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CREATION AND GENERATION COPYRIGHT STANDARDS

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There is a de facto double standard in copyright eligibility. Despite the insistence of the U.S. Copyright Office (“Office”) that copyright law is applied consistently to all subject matter, in practice the user of AI-generated services needs to meet an unattainably high standard. This includes that the author had a fully formed conception and total control over the creation of the work, beyond time and space, which this author calls the “platonic” ideals of copyright. The authors of traditional works, such as paintings and photos, often do not have to meet this standard.

This article contrasts the Office’s rejections of copyright protection for AI-generated images with the Beijing Internet Court’s approval, highlighting a global debate on copyright eligibility to AI-generated products versus traditional expressive works. The article is the first one that critiques both stances for overlooking creativity’s inherent

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unpredictability, authorial spontaneity, and the notion that at some level fine-grained ideas become expressions, and advocates for a policy that counterbalances human and AI contributions to artistic, literary, and musical works. Instead of replacing the “double standard” with a unified standard, this article proposes a dual standard: one for human-created works; and a different one for AI-assisted products. Therefore, it is important that artists disclose the part of the work generated by AI. But equally significant is that providers of generative AI (“gAI”) services make a database of AI-generated products available to the Office, so that it will be able to compare the applications for copyright registration with those products generated by AI, to see whether the human intervention meets the threshold and originality. Until this is possible, there should be a moratorium on the protection of AI-generated products via copyright law or a sui generis right. In turn, and to balance the promotion of innovation and creativity, the Office should make available registered copyrighted works and the metadata of their authors that can be used as training data for AI service providers, so that they have the metadata to compensate these authors. This author recommends preferential treatment to human authors to avert or at least slow down the dilution of human culture.

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REPORTS OF THE AUTHOR’S DEATH MAY BE GREATLY EXAGGERATED.

— Theresa Enos, *Reports of the ‘Author’s’ Death May Be Greatly Exaggerated But the ‘Writer’ Lives On in the Text*, 20 RHETORIC SOC’Y Q. 339 (1990).

ANYONE WHO IS NOT A BEAST AND THEREFORE HAS THE AWARENESS AND DIGNITY OF A HUMAN BEING, THE POOREST HUMAN BEING WHO HAS NEVER RENEGED ON HIS OWN INDIVIDUALITY, WILL FEEL THIS NEED: TO BE ENCHANTED AND TO ENCHANT, TO EXPRESS HIMSELF.

— Carlo Mollino, *Vedere L’architettura*, AGORÀ, Aug. 1946, at 13.

INTRODUCTION

This article reveals for the first time a towering standard of copyright eligibility that the U.S. Copyright Office (“Office”) and the Beijing Internet Court have inadvertently been using in the question whether AI-generated images should get protection under copyright law. Even though the Office insists it uses the same standard, it applies a much more permissive standard for human-authored works.

A. *From “Copyrightable-Causation” to “platonic” Standard*

A reasonable eligibility standard for copyright protection is that a human author translates an idea into a fixed, tangible medium of expression,¹ and so is

¹ 17 U.S.C. § 102. *See* 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.”). *See* Lindsay v. Wrecked & Abandoned Vessel R.M.S. Titanic, 52 U.S.P.Q.2d 1609 (S.D.N.Y. 1999) (“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

originality;² which means independently created with a modicum of originality.³ However, Professor Shyamkrishna Balganesh argued that an analysis of copyright eligibility is not complete without taking causation of fixation by the author into account; what he calls copyrightable-causation.⁴ After it was proven that a claimant caused a contribution to the work, Balganesh proposes three questions that can disqualify the claimant of copyrightable causation: “Did the claimant have insufficient control over the creative process?; Is the claim disproportionate to the claimant’s contribution?; Will the claim conflate the contributor’s creative choices?”⁵ In other words, Balganesh describes a scenario where the Office or courts cast the net too wide and subsequently let those works escape out of the net that do not deserve to be caught. Phrasing these terms positively: sufficient control, contribution, and choice over the creative process turn out to be part of the “platonic”⁶ prerequisites for copyright eligibility. These “platonic” prerequisites, which emphasize the mental conception and control of the human author over the creative process of a work, have not been applied consistently to traditional works, thereby creating a double standard.⁷ The Office qualified reiterative instructions of prompt-engineers to AI-generated images as merely conveying ideas, the outcome as unpredictable and therefore unprotectable, while the Beijing Internet Court held human intervention by a user of Stable Diffusion as sufficient human intellectual

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.”) (quoting *Cmt. for Creative Non-Violence*, 490 U.S. at 737).

² 17 U.S.C. § 102. Hacoheh and Elkin-Koren explore the concept of leveraging generative AI to quantify copyright originality, to assist in copyright legal disputes. Uri Y. Hacoheh & Niva Elkin-Koren, *Copyright Regenerated: Harnessing GenAI to Measure Originality and Copyright Scope*, 37 HARV. J.L. & TECH. 555, 608 (2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4530717 [<https://perma.cc/FR95-YRBZ>].

³ *Feist Publ’ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 358 (1991).

⁴ In Professor Balganesh’s copyrightable-causation analysis, the first question is: “Would the work not have come into existence but for the claimant’s contribution? Or, was the claimant’s contribution a Necessary Element of a Sufficient Set of conditions that produced the work?” Shyamkrishna Balganesh, *Causing Copyright*, 117 COLUM. L. REV. 1, 71 (2017).

⁵ *Id.*

⁶ The word “platonic” is written in lowercase and between quotation marks to make clear that the historical Plato might not have concurred with the use of the term for an idealistic standard in copyright eligibility.

⁷ See Edward Lee, *Prompting Progress: Authorship in the Age of AI*, 76 FLA. L. REV. 1445, 1445 (2024) (criticizing the imposition of more onerous requirements of authorship on AI-generated products: “sufficient control, avoidance of random elements in the creative process, prediction of the final work ahead of time, and dictation of the specific results”).

achievement and original, thus protectable. Although these institutions came to opposite decisions, they share “platonic” prerequisites for copyrightability, but where they seem to only differ on is whether the process of prompting was creative. Instead of a double standard, this author advocates for a dual standard based on policy considerations: one for human-created works; and one for AI-assisted products.⁸ In addition, the Office needs to make the different standards clear, instead of upholding the pretense that there is one standard for all subject matter.⁹

B. *Digital Dignity*

There needs to be transparency on both sides of Large Language Models (“LLMs”). On the input (ingestion) side, this author has advocated that the copyrighted works in the Copyright Register be used as training data for LLMs,¹⁰ next to public domain works and Creative Commons-licensed works,¹¹ in addition to factual data. As Jaron Lanier, the “Prime Unifying Scientist” at Microsoft,¹² pointed out, AI does not have to be a blackbox regarding the provenance of the output from the input.¹³ Lanier’s advocacy for data dignity¹⁴ is a useful antidote

⁸ U.S. COPYRIGHT OFF., COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 313.2 (3d ed. 2021) (questioning “whether the ‘work’ is basically one of human authorship, with the computer [or other device] merely being an assisting instrument, or whether the traditional elements of authorship in the work (literary, artistic, or musical expression or elements of selection, arrangement, etc.) were actually conceived and executed not by man but by a machine”) (quoting U.S. COPYRIGHT OFF., ANNUAL REPORT OF THE REGISTER OF COPYRIGHT 5 (1966)) [hereinafter COMPENDIUM (Third)].

⁹ 17 U.S.C. § 102(a).

¹⁰ Danny Friedmann, *Copyright as Affirmative Action for Human Authors Until the Singularity*, 73 GRUR INT’L 1, 2 (2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4697678 [<https://perma.cc/N6T7-NYM4>].

¹¹ Professor Levendowski calls works in the public domain and Creative Commons-licensed works: low friction-data but biased. Amanda Levendowski, *How Copyright Law Can Fix Artificial Intelligence’s Implicit Bias Problem*, 93 WASH. L. REV. 579, 610–19 (2018).

¹² Jaron Lanier, *Office of the Chief Technical Officer Prime Unifying Scientist (Microsoft’s Octopus)*, MICROSOFT, <https://www.microsoft.com/en-us/research/people/jalani/> [<https://perma.cc/UV9M-AJNY>] (last visited Feb. 23, 2024).

¹³ Connie Loizos, *We All Contribute to AI—Should We Get Paid for That?*, TECHCRUNCH (Apr. 21, 2023), <https://techcrunch.com/2023/04/21/as-ai-eliminates-jobs-a-way-to-keep-people-a-float-financially-thats-not-ubi/> [<https://perma.cc/MBE8-EDHV>].

¹⁴ Lanier & Weyl, *infra* note 30. Catherine Jewell, *Digital Pioneer, Jaron Lanier, on the Dangers of “Free” Online Culture*, WIPO MAG., Apr. 2016, https://www.wipo.int/wipo_magazine/en/2016/02/article_0001.html [<https://perma.cc/3UTA-3S3W>] (asserting that automated translations are mash-ups of real-life

against technological determinism.¹⁵ Provenance could be seen as part of the research agenda of how to make AI explainable (“XAI”). Law by design, a doctrine discussed by Professors Reidenberg, Lessig, and Elkin-Koren¹⁶ could prescribe to include metadata in the training data that could be retrieved in the output, and play a role in the remuneration of the authors/copyright holders in the training data.

U.S.-based generative AI (“gAI”) services have been focusing predominantly on innovation¹⁷ and safety for the users, instead of transparency, let alone provenance. On October 30, 2023, President Biden issued an Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence.¹⁸ It provides soft law measures, such as principles and policy goals, reports, guidelines and best practices to promote a consensus standard for the AI-industry based on self-regulation, also regarding authenticating, labelling, detecting and tracking the provenance of synthetic data.¹⁹ On July 12, 2024, the EU published the final text of the AI Act, listing transparency among the general principles applicable to all AI systems.²⁰ According to Preamble number 27 of the AI Act: “Transparency means that AI systems are developed and used in a way that allows appropriate traceability and explainability, while making humans aware that they communicate or interact with an AI system, as well as duly informing

translations, and that we should be paying the people whose data we are taking to make these translations possible).

¹⁵ Winner indicates that technology does not develop as the sole result of an internal process, molding society unmediated, to fit its patterns, but is part of a legal, social and economic forcefield. See Langdon Winner, *Do Artifacts Have Politics?*, 109 DAEDALUS 121, 122 (1980).

¹⁶ Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 554–55 (1997–98). LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 6–8 (1999). Niva Elkin-Koren, *Fair Use by Design*, 64 UCLA L. REV. 1082, 1093–94 (2017).

¹⁷ In the U.S., the Defense Advanced Research Projects Agency (DARPA) “found evidence that explainability can improve performance.” David Gunning et al., *DARPA’s Explainable AI (XAI) Program: A Retrospective*, 2 APPLIED AI LETTERS 1, 8 (2021), <https://doi.org/10.1002/ail2.61> [<https://perma.cc/GXE4-2388>]. See generally *Explainable Artificial Intelligence (XAI) (Archived)*, DARPA, <https://www.darpa.mil/program/explainable-artificial-intelligence>. [<https://perma.cc/TNZ8-HY7C>] (last visited Feb. 23, 2024).

¹⁸ Exec. Order No. 14,110, 88 Fed. Reg. 75191 (Oct. 30, 2023).

¹⁹ *Id.* at 75202–03.

²⁰ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), 2024 O.J. (L), <http://data.europa.eu/eli/reg/2024/1689/oj> [<https://perma.cc/3RHA-3YW2>] [hereinafter AI Act].

deployers of the capabilities and limitations of that AI system and affected persons about their rights.”²¹

In 2019, a Chinese Specialist Committee offered eight “Governance Principles” for “Responsible AI,” including fairness and justice, and traceability.²² In 2021, the soft law Ethical Norms for New Generation AI were issued by the National New Generation AI Governance Specialist Committee,²³ stipulating in Art. 12 to enhance security and transparency, and expressed the ambition to “[g]radually achieve verifiability, auditability, supervisability, traceability, predictability, and reliability.”²⁴ In 2023, the Cyberspace Administration of China (“CAC”) drafted the Rules on Generative AI, which stipulate in Art. 4(3) to respect IP; in its mirror provision Art. 4(5) not to infringe IP; and importantly, Art. 7 that gAI service providers will be held responsible for the legality of the sources of the pre-training data. Art. 7(2) explicitly prohibits content that infringes IP rights.²⁵ In China, no lawsuit has been published yet of copyright holders that sued training data scrapers and gatherers, LLM trainers, or AI service providers. The CAC might

²¹ *Id.*

²² *Fashan Fu Zeren De Rengong Zhineng: Xin Yidai Rengong Zhineng Zhili Yuanze Fabu* (发展负责任的人工智能: 新一代人工智能治理原则发布) [*Developing Responsible Artificial Intelligence: Governance Principles for the Next Generation of Artificial Intelligence Release*], MINISTRY OF SCI. AND TECH. OF THE PEOPLE’S REPUBLIC OF CHINA (June 17, 2019), https://www.most.gov.cn/kjbgz/201906/t20190617_147107.html [<https://perma.cc/8MGX-62DM>]. See generally Matt Sheehan, *China’s AI Regulations and How They Get Made*, CARNEGIE ENDOWMENT FOR INT’L PEACE (July 10, 2023), https://carnegieendowment.org/files/202307-Sheehan_Chinese%20AI%20gov.pdf [<https://perma.cc/CA4K-3MAX>] (excellent description of the “policy funnel” of China’s AI governance).

²³ *Xin Yidai Rengong Zhineng Lunli Guifan* (新一代人工智能伦理规范) [Ethical Norms for New Generation Artificial Intelligence] (promulgated by the National New Generation AI Governance Specialist Committee, Sept. 25, 2021, effective Sept. 25, 2021), *translated in* Ctr. for Sec. and Emerging Tech., https://cset.georgetown.edu/wp-content/uploads/t0400_AI_ethical_norms_EN.pdf [<https://perma.cc/SVB3-L9ZS>].

²⁴ *Id.*

²⁵ *Shengcheng Shi Rengong Zhineng Fuwu Guanli Banfa* (Zhengqiu Yijian Gao) (生成式人工智能服务管理办法 (征求意见稿)) [Measures for the Management of Generative Artificial Intelligence Services (Draft for Comment)], CYBERSPACE ADMIN. OF CHINA (Apr. 11, 2023), https://www.cac.gov.cn/2023-04/11/c_1682854275475410.htm [<https://perma.cc/EY2H-M5CR>], *translated in* DigiChina, <https://digichina.stanford.edu/work/translation-measures-for-the-management-of-generative-artificial-intelligence-services-draft-for-comment-april-2023/> [<https://perma.cc/KFV5-D9Y4>].

be waiting to see what happens in other jurisdictions, in particular the U.S.,²⁶ before it will advise People's Courts to start docking similar cases.

Thus, this author proposes that the AI service providers can acquire the training data in a way that promotes both innovation and copyright protection, as an alternative to fair use,²⁷ and text-and-data mining as copyright exception.²⁸ Instead, the Office should start registering works and their authors' metadata as training data for LLMs,²⁹ enabling AI service providers to use the metadata and remunerate the authors of the works in the training data.³⁰

On the output side, it is imperative that users disclose the extent to which their works have been generated by AI, ensuring a clear delineation between human creativity and machine-generated content.³¹ The requirement for transparency

²⁶ Edward Lee, *Status of All Copyright Lawsuits v. AI (Feb. 18, 2024)*, CHAT GPT IS EATING THE WORLD (Feb. 18, 2024), <https://chatgptiseatingtheworld.com/2024/02/18/status-of-all-copyright-lawsuits-v-ai-feb-18-2024> [<https://perma.cc/W5S6-LP8Q>].

²⁷ Mark A. Lemley & Bryan Casey, *Fair Learning*, 99 TEX. L. REV. 743, 748 (2021), <https://texaslawreview.org/fair-learning/> [<https://perma.cc/7DG6-6Q3M>].

²⁸ See, e.g., Martin Senftleben, *Generative AI and Author Remuneration*, 54 INT'L REV. INTELL. PROP. & COMPAR. L. 1535, 1544 (2023) (pointing out that the opt-out mechanism of Art. 4(3) of Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market and Amending Directives 96/9/EC and 2001/29/EC, 2019 O.J. (L 130) 92 (Directive 2019/790) can serve as a way for copyright holders to license their works for text-and-data mining purposes, as shown in Art. 4(1) Directive 2019/790); Tianxiang He, *Copyright Exceptions Reform and AI Data Analysis in China A Modest Proposal*, in ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY 196, 218 (Jyh-An Lee et al. eds., 2021) (holding that transplanting a U.S.-style fair use regime is not opportune in the current geopolitical climate, and proposing an extension of the current semi-open copyright exceptions model of Art. 24 Copyright Law of China with a Japanese-style text-and-data mining exception, to combine flexibility and certainty). See generally Tianxiang He, *Transplanting Fair Use in China? History, Impediments and the Future*, 2 U. ILL. J.L. TECH. & POL'Y 359 (2020); Artha Dermawan, *Text and Data Mining Exceptions in the Development of Generative AI Models: What the EU Member States Could Learn from the Japanese "Nonenjoyment" Purposes?*, 27 J. WORLD INTELL. PROP. 44 (2013).

²⁹ Friedmann, *supra* note 10.

³⁰ Jaron Lanier & E. Glen Weyl, *A Blueprint for a Better Digital Society*, HARV. BUS. REV. (Sept. 26, 2018), <https://hbr.org/2018/09/a-blueprint-for-a-better-digital-society> [<https://perma.cc/UE4V-ZJCM>] (Lanier has been a proponent of "data dignity," of which the transparency of the "provenance" of and control over one's data is an integral part to counter technology's incursions on human rights).

³¹ In his Second Request for copyright registration, Mr. Thaler argued that denying copyright protection for machine-generated works will encourage individuals to "act dishonestly." "Entrance," *infra* note 129, at 3 n.2. The Board was unconvinced, and argued that there are criminal penalties for anyone who "knowingly makes a false representation of a material fact in the application for copyright registration." 17 U.S.C. § 506(e).

should not only rely on the users of AI. Providers of AI-generated services also have a significant responsibility to make the provenance visible and traceable. So far, the emphasis has been on identifying and labeling AI-generated content via visible and invisible watermarks,³² and digital signatures.³³ In addition, providers of gAI services should establish and maintain a comprehensive database of products generated by their AI technologies and make this database accessible to the Office. Such a measure would serve a critical function: it would enable the Office to effectively review and compare copyright registration applications against the backdrop of existing AI-generated products. This comparison is crucial for determining whether the human contribution in an AI-generated product surpasses the threshold of originality—a cornerstone requirement for copyright protection.

C. Provenance of Synthetic Data

In January 2023, OpenAI stated that it could identify AI-generated content.³⁴ But in July 2023, it asserted that it could not distinguish synthetic data from non-synthetic data.³⁵ But on February 13, 2024, the same U.S.-based AI research organization announced that it records sessions if the user does not actively request

³² Tianxiang He, *AI Originality Revisited: Can We Prompt Copyright Over AI-Generated Pictures?*, 73 GRUR INT'L 299, 306 (2024). See also Nick Clegg, *Labeling AI-Generated Images on Facebook, Instagram and Threads*, META (Feb. 6, 2024), <https://about.fb.com/news/2024/02/labeling-ai-generated-images-on-facebook-instagram-and-threads/> [https://perma.cc/KY9P-PWD2]; Kyt Dotson, *OpenAI Will Now Add Labels to AI-generated Images Following Meta*, SILICON ANGLE (Feb. 7, 2024), <https://siliconangle.com/2024/02/07/openai-will-now-add-labels-ai-generated-images-following-meta/> [https://perma.cc/GN7U-EEVB]. Tiffany Hsu, *Google Joins Effort to Help Spot Content Made With A.I.*, N.Y. TIMES (Feb. 8, 2024), <https://www.nytimes.com/2024/02/08/business/media/google-ai.html> [https://perma.cc/EG4P-QE7V].

³³ The Coalition for Content Provenance and Authenticity (C2PA) unifies the Adobe-led Content Authenticity Initiative (CAI) to provide context and history for digital media, with Project Origin, which is a project led by Microsoft and the BBC focusing on disinformation in the digital news ecosystem. *Guiding Principles*, C2PA, <https://c2pa.org/principles> [https://perma.cc/SMK9-PLBV] (last visited Oct. 21, 2024).

³⁴ Jan Hendrik Kirchner et al., *New AI Classifier for Indicating AI-written Text*, OPENAI BLOG (Jan. 31, 2023), <https://openai.com/blog/new-ai-classifier-for-indicating-ai-written-text> [https://perma.cc/9FCS-V3LP].

³⁵ Emilia David, *OpenAI Can't Tell if Something Was Written by AI After All*, VERGE (July 26, 2023), <https://www.theverge.com/2023/7/25/23807487/openai-ai-generated-low-accuracy> [https://perma.cc/VLS7-DCCM]. This author finds the alleged impossibility of OpenAI to distinguish between products generated by ChatGPT and those not generated by ChatGPT not very credible. It is highly conceivable that OpenAI is recording every single generated content, if only to learn these interactions generally and to personalize the results for the users.

to delete these “memories.”³⁶ On August 4, 2024, OpenAI’s updated a blog post on content provenance solutions:³⁷ it announced that OpenAI will launch audiovisual content provenance solutions, and is experimenting with classifiers, watermarking and metadata for synthetic data, and has joined the Coalition for Content Provenance and Authenticity (“C2PA”).³⁸

Blockchain solutions could create a tamper-proof ledger³⁹ of both the metadata of the copyrighted works in the training data and the AI-generated material and distribution.

In the EU, the AI service providers but also users of an AI system that generates or manipulates image, audio or video content that appreciably resembles existing persons, objects, places or other entities or events and would falsely appear to a person to be authentic or truthful (“deep fake”) shall disclose that the content has been artificially generated or manipulated.⁴⁰

In China, Art. 17 of the Provisions on the Administration of Deep Synthesis Internet Information Services stipulates that AI service providers need to add a conspicuous label on generated content.⁴¹

In sum, the U.S. aims to become a leader in AI innovation using laissez-faire market forces;⁴² the EU would like to become a leader in gAI governance and

³⁶ *Memory and New Controls for ChatGPT*, OPENAI (Feb. 13, 2024), <https://openai.com/blog/memory-and-new-controls-for-chatgpt> [<https://perma.cc/L4RF-5U5H>].

³⁷ *Understanding the Source of What We See and Hear Online*, OPENAI (Aug. 4, 2024), <https://openai.com/index/understanding-the-source-of-what-we-see-and-hear-online/> [<https://perma.cc/2SYW-A9ZN>]. See also Deepa Seetharaman & Matt Barnum, *There’s a Tool to Catch Students Cheating With ChatGPT. Open AI Hasn’t Released It.*, WALL ST. J. (Aug. 4, 2024) (for the text watermarking, the tool allegedly slightly changes how tokens are selected, leaving a pattern).

³⁸ C2PA, *supra* note 33.

³⁹ Shubhangi V. Urkude et al., *Anatomy of Blockchain Implementation in Healthcare*, in BLOCKCHAIN TECHNOLOGY: APPLICATIONS AND CHALLENGES 51, 67 (Sandeep Kumar Panda et al. eds., 2021).

