Is This Man Enough For You? A Proposal for a Test Weighing How Much Human Involvement in AI Generation is Necessary for Copyright Eligibility

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I. INTRODUCTION

Artificial Intelligence ("AI") generated images have become a popular subject in recent years as programmers build more functional methods of using machine learning and artificial intelligence to create original images. One popular new artificial intelligence system, DALL-E 2, has gained massive online attention. In fact, this image generating program has been incorporated into Microsoft's new AI graphic design app.¹ These machine learning models have the potential to dramatically alter the graphic design industry. Corporations may soon find it more efficient to use an AI to create a logo or graphic, rather than hiring a human graphic designer.

Another new AI that has gained significant attention and funding is ChatGPT. ChatGPT is an AI used for generating answers to simple questions, draft full essays, conduct philosophical debates, and even computer code.² The usefulness of this AI will most likely have a massive impact on almost every industry that involves writing. The ability to use this tool will be crucial productivity and efficiency for many businesses in the near future.³

This innovation has also created a novel question of law. Can an AI program be used to create an image or writing that is eligible for copyright protection? Right now, it seems like the short answer to this question is no. The Copyright Office has not been willing to grant copyright

¹ Todd Bishop, *Microsoft's new Designer app integrates OpenAI's DALL-E 2 image generator for graphic design*, GEEK WIRE (Oct. 12, 2022, 7:00 AM), https://www.geekwire.com/2022/microsofts-new-designer-graphic-designapp-integrates-openais-dall-e-2-image-generator.

² Sabrina Ortiz, *What is ChatGPT and why does it matter? Here's what you need to know* (July 21, 2023), https://www.zdnet.com/article/what-is-chatgpt-and-why-does-it-matter-heres-everything-you-need-to-know.

³ *ChatGPT and the Future of Work*, THE BROOKINGS INSTITUTE (Mar. 15, 2023), https://www.brookings.edu/events/chatgpt-and-the-future-of-work.

protection over works that have been generated purely from AI.⁴ This begs the question: How should the Copyright Office determine if there has been sufficient human involvement in the AI generation so that it can be copyright eligible?

II. BACKGROUND

AIs are becoming immensely popular online and have vast implications for many types of industries. These AIs come in many varieties and have different impacts on copyright law. The majority of the image generation services use machine learning to analyze massive databases of images to construct original images according to key words supplied by each user. These tools have the benefits of being much faster and cheaper than using a graphic designer or writer to create an original work. They also have the benefit of creating a large number of images for the user to choose from.

These image generation models—of course—have their limitations and flaws. The quality of the images can be poor and achieving the exact details a user wants can be difficult. ChatGPT is also having a variety of issues. The service has been known to generate incorrect answers and have biased output. But, these tools are in their infancy and have the potential to greatly improve. In the near future these tools will likely revolutionize countless industries. Because of this potential impact, the ability to acquire copyright protection over images and writings generated with these tools is crucial for their use and their users.

⁴ *See* Refusal to Register Copyright Letter from Shira Perlmutter, U.S. Copyright Office Review Board, to Ryan Abbott, Esq., Brown, Neri, Smith & Khan, LLP (Feb. 14, 2022).

⁵ Edward Chechique, *AI Image generators, a complete guide to this new technology*, PROTOTYPR (Jan. 10, 2022), https://blog.prototypr.io/ai-image-generator-

afa0798ee507#:~:text=How%20does%20an%20AI%20image,it%20creates%20a%20new%20image.

⁶ *Id*.

⁷ *Id*.

⁸ *Id*.

⁹ Garling Wu, 8 *Big Problems With OpenAI's ChatGPT*, MAKE USE OF (May 6, 2023), https://www.makeuseof.com/openai-chatgpt-biggest-probelms. ¹⁰ *Id.*

In the United States, "Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device," — the key phrase here, being "original works of authorship." This phrase was intentionally left vague in order to "incorporate without change the standard of originality established by the courts under the . . . [1909] copyright statute." ¹²

While this phrase is broad in its scope, courts have been firm in restricting the definition of "authorship" to just human authorship. ¹³ This year, Ryan Abbott, a programmer, attempted to copyright an imaged produced entirely by an AI program under the "work made for hire" doctrine. ¹⁴ The U.S. Copyright Office rejected his request, stating that copyright eligible material "requires human authorship." ¹⁵ The reasoning behind this decision is that copyright law does not protect works solely made by a machine or mechanical process that operates "without any creative input or intervention from a human author" because "a work must be created by a human being[.]" ¹⁶

However, recently the Copyright Office initially was willing to give copyright protection to works that have partial AI authorship.¹⁷ Kris Kashtanova was able to acquire a copyright for her AI-generated graphic novel.¹⁸ Kashtanova stated that her work was copyright eligible because it was only AI assisted, therefore a degree of human authorship was involved.¹⁹ But

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¹¹ The United States Copyright Act, 17 U.S.C. § 102.

