NOT ALL WORKS ARE CREATED EQUALLY:

An Examination of the Entanglement between Copyright and Artificial Intelligence

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I. Introduction.

"Copyright registration" is a legal concept that preexists the United States of America. *See generally* WILLIAM F. PATRY, PATRY ON COPYRIGHT, § 1:1 (Thomson West ed., 2007). In the centuries since its creation, the foundational principles of copyright law remain largely unchanged. However, a new challenge has appeared in the form of the proliferation of the artificial intelligence. The purpose of this paper is to examine the effect of artificial intelligence on copyright law, how it has been addressed to this point, and how it could develop further. We will begin with a brief overview of the fundamentals of copyright law, then examine the ways that artificial intelligence affects the principles of copyright law, and finally we will review recent jurisprudence on the subject to understand how the courts have reconciled the classical legal principles of copyright with the contemporary problem of artificial intelligence.

II. The Fundamentals of Copyright Law.

In the simplest terms, a copyright is the legal mechanism that grants a creator exclusive rights over certain types of creations. *See* Fourth Est. Pub. Benefit Corp. v. Wall-Street.com, LLC, 586 U.S. 296, 300-01 (2019). Copyright law often refers to the creator as the "author," which is used generally rather than in the literary sense. The creation is typically described as the "work" or "work of authorship." There are three requirements to obtain a copyright: the subject must be a "work of authorship," it must be "original," and it must be "fixed in any tangible medium of expression." 17 U.S.C. § 102(a).

One of the first questions related to a copyright issue is whether the "work" is eligible for a copyright. The Copyright Act includes a list of works that can be copyrighted including, but not limited to, works of literature, music, photos, movies, and more. 17 U.S.C. § 102. This list is not exhaustive, rather it illustrates that a broad range of works can be eligible for copyright. However, only those works that are "original" to the author can be copyrighted. 17 U.S.C. § 102(a). While it may be tempting to assess "originality" through the lens of aesthetic merit or novelty, such judgments are largely irrelevant to copyright law. In judging the originality required to be eligible for copyright, the question is whether the author has added something original to the expression. Kamar Int'l., Inc. v. Russ Berrie

and Co., 657 F.2d 1059, 1061 (9th Cir. 1981). The Supreme Court has clarified that originality exists where the author exerts independent effort (meaning they did not merely copy all or most of the content from some other work) and a minimum of creativity (meaning they made some creative decision that impacted the work). Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 358-59 (1991). While this inquiry is inexact, it is unquestionable that there must be some "creative spark" injected by the author for the work to be copyrightable. *Id*.

Assuming the work is original and capable of being copyrighted, the next question is whether the work was "fixed in any tangible medium of expression." A work meets this requirement if there is essentially "any physical rendering [of the work.]" Goldstein v. California, 412 U.S. 546, 561 (1973). For instance, the recording of a phone call at the same time it was transmitted was found to meet the "fixation" requirement. Swatch Grp. Mgmt. Serv.s Ltd. v. Bloomberg L.P., 808 F. Supp. 2d 634, 637 (S.D.N.Y. 2011). In contrast, an individual who authored the music and lyrics to a song, but ultimately did not record the song could not obtain copyright protection for the song itself. Wilson v. Kelly, 2021 WL 4242363, *3 (N.D. Ga. 2021). The only element that was "fixed" were the lyrics which he wrote down. *Id*. As a result, the author had a valid copyright claim to the lyrics, but no other aspect of the song because the additional elements had been "fixed" as required by the statute. *Id*.

There are a number of limitations on copyright protection, but the most prominent is the "idea-expression dichotomy." At the heart of this issue is the language of the Copyright Act which explicitly bars copyright protection for 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." 17 U.S.C. § 102(b). This language draws a line between the elements of a work that *can* be copyrighted and those that *cannot*. Effectively, this language ensures that the expression of the idea is eligible for copyright protection. For example, an original work that describes a system of bookkeeping was held to be copyrightable because it is a unique expression of that

system. *See* Baker v. Selden, 101 U.S. 99, 25 L. Ed. 841 (1879). However, the idea-expression dichotomy prevents a copyright from being obtained for the underlying idea. In *Baker*, the description of the system was found to be an original expression, but the system itself was not eligible for copyright protection. *Id*.

While registration with the Copyright Office is an important step toward protecting one's rights, it is not necessary for a copyright to exist. As soon as a work is created and fixed in any tangible medium of expression, copyright protection attaches. Fourth Est. Pub. Benefit Corp. v. Wall-Street.com, LLC, 586 U.S. 296 (2019). This grants the author the following exclusive rights in their creation: (1) to reproduce copies and phonorecords of the work, (2) to prepare derivative works, (3) to distribute copies and phonorecords of the work to the public, (4) to perform the work publicly, and (5) to display the work publicly. 17 U.S.C. § 106(1-5). These rights are not permanent, rather they grant the holder a limited period of exclusive control. Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932). While the rights attach at creation, a copyright infringement action can only be brought if the work has been registered with the Copyright Office. *See* Pastime LLC v. Schreiber, 705 F.Supp.3d 95 (S.D.N.Y. 2017).