⁴⁰ AI Act, *supra* note 20, pmbls. 60, 134 & art. 50(4); Art. 5.1(a) of the AI Act prohibits AI systems to deploy subliminal techniques beyond a person’s consciousness. Neuwirth argues that the wording should be “below” instead of “beyond,” unless paraliminal [beyond a person’s consciousness] techniques are possible. ROSTAM NEUWIRTH, THE EU ARTIFICIAL INTELLIGENCE ACT REGULATING SUBLIMINAL AI SYSTEMS 9, 20 (2023).

⁴¹ Provisions on the Administration of Deep Synthesis Internet Information Services (promulgated by the Cyberspace Admin. of China, Nov. 25, 2022), *translated in* China Law Translate, <https://www.chinalawtranslate.com/en/deep-synthesis/> [<https://perma.cc/4RAY-QMFT>].

⁴² Christiaan Hetzner, *Former Google CEO Eric Schmidt Tells Government to Leave A.I. Regulation to Big Tech*, FORTUNE (May 15, 2023), <https://fortune.com/2023/05/15/former-google-ceo-eric->

wants to repeat the Brussels Effect it achieved with the General Data Protection Regulation (“GDPR”), which is the process of externalizing a unilaterally imposed standard (in online privacy) in the EU, made possible because of its market prominence.⁴³ China is planning to become a leader in both innovation and technology.⁴⁴ In 2017, China already revealed its ambition in a strategic regulatory framework for AI,⁴⁵ which stretches forth until 2030.

D. *Letting Go of the Romantic Lens*

In the U.S., China, and in EU member states, copyright protection is automatic upon creation. However, filing for registration is a precondition for enforcing a copyright infringement lawsuit of a domestic work in U.S. courts.⁴⁶ The Office has applied an unattainable high standard to copyright eligibility. Before introducing this “platonic” standard, the article will give a concise overview of the Romantic view on authorship and its critics, and why it is less useful to critique the decisions of the Office and the Beijing Internet Court.

The extant historical view of the Romantic period (1798–1837) only provides coarse contours of an ideal author in relation to his or her work. The Romantic idea is that works are created out of nothing.⁴⁷ The English poet Samuel Taylor Coleridge distinguished between primary, and secondary imagination and fancy.

schmidt-tells-government-to-leave-regulation-of-ai-to-big-tech-openai-chatgpt-bardai-midjourney/
[<https://perma.cc/69HT-FZPM>].

⁴³ ANU BRADFORD, *THE BRUSSELS EFFECT: HOW THE EUROPEAN UNION RULES THE WORLD* xiv (2020).

⁴⁴ Sjoerd Bakker, *AI Regulations May See a Beijing Effect*, FREEDOM LAB (Aug. 4, 2022), <https://www.freedomlab.com/posts/ai-regulations-may-see-a-beijing-effect> [<https://perma.cc/UEF6-PVRR>].

⁴⁵ Guowu Yuan Guanyu Yinfa Xin Yidai Rengong Zhineng Fazhan Guihua de Tongzhi (国务院关于印发新一代人工智能发展规划的通知) [State Council Notice on the Issuance of the New Generation Artificial Intelligence Development Plan] (promulgated by the State Council of the People’s Republic of China, July 20, 2017), https://www.gov.cn/zhengce/content/2017-07/20/content_5211996.htm [<https://perma.cc/PK93-32PY>].

⁴⁶ 17 U.S.C. § 411(a). Registration also makes statutory damages and attorney’s fees possible. 17 U.S.C. § 412. “In 1988, Congress removed foreign works from § 411(a)’s dominion in order to comply with the Berne Convention for the Protection of Literary and Artistic Works’ bar on copyright formalities for such works.” *Fourth Est. Pub. Benefit Corp. v. Wall-Street.com, LLC*, 139 S. Ct. 881, 891 (2019).

⁴⁷ Plato wrote about a benevolent creator-god (also known as “craftsman” [in Greek: “demiurge”]) of the universe who organizes the cosmos and its contents out of pre-existing chaos, shaping the physical world to reflect the eternal, unchanging world of forms. PLATO, *TIMAEUS* (Sue Asscher & David Widger eds., Benjamin Jowett trans., Project Gutenberg eBook 2021) (ebook), <https://www.gutenberg.org/files/1572/1572-h/1572-h.htm> [<https://perma.cc/PET5-PE54>]. See also Richard D. Mohr, *What Plato’s Demiurge Does*, *SOC’Y FOR ANCIENT GREEK PHIL. NEWSL.*, no. 112, Oct. 1983, at 1, 3.

This tripartite division could be interpreted thus: if God created the cosmos as an act of primary imagination (perceived and understood by people), then creative artists are engaged in a finite but almost divine imitation: secondary imagination (transformation that created the world artistically into something original and expressive), while lesser artists “fancifully” shuffle prefabricated elements around.⁴⁸ Contemporary authors of Coleridge, such as Lord Byron dared to break from the traditional epic form in “Don Juan” and used a satirical and irreverent style, in favor of personal expression.⁴⁹ The German poet Friedrich Schiller in “On Bürger’s Poems,” described the true artist as one whose heart and head, imagination and reason have merged.⁵⁰ The Romantic poets reconceptualized the creative process from imitation to genuine originary authorship.⁵¹

The Romantic view on authorship can be characterised by the emphasis on the solitary individual imagination,⁵² often perceived as reserved for geniuses.⁵³

⁴⁸ SAMUEL TAYLOR COLERIDGE, *BIOGRAPHIA LITERARIA* cvii (Adam Roberts ed., 2014), https://www.sas.upenn.edu/~cavitch/pdf-library/Coleridge_Biographia_Literaria.pdf [<https://perma.cc/R9KV-DY3F>].

⁴⁹ LORD BYRON, *DON JUAN* (David Widger ed., Project Gutenberg eBook 2024) (ebook) (1837), <https://www.gutenberg.org/cache/epub/21700/pg21700-images.html> [<https://perma.cc/8DXZ-HSNP>].

⁵⁰ In Romantic theory the “true” artist was one who had escaped the division of labor that characterized modern life generally, and who united “head and heart, shrewdness and ingenuity, reason and imagination in a harmonious alliance,” thus restoring the “whole person” in us. MARTHA WOODMANSEE, *THE AUTHOR, ART, AND THE MARKET: REREADING THE HISTORY OF AESTHETICS* 72 (1993) (translating Friedrich Schiller, *Über Bürgers Gedichte*, *ALLGEMEINE LITERATUR-ZEITUNG*, Jan. 1791).

⁵¹ “Genuine authorship is *originary*,” “it results not in a variation, an imitation, or an adaptation,” “but in an utterly new, unique—in a word, ‘original’—work” “to be the property of its creator” which merits protection. Peter Jaszi & Martha Woodmanse, *Introduction to THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE* 1, 3 (Martha Woodmanse & Peter Jaszi eds., 1994).

⁵² “The coming into being of the notion of ‘author’ constitutes the privileged moment of *individualization* in the history of ideas, knowledge, literature, philosophy, and the sciences.” Michel Foucault, *What is an Author?*, in *TEXTUAL STRATEGIES: PERSPECTIVES IN POST-STRUCTURALIST CRITICISM* 141, 141 (Josué V. Harari ed., 1979).

⁵³ See Martha Woodmansee, *The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the ‘Author’*, 17 *EIGHTEENTH-CENTURY STUD.* 425 (1984) (illustrating the Romantic ideal that the “author-genius,” inspired by the numinous creates something the world has never seen). “Secular prophet with privileged access to experience the numinous and a unique ability to translate that experience for the masses of less gifted consumers.” Jaszi & Woodmanse, *supra* note 51, at 3. Wordsworth’s “The Prelude”, with its personal and innovative approach to poetry, can exemplify the work of a solitary Romantic genius. WILLIAM WORDSWORTH, *THE PRELUDE OR, GROWTH OF A POET’S MIND; AN AUTOBIOGRAPHICAL POEM* (1850), <https://archive.org/details/prelude00unkngoog/page/n9/mode/2up?view=theater> [<https://perma.cc/TB6X-L2N5>].

Where expression of personal experience and emotion was imperative,⁵⁴ nature was used as a source of inspiration,⁵⁵ and creation was often seen as a mystical process. Commentators, such as Professors Boyle,⁵⁶ Jaszi,⁵⁷ Coombe,⁵⁸ Jaszi and Woodmansee,⁵⁹ and Farley,⁶⁰ have lamented the influence that Romanticism would have had on the development of copyright law. This article will break with this tradition and use a more precise “platonic” perspective on copyright eligibility as the framework to compare the respective points of view of the Office and the Beijing Internet Court regarding AI-generated images.

This author is not the first one who has criticized Romanticism as a useful explanatory framework of copyright law. Professor David Lange asserted that the relevant influence on authorship was misattributed to bourgeois Romanticism, which started three centuries before the eighteenth century.⁶¹ “The fact remains that authorizing speech, historically, has been the work of the state—of any state, whether bourgeois or not.”⁶² Also, Lemley did not think the Romantic conception of authorship was a useful framework to compare it with contemporary copyright

⁵⁴ Samuel Taylor Coleridge’s “The Rime of the Ancient Mariner” reflects the personal emotional landscape and vivid imagination, hallmarks of Romanticism. SAMUEL TAYLOR COLERIDGE, *THE POEMS OF SAMUEL TAYLOR COLDRIDGE* 186 (Ernest Hartley Coleridge ed., 1921), <https://archive.org/details/poemsofsamueltay1921cole/page/186/mode/2up> [<https://perma.cc/R6FY-B2YT>].

⁵⁵ John Keats’ “To Autumn” is an example where the author is inspired by nature and imbues it with symbolic meaning. JOHN KEATS, *THE POEMS OF JOHN KEATS* 205 (Ernest De Selincourt ed., 1905), <https://archive.org/details/poemsofjohnkeats00keat/page/205/mode/2up> [<https://perma.cc/2BZG-XHGF>].

⁵⁶ JAMES BOYLE, *SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY* 42 (1996). See also James D.A. Boyle, *The Search for an Author: Shakespeare and the Framers*, 37 AM. U. L. REV. 625, 629 (1988).

⁵⁷ Jaszi realized that Romantic conception of “authorship” with its focus on self-expression, personal experiences, exalted notions of the transcendental, are refracted in contemporary copyright law as “images in fun-house mirrors.” Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of “Authorship,”* 40 DUKE L.J. 455, 456 (1991).

⁵⁸ Rosemary J. Coombe, *Challenging Paternity: Histories of Copyright*, 6 YALE J.L. & HUMAN. 397, 398 (1994) (pointing out that seemingly transparent terms such as “author” and “work” and the contexts in which they emerged, were complex, contested before they gained legitimacy).

⁵⁹ Martha Woodmansee, *On the Author Effect: Recovering Collectivity*, 10 CARDOZO ARTS & ENT. L.J. 279, 291–92 (1992). Jaszi & Woodmansee, *supra* note 51, at 3.

⁶⁰ See Christine Haight Farley, *The Lingering Effects of Copyright’s Response to the Invention of Photography*, 65 U. PITT. L. REV. 385, 387 (2004) (the author contends that commentators have criticized courts as unwittingly invoking the standard of the Romantic author).

⁶¹ David Lange, *At Play in the Fields of the Word: Copyright and the Construction of Authorship in the Post-Literate Millennium*, 55 L. & CONTEMP. PROBS. 139, 144 (1992).

⁶² *Id.*

law,⁶³ since it was not able to explain why copyright historically provided a limited, qualified protection;⁶⁴ why the universe of copyright continues to expand;⁶⁵ and why moral rights never really caught on in the U.S.⁶⁶ In addition, copyright doctrines such as work for hire, assignment and transfer are inimical to the notion of Romantic authorship.⁶⁷ Boyle argued that due to Romanticism, authors provide insufficient attribution to earlier sources.⁶⁸ In contrast, Lemley held that “initial creators were given far too much control over the work of transformative improvers.”⁶⁹ Litman too held that the notion that every new work is in some sense based on previous works is a truism “invoked, but not examined.”⁷⁰

According to Lemley, copyright is not so much formed by the influence of Romanticism, but instead because of the opposing force field of public and private interests, creators and improvers, and legislators that are trying to balance these interests.⁷¹

This author does not want to impose a more pronounced fine-grained take on authorship due to Romanticism that historically did not exist. In contemporary copyright law, the individual author is still preferred by courts,⁷² not so much for theoretical as for practical reasons since joint authorship often leads to convoluted situations.⁷³ Moreover, some of the most prominent copyright scholars could not

⁶³ Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 TEX. L. REV. 873, 876 (1997) (reviewing JAMES BOYLE, *SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY* (1996)).

⁶⁴ *Id.* at 880.

⁶⁵ *Id.* at 886–87 (the protection of copyright has been expanding regarding subject matter, duration, and control of the copyright holder).

⁶⁶ The notion of Romantic authorship has failed to persuade decisionmakers in the U.S. to implement moral rights beyond V.A.R.A. *Id.* at 894.

⁶⁷ *Id.* at 886–87.

⁶⁸ BOYLE, *supra* note 56, at 130.

⁶⁹ Lemley, *supra* note 63, at 884. IP rights holders might not only be interested in the return of their investment, but also to exercise content control over subsequent uses of their works. Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 998 (1997).

⁷⁰ Jessica D. Litman, *The Public Domain*, 39 EMORY L.J. 965, 966 (1990).

⁷¹ Lemley, *supra* note 63, at 888.

⁷² Aman K. Gebru, *Communal Authorship*, 58 U. RICH. L. REV. 337, 348–49 (2024).

⁷³ See, e.g., *Childress v. Taylor*, 945 F.2d 500 (2d Cir. 1991); *Thomson v. Larson*, 147 F.3d 195 (2d Cir. 1998) (demonstrate the difficulty for courts to assess contributions by the parties, and whether there was an intention to merge their contributions into an inseparable whole). Once there is joint authorship, it entitles co-authors to equal undivided interests in the whole work, subject to the obligation to account to

agree on the interpretation of joint authorship. On the one hand, Professors Melville Nimmer and David Nimmer held that there needs to be an intention to create a unitary work and some contribution above a minimum level, but each contribution does not have to be an original work.⁷⁴ On the other hand, Professor Paul Goldstein held that “a contribution to a joint work need not be quantitatively or qualitatively equal to the other contributions, so long as it meets the threshold of protectible expression.”⁷⁵ This has led to a split in the Circuit Courts,⁷⁶ that one day may be resolved by the Supreme Court.

In 1884, forty-seven years after the Romantic era, the Supreme Court decided in *Burrow-Giles*, one of the seminal copyright cases, that a photo camera could be an instrument for creative authors.⁷⁷ In 1903, the Supreme Court in *Bleistein* affirmed aesthetic neutrality: that copyright law should not distinguish between a work of genius and a work of a dunce, between high and low art, between emotional and rational content.⁷⁸ The Berne Convention for the Protection of Literary and

the other joint owner for any profits that are made. 17 U.S.C. § 201(a). This can lead to problems regarding decisions, division of royalties and attribution. Balganesch criticized “the law’s treatment of joint authors as equal co-owners, in which each author’s ownership stake or right is equal to the other’s regardless of the precise contribution made to the work, generates the impulse to deny legal creation altogether because of the disproportionality in contribution.” Balganesch, *supra* note 4, at 67; Balganesch, *supra* note 4, at 68 (“The argument that a contributor deserves to be classified as the legal creator (i.e., author) of the work by virtue of her contributions may thus serve as a claim about the virtue of that contribution—independently of whether the classification might enhance overall utility, either in the individual case or over the long term.”). According to LaFrance who analysed the case law that Congress incorporated by reference in the 1976 Act, joint authors are entitled to ownership shares that reflect their respective contributions to the joint work. Mary LaFrance, *Apportioning Authorship*, 71 KAN. L. REV. 209, 210 (2022).

⁷⁴ 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 6.07[A][3][a] (2024) (asserting that Congress “elevate[d] intention as the touchstone, without placing any further parsing as to the copyrightable status of each individual component that the parties intended to contribute to the work as a whole”).

⁷⁵ PAUL GOLDSTEIN & P. BERNT HUGENHOLTZ, INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE 249 (2d ed. 2010). *See also* PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 4.2.1.2 (3d ed. 2005 & Supp. 2024).

⁷⁶ The Second Circuit in *Childress*, 945 F.2d at 507, and the Ninth Circuit in *Aalmuhammed v. Lee*, 202 F.3d 1227, 1231 (9th Cir. 2000) follow Goldstein’s interpretation, while the Seventh Circuit has followed Nimmer & Nimmer’s view in *Gaiman v. McFarlane*, 360 F.3d 644, 659 (7th Cir. 2004).

⁷⁷ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

⁷⁸ *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 252 (1903) (Holmes, J.) (“It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits.”).

Artistic Works (“Berne Convention”) was signed in 1886,⁷⁹ and the Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS Agreement”),⁸⁰ which incorporated important parts of the Berne Convention,⁸¹ was signed in 1994. Neither treaty provides any definition of author, work, or the exact scope of authorship.

E. “platonic” Conception of Copyright Eligibility

This author is the first who has chosen for a constructed “platonic” view as a more useful theoretical framework to juxtapose the respective U.S. and Chinese allegiances and deviations of this ideal regarding gAI and copyright eligibility, since this “platonic” conception of copyright eligibility did not exist before (except in the platonic sense of course). The historical Plato saw art as mimesis, imitation of reality,⁸² and therefore this author does not want to present him anachronistically. The contemporary view of “platonism” applied on the Theory of Forms is “the view that there exist such things as abstract objects—where an abstract object is an object that does not exist in space or time and which is therefore entirely non-physical and non-mental.”⁸³

The Theory of Forms is one of Plato’s most important philosophical concepts he articulated in particular in “The Republic,” Book VII,⁸⁴ Plato described a dialogue between Socrates and Glaucon. Here Plato let Socrates explain to Glaucon the eminent “allegory of the cave.”⁸⁵ With this allegory Plato posits that the

⁷⁹ Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, amended on Sept. 28, 1979, S. TREATY DOC. NO. 99-27 [hereinafter Berne Convention].

⁸⁰ 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].

⁸¹ *Id.* art. 9(1) (Members shall comply with Arts. 1 through 21 of the Berne Convention (1971) and the Appendix thereto).

⁸² Giancarlo F. Frosio, *Reimagining Digital Copyright Through the Power of Imitation: Lessons from Confucius and Plato*, 5 PEKING UNIV. TRANSNAT’L L. REV. 55, 56 (2018).

⁸³ Mark Balaguer, *Platonism in Metaphysics*, in STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta ed., 2016), <https://plato.stanford.edu/archives/spr2016/entries/platonism/> [<https://perma.cc/YBY5-WJNH>].

⁸⁴ “[T]he truth would be literally nothing but the shadows of the images.” PLATO, THE REPUBLIC (Sue Asscher & David Widger eds., Benjamin Jowett trans., Project Gutenberg eBook 2021) (ebook), <https://www.gutenberg.org/files/1497/1497-h/1497-h.htm> [<https://perma.cc/KYP6-MAT8>].

⁸⁵ The “allegory of the cave,” describes prisoners, chained to their feet and necks so they cannot look around, in an underground den all their lives. The wall that they faced showed some shadows of things that

material world humans perceive is not reality but merely a shadow or copy of reality. According to Plato, the real world is the world of Forms, eternal, unchangeable, and the true essence of reality.⁸⁶ According to Plato, one cannot learn or create something new. Instead, one can only recollect (*anamnesis*) what the soul already knew; namely the world of Forms.⁸⁷

Professor Jane Ginsburg referred to what she called the “Platonic fact precept,” which are precepts, facts and theories that may have been “suspended in the ether, or lurking in the cave, but they are ‘there’—true, unchangeable, and awaiting discovery by the perceptive or the blessed.”⁸⁸ Fundamentally, the “platonic” view of creation as “re-membering” existing ideal forms,⁸⁹ is a better match with AI systems that generate products based on combining aspects of pre-existing copyrighted works in the training data: creation out of something (*creatio ex materia*) instead of creation out of nothing (*creatio ex nihilo*). This could comport with the prerequisite of originality: independently (remembered) created, with a modicum of creativity.⁹⁰

Observing the decisions of the Office, which rejected the copyrightability of four AI-generated images, and the Beijing Internet Court, which accepted an AI-generated image, it becomes clear that they both applied a “platonic” view on copyright eligibility. Both jurisdictions used the same high standard with opposite effect.⁹¹ However, this article is not criticizing the outcome of the courts, but their reasoning. From a policy perspective, it is entirely reasonable to avoid imposing

were passing in front of a fire behind and above them, i.e., the real world. They see forms in these shadows and describe them as real, instead of the things that cause the shadow. *Id.*

⁸⁶ “That the knowledge at which geometry aims is knowledge of the eternal, and not of aught perishing and transient.” *Id.*

⁸⁷ “Whereas, our argument shows that the power and capacity of learning exists in the soul already; and that just as the eye was unable to turn from darkness to light without the whole body, so too the instrument of knowledge can only by the movement of the whole soul be turned from the world of becoming into that of being, and learn by degrees to endure the sight of being, and of the brightest and best of being, or in other words, of the good.” *Id.*

⁸⁸ Jane Ginsburg, *Sabotaging and Reconstructing History: A Comment on the Scope of Copyright Protection in Works of History after Hoehling v. Universal City Studios*, 29 J. COPYRIGHT SOC’Y U.S.A. 647, 658 (1982).

⁸⁹ Balaguer, *supra* note 83.

⁹⁰ *Feist Publ’ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 340 (1991).

⁹¹ Professor Lee points out that the “bare minimum” copyright standard, selection and arrangement of uncopyrightable elements, is attainable for users of gAI. Lee, *supra* note 7, at 41.

a single copyright standard on both works created by humans and those products generated by AI, opting instead for two distinct standards. This approach would provide preferential treatment to human authors, recognizing their unique creative contributions to human culture.⁹²

F. *Copyright Axioms and Rationales*

What are the contemporary copyright axioms that one must consider? Commentators traditionally categorized the rationale behind copyright protection in copyright nations (often common law countries, including the U.S.) as grounded in utilitarianism, while authors' right nations (often civil law countries, including China and most EU member states) as stemming from natural law.⁹³ However, this division is more nuanced,⁹⁴ and especially since the ongoing harmonization projects of the Berne Convention and TRIPS Agreement, one can observe quite some convergence.⁹⁵ One can argue that the emphasis of the justification of copyright protection in countries with civil law systems was based more on natural law:⁹⁶ an inalienable link between author and work, and an emphasis on the self-determination of the author. The concomitant moral rights include the *droit de divulgation* (right of disclosure), which provides the author the right to decide whether to make the work known to the public or not, and if so, to what extent

⁹² Friedmann, *supra* note 10, at 1.

⁹³ See GOLDSTEIN & HUGENHOLTZ, *supra* note 75, at 5. See also Peter Burger, *The Berne Convention: Its History and Its Key Role in the Future*, 3 J.L. & TECH. 1, 15 (1988) (discussing the “divisive philosophical differences and necessary compromises between natural right countries such as France, which wanted universal protection, and Anglo-American copyright countries such as Great Britain, which preferred to leave most matters to the province of national law”). Benjamin Davidson, *Lost in Translation: Distinguishing between French and Anglo-American Natural Rights in Literary Property, and How Dastar Proves that the Difference Still Matters*, 38 CORNELL INT’L L.J. 583, 620 (2005) (stating that since the Statute of Anne, Anglo-American legislators have been replacing natural law copyright with statutory law, “wherein the author’s incentive to create is balanced against the public’s need for access to the work”).