¹² H.R. REP. NO. 94-1476, at 51 (1976).

¹³ Refusal to Register Copyright Letter from Shira Perlmutter, U.S. Copyright Office Review Board, to Ryan Abbott, Esq., Brown, Neri, Smith & Khan, LLP (Feb. 14, 2022).

¹⁴ *Id*. at 2.

¹⁵ *Id*. at 7.

¹⁶ U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 602.4(C) (3d ed. 2021)

¹⁷Kris Kashtanova (@kris.kashtanova), INSTAGRAM (Sept. 20, 2022), https://www.instagram.com/p/CivS3iiPigt.

¹⁸ *Id*.

¹⁹ *Id*.

recently, the copyright office began cancellation proceedings because of false information in her application.²⁰ It was suggested that had she disclosed to the Copyright Office that the novel was created using AI, then copyright protection could have been available for her individual contributions to the work.²¹

In another recent copyright case, a court technically did not answer whether a monkey who took a selfie could receive copyright protection, but it did hold that he (the monkey) did not have standing to sue for copyright infringement.²²

The Copyright Office has established that a purely AI-generated image will not be afforded copyright protection, but that some degree of human involvement will be sufficient to establish eligibility. In order to keep consistency in this decision-making process, there needs to be a fact specific, multi-factor test to determine when a partially AI-generated work is copyright eligible.

This process must address how much human involvement needs to occur for that person to get copyright protection over their work. This type of analysis is comparable to the analysis a court may use when determining when there is joint authorship on a work. Basing the analysis on the factors of joint authorship may be a good starting place for this test. The amount of work that is sufficient to constitute a joint author should also be sufficient to satisfy a human authorship requirement.

In determining whether each joint author has contributed sufficiently to the work to be afforded authorship, the court will consider three factors:

²⁰ Dennis Crouch, *Copyright and AI – Zarya of the Dawn*, PATENTLYO (Jan. 26, 2023), https://patentlyo.com/patent/2023/01/copyright-zarya-dawn.html.

²¹ Id.

²² See Naruto v. Slater, 888 F.3d 418 (9th Cir. 2018.)

- "each author must have made a substantial and valuable contribution to the work;"
- "each author must have intended that [his] [or] [her] contribution be
 merged into inseparable or interdependent parts of a unitary whole;" and
- 3. "each author must have contributed material to the joint work which could have been independently copyrighted."²³

Factors one and two will be helpful in establishing a test to determine sufficient involvement in the AI generation process, but factor three should be left out. This will weigh too heavily against granting copyright protection for authors who use AI. While this third factor will not be used, a similar analysis will be discussed in subfactor (iii).

a. Factor One: Substantial and Valuable Contribution

Factor one is inherently fact specific and will inevitably have some subjective judgment, but this has not stopped courts in the past from using this type of analysis. For example, in *Childress v. Taylor* the court was involved an ownership dispute on a play about the life of Jackie "Moms" Mabley.²⁴ Defendant was an actress who, after some research, suggested to the playwriter the overall idea for the play, characters and their personalities, specific scenes, and general facts about the life of Jackie Mabley.²⁵ The court determined that these were simply facts about the life of Jackie Mabley, and while this work assisted the writer, it was not sufficient to establish joint authorship.²⁶

To prevent some of the inherent subjectiveness that is inseparable from these types of multifactor tests, there should be guidelines in the analysis. For the analysis

²³ The United States Copyright Act, 17 U.S.C. §§ 101, 201(a).

²⁴ Childress v. Taylor, 945 F.2d 500, 501 (2d Cir. 1991).

²⁵ *Id.* at 502.

²⁶ *Id.* at 509.

relating to "substantial" contribution, the overarching question should be: How difficult would this be to recreate?

This standard borrows from the concept of proximate cause. Analyzing how difficult it would be to reproduce that exact image or writing would be a functional standard to determine how much human involvement was done to achieve the resulting work. Essentially the court would be asking, would the work have been created without this person doing some form of complex addition or alteration to the image.