III. The Effect of AI on Copyright Law.

The complexity of this subject has been explored for hundreds of years, but now there is a new wrinkle. The rise of artificial intelligence has generated new lines of inquiry into the copyright process, from the determination of whether the work is copyrightable to the issue of who, if anyone, holds the rights to the work. These issues will likely inform the next hundred years of copyright law and, as a result, we will review the foundational problems that artificial intelligence presents for copyright considerations.

Artificial intelligence, or A.I., is the blanket name for a machine learning model that generates natural language responses to prompts from a human user. David E. Chamberlain, *ARTICLE - ARTIFICIAL INTELLIGENCE AND THE PRACTICE OF LAW OR CAN A COMPUTER THINK LIKE A LAWYER?*, 2016 TXCLE-BD 25 ARTICLE (2016). These programs are currently valuable for their raw computing power and ability to digest large quantities of

data, but the arc of AI bends towards the creation of programs that are capable of recognizing concepts and processing information like a human. *Id*. These technologies "train" on vast quantities of preexisting human-authored works and use inferences from that training to generate new content. Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190 (Mar. 16, 2023). As "generative" programs, AI is arguably responsible for some form of creating, but the extent of that authorship and a determination of its originality is a nuanced question, particularly with respect to copyright law.

The first copyright quandary presented by AI is whether a work is "original." As previously discussed, a copyright will not be issued if the work is a copy of preexisting material. As a pre-AI example, a company who produced digital models of a car sought copyright protection for its models but was denied because the models were held to be mere copies of the design of the car and, as a result, the work was not "sufficiently original." *See* Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc., 528 F.3d 1258 (10th Cir. 2008). This case stands for the proposition that the originality requirement is not met where a program is effectively used to digitally duplicate an existing work. AI is a machine learning program that is trained on a massive amount of data, meaning it reviews existing data, takes information from that data, and creates "new" data. It could be argued that this "new" data is really just a copy and aggregation of the underlying data on which the model was trained. The difference between AI's output and that of *Meshwerks* is that AI is not created using a single work, rather it is generated through review of an immense amount of work. It could be argued that this is analogous to the way a human might look for references before creating something. Given that the originality requirement is relatively low, requiring only a modicum of creative expression, the work created by AI could arguably be sufficiently unique and expressive to clear this hurdle. However, is it sufficient for the AI to add an element of "expression" to the final product or does a human need to be a part of that creativity?

The second copyright quandary presented by AI is the question of "authorship." The "creation" process involving an AI program is two-fold: first, a human crafts and enters a prompt, then the program reviews massive volumes of existing information and generates a response based on that data. This process implicates multiple different "authors" who could conceivably claim copyright protection. First, there is the human who is responsible for crafting the prompt. Without this prompt, the resulting creation would not exist. The wording of the prompt has a direct and considerable impact on the final product. Second, there is the AI program itself which ingests the prompt, reviews the data, and creates the finished product. If the AI program was not capable of reviewing a significant volume of data and "learning" how to replicate, enhance, or alter that data, then there would be no creation at all. While not human, the AI program's mark on the finished product is indelible. Third, there are the programmers who created the AI program. They might assert that the AI program was merely following orders that the programmers created and, in effect, they deserve some sort of credit as an author. Like with the prompt creator and the AI program itself, the programmers can argue that the final product would not have been possible without their input. Finally, there are the individual creators whose data was reviewed in the machine learning process and which formed the basis for the AI program's creation. These individuals had no intentional impact, but they can credibly claim that the final result is at least in part due to their own work(s) of authorship. These examples draw attention to the ways in which AI complicates the copyright process, requiring clarity on how to proceed through this new frontier.

While every variation of these questions has not yet been definitively addressed, the Copyright Office has issued guidance for materials that involve AI. The guidance notes the questions raised about the use of AI, such as "whether the material they produce is protected by copyright, whether works consisting of both human-authored and AI-generated material may be registered, and what information should be provided to the Office by applicants seeking to register them." Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence, 88 Fed. Reg. 16190 (Mar. 16,

2023). The most impactful aspect of the guidance comes in the affirmation that copyright registration requires "creative contribution from a human actor." *Id.* This baseline requirement stems directly from the definition of "author" which has long excluded non-humans for purposes of copyright protection. *Id.* Interestingly, this exclusion does not bar photographs from qualifying as copyrightable "works of authorship." *Id.* The Supreme Court resolved this question in 1884, holding that photographs are copyrightable provided "they are representatives of original intellectual conceptions of the author." *Id.* This guidance has only spurred AI-users to argue that the click of a button on a camera is analogous to the click of a keyboard triggering AI to create an original work.

