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# BEYOND HUMAN AUTHORSHIP: GENERATIVE AI, INTELLECTUAL PROPERTY RIGHTS, AND THE FUTURE OF DIGITAL CONTENT OWNERSHIP

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## ABSTRACT

The emergence of generative artificial intelligence (AI) systems capable of producing text, images, music, and code has destabilized the foundational assumptions of copyright law, which has historically presumed a human author as the source of original expression. This paper critically examines the authorship and ownership problem posed by generative AI, tracing how legal doctrines built around human creativity, originality, and intent struggle to accommodate content produced substantially or entirely by machine learning systems. Drawing on comparative analysis of United States, United Kingdom, European Union, and Indian copyright frameworks, the paper reviews landmark disputes, including *Thaler v. Perlmutter*, the *Zarya of the Dawn* registration decision, and pending infringement litigation against AI developers such as *Getty Images v. Stability AI* and the Authors Guild and New York Times actions against OpenAI, to illustrate the doctrinal uncertainty surrounding both the outputs of generative systems and the legality of the training data used to build them. The paper further explores the mechanics of generative models to clarify where human creative agency plausibly persists in prompt engineering, curation, and post-processing, and where it does not. Building on this analysis, the paper proposes a framework of ownership models for the generative AI era, encompassing human-in-the-loop authorship standards, a possible *sui generis* right for AI-assisted works, text-and-data-mining licensing and compensation mechanisms for training data, and contractual allocation of rights at the platform level. The paper argues that copyright law's traditional binary of human author versus unprotected machine output is no longer adequate, and that a graduated, contribution-sensitive approach better serves the interests of creators, AI developers, and the public domain alike. The paper concludes with policy recommendations and directions for future research.

**Keywords:** generative artificial intelligence, copyright law, authorship, intellectual property, digital content ownership, training data, fair use.

## 1. Introduction

Copyright law has, since its inception, rested on an assumption so basic that it was rarely stated as a formal requirement: that a work of authorship originates from a human mind.<sup>1</sup> The rise of generative AI systems -- large language models, diffusion-based image generators, and text-to-music and text-to-video tools capable of producing outputs that are, to a human observer, often indistinguishable from human-created works -- has placed this assumption under unprecedented strain. When a system such as a diffusion model generates an image from a short text prompt, or a large language model drafts an article from a single instruction, the question of who, if anyone, may claim authorship, and what rights (if any) attach to the training data ingested to build the system in the first place, has become one of the most contested issues in contemporary intellectual property law.

The problem is genuinely two-sided. On the output side, copyright offices and courts must determine whether, and under what conditions, AI-assisted or AI-generated content can be protected at all, and if so, to whom that protection should belong -- the user who wrote the prompt, the developer who built the model, or no one.<sup>2</sup> On the input side, the training of generative models typically requires ingesting vast quantities of copyrighted text, images, and other works scraped from the internet, raising a parallel question of whether such ingestion constitutes infringement, fair use, or a permissible text-and-data-mining activity, and whether original rightsholders are owed compensation, attribution, or a right to object.<sup>3</sup>

This paper addresses both dimensions of the problem. It proceeds as follows. Section 2 reviews the doctrinal and theoretical literature on authorship, originality, and machine-generated works. Section 3 examines the technical mechanics of generative AI systems to identify where meaningful human creative agency persists in the generative pipeline. Section 4 analyzes the authorship problem through comparative case law across major jurisdictions. Section 5 turns to the training-data side of the problem, reviewing fair use, fair dealing, and text-and-data-mining doctrines alongside major pending litigation. Section 6 proposes a framework of ownership models suited to the generative AI era. Section 7 offers illustrative case studies,

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<sup>1</sup>Ginsburg, J. C., & Budiardjo, L. A. (2019). Authors and machines. *Berkeley Technology Law Journal*, 34(2), 343–448.

<sup>2</sup>Guadamuz, A. (2017). Do androids dream of electric copyright? Comparative analysis of originality in artificial intelligence generated works. *Intellectual Property Quarterly*, 2017(2), 169–186.

<sup>3</sup>Sag, M. (2023). Copyright safety for generative AI. *Houston Law Review*, 61(2), 295–347.