When analyzing this question, there are subfactors that can help with the consideration: (i) amount of creative and detailed input prior to the AI generation; (ii) amount of oversight and involvement in the AI generation process; and (iii) post generation alterations.

i. Amount of creative and detailed input prior to the AI generation.

The amount of creative and detailed input into the description of the desired product prior to the AI generating the work would be an important factor in determining if there was substantial contribution. There is a large spectrum of possible levels of input, so this analysis would inherently be subjective, but this has not stopped courts before.²⁷

The court would look to the contributions prior to the image generation and if there was a large amount of creative and detailed input, then this would weigh towards copyright eligibility. For example, DALL-E's image generation service uses text inputs to determine what the AI will produce. These textual inputs can be as simple or complex as the user desires. A court will be able to look to see if the user simply typed in

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²⁷ See id. at 501.

"landscape" to have the AI generate various images of generic landscapes. This type of input would weigh against copyright eligibility.

However, if a user wrote a more descriptive input of their desired outcome, then this would weigh more towards copyright eligibility. For example, an input stating: "Hilly forest landscape, with evergreen trees to the right, a large oak tree in the center with a barn owl sitting on it, a multi-colored sunrise in the background with shades of pink, blue, and orange . . .etc" would weight towards the substantial contribution and copyright eligibility. Look to Appendix (a) for an example of this subfactor.

For ChatGPT, the analysis would be similar. The more detailed the question proposed to the AI, the more likely the resulting output would be copyright eligible. This initial level of detail is important because it would demonstrate that the AI is being used as a tool to help produce a work of human authorship. If the level of detail in the input is low and the AI has to fill in many of the detail gaps, then this would most likely not reflect a work of human authorship.

ii. Amount of oversight and involvement in the generation process

The amount of involvement and decision-making during the process of the AI generating the work would factor into whether the contribution was substantial. This would necessarily depend on the functionality of the AI. If an image generation system allows a person to make alterations in the searches and adjust settings while attempting to perfect what the AI is outputting, then this factor would weigh more heavily than if the image generation system did not have adjustable settings.

If the user does their initial search, is unhappy with the result, and then adjusts the settings or alters their search, then these actions would be analyzed under this factor. The

more complexity involved in the adjustment and the number of trials it takes to get to the final image would weigh towards substantial contribution. Look to Appendix (b) for an example of this subfactor.

In a writing AI system, such as ChatGPT, the production of the writing can be a complex back-and-forth between the user and the AI. One can essentially talk with the AI to work out exactly what the output should be.²⁸ By "chatting" back-and-forth, the user can work to provide specific instructions to produce exactly what they are envisioning. A detailed back-and-forth here would demonstrate that the user is working with the AI as a tool to bring about a creation of human authorship, as opposed to a work that was a spontaneous creation from the AI.

One may criticize this factor as it seems to incentivize users purposely making poor searches in the initial steps. This is a fair criticism, but this factor will be in no way dispositive and is used only as a way to measure how difficult it was to create the image. Also, this work around would simply be too inefficient to worry too much about. A company using an AI to save time and money on graphic design would most likely not want their employees wasting time and resources making fraudulent bad searches to establish copyright eligibility when there are other, easier methods of establishing it.

iii. Post generation alterations.

Likely the most dispositive factor of the three, manual alterations of the work after it has been generated would weigh strongly towards substantial contribution by the user. There are, of course, a broad spectrum of alterations that a user could employ, so a court or Copyright Office will have to use their judgment as to the degree of the changes.

²⁸ Maria Diaz, *How to Use ChatGPT: Everything you Need to Know*, ZDNET (June 30, 2023), https://www.zdnet.com/article/how-to-use-chatgpt.

For example, after an image generation, if a user simply changes the color of a graphic or adds a filter on top of an image, this will most likely not weigh towards substantial contribution. However, if a user actually utilizes graphic design tools to add objects or characters to the image, then this would be more of a substantial contribution the court could use to establish copyright eligibility.

For a writing AI, these alterations would be fairly simple. Significantly changing the wording or structure of the work in order to better represent the ideas of the user would be sufficient to weigh towards copyright eligibility. The degree of alteration will need to be analyzed, but any post generation alteration should weigh towards copyright eligibility.

Although the third factor of the joint ownership statute should not be in this analysis at all, post generation alterations would be the best way to satisfy the factor. The factor states: "each author must have contributed material to the joint work which could have been independently copyrighted." Simply adding text descriptions prior to the generation and adjusting the settings of the AI would not in themselves be independently copyrightable, but alterations and additions after the work is generated possibly could be independently copyrightable. Because of the similarity to other copyright standards, the post generation alterations should weigh the heaviest in this balancing test.