Despite their best efforts, AI creations have not afforded the same protection as photographs. Instead, the Copyright Office has clarified that copyrightable works must "owe their origin to a human agent" and that it "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." *Id.* The line has been drawn to exclude any works where a computer, program, or other device is being used as more than an "assisting instrument." *Id.* Also excluded are those works where "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." *Id.* For works created by AI, the Copyright Office has determined that the AI itself is responsible for the "traditional elements of authorship," since it is actually reviewing, selecting, and executing the act of creation based on a prompt provided by a human. *Id.* In that way, the prompts generated by a human are seen as analogous to instructions given to a commissioned artist in that "they identify what the prompter wishes to have depicted, but the machine determines how those instructions are implemented in its output." *Id.* This guidance provides clarity that an AI creation that is the product of a human prompt is not *per se* eligible for copyright protection.

The hardline exclusion of those creations whose essential elements were authored by AI does not eliminate any use of AI in copyrightable works. *Id.* The Copyright Office notes

that AI can be used as "part of the creative process," but that the copyright will only protect the "human-authored aspects of the work, which are independent of and do not affect the copyright status of the AI generated material itself. *Id.* (internal quotations omitted). The dispositive questions remain: (1) To what extent did a human have control over the work's expression? And (2) which traditional elements of authorship were created by a human? The challenge lies in assessing the vast and varied creations which are put forth for copyright protection in light of these seemingly simple questions.

IV. Review of recent jurisprudence concerning AI and copyright.

The following are examples of works created through or with the assistance of AI and the ensuing battle over copyrightability. While some predate the guidance from the Copyright Office, the principles underlying the guidance directly apply.

A. "A Recent Entrance to Paradise" by Steven Thaler.

In 2022, Steven Thaler applied for a copyright on the above image. In his application, Mr. Thaler identified its author as the "Creativity Machine." Thaler v. Perlmutter, 687 F.

Supp. 3d 140, 143 (D.D.C. 2023). The "Creativity Machine" is described by Mr. Thaler as an AI program capable of generating original pieces of visual art. *Id.* at 142. This AI program was actually programmed by Mr. Thaler, meaning he was responsible for creating the program and creating the prompt which then generated the image at issue. *Id.* As a result of his "ownership" of the AI, Mr. Thaler asked that the Court vest copyright protection for an AI image in the AI's owner. *Id.* at 143. However, the Court rebuffed this argument, finding that the question of who should retain the rights of a copyright was only pertinent if the image was copyrightable in the first place. *Id*. at 146. Ultimately the image was held to be devoid of "human authorship." *Id.* at 145. The Court took note of the argument from Mr. Thaler that AI is analogous to a camera, but disagreed, noting that a camera generates a "mechanical reproduction" of a scene but only after the photographer develops a "mental conception" and then executes that by making decisions about where and when to take the photo. *Id.* at 146. Whatever similarities that a camera arguably shares with an AI program, this Court had no interest in entertaining the argument.

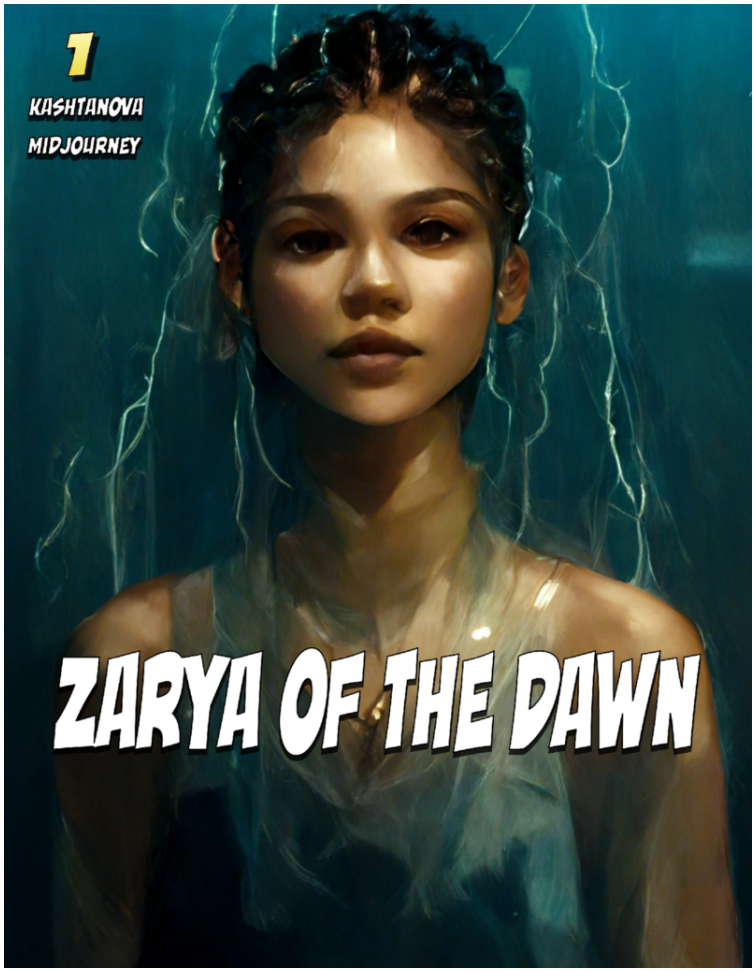
Instead, the Court reemphasized the Copyright Acts commitment to protecting works created by humans. *Id.* at 148. However, the Court had to first acknowledge that this limitation is not explicitly defined in the Copyright act. *Id.* at 147. The conclusion that an author only pertains to a human being rests on the historic and "consistent" understanding that copyright protection is intended to protect the "act of human creation." *Id.* At the same time, the Court recognizes the new frontiers of copyright protection in the age of AI and the need to parse difficult authorship questions. *Id.* at 149. This particular question was viewed by the Court as straightforward and, as a result, it affirmed the original determination that this image was not eligible for copyright protection. *Id.* at 150.