Section 8 discusses the innovation-versus-creator-rights trade-off, Section 9 addresses limitations and future research, and Section 10 concludes.

## 2. Literature Review

### *2.1 Originality, Authorship, and the Human-Centric Foundations of Copyright*

Anglo-American copyright doctrine has long tied protection to a minimal but irreducibly human threshold of originality. In *Feist Publications v. Rural Telephone Service Co.*, the U.S. Supreme Court held that copyright protection requires only a modicum of creativity, but the Court's reasoning presupposed that the relevant creative choices were made by a human being.<sup>4</sup> This human-centric premise was tested, though not resolved for AI purposes, in *Naruto v. Slater*, in which a photograph taken by a macaque was held unprotectable because the Copyright Act's authorship requirement extends only to human beings.<sup>5</sup> Scholars had anticipated the generative AI authorship dilemma well before it became a matter of active litigation; Samuelson's early analysis of computer-generated works argued that ownership of such works should be allocated by policy choice rather than derived mechanically from existing authorship doctrine, since the traditional author-centered framework simply does not map onto machine-generated output.<sup>6</sup>

### *2.2 The Idea/Expression Dichotomy Under Algorithmic Generation*

Copyright protects the expression of ideas, not ideas themselves, a distinction that becomes analytically difficult to apply to generative AI outputs because the user's prompt (arguably the idea) and the model's output (arguably the expression) are separated by a statistical generative process over which the user exercises only indirect and probabilistic control.<sup>7</sup> Grimmelman has argued that there is, properly understood, no such thing as a computer-authored work in the sense of the machine itself holding authorial intent; rather, every output can in principle be traced to human choices made somewhere in the pipeline -- in training, in prompting, or in

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<sup>4</sup>*Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991).

<sup>5</sup>*Naruto v. Slater*, 888 F.3d 418 (9th Cir. 2018).

<sup>6</sup>Samuelson, P. (1986). Allocating ownership rights in computer-generated works. *University of Pittsburgh Law Review*, 47(4), 1185–1228.

<sup>7</sup>Bridy, A. (2012). Coding creativity: Copyright and the artificially intelligent author. *Stanford Technology Law Review*, 2012, 1–28.

curation -- even if those choices are attenuated.<sup>8</sup>

### ***2.3 Legal Personhood, Machine Agency, and the Limits of the Author Construct***

A separate strand of scholarship questions whether copyright's author-centered architecture can or should be stretched to accommodate non-human generative agency at all. Craig and Kerr argue that attempts to fit AI-generated works into existing authorship categories -- whether by naming the AI as author, the programmer, or the user -- distort the normative commitments underlying copyright, which is fundamentally premised on incentivizing and rewarding human creative labor and personality.<sup>9</sup> This literature suggests that the authorship question cannot be resolved through interpretive stretching alone and instead requires either a new sui generis category of protection or an explicit policy determination that certain AI outputs should remain unprotected and enter the public domain by default.

## **3. How Generative AI Systems Create Content**

Assessing where, if anywhere, human authorship persists in AI-assisted content requires a basic understanding of how generative systems actually operate.

### ***3.1 Training Data and the Ingestion Problem***

Large generative models are trained on datasets comprising billions of text passages, images, or audio samples, frequently scraped from publicly accessible sources without individualized permission from the rightsholders of each constituent work.<sup>10</sup> During training, the model does not store copies of individual works in a retrievable form but adjusts millions or billions of numerical parameters to capture statistical regularities across the training corpus, a process that complicates the application of traditional reproduction-based infringement analysis.

### ***3.2 Generative Mechanics: Diffusion Models and Large Language Models***

Diffusion-based image generators produce output through an iterative denoising process that

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<sup>8</sup>Grimmelmann, J. (2016). There's no such thing as a computer-authored work -- and it's a good thing, too. *Columbia Journal of Law & the Arts*, 39(3), 403–416.

<sup>9</sup>Craig, C. J., & Kerr, I. R. (2021). The death of the AI author. *Ottawa Law Review*, 52(1), 31–86.