⁹⁴ GOLDSTEIN & HUGENHOLTZ, *supra* note 75 (pointing out that a natural rights strain arrived in author’s rights countries only in the late nineteenth century, while the utilitarian ideology dominated during the French revolutionary copyright laws; and the Anglo-American copyright history has been imbued with the realization “that the author has a natural right to profit from his creativity and labor”).

⁹⁵ *Id.*

⁹⁶ Borghi points out Kant, Hegel and Fichte as the theorists relevant for copyright doctrine on the continent of Europe, while in the UK, Locke’s theory on labor has been applied to copyright doctrine. Borghi, *infra* note 350, at 9. See also Alfred C. Yen, *The Interdisciplinary Future of Copyright Theory*, in THE CONSTRUCTION OF AUTHORSHIP: TEXTUAL APPROPRIATION IN LAW AND LITERATURE 159, 161–62 (Martha Woodmansee & Peter Jaszi eds., 2d ed. 1994).

he wants to divulge his work, and creates a market for licensing. In contrast, the common law countries, including the U.S., justify copyright in a utilitarian way: balancing the private interests of authors to temporarily protect the work and public interests in accessing the work and building upon it. The U.S. for example has a much less pronounced moral rights protection regime, where the second Fair Use factor takes into account whether a work was published or not; and the fourth Fair Use factor takes the possibility of licensing into account.⁹⁷

The “incentive justification of copyright” is enshrined in the Copyright Clause of the U.S. Constitution.⁹⁸ Human authors must be incentivized to create expressive works by rewarding them exclusive rights temporarily.⁹⁹ The goal is to create a “giant warehouse of authorship,”¹⁰⁰ where the focus is, ineluctable due to *Bleistein*’s aesthetic neutrality requirement,¹⁰¹ on quantity, instead of quality.

However, certain axioms of copyright law are universal: that the actual creator of a work is the initial author and owner, except in case of a work for hire.¹⁰² The

⁹⁷ “Just as licensing of derivatives is an important economic incentive to the creation of originals, so too will the right not to license derivatives sometimes act as an incentive to the creation of originals.” *See generally* Salinger v. Colting, 641 F. Supp. 2d 250, 268 (S.D.N.Y. 2009).

⁹⁸ U.S. CONST. art. I, § 8, cl. 8.

⁹⁹ *Id.*

¹⁰⁰ Jessica Litman, *Lawful Personal Use*, 85 TEX. L. REV. 1871, 1880 (2007) (pointing out that the giant warehouse of authorship is preoccupied with creation and not with consumption).

¹⁰¹ *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251 (1903) (Holmes, J.).

¹⁰² 17 U.S.C. § 201(a), (b). *Cf.* Zhuzuoquan Fa (著作权法) [Copyright Law] (promulgated by the Standing Comm. Nat’l People’s Cong., Sept. 7, 1990, rev’d Nov. 11, 2020, effective June 1, 2021) art. 11, 2021 STANDING COMM. NAT’L PEOPLE’S CONG. GAZ. 348, *translated in* WILMap, <https://wilmap.stanford.edu/node/31101> [<https://perma.cc/7MZB-ZTWR>] [hereinafter China Copyright Law].

economic rights of a copyright are limited,¹⁰³ and after the protection duration expires,¹⁰⁴ the work ascends to the public domain.¹⁰⁵

Works are eligible for copyright protection if they are original expressions.¹⁰⁶ The Dutch authors' rights doctrine that only products that have "own, original character" and "bear the personal stamp of the author" can be protected by copyright,¹⁰⁷ is closer to the "platonic" ideal of a copyrighted work than the Court of Justice of the European Union ("CJEU")'s standard that the work should be the "author's own intellectual creation reflecting his personality."¹⁰⁸ After CJEU's *Eva-Maria Painer*,¹⁰⁹ the member states of the EU, including the Netherlands, must follow this less strict standard.

Contemporary authors' works are arguably influenced by nature and nurture, including the works of other authors, since "we are standing on shoulders of giants,"¹¹⁰ thus, the "independently created" leg of originality is fictitious too.¹¹¹

¹⁰³ In the U.S. the term of copyright duration is 70 years after the death of the author for works created on or after Jan. 1, 1978. 17 U.S.C. § 302(a). In the case of an anonymous work, a pseudonymous work, or a work made for hire, the copyright endures for a term of 95 years from the year of its first publication, or a term of 120 years from the year of its creation, whichever expires first. 17 U.S.C. § 302(a)–(c). *Cf.* China Copyright Law, art. 23 (granting a protection period of 50 years after the death of the author, or in case of work for hire, the protection period of the publication right is 50 years).

¹⁰⁴ 17 U.S.C. § 301(a) (preempting state common law copyright for works within the subject matter of copyright as of Jan. 1, 1978, while preserving perpetual protection for unpublished works created before this date); Copyright Act of 1909, Pub. L. No. 60-349, ch. 320, § 2, 35 Stat. 1075, 1076 (1909) (providing perpetual common law protection for unpublished works); H.R. Rep. No. 94-1476, at 130 (1976).

¹⁰⁵ "Title 17, United States Code, as amended by this Act, does not provide copyright protection for any work that is in the public domain in the United States." Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, § 12, 102 Stat. 2853 (1988). One could see the public domain as a kind of "platonic" heaven where the expressive works "return" after the expiration of the copyright. *See generally* Andrew Gilden, *Life, Death, Public Domain*, 22 GEO. MASON L. REV. 13, 39 (2014).

¹⁰⁶ 17 U.S.C. § 102(a) ("original work of authorship fixed in any tangible medium of expression"). *Cf.* China Copyright Law, art. 3.

¹⁰⁷ "[E]igen, oorspronkelijk karakter en persoonlijk stempel van de maker." HR 30 mei 2008, NJ 2008, 556 m.nt. EJD (Endstra/Uitgeverij Nieuw Amsterdam B.V.) (Neth.), <https://uitspraken.rechtspraak.nl/details?id=ECLI:NL:HR:2008:BC2153> [<https://perma.cc/ZPQ2-RHJ4>].

¹⁰⁸ Case C-145/10, *Eva-Maria Painer v Standard Verlags GmbH and Others*, ECLI:EU:C:2011:798, ¶ 15 (Dec. 1, 2011).

¹⁰⁹ *Id.*

¹¹⁰ This winged statement is attributed to Sir Isaac Newton, who used it in a letter to Robert Hooke in 1675. CHAOMEI CHEN, *MAPPING SCIENTIFIC FRONTIERS: THE QUEST FOR KNOWLEDGE VISUALIZATION* 135–36 (2003).

¹¹¹ Perhaps the exceptions are feral children raised by animals that start doodling for the first time.

In the same vein, one can argue that products generated by AI are not created independently, but generating parts of the evaporated copyrighted works in the training data.¹¹²

Just as the Berne Convention and TRIPS Agreement, both remain silent on the terms “author” and “work,” the phrase “original works of authorship” was also “purposely left undefined” by Congress so that the courts could “incorporate without change the standard of originality established by the courts under the . . . [1909] copyright statute.”¹¹³ According to the Office in “A Recent Entrance to Paradise,” the term is “very broad,” but its scope is not unlimited.¹¹⁴ In “Zarya of the Dawn” and “SURYAST,” the Office refers to the originality standard of *Feist*.¹¹⁵ The Beijing Internet Court held that “[g]enerally, ‘originality’ requires that the work be independently created by the author and embody their unique personal expression.”¹¹⁶

Walter Benjamin sung the swan song of unity of time and place of works of art.¹¹⁷ Mechanical reproduction caused the aura of works to disintegrate since you can, for example, enjoy the Mona Lisa not just in the Louvre, but online as well, and via replicas of the painting at many places and merchandise.

G. *Cutting the Umbilical Cord Between Author and Work*

With the emergence of gAI, it seems that the philosophical underpinnings provided by Poststructuralists and Deconstructionists, such as Jacques Derrida, Michel Foucault, and Roland Barthes, foreshadowed the inherent challenges

¹¹² Professor Sag euphemistically referred to copyrighted works as “grist for the mill” in relation to what he called “copy-reliant technologies,” such as internet search engines, plagiarism software; since they are used in a non-expressive way. Matthew Sag, *Copyright and Copy-Reliant Technology*, 103 Nw. U. L. REV. 1607, 1608, 1622, 1624–31 (2009).

¹¹³ H.R. REP. NO. 94-1476, at 51 (1976).

¹¹⁴ “Entrance,” *infra* note 129, at 52.

¹¹⁵ *Feist Publ’ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 346 (1991).

¹¹⁶ “Spring,” *infra* note 217, at 13–14. Interestingly, the Court attached interest in the views and likes of numerous users on “Little Red book,” “which shows that the picture can be identified as work of originality by the standards of the general public.” *Id.* at 10.

¹¹⁷ Benjamin described what was lost as the “aura” of the work: “One might subsume the eliminated element in the term ‘aura’ and go on to say: that which withers in the age of mechanical reproduction is the aura of the work of art.” WALTER BENJAMIN, *The Work of Art in the Age of Mechanical*, in ILLUMINATIONS 217, 221 (Hannah Arendt ed., Harry Zohn trans., Schocken Books 1969), <https://web.mit.edu/allanmc/www/benjamin.pdf> [<https://perma.cc/HN5S-B8ZZ>].

one can encounter within the ambit of LLMs. Derrida, in works like “Of Grammatology,” critiqued the notion of fixed meanings through his concept of *différance*, arguing that meanings are deferred and differ in context, which implies a fluidity and instability in language that LLMs struggle to encapsulate.¹¹⁸ Roland Barthes, especially in “The Death of the Author,”¹¹⁹ posited that the author’s intended meaning is not the ultimate source of a text’s meaning, emphasizing the role of the reader in creating meaning, interpreting, and criticizing the text. Foucault in “What Is an Author?” held that the author is a function that each reader is creating and does not coincide with the person who wrote the text: the author is a social construct.¹²⁰ “The author is therefore the ideological figure by which one marks the manner in which we fear the proliferation of meaning.”¹²¹

During the unsupervised training of LLMs, the intricate and costly process tends to sever texts from their semantic roots—what might be termed the “decapitation” of semantics from the often-copyrighted works, arguably cutting the umbilical cords of authors and their works in the process. The aspects of a work (text, audio, images, audiovisual, or computer code) are broken up in tokens that are assigned a weight. The relation between these tokens is inferred by a process of unsupervised learning: optimizing, often using variants of gradient descent, to iteratively adjust the weights to minimize the loss function.¹²² After this modern form of “Gematria,”¹²³ patterns and principles of the works are abstracted and can be generalized and applied to new unseen situations. This detachment from original

¹¹⁸ JACQUES DERRIDA, *OF GRAMMATOLOGY* xliii (Gayatra Chakravorty Spivak trans., 1997).

¹¹⁹ ROLAND BARTHES, *The Death of the Author*, in *IMAGE - MUSIC - TEXT* 142, 147–48 (Stephen Heath ed. & trans., 1977).

¹²⁰ TIM SMITH-LAING, *AN ANALYSIS OF MICHEL FOUCAULT’S WHAT IS AN AUTHOR?* 11 (2018).

¹²¹ Michel Foucault, *What Is an Author?*, in *TEXTUAL STRATEGIES: PERSPECTIVES IN POST-STRUCTURALIST CRITICISM* 141, 159 (Josué V. Harari ed., 1979).

¹²² “The most common method for parameter learning in neural networks is the steepest-descent method, in which the gradient of the loss function is used to make parameter updates.” CHARU C. AGGARWAL, *NEURAL NETWORKS AND DEEP LEARNING* 134 (2018). This open source book provides primers on training data, numerical optimization including gradient optimizations. See IAN GOODFELLOW, YOSHUA BENGIO & AARON COURVILLE, *DEEP LEARNING* 80–84 (2016), <https://www.deeplearningbook.org/contents/numerical.html> [https://perma.cc/94HH-KNDW].

¹²³ “Gematria” is assigning a numerical value to a name, word or phrase. It is a method of exegesis used by medieval Kabbalists to derive mystical insights into sacred writings or obtain new interpretations of the texts. DAVID A. COOPER, *GOD IS A VERB: KABBALAH AND THE PRACTICE OF MYSTICAL JUDAISM* 52 (1997).

contexts and the disregard for the interpretive role of human consciousness reveal the limitations of LLMs.

This article is divided in three Parts:

After the Introduction, Part I provides a terse overview of “A Recent Entrance to Paradise,” “Zarya of the Dawn,” “Théâtre D’opéra Spatial,” and “SURYAST,” four decisions by the Office to reject AI-generated images.

Part II gives a concise analysis of “Spring Breeze Brings Tenderness,” an AI-generated image that the Beijing Internet Court held eligible for copyright protection. This case did not fall out of the sky. Therefore, four precursors to the case will be briefly highlighted.

Based on the motivations given in these cases, Part III explores eligibility of copyright through the “platonic” lens and provides a possible framework to try to make the chosen motivations of the Office and the Beijing Internet Court insightful in the face of their respective decisions on AI-generated images. This Part will then focus on the erroneous assumption of the Office that a series of instructions cannot lead to expressive works; and the relevant time dimension of images generated by AI.

Finally, the Conclusion maintains that the Office is rejecting, and the Beijing Internet Court is accepting AI-generated images, both based on false premises. This author will contend that AI-generated images should be rejected from copyright registration and protection, however for the right reason, namely policy considerations to give preferential treatment to human authors. In addition, this Part provides some recommendations that can contribute to prevent or at least slow down the dilution of human culture.

I

COPYRIGHT OFFICE IMPOSES “PLATONIC” STANDARD ON AI-GENERATED IMAGES

The Office takes pride in the experience it has gained to distinguish between copyrightable and non-copyrightable works since 1870.¹²⁴ However,

¹²⁴ Several courts have deferred to the expertise of the U.S. Copyright Office. *See, e.g.*, *Norris Indus., Inc. v. Int’l Tel. & Tel. Corp.*, 696 F.2d 918, 922 (11th Cir. 1983); *Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 480 (6th Cir. 2015).

gAI brings unprecedented new challenges.¹²⁵ The Office has done extensive consultations¹²⁶ and requested the public to provide comments. On March 16, 2023, it issued the Copyright Registration Guidance for Works Containing AI-Generated Materials.¹²⁷ By December 6, 2023, the Office received approximately 10,370 comments. The irony is that the Office will probably have to use AI to analyze this massive number of comments.

The position of the Office is to exclude AI-generated material that is more than *de minimis* from any application.¹²⁸ The Office's denial to register Stephen Thaler's "A Recent Entrance to Paradise" ("Entrance")¹²⁹ was affirmed by the District Court for the District of Columbia¹³⁰ (see Part I.A); and the Review Board denied the registrations of Kristina Kashtanova's "Zarya of the Dawn" ("Zarya")¹³¹ (see Part I.B); Jason Allen's "Théâtre D'opéra Spatial" ("Spatial")¹³² (see Part I.C); and Ankit Sahni's "SURYAST"¹³³ (see Part I.D) AI-generated images.

A. "A Recent Entrance to Paradise"

Stephen Thaler invented the "Creativity Machine," a gAI that allegedly autonomously generated the image (described by the Office as a "two-dimensional artwork") entitled "A Recent Entrance to Paradise."¹³⁴ Mr. Thaler, as the owner of the "Creativity Machine," asked the Office to register the image as a work-made-

¹²⁵ Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 37 C.F.R. § 202 (2023), https://www.copyright.gov/ai/ai_policy_guidance.pdf [<https://perma.cc/6ADC-436N>].

¹²⁶ *Artificial Intelligence Study*, U.S. COPYRIGHT OFF., <https://www.copyright.gov/policy/artificial-intelligence/> [<https://perma.cc/897F-9ETZ>] (last visited Nov. 29, 2024).

¹²⁷ 37 C.F.R. § 202 (2023).

¹²⁸ *Id.*

¹²⁹ Letter from U.S. Copyright Off. Rev. Bd. to Ryan Abbott, Brown, Neri, Smith & Khan, LLP (Feb. 14, 2022), <https://www.copyright.gov/rulings-filings/review-board/docs/a-recent-entrance-to-paradise.pdf> [<https://perma.cc/857Y-F4HN>] [hereinafter "Entrance"].

¹³⁰ Thaler v. Perlmutter, 687 F. Supp. 3d 140, 146 (D.D.C. 2023).

¹³¹ Letter from U.S. Copyright Off. to Van Lindberg, Taylor English Duma LLP (Feb. 21, 2023), <https://www.copyright.gov/docs/zarya-of-the-dawn.pdf> [<https://perma.cc/SD2G-2JSK>] [hereinafter "Zarya"].

¹³² Letter from U.S. Copyright Off. Rev. Bd. to Tamara Pester, Tamara S. Pester, LLC (Sept. 5, 2023), <https://www.copyright.gov/rulings-filings/review-board/docs/Theatre-Dopera-Spatial.pdf> [<https://perma.cc/Y3Y9-LSEV>] [hereinafter "Spatial"].

¹³³ Letter from U.S. Copyright Off. Rev. Bd. to Alex P. Garens, Day Pitney, LLP (Dec. 11, 2023), <https://copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf> [<https://perma.cc/9QBD-ABR4>] [hereinafter "SURYAST"].

¹³⁴ "Entrance," *supra* note 129, at 1–2.

for-hire,¹³⁵ to no avail. Mr. Thaler held that this rejection was unconstitutional and not supported by case law.¹³⁶ However, copyright law only protects “the fruits of intellectual labor,”¹³⁷ that “are founded in the creative powers of the [human] mind.”¹³⁸ The Office will not register works “produced by a machine or mere mechanical process” that operates “without any creative input or intervention from an author” because, under the statute, “a work must be created by a human being.”¹³⁹ The Office also referred to the description in *Burrow-Giles*¹⁴⁰ of copyright as “the exclusive right of a man to the production of his own genius or intellect.”¹⁴¹ The District Court for the District of Columbia affirmed this reasoning.¹⁴²

Mr. Thaler argued that the Copyright Office “is currently relying upon non-binding judicial opinions from the Gilded Age to answer the question of whether [computer-generated works] can be protected.”¹⁴³ The Gilded Age is a term coined by Mark Twain, which refers roughly to the period from 1865 to 1904, between the Reconstruction and the Progressive Era,¹⁴⁴ to criticize, in Thaler’s eyes, the

¹³⁵ *Id.*

¹³⁶ *Id.* at 3.

¹³⁷ The Office invoked the labor theory of John Locke. JOHN LOCKE, *TWO TREATISES ON CIVIL GOVERNMENT* 204 (George Routledge & Sons 1884). See generally Alexander D. Northover, ‘*Enough and as Good*’ in the Intellectual Commons: A Lockean Theory of Copyright and the Merger Doctrine, 65 *EMORY L.J.* 1363 (2016) (applying the Lockean proviso on merger theory).

¹³⁸ *COMPENDIUM* (Third), *supra* note 8, § 306 (quoting Trade-Mark Cases, 100 U.S. 82, 94 (1879)); see also *COMPENDIUM* (Third) § 313.2.

¹³⁹ “Entrance,” *supra* note 129, at 3. Gervais comes to the same conclusion: “that machines that make decisions and cross the autonomy threshold produce public domain material to which no copyright rights attach.” Daniel Gervais, *The Machine as Author*, 105 *IOWA L. REV.* 2053, 2099 (2020). Gervais holds that copyright is meant to promote human creativity, that machines cannot make creative choices and are therefore devoid of originality. *Id.* at 2106.

¹⁴⁰ “Entrance,” *supra* note 129, at 4.

¹⁴¹ *Burrow-Giles Lithographic Co. v. Saroni*, 111 U.S. 53, 58 (1884). Farley, *supra* note 60, at 389 n.10 points to the anecdote that Oscar Wilde was asked by the U.S. Customs whether he had anything to declare, in which he replied: “I have nothing to declare but my genius.”

¹⁴² Judge Beryl A. Howell held that “[h]uman authorship is a bedrock requirement of copyright.” District Court of the District of Columbia affirmed that the Copyright Office appropriately refused to grant copyright registration for a work produced without any human creative input. *Thaler v. Perlmutter*, 687 F. Supp. 3d 140 (D.D.C. 2023).

¹⁴³ “Entrance,” *supra* note 129, at 2.

¹⁴⁴ MARK TWAIN & CHARLES DUDLEY WARNER, *THE GILDED AGE: A TALE OF TODAY IS A NOVEL* (1873) (eBook), <https://www.gutenberg.org/files/3178/old/orig3178-h/main.htm#contents> [<https://perma.cc/CH5H-ZWL7>].

outmoded policy to reject autonomously generated products. Professor Jyh-An Lee makes clear that the U.K. approach to provide protection of the computer-generated work to “the person by whom the arrangements necessary for the creation of the work are undertaken”¹⁴⁵ is problematic, since such work can have many fathers or mothers or can be generated by a derivative computer model in case of open-source software.¹⁴⁶ The programmers, data providers, trainers, and machine operators may all play indispensable roles in the creation of AI-generated works.¹⁴⁷

B. “*Zarya of the Dawn*”

Kristina Kashtanova registered her comic book/graphic novel entitled “*Zarya of the Dawn*” at the Office.¹⁴⁸ On social media she made clear she had used Midjourney, a text-to-image gAI, to generate the images of the album.¹⁴⁹ When the Office learned about this,¹⁵⁰ it replaced the original certificate registration by disclaiming the images of the generated content, but registering the text written by Ms. Kashtanova, since she is “the author of the Work’s text as well as the selection, coordination, and arrangement of the Work’s written and visual elements.”¹⁵¹

The Office described how Midjourney generates images after the text commands “prompts” by the users, and points to the possibility to influence the outcome by adding a URL, changing the aspect ratio, and giving functional directions.¹⁵² The gAI will generate four images, with the possibility to provide a higher resolution or a variety of four new images if the user chooses to select one of the four previous images.¹⁵³

The Office held, based on Midjourney’s information, that it “does not understand grammar, sentence structure, or words like humans,” it instead converts

¹⁴⁵ Copyright, Designs and Patents Act 1988, c. 48, § 9 (UK).

¹⁴⁶ Jyh-An Lee, *Computer-Generated Works Under the CDPA 1988*, in *ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY* 177, 194 (Jyh-An Lee, Reto M. Hilty & Kung-Chung Liu eds., 2021).

¹⁴⁷ *Id.*

¹⁴⁸ “*Zarya*,” *supra* note 131.

¹⁴⁹ *Id.* at 2.

¹⁵⁰ “*Zarya*,” *supra* note 131, at 5 n.8. The Office makes clear that it normally does not verify facts of any statements made in an application, COMPENDIUM (Third), *supra* note 8, § 602.4(C), but it can take notice of facts known to the Office or the general public that demonstrate inaccurate or incomplete information, and re-evaluate the application accordingly.

¹⁵¹ *Id.* at 1, 4–5.

¹⁵² *Id.* at 7.

