does not always result in inherently protectable expression.").

[125] *See also* ATC Distrib. Grp., Inc. v. Whatever It Takes Transmissions & Parts, Inc., 402 F.3d 700, 707 (6th Cir. 2005) ("Original and creative ideas, however, are not copyrightable . . . unlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea—not the idea itself.").

[126] *See* Baker v. Selden, 101 U.S. 99, 100–01 (1879) ("Where the truths of a science or the methods of an art are the common property of the whole world, any author has the right to express the one, or explain and use the other, in his own way."); Bikram's Yoga Coll. of India, LP v. Evolation Yoga, LLC, 803 F.3d 1032 (9th Cir. 2015) (explaining that a sequence of yoga poses does not merit copyright protection).

[127] *See* Cheng Lim Saw, *Protecting the Sound of Silence in 4'33: - A Timely Revisit of Basic Principles in Copyright Law*, 27 EUR. INTELL. PROP. REV. 467, 467 (2005).

[128] *See, e.g.*, Hoehling v. Universal City Studios, Inc., 618 F.2d 972, 979 (2d Cir. 1980); Detective Comics v. Bruns Publications, 111 F.2d 432 (2d Cir. 1940); Abdin v. CBS Broadcasting, 971 F.3d 57, 68 (2d Cir. 2020).

[129] *Hoehling*, 618 F.2d at 978 ("[In] works of fiction . . . the distinction between an idea and its expression is especially elusive. But, where, as here, the idea at issue is an interpretation of an historical event . . . such interpretations are not copyrightable as a matter of law . . . factual information is in the public domain.").

[130] Pamela Samuelson, *Reconceptualizing Copyright's Merger Doctrine*, 63 J. COPYRIGHT SOC'Y U.S.A. 417, 417 (2016); *see Baker*, 101 U.S. at 100–01.

stems from the antecedent requirement of authorial expression, making emergent works uncopyrightable.[131]

Moreover, in the U.S. and EU alike, the originality threshold was invoked, implicitly or explicitly, in consideration of the protection of computer program interfaces, as distinguished from the original code, despite the high economic investment that companies made in the underlying products.[132] Combinations of unoriginal elements, no matter how much investment is put into them, do not satisfy the originality requirement.[133]

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[131] To further clarify, Daniel Gervais summarized this element of *Feist* elegantly:

> A choice is creative if made independently by the author and that is not dictated by the function of the work, the method or technique used, or by applicable standards or relevant good practice. Purely random, arbitrary or insignificant selection is insufficient. The exclusion of choices dictated by the function of the work is an expression of the test of "practical inevitability" found in *Feist*: If function dictates the course to be followed, there is no room for creativity. From a copyright standpoint, therefore, the result is indeed "inevitable."

Gervais, *supra* note 4, at 2090–91 (footnotes omitted).

[132] Google LLC v. Oracle America, Inc., 141 S. Ct. 1183 (2021). The Court refused to opine on originality explicitly, finding fair use instead. *Id.* at 1197. The originality angle of the case was nonetheless emphasized by scholars. *See* Mark A. Lemley & Pamela Samuelson, *Interfaces and Interoperability After* Google v. Oracle, 100 TEX. L. REV. 1 (Nov. 2021). For the European position, see Case C-393/09, Bezpečnostní softwarová asociace – Svaz softwarové ochrany v. Ministerstvo kultury, 2010 E.C.R. I-13971, ¶¶ 46–49 ("Consequently, the graphic user interface can, as a work, be protected by copyright if it is its author's own intellectual creation . . . where the expression of those components is dictated by their technical function, the criterion of originality is not met, since the different methods of implementing an idea are so limited that the idea and the expression become indissociable.").

[133] As the Ninth Circuit held:

> It is true, of course, that a combination of unprotectable elements may qualify for copyright protection. But it is not true that any combination of unprotectable elements automatically qualifies for copyright protection. Our case law suggests, and we hold today, that a combination of unprotectable elements is eligible for copyright protection only if those elements are numerous enough and their selection and arrangement original enough that their combination constitutes an original work of authorship.

2. Authorship

The concept of authorship is beset with obscurities. In the case of the *Wrecked and Abandoned Vessel R.M.S. Titanic*,[134] the court explained that:

> Generally speaking, the author of a work is the person who actually creates the work, that is, the person who translates an idea into a fixed, tangible expression entitled to copyright protection. In the context of film footage and photography, it makes intuitive sense that the "author" of a work is the individual or individuals who took the pictures, i.e.[,] the photographer.[135]

However, originality molds our understanding of authorship. While the plaintiff did not physically take the pictures, they provided the nautical photographers with key directions regarding storyboards, lighting, and the angles of the shots. Their involvement transformed the work into their original intellectual conception.[136] The plaintiff, therefore, exercised creative control by constraining the choices of the actual photographers and obtained authorship and copyright through a relationship of agency.[137] The principle remains the same in joint works,[138] and for this reason actors or models ordinarily do not own copyright in the works they are the subject of unless they provide original contributions.[139]

Satava v Lowry, 323 F.3d 805, 811 (9th Cir. 2003); *see also* Coach, Inc. v. Peters, 386 F. Supp. 2d 495, 496 (S.D.N.Y. 2005); Letter from Catherine Zaller Rowland, U.S. Copyright Office, to Andrew J. Avsec, Esq., Brinks Gilson & Lione (Jan. 8, 2018) (on file with the Library of Congress).

[134] Lindsay v. Wrecked & Abandoned Vessel R.M.S. Titanic, No. 97 Civ. 9248 (HB), 1999 WL 816163 (S.D.N.Y. Oct. 13, 1999).

[135] *Id.* at *4; *see also* Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730, 737 (1989) ("[T]he author is the party who actually creates the work, that is, the person who translates an idea into a fixed, tangible expression entitled to copyright protection.").

[136] *Lindsay*, 1999 WL 816163, at *4–5.

[137] This is also known as "amanuensis." *See* Jane C. Ginsburg & Luke A. Budiardjo, *Authors and Machines*, 34 BERKELEY TECH. L.J. 343 (2018).

[138] *See, e.g.*, Erickson v. Trinity Theatre, Inc., 13 F.3d 1061 (7th Cir. 1994); Aalmuhammed v. Lee, 202 F.3d 1227 (9th Cir. 2000).

[139] *See, e.g.*, Garcia v. Google, Inc., 786 F.3d 733 (9th Cir. 2015) (en banc). The latter point is now hotly debated. *See* Justin Hughes, *Actors as Authors in American Copyright Law,* 51 CONN. L. REV. 1 (2018).

For the purposes of copyrightability of emergent works, matters do not look different under the work made for hire doctrine, despite some arguments to the contrary.[140] Works made for hire are works created by the employees within the scope of their employment or specially commissioned thereto, where the Act ascribes authorship to the employer, rather than the factual creator.[141] When a work is commissioned, the overarching question is whether the employer controls the creative process.[142] In any case, there must be a natural person who expresses their creativity in the work in question. This, of course, AI cannot do[143]—and if it could, the work would not be an emergent work.

3. Work

While the concept of a "work" is painfully under-theorized, in the U.S., like in old British law, it relates to any subject matter factually created.[144] Indeed, it may be impossible to "extract the

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[140] *Cf. e.g.*, Yanisky-Ravid, *supra* note 4 (developing an AI work made for hire model).

[141] 17 U.S.C. § 101.

[142] Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730 (1989).

[143] Arguably, in the U.S., the Constitution rules out protection of non-human creativity. Boyden, *supra* note 2, at 383. As Annmarie Bridy concedes: "[W]ho or what can be an author for purposes of the Copyright Act is ultimately a constitutional question. Congress has constitutional authority to create exclusive rights in the writings of authors. And historically, courts have construed these words liberally, but always with reference to human genius or intellect." *Evolution of Authorship*, *supra* note 4, at 398 (footnotes omitted). She goes on to offer an argument in favor of protection of AI-generated works on the basis that machines can also be "creative." *Id.* This is a rather confusing argument, since Bridy switches between neuroscience, metaphysics, and the law, attempting to find someone who will concede the machine can be creative. *Cf.* Mala Chatterjee & Jeanne C. Fromer, *Minds, Machines, and the Law: The Case of Volition in Copyright Law*, 119 COLUM. L. REV. 1887 (2019) (similarly inquiring whether machines can have requisite mental states for copyright purposes but noting that it is ultimately a normative question what the mental state requirements are).