<sup>10</sup>Longpre, S., Mahari, R., Chen, A., Obeng-Marnu, N., Sileo, D., Brannon, W., et al. (2023). The Data Provenance Initiative: A large scale audit of dataset licensing and attribution in AI. arXiv preprint arXiv:2310.16787.

begins with random noise and progressively refines it toward an image consistent with a text prompt, while large language models generate text token-by-token based on learned probability distributions over sequences of words.<sup>11</sup> In neither case does the system retrieve or assemble pre-existing works in any straightforward sense; rather, the output is a novel statistical construction shaped by, but not a direct copy of, the training distribution -- a fact with significant implications for both the authorship and infringement inquiries.

### ***3.3 Human Input, Prompt Engineering, and Creative Control***

The degree of human creative control over a generative AI output varies enormously depending on the specificity of the prompt, the extent of iterative refinement, the selection among multiple generated candidates, and post-generation editing. A single, generic prompt with no further intervention plausibly reflects minimal human authorship, whereas an extended process of iterative prompting, selection, and substantial post-processing may embody a level of creative control comparable to the use of a conventional digital editing tool.<sup>12</sup> This variability suggests that authorship determinations for generative AI outputs may need to be assessed on a contribution-sensitive, case-by-case basis rather than through a categorical rule.

## **4. The Authorship Problem: Comparative Perspectives**

### ***4.1 The United States: Thaler and the Human Authorship Requirement***

In *Thaler v. Perlmutter*, the U.S. Copyright Office and subsequently the federal courts rejected a copyright registration application listing an AI system, DABUS, as the sole author of a visual work, holding that the Copyright Act's authorship requirement is confined to human beings and that a work generated entirely autonomously by a machine, without a human claiming a creative contribution, is not copyrightable.<sup>13</sup> The U.S. Copyright Office's subsequent guidance and its decision in the *Zarya of the Dawn* matter refined this position, holding that a graphic novel containing AI-generated images arranged and edited by a human author was protectable with respect to the human-authored text and the selection and arrangement of the work as a whole, but not with respect to the individual AI-generated images themselves, which the Office treated as unprotectable machine output.<sup>14</sup>

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<sup>11</sup>Lemley, M. A., & Casey, B. (2020). Fair learning. *Texas Law Review*, 99(4), 743–785.

<sup>12</sup>Franceschelli, G., & Musolesi, M. (2022). Copyright in generative deep learning. *Data & Policy*, 4, e17.

<sup>13</sup>*Thaler v. Perlmutter*, 687 F. Supp. 3d 140 (D.D.C. 2023).

<sup>14</sup>U.S. Copyright Office. (2023). Cancellation decision re: *Zarya of the Dawn* (Registration No.

#### ***4.2 The United Kingdom: Computer-Generated Works Under the CDPA***

The United Kingdom offers a notable statutory exception to the pure human-authorship rule. Section 9(3) of the Copyright, Designs and Patents Act 1988 provides that for computer-generated works in which there is no human author, the author is deemed to be the person by whom the arrangements necessary for the creation of the work were undertaken.<sup>15</sup> This provision predates modern generative AI by several decades and was designed with simpler algorithmic outputs in mind, and commentators have questioned whether it can sensibly be applied to outputs of large-scale generative models, where identifying the person who undertook the necessary arrangements is far less straightforward than in earlier computer-generated contexts.

#### ***4.3 The European Union and India: Divergent and Unsettled Approaches***

European Union copyright law, both at the level of the Court of Justice's jurisprudence on originality and at the level of national implementing statutes, generally maintains that copyright protection requires the author's own intellectual creation, a standard the Court of Justice has interpreted as requiring free and creative choices reflecting the author's personality, a requirement most machine-generated content struggles to satisfy without substantial human involvement.<sup>16</sup> India's Copyright Act, 1957, similarly presumes human authorship for most categories of protected work, though its treatment of computer-generated works remains comparatively underdeveloped and largely untested by Indian courts in the generative AI context, leaving considerable regulatory uncertainty for creators and platforms operating in the Indian market.<sup>17</sup>

### **5. Training Data, Fair Use, and Infringement Litigation**

#### ***5.1 Fair Use and Fair Dealing Doctrines***

In the United States, whether the ingestion of copyrighted works for AI training constitutes fair use turns principally on the transformative-use inquiry under the four-factor test codified in Section 107 of the Copyright Act, with proponents arguing that training is a non-expressive,

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<sup>15</sup>Copyright, Designs and Patents Act 1988, c. 48, § 9(3) (UK).