¹⁵³ *Id.*

words and phrases “into smaller pieces, called tokens, that can be compared to its training data and then used to generate an image.”¹⁵⁴ Subsequently, Midjourney commences with “a field of visual noise, like television static, . . . to generate the initial image grids,” followed by an algorithm that refines that static into human-recognizable images.¹⁵⁵ The Office argued that the process to generate an image through the tool is not the same process as that of a human artist, writer, or photographer.¹⁵⁶ Ms. Kashtanova contended that she “guided” the structure and content of each image.¹⁵⁷ Nevertheless, the Office qualified the process and the traditional elements of authorship in the images as not an original work of authorship protectable by copyright.¹⁵⁸ Ms. Kashtanova held that the prompt was the core creative input for the image.¹⁵⁹ She did not claim she created any visual material herself—she used passive voice in describing the final image as “created, developed, refined, and relocated,” and as containing elements from intermediate images “brought together into a cohesive whole.”¹⁶⁰ She obtained the final image as the result of “a process of trial-and-error,” in which she provided “hundreds or thousands of descriptive prompts” to Midjourney until the “hundreds of iterations [created] as perfect a rendition of her vision as possible.”¹⁶¹

Ms. Kashtanova did not have control over the tool via textual prompts, the Office held, but instead Midjourney generated images in an unpredictable way.¹⁶² The distance between her directions and the unpredictable outcome was too big, according to the Office.¹⁶³ It contended she did not act as “the inventive or master mind” of the images,¹⁶⁴ as required in *Burrow-Giles*.¹⁶⁵ The Office attached importance to the difference between Midjourney and computer-based

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 7–8.

¹⁵⁶ *Id.* at 8.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* (“[T]he Office will not register works produced by a machine or mere mechanical process that operates randomly or automatically without any creative input or intervention from a human author.”) (citing COMPENDIUM (Third), *supra* note 8, § 313.2).

¹⁵⁹ “Zarya,” *supra* note 131, at 8.

¹⁶⁰ *Id.*

¹⁶¹ *Id.* at 8.

¹⁶² *Id.* at 9.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 61 (1884).

tools such as Adobe Photoshop.¹⁶⁶ While the results of the first were considered unpredictable in the eyes of the Office, the latter was merely used to modify the outcome in a predictable way.¹⁶⁷ The Office could not definitively conclude that Ms. Kashtanova's editing alterations with Adobe Photoshop were sufficiently creative to be entitled to copyright, since they were allegedly "too minor and imperceptible."¹⁶⁸ The Office made clear that if there were substantive edits, this could lead to copyrightability.¹⁶⁹ The Office described the prompts function closer to suggestions than orders, "similar to the situation of a client who hires an artist to create an image with general directions as to its contents."¹⁷⁰ The Office wrote: "Because Midjourney starts with randomly generated noise that evolves into a final image, there is no guarantee that a particular prompt will generate any particular visual output."¹⁷¹ The Office did not doubt Ms. Kashtanova's efforts,¹⁷² but "sweat of the brow" is not protected as *Feist* affirmed.¹⁷³

After this decision, the Office issued a guide for works containing AI-generated content, which needs to be declared in the application for copyright registration.¹⁷⁴

C. "Théâtre D'opéra Spatial"

Jason Allen used a series of prompts in Midjourney to produce the two-dimensional artwork entitled "Théâtre D'opéra Spatial" ("Spatial"),¹⁷⁵ for which he won the 2022 Colorado State Fair's annual fine art competition.¹⁷⁶ When the Office learned about this, it asked Mr. Allen to provide more information about the process of the production of the image. Mr. Allen stated that he "input numerous

¹⁶⁶ "Zarya," *supra* note 131, at 9.

¹⁶⁷ *Id.* ("[W]hen artists use editing or other assistive tools, they select what visual material to modify, choose which tools to use and what changes to make, and take specific steps to control the final image such that it amounts to the artist's own original mental conception, to which [they] gave visible form.").

¹⁶⁸ *Id.* at 10–11.

¹⁶⁹ *Id.* at 12.

¹⁷⁰ *Id.* at 10.

¹⁷¹ *Id.* at 9–10.

¹⁷² *Id.* at 10.

¹⁷³ *Feist Publ'ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 352–53 (1991).

¹⁷⁴ 37 C.F.R. § 202 (2023).

¹⁷⁵ "Spatial," *supra* note 132.

¹⁷⁶ Sarah Kuta, *Art Made with Artificial Intelligence Wins at State Fair*, SMITHSONIAN MAG. (Sept. 6, 2022), <https://www.smithsonianmag.com/smart-news/artificial-intelligence-art-wins-colorado-state-fair-180980703/> [https://perma.cc/2FZF-3Y45].

revisions and text prompts at least 624 times to arrive at the initial version of the image.”¹⁷⁷ After that, he used Adobe Photoshop to remove flaws and create new visual content,¹⁷⁸ and subsequently used Gigapixel AI to “upscale” the image,¹⁷⁹ increasing its resolution and size.¹⁸⁰ The Office requested that Mr. Allen disclaimed the product generated by Midjourney, which he refused. The Office held that Mr. Allen’s alleged authorship and Midjourney’s generated product was inextricably merged into inseparable contributions.¹⁸¹ According to the Office “the image generated by Midjourney that formed the initial basis for th[e] Work is not an original work of authorship protected by copyright.”¹⁸²

In contrast to “Zarya,”¹⁸³ in the case of “Spatial,” the Office accepted Mr. Allen’s claim that human authored “visual edits” made with Adobe Photoshop contained sufficient original authorship to be registered. The Board of Revision backtracked this a bit, by stating that it did not have sufficient information to determine whether the visual edits were sufficient to be registered on its own.¹⁸⁴ However, Mr. Allen was still unwilling to disclaim the features generated by Midjourney and Gigapixel AI, respectively. The Board of Revision found that the image contains more than a *de minimis* amount of AI-generated content, which must be disclaimed in an application for registration, and thus it rejected to register the image.¹⁸⁵ According to Mr. Allen, the underlying AI-generated image was just the raw material that he transformed by his artistic contributions, and that “the denial of copyright protection for the output of such tools would result in a void of ownership.”¹⁸⁶ Mr. Allen held that “[r]equiring creators to list each tool and the proportion of the work created with the tool would have a burdensome effect if enforced uniformly.”¹⁸⁷

¹⁷⁷ “Spatial,” *supra* note 132, at 2.

¹⁷⁸ *Id.* at 5 (“beautify and adjust various cosmetic details/flaws/artifacts, etc.”).

¹⁷⁹ *Id.* at 5.

¹⁸⁰ *Id.* at 2.

¹⁸¹ *Id.*

¹⁸² *Id.*

¹⁸³ “Zarya,” *supra* note 131.

¹⁸⁴ “Spatial,” *supra* note 132, at 5.

¹⁸⁵ *Id.*

¹⁸⁶ *Id.* at 3.

¹⁸⁷ *Id.*

The Office and the Board assessed whether the image has the required originality, and human authorship; “whether the AI contributions are the result of ‘mechanical reproduction’ or instead of an author’s ‘own original mental conception, to which [the author] gave visible form.’”¹⁸⁸ If all of a work’s “traditional elements of authorship” were produced by a machine, the work lacks human authorship.

Like in *Entrance*, the Office and the Board leaned heavily on Midjourney’s description that “prompts ‘influence’ what the system generates and are ‘interpret[ed]’ by Midjourney and ‘compared to its training data.’”¹⁸⁹ The Office stated that “‘Midjourney does not interpret prompts as specific instructions to create a particular expressive result,’ because ‘Midjourney does not understand grammar, sentence structure, or words like humans.’”¹⁹⁰ The Office believes that Midjourney does not treat text prompts as direct instructions, users may need to attempt hundreds of iterations before landing upon an image they find satisfactory.¹⁹¹ In other words, the distance between the prompts and the outcomes is too big to perceive it as a specific or direct instruction. The Office held that “when an AI technology receives solely a prompt from a human and produces complex written, visual, or musical works in response, the ‘traditional elements of authorship’ are determined and executed by the technology—not the human user.”¹⁹²

Mr. Allen described how he used Midjourney and “input numerous revisions and text prompts at least 624 times.” These prompts iteratively refined the image generated, which he later edited with Adobe Photoshop and upscaled with Gigapix AI.¹⁹³ Mr. Allen started with a “big picture description” prompt that “focus[ed] on the overall subject of the piece.”¹⁹⁴ He then added a second “big picture

¹⁸⁸ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884).

¹⁸⁹ “Spatial,” *supra* note 132, at 6 (quoting *Prompts*, MIDJOURNEY DOCUMENTATION, <https://docs.midjourney.com/docs/prompts> [<https://perma.cc/XJA5-W9LV>] (last visited Oct. 11, 2024)).

¹⁹⁰ *Id.* at 6–7 (quoting “Zarya,” *supra* note 131, at 7).

¹⁹¹ *Id.* at 7.

¹⁹² *Id.* (quoting Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190, 16192 (Mar. 16, 2023)).

¹⁹³ *Id.* at 2 (citing E-mail from Tamara Pester, Tamara S. Pester, LLC, to U.S. Copyright Off. (Sept. 30, 2020)).

¹⁹⁴ *Id.* at 6 (quoting E-mail from Tamara Pester, Tamara S. Pester, LLC, to U.S. Copyright Off. (Sept. 30, 2020)).

description” to the prompt text “as a way of instructing the software that Mr. Allen is combining the two ideas.” Next, he added the “the overall image’s genre and category,” “certain professional artistic terms which direct the tone of the piece,” “how lifelike [Mr. Allen] wanted the piece to appear,” a description of “how colors [should be] used,” a description “to further define the composition,” “terms about what style/era the artwork should depict,” and “a writing technique that Mr. Allen has established from extensive testing” that would make the image “pop.”¹⁹⁵ He then “append[ed the prompt] with various parameters which further instruct[ed] the software how to develop the image,” resulting in a final text prompt that was “executed . . . into Midjourney to complete the process.”¹⁹⁶

In short, prompted by the text instructions of Mr. Allen, the Midjourney generated ever finer grained images, according to Mr. Allen’s artistic expressive wishes, until the image was generated that satisfied Mr. Allen as the final result.

The Board acknowledged that the process of prompting can involve creativity and that the prompts themselves may be sufficiently creative to be protected by copyright as literary works,¹⁹⁷ but not the images that the AI generated after these prompts.¹⁹⁸ Lemley argues that creative prompts or the iterative series of prompts might be eligible for copyright protection, if they are detailed enough.¹⁹⁹

The Office held that the gAI and not Mr. Allen conceived the image.²⁰⁰

D. “SURYAST”

According to Ankit Sahni, Robust Artificially Intelligent Graphics and Art Visualizer (RAGHAV) is an “AI-powered tool,” that uses machine learning to

¹⁹⁵ *Id.* (quoting E-mail from Tamara Pester, Tamara S. Pester, LLC, to U.S. Copyright Off. (Sept. 30, 2020)).

¹⁹⁶ *Id.* (quoting E-mail from Tamara Pester, Tamara S. Pester, LLC, to U.S. Copyright Off. (Sept. 30, 2020)).

¹⁹⁷ Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190, 16192 n.27 (Mar. 16, 2023) (to be codified at 37 C.F.R. pt. 202).

¹⁹⁸ “Spatial,” *supra* note 132, at 7.

¹⁹⁹ Mark A. Lemley, *How Generative AI Turns Copyright Law Upside Down*, 25 COLUM. SCI. & TECH. L. REV. 190, 199–201 (2024), <https://journals.library.columbia.edu/index.php/stlr/article/view/12761/6285> [<https://perma.cc/3ED8-YDFF>]; Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. at 16192 n.27 (pointing out that “prompts may be sufficiently creative to be protected by copyright,” but not the material generated from a copyrightable prompt); “Zarya,” *supra* note 131, at 9 n.16 (suggesting that the prompts that led to “Zarya of the Dawn,” are copyrightable because they are similar to poems, but she did not submit them in the application for copyright registration).

²⁰⁰ “Spatial,” *supra* note 132, at 1.

perform ‘Neural Style Transfer,’ which entails ‘generat[ing] an image with the same “content” as a base image, but with the “style” of [a] chosen picture.’”²⁰¹

Mr. Sahni used RAGHAV to blend his photo he took with an image of Vincent van Gogh’s *The Starry Night* as the style reference and chose a variable value determining the amount of style transfer to create the image “SURYAST” in 2020.²⁰² Mr. Sahni did not modify the image after it was generated.²⁰³

In his application for copyright registration, Mr. Sahni designated himself and RAGHAV as co-authors.²⁰⁴ He called RAGHAV’s contribution “distinct, disparate and independent” from his contribution to the image.²⁰⁵ Mr. Sahni claimed that “‘conceiving, creating and selecting an original [base] image,’ ‘selection of the style image,’ and ‘selecting a specific variable value determining the amount and manner of style transfer’ ‘cumulatively resulted in the [Work], which is the direct outcome of [Mr. Sahni’s] creative expression and contribution.’”²⁰⁶ “As evidence of his creative control, Mr. Sahni claimed his decisions resulted in the image containing 1) ‘a sunset,’ 2) ‘clouds,’ 3) the ‘contours of a building,’ 4) a composition in which ‘the sky accounts for the upper two thirds of the work,’ and 5) ‘a precise and deliberate style of Van Gogh’s [The] Starry Night.’”²⁰⁷ However, the Board of Revision found that the expressive elements of pictorial authorship were not provided by Mr. Sahni. They were the results of three inputs (base, style element, and style transfer value)²⁰⁸ that were too imprecise to have conceived and executed the human authorship.²⁰⁹ The color and position of the elements in the image were generated by RAGHAV. “The Board was not convinced by Mr. Sahni’s description of RAGHAV as ‘an assistive tool’ that works similarly to ‘a camera, digital tablet, or a photo-editing software program.’”²¹⁰ The Office and the Board rejected Mr. Sahni’s application, because his human authorship could

²⁰¹ “SURYAST,” *supra* note 133, at 5 (quoting E-mail from Ankit Sahni to U.S. Copyright Off. (Apr. 14, 2022)).

²⁰² *Id.* at 5–8.

²⁰³ *Id.* at 6.

²⁰⁴ *Id.* at 2.

²⁰⁵ *Id.* (citing E-mail from Ankit Sahni to U.S. Copyright Off. (Apr. 14, 2022)).

²⁰⁶ *Id.* at 7 (quoting E-mail from Ankit Sahni to U.S. Copyright Off. (Apr. 14, 2022)).

²⁰⁷ *Id.* (quoting E-mail from Ankit Sahni to U.S. Copyright Off. (Apr. 14, 2022)).

²⁰⁸ *Id.*

²⁰⁹ *Id.* at 4.

²¹⁰ *Id.* at 8 (quoting E-mail from Ankit Sahni to U.S. Copyright Off. (Apr. 14, 2022)).

not be distinguished or separated from the final work produced by RAGHAV.²¹¹ However, the Office left room for the possibility of registering Mr. Sahni's underlying photograph.²¹²

In the re-evaluation, the Board concluded that the image could not be registered “because the work deposited is a derivative work that does not contain enough original human authorship to support a registration.”²¹³

On February 23, 2024, following the rejection by the Office to register SURYAST, the Register of Copyrights and Director of the Office, Ms. Shira Perlmutter, sent a letter to Senators Coons and Tillis, as well as Representatives Issa and Johnson, to update them about the work of the Office so far regarding copyright and gAI. The letter includes an interesting passage and an even more interesting footnote:

”Since the Registration Guidance was issued, the Office’s Registration Division has examined hundreds of works that incorporate AI-generated material and has issued registrations to well over 100 so far.”

The footnote stated:

“U.S. Copyright Off. Rev. Bd., Decision Affirming Refusal to Register SURYAST 4 n.3 (Dec. 11, 2023), <https://www.copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf>. Other applications have been rejected either because the applicant failed to follow the Office’s Registration Guidance or because the work did not contain sufficient human authorship.”²¹⁴

²¹¹ *Id.* at 2.

²¹² *Id.* at 8.

²¹³ *Id.* at 2.

²¹⁴ Letter from Shira Perlmutter, Reg. of Copyrights & Dir., U.S. Copyright Off., to Sen. Chris Coons, Sen. Thom Tillis, Rep. Darrell Issa & Rep. Henry C. Johnson (Feb. 23, 2024), <https://copyright.gov/laws/hearings/USCO-Letter-on-AI-and-Copyright-Initiative-Update-Feb-23-2024.pdf?loclr=blogcop> [<https://perma.cc/RBC6-TW6G>].

Thus, the Office registered over 100 “works that incorporate AI-generated material,” but it did not give one example of such a registration,²¹⁵ neither in this letter nor on its website.

II

BEIJING INTERNET COURT ACCEPTED COPYRIGHT AI-GENERATED IMAGE

In November 2023, the trailblazing Beijing Internet Court²¹⁶ decided that an AI-generated image titled “Spring Breeze Brings Tenderness” (“Spring”)²¹⁷ can be protected under copyright law if there is sufficient intellectual achievement, and the work is original based on sufficient human intervention. At first sight, the decision of “Spring”²¹⁸ seems surprising, but the case did not fall out of the sky. There were some instructive precursor cases: the 2018 “Music Fountain” case at the Beijing Intellectual Property Court,²¹⁹ the 2019 “Feilin” case at the Beijing Internet Court,²²⁰ the 2019 “Dreamwriter” case at the Shenzhen Nanshan District Court,²²¹ and the 2020 “Hot Air Balloon” case at the Beijing Internet Court.²²² Finally, this Part will address “Spring” at the Beijing Internet Court.²²³

²¹⁵ Andres Guadamuz, LINKEDIN (Jul. 22, 2024), https://www.linkedin.com/posts/andres-guadamuz_im-participating-in-a-workshop-on-ai-and-activity-7221139807035342848-ApAc?utm_source=share&utm_medium=member_desktop [<https://perma.cc/B8NZ-9HD8>].

²¹⁶ *White Paper on Rule of Law in Cyberspace Governance*, BEIJING INTERNET CT. (May 24, 2019), https://english.bjinternetcourt.gov.cn/2019-05/24/c_167.htm [<https://perma.cc/Y5UJ-7WUL>]; *Jurisdiction*, BEIJING INTERNET CT. (Mar. 25, 2019), https://english.bjinternetcourt.gov.cn/2019-03/25/c_23.htm [<https://perma.cc/7LEW-BX2C>].

²¹⁷ Li Yunkai Su Liu Yuanchun Qin Hai Zuopin Shuming Quan, Xinxi Wangluo Chuanbo Quan Jiufen An (李昉诉刘元春侵害作品署名权、信息网络传播权纠纷案) [Li Yunkai v. Liu Yuanchun, A Dispute over Copyright Infringement of the Right of Authorship and Right of Communication through Information Network], (2023) Jing 0491 Min Chu 11279 Hao (Beijing Internet Ct. Nov. 27, 2023), *translated in* Geo. Wash. Univ. Ctr. for L. & Tech., <https://patentlyo.com/media/2023/12/Li-v-Liu-Beijing-Internet-Court-20231127-with-English-Translation.pdf> [<https://perma.cc/V2EH-39K8>] [hereinafter “Spring”].

²¹⁸ *Id.* See also Tian Lu, *Chinese Court Deems AI-Generated Image Has Copyright – Assessing the Possibly Over-Hasty ‘Spring Breeze’ Case*, IP KAT (Dec. 27, 2023), <https://ipkitten.blogspot.com/2023/12/chinese-court-deems-ai-generated-image.html> [<https://perma.cc/4XK8-9GZG>].

²¹⁹ See *infra* Part II.A.

²²⁰ See *infra* Part II.B.

²²¹ See *infra* Part II.C.

²²² See *infra* Part II.D.

²²³ See *infra* Part II.E.

A. “*Music Fountain*”

On June 26, 2018, the Beijing Intellectual Property Court²²⁴ upheld the decision of the Haidian District People’s Court that an autonomously operated musical fountain which created a combination of expressive water figures, music and light effects provided an aesthetic experience, had originality, and constituted a work according to Art. 2 of the Copyright Law Implementing Regulations in China 2002, making it eligible for copyright protection.²²⁵ The defendants were ordered to pay 90,000 Renminbi (around 12,700 U.S. dollars) in damages and give a public apology to the plaintiff.²²⁶

B. “*Feilin*”

On April 25, 2019, the Beijing Internet Court ruled in *Feilin* that an analysis report, largely produced by Wolters Kluwer’s legal data analysis software, contained sufficient human creativity to warrant copyright protection,²²⁷ despite the defendant’s unauthorized copying, editing, and reposting without attribution.²²⁸ The court clarified that purely AI-generated content is not copyrightable but acknowledged such works may still merit some form of protection.²²⁹ It specified that technical designs, geographical elements, and objective facts in various drawings are not copyrightable.²³⁰ While the plaintiff argued for the originality of the report’s graphics based on beautification efforts, the lack of evidence undermined this claim.²³¹ However, the court recognized parts

²²⁴ “Yinyue Penquan” Zuopin Zhuzuo Quan Qinquan Jiufen An (“音乐喷泉”作品著作权侵权纠纷案) [A Dispute over Infringement of Copyright of “Music Fountain” Works], (2017) Jing 73 Min Zhong 1404 Hao (Beijing Intell. Prop. Ct. June 26, 2018), <https://bjgy.bjcourt.gov.cn/article/detail/2019/04/id/3850563.shtml> [<https://perma.cc/SML4-25UH>] [hereinafter “Music Fountain”].

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ Beijing Feilin Lushi Shiwu Suo Su Beijing Baidu Wangxun Keji Youxian Gongsi Zhuzuo Quanqin Quan Jiufen An (北京菲林律师事务所诉北京百度网讯科技有限公司著作权侵权纠纷案) [Beijing Feilin Law Firm v. Beijing Baidu Netcom Sci. & Tech. Co., Ltd., A Dispute over Copyright Infringement], (2018) Jing 0491 Min Chu 239 Hao (Beijing Internet Ct. Apr. 25, 2019), *translated in* ChinaDaily, [https://www.chinadaily.com.cn/specials/BeijingInternetCourtCivilJudgment\(2018\)Jing0491MinChuNo.239.pdf](https://www.chinadaily.com.cn/specials/BeijingInternetCourtCivilJudgment(2018)Jing0491MinChuNo.239.pdf) [<https://perma.cc/8PSG-HZZF>] [hereinafter “Feilin”].

²²⁸ *Id.*

²²⁹ *Id.* (“The absence of protection of [the investor’s] rights and interests will be adverse to the communication of the input result.”).