[144] *See* Brad Sherman*, What Is a Copyright Work?*, 12 THEORETICAL INQUIRIES L. 99 (2011); Paul Goldstein, *What Is a Copyrighted Work? Why Does It Matter?*, 58 UCLA L. REV. 1175, 1175 (2011) ("[C]opyright . . . nowhere in fact delimits the metes and bounds of a copyrighted work, or even prescribes a methodology for locating a work's boundaries"); Justin Hughes, *Size Matters (Or Should) in Copyright Law*, 74 FORDHAM L. REV. 575, 576 (2005) ("American copyright law is . . . full of defined terms, all built on one completely undefined term: the 'work.'

'work' from the doctrinal alloy mandating that works be fixed in 'copies,' original and authored, and then separately inspect it."[145] For our purposes, it may not warrant further investigation: since copyright only subsists in original authorial works, the concept of a work cannot salvage the case for protecting emergent works. According to *Feist*, this is what the Constitution prescribes.[146] To protect emergent works would thus, on conventional interpretation, not only be antithetical to copyright, but also unconstitutional.

C. EU Copyright Law

The CJEU harmonized both the concepts of *work* and *originality*, unifying them as the "author's own intellectual creation" ("AOIC").[147] It accomplished this by designating *work* and *originality* as *autonomous legal concepts*, thereby unifying their interpretation, regardless of national legislation and jurisprudence.[148]

"); Jani McCutcheon, *Works of Fiction: The Misconception of Literary Characters As Copyright Works*, 66 J. COPYRIGHT SOC'Y U.S.A. 115, 129 (2019) ("Copyright work itself is undefined, joining its indeterminate stablemates of authorship and the creativity standard conditioning originality.") (footnotes omitted).

[145] McCutcheon, *supra* note 144, at 130 (footnotes omitted).

[146] *See* Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 346 (1991) (stating that the constitutional reference to "authors" and "writings" "presuppose[s] a degree of originality"); Kelley v. Chi. Park Dist., 635 F.3d 290, 302 (7th Cir. 2011).

[147] *See* Council Directive 2001/29, 2001 O.J. (L 167) 5, 9 (EC) ("While no new concepts for the protection of intellectual property are needed . . . [a]ny harmonisation [sic] of copyright and related rights must take as a basis a high level of protection, since such rights are crucial to intellectual creation."); *see* ROSATI, *supra* note 93.

[148] ROSATI, *supra* note 93, at 4; *see also* Ana Ramalho, *The Competence and Rationale of EU Copyright Harmonization*, *in* THE ROUTLEDGE HANDBOOK OF EU COPYRIGHT LAW 3, 14 (Eleonora Rosati ed., 2021) (analyzing both the Treaties' derived competency to harmonize and its de facto advancement through the CJEU and institutional activity); Tatiana-Eleni Synodinou, *The Desirability of Unification of European Copyright Law*, *in* THE ROUTLEDGE HANDBOOK OF EU COPYRIGHT LAW, *supra,* at 39, 52 ("[The CJEU] has often 'creatively' interpreted the EU legislative acquis provisions by clarifying, completing or forming their meaning with a strong emphasis on their 'autonomous and uniform interpretation' [so that] important areas of copyright that had been largely left untouched by harmonization directives have been de facto harmonized by the Court."); *see also*

The CJEU constituted the notion of AOIC as the subsistence requirement for all works.[149] This standard combines two elements: personal and intellectual creation.[150] In this way, the CJEU embraced the notion of originality implicitly defined in Berne, and later transposed into TRIPS,[151] extrapolating them into the autonomous concept, and ascribed the nation state laws with this meaning.[152] In *Football Dataco v. Yahoo!*,[153] the Court further "ruled out any possible alternative (quasi-copyright) protection for subject-matter such as databases" or, by implication, AI-generated works.[154] Therefore, the Court "finish[ed] the job left largely undone by the European legislature."[155]

The process of harmonization achieved its maturity in *Infopaq International v. Danske Dagblades*.[156] The Court first noted that it is "apparent from the general scheme of the Berne Convention," particularly Articles 2(5) and (8), that the "protection of certain subject-matters as artistic or literary works presupposes that they are intellectual creations."[157] The Court went on to say that "copyright within the meaning of [the Directive] is liable to apply only in relation to a subject-matter which is original in the sense that it is its author's own intellectual creation."[158] In regard to parts of a work, the Court held that they are protected only insofar as they contain

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Paul Torremans, *The Role of the CJEU's Autonomous Concepts as a Harmonising Element of Copyright Law in the United Kingdom*, 4 INTELL. PROP. Q. 265 (2019) (analyzing the implications of harmonization on the UK law). *See generally* ANA RAMALHO, THE COMPETENCE OF THE EUROPEAN UNION IN COPYRIGHT LAWMAKING (2016) (analyzing copyright harmonization vis-à-vis the "normative gap" of the lawmaking, not based in Treaties or other higher sources of the law).

[149] ROSATI, *supra* note 93, at 4.

[150] *Id.* at 5 (quoting JEAN-SYLVESTRE BERGE, LA PROTECTON INTERNATIONALE ET COMMUNAUTAIRE DU DROIT D'AUTEUR 141 (1996)).

[151] *Id.* at 62.

[152] *Id.* at 53.

[153] Case C-604/10, Football Dataco v. Yahoo!, ECLI:EU:C:2012:115 (Mar. 1, 2012).

[154] ROSATI, *supra* note 93, at 6.

[155] Bernt Hugenholtz, *Why the Copyright Directive is Unimportant, and Possibly Invalid*, 22 EUR. INTELL. PROP. REV. 499, 500 (2000).

[156] Case C-5/08, Infopaq Int'l v. Danske Dagblades, 2009 E.C.R. I-06569.

[157] *Id.* ¶ 34.

[158] *Id.* ¶ 37.

"elements which are the expression of the intellectual creation of the author of the work."[159] Understood in this way, there are two "cumulative conditions [which] must be satisfied for a subject matter to be classified as a 'work.' "[160] First, "the subject matter concerned must be original in the sense that it is the author's own intellectual creation."[161] Second, "only something which is the expression of the author's own intellectual creation may be classified as a 'work.' "[162] The Court thus closed the circle: copyright protects *only* an author's own intellectual creations.

According to an influential interpretation of the European standard, the two-step test requires first to determine if the particular subject matter is of such kind which allows for formative freedom in the work's creation—in other words, whether free and creative choices *can* be made—and second, whether the putative author exercised creative choices to a sufficient extent, so that the work is his own intellectual creation, reflecting authorial personality.[163] The causal inquiry involves an assessment of "the history of their individual creation: the intention or expectation of the persons who created them, and the view of the society in which they were created."[164] It seems inevitable that emergent works which categorically deny authorial creative contributions must fall outside

[159] *Id.* ¶ 39.
[160] Case C-310/17, Levola Hengelo BV v. Smilde Foods BV, ECLI:EU:C:2018:899, ¶ 35 (Nov. 13, 2018).
[161] *Id.* ¶ 36.
[162] *Id.* ¶ 37.
[163] Pila, *supra* note 92, at 21.
[164] *Id.* at 31–32.

of the EU copyright causation.[165] In fact, this conclusion has been affirmed by a European Parliament resolution.[166]

