

## Comments on Artificial Intelligence Study

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The U.S. Copyright Office (the “Office”) has clarified its stance on copyright registration for AI-generated content (“AIGC”) in the public letters addressing three artworks (i.e., *Zarya Of The Dawn*, *Théâtre D’opéra Spatial*, and *A Recent Entrance to Paradise*) and the Copyright Registration Guidance on Works Containing Material Generated by Artificial Intelligence (Copyright Registration Guidance). What troubles most users of artificial intelligence (“AI”) systems is that merely inputting prompts to obtain AIGC results in material that is deemed uncopyrightable. The core issue lies in the fact that the copyright regime is crafted solely to safeguard the works of human authors. As an intellectual property scholar, I aim to distill the standards applied by the Office concerning AIGC and its grasp of AI technologies. Subsequently, I pose legal questions for the Office and legislators to ponder, urging adjustments of the copyright regime for the increasing utilization of AI systems.

- Standards on Authorizing Copyrights for AIGC

The Office does not outright reject any AIGC but explicitly refuses AIGC under two circumstances. First, the author or a co-author of the work is named under an AI system. Second, the work is generated by an individual only providing text prompts to an AI system. The criteria outlined in the Copyright Registration Guidance align with these two circumstances.

The rejection in the former case is straightforward, grounded in the principle that only humans can be recognized as authors of copyrights, as mandated by the human authorship requirement in the Copyright Act, rooted in the Constitution. The rejection in the latter case is more intricate, addressing both originality and the human authorship requirement in the Copyright Act. Specifically, AIGC lacks originality if human contributions during AI’s generating are limited

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to providing text prompts.

The Office categorizes AI technologies based on their technical features before addressing rejections in the second circumstance. Some technologies are labeled AI but do not introduce new original elements into the produced image, such as Gigapixel AI deployed by Allen to upscale the work for resolution.<sup>1</sup> These technologies may contribute *de minis* to creation. In contrast, Midjourney enables users to produce images by providing text prompts. The Office explains that such an AI system functions similarly to a search engine, interpreting prompts as suggestions rather than orders or instructions.<sup>2</sup> Therefore, when using an AI system like Midjourney, the prompter behaves more like searching rather than instructing, with no control over the image generation process.

As a result, AIGC produced by merely inputting prompts qualifies as neither human authorship nor the prong of independent creation in the originality requirement. Due to the lack of control, it is not a valid argument that AIGC is consistent with the prompter's creative vision.<sup>3</sup> Moreover, it is not a justifiable argument that the user has invested in time and effort to search.<sup>4</sup> Furthermore, the argument of "work for hire" is not valid because the recipient of the prompts is a machine rather than a human artist.<sup>5</sup>

- Questions for the Office to Rethink

Given the expressions in the copyright guidance for AIGC and the rejection letters issued by the Office to copyright applicants attempting to register works containing AIGC, several questions merit the Office's consideration.

First, could fixation serve as an additional reason to reject copyrights for AIGC? The full statutory language regarding originality and human authorship is "original works of authorship fixed in any tangible medium of expression."<sup>6</sup> Nevertheless, the fixation requirement has not been explicitly addressed. Users of ChatGPT, for example, often encounter different outputs with the

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<sup>1</sup> Letter from U.S. Copyright Office to Tamara Pester 2&5 (Sept. 5, 2022).

<sup>2</sup> Letter from U.S. Copyright Office to Kristina Kashtanova 8 (Feb. 21, 2023); Letter from U.S. Copyright Office to Tamara Pester 6-7 (Sept. 5, 2022).

<sup>3</sup> Letter from Van Lindberg to U.S. Copyright Office 7 (Nov. 21, 2022).

<sup>4</sup> Letter from U.S. Copyright Office to Kristina Kashtanova 8 (Feb. 21, 2023).

<sup>5</sup> *Id.*

<sup>6</sup> 17 U.S.C. §102(a).

same prompts due to the “temperature” parameter, which “controls how creative or unpredictable the generation of words.”<sup>7</sup> It is even more widespread for users of different AI systems to acquire irrelevant output after inputting the same text prompts because the AI systems are designed and trained with different algorithms, data, and features and offer different customization options and accessibility.<sup>8</sup> If the AIGC entirely controlled by the prompter but unpredictable, it may not be reasonable to argue the establishment of fixation for AIGC when the prompts are written and fixed.