<sup>16</sup>Court of Justice of the European Union, *Infopaq International A/S v. Danske Dagblades Forening*, Case C-5/08 (2009).

<sup>17</sup>The Copyright Act, 1957, No. 14, Acts of Parliament, 1957 (India), § 2(d)(vi).

transformative use analogous to that upheld in *Authors Guild v. Google*, which permitted mass digitization for search-indexing purposes.<sup>18</sup> Critics counter that generative AI differs materially from search indexing because its outputs can directly substitute for, and compete in the market with, the works on which it was trained, a distinction that several pending lawsuits are now testing directly.

### ***5.2 Major Pending Litigation***

Getty Images filed suit against Stability AI in both the United States and the United Kingdom, alleging that the unauthorized use of millions of copyrighted images to train the Stable Diffusion model constitutes infringement, and pointing to instances in which generated images reproduced distorted versions of Getty's watermark as evidence of memorization.<sup>19</sup> Separately, visual artists brought a putative class action, *Andersen v. Stability AI*, alleging that diffusion models trained on their copyrighted works generate infringing derivative images, while the New York Times' suit against OpenAI and Microsoft alleges that ChatGPT can, in certain circumstances, reproduce near-verbatim excerpts of Times articles, undermining claims that large language model outputs are purely transformative.<sup>20</sup> These cases remain unresolved as of this writing and are likely to shape the boundaries of permissible AI training for years to come.

### ***5.3 The European Union's Text-and-Data-Mining Exception***

The European Union has adopted a more explicit statutory approach through Articles 3 and 4 of the Digital Single Market Copyright Directive, which create text-and-data-mining exceptions permitting the reproduction of lawfully accessible copyrighted works for TDM purposes, subject to a rightsholder's ability to expressly opt out of the Article 4 exception for commercial TDM uses, including AI training.<sup>21</sup> This opt-out mechanism, while more explicit than the U.S. fair-use approach, has itself proven difficult to operationalize in practice, since rightsholders often lack effective technical means of signaling an opt-out across the fragmented landscape of AI training-data pipelines.

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<sup>18</sup> *Authors Guild v. Google, Inc.*, 804 F.3d 202 (2d Cir. 2015).

<sup>19</sup> *Getty Images (US), Inc. v. Stability AI, Inc.*, No. 1:23-cv-00135 (D. Del. filed Feb. 3, 2023).

<sup>20</sup> *The New York Times Company v. Microsoft Corp. and OpenAI, Inc.*, No. 1:23-cv-11195 (S.D.N.Y. filed Dec. 27, 2023).

<sup>21</sup> Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market, Arts. 3–4.

## 6. Toward New Ownership Models for the Generative AI Era

Building on the preceding analysis, this paper proposes four complementary approaches to allocating rights over generative AI outputs and training inputs.

### 6.1 *A Human-in-the-Loop Authorship Standard*

Rather than a binary rule under which AI-assisted works are either fully protected or wholly unprotected, copyright offices and courts could adopt a graduated, contribution-sensitive standard that asks whether the human's prompting, curation, arrangement, and editing choices rise to the level of the modest creative contribution required by existing originality doctrine, consistent with the approach implicitly adopted in the *Zarya of the Dawn* decision.<sup>22</sup>

### 6.2 *A Sui Generis Right for AI-Assisted Works*

Where human creative contribution is minimal but the output nonetheless has independent commercial value, a sui generis regime -- analogous to the EU's database right -- could offer a shorter term and narrower scope of protection than traditional copyright, discouraging over-protection while still providing investment incentives for AI developers and users.<sup>23</sup>

### 6.3 *Licensing and Compensation Frameworks for Training Data*

Collective licensing schemes, modeled on existing mechanisms in the music industry, could allow AI developers to compensate rightsholders for the use of their works in training datasets without requiring impracticable individualized negotiation, an approach several publishers and AI companies have already begun to pursue through direct licensing agreements.<sup>24</sup>

### 6.4 *Contractual and Platform-Level Rights Allocation*

In the absence of settled statutory or judicial guidance, AI platforms increasingly allocate rights through terms of service, assigning ownership of generated outputs to the user while reserving

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<sup>22</sup>Hristov, K. (2017). Artificial intelligence and the copyright dilemma. *IDEA: The Journal of the Franklin Pierce Center for Intellectual Property*, 57(3), 431–454.