1. Unoriginality of Emergent Works

Since AI-generated works do not fulfill the AOIC standard, they are not original, and thus not protectable. The *Infopaq* court stated that it is "only through the choice, sequence and combination of those words that the author may express his creativity in an original manner and achieve a result which is an intellectual creation."[167] For this reason, words are generally not protected in themselves.[168] Moreover, in *Painer*,[169] the Court addressed copyright in photographs, finding that copyright can subsist in a photograph if it is original in the sense of being the author's own intellectual creation.[170] Even though photographs are famously difficult for the artist to take creative choices in, the Court distinguished them from football matches which, being subject to the rules of the game, leave no room for creative freedom.[171] Unlike football matches which are rule-bound from making creative choices, the photographer can make "free and creative choices in several ways and at various points in its production."[172] The Court then provided examples of such choices, including the choice of background, framing, or

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[165] *Id.* at 40 ("[T]here is . . . no scope for protecting by copyright works produced by a machine or animal, including an intelligent one."); LIONEL BENTLY ET AL., INTELLECTUAL PROPERTY LAW 117–18 (5th ed. 2018) ("[N]o computer-generated work can be protected by copyright in accordance with European law."); s*ee also* Wietse Vanpoucke, *Copyright Challenged by Art Created by Artificial Intelligence*, 42 EUR. INTELL. PROPR. REV. 495, 497 (2021) ("[W]orks wherein the human factor is difficult or impossible to determine do not qualify for copyright protection in the EU copyright acquis as these works have no readily identifiable author.") (emphasis omitted).

[166] European Parliament Resolution of 20 October 2020 on Intellectual Property Rights for the Development of Artificial Intelligence Technologies, 2021 O.J. (C 404) 129, 133.

[167] Case C-5/08, Infopaq Int'l v. Danske Dagblades, 2009 E.C.R. I-06569, ¶ 45.

[168] *Id.* ¶ 46.

[169] Case C-145/10, Painer v. Standard VerlagsGmbH, 2011 E.C.R. I-12533, ¶ 217.

[170] *Id.* ¶ 87.

[171] *Id.* ¶ 89 (citing Joined Cases 403 & 429/08, Football Association Premier League Ltd v. QC Leisure, ECLI:EU:C:2011:631, ¶ 98 (Oct. 4, 2011)).

[172] *Id.* ¶ 90.

lighting,[173] concluding that through them an author of a photograph can, in principle, "stamp the work created with his 'personal touch.' "[174] By definition, since an author makes no requisite creative choices in AI-generated or emergent works, the works are not original and thus not protectable. This was affirmed in Advocate General Trstenjak's opinion, where she stated that "only human creations are . . . protected."[175]

Moreover, the Court clarified that its definition of originality, using the notion of creativity, is not satisfied through mere expenditure of capital or labor. This was emphasized in *Football Dataco*,[176] where the CJEU relied on TRIPS and the WIPO Copyright Treaty to hold that data, by itself, does not fulfill the required standard of originality.[177] In holding so, the Court distinguished that the foundational notion of copyright—creativity—and that of a related right is different.[178] The Court held that the resources or labor invested in setting up the database are irrelevant for copyright protection.[179] The only criterion that matters

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[173] *Id.* ¶ 91 ("In the preparation phase, the photographer can choose the background, the subject's pose and the lighting. When taking a portrait photograph, he can choose the framing, the angle of view and the atmosphere created. Finally, when selecting the snapshot, the photographer may choose from a variety of developing techniques the one he wishes to adopt or, where appropriate, use computer software.").

[174] *Id.* ¶ 92; *see also* C-161/17, Land Nordrhein-Westfalen v. Renckhoff, ECLI:EU:C:2018:634, ¶ 14 (Aug. 7, 2018); Case C-683/17, Cofemel—Sociedade de Vestuário SA v. G-Star Raw CV, ECLI:EU:C:2019:721, ¶ 30 (Sep. 12, 2019). Moreover, the Court found that this standard applies to all photographs, including the portrait one, and on the other hand, the copyright granted therein of the same quality. *Id.* ¶¶ 93–98. One cannot thus argue that, for example, a *weak* copyright exists in particular works, such as AI-generated ones.

[175] Opinion of Advocate General Trstenjak, Case C-145/10, Painer v. Standard VerlagsGmbH, 2011 E.C.R. I-12533, ¶ 121 (Apr. 12, 2011).

[176] Case C-604/10, Football Dataco Ltd. v. Yahoo!, ECLI:EU:C:2012:115 (Mar. 1, 2012).

[177] *See also* Council Directive 96/9, art. 16, 1996 O.J. (L 77) 21 (EC) ("[N]o criterion other than originality in the sense of the author's intellectual creation should be applied to determine the eligibility of the database for copyright protection, and in particular no aesthetic or qualitative criteria should be applied.").

[178] *Football Dataco*, ECLI:EU:C:2012:115, ¶ 27.

[179] *Id.* ¶ 36.

is originality,[180] which is understood as an author's expression of "his creative ability in an original manner by making free and creative choices . . . [who] thus stamps his 'personal touch.' "[181] Significant skill and labor are relevant only insofar as they express the creativity of the author of the database.[182] For example, the mere fact that a company invested in the development of an AI system or that the user licensed the program is not enough to find originality in the AI's output.

Furthermore, originality and copyright causation have an intrinsic element of intentionality. In *Brompton Bicycle Ltd. v. Chedech/Get2Get*,[183] the Court stated that whether personality was stamped through creative choices is a matter of authorial intention, which a court must infer, but is not obligated to find, from the mere appearance of the object.[184] This intentional element of copyright causation was emphasized even more forcefully by the Advocate General, who stated that the Court must determine "whether [the] author was really seeking to achieve his own intellectual creation or whether, instead, he was seeking only to protect an idea applicable to the development of an . . . industrial product."[185] The map is not territory,[186] one cannot copyright subject matter only because it looks protectable as a matter of principle, and thus cannot copyright emergent works just because they superficially look like something

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[180] *See id.* ¶ 40.

[181] *Id.* ¶ 38 (citing Case C-393/09, Bezpečnostní softwarová asociace – Svaz softwarové ochrany v. Ministerstvo kultury, 2010 E.C.R. I-13971, ¶ 50; Case C-145/10, Painer v. Standard VerlagsGmbH, 2011 E.C.R. I-12533, ¶ 92).

[182] *Id.* ¶¶ 41–46.

[183] Case C-833/18, Brompton Bicycle Ltd. v. Chedech/Get2Get, ECLI:EU:C:2020:79 (Feb. 6, 2020).

[184] *Id.* ¶¶ 34–36.

[185] *See* Opinion of Advocate General Campos Sánchez-Bordona, Case C-833/18, Brompton Bicycle Ltd. v. Chedech/Get2Get, ECLI:EU:C:2020:79, ¶ 93 (Feb. 6, 2020).

[186] *See id.* ¶¶ 58–60 (finding that *Cofemel* defined the term "work" as an autonomous concept of EU law, "holding that it must reflect the personality of the work's creator." In doing so, the AG argued, *Cofemel* does not find originality simply because of aesthetic effect thus "precluding national legislation from conferring protection, under copyright, to designs . . . on the ground that, over and above their practical purpose, they generate a specific and aesthetically significant visual effect.").

protectable.[187] This seemingly bold conclusion is copyright orthodoxy: just because a reproduction looks like the original does not mean it is copyrightable.