B. "Théâtre D'opéra Spatial" by Jason Allen.

Jason Allen attempted to register "Théâtre D'opéra Spatial" with the office in 2022. U.S. Copyright Off. Rev. Bd., Opinion Letter on Second Request for Reconsideration for Refusal to Register Théâtre D'opéra Spatial (SR # 1-11743923581; Correspondence ID: 1-5T5320R) (Sept. 5, 2023), at 6. The image was created using Midjourney, an AI program. *Id.* While the AI program generated the image, Mr. Allen put his own sweat into the project by generating and revising the prompt over 624 times to create the image. *Id.* Then he used a photo editing program to modify the AI-generated output. *Id.* The result is a hybrid image, created from human-generated prompts, refined repeatedly by the varying of the prompts, and ultimately edited further after initial AI image was generated. *Id.* The additional effort by Mr. Allen created an issue for the copyright office: how much authorship by a human, if any, is sufficient to create a copyrightable work that involves AI image generation? In this case, the Copyright Review Board acknowledged that Mr. Allen's modifications to the image after it was generated by the AI program could be copyrightable. *Id.* However, the

Board found that "the Work contains more than a de minimis amount of content generated by artificial intelligence ("AI"), and this content must therefore be disclaimed in an application for registration." *Id.* Effectively the Board determined that the image was still substantially the result of the AI program, not of human authorship and, as a result, Mr. Allen could only seek protection for the edits he made to the image after the fact. *Id.* Mr. Allen was unwilling to forego protection for the elements created by AI and, as a result, the Board denied the application for copyright protection. *Id.*

C. "Zarya of the Dawn"



In 2023, Kristina Kashtanova created a graphic novel called Zarya of the Dawn. U.S. Copyright Off. Rev. Bd., Opinion Letter on Zarya of the Dawn (Registration # VAu001480196) (Feb. 21, 2023), at 9. Initially, the work was granted copyright protection,

but then the Copyright Office sought more information to determine the extent that AI was used in creating the novel. *Id.* Upon review, it was determined that Ms. Kashtanova had a valid copyright claim for the work's text as well as the "selection, coordination, and arrangement of the Work's written and visual elements." *Id.* The protection did not extend to the images in the graphic novel which were generated by AI. *Id.* Much like "Théâtre D'opéra Spatial," the protection of the whole work could only apply to those elements not created by AI. *Id.* As a result, the Office cancelled the original copyright registration certificate and issued a new certificate, "covering only the expressive material that she created." *Id.* This example is indicative of the separation between the copyrightable and uncopyrightable aspects of a single work and how the courts will balance the importance of a copyright with the commitment to protecting only the elements created by humans.

V. Conclusion.

A substantial amount of time, energy, and thought has been expended on reconciling the Copyright Act with the advent of AI. Despite the hard work by the Courts and by the Copyright Office, there are few clear answers and certainly more problems on the horizon. Each decision from the Office is caveated by the understanding that future issues will complicate the copyright determination. As the technology develops and further blurs the line between human and machine creation, the basic concepts will remain unchanged: there must be a "work of authorship," it must be "original," and it must be "fixed in any tangible medium of expression." While there is plenty of ambiguity in those requirements, the Court has, for now, emphasized "expression" in the form of instructions to an AI program is not equivalent to human creation.