²³⁰ *Id.*

²³¹ *Id.*

of the graphic composition as original due to human contribution, thereby making them eligible for copyright protection.²³²

C. “Dreamwriter”

On December 24, 2019, the Shenzhen Nanshan District Court ruled that an article generated by Tencent’s “Dreamwriter” AI, which was generating half a million articles yearly on finance, weather, and sports since 2015, was copyrightable.²³³ Tencent had published a financial reporting article on the Tencent Securities website, and noted at the end of the article: “This article was automatically written by Tencent’s robot Dreamwriter.”²³⁴ Shanghai Yingxun Technology Company unauthorizedly published the article generated by the Dreamwriter AI on its website the same day, which led to Tencent’s successful copyright infringement lawsuit and a 1,500 Renminbi (around 211 U.S. dollars) damages award against Yingxun.²³⁵ The Court found that the article’s content demonstrated deliberate selection, analysis, and judgement by multiple teams using multiple divisions of labor, with structural coherence and originality, refuting the notion of mere automated creation.²³⁶ Highlighting the plaintiff team’s significant role in shaping the article’s unique expression, the Supreme People’s Court recognized this case as a model case in 2021, affirming its importance at the national level.²³⁷

²³² *Id.*

²³³ Shenzhen Shi Tengxun Jisuanji Xitong Youxian Gongsu Su Shanghai Yingxun Keji Youxian Gongsu Qin Hai Zhuzuo Quan Ji Buzhengdang Jingzheng Jiufen An (深圳市腾讯计算机系统有限公司诉上海盈讯科技有限公司侵害著作权及不正当竞争纠纷案) [Shenzhen Tencent Comput. Sys. Co. v. Shanghai Yingxun Tech. Co., A Dispute over Copyright Infringement and Unfair Competition], (2019) Yue 0305 Min Chu 14010 Hao (Shenzhen Nanshan Dist. People’s Ct. Dec. 24, 2019), <https://mp.weixin.qq.com/s/jjv7aYT5wDBIdTVWXV6rdQ> [<https://perma.cc/M7LQ-P8WF>] [hereinafter “Dreamwriter”].

²³⁴ BO ZHOU, ARTIFICIAL INTELLIGENCE AND COPYRIGHT PROTECTION-JUDICIAL PRACTICE IN CHINESE COURT 1 (2020), https://www.wipo.int/export/sites/www/about-ip/en/artificial_intelligence/conversation_ip_ai/pdf/ms_china_1_en.pdf [<https://perma.cc/2C9K-F2FU>].

²³⁵ “Dreamwriter,” *supra* note 233.

²³⁶ *Id.*

²³⁷ Andres Guadamuz, *Chinese Court Declares that AI-Generated Image Has Copyright*, TECHNO LLAMA (Dec. 9, 2023), <https://www.technollama.co.uk/chinese-court-declares-that-ai-generated-image-has-copyright> [<https://perma.cc/X54T-ZMGU>].

D. “Hot Air Balloon”

On April 2, 2020, the Beijing Intellectual Property Court adjudicated another seminal case, *Gao Yang v. Youku*.²³⁸ In this instance, the plaintiff affixed a sports camera to a hot air balloon, initiating an autonomous photographic sequence of earth’s outer surface as the balloon ascended.²³⁹ This process involved the camera capturing video footage from which the plaintiff later extracted specific screenshots for further refinement.²⁴⁰ The Court held that despite the camera operating autonomously beyond human manipulation during its aerial capture phase, there was a discernible level of human intervention prior to launch.²⁴¹ This intervention encompassed decisions regarding the selection of the camera, determination of the shooting angle, choice of video recording mode, and the specification of various photographic parameters such as display format and sensitivity.²⁴² The Court held that these preparatory actions, being deliberately executed in advance, imbued the automatically generated screenshots with the characteristics of photographic works.²⁴³ Consequently, any unauthorized exploitation of these images was deemed to infringe upon the plaintiff’s copyright in said works.

E. “Spring Breeze Brings Tenderness”

On February 24, 2023, Li Yunkai generated some images with “Stable Diffusion Aki 4.2”²⁴⁴ of a young Asian woman. Mr. Li shared the image on “Little

²³⁸ Gao Yang Su Youku Xinxi Jishu (Beijing) Youxian Gongsi Qin Hai Zhuzuo Quan Jiufen An (高阳诉优酷信息技术(北京)有限公司侵害著作权纠纷案) [*Gao Yang v. Youku Info. Tech. (Beijing) Co. Ltd., A Dispute over Copyright Infringement*], (2017) Jing 73 Min Zhong 797 Hao (Beijing Intell. Prop. Ct. Apr. 2, 2020) [hereinafter “Hot Air Balloon”]. See also ZHOU, *supra* note 234, at 4.

²³⁹ “Hot Air Balloon,” *supra* note 238.

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² *Id.*

²⁴³ *Id.*

²⁴⁴ Stable Diffusion, just like Midjourney, DALL-E, ChatGPT and other Western gAI services are all geo-blocked in China but are accessible via a Virtual Private Network (VPN). See Ben Wodecki, *China Cracks Down on ChatGPT Access*, AI BUSINESS (Feb. 24, 2023), <https://aibusiness.com/nlp/china-cracks-down-on-chatgpt-access> [<https://perma.cc/BUS8-R2BY>]. Benj Edwards, *China Bans AI-Generated Media Without Watermarks*, ARS TECHNICA (Dec. 13, 2022), <https://arstechnica.com/information-technology/2022/12/china-bans-ai-generated-media-without-watermarks/> [<https://perma.cc/XT2G-NDY7>]. Operators of gAI services need a license from the Cyber Administration of China. See Josh Ye, *China Approves over 40 AI Models for Public Use in Past Six Months*, REUTERS (Jan. 29, 2024), <https://>

Red Book,”²⁴⁵ a popular content-sharing platform, under the title “Spring Breeze Brings Tenderness,” (“Spring”)²⁴⁶ with the tag “AI image,” in conformance to Art. 17 of the Internet Information Service Deep Synthesis Management Provisions, that prescribes to prominently mark content that is generated by AI.²⁴⁷

Mr. Li discovered that Liu Yuanchun, a blogger, illustrated her blogpost “Love in March, Among Peach Blossoms”²⁴⁸ with the same image on “Baijiahao,”²⁴⁹ a content-sharing platform owned by the internet company Baidu. Before Ms. Liu placed the image with her blogpost, she removed both Mr. Li’s user ID and the “Little Red Book” watermark from the image.²⁵⁰ Subsequently, Mr. Li brought a case at the Beijing Internet Court against Ms. Liu for copyright infringement and the right of dissemination via the internet,²⁵¹ and was awarded 500 Renminbi (around 70 U.S. dollars), 50 Renminbi (around 7 U.S. dollars) in court costs, plus a public apology.²⁵²

Mr. Li contended that he used approximately 20 positive prompts²⁵³ and around 120 negative prompts to generate the image.²⁵⁴ Stability Diffusion, as

www.reuters.com/technology/china-approves-over-40-ai-models-public-use-past-six-months-2024-01-29/ [<https://perma.cc/PL89-HTUB>].

²⁴⁵ XIAO HONG SHU (小红书), <https://www.xiaohongshu.com/explore> [<https://perma.cc/8CB4-VK6Q>] (last visited Nov. 9, 2024).

²⁴⁶ “Spring,” *supra* note 217.

²⁴⁷ Hulianwang Xinxi Fuwu Shendu Hecheng Guanli Guiding (Zhengqiu Yijian Gao) (互联网信息服务深度合成管理规定 (征求意见稿)) [Internet Information Service Deep Synthesis Management Provisions (Draft for Comment)], CYBERSPACE ADMIN. OF CHINA (Jan. 28, 2022), http://www.cac.gov.cn/2022-01/28/c_1644970458520968.htm [<https://perma.cc/MMW7-8AQ3>].

²⁴⁸ “Spring,” *supra* note 217, at 2.

²⁴⁹ BAIJIAHO (百家号), <https://baijiahao.baidu.com> [<https://perma.cc/ZW3U-G5Q9>] (last visited Nov. 9, 2024).

²⁵⁰ “Spring,” *supra* note 217, at 18. *See also* SUBHRAJIT SINHA ROY ET AL., INTELLIGENT COPYRIGHT PROTECTION FOR IMAGES *passim* (2019) (explaining the process of watermark removal).

²⁵¹ Lu, *supra* note 218 (“right of communication to the public on information networks”).

²⁵² “Spring,” *supra* note 217. *See* Lu, *supra* note 218.

²⁵³ Positive prompts: “ultra-photorealistic: 1.3), extremely high quality highdetail RAW color photo, in locations, Japan idol, highly detailed symmetrical attractive face, angular symmetrical face, perfect skin, skin pores, dreamy black eyes, reddish-brown plaits hairs, uniform, long legs, thighhighs, soft focus, (film grain, vivid colors, Film emulation, kodak gold portra 100, 35mm, canon50 f1,2), Lens Flare, Golden Hour, HD, Cinematic, Beautiful Dynamic Lighting.” *For the First Time AI Generated Photo Gets Copyright in China*, HFG (Dec. 5, 2023), <https://www.hfgip.com/news/first-time-ai-generated-photo-gets-copyright-china> [<https://perma.cc/MZH9-4B27>].

²⁵⁴ Negative prompts: “((3d, render, cg, painting, drawing, cartoon, anime, comic:1,2)), bad anatomy, bad hands, text, error, missing fingers, extra digit, fewer digits, cropped, worst quality, signature, watermark,

used by Mr. Li, can generate images based on text but also image prompts.²⁵⁵ It is based on Contrastive Language-Image Pretraining (CLIP)-guided diffusion,²⁵⁶ which are two models that cooperate together. CLIP-guided diffusion makes it possible for training data to be restored²⁵⁷ or for diffused images to be interpolated, mathematically blended, to produce new derivative images.²⁵⁸

The Beijing Internet Court held that Mr. Li, from the conception to the final selection of the image, had made a certain amount of intellectual investment: designing the presentation of characters, selecting prompt words, and arrangements, selecting the order of prompt words, setting relevant parameters, and selecting which image met the expectations, etc.²⁵⁹ This “certain amount

username, blurry, artist name, (long body), bad anatomy, liquid body, malformed, mutated, bad proportions, uncoordinated body, unnatural body, disfigured, ugly, gross proportions, mutation, disfigured, deformed, (mutation), (child:1,2), b&w, fat, extra nipples, minimalistic, nsfw, lowres, bad anatomy, bad hands, text, error, missing fingers, extra digit, fewer digits, cropped, worst quality, low quality, normal quality, jpeg artifacts, signature, watermark, username, blurry, disfigured, kitsch, ugly, oversaturated, grain, low-res, Deformed, disfigured, poorly drawn face, mutation, mutated, extra limb, ugly, poorly drawn hands, missing limb, floating limbs, Disconnected limbs, malformed hands, blur, out of focus, long neck, long body, ugly, disgusting, poorly drawn, childish, mutilated, mangled, old, surreal, text, b&w, monochrome, conjoined twins, multiple heads, extra legs, extra arms, meme, elongated, twisted, fingers, strabismus, heterochromia, closed eyes, blurred, watermark, wedding, group, dark skin, dark-skinned female, tattoos, nude, lowres, bad anatomy, bad hands, text, error, missing fingers, extra digit, fewer digits, cropped, worst quality, low quality, normal quality, jpeg artifacts, signature, watermark, username, blurry.” Mr. Li used the following further steps and prompts: “c) Set the Sampling Step as 33”; “d) Set the Height as 768”; “e) Set the CFG Scale as 9”; “f) Set the Seed as 2692150200”; “g) Set the weight for model ‘land-hanfugirl-v1-5.safetensors’ in ‘Additional-Networks’”; “h) Modify the Seed as 2692150199”; “i) Add several keywords in Prompt: ‘shy, elegant, cute, lust, cool pose, teen, viewing at camera, masterpiece, best quality.’” *Id.*

²⁵⁵ *How Does Stable Diffusion Work?*, STABLE DIFFUSION ART (June 9, 2024), <https://stable-diffusion-art.com/how-stable-diffusion-work/> [<https://perma.cc/AF38-43MQ>]; Alec Radford et al., *CLIP: Connecting Text and Images*, OPENAI (Jan. 5, 2021), <https://openai.com/index/clip/> [<https://perma.cc/2AF2-4QPW>].

²⁵⁶ Initially, the CLIP model is trained on a dataset of images and learns to relate the semantic meaning of images and associated text through an intermediate format called a CLIP embedding. This method starts with an initial image, adds noise to it, and then uses the CLIP model to guide the denoising process based on a text prompt. When a user submits a prompt to the AI image product—either text, image, or a combination—the CLIP model converts this prompt to an embedding. The embedding is then used as conditioning data as the diffusion model progressively generates the image through denoising. The image that emerges at the end of the denoising process is presented to the user as the output. STABLE DIFFUSION ART, *supra* note 255.

²⁵⁷ Nicholas Carlini et al., *Extracting Training Data From Diffusion Models 1* (Jan. 30, 2023) (unpublished manuscript), <https://arxiv.org/pdf/2301.13188.pdf> [<https://perma.cc/B92T-JUCF>].

²⁵⁸ Jonathan Ho et al., *Denoising Diffusion Probabilistic Models 8* (Dec. 16, 2020) (unpublished manuscript), <https://arxiv.org/pdf/2006.11239.pdf> [<https://perma.cc/7XEY-QAZX>].

²⁵⁹ “Spring,” *supra* note 217, at 13.

of intellectual investment” language comes across as a “sweat-of-the-brow” argument, which, in both the U.S. and China, is not a sufficient reason to issue a copyright certificate for a work.²⁶⁰ However, the use of the words “selection and arrangement” places the Court’s argument within the tradition of *Burrow-Giles*.²⁶¹

As mentioned above, Lemley argued that creative prompts or the iterative series of prompts might be eligible for copyright protection, if they are detailed enough.²⁶² This implies that creative prompts can be protected, but not necessarily the outcome of the prompts.

Regarding originality, the Court held that the plaintiff designed the characters, their presentation, and other visual elements through prompts and set the layout and composition of the image through parameters which reflected the plaintiff’s selection and arrangements.²⁶³ The adjustment and modification process “also reflects the Plaintiff’s aesthetic choice and personal judgment.”²⁶⁴ Therefore, the images involved in this case are not achieved mechanically, but rather, according to the Court: “it can be assumed that the disputed image was independently completed by the Plaintiff and reflects [his] personal expression.”²⁶⁵ However, as pointed out above, one can argue that AI-generated images are by definition not independently created: they are based on works in the training data, including copyrighted works. Then again, some scholars believe that copying works for the training data is not really copying in the copyright sense since they are not used and enjoyed by the machine in the training phase in an expressive way,²⁶⁶ but merely in a probabilistic way, or according to other scholars, this is copying in the copyright sense, but justified as fair use.²⁶⁷

²⁶⁰ *Id.* at 12; *Feist Publ’ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 352–53 (1991).

²⁶¹ *Burrow-Giles Lithographic Co. v. Saroni*, 111 U.S. 53, 55, 60 (1884).

²⁶² Lemley, *supra* note 199, at 200–01.

²⁶³ “Spring,” *supra* note 217, at 14.

²⁶⁴ *Id.*

²⁶⁵ *Id.*

²⁶⁶ Oren Bracha, *The Work of Copyright in the Age of Machine Production 1* (Sept. 24, 2023) (unpublished manuscript), <https://ssrn.com/abstract=4581738> [<https://perma.cc/9EVA-2JGJ>].

²⁶⁷ See Mark A. Lemley & Bryan Casey, *Fair Learning*, 99 *TEX. L. REV.* 743, 745 (2021). *But see* Jon Baumgarten, *Former Copyright Office GC Warns Against Blanket Assertions That AI Ingestion of Copyrighted Works ‘Is Fair Use’*, *COPYRIGHT ALL.* (May 23, 2023), <https://copyrightalliance.org/warns-assertions-ai-ingestion-is-fair-use/> [<https://perma.cc/4N9U-5CU7>].

The Court suggested that the aesthetic appeal played a role in the question of whether the image was original: “After the Plaintiff published it on Little Red Book, it has been viewed and liked by numerous users, which shows that the picture can be identified as a work of originality by the standards of the general public.”²⁶⁸ This goes against aesthetic neutrality, a keystone of copyright doctrine around the world since *Bleistein*.²⁶⁹

The defendant could argue that the plaintiff’s input prompts (e.g., “outdoor environment,” “Japanese idol,” “highly detailed, symmetrical, attractive face”) are merely ideas rather than expressions of such ideas.²⁷⁰ However, the Beijing Internet Court held that the images involved in this case are graphic art works with aesthetic significance composed of lines and colors.²⁷¹ The Court stated that “when people use an AI model to generate pictures, there is no question about who is the creator. In essence, it is a process of man using tools to create, that is, it is man who does intellectual investment throughout the creation process, the not [sic] AI model.”²⁷² Relying on the doctrine that humans need incentives for creation, including AI-generated images, the Court stated, “The core purpose of the copyright system is to encourage creation. . . . [A]s long as the AI-generated images can reflect people’s original intellectual investment, they should be recognized as works and protected by the Copyright Law.”²⁷³

The Court’s hearing was broadcast by China Central Television and livestreamed on multiple platforms, attracting over 170,000 viewers.²⁷⁴ During

²⁶⁸ “Spring,” *supra* note 217, at 10.

²⁶⁹ *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 252 (1903) (Holmes, J.).

²⁷⁰ Keith Kelly, *Computer Love: Beijing Court Finds AI-Generated Image is Copyrightable in Split with United States*, NAT’L L. REV. (Dec. 20, 2023), <https://natlawreview.com/article/computer-love-beijing-court-finds-ai-generated-image-copyrightable-split-united> [<https://perma.cc/G5UP-QPSF>].

²⁷¹ “Spring,” *supra* note 217.

²⁷² *Id.*

²⁷³ *Id.* *But cf.* PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 2.2.2 (3d ed. 2005 & Supp. 2024) (“[I]n an environment in which new works can be electronically created virtually at the cost of electricity, creators of computer-generated products will have little incentive to copy the products created by others.”).

²⁷⁴ Du Qiongfang, *Beijing Court Rules First Case of Infringement on a Generative AI Picture*, GLOB. TIMES (Nov. 30, 2023, 9:08 PM), <https://www.globaltimes.cn/page/202311/1302805.shtml> [<https://perma.cc/ZPC2-44TQ>]. A copy of the broadcasted hearing (in Mandarin Chinese) is available online. *See* Dongqingbailuo (冬青白萝), *Tingshen Lubo: Guonei Shouli AI Huihua Banquan Jiufen An* (庭审录播: 国内首例AI绘画版权纠纷案) [*Trial Recording: China’s First AI Painting Copyright Dispute Case*], BILIBILI (Aug. 24, 2023), <https://www.bilibili.com/video/BV1iz4y1T7Q1/> [<https://perma.cc/5QZK-A3XZ>].

the hearing, the plaintiff convinced the Beijing Internet Court that the AI model will generate the same result when the same prompt is repeated.²⁷⁵ In general, gAI produces slightly different results when the same prompt is repeated because of the incorporation of randomness in the processing of AI—for example, some models start with different initial conditions or states each time they are run.²⁷⁶ This evolving nature of AI models contributes to the variability in their outputs, even when the same prompts are used.²⁷⁷ Advanced AI models, particularly those using deep learning, have a high level of complexity with millions of parameters. This can lead to a wide range of potential outputs for the same input.²⁷⁸ Small nuances in outputs from training data change how the model learned to interpret something and can cause variations in output, especially in text-to-image gAI.²⁷⁹ The final output is often generated through a sampling process. The AI model might generate different results depending on resource constraints, such as memory or processing power and the model's configuration, and updates to the model can change the outcome as well.²⁸⁰ In short, temporal and spatial elements of the algorithms will constantly change.

²⁷⁵ See Seagull Song, *China's First Case on Copyrightability of AI-Generated Picture*, KING & WOOD MALLESONS (Dec. 7, 2023), <https://www.kwm.com/cn/en/insights/latest-thinking/china-s-first-case-on-copyrightability-of-ai-generated-picture.html> [<https://perma.cc/N8H8-MHV3>].

²⁷⁶ Jason Brownlee, *Why Do I Get Different Results Each Time in Machine Learning?*, MACH. LEARNING MASTERY (Aug. 27, 2020), <https://machinelearningmastery.com/different-results-each-time-in-machine-learning> [<https://perma.cc/743L-77QK>].

²⁷⁷ *Id.*

²⁷⁸ *What Are Large Language Model Settings: Temperature, Top P And Max Tokens*, NOVITA AI (Apr. 29, 2024), <https://blogs.novita.ai/what-are-large-language-model-settings-temperature-top-p-and-max-tokens/> [<https://perma.cc/7JGV-M9ZS>]. One can argue that diversity in the results is desirable for society. See Michal Shur-Ofry et al., *Growing a Tail: Increasing Output Diversity in Large Language Models 10* (Nov. 5, 2024) (unpublished manuscript), <https://arxiv.org/abs/2411.02989v1> [<https://perma.cc/SY3W-RLFT>] (“A few simple and cheap measures, such as temperature increase and diversity-inducing prompting, can ‘extract’ these contents and significantly improve diversity levels.”).

²⁷⁹ Shervin Minaee et al., *Large Language Models: A Survey 1*, 36 (Feb. 20, 2024) (unpublished manuscript), <https://arxiv.org/pdf/2402.06196v2> [<https://perma.cc/HP4P-W8KT>] (LLMs mainly refer to “transformer-based neural language models that contain tens to hundreds of billions of parameters, which are pretrained on massive text data.” However, “[f]uture LLMs are expected to be multi-modal and handle a variety of data types, such as text, images, and videos, audio, in a unified manner.”).

²⁸⁰ *Id.* at 21.

However, Stable Diffusion has a feature called “seed,” which is a number to initialize the generation.²⁸¹ The seed allows reproducible images to be generated and makes it easier for users to experiment with parameters or prompt variations.²⁸² The image in the “Spring” case was generated from a version of Stable Diffusion that was downloaded onto Mr. Li’s computer.²⁸³ Although the downloaded version is likely more stable than a web-based version of Stable Diffusion, it is perhaps not completely stable due to factors such as the sampling process and the complexity of the algorithm. Although the plaintiff submitted a video to the Court demonstrating the recreation process of the image in question,²⁸⁴ a video recording of the process of generating the image does not prove that the process is replicable. It only proves that Mr. Li generated the image via his computer at a particular point in time with the algorithm in a particular state.

Tianxiang He argued that using existing checkpoints and generation data, as shared on sites such as Civitai, might make the generative process mechanical in nature, potentially contradicting any modicum of creativity,²⁸⁵ in addition to refuting the independently created requirement of originality.

Human intellectual creation contains not just rationality like AI-generated content but also thoughts, emotions and inspiration. According to Yu Wenwen, “[e]ven though the content generated by artificial intelligence has the appearance of human intellectual creation, because its generation process is essentially different from human intellectual creative activities, it is not a ‘work’ within the meaning of the current Copyright Law, and it is difficult to enjoy copyright.”²⁸⁶ However, Yu Wenwen argued that AI-generated content has interests that are closely related to the market for works, and she asserted that one should pay attention to this kind of relationship and adjust Copyright Law accordingly.²⁸⁷ Yu seems to be open to

²⁸¹ See *Guide to Using Seed in Stable Diffusion*, GETIMG.AI, <https://getimg.ai/guides/guide-to-seed-parameter-in-stable-diffusion> [<https://perma.cc/UN7H-VTHY>] (last visited Oct. 11, 2024).

²⁸² *Id.*

²⁸³ See Lu, *supra* note 218.

²⁸⁴ *Id.*

²⁸⁵ He, *supra* note 32, at 301.

²⁸⁶ Yu Wenwen, *Copyright of Artificial Intelligence-Generated Content*, OFF. OF THE CENT. CYBERSPACE AFFS. COMM’N (Aug. 21, 2019), https://web.archive.org/web/20230511195349/http://www.cac.gov.cn/2019-08/21/c_1124902661.htm [<https://perma.cc/88H9-FRM7>].