2. Emergent Works and the Concept of "Work"

In addition to being unoriginal, emergent works are also not even *works* as understood in CJEU jurisprudence. As the CJEU held in *Cofemel v. G-Star Raw*,[188] the concept of a "work" is indeed an autonomous concept of EU law, which requires that there "exist an original subject matter, in the sense of being the author's own intellectual creation" and, second, that the very "classification as a work is reserved to the elements that are the expression of such creation."[189] That which is not the author's own intellectual creation does not exist in copyright's eyes. It is not even a "work;" its form

[187] This reasoning also follows the principle of aesthetic non-discrimination. Similar argument was made by Daniel Gervais. Gervais, *supra* note 4, at 2092–93 ("Applied to determine whether machine productions are creative because they look like they result from a creative process, the test leads to a negative answer . . . It is not enough for a machine to pass itself off as human in one of its outputs to justify generating the same rights as human activity would; the creation process must be human.") (emphasis omitted); Ginsburg & Budiardjo, *supra* note 137, at 401–02 ("Today's machines are fundamentally sets of processes designed by humans to accomplish specific tasks. Their outputs may appear to be 'creative' and may even be aesthetically equivalent to works produced by human authors, but to attribute a work's expressive value to the machine that physically generated that work is to indulge in a fiction.") (footnotes omitted). *But see Coding Creativity*, *supra* note 4. Bridy argues for the opposite conclusion, employing an argument that since all creativity is algorithmic, then there is no difference between outputs of human minds and of computers: both are "machines" merely remixing the data gathered to generate new, but not truly original outputs. *Id.* at 10–11. This is an extension of the postmodern critique of romantic authorship, which turns into a *cul de sac*. Even if it were philosophically true that "all creativity is algorithmic," it does not follow that AI and humans are algorithmic in the same way: the biological limitations of humans as compared to algorithms introduce a quantitative and qualitative difference. Moving the discourse from philosophical to legal, we come to Hume's guillotine. Why is it exactly that the law should see no difference between the two? This is a question deconstruction cannot answer.

[188] Case C-683/17, Cofemel—Sociedade de Vestuário SA v. G-Star Raw CV, ECLI:EU:C:2019:721 (Sept. 12, 2019).

[189] *Id.* ¶ 29.

was never created, even if the corporeal object exists. Finally, the EU law precluded national legislation from holding otherwise.[190]

This reasoning is only reinforced by the invocation of the Berne Convention and an exegesis of its conception of a "work"—which, if to believe the Court's reading, necessitates the AOIC standard. As the *Cofemel* judgment noted, "[c]opyright can only subsist where there is a 'work' that falls within the Berne Convention's artistic, literary[,] or scientific sphere."[191] To reiterate, emergent works fall beyond Berne, too.

What are emergent or AI-generated works, then? They are equivalent to ideas, data, or subject matter predicated by technical function, uninscribed with the authorial creativity and personality of a human author. In other words, they do not exist as entities in copyright law's positive ontology. Again, the case of *Brompton Bicycle* is instructive. The CJEU considered whether copyright subsists in a product whose shape was necessary to obtain a technical result.[192] The Court clarified that the concept of *work* has two conditions: it must be (1) "an original subject matter which is the author's own intellectual creation" and (2) "it requires the expression of that creation."[193] It also recognized that it might be unclear how these two conditions differ, and therefore simplified the conditions, stating that "it is both necessary and sufficient that the subject matter reflects the personality of its author, as an expression of his free and creative choices."[194] The Court further clarified that where a work is a result of purely technical considerations, where there is neither scope for nor exercise of creative freedom, the work will not be copyrighted.[195] There is no presumption of originality or

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[190] *Id.* ¶ 56; *see also* Jozefien Venherpe, *AI and IP – a Tale of Two Acronyms*, *in* ARTIFICIAL INTELLIGENCE AND THE LAW 207, 222 (Jan De Bruyne & Cedric Vanleenhove eds., 2021) ("If there is insufficient human input, if the AI crosses a certain threshold of autonomy, copyright protection will be unavailable.").

[191] Marianne Levin, *The Cofemel Revolution – Originality, Equality and Neutrality*, *in* THE ROUTLEDGE HANDBOOK OF EU COPYRIGHT LAW, *supra* note 148, at 99.

[192] Case C-833/18, Brompton Bicycle Ltd. v. Chedech/Get2Get, ECLI:EU:C:2020:461 (June 11, 2020).

[193] *Id.* ¶ 22 (citing *Cofemel*, ECLI:EU:C:2019:721, ¶¶ 29, 32).

[194] *Id.* ¶ 23.

[195] *Id.* ¶¶ 24, 26.

"workness" just because an output exists.[196] To hold otherwise would be to allow for monopolization of ideas rather than expressions, in contravention of the WIPO Copyright Treaty.[197]

IV. CAUSING COPYRIGHT TODAY

Copyright law, as a modern legal institution, is rooted in the notion of human creativity, which it seeks to protect and encourage. This is true when considering international law and both the copyright theory and doctrine of the United States and the European Union.[198] The idea-expression dichotomy, the requirement of human authorship, and the concept of originality inform copyright law's causal inquiry: what does one have to do to acquire copyright in a particular subject matter? By definition, in the case of emergent works, no putative owner, whether the user of a program or its programmer, supplies sufficient creativity to acquire ownership in

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[196] *Id.* ¶ 32; *see also* Opinion of Advocate General Campos Sánchez-Bordona, Case C-833/18, Brompton Bicycle Ltd. v. Chedech/Get2Get, ECLI:EU:C:2020:79, ¶ 65 (Feb. 6, 2020) ("If the appearance of a work of applied art is exclusively dictated by its technical function, as a decisive factor, it will not be eligible for copyright protection.") (emphasis omitted).

[197] *Brompton Bicycle Ltd.*, ECLI:EU:C:2020:79, ¶ 27.

[198] Gervais, *supra* note 4, at 2061, 2093, 2106 ("Copyright is a legal mechanism designed to help produce works that are the result of a human creative process; the incentive is for humans to engage in the process . . . . human progress should serve as a normative guidepost . . . [and] the law should not protect machine productions.") (emphasis omitted); Venherpe, *supra* note 190, at 225 ("[C]opyright seeks to incentivise [sic] human creators, not AI systems, as prescribed by the essentially anthropocentric paradigm of natural justice that underlies continental EU copyright law."); Zurth, *supra* note 4 (arguing that copyright anthropocentrism should be preserved and emergent works should not be protected); *see also* Haochen Sun, *Redesigning Copyright Protection in the Era of Artificial Intelligence*, 107 IOWA L. REV. 1213 (2022) (arguing that subject matter devoid of human contributions should be placed in the public domain and proposing to protect AI works generated with human contributions through a related rights regime); Enrico Bonadio & Luke McDonagh, *Artificial Intelligence as Producer and Consumer of Copyright Works: Evaluating the Consequences of Algorithmic Creativity*, 2 INTELL. PROP. Q. 112 (2020); Ana Ramalho, *Will Robots Rule the (Artistic) World? A Proposed Model for the Legal Status of Creations by Artificial Intelligence Systems*, 21 J. INTERNET L. 1, 22 (2017) (writing that "legislators should consider a public domain model for Ais [sic] creations"); *see also* discussion *supra* Section III.

the AI's output; otherwise, it would not be an emergent work.[199] The seemingly expressive subject matter that is not actually founded in human authorship is not protectable.

Moreover, according to the current version of the Compendium of U.S. Copyright Office Practices, copyright will be refused if a human being did not create the work—meaning when a machine operates randomly or automatically, without input or intervention from a human author, or when the work is created by a non-human animal.[200] The question of AI-generated emergent works has been considered in the Copyright Office Review Board's recent decisions in *A Recent Entry to Paradise* and *Zarya of the Dawn*, while the issue of works created by non-human animals was considered in *Naruto v. Slater*.[201] The denial of copyright in emergent works has also been confirmed in the registration guidance on works containing AI-generated material.[202]

At the same time, although emergent works—just like ideas, facts, or expressions predicated on technical functionality—cannot be protected, if a human author transforms such output to create a new and original expression by supplying enough creativity of his own, the end result may be protectable.[203] For the first time, the causal inquiry needs to become more nuanced, while remaining

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[199] Ralph D. Clifford, *Intellectual Property in the Era of the Creative Computer Program: Will the True Creator Please Stand Up?*, 71 TUL. L. REV. 1675 (1997).

[200] U.S. COPYRIGHT OFF., COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES §§ 101, 306, 312.2 (3d ed. 2021); *see* discussion *infra* Section IV.A–C.

[201] *See* discussion *infra* Section IV.A–C.