Second, how would legal utilitarian theories be applied to authorize copyrights for AIGC? The Office has not fully embraced the value of applying *Satava v. Lowry*.<sup>9</sup> “[The ideas], first expressed by nature, are the common heritage of humankind, and no artist may use copyright law to prevent others from depicting them.”<sup>10</sup> In the context of using an AI system in creation, ideas obtained from the system should be open to all users. The reason is that these ideas are not created by text prompts but rather searched by the prompts. The user who first searches out some ideas should not prevent other users from discovering the ideas in creative ways. The Office, while recognizing how Midjourney functions as a search engine, has not refused to protect AIGC for the public’s use of AI systems.<sup>11</sup> While *Satava* was cited when the Office rejected Allen, the Office did not recognize its value for the public interest.<sup>12</sup> The guidance also does not address this aspect.

The Office has also not fully embraced the value of applying *Bleistein v. Donaldson Lithographing Co.*<sup>13</sup> In *Bleistein*, Justice Holmes, viewed as the pioneer of legal utilitarianism and pragmatism,<sup>14</sup> argued that copyrightability should be based on the author’s contributions or personality rather than the purpose or public perception of the work.<sup>15</sup> What would Holmes say today?

Third, how much emphasis should the Office place on whether AIGC results from

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<sup>7</sup> \_j, *Different output generated for same prompt in chat mode and API mode using gpt-3.5-turbo*, OPENAI (Aug. 8, 2023), <https://community.openai.com/t/different-output-generated-for-same-prompt-in-chat-mode-and-api-mode-using-gpt-3-5-turbo/318246>.

<sup>8</sup> See e.g., Jim Clyde Monge, *Dall-E2 VS Stable Diffusion: Same Prompt, Different Results*, MEDIUM (Aug. 25, 2022), <https://medium.com/mllearning-ai/dall-e2-vs-stable-diffusion-same-prompt-different-results-e795c84adc56>; *MidJourney vs Stable Diffusion: Same Prompt, Different Results*, DIGIALPS, <https://digialps.com/midjourney-vs-stable-diffusion-same-prompt-different-results/> (last visited in Dec. 3, 2023); Jim Clyde Monge, *Dall-E2 vs MidJourney — Same Prompt, Different Results*, MEDIUM (June 22, 2022), <https://medium.com/codex/dall-e2-vs-midjourney-same-prompt-different-results-bf64cb66d90b>.

<sup>9</sup> 323 F.3d 805 (9th Cir. 2003).

<sup>10</sup> *Id.* at 812.

<sup>11</sup> Letter from U.S. Copyright Office to Kristina Kashtanova 10 (Feb. 21, 2023).

<sup>12</sup> Letter from U.S. Copyright Office to Ryan Abbott 5 (Feb. 14, 2022).

<sup>13</sup> 188 U.S., at 239.

<sup>14</sup> See generally Thomas C. Grey, *Holmes and Legal Pragmatism*, 41 STAN. L. REV. 787 (1989).

<sup>15</sup> *Id.* at 250-52.

mechanical reproduction? It has been a core issue determined by the Offices in past decisions when applying *Burrow-Giles Lithographic Co.*<sup>16</sup> However, this may not be a technical question but sometimes be more of a normative one so as to be datable for a long term and need to be responded by the U.S. Supreme Court. In a recent case decided by the Beijing Internet Court in China, the court believed that the material on the dispute generated by an AI system based on the prompts provided by an individual is not a mechanical reproduction but presents the prompter's creativity and authorized copyright for the material.<sup>17</sup> Compared to this issue, a more important issue for the Office should be whether the human author's contributions results from the reproduction of the AIGC that is produced only under his or her use of prompts.

The Office needs reflect on these questions. If explicitly prohibiting AICG that is solely produced by prompts from copyright protection, the copyright regime should acknowledge and credit prompters for their creative inputs. It is essential for the copyright regime to update the statutory language to formally embrace AI technologies, just like the formation of National Commission on New Technological Uses of Copyrighted Works to adjust to computing technologies in the 1970s.<sup>18</sup>

In addition, the Office could consider constructing an alert list of AI technologies to guide authors and artists. AI technologies that allow users to generate material solely through text prompts should be included in the list. Users of such technologies should explicitly exclude the material generated by the technologies in their copyright registration filings. As AI technologies develop advance, the Office can continuously monitor and update the list accordingly.

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<sup>16</sup> *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884).

<sup>17</sup> *See Li v. Liu*, ( Beijing Internet Ct. Nov. 27, 2023) (China).

<sup>18</sup> National Commission on New Technological Uses of Copyrighted Works, Pub. L. 93-573, § 201(b)(2), 88 Stat. 1873, 1873 (1974).