<sup>23</sup>Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the Legal Protection of Databases, Art. 7.

<sup>24</sup>World Intellectual Property Organization. (2020). *WIPO Technology Trends 2019: Artificial Intelligence*. WIPO Publications.



broad licenses to use both inputs and outputs for further model training, a practice that raises its own transparency and fairness concerns given the unequal bargaining power between individual users and large AI developers.

## **7. Illustrative Applications**

### ***7.1 Generative Art and Visual Media***

The *Zarya of the Dawn* decision illustrates the workability of a contribution-sensitive standard in practice: the human author's selection, arrangement, and textual additions were protected, while the individually AI-generated panel images were not, offering a template that could be extended to other visual and multimedia works produced with substantial AI assistance.

### ***7.2 AI-Assisted Journalism and Text Generation***

News organizations increasingly use generative AI to draft summaries or first-pass articles subsequently edited by human journalists, raising authorship questions analogous to those addressed in *Zarya of the Dawn* but also implicating the New York Times litigation's concerns about verbatim reproduction of copyrighted source material within AI outputs.

### ***7.3 Music and Audio Generation***

AI-generated music raises compounded authorship and training-data concerns, since protectable elements may include not only melody and lyrics but also stylistic imitation of specific artists, a phenomenon that existing copyright doctrine addresses poorly because style itself is traditionally considered an unprotectable idea rather than protectable expression.<sup>25</sup>

## **8. Discussion: Balancing Innovation and Creator Rights**

Proponents of expansive fair-use and TDM protections for AI training argue that restrictive copyright rules risk stifling AI innovation and concentrating AI development in the hands of the few incumbents able to afford comprehensive licensing arrangements, potentially entrenching existing market power rather than protecting individual creators.<sup>26</sup> Creator

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<sup>25</sup>Deltorn, J.-M., & Macrez, F. (2018). Authorship in the age of machine learning and artificial intelligence. In S. Dusollier & C. Geiger (Eds.), *Research Handbook on Intellectual Property and Digital Technologies* (pp. 275–294). Edward Elgar Publishing.

<sup>26</sup>Levendowski, A. (2018). How copyright law can fix artificial intelligence's implicit bias problem. Washington

advocates counter that unrestricted use of copyrighted works for commercial AI training, without compensation or consent, effectively transfers value from individual artists and writers to large AI developers, undermining the incentive structure copyright law is designed to protect.

This paper's contribution-sensitive and licensing-based framework attempts to hold both concerns in view: it neither treats all AI-assisted works as automatically unprotectable, which would discourage productive human-AI collaboration, nor treats AI training as categorically exempt from the economic claims of the creators whose works made that training possible. Genuine trade-offs nonetheless remain, particularly around the practical difficulty of tracing individual contributions within large training corpora and the risk that graduated authorship standards could increase litigation costs and legal uncertainty in the short term.

## 9. Limitations and Directions for Future Research

This paper's analysis is doctrinal and comparative rather than empirical; it does not measure the actual market impact of generative AI on creator incomes or quantify the extent of memorization across major AI training corpora. Future research should incorporate empirical study of output-similarity rates in commercial AI systems, comparative analysis of the practical effectiveness of the EU's TDM opt-out mechanism once more rightsholders attempt to exercise it, and evaluation of emerging collective licensing agreements as they mature.

Further work is also needed on how the framework proposed here would apply to open-source and non-commercial AI models, which raise distinct policy considerations from those presented by large commercial developers, and on the international harmonization challenges posed by the divergent approaches to authorship and training-data use surveyed in Sections 4 and 5.<sup>27</sup>

## 10. Conclusion

Generative AI has exposed a structural gap in copyright law's human-centric conception of authorship, one that cannot be closed simply by declaring AI outputs uniformly protectable or uniformly unprotectable. This paper has argued that a more defensible path forward lies in a

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Law Review, 93(2), 579–630.

<sup>27</sup>World Intellectual Property Organization. (2023). WIPO Conversation on Intellectual Property and Artificial Intelligence: Revised Issues Paper. WIPO Publications.

contribution-sensitive authorship standard that examines the degree of genuine human creative agency exercised through prompting, curation, and editing, supported by a possible sui generis regime for outputs with minimal human contribution, licensing and compensation mechanisms for the training data that make generative AI possible, and transparent contractual allocation of rights at the platform level.