[202] Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190 (Mar. 16, 2023) (to be codified at 37 C.F.R. pt. 202).

[203] *See* Alfred Bell & Co. v. Catalda Fine Arts, Inc., 191 F.2d 99, 105 (2d Cir. 1951) ("A copyist's bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations. Having hit upon such a variation unintentionally, the 'author' may adopt it as his and copyright it.") (footnotes omitted).

faithful to the notion of creative expression.[204] These issues were brought out in *Zarya of the Dawn*.[205]

What does this causal inquiry look like? First, one needs to assess where the creative elements in the output of the AI originate. In other words, one needs to assess the quality and nature of a programmer's and a user's respective contributions at the point when the subject matter is created.[206] If the putative author expresses an idea in an original way, that is, in accordance with the jurisdiction's qualitative standard, he can acquire copyright in the subject matter. This calls for looking into "the causation of originality."[207] More specifically, authors propose a foreseeability inquiry to answer the questions of authorship and originality in those factual situations where AI is not merely a tool but disrupts originality causation.[208] The question is how probable it is that the author *intended*, or rather *foresaw*, the creative result.

It seems that in many cases involving the use of AI, the algorithm does not undermine the creative control of a human. Thus, we are faced with the principle already observed in the *Titanic* case that if "the upstream creator's decisions define and bound the downstream creator's role," or that of the tool, then "the downstream creator" or the tool used do "not disrupt the upstream creator's claim of authorship."[209] It is equally clear that if a putative author

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[204] *See* Boyden, *supra* note 2; Gervais, *supra* note 4.

[205] Letter from Robert J. Kasunic, U.S. Copyright Off., to Van Lindberg, Taylor English Duma LLP (Feb. 21, 2023) (on file with Library of Congress); *see* discussion *infra* Section IV.C.

[206] Boyden, *supra* note 2, at 381–84.

[207] Gervais, *supra* note 4, at 2099 ("[T]his means identifying the cause of the choices that 'look like' they might be creative and thus generative of originality."). This line of thinking has been applied in the context of AI-assisted production by Bernt Hugenholtz, João Pedro Quintais, and Daniel Gervais. They distinguish three iterative stages: (1) conception, (2) execution, (3) redaction. In cases of automatic execution, with human involvement in conception and redaction absent, there will clearly be no "work." Bernt Hugenholtz, João Pedro Quintais & Daniel Gervais, *Trends and Developments in Artificial Intelligence: Challenges to* Copyright, WOLTERS KLUWER COPYRIGHT BLOG (Dec. 16, 2020), http://copyrightblog.kluweriplaw.com/2020/12/16/trends-and-developments-in-artificial-intelligence-challenges-to-copyright/ [https://perma.cc/8RCK-V7H5].

[208] Boyden, *supra* note 2, at 391; Gervais, *supra* note 4, at 2100–01.

[209] Ginsburg & Budiardjo, *supra* note 137, at 429.

exercised so little creative control, because of another person's creative contributions or the use of AI, then the causal link can be severed.[210] This is a probabilistic inquiry, leading to the conclusion that either the user, the programmer, or no one authored the output.[211] Accordingly:

> If all or almost all of the relevant choices were caused by a machine, the production is not protected by copyright at all. If a work results from choices made both by human and machine, that work should be treated as any other case where someone has reused material from the public domain to create a new work: The public domain material must be filtered out [which] means filtering out material that results from machine-made choices.[212]

Similarly, it has been proposed that legal causation should ask whether a person claiming to be an author could predict the "work's content with reasonable specificity before it is rendered or received by the user."[213] Therefore, it is clear that after having filtered out the unoriginal material, the subject matter must either be found authored by a human who supplied the necessary originality (or his employer) or remain in the public domain.

This is a general sketch of the causal inquiry, which must become refined, though scholars disagree on the details. Thus, for example, the above version of the causal inquiry includes not just whether the output contains expressive elements that the author could reasonably foresee, but also "a meaning or message that the author wishes to convey to his or her audience,"[214] which is a contentious addition. Moreover, while EU law clearly requires the authorial intent to be present,[215] authors disagree on the place and scope of the intent to create in the U.S.,[216] and how it would apply to creations with the use of AI.

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[210] *Id*.

[211] Boyden, *supra* note 2, at 392.

[212] Gervais, *supra* note 4, at 2100–01 (emphasis omitted) (footnotes omitted).

[213] Boyden, *supra* note 2, at 379.

[214] *Id.* at 393.

[215] *See* Opinion of Advocate General Campos Sánchez-Bordona, Case C-833/18, Brompton Bicycle Ltd. v. Chedech/Get2Get, ECLI:EU:C:2020:79, ¶ 93 (Feb. 6, 2020).

[216] *See* Ramalho, *supra* note 198, at 6 (writing that machines cannot author because they lack the "intention or purpose to create"); David Nimmer, *Copyright*

The following sections will analyze how copyright law came to be applied in the recent judgements in *Naruto v. Slater*[217] and *Thaler v. Perlmutter*,[218] together with the Copyright Office Review Board's decisions in *A Recent Entry to Paradise*[219] and *Zarya of the Dawn*.[220] Irrespective of the difficulties mentioned above, the *Naruto* and *Thaler* cases, together with the Review Board's registration decisions in *A Recent Entry to Paradise* and *Zarya of the Dawn*, affirm the place of the fundamental principles of copyright and preclude the subsistence of rights in emergent works.

A. Naruto v. Slater

In *Naruto v. Slater*,[221] widely known as the "monkey selfie case," the People for the Ethical Treatment of Animals ("PETA") brought an action against David John Slater, a professional photographer, and his publisher, claiming they violated the copyright of Naruto, a monkey. According to the complaint, Naruto took photographs of himself through "independent, autonomous action," one which was purposeful and guided by understanding, and thus created an original work of authorship.[222] Whether the factual allegations were true is difficult to ascertain. Slater himself

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in the Dead Sea Scrolls: Authorship and Originality, 38 HOUS. L. REV. 1, 159, 210 (2001) ("[I]ntent is a necessary element of the act of authorship.") (emphasis omitted). *But see* Ginsburg & Budiardjo, *supra* note 137, at 403 n.229 ("We do not endorse the view that authorship requires the putative author to claim that she had the 'purpose to create.' "); Balganesh, *supra* note 68, at 7 ("Copyright law treats the author's intentionality—or lack thereof—as irrelevant to the originality determination, which is satisfied as long as the work itself exhibits a 'modicum of creativity.' ").

[217] Naruto v. Slater, 888 F.3d 418 (9th Cir. 2018).

[218] Thaler v. Perlmutter, No. 22-1564 (BAH), 2023 WL 5333236 (D.D.C. Aug. 18, 2023).

[219] Letter from Shira Perlmutter, U.S. Copyright Off., to Ryan Abbott (Feb. 14, 2022) (on file with Library of Congress) (regarding Second Request for Reconsideration for Refusal to Register a Recent Entrance to Paradise).

[220] Letter from Robert J. Kasunic, U.S. Copyright Off., to Van Lindberg, Taylor English Duma LLP (Feb. 21, 2023) (on file with Library of Congress) (regarding Zarya of the Dawn, registration # VAu001480196).

[221] Naruto v. Slater, No. 15-cv-04324-WHO, 2016 WL 362231(N.D. Cal. Jan. 28, 2016).

[222] Complaint at *1–3, Naruto v. Slater, No. 15-cv-04324-WHO, 2016 WL 362231 (N.D. Cal. Jan. 28, 2016).

offered a different account of how the monkey selfie came to be, claiming he exercised creative control over the shot, including setting the light and perspective, and "coax[ed] the monkeys into pressing the shutter."[223] According to principle, the scope of Slater's involvement in the creation of the work is critical in assessing the validity of his copyright claim.