²⁸⁷ *Id.*

the idea of vesting copyright in the natural person who made the arrangements necessary for the computer-generated content, conforming with Section 9 of the U.K. Copyright, Designs and Patents Act 1988.²⁸⁸

The decision by the Beijing Internet Court to protect an image generated by AI has internationally caused a stir.²⁸⁹ Those hoping for an international AI copyright *acquis* must have felt disappointed by the split between the U.S. and China. A level playing field for all stakeholders in AI and copyright²⁹⁰ seems farther than ever.²⁹¹

III

A “PLATONIC” PERSPECTIVE ON COPYRIGHT ELIGIBILITY

This Part examines the unattainable “platonic” standard of copyright eligibility. The criteria of this standard include:

Part III.A. human intervention in the creative process;

Part III.B. mental conception *ex ante* instead of mechanical reproduction;

Part III.C. control over the creative process according to intention, predictability, and permanence;

²⁸⁸ Copyright, Designs and Patents Act 1988, c. 48, § 9(3) (UK) (“In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken.”); *see Lee, supra* note 146, at 186–87 (“Although there is no readily identifiable author that makes the necessary arrangements for the creation, it is clear the CDPA 1988 intends to build a personal relation or causal link between the author and the computer-generated work.”).

²⁸⁹ The Beijing Internet Court’s decision instigated international academic debates on whether convergence of U.S. and China’s copyright systems is replaced by divergence. Professor Yu keeps the option open of a crossvergence (a simultaneous but partial convergence and divergence of copyright standards). *See* Peter K. Yu, *The Future Path of Artificial Intelligence and Copyright Law in the Asian Pacific*, 96 *COMPUT. & L.* (forthcoming 2024) (manuscript at 10), <https://ssrn.com/abstract=4707592> [<https://perma.cc/E7PY-DDAP>].

²⁹⁰ *See* 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 & n.23 (2002) (arguing for the non-discriminatory principle of national treatment, which means treating foreign works as well as domestic works, which urges other countries to match this treatment).

²⁹¹ It is time to update the Berne Convention to the AI era, in the same way the WIPO Internet Treaties (WIPO Copyright Treaty plus WIPO Performances and Phonograms Treaty) updated the Agreement on Trade-Related Aspects of Intellectual Property Rights to the internet era in 1996, and reintroduce formalities and create a level playing field between jurisdictions. *See* Friedmann, *supra* note 10, at 1; *see, e.g., Yu, supra* note 289, at 4 (observing that there seems to be a global consensus that AI systems cannot be deemed authors under copyright law, yet opinions diverge internationally regarding how much human creativity is required for AI-generated works to qualify for copyright protection).

Part III.D. a direct connection between the author and the work; and

Part III.E. the stipulation that protection applies to the expression of ideas, not the ideas themselves.

These criteria have been applied inconsistently by entities like the Office and the Beijing Internet Court, particularly in cases involving AI-generated images versus traditional human-authored works such as paintings and photographs. It is inevitable that these sub-sections partly overlap.

A. *Human Intervention*

The first question is whether there is any human intervention. The second question is how far should one go back to find an author. The third question is whether the direct human intervention is sufficient for copyright eligibility.

First, is there any human intervention? Legal precedents underscore the necessity of human creativity for copyright eligibility. The *Burrow-Giles* decision of the Supreme Court,²⁹² and the notable *Naruto*²⁹³ and *Urantia*²⁹⁴ cases of the Ninth Circuit, affirm that copyright is reserved for works originating from humans, explicitly excluding non-human entities. For example, British photographer David Slater set up a photo-camera in the hope that one or more crested black macaques he was following in the Tangkoko Reserve on North Sulawesi, Indonesia, would start playing with it, so that photos would be made in the process.²⁹⁵ This transpired; a crested black macaque called Naruto made several pictures, inspecting his teeth and smile in the screen of the camera. The Ninth Circuit held that the monkey cannot register a copyright in the photos it captured with a camera because the Copyright Act refers to an author's "children," "widow," "grandchildren," and "widower,"

²⁹² *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884) (The Supreme Court held that copyright was the exclusive right of "a man [who was the originator] to the production of his own genius or intellect").

²⁹³ *Naruto v. Slater*, 888 F.3d 418, 426 (9th Cir. 2018). *Cf.* *Graham v. John Deere Co.*, 383 U.S. 1, 15 (1966) (this patent law case at the Supreme Court repudiated its prior dicta suggesting that the inventive process required a "flash of genius").

²⁹⁴ *Urantia Found. v. Maaherra*, 114 F.3d 955, 957–59 (9th Cir. 1997) (The Ninth Circuit held that a book containing words "'authored' by non-human spiritual beings" can only gain copyright protection if there is "human selection and arrangement of the revelations").

²⁹⁵ See Andres Guadamuz, *Can the Monkey Selfie Case Teach Us Anything About Copyright Law?*, WIPO MAG., Feb. 2018, https://www.wipo.int/wipo_magazine/en/2018/01/article_0007.html [<https://perma.cc/B2R8-DBLM>].

terms that “all imply humanity and necessarily exclude animals.”²⁹⁶ A speciesist interpretation one could argue,²⁹⁷ since the terms “children” and “grandchildren” can be applied to non-human animals as well.

Even though there have been experiments with other non-human animals painting; including chimpanzees, elephants, dogs, and parrots,²⁹⁸ the *Naruto* case affirmed that the Office and the courts are only willing to see human-animals as authors.²⁹⁹ In the same vein, the Seventh Circuit rejected a copyright claim in a “living garden” because “[a]uthorship is an entirely human endeavor” and “a garden owes most of its form and appearance to natural forces.”³⁰⁰ Divine revelation *an sich* is also not copyrightable. In *Urantia*,³⁰¹ the District Court held that “[w]hether *The Urantia Book* is a divine revelation dictated by divine beings is irrelevant to the issue of whether the book is a literary work within the meaning of 17 U.S.C. § 102.”³⁰² In *New Christian Church*, Dr. Helen Schucman claimed to be the scribe of the religious work “A Course in Miracles,” through which Jesus spoke. Dr. Schucman claimed to have been pressed by the Christian prophet himself to obtain a copyright.³⁰³ The Court held that her scribe function was sufficient to be seen as the author of the work.³⁰⁴

According to the Office:

excluded from copyright protection are: a photograph taken by a monkey;
a mural painted by an elephant; a claim based on the appearance of

²⁹⁶ *Naruto*, 888 F.3d at 426.

²⁹⁷ Peter Singer defined speciesism as “a prejudice or attitude of bias in favor of the interests of members of one’s own species and against those of members of other species.” PETER SINGER, *ANIMAL LIBERATION* 6 (2d ed. 1990).

²⁹⁸ Jason Goldman, *Creativity: The Weird and Wonderful Art of Animals*, BBC FUTURE (July 23, 2014), <https://www.bbc.com/future/article/20140723-are-we-the-only-creative-species> [<https://perma.cc/F7E9-N9JG>].

²⁹⁹ *Naruto*, 888 F.3d at 426.

³⁰⁰ *Kelley v. Chi. Park Dist.*, 635 F.3d 290, 304 (7th Cir. 2011).

³⁰¹ *Urantia Found. v. Maaherra*, 895 F. Supp. 1337, 1338 (D. Ariz. 1995).

³⁰² *Id.*

³⁰³ *Penguin Books U.S.A., Inc. v. New Christian Church of Full Endeavor, Ltd.*, No. 96 CIV. 4126 (RWS), 2000 WL 1028634, at *5 (S.D.N.Y. July 25, 2000), *vacated*, 2004 WL 906301 (S.D.N.Y. Apr. 27, 2004) (“None of us was prepared, however, for one particular instruction from Jesus to Helen Schucman, scribe of the Course. He wanted *A Course in Miracles* copyrighted and, she stated emphatically, he was quite adamant about this.”).

³⁰⁴ *Id.* at *14.

actual animal skin; a claim based on driftwood that has been shaped and smoothed by the ocean; a claim based on cut marks, defects, and other qualities found in natural stone; and an application for a song naming the Holy Spirit as the author of the work.³⁰⁵

A gAI service is not human, but as Jaron Lanier argued, it is trained on the data of almost the whole of humanity, and he perceives it as a social collaboration, as a mash-up of real people.³⁰⁶ Indirectly, almost everyone was involved in its creation, and generation of its output. gAI is not fancifully shuffling prefabricated elements around in a Coleridgian fashion, instead it has detached patterns and principles of knowledge during the training process. How, if at all, gAI understands anything is a mystery, even for researchers at this moment.³⁰⁷

The “Entrance”³⁰⁸ case, whereby Stephen Thaler invented the “Creative Machine,” epitomizes an AI that can autonomously generate images.³⁰⁹ Therefore, it lacked the human intervention necessary for copyright eligibility.³¹⁰ In contrast, in the cases of “Zarya”³¹¹ and “Spatial,”³¹² Ms. Kashtanova and Mr. Allen,

³⁰⁵ COMPENDIUM (Third), *supra* note 8, § 313.2.

³⁰⁶ See Jaron Lanier, *There Is No A.I., There Are Ways of Controlling the New Technology—But First We Have to Stop Mythologizing It*, NEW YORKER, Apr. 20, 2023, <https://www.newyorker.com/science/annals-of-artificial-intelligence/there-is-no-ai> [<https://perma.cc/D5RP-QGST>].

³⁰⁷ Richard Shiffrin & Melanie Mitchell, *Probing the Psychology of AI Models*, PNAS (Mar. 1, 2023), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10013777/pdf/pnas.202300963.pdf> [<https://perma.cc/ZRN5-ZXW5>] (asserting that the capabilities of gAI are beyond dispute, but “the mechanisms underlying these systems remain mysterious, even to the researchers who created them”). Perhaps this truly human understanding distinguishes the way human-animals learn from machine learning, at least for the moment. Professor Gaon describes AI as pseudo-human intelligence and suggests to rely on the following technical definition that focuses on the output and not on the degree of “human-like” understanding: “Any artificial systems that perform tasks under varying and unpredictable circumstances, without significant human oversight, or that can learn from their experience and improve their performance.” AVIV H. GAON, *THE FUTURE OF COPYRIGHT IN THE AGE OF ARTIFICIAL INTELLIGENCE* 55–56 (Peter K. Yu ed., 2021).

³⁰⁸ “Entrance,” *supra* note 129.

³⁰⁹ Cf. Bruce Boyden, *Emergent Works*, 39 COLUM. J.L. & ARTS 337, 379 (2016) (describing emergent works as “works of apparently creative expression that arise from the operation of a program but cannot be traced directly to a human source”). This author prefers to use products and generations if there is no direct human involvement over works and creations.

³¹⁰ COMPENDIUM (Third), *supra* note 8, § 313.2. But copyright only protects “the fruits of intellectual labor” that “are founded in the creative powers of the [human] mind.” *Id.* at § 306 (quoting Trade-Mark Cases, 100 U.S. 82, 94 (1879)).

³¹¹ “Zarya,” *supra* note 131, at 6–10.

³¹² The Copyright Office reaffirmed the bedrock requirement of human authorship for copyright protection. “Spatial,” containing AI-generated material, was required to disclose such contributions to ensure

respectively, used Midjourney to generate images by inputting a massive number of prompts, which established their human intervention. This happened to a lesser extent also in the “SURYAST” case where Mr. Sahni used a text-to-image AI named RAGHAV. In the “Spring” case, where Mr. Li used Stable Diffusion, there was sufficient human intervention according to the Beijing Internet Court.

Secondly, how far should we be willing to go back to find an author regarding AI-generated content? Hugenholtz and Quintais interpreted human intervention that could play a role in copyrightability more generously than the Office, the District Court for the District of Columbia, and the Beijing Internet Court. They argued that not only “supervision of the creative process, editing, curation, [and] post-production” could play a role, but so could “the development of the AI software, the gathering and choice of training data, the drawing up of functional specifications.”³¹³

In the same vein, Professor Dirk Visser cast the net very wide regarding the possible scope of human intervention relevant for copyrightability: “result[s] that the robot produces can be dictated by both the designer of the robot, who ‘instructs’ his creativity, as it were, and by the user, whose instructions and commands are expressed in the result.”³¹⁴ However, in the abovementioned cases, whether the human intervention is sufficient depends on how original or creative the conception, execution, and redaction phases are.

There seems to be consensus on the precondition of a human author in all four cases at the Office, the case at the District Court for the District of Columbia, and the recent case at the Beijing Internet Court. In other words, a completely autonomously generated product of AI cannot be protected by copyright, at least at this moment in time.³¹⁵

transparency and maintain the standard that copyright protection extends only to human-created works. “Spatial,” *supra* note 132, at 3, 8.

³¹³ P. Bernt Hugenholtz & João Quintais, *Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?*, 52 INT’L REV. INTELL. PROP. & COMPETITION L. 1190, 1202 (2021), <https://link.springer.com/article/10.1007/s40319-021-01115-0> [<https://perma.cc/E2UQ-WQSG>].

³¹⁴ Dirk Visser, *Robotkunst and Auteursrecht* [Robot Art and Authors’ Right], 7 NEDERLANDS JURISTENBLAD 504, 507 (Feb. 17, 2023), <https://www.ipmc.nl/wp-content/uploads/2023/06/Robotkunst-en-auteursrecht-1.pdf> [<https://perma.cc/TS7D-XGS2>].

³¹⁵ Bo Zhou, the Senior Judge of the IPR Division of the Supreme People’s Court of China leaves open this possibility and contended that “it remains to be seen whether the autonomously generated product of AI can be a work protected by the *Copyright Law*.” ZHOU, *supra* note 234, at 3. “[T]he AI author has not been born

Mr. Sahni's request to make him and the gAI RAGHAV co-authors remains anathema to the Office, even in case Mr. Sahni's input would be sufficiently original and creative. But the Office concluded that that was also not the case, and qualified the work as derivative, containing insufficient original human authorship.

Thirdly, is the direct human intervention sufficient? The World Intellectual Property Organization (WIPO) Secretariat's Revised Statement on IP Policy and AI³¹⁶ delineates between "AI-generated," meaning autonomously produced by AI, and "AI-assisted" products, where AI is used as merely a tool,³¹⁷ highlighting the evolving challenge of proving human intervention as AI technology advances.

In contrast to the Office, the Beijing Internet Court acknowledges AI's role as a tool in human-led creative processes, suggesting a broader interpretation of authorship that includes significant human contribution, namely intelligent achievement, and originality in AI-generated content.³¹⁸ Intelligent achievement seems to point to thresholds of both intelligence and effort. One can argue that neither a value judgment about whether the creation of a work was smart or stupid nor whether a little or a lot of effort was invested should be relevant: both the opposite of aesthetic neutrality,³¹⁹ aesthetic discrimination, and sweat-of-the-brow³²⁰ are anathema to copyright doctrine.

B. Mental Conception or Mechanical Reproduction

Another important "platonic" ideal of copyright eligibility is that the author conceived the complete blueprint of the expressive work in advance of the creative process. In this view, the author is seen as a medium that channels the expressive

yet." Mauritz Kop, *AI & Intellectual Property: Towards an Articulated Public Domain*, 28 TEX. INTELL. PROP. L.J. 297, 304 (2020). The author of this article has advocated for preferential treatment of human authors, with the proviso "at least . . . until . . . the moment of singularity." See Friedmann, *supra* note 10, at 1.

³¹⁶ World Intell. Prop. Org. [WIPO], *WIPO Conversation on Intellectual Property (IP) and Artificial Intelligence (AI)*, ¶ 12, WIPO/IP/AI/2/GE/20/1 REV (May 21, 2020), https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_ai_2_ge_20/wipo_ip_ai_2_ge_20_1_rev.pdf [<https://perma.cc/VNP9-W5PA>].

³¹⁷ *Id.* In "Entrance," since there was an absence of human intervention, the question whether the Creativity Machine was merely used as assistive tool does not have to be answered. "Entrance," *supra* note 129, at 3 (referring to COMPENDIUM (Third), *supra* note 8, § 313.2). In "Zarya," Ms. Kashtanova's lawyer argued that Midjourney served merely as an assistive tool. "Zarya," *supra* note 131, at 3. In "SURYAST," Mr. Sahni argued that RHAGAV is merely an assistive software tool. "SURYAST," *supra* note 133, at 3.

³¹⁸ See "Spring," *supra* note 217, at 15.

³¹⁹ See *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 252 (1903) (Holmes, J.).

³²⁰ See *Feist Publ'ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 352–53 (1991).

work, so that it is revealed to the author exclusively. This “platonic” view is akin to patent law, where “[t]he inventor must form a definite and permanent idea of the complete and operable invention to establish conception,”³²¹ thus the conception must be done in the mind of the author. However, only a few authors think over the whole work, let it completely crystalize, before they set out to start creating. John Milton, the seventeenth-century English writer went first completely blind and then dictated *Paradise Lost*, his *magnus opus*, line for line to his daughter.³²² But other authors start with a vague idea and incrementally develop the idea in a particular expression of that idea. According to George Saunders, writer of *Lincoln in the Bardo*: “We buy into some version of the intentional fallacy: the notion that art is about having a clear-cut intention and then confidently executing same [*sic*].”³²³ Saunders describes his process much like the process of a prompt engineer using gAI:

I imagine a meter mounted in my forehead, with “P” on this side (“Positive”) and “N” on this side (“Negative”). I try to read what I’ve written uninflectedly, the way a first-time reader might (“without hope and without despair”). Where’s the needle? Accept the result without whining. Then edit, so as to move the needle into the “P” zone. Enact a repetitive, obsessive, iterative application of preference: watch the needle, adjust the prose, watch the needle, adjust the prose (rinse, lather, repeat), through (sometimes) hundreds of drafts. Like a cruise ship slowly turning, the story will start to alter course via those thousands of incremental adjustments.³²⁴

After writing a true sentence, more will follow.³²⁵ Our brains are in the sense of functionality not that different from LLMs: they can be both described

³²¹ MPEP § 2138.04 (9th ed. Rev. 01.2024, Nov. 2024). *See also* *Bosies v. Benedict*, 27 F.3d 539, 543 (Fed. Cir. 1994).

³²² Henry Fuseli, the Swiss painter, depicted “Milton Dictating to His Daughter” in 1793. *See* Henry Fuseli, *Milton Dictating to His Daughter* (illustration), in *Painting and Sculpture of Europe, Gallery 219*, ART INST. CHI. (1793), <https://www.artic.edu/artworks/44739/milton-dictating-to-his-daughter> [<https://perma.cc/L3RR-RYXD>].

³²³ George Saunders, *What Writers Really Do When They Write*, *GUARDIAN* (Mar. 4, 2017), <https://www.theguardian.com/books/2017/mar/04/what-writers-really-do-when-they-write> [<https://perma.cc/9CEP-LM4K>].

³²⁴ *Id.*

³²⁵ ERNEST HEMINGWAY, *A MOVEABLE FEAST* 9 (1964).

as prediction machines.³²⁶ In the same vein as LLMs were trained on enormous amounts of data, including copyrighted works, humans learn, although much more efficiently, and are exposed to enormous amounts of data, including copyrighted works as well.³²⁷

Ross and Copeland pointed out that there is no empirical evidence that human creativity works according to a blueprint.³²⁸ Tim Ingold argued that human creativity is neither mechanistic nor deterministic, but that the author is in dialogue with the material and where serendipity is an integral part of creation.³²⁹ The abstract expressionist painter Jackson Pollock, “interrupting his work, would judge his ‘acts’ very shrewdly and carefully for long periods before going into another ‘act.’ He knew the difference between a good gesture and a bad one. This was his conscious artistry at work, and it makes him a part of the traditional community of painters.”³³⁰

In the “Backseat Conversations” case, the Netherlands’ Supreme Court (*Hoge Raad*) clarified that copyrightability does not require the intention to create a work or make creative choices. The case involved recordings of interrogations of real estate entrepreneur Willem Endstra in a police BMW between May 2003 and January 2004. After Endstra’s assassination on May 17, 2004, Dutch media published the transcripts. The Endstra family’s attempt to ban these publications through summary proceedings was initially unsuccessful, as lower courts deemed the tapes non-copyrightable due to the lack of creative intent. However, on May 30, 2008, the Supreme Court overturned this decision, rejecting the necessity for an

³²⁶ “Theorists propose that the brain constantly generates implicit predictions that guide information processing.” Micha Heilbron et al., *A Hierarchy of Linguistic Predictions During Natural Language Comprehension*, 119 PNAS 1, 1 (2022) <https://www.pnas.org/doi/epdf/10.1073/pnas.2201968119> [<https://perma.cc/6NCA-YS3C>].

³²⁷ A big difference is that humans in most cases have to directly compensate the copyright holders if they buy a book or painting, or indirectly via the libraries and museums they visit.

³²⁸ See Wendy Ross, *Heteroscalar Serendipity and the Importance of Accidents*, in *THE ART OF SERENDIPITY* 77 (Wendy Ross & Samantha Copeland eds., 2022).

³²⁹ “Rather than reading creativity ‘backwards’, from a finished object to an initial intention in the mind of an agent, this entails reading it forwards, in an ongoing generative movement that is at once itinerant, improvisatory and rhythmic.” Tim Ingold, *The Textility of Making*, 34 *CAMB. J. OF ECON.* 91, 91 (2010).

³³⁰ ALLAN KAPROW, *ESSAYS ON THE BLURRING OF ART AND LIFE* 4 (Jeff Kelley ed., 1993).

author's conscious intent to create a work and make creative choices for copyright protection.³³¹

Professor Christine Farley noted that photography was initially heralded as a mechanical science in the nineteenth century,³³² described as “the pencil of nature”³³³ for its ability to mechanically capture scenes. Lange describes photography as a medium which, by definition, merges idea and expression, a notion that challenged its copyrightability.³³⁴

Burrow-Giles recognized photographers as authors of creative works when they engage in “posing . . . selecting and arranging the costume, draperies, and other various accessories in said photograph . . . arranging and disposing the light and shade, suggesting and evoking the desired expression[.]”³³⁵ Yet, mere mechanical reproductions without creative input, such as surveillance footage, satellite images, or direct copies of art,³³⁶ lack copyright protection. Therefore, straightforward photographs of public domain artworks were not considered creative, according to Wojcik.³³⁷ In the same vein, the Tenth Circuit in *Meshwerks v. Toyota*, held that digital three-dimensional models of Toyota vehicles that closely replicated the actual products were not protected.³³⁸ Similarly, the Ninth Circuit in *Satava v. Lowry* ruled that natural depictions, like jellyfish, are unprotectable because they

³³¹ “However, this [the creativity required for copyright protection] concerns a characteristic that can be recognized from the product itself. Therefore, it may not be required that the maker consciously wanted to create a work and consciously made creative choices, which requirement can also present those involved with insurmountable evidentiary problems,” the Dutch Supreme Court (Hoge Raad) said in its Endstra judgment. HR 30 mei 2008, NJ 2008, 556 m.nt. EJD (Endstra/Uitgeverig Nieuw Amsterdam B.V.) (Neth.), <https://uitspraken.rechtspraak.nl/details?id=ECLI:NL:HR:2008:BC2153> [<https://perma.cc/ZPQ2-RHJ4>].