The comparative analysis presented here shows that courts and legislators across the United States, United Kingdom, European Union, and India are converging, however unevenly, on the recognition that neither pure exclusion of AI-assisted works from copyright protection nor unrestricted extension of existing doctrine to machine output is fully satisfactory. As generative AI systems become further embedded in creative and journalistic practice, resolving the authorship and ownership questions examined in this paper will be essential not only to providing legal certainty for creators, platforms, and users, but also to preserving the underlying incentive structure that copyright law exists to protect.

## References

Authors Guild v. Google, Inc., 804 F.3d 202 (2d Cir. 2015).

Bridy, A. (2012). Coding creativity: Copyright and the artificially intelligent author. *Stanford Technology Law Review*, 2012, 1–28.

Copyright, Designs and Patents Act 1988, c. 48, § 9(3) (UK).

Court of Justice of the European Union, *Infopaq International A/S v. Danske Dagblades Forening*, Case C-5/08 (2009).

Craig, C. J., & Kerr, I. R. (2021). The death of the AI author. *Ottawa Law Review*, 52(1), 31–86.

Deltorn, J.-M., & Macrez, F. (2018). Authorship in the age of machine learning and artificial intelligence. In S. Dusollier & C. Geiger (Eds.), *Research Handbook on Intellectual Property and Digital Technologies* (pp. 275–294). Edward Elgar Publishing.

Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market, Arts. 3–4.

Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the Legal Protection of Databases, Art. 7.

*Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991).

Franceschelli, G., & Musolesi, M. (2022). Copyright in generative deep learning. *Data & Policy*, 4, e17.

*Getty Images (US), Inc. v. Stability AI, Inc.*, No. 1:23-cv-00135 (D. Del. filed Feb. 3, 2023).

Ginsburg, J. C., & Budiardjo, L. A. (2019). Authors and machines. *Berkeley Technology Law Journal*, 34(2), 343–448.

Grimmelmann, J. (2016). There's no such thing as a computer-authored work -- and it's a good thing, too. *Columbia Journal of Law & the Arts*, 39(3), 403–416.

Guadamuz, A. (2017). Do androids dream of electric copyright? Comparative analysis of originality in artificial intelligence generated works. *Intellectual Property Quarterly*, 2017(2), 169–186.

Hristov, K. (2017). Artificial intelligence and the copyright dilemma. *IDEA: The Journal of the Franklin Pierce Center for Intellectual Property*, 57(3), 431–454.

Lemley, M. A., & Casey, B. (2020). Fair learning. *Texas Law Review*, 99(4), 743–785.

Levendowski, A. (2018). How copyright law can fix artificial intelligence's implicit bias problem. *Washington Law Review*, 93(2), 579–630.

Longpre, S., Mahari, R., Chen, A., Obeng-Marnu, N., Sileo, D., Brannon, W., et al. (2023). The Data Provenance Initiative: A large scale audit of dataset licensing and attribution in AI. arXiv preprint arXiv:2310.16787.

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

Sag, M. (2023). Copyright safety for generative AI. *Houston Law Review*, 61(2), 295–347.

Samuelson, P. (1986). Allocating ownership rights in computer-generated works. *University of Pittsburgh Law Review*, 47(4), 1185–1228.

*Thaler v. Perlmutter*, 687 F. Supp. 3d 140 (D.D.C. 2023).

The Copyright Act, 1957, No. 14, Acts of Parliament, 1957 (India), § 2(d)(vi).

*The New York Times Company v. Microsoft Corp. and OpenAI, Inc.*, No. 1:23-cv-11195 (S.D.N.Y. filed Dec. 27, 2023).

U.S. Copyright Office. (2023). Cancellation decision re: *Zarya of the Dawn* (Registration No. VAu001480196).

World Intellectual Property Organization. (2020). *WIPO Technology Trends 2019: Artificial Intelligence*. WIPO Publications.

World Intellectual Property Organization. (2023). *WIPO Conversation on Intellectual Property and Artificial Intelligence: Revised Issues Paper*. WIPO Publications.