As long as the alterations are not de minimis contributions, they will demonstrate that the work should be copyright eligible. Look to Appendix (c) for an example of this subfactor.

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²⁹ The United States Copyright Act, 17 U.S.C. §§ 101, 201(a).

iv. How difficult would it be to recreate?

This is the overall question that a court will consider in determining if there was substantial contribution to the creation of the work. This will be a fact intensive analysis, with possible expert witnesses and possibly even a division of the copyright office committed to reverse engineering AI generated images.

Because of this complexity, it may make more sense to have a lower bar in the initial screening to obtain the original copyright. The standard will then heighten if the copyright is disputed in court. At the Copyright Office level, the examiner will look to the history of the work generation. If an applicant wants to copyright an AI-generated work, it will be their burden to provide the description and history of how the piece was generated.

On its face, this may seem like too high of a burden, but it can simply be worked into the graphic design software. As discussed, Microsoft is incorporating DALLE-2 into its graphic design program. ³⁰ Programs like this will simply need to incorporate a manner of tracking the progress on the graphic design process. In fact, ChatGPT already has incorporated this type of tracking into their system. ³¹ By doing this, it will be feasible for the Copyright Office and the courts to examine the contribution that the user added to the image.

However, this could create another problem. With the focus on the complexity of the contribution and the difficulty of recreating the work, it may incentivize the users to simply create images or writings that are difficult to recreate to skew the analysis. The solution here is also in the first factor of the joint authorship test: "valuable contribution."

³⁰ Todd Bishop, *Microsoft's New Designer App Integrates OpenAI's DALL-E 2 Image Generator for Graphic Design*, GEEK WIRE (Oct. 12, 2022, 7:00 AM), https://www.geekwire.com/2022/microsofts-new-designer-graphic-design-app-integrates-openais-dall-e-2-image-generator.

³¹ OPEN AI, https://openai.com (last visited July 23, 2023).

³² The United States Copyright Act, 17 U.S.C. §§ 101, 201(a).

While value of a work before it even has copyright protection is speculative and subjective, an overly complex creation motivated by getting around copyright examination will most likely have less value than a work that is made only for that commercial purpose. The overly complex creation also defeats the point of using the AI as a tool in the image and writing generation. A rational person would not create a system of making complex alterations to AI generation just to get around copyright eligibility laws when it would be simpler to hire a graphic designer or writer and avoid the eligibility problem entirely. Also, this incentive will most likely be fixed through simple market correction. This is because a rational person simply would not produce something that is not valuable.

The value of the contribution would not be a high bar to overcome, because generally the Copyright Office and the courts are not well equipped to determine the value of works of art.

This standard is often set by the market and those desiring copyright protection most likely would not apply for protection for works they don't deem valuable.

b. Factor two: Author's Intent

Joint Authorship in copyright law puts heavy weight on each author's subjective intent when creating the work. It is important for the court that each author knows that the work is going to have multiple authors. However, this intent analysis does not function when using an AI image generation service. For the user, it is clear that they are intending to be an author to the finished work. But how would the software intend that the work be copyright eligible for the user? It is simple—it would be put in the terms of service.

These image generating AIs are not sentient (at the moment),³³ so it would be the organization distributing the tool that would need to intend that its use result in copyrightable images. This factor is much simpler than the subjective nature of the first. The organization would just need to put in their terms of service that they intend that the images created using this AI are capable of gaining copyright protection for the user.

At the moment, ChatGPT does not have a policy on their website indicating whether works made with the AI have permission to be copyrighted.³⁴ The terms do state that it is a violation of their policy to "represent that that output from the [AI] was human-generated when it is not[.]"³⁵

This factor helps assure the Copyright Office or a court that (1) the user was licensed to use the program, and (2) this program was intended create works that can be copyrighted. For example, in Open-AI's terms of service, if the user wants to publish content made with the AI, it must be sufficiently disclosed that AI was used in the production and there are various use restrictions such as not being related to political campaigns, adult content, spam, and various other types of use.³⁶

IV. SHOULD WE ALLOW COPYRIGHT PROTECTION HERE?

While there is a large amount of concern ChatGPT may take the jobs of writers,³⁷ AI-generated art has sparked even more controversy in the artistic community. Artists around the

³⁶ API TERMS & POLICIES Sharing & Publication Policy, OPEN AI, https://openai.com/api/policies/sharing-publication (last visited Dec. 5, 2022).