³³² Farley, *supra* note 60, at 395.

³³³ *Id.* at 396.

³³⁴ Lange, *supra* note 61, at 145–46.

³³⁵ *Burrow-Giles Lithographic Co. v. Saroni*, 111 U.S. 53, 60 (1884).

³³⁶ The mere reproduction of a work of art in a different medium should not constitute the required originality for the reason that no one can claim to have independently evolved any particular medium. As discussed above, the law requires “some element of material alteration or embellishment” to the totality of the work. At bottom, the totality of the work is the image itself, and Bridgeman admittedly seeks to duplicate exactly the images of the underlying works. *Bridgeman Art Libr. Ltd. v. Corel Corp.*, 36 F. Supp. 2d 191, 199 (S.D.N.Y. 1999).

³³⁷ See Mary Campbell Wojcik, *The Antithesis of Originality: Bridgeman, Image Licensors, and the Public Domain*, 30 HASTINGS COMM. & ENT. L.J. 257, 265 (2008).

³³⁸ *Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc.*, 528 F.3d 1258, 1268 (10th Cir. 2008).

are nature's creations.³³⁹ However, copyright can cover works that transcend mere replication,³⁴⁰ including photographs with significant post-production editing, highlighting that creativity can imbue mechanical reproductions with copyright eligibility.³⁴¹

Although authorial intention remains part of the “platonic” prerequisites for copyrightability, the literary theorists Wimsatt and Beardsley,³⁴² and Barthes,³⁴³ declared the author as unknowable, and more importantly, irrelevant. Authorial intention will be hidden until the technique that is now being developed to read people's minds comes to fruition.³⁴⁴ Therefore, it is challenging to prove what the author had in mind at the moment of conception of the work. Users of gAI were unable to convince the Office, and only Mr. Li managed to convince the Beijing Internet Court that the final image was a rendition of his vision, *ex ante*.

Mr. Thaler's role in shaping the mental imagery behind “Entrance” created by the Creativity Machine was an indirect one, primarily through his selection of the training data and other preparatory actions. Therefore, the Office's assumption was that the image was the result of a “mechanical reproduction” instead of Mr. Thaler's own original mental conception to which he had given a visible form.³⁴⁵

³³⁹ *Satava v. Lowry*, 323 F.3d 805, 813 (9th Cir. 2003).

³⁴⁰ *See E. Am. Trio Prods., Inc. v. Tang Elec. Corp.*, 97 F. Supp. 2d 395, 417 (S.D.N.Y. 2000).

³⁴¹ For example, if after a photo is taken, it is retouched, reworked, cropped, framed, redeveloped or, colored, or a combination. Farley, *supra* note 60, at 390. Photography does not have to be “the product of a soulless labor of the machine.” *Id.*

³⁴² *See* William K. Wimsatt Jr. & Monroe C. Beardsley, *The Intentional Fallacy*, 54 THE SEWANEE REV. 468, 468–69 (1946), <http://www.jstor.org/stable/27537676> [<https://perma.cc/3JLR-DEF6>] (arguing that authorial intention is both recoverable from a text and the locus of that text's meaning, separate from the author).

³⁴³ BARTHES, *supra* note 119, at 142 (positing that the intentions, subjectivity, and biography of an author ought not, and cannot, be used to interpret his or her text. Rather texts are “composites” of different interpretations by the readers).

³⁴⁴ *See* Liam Drew, *The Rise of Brain-Reading Technology: What You Need to Know*, NATURE (Nov. 8, 2023), <https://www.nature.com/articles/d41586-023-03423-6> [<https://perma.cc/S9CS-CEZP>] (noting that a “commercial ecosystem of wearable brain-reading devices is growing”).

³⁴⁵ “Entrance,” *supra* note 129, at 3. *See* U.S. COPYRIGHT OFF., ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 5 (1966); *see also* Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. at 16190, 16192 (asking “whether the AI contributions are the result of ‘mechanical reproduction’ or instead of an author's ‘own original mental conception, to which [the author] gave visible form’”) (quoting *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884)). As also stated in “Spatial,” *supra* note 132, at 4, the Office will not register works produced by a machine or mere mechanical intervention from a human author.

In “Zarya,”³⁴⁶ when Ms. Kashtanova used Midjourney, the results were not considered to be predictable (see below), and therefore not based on a premeditated blueprint. The same can be said for “Entrance,”³⁴⁷ “Spatial,”³⁴⁸ and “SURYAST.”³⁴⁹

The creative process should combine form and matter into an expression of the personality of the author, according to Professor Maurizio Borghi.³⁵⁰ Professor Christopher Buccafusco pointed out the paradox of control: when there is not enough control, the creator is not the author; but when there is too much control, the work is considered not sufficiently creative.³⁵¹ In the same vein, the Beijing Internet Court held that “works completed by following a specific sequence, formula, or structure, which yield identical results regardless of who completes them, lack originality due to their uniform expression.”³⁵² When individuals utilize tools such as Stable Diffusion, the uniqueness and specificity of their prompts, particularly in describing visual elements and composition, significantly enhance the personal expression reflected in the resulting images.³⁵³

The “platonic” ideal in copyright law suggests that an author should mentally conceive the entire blueprint of a work before creation, similar to patent law. However, many authors develop their works incrementally rather than starting with a fully formed concept. Creativity is not mechanistic, and copyright law has evolved to protect works even when serendipity or a lack of conscious intent is involved.

³⁴⁶ “While additional prompts applied to one of these initial images can influence the subsequent images, the process is not controlled by the user because it is not possible to predict what Midjourney will create ahead of time.” “Zarya,” *supra* note 131, at 8.

³⁴⁷ “Entrance,” *supra* note 129 (since there was no direct human intervention at all in the generation).

³⁴⁸ “Spatial,” *supra* note 132, at 7 (“Instead, Mr. Allen is closer to the plaintiff in *Kelley v. Chicago Park District* who sought to claim copyright in a ‘living garden.’” In that case, the 7th Cir. held that Kelley did not have sufficient creative control of the claimed elements of the work).

³⁴⁹ According to the U.S. Copyright Office, “it will ‘depend on the circumstances, particularly how the AI tool operated and how it was used to create the final work.’” “SURYAST,” *supra* note 133, at 4.

³⁵⁰ Maurizio Borghi, *Owning Form, Sharing Content: Natural-Right Copyright and Digital Environment*, in 5 *NEW DIRECTIONS IN COPYRIGHT LAW* 197, 197 (Fiona MacMillan ed., 2007), <https://ssrn.com/abstract=1031855> [<https://perma.cc/SX8F-WCZ8>].

³⁵¹ Christopher Buccafusco, *How Conceptual Art Challenges Copyright’s Notions of Authorial Control and Creativity*, 43 *COLUM. J.L. & ARTS* 375, 375 (2020).

³⁵² “Spring,” *supra* note 217, at 14.

³⁵³ *Id.*

C. Control Over the Creative Process of the Work

The “platonic” ideal on copyright eligibility centers on the author’s total control over their creative work, rooted in the Latin word “auctoritas,” signifying power.³⁵⁴ This control involves decision-making, boundary-setting, and exclusivity.³⁵⁵ Artists who want to generate images with a text-to-image AI must select a model that aligns with their aesthetic vision.³⁵⁶ Users of gAI can influence the outcome with prompt designs, changing the parameters or settings (creativity levels, randomness, specificity, aspect ratio, etc.),³⁵⁷ and importantly iterative refinement. The Office and the District Court for the District of Columbia argued that the influence of gAI is insufficient,³⁵⁸ while the Beijing Internet Court acknowledged that it can be enough.³⁵⁹

Text-to-image models such as Midjourney and Stable Diffusion provide, after the input of a prompt, four images, each with slight variations, so that the user can pick the image that is closest to his or her vision, to further refine that image with a subsequent prompt. The Office, Board and District Court for the District of

³⁵⁴ Nickolas Pappas, *Authorship and Authority*, 47 J. AESTHETICS & ART CRITICISM 325 (1989), <https://doi.org/10.2307/431132> [<https://perma.cc/QZC9-2BB8>].

³⁵⁵ Boyden, *supra* note 309, at 385, 393 (In the absence of transparency between the ratio of creation and generation, Boyden proposed to use “[t]he ability of a person to foresee the work as rendered by a device or process can serve as a proxy for whether that person’s meaning or message is embodied in that work”). This would lead to practical evidentiary law challenges: should the candidate author describe and document his or her envisioned work? This would be burdensome and destroy any spontaneity. Or should the candidate author persuade the Office that he or she envisioned the work all along?

³⁵⁶ It has been argued that the DALL-E, Midjourney and Stable Diffusion LLMs each have their own distinct visual language. Robert Lavigne described the visual language of DALL-E as “realistic and abstract images with a flair for the imaginative,” Stable Diffusion as “images, ranging from hyper-realistic scenes to artistic or abstract compositions” and Midjourney as “specializing in artistic and often abstract interpretations.” Robert Lavigne, *Comparing DALL-E, Stable Diffusion, and Midjourney Prompt Engineering (2024)*, MEDIUM (Jan. 14, 2024), <https://medium.com/@RLavigne42/comparing-dall-e-stable-diffusion-and-midjourney-prompt-engineering-2024-4bf19ac11256> [<https://perma.cc/6VNH-A8W4>].

³⁵⁷ For example, by adding a camera and aperture as a prompt, users of text-to-image AI can dictate the depth of field. Robert K. Baggs, *Like or Loathe Midjourney, Photographers Currently Have an Edge With It*, FSTOPPERS (Aug. 23, 2023), <https://fstoppers.com/artificial-intelligence/or-loathe-midjourney-photographers-currently-have-edge-it-639126> [<https://perma.cc/5ZSZ-UCDX>].

³⁵⁸ While such instructions may give a user greater influence over the output, the AI technology is what determines how to implement those additional instructions. *Thaler v. Perlmutter*, 687 F. Supp. 3d 140, 149 (D.D.C. 2023).

³⁵⁹ See “Spring,” *supra* note 217, at 2, 8.

Columbia seem to perceive this feature as a slot machine, where chance plays an oversized role, instead of an efficient way to come closer to the artistic vision.³⁶⁰ Ms. Kashtanova's lawyer asserted that the Office relied upon oversimplified press accounts of her creative process.³⁶¹ Instead of an unguided, "push-button" process, the creative process Ms. Kashtanova engaged in with Midjourney took over a year; each image took hours, and a page took a day or more.³⁶²

After the initial image is generated by AI, the artist can decide to further modify and enhance it using additional post-processing tools and manual editing, ensuring the final product meets the artist's standards and vision. This was also acknowledged by the Office which attached importance to Ms. Kashtanova's³⁶³ and Mr. Allen's³⁶⁴ respective editing alterations with Adobe Photoshop if they would exert a certain degree of control over the final product. Control plays an important role in contemporary copyright law as well, to point out whether someone is an author or not,³⁶⁵ but in a less totalitarian way than the "platonic" ideal prescribes: authors are those who make creative decisions on their own,³⁶⁶ to exert authority over the expressive creation and have the last say in the final product.³⁶⁷

The Office argued that the technology that adds random noise to an image that evolves into a final image is too unpredictable.³⁶⁸ Users such as Ms. Kashtanova and Mr. Allen did not have control over the tool via textual prompts, and instead, Midjourney generated images in an unpredictable way, according to the Office. As pointed out above, the Office in "Spatial" held that "Midjourney does not understand grammar, sentence structure, or words like humans."³⁶⁹ However, this does not mean that these artists were not able to implement their vision to an aseptic (without being aware of semantics) tool such as Midjourney. In contrast, in the case

³⁶⁰ The Office relies on Midjourney that wrote: Midjourney "does not understand grammar, sentence structure, or words like humans," it instead converts words and phrases "into smaller pieces, called tokens, that can be compared to its training data and then used to generate an image." "Zarya," *supra* note 131, at 7.

³⁶¹ *Id.* at 19.

³⁶² *Id.*

³⁶³ *Id.* at 9–12.

³⁶⁴ "Spatial," *supra* note 132, at 2, 8.

³⁶⁵ See Balganes, *supra* note 4, at 71.

³⁶⁶ *Lindsay v. Wrecked & Abandoned Vessel R.M.S. Titanic*, 52 U.S.P.Q.2d 1609, 1614 (S.D.N.Y. 1999).

³⁶⁷ See *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000).

³⁶⁸ The Office discussed the topic of the copyrightability of "aleatory music" [randomly created music] already in 1966. U.S. COPYRIGHT OFF., ANNUAL REPORT OF THE REGISTER OF COPYRIGHT 5 (1967).

³⁶⁹ "Spatial," *supra* note 132, at 6–7.

of “SURYAST,” Mr. Sahni utilized only three inputs that led to the end result: (1) the photo that was made by Mr. Sahni; (2) a style element (“The Starry Night” in the style of Vincent van Gogh); and (3) a style transfer value percentage,³⁷⁰ that was too imprecise to have conceived and executed the human authorship.

Professor Balganesh suggested that in the case of *Naruto*, if Slater had not merely positioned the camera in a location popular with crested black macaques but had also trained a monkey or another animal under the photographer’s control to take the photograph, then the involvement of the animal would be predictable and directed rather than random. This could have potentially allowed the photographer to be recognized as the author.³⁷¹

Professor Dan Burk described thirty-six scenarios to assess whether a fictitious Jackson Pollock is author of the work in each situation and eligible for copyright protection.³⁷² Burk agreed with Balganesh that if Jackson would train an elephant to “dip the paintbrush into paint, and fling paint across a canvas, producing random splatters of color[,]”³⁷³ Jackson would be the author of the work. Burk argued that if Pollock intentionally leaves the window to his studio open, expecting that an errant wind will likely knock over the paint cans that he set up, splattering paint across a nearby canvas, that he could be the author.³⁷⁴ Burk equates the situation of an errant wind with that of feral hogs entering his studio.³⁷⁵ Applying Burk’s reasoning, this makes a generous interpretation of *Naruto* possible because Slater intentionally staged the situation just as one can bet on the errant wind or feral hogs to visit a studio.

In *Kelley*, the Seventh Circuit held that a “living garden lacks the kind of authorship and stable fixation normally required to support copyright.”³⁷⁶ After

³⁷⁰ “SURYAST,” *supra* note 133, at 7.

³⁷¹ Balganesh, *supra* note 4, at 65.

³⁷² Dan L. Burk, *Thirty-Six Views of Copyright Authorship, By Jackson Pollock*, 58 Hous. L. Rev. 263 (2020).

³⁷³ *Id.* at 307.

³⁷⁴ *Id.* at 277.

³⁷⁵ *Id.* at 308.

³⁷⁶ *Kelley v. Chi. Park Dist.*, 635 F.3d 290, 303 (7th Cir. 2011). *But see* PAUL GOLDSTEIN, GOLDSTEIN ON COPYRIGHT § 2.2.2 & n.68.2 (3d ed. 2005 & Supp. 2024) (“In fact no studied garden design will fail to reveal the impress of the artist or architect’s authorship.”).

all, capricious nature rules over the outdoor gardens. The process of tie-dyeing³⁷⁷ is also considered too unpredictable for copyright protection.

Jackson Pollock used randomness to express himself, although he denied “the accident,” with which he meant the accidental in his painting.³⁷⁸ In a 1973 documentary, Pollock described his painting method in this way:

Sometimes I use a brush, but often prefer using a stick. Sometimes, I pour the paint straight out of the can. I like to use a dripping fluid paint. A method of painting as the natural growth out of a need, I want to express my feelings rather than illustrate them. Technique is just a means of arriving at a statement.³⁷⁹

Professor Richard Chused argued that many works of art in recent decades “capitalize on the concept of randomness and the vitality it invokes in a fixed work.”³⁸⁰ According to Chused, removing human agency from AI is unlikely.³⁸¹ Then again, according to a materialistic deterministic worldview, every outcome, from Pollock’s works to products generated by AI after the instructions of prompts, is by definition predetermined.³⁸²

³⁷⁷ “Tie-dye: A resist-dyeing process in which parts of a fabric are compressed and wrapped tightly with yarn or strip material before dyeing.” *Textile Terms*, GEO. WASH. UNIV. TEXTILE MUSEUM, <https://museum.gwu.edu/textile-terms> [<https://perma.cc/GG8Q-K8WP>] (last visited Nov. 8, 2024).

³⁷⁸ “Jackson Pollock said: When I am painting I have a general notion as to what I am about. I can control the flow of paint; there is no accident.” Lore Mariano, *Jackson Pollock’s Number 1A, 1948; or, How Can We Be Abandoned & Accurate at the Same Time?*, TERRAIN GALLERY, <https://terraingallery.org/aesthetic-realism-art-criticism/jackson-pollocks-number-1a-1948-or-how-can-we-be-abandoned-accurate-at-the-same-time/> [<https://perma.cc/ML2X-9QHU>] (last visited Nov. 30, 2024). See also JACKSON POLLOCK, *NEW APPROACHES 57* (Kirk Varnedoe & Pepe Karmel eds., 1999).

³⁷⁹ Contemporary Art Fashion Slub Pop Kitsch, *Jackson Pollock Documentary (circa 1973 or so)*, YOUTUBE (Oct. 27, 2019), <https://www.youtube.com/watch?v=PYpA0iWhjJc&t=20s> [<https://perma.cc/7A9H-ZPUS>]. See, e.g., ALLAN KAPROW, *The Legacy of Jackson Pollock (1958)*, in *ESSAYS ON THE BLURRING OF ART AND LIFE 1*, 3–4 (Jeff Kelley ed., 2003).

³⁸⁰ Richard H. Chused, *Randomness, AI Art, and Copyright*, 40 *CARDOZO ARTS & ENT. L.J.* 621, 622 (2023).

³⁸¹ *Id.* at 626. But see Luciano Floridi, *AI as Agency Without Intelligence: On ChatGPT, Large Language Models, and Other Generative Models*, 36 *PHIL. & TECH.*, no. 15, Mar. 10, 2023, at 1, 6.

³⁸² “In the mind there is no absolute or free will; but the mind is determined to wish this or that by a cause, which has also been determined by another cause, and this last by another cause, and so on to infinity.” BARUCH SPINOZA, *ETHICS*, Pt. II, Proposition 48 (R.H.M. Elwes trans., Monadnock Valley Press 2022) (1677), <https://monadnock.net/spinoza/ethics-2.html> [<https://perma.cc/V76G-ME6R>]. See ROBERT M. SAPOLSKY, *DETERMINED: A SCIENCE OF LIFE WITHOUT A FREE WILL passim* (2023).

In *Alfred Bell*, the Second Circuit held that some random variations from the prior art were sufficient to find originality,³⁸³ and some thin protection. However, in *Toro Co. v. R & R Products Co.*, the Eighth Circuit held that the defendant in a copyright infringement case had copied the plaintiff's part numbers.³⁸⁴ But that these were not proper subject matter for copyright, since they were randomly and arbitrarily selected, and therefore there was no originality.³⁸⁵ Hence, some randomness can provide originality (*Alfred Bell*), but complete randomness cannot (*Toro*).

In contrast to the “platonic” view of the Office and the Beijing Internet Court, in at least some traditional expressive works there is room for randomness, unpredictability, serendipity, timing and luck, in short, for opportunism.³⁸⁶ Serendipity can be described as finding something that what one was not looking for.³⁸⁷ Abraham Zapruder happened to stand at the exact time and place to film the assassination of John F. Kennedy, and he was able to protect his film under copyright law.³⁸⁸ It seems he witnessed and reported on something he was not looking for, and for shooting the film he was rewarded. The Court however emphasized the “creative” choices involved in the selection of camera, film, lens, location, and timing.³⁸⁹

³⁸³ *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 105 (2d Cir. 1951) (including the inadvertent variations caused by “bad eyesight or defective musculature, or a shock caused by a clap of thunder,” may produce material that “the ‘author’ may adopt . . . as his and copyright it”); Professor Boyden described this as situations where “an author can add creativity to elements of a work by ‘ratifying’ their presence post hoc.” Boyden, *supra* note 309, at 391.

³⁸⁴ *See Toro Co. v. R & R Prods. Co.*, 787 F.2d 1208, 1210 (8th Cir. 1986).

³⁸⁵ *Id.* at 1216.

³⁸⁶ Lee, *supra* note 7, at 75 (“The Copyright Office’s restrictive approach is at odds with the creative process and ignores the extensive body of research showing the importance of serendipity, lack of control, accidents, trial and error, randomness, and the use of iterative processes in artistic creation.”).

³⁸⁷ In paragraph 191 Letter 90 To Sir Horace Mann. Arlington Street, Jan. 28, 1754, Horace Walpole wrote: “I once read a silly fairy tale, called ‘The Three Princes of Serendip;’ as their Highnesses travelled, they were always making discoveries, by accidents and sagacity, of things which they were not in quest of: for instance, one of them discovered that a mule blind of the right eye had travelled the same road lately, because the grass was eaten only on the left side, where it was worse than on the right—now do you understand Serendipity?” HORACE WALPOLE, *THE LETTERS OF HORACE WALPOLE, EARL OF ORFORD — VOLUME 2* (Marjorie Fulton ed., Project Gutenberg eBook 2003) (ebook), <https://www.gutenberg.org/cache/epub/4610/pg4610-images.html> [<https://perma.cc/EPP7-JHH2>].

³⁸⁸ *See Time Inc. v. Bernard Geis Assocs.*, 293 F. Supp. 130, 144 (S.D.N.Y. 1968).

³⁸⁹ *Id.* at 143.

Photojournalist Alfred Eisenstaedt's photograph of a sailor and a dental assistant kissing in Times Square symbolized Victory over Japan (V-J) Day, August 14, 1945, the final end of World War II.³⁹⁰

Wildlife photographer Thomas Mangelsen photographed an Alaskan brown bear that stood in the stream while a salmon flew into his mouth, which he titled "Catch of the Day Legacy Reserve."³⁹¹ The gallery of Mangelsen calls this "a testament to [his] ability to previsualize a composition first in his mind's eye, then positioning himself above the falls of Brooks River, allowing all of the critical elements to converge and pure magic to happen."³⁹² In other words Mangelsen increased his chances that he could shoot the picture. Mangelsen himself described the creative process for this picture and the unpredictable outcome that:

[a]fter a week I still wasn't sure I had gotten the image I wanted of the catch. I had seen it several times, which was special enough, but it all happened so fast and there were so many variables, that I couldn't be sure if I had reacted quickly enough to capture it on film. I wouldn't know for certain until I saw the processed film weeks later.³⁹³

Many authors planned their work purposively, only in retrospect. Similarly, Eisenstaedt anticipated the picture he was looking for,³⁹⁴ and Mangelsen allegedly "previsualized" the situation.³⁹⁵

Randomness and serendipity are often important elements in the creation of works. This is not a problem for the registration and protection of traditional works, but becomes an obstacle for the registration and protection of AI-generated

³⁹⁰ Devin Coldewey, *Camera That Shot Famed 'V-J Day Kiss' Photo up for Auction*, NBC NEWS, (Apr. 22, 2013, 5:36 PM), <https://www.nbcnews.com/tech/gadgets/camera-shot-famed-v-j-day-kiss-photo-auction-flna6c9548163> [<https://perma.cc/B3GL-DLS9>]. See generally LAWRENCE VERRIA & GEORGE GALDORISI, *THE KISSING SAILOR, THE MYSTERY BEHIND THE PHOTO THAT ENDED WORLD WAR II* 1–5 (2012) (Eisenstaedt described the combination of instinctive anticipation, aesthetic appraisal, and photographic skills).