Nevertheless, the Court accepted PETA's factual allegations as true, to then dismiss the claim for lack of standing. The Court found that Naruto was not an "author" within the meaning of the Copyright Act,[224] given that the statute does not mention animals, while all of the case law has extended the concept of authorship to human beings only.[225] Moreover, the Court relied on the *Trade-Mark Cases*,[226] which held that only the "the fruits of intellectual labor . . . founded in the creative powers of the mind" can be protected,[227] and on the Copyright Office Compendium holding that only "original work of authorship, provided that the work was created by a human being," could be registered.[228] On appeal, the Ninth Circuit upheld the District Court's decision, finding that non-humans lack standing under the Copyright Act.[229]

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[223] Julia Carrie Wong, *Monkey Selfie Photographer Says He's Broke: 'I'm Thinking of Dog Walking'*, GUARDIAN (July 12, 2017, 8:22 PM), https://www.theguardian.com/environment/2017/jul/12/monkey-selfie-macaque-copyright-court-david-slater [https://perma.cc/U8ZW-Z5NV]; Ginsburg & Budiardjo, *supra* note 137, at 364.

[224] *Naruto*, 2016 WL 362231, at *4.

[225] *Id*.

[226] Trade-Mark Cases, 100 U.S. 82 (1879).

[227] *Id.* at 94.

[228] *Naruto*, 2016 WL 362231, at *4 (citing U.S. COPYRIGHT OFF., COMPENDIUM OF THE U.S. COPYRIGHT OFFICE PRACTICES § 306 (3d ed. 2021)); *see also* Tim W. Dornis, *Artificial Creativity: Emergent Works and the Void in Current Copyright Doctrine*, 22 YALE J.L. & TECH. 1, 19–20 (2020) ("Up until today . . . the conviction has remained that beyond the mere effort and the actual economic value of the results, an emanation of intellectual labor and mindpower are required, and that these aspects indicate an indispensably human element of a creation. In copyright practice . . . non-human creativity is also nonexistent.") (emphasis omitted).

[229] Naruto v. Slater, 888 F.3d 418, 420 (9th Cir. 2018) ("[W]e conclude that this monkey—and all animals, since they are not human—lacks statutory standing under the Copyright Act.") (citing 17 U.S.C. § 101).

This case illustrates an important point: Why is it that the law does not protect all outputs of apparently creative acts? There does not seem to be a philosophically obvious reason not to protect a beaver dam or a spider web. If one was to provide it, they would take recourse to the theory of mind, metaphysics of creativity, or neuroscience.[230] But the reason is that *Naruto*, like a beaver for example, is not a subject of copyright law—and it is difficult to imagine it could be in the same way humans are, at least.[231] The law takes a beaver dam to be a part of nature[232] because it simply does

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[230] *See, e.g.*, Luciano Floridi, *AI as Agency Without Intelligence: On ChatGPT, Large Language Models, and Other Generative Models*, 36 PHIL. & TECH. 1 (2023); Evgeny Morozov, *The Problem With Artificial Intelligence? It's Neither Artificial nor Intelligent*, GUARDIAN (Mar. 30, 2023, 10:55 AM), https://www.theguardian.com/commentisfree/2023/mar/30/artificial-intelligence-chatgpt-human-mind [https://perma.cc/RVZ6-ND3H].

[231] Analyzing this fundamental difference, the Ninth Circuit observed:

> We have no idea whether animals or objects wish to own copyrights or open bank accounts to hold their royalties from sales of pictures. To some extent, as humans, we have a general understanding of the similar interests of other humans. . . . We are really asking what another species desires. Do animals want to own property, such as copyrights?

Naruto, 888 F.3d at 432 (Smith, J., concurring in part) (emphasis omitted) (footnotes omitted). This dictum may prove important in refuting the post-humanist claims, hitherto rarely posited, that AI (or rather AGI) *deserves* rights in things, including copyrights. *See generally* JOSHUA C. GELLERS, RIGHTS FOR ROBOTS (2020); Jacy Reese Anthis, *We Need an AI Rights Movement*, THE HILL (Mar. 23, 2023, 1:00 PM), https://thehill.com/opinion/cybersecurity/3914567-we-need-an-ai-rights-movement/ [https://perma.cc/D4UX-8SDA]. *But see* Abeba Birhane, Jelle van Dijk & Frank Pasquale, Debunking Robot Rights: Metaphysically, Ethically, and Legally, Address at the University of Miami School of Law We Robot Conference (Sept. 25, 2021) (paper available on the University of Miami School of Law website); Abeba Birhane & Jelle van Dijk, Robot Rights? Let's Talk about Human Welfare Instead, Presentation at the 2020 AAAI/ACM Conference on AI, Ethics, and Society (Feb. 7–8, 2020) (paper available in the ACM Digital Library).

[232] As the Seventh Circuit held:

> [W]orks owing their form to the forces of nature cannot be copyrighted. . . . Most of what we see and experience in a garden—the colors, shapes, textures, and scents of the plants—originates in nature, not in the mind of the gardener. At any given moment in time, a garden owes most of its form and appearance to natural forces, though the gardener who plants and tends it obviously assists.

Kelley v. Chi. Park Dist., 635 F.3d 290, 304 (7th Cir. 2011).

not ascribe the meaning it does to human outputs. A dam is just a dam, essentially an amalgam of physical elements, without the "aura."[233] This line of reasoning is shared by most commentators, both in the U.S. and the EU.[234]

B. A Recent Entrance to Paradise

Curiously, the development of copyright and patent law decisions regarding AI outputs has been procured by the team of provocateurs led by Ryan Abbott and Stephen Thaler, who have brought a series of test cases in several jurisdictions attempting to move intellectual property law in a post-humanist direction.[235] Their first application for copyright registration, *A Recent Entrance to Paradise*, was refused by the Copyright Office, whose Review Board decision provides insight into how the requirements of originality and authorship play out regarding emergent works.[236]

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[233] *See* WALTER BENJAMIN, THE WORK OF ART IN THE AGE OF MECHANICAL REPRODUCTION 6 (Harry Zohn trans., 2005).

[234] Deming Liu, *Forget the Monkey Copyright Nonsense for Goodness Sake, Dude!*, 40 EUR. INTELL. PROP. REV. 61, 63 (2018) (calling the idea of animal ownership of copyright "nonsensical"); Eleonora Rosati, *The Monkey Selfie Case and the Concept of Authorship: An EU Perspective*, 12 J. INTELL. PROP. L. & PRAC. 973 (2017); Stanford University, *Stanford HAI 2019 Fall Conference - Owning AI: Intellectual Property for Artificial Intelligence*, YOUTUBE (Nov. 13, 2019), https://www.youtube.com/watch?v=eDZRgdmCm2A [https://perma.cc/XBU4-KHEJ] (highlighting that monkeys need no incentives providedby copyrigh t, as well as the fact that the photographer did make an authorial original contrib ution); Ginsburg & Budiardjo, *supra* note 137, at 364–65.

[235] *See* THE ARTIFICIAL INVENTOR PROJECT, https://artificialinventor.com/ [https://perma.cc/TT7U-4KMF] (last visited Sept. 17, 2023); *see also* RYAN ABBOTT, THE REASONABLE ROBOT: ARTIFICIAL INTELLIGENCE AND THE LAW (2020); Ryan Abbott & Elizabeth Rothman, *Disrupting Creativity: Copyright Law in the Age of Generative Artificial Intelligence*, FLA. L. REV. (forthcoming 2023). For an early argument following this line of thinking, see Karl F. Milde, Jr., *Can a Computer be an "Author" or an "Inventor"?*, 51 J. PAT. OFF. SOC'Y 378, 393 (1969). Many scholars responded negatively to these arguments. For example, Pamela Samuelson wrote that "only those stuck in the doctrinal mud could even think that computers could be 'authors.'" Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. PITT. L. REV. 1185, 1200 (1985).

[236] *See* Letter from Shira Perlmutter to Ryan Abbott, *supra* note 219. On the role of the Review Board decisions in clarifying the originality doctrine, see Nicole E.