³⁹¹ Thomas Mangelsen, *Catch of the Day Legacy Reserve* (photograph), in MANGELSEN, <https://www.mangelsen.com/catch-of-the-day-legacy-reserve-collection-1698lr.html> [<https://perma.cc/P4BK-322E>] (last visited Nov. 9, 2024).

³⁹² *Id.*

³⁹³ *Id.*

³⁹⁴ See Coldewey, *supra* note 390. See generally VERRIA & GALDORISI, *supra* note 390.

³⁹⁵ Mangelsen, *supra* note 391.

products. This is also ironic, since one can argue that humans are less predictable than AI. In other words, the author is not allowed to play dice, but she does.³⁹⁶

D. Inalienable Bond Between Author and Work

In countries with an author's rights system, the notion that there is an inalienable bond between the author and his or her work has led to the protection of moral rights.³⁹⁷ The concept has hardly caught on in countries with a copyright system, such as the U.S. The Berne Convention instructs the members of the Berne Union to implement at least the right of attribution or integrity.³⁹⁸ The U.S. is a member of the Berne Convention, but has hardly incorporated any explicit moral rights, except for the Visual Artists Rights Act (VARA).³⁹⁹ Instead, the Office believes that the U.S. already complies to obligations of the Berne Convention by implementing a patchwork of measures as stand-in for formal moral rights.⁴⁰⁰

According to the "platonic" view, the author's mind instructs his own hands to create the work. In this view one's own manual dexterity is imperative. This view might be too simplistic. According to Mr. Allen he used at least 624 iterations of prompts that lead to the almost finished product of "Spatial."⁴⁰¹ This process is arguably comparable to an iterative process of giving a painter several instructions at a time, until the result is what the instructor had in mind. The principle of a direct

³⁹⁶ Inspired by Albert Einstein's famous saying "Der Herrgott würfelt nicht" (God does not play dice). It seems Einstein expresses people's innate preference that reality should be deterministic and predictable, instead of probabilistic and sometimes random. In a letter Einstein gave his reaction to the part of Nature described by Quantum Mechanics to physicist Max Born on December 4, 1926. He actually wrote, "[t]he theory says a lot, but does not really bring us any closer to the secret of the 'old one.' I, at any rate, am convinced that *He is not playing at dice.*" MAX BORN & ALBERT EINSTEIN, *THE BORN-EINSTEIN LETTERS: FRIENDSHIP, POLITICS AND PHYSICS IN UNCERTAIN TIMES* 88 (Irene Born trans., 2005).

³⁹⁷ Cyrill P. Rigamonti, *The Conceptual Transformation of Moral Rights*, 55 AM. J. COMPAR. L. 67, 73 (2007).

³⁹⁸ See Berne Convention, *supra* note 79, art. 6bis.

³⁹⁹ 17 U.S.C. § 106A. See also Note, *Visual Artists' Rights in a Digital Age*, 107 HARV. L. REV. 1977, 1985 (1994).

⁴⁰⁰ See U.S. COPYRIGHT OFF., *AUTHORS, ATTRIBUTION, AND INTEGRITY: EXAMINING MORAL RIGHTS IN THE UNITED STATES, A REPORT OF THE REGISTER OF COPYRIGHTS* 5 (2019), <https://www.copyright.gov/policy/moralrights/full-report.pdf> [<https://perma.cc/99HX-SG47>]. See, e.g., Georg H. C. Bodenhausen, *United States Copyright Protection and the Berne Convention*, 13 BULL. COPYRIGHT SOC'Y U.S.A. 215, 221 (1966). Ralph S. Brown, *Adherence to the Berne Copyright Convention: The Moral Rights Issue*, 35 J. COPYRIGHT SOC'Y U.S.A. 196, 204 (1988). Justin Hughes, *American Moral Rights and Fixing the Dastar 'Gap'*, 3 UTAH L. REV. 659, 664–77 (2007).

⁴⁰¹ "Spatial," *supra* note 132, at 2, 6.

connection between the author and the work was already belied by painters such as Pieter de Bruegel the younger (1564–1638),⁴⁰² Peter Paul Rubens (1577–1640)⁴⁰³ and Rembrandt Harmenszoon van Rijn (1606–1669),⁴⁰⁴ who all founded schools of painting and kept flourishing studios where talented pupils were learning from precise instructions to paint in the style of the master, and sometimes developed specializations, for example in painting hands, so that the labor could be efficiently divided.

“[A]lthough studio works might be attributed to the master for purposes of artistic authenticity, the attribution of copyright authorship would depend on the degree of oversight that the master was exercising over the apprentices in the workshop.”⁴⁰⁵

John Smith, art historian and writer, argued that if the brilliance of these eminent painters would only be vested in manual dexterity, then it could be easily imitated. Instead, Smith claimed that:

[B]eauties which emanate from a higher source, such as expression, delicacy of gradation, and harmony of tints, they are then beyond the reach of all who are inferior to the master himself. . . .⁴⁰⁶

Although Napoleon Sarony, the master-photographer who was the respondent in *Burrow-Giles* staged the picture of Oscar Wilde by “selecting and arranging” the many elements necessary for the photograph,⁴⁰⁷ his chief operator seems to have

⁴⁰² Between 1559 and 1563, Bruegel the Elder, was working alone and without workshop participation. MARGARET A. SULLIVAN, BRUEGEL AND THE CREATIVE PROCESS, 1559–1563 15 (2010). Bruegel the Younger, together with his workshop, produced a number of copies of his father’s paintings, including one of the Proverbs painting of 1559. *Id.* at 33, 38.

⁴⁰³ *Collaborators of Rubens*, RUBENS EXPERTS, <https://www.rubensexerts.com/rubens-assistants.php> [<https://perma.cc/LX8Y-73JQ>] (last visited Nov. 9, 2024).

⁴⁰⁴ Arthur K. Wheelock Jr., *Issues of Attribution in the Rembrandt Workshop*, NAT’L GALLERY OF ART (2014), <https://www.nga.gov/research/online-editions/17th-century-dutch-paintings/essay-issues-attribution-rembrandt.html> [<https://perma.cc/RA67-W55C>] (last visited Nov. 9, 2024).

⁴⁰⁵ Burk, *supra* note 372, at 305. Of course, one needs to realize that pre-1710 (Statute of Anne), there was no formal copyright law.

⁴⁰⁶ JOHN SMITH, A CATALOGUE RAISONNÉ OF THE MOST EMINENT DUTCH, FLEMISH, AND FRENCH PAINTERS 244 (1836), <https://digi.ub.uni-heidelberg.de/diglit/smith1836bd7/0314/image,info> [<https://perma.cc/BC95-TYJ3>].

⁴⁰⁷ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884).

been Benjamin Richardson who took the actual photographs.⁴⁰⁸ In contemporary art, figures like Andy Warhol in the past, and Jeff Koons today, are known for producing few, if any, of their artworks directly and physically on their own. Warhol relied on assistants in his atelier called “The Factory” to mass produce prints on different sizes and formats.⁴⁰⁹ Also Koons’ coterie relies on expert artisans in his workshop space whom he gives meticulous instructions.⁴¹⁰ “Koons sees himself comparable to a fashion designer, who creates an idea, then employs other individuals to make the product.”⁴¹¹ Koons has fifty employees on the payroll,⁴¹² who prepare works for him and he automatically becomes the author of all these works made for hire.⁴¹³ In *Lindsay*, Alexander Lindsay did not himself film the underwater wreck of the Titanic, but precisely planned and directed the film, which was sufficient to make him the author, especially since the film duplicated Lindsay’s conceptions.⁴¹⁴ Nevertheless, the Supreme Court has stated that “[a]s a general rule, the 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.”⁴¹⁵ Authorship is generally a factual question for juries to decide in copyright actions.⁴¹⁶

⁴⁰⁸ Farley, *supra* note 60, at 434–35. ROBERT HIRSCH, *SEIZING THE LIGHT: A SOCIAL & AESTHETIC HISTORY OF PHOTOGRAPHY* 88 (3d ed. 2017).

⁴⁰⁹ Rebecca Marsham, *A Short Guide To Andy Warhol’s Factory*, MY ART BROKER, <https://www.myartbroker.com/artist-andy-warhol/guides/5-things-to-know-about-warhols-factory> [<https://perma.cc/MW6Z-CQ3P>] (last updated Oct. 18, 2023).

⁴¹⁰ Rosie Lesso, *How Does Jeff Koons Make His Art?*, THE COLLECTOR (Aug. 31, 2022), <https://www.thecollector.com/how-does-jeff-koons-make-his-art/> [<https://perma.cc/H7A2-YA4J>].

⁴¹¹ Madeleine Conlin, *Give and Take: On Jeff Koons Mastering Contractual and Statutory Relationships with Other Artists*, *CTR. FOR ART L.* (July 7, 2017), <https://itsartlaw.org/2017/07/07/give-and-take-on-jeff-koons-mastering-contractual-and-statutory-relationships-with-other-artists/> [<https://perma.cc/EL3P-DB6Y>].

⁴¹² *Jeff Koons, LLC Information*, ROCKETREACH, <https://rocketreach.co/jeff-koons-llc-profile-b47cc4c1fc4f91cc> [<https://perma.cc/NBZ9-J6HE>] (last visited Nov. 9, 2024).

⁴¹³ *Compare* 17 U.S.C. § 201(b) with the conditions stated in *Cnty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 750–51 (1989).

⁴¹⁴ *Lindsay v. Wrecked & Abandoned Vessel R.M.S. Titanic*, 52 U.S.P.Q.2d 1609, 1613 (S.D.N.Y. 1999).

⁴¹⁵ *Cnty. for Creative Non-Violence*, 490 U.S. at 737. *But see* Timothy J. McFarlin, *A Copyright Ignored: Mark Twain, Mary Ann Cord, and the Meaning of Authorship*, 69 J. COPYRIGHT SOC’Y U.S.A. 421, 423, 431 (an orally expressed work of authorship can be protected under state-law copyright; the perpetual nature of common-law copyright might still be existing today).

⁴¹⁶ *Andrien v. S. Ocean Cnty. Chamber of Com.*, 927 F.2d 132, 134 (3d Cir. 1991).

In *Andrien*, the plaintiff's direction of a printing company's employee, Carolyn Haines, in compiling preexisting maps, street names, and other information into a map of Long Beach Island rendered him at least an author of the compilation (and possibly a joint author).⁴¹⁷ Ms. Haines acted as his amanuensis just as does a stenographer in typing material dictated by another person.⁴¹⁸ The "platonic" ideal is diluted in *Andrien*.⁴¹⁹

In contrast to the Office, the Beijing Internet Court acknowledged that users of Stable Diffusion do not draw lines or apply color, but only provide textual descriptions that can present human creativity and conception in a tangible form.

There are many examples of indirect or partial connections between authors and works: from works for hire to joint works,⁴²⁰ that are eligible for copyright registration and protection. It is interesting to see that this is now a factor being regarded as a barrier for copyright registration and protection.

E. Expressions of Ideas

Ideas, abstractions, or concepts cannot be protected under copyright law, and only expressions of ideas are eligible for copyright protection.⁴²¹ One can argue that the idea is the mother of all expressions of that idea, and therefore it should be free to be used by every new author to provide his or her own idiosyncratic expression of that idea. For example, in *Kalpakian*, the Ninth Circuit held that a jeweled bee pin is an idea that defendants were free to copy and provide their own expression of this idea.⁴²²

The nineteenth-century Dutch author Herman Gorter argued that art "must be the most individual expression of the most individual emotion."⁴²³ One can argue

⁴¹⁷ *Id.* at 135–36.

⁴¹⁸ *Id.* Ginsburg and Budiardjo describe gAI as a tool, which has an "amanuensis" function. See Jane C. Ginsburg & Luke A. Budiardjo, *Authors and Machines*, 34 BERKELEY TECH. L.J. 343, 412 (2019).

⁴¹⁹ *Andrien*, 927 F.2d at 135 ("These writers are entitled to copyright protection even if they do not perform with their own hands the mechanical tasks of putting the material into the form distributed to the public.").

⁴²⁰ See 17 U.S.C. § 201(a).

⁴²¹ 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.").

⁴²² *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir. 1971).

⁴²³ Herman Gorter was a representative of the Dutch literary Movement of the Eighties (1880–1894). Herman Gorter, *Verzen Amsterdam, 1890*, in NIEUWERE LITERATUUR-GESCHIEDENIS 161 (Willem Kloos

that the “platonic” ideal of a copyrighted work should fulfil this condition as well. Interestingly, Article 2.1 of the Korean Copyright Act explicitly refers to emotions in the definition of a copyrighted work: “The term ‘work’ means a creative production that expresses human thoughts and emotions.”⁴²⁴ The stereotypical Romantic notion is that a genuine artist must experience the same emotion as the artwork is expressing during the creation process. In contrast, Richard Wollheim’s theory explains that an author can project sadness in his work without feeling sadness.⁴²⁵ In this way, there is still some connection between the artist’s own emotional state and the emotion conveyed in the artwork.

The distinction between ideas and expression of ideas, becomes very germane in the discussion about whether prompts can convey expressive works. The argument by the Office that one or more instructions are merely ideas is too simplistic. If a user of gAI provides a series of increasingly fine-grained instructions, there comes a point when the instructions are no longer ideas, but expressions of ideas. An analogy of the relation between prompt engineer and gAI is like witness and forensic sketch artist. Sometimes, it becomes less than intuitive to determine who the author of the expressive work is. The forensic sketch artist will draft a suspect after reiterative directions of the witness. The witness provides ever more precise descriptions. With these additions, deletions, and modifications, a profile is drafted of the suspect. When Koons has an idea, he will find an artisan to give form to it. After every version of the work, Koons provides meticulous directions. Again, the question is, at what moment does Koon’s concept become Koon’s expression? If the idea is sufficiently fine-grained, it ceases to be merely ideational, but becomes expressive.

Despite the welcoming attitude of the Beijing Internet Court regarding the copyright eligibility of the AI-generated image “Spring,” the Court held that the analogy of a commissioned artist and client is incorrect.⁴²⁶ It held that the

ed., 1925) (“In ‘t algemeen slechts kan men weten, dat kunst de aller-individueelste expressie van de aller-individueelste emotie moet zijn.”), https://www.dbnl.org/tekst/kloo003veer02_01/kloo003veer02_01_0016.php [<https://perma.cc/8USJ-JNBQ>].

⁴²⁴ Copyright Act, art. 2 para. 1 (S. Kor.), *translated in* Korean Legislation Research Institute’s online database, https://elaw.klri.re.kr/eng_service/lawView.do?hseq=42726&lang=ENG [<https://perma.cc/NS38-2VRN>].

⁴²⁵ See RICHARD WOLLHEIM, *ART AND ITS OBJECTS* 67 (2d ed. 1980).

⁴²⁶ “Spring,” *supra* note 217, at 15.

commissioned artist has their own will and integrates their choices and judgments into the painting; and by contrast, current gAI models do not possess a free will.⁴²⁷ This demonstrates that the Beijing Internet Court is also under the influence of the “platonic” view on copyright eligibility.

In the “Entrance” case, there was no expression of Mr. Thaler.⁴²⁸ In the case of “SURYAST,” the Board found that the expressive elements of pictorial authorship were not provided by Mr. Sahni:⁴²⁹ specifically, it held that the color and position of the elements in the image were generated by RAGHAV, the gAI.

In the case of “Zarya,” the Office held that Ms. Kashtanova’s prompts functioned closer to suggestions than orders. Also, Mr. Allen’s prompts were held to be too indirect for the award-winning result “Spatial,” that was generated predominantly by Midjourney.⁴³⁰ Moreover, Mr. Allen’s input was inextricably merged with the input from Midjourney.⁴³¹ The Office was not convinced that these prompt engineers sufficiently guided the structure and content of their respective images, even though one can argue that the feedback loop significantly enhanced the relevance and quality of the generated images.

One can argue that “Zarya,” “Spatial,” and “Spring” are comparable in their genesis. Ms. Kashtanova asserted that she used hundreds or thousands of prompts in Midjourney;⁴³² Mr. Allen contended that he used at least 624 iterations of prompts in Midjourney;⁴³³ while Mr. Li used twenty positive and 120 negative prompts in Stable Diffusion.⁴³⁴ Their respective human interventions were different in degree, not in kind. Surprisingly, the opposite determinations of the Office and the Beijing Internet Court used the same “platonic” reasoning. Only in the Chinese case of “Spring,” the Beijing Internet Court held that Mr. Li’s reiterative input was sufficient human intervention, meeting their standard

⁴²⁷ *Id.* The certainty with which the Beijing Internet Court claims that humans have free will is remarkable. *Contra* SPINOZA, *supra* note 382; SAPOLSKY, *supra* note 382.

⁴²⁸ “Entrance,” *supra* note 129, at 5 (“[T]he courts have been consistent in finding that non-human expression is ineligible for copyright protection.”).

⁴²⁹ “SURYAST,” *supra* note 133, at 7.

⁴³⁰ “Spatial,” *supra* note 132, at 7.

⁴³¹ *Id.*

⁴³² “Zarya,” *supra* note 131, at 9.

⁴³³ “Spatial,” *supra* note 132, at 2.

⁴³⁴ *See supra* notes 253–54.

of intellectual achievement, and originality, demonstrating sufficient human creativity.⁴³⁵

WHAT IS GOOD IS FORM-GIVING. WHAT IS BAD IS FORM. FORM IS THE END, DEATH. FORM-GIVING IS MOVEMENT, ACTION. FORM-GIVING IS LIFE.

— 2 PAUL KLEE, *NOTEBOOKS: THE NATURE OF NATURE* 269 (Jürg Spiller ed., Heinz Norden trans., George Wittenborn 1973).

Repeating a prompt leads to slightly different outcomes. This instability of outcomes is anathema to the “platonic” view of *ex ante* conception. When one envisions the end product, the “platonic” ideal suggests that one should replicate the envisioned creative steps precisely to achieve that identical end result. This high standard is not applied to traditional works: A modern painter might have a very coarse sense of what he wants to create and by serendipitous techniques such as throwing paint to the canvas, he is making use of certain patterns he finds pleasing. In other words, this process can be repeated, but will lead to different outcomes, just as text-to-image gAI services. The argument that copyright doctrine dictates the standard that the outcome of prompts should be stable is untenable. What one can say, however, is that the prompt engineer, after a series of iterative prompts, is satisfied with the outcome.⁴³⁶

CONCLUSION

This paper points out that the U.S. Copyright Office, the District Courts, and the Beijing Internet Court all use a higher standard of copyright eligibility for AI-generated images, which this author calls a “platonic” standard, than for traditional expressive works, where it uses a humanistic standard. It is inimical to copyright law to apply a different standard on “pictorial, graphical, and sculptural works,”⁴³⁷ because they came into being via generation and not creation. Instead of pretending to apply the same standard for both AI-generated content and traditional expressive

⁴³⁵ “Spring,” *supra* note 217.

⁴³⁶ In the movie *Pollock* (2000) a Life Magazine reporter asked Jackson Pollock: “How do you know when you’re finished with a painting?” Pollock: “How do you know when you’re finished with making love?” *POLLOCK* (Sony Pictures Classics 2000).

⁴³⁷ 17 U.S.C. § 102(a)(5).

works, this author holds that it is justified to provide preferential treatment to human-authored creations over AI-generated products to promote the continued flourishing of human creativity, avert the dilution of human culture, and at the same time allow innovation in AI (especially regarding to science) to thrive.⁴³⁸

This author proposes a moratorium for the protection of AI-generated products until we start making the distinction between creation and generation.

The Office should make available registered works and the metadata of their authors as training data to AI service providers, so that they can license the use of the copyrighted works to train the LLMs. In turn, the AI service providers should make a database accessible to the Office with the products that were generated via their AI services, so that the Office is able to compare the generated products with the works that applicants of copyright registration have submitted.

Once a distinction between creation and generation can be made, two standards need to be applied. The existing humanistic standard for creation; and a new standard for AI-assisted content.

This author recommends the following two methods to provide preferential treatment to human authors:

First, in contrast to the protection of human authors which are eligible for a copyright duration term of seventy years after the death of the author in the U.S., or 50 years after the death of the author in China, a *sui generis* regime for AI-assisted products should be considered, applying the same originality standard as clarified in *Feist*,⁴³⁹ but providing a much shorter duration—for example 5 years in total (independent of the life of the author)—in proportion to the efficient and expedient way of generation. This would enable the products to ascend into the public domain relatively quickly. Another way is to provide only “thin” protection, which means that infringement claims would be more challenging to prove because the copyright only covers the exact expression of the work.⁴⁴⁰ This is important, since it would help counter copyright trolls who could massively churn out gradual

⁴³⁸ See Friedmann, *supra* note 10, at 1.

⁴³⁹ *Feist Publ'ns, Inc. v. Rural Tele. Serv. Co.*, 499 U.S. 340, 345 (1991).

⁴⁴⁰ See *Satava v. Lowry*, 323 F.3d 805, 812 (9th Cir. 2003).

variations of AI-generated material to start suing succeeding users of gAI,⁴⁴¹ if no legal change is made. Users of gAI who would like to be eligible for such a *sui generis* protection would need to provide metadata to the database of the Office. This is indeed a formality, which is a non-issue since the *sui generis* system does not have to comply with the Berne Convention.

A *sui generis* system could only work if the human intervention can be quantified. The burden of proof is with the user of gAI. But the gAI services have a responsibility too: to add indelible watermark, cryptography, and metadata, and to make their database accessible to the Office, so that the latter can compare the applicant's work with the AI-generated product, to measure his or her human input. In absence of the transparency on the ratio between creation and generation, there should be a moratorium on the protection of AI-generated products.

Second, legislators and policy makers could be inspired by the government of Quebec, which has implemented a regulatory framework that ensures that French will remain the dominant language in the Province. Analogous to the “Bill 96, An Act to respect French the official and common language of Québec,”⁴⁴² regulatory measures could be taken to promote the creation of human-authored works and avert the dilution of human culture. One could think of incentives and support to human-authored journalism and cultural sector activities; examples include tax benefits, grants, benchmarks, and funding opportunities for human authors, as well as limitations for AI-assisted products.

In the end, creation is finite, just as authors are finite. Therefore, it should be acknowledged as more valuable than generation.

⁴⁴¹ See Matt Binder, *New Algorithm Generates Every Possible Melody to Curb Copyright Lawsuits*, MASHABLE (Mar. 1, 2020), https://mashable.com/article/music-melody-algorithm-midi-copyright?test_uid=01iI2GpryXngy77uIpA3Y4B&test_variant=a [<https://perma.cc/4ZB7-2432>] (Binder points out a potential example of copyright bullying in music using gAI).

⁴⁴² An Act Respecting French, the Official and Common Language of Québec, S.Q. 2022, c 14 (Can.), https://www.publicationsduquebec.gouv.qc.ca/fileadmin/Fichiers_client/lois_et_reglements/LoisAnnuelles/en/2022/2022C14A.PDF [<https://perma.cc/FN4V-NWKP>].