According to the facts stated in its registration materials, the work was emergent, devoid of any human creative contributions.[237] The Board held that since copyright protects only the fruits of intellectual labor founded in the creative powers of the human mind, the petitioner had to either "provide evidence that the Work is the product of human authorship or convince the Office to depart from a century of copyright jurisprudence."[238] The Board further analyzed foundational copyright case law to find that the courts "have uniformly limited copyright protection to creations of human authors,"[239] and relied on *Urantia Found. v. Kristen Maaherra*,[240] which stated that an element of human creativity (as opposed to non-human, divine beings who were alleged to have created the work), is necessary for copyrightability.[241] The Board's decision supports outright that copyright protection of emergent works is impossible, and as will be seen, so do further Board decisions, such as the decision regarding *Zarya of the Dawn*, and the recent court case, *Thaler v. Perlmutter*.[242]

C. Zarya of the Dawn

The widely discussed recent application for registration of the comic book *Zarya of the Dawn* brought a distinct fact pattern.[243] Here, Kristina Kashtanova, the artist and an AI-educator, failed to disclose that she used AI to create any part of the work and did not disclaim any portion of the work.[244] Rather, the Copyright Office found out via social media that Kashtanova claimed to have created

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Pottinger & Brian L. Frye, *Registration is Fundamental*, 8 INTELL. PROP. THEORY 1 (2018).

[237] Letter from Shira Perlmutter to Ryan Abbott, *supra* note 219, at 2–3.

[238] *Id.* at 3 (footnotes omitted).

[239] *Id.* at 4; *see also supra* Part II.

[240] Uranita Found v. Kristen Maaherra, 114 F.3d 955 (9th Cir. 1997). For an overview of this and other cases finding that celestial beings cannot be authors, see Jarrod Welsh, *Copyrighting God: New Copyright Guidelines Do Not Protect Divine Beings*, 17 RUTGERS J. L. & RELIGION 121 (2015).

[241] 114 F.3d at 957–59; *see also* Kelley v. Chi. Park Dist., 635 F.3d 290, 304 (7th Cir. 2011).

[242] *See* discussion *infra* Sections IV.C, IV.D

[243] Letter from Robert J. Kasunic to Van Lindberg, *supra* note 220.

[244] *Id.* at 2.

the work with the use of Midjourney AI, and moved to cancel her registration for incompleteness.[245] In response, Kashtanova claimed that she authored every aspect of the work, using AI solely as a tool. Alternatively, she argued that portions of the work were registerable because she created the text used in the comic book and that the whole comic book was a copyrightable compilation because of her creative selection, coordination, and arrangement of the text and images.[246]

The Board responded to the application by, once again, stating that courts limit the definition of "works of authorship" to the creations of human authors.[247] It held that the text of the work, which was created by the artist herself, without AI assistance, was original and thus protectable.[248] But when considering the AI-generated images, the Board found them not to be original works of authorship: "[I]t was Midjourney–not Kashtanova–that originated the 'traditional elements of authorship in the images.' "[249] The Board noted that, unlike a tool, the AI in question "generates images in an unpredictable way . . . [so that] users are not the 'authors' for copyright purposes," as they do not have sufficient control over the creative process.[250] Finally, the Board found that the selection and arrangement of the images and text in the work were protectable as a compilation.[251] Thus, while the AI-generated output was not protectable, by transforming it through the process of compilation, the artist appropriated the raw material and stamped it with her personality, effectively becoming the author of the whole work.[252] In so holding, the Board distinguished minor alterations supposedly made by Kashtanova to images from the compilation, which was a more creative enterprise.[253] In making these findings, the Copyright Office supported that emergent works are not protectable under

[245] *Id.* at 3.
[246] *Id*.
[247] *Id.*
[248] *Id.* at 4.
[249] *Id.* at 8.
[250] *Id.* at 9.
[251] *Id.* at 5.
[252] *Id.*
[253] *Id.* at 10–11.

copyright law. Indeed, not protecting AI-generated works is not a failure of the law, as some authors suggest, but the fulfillment of its purpose.[254]

D. Thaler v. Perlmutter

Most recently, the District Court for the District of Columbia in *Thaler v. Perlmutter*[255] rejected a challenge of the Board's decision in *A Recent Entrance to Paradise*.[256] The plaintiffs asserted that the Board had acted "arbitrarily" or "capriciously" in denying the copyright registration application of the emergent work in question.[257] The Court found instead that "human authorship is an essential part of a valid copyright claim,"[258] stating that a "guiding human hand" is "a bedrock requirement of copyright."[259] Thus, the Board did not err in refusing to register a copyright in the emergent work in the case that (as the plaintiffs insisted) was authored by the AI autonomously.

In answering the substantive question of copyright, Judge Beryl A. Howell reminded that when the creative process underwent transformation with the emergence of photographs, the copyright doctrine remained faithful to human creativity.[260] Thus, in concluding whether a mode of creation can produce copyrightable outputs, or if new types of work are copyrightable, the criterion is

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[254] *Cf., e.g.*, Michelle D'Souza, *Artificial Intelligence, Entertainment, and Intellectual Property: Navigating the New Frontiers*, 2023 BERKELEY J. ENT. & SPORTS L. 1, 2 (2023); Tanner Co, *The Intellectual Property Implications of AI-Generated Images*, NYU J. INTELL. PROP. & ENT. L. BLOG (Nov. 4, 2022), https://jipel.law.nyu.edu/the-intellectual-property-implications-of-ai-generated-images/ [https://perma.cc/3H8R-HL6L].

[255] Thaler v. Perlmutter, No. 22-1564 (BAH), 2023 WL 5333236 (D.D.C. Aug. 18, 2023).

[256] *See* discussion *supra* Section IV.B.

[257] *Thaler v. Perlmutter*, 2023 WL 5333236 at *2.

[258] *Id.* at *1.

[259] *Id.* at *4.

[260] *Id.* at *3 ("[H]uman creativity is the *sine qua non* at the core of copyrightability, even as that human creativity is channeled through new tools or into new media.")

the "human involvement in, and ultimate creative control over, the work."[261]

Similar to the argument presented in this Article, the Court did not find it necessary to entertain "various legal theories under which a copyright in the computer's work would transfer" to a natural or legal person wanting to profit from it, since fundamentally, "no valid copyright had ever existed in a work generated absent human involvement."[262] It is a fundamental principle of the law that no one can give what they do not have, or what does not exist.[263] Since an emergent work cannot legally be, ownership in it cannot also be transferred or claimed by anyone.

Finally, it is a telling argument against the protection of emergent works, in this case supposedly generated by the plaintiff's computer system, that at a certain point in this saga, Thaler changed his line of argument. While he had previously asserted that the subject matter was "[c]reated autonomously by machine" and that his claim to the copyright was only based on the fact of his "[o]wnership of the machine,"[264] Thaler turned to transform the issue, asserting new facts indicating that he actually "provided instructions and directed his AI to create the Work," and that the AI was "entirely controlled by [him]," operating at his direction. While these assertions of fact would have changed the substantive answer, they contradicted the administrative record, and were not admitted for purposes of judicial review.[265] Thus, even the plaintiffs bringing a test case regarding the necessity of human authorship saw that protection for emergent works is a hopeless cause.

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[261] *Id*.

[262] *Id.* at *3.

[263] The principle of *nemo dat quod non habet* is more commonly invoked in other areas of property law. *See* Donald J. Kochan, *Dealing with Dirty Deeds: Matching Nemo Dat Preferences with Property Law Pragmatism*, 64 U. KAN. L. REV. 1, 1 (2015) (calling *nemo dat* an "organizing principle of the rule of law based on individualism").

[264] *Thaler v. Perlmutter*, 2023 WL 5333236 at *6.

[265] *Id*.

E. Impossibility Reaffirmed

All the cases and decisions examined above demonstrate that copyright law has appropriate conceptual tools to tackle the problem of emergent works while remaining faithful to the principle of human creative expression. Of course, further legal battles are underway. Although the plaintiffs in *Thaler* have given notice of appeal[266] and although the question of emergent works may be raised in the recent wave of litigation,[267] it is clear that emergent works are not protectable in American or European copyright law.[268] This stems from the importance of originality, authorship, and the underlying dichotomy between ideas and expressions. Emergent works, being *no property* in copyright's positive ontology, cannot be protected unless the coherence of the law is undermined. At the same time, this result does not stifle the creative freedom of human authors: as long as a natural person takes unprotectable subject matter and transforms it with the stamp of authorial personality, the end result may well be protected.

While the CJEU has not yet considered the question of emergent works, the European Parliament has issued a resolution that considered that "works autonomously produced by artificial agents and robots might not be eligible for copyright protection" due to the principle of originality being linked to a natural person and authorial personality.[269] More recently, the European Commission released a study that specified that AI-generated output is not protected in the "absence of human creative choices."[270] The authors went on to say

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[266] Notice of Appeal, Thaler v. Perlmutter, No. 22-1564 (BAH), 2023 WL 5333236 (D.D.C. Oct. 11, 2023).

[267] *See, e.g.*, Complaint, Andersen v. Stability AI Ltd., No. 3:23-cv-00201 (N.D. Cal. 2023); Complaint, Tremblay v. OpenAI, Inc., No. 3:23-cv-03223 (N.D. Cal. 2023); Complaint, Silverman v. OpenAI, Inc., No. 3:23-cv-03416 (N.D. Cal. 2023).

[268] The Copyright Office has also released a notice of inquiry and a request for comments. *See* U.S. COPYRIGHT OFF., ARTIFICIAL INTELLIGENCE AND COPYRIGHT, DOCKET NO. 2023–6.

[269] European Parliament Resolution of 20 October 2020 on Intellectual Property Rights for the Development of Artificial Intelligence Technologies, *supra* note 166, at ¶ 15.

[270] EUROPEAN COMMISSION, STUDY ON COPYRIGHT AND NEW TECHNOLOGIES: COPYRIGHT DATA MANAGEMENT AND ARTIFICIAL INTELLIGENCE 21 (2022).

that "[a]utonomously generated output, produced without human creative choices at the input or output side of the AI process, necessarily falls outside the scope of copyright protection," since as a matter of principle, "human intervention is required to qualify for copyright protection."[271] Finally, it was suggested that such subject matter could be protected using other means, such as contracts, but it does not belong to the copyright realm.[272]

Additionally, the recently-issued U.S. Copyright Office Guidance[273] further outlined the requirement of human authorship for the purposes of copyright protection,[274] writing that the Office has "extensive experience in evaluating works submitted for registration that contain human authorship combined with uncopyrightable material."[275] The issue is not conceptually novel;[276] procedurally, applicants are now required to disclose the inclusion of AI-generated content and to provide a brief explanation of the human author's contributions to the work.[277]

Instead, the causal inquiry is grounded in the institutional reality of copyright law: it is a part of the game whose rules stem from the law's texts and philosophical assumptions. It is for this reason, for example, that when a lawyer encounters "originality" or "creativity" in a dispute, he knows not to interpret them through the prism of literary theory, philosophy, or psychology.[278] Instead, being agnostic about any objective or scientific meaning of the concept of creativity, the lawyer interprets "creativity" as a conception of the

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[271] *Id.* at 156.
[272] *Id.*
[273] *See* 88 Fed. Reg. 16190, *supra* note 202.
[274] *Id.* at 2.
[275] *Id.* at 3.
[276] For the pre-history of emergent works, see *supra* note 3.
[277] *Id.* at 4; *see* Letter from Suzanne V. Wilson, U.S. Copyright Off., to Tamara Pester, Esq. (Sept. 5, 2023) (on file with Library of Congress) (finding that since the applicant failed to disclose a non-negligible amount of content generated by artificial intelligence, the work could not be registered).
[278] *See* THE PHILOSOPHY OF CREATIVITY: NEW ESSAYS (Elliott Samuel Paul & Scott Barry Kaufmann eds., 2014); THE CAMBRIDGE HANDBOOK OF CREATIVITY (James Kaufman & Robert Sternberg eds., 2010).

law, existing in its closed system.[279] In this way, the causal inquiry operates with the law's concepts as entities *in law*, institutional facts.[280] The law uses them to determine if an author created a work both *in fact* and *in law* and to determine the question of rights, i.e., whether the creation satisfies the subsistence requirements. In this way, the anthropocentrism of copyright law and modern law, in general, does not need to be a philosophically unquestionable position to affect the law's validity or to guide copyright's approach to emergent works.[281] It is not literary post-modernism, but the law's seamless web, including the U.S. Constitution and the EU Directives, as well as relevant legal principles from areas such as property and tort law, which determine who the law's subject is and how he comes to justly acquire personal property.[282]

V. CONCLUSION

This Article approached the question of emergent works protection from copyright's normative perspective, which operates with a distinctly human-centered ontology. As Part I showed, the building blocks of copyright doctrine originate from the Enlightenment, while anthropocentrism characterizes modern law more broadly.[283] To protect emergent works that were not rightly acquired by any person would not only be unjust; since they were not *created* by anyone in law's ontology and cannot be acquired by

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[279] On the distinction between concepts and conceptions, see W. B. Gallie, *Essentially Contested Concepts*, 56 PROCS. ARISTOTELIAN SOC'Y 167 (1956); *see also* Maite Ezcurdia*, The Concept-Conception Distinction,* 9 PHIL. ISSUES 187 (1998).

[280] *See* JOHN R. SEARLE, THE CONSTRUCTION OF SOCIAL REALITY 27 (1996); *see also* ALEXANDRA GEORGE, CONSTRUCTING INTELLECTUAL PROPERTY 98 (2012) (applying Searle to the intellectual property context).

[281] This is difficult to argue against from either soft or hard positivist, Dworkinian, or deontological jurisprudential perspectives.

[282] *See* F. W. Maitland, *A Prologue to a History of English Law*, 14 L. Q. REV. 13 (1898).

[283] Maneesha Deckha, *Initiating a Non-Anthropocentric Jurisprudence: The Rule of Law and Animal Vulnerability under a Property Paradigm*, 50 ALTA. L. REV. 783, 784 (2013) ("[L]aw is an anthropocentric terrain. Not only is law the product of human actors, it entrenches the interests of humans over virtually all others and centres [sic] the reasonable human person as a main legal subject.").

anyone, they are as self-referential as ideas, nature, gods, or natural persons. All those whose existence precedes essence[284] are the "no-properties" of modern law.[285]

Thus, emergent works are not protectable under the law of copyright. They are not original. In fact, they are not authorial works or expressions of ideas at all. If all works can ultimately be reduced to the process of their becoming, then the missing of all causal concepts implies that no work comes into being.[286] This result is necessitated by copyright law theory and doctrine both in the U.S. and the EU. Emergent works fall outside the scope of international copyright law as well. To be protectable, subject matter must originate from a human author, who can appropriate the creative result of his expression, providing sufficient originality. This conclusion has been reaffirmed by recent U.S. decisions, and it stems from the entire jurisprudence of the CJEU, recently affirmed by the European Parliament resolution and the European Commission study, which exemplify copyright's anthropocentric ideology, to promote human creativity in the new technological landscape. Emergent works simply cannot be as a matter of copyright's positive ontology.

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[284] *See* JEAN-PAULE SARTRE, EXISTENTIALISM IS A HUMANISM (Carol Macomber trans., 2007).

[285] *See* Rose, *supra* note 27.

[286] *See* ALFRED NORTH WHITEHEAD, PROCESS AND REALITY 24 (1978). In a rather different context, Whitehead wrote that "how an actual entity becomes constitutes what that actual entity is . . . [i]ts 'being' is constituted by its 'becoming.' This is the principle of process." *Id*. at 31. Thus, even if we dispute the stability of the concept of work in copyright law, we can still deny emergent works' status based on how they come to be.