³³ Amelia Tait, 'I am, in Fact, a Person': Can Artificial Intelligence Ever be Sentient?, THE OBSERVER (Aug. 14, 2022, 4:00 PM), https://www.theguardian.com/technology/2022/aug/14/can-artificial-intelligence-ever-be-sentient-googles-new-ai-program-is-raising-questions.

³⁴ Terms of Use, OPEN AI, https://openai.com/policies/terms-of-use (last visited Mar. 5, 2022).

³⁵ Id.

³⁷ Adrian Wooldridge, *Your Humanity Could Your Writing Job from ChatGTP-4*, THE WASHINGTON POST, (Mar. 21, 2023), https://www.washingtonpost.com/business/energy/2023/03/21/want-to-save-your-columnist-gig-from-chatgpt-4-be-more-human/89d13c62-c7a9-11ed-9cc5-a58a4f6d84cd_story.

world are furious about these AI programs.³⁸ In fact, recently an AI generated image won an award at an art show.³⁹ At the Colorado State Fair, Jason M. Allen submitted his work, Théâtre D'opéra Spatial, and was awarded the blue ribbon for emerging digital artist.⁴⁰ Théâtre D'opéra Spatial, however, was not made entirely by Jason M. Allen.⁴¹ Jason used the AI program, Midjourney" to create the work and submitted the piece as "Jason M. Allen via Midjourney."⁴²

This result infuriated artist and news of the award spread quickly in artistic communities. Some even going so far to say that "[w]e're watching the death of artistry unfold right before our eyes." They believe that simply writing a prompt for an AI to generate an image is not worthy of artistic praise and is potentially diluting the industry as a whole. Others argue that this is simply a new tool of creation and there will be artistic pushback anytime a new artistic tool is used.

While there is much valid debate and controversy as to whether AI-generated images can be considered award worthy art, does this also mean that they should not be afforded copyright protection? It seems like these are two vastly different questions, but they are receiving similar treatment by those analyzing them. The creativity needed to win an art award is very different than the amount it takes to be afforded copyright protection.

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³⁸ Rachel Metz, *These Artists Found out Their Work was Used to Train AI. Now They're furious*, CNN BUSINESS, (Oct. 21, 2022), https://www.cnn.com/2022/10/21/tech/artists-ai-images.

³⁹ Kevin Roose, *An A.I.-Generated Picture Won an Art Prize. Artists Aren't Happy*, THE NEW YORK TIMES (Sept. 2, 2022), https://www.nytimes.com/2022/09/02/technology/ai-artificial-intelligence-artists.html.

⁴⁰ *Id*.

⁴¹ *Id*.

⁴² *Id*.

⁴³ *Id*.

⁴⁴ Id.

⁴⁵ Roose, *supra*, note 39. (artistic communities displayed feverous pushback against the use of cameras for art in the 19th century and the use of computers in general in the 20th century).

The amount of creativity and originality needed for copyright protection has been described as a "modicum of creativity[.]"⁴⁶ The United States Supreme Court has held that "the requisite level of creativity is extremely low; even a slight amount will suffice."⁴⁷ The Court stated that "the vast majority of works make the grade quite easily, as they possess some creative spark, 'no matter how crude, humble or obvious' it might be."⁴⁸ This "modicum of creativity" standard is an extremely low bar to pass for this protection. The creative involvement sufficient to pass this paper's proposed test would almost surely be sufficient to overcome this low requisite level of creativity.

While there may be sufficient human involvement and creativity to overcome the bar for copyright protection, some might believe this is against the spirit of copyright laws to grant this protection. The majority of these AIs function through their ability to scrap the internet for pictures and information.⁴⁹ These programs sort through billions of images paired with written descriptions to learn how to create each image.⁵⁰ By doing this the AIs can learn the objects, artistic styles, ideas, and any other subjects necessary to create these original images.

This scrapping of the internet for pictures gives some people pause, because it almost feels like copyright infringement in itself. Various artists have spoken out about the subject, as their art has been used to train these AIs to be able to mimic their styles.⁵¹ Erin Hanson, for example, learned that much of her art had been used to train the AI "Stable Diffusion."⁵² After figuring out her work had been used to train this AI, Hanson was understandably upset.⁵³ She

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⁴⁶ Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 346 (1991).

⁴⁷ *Id.* at 345.

⁴⁸ *Id*.

⁴⁹ Metz, *supra* note 38.

⁵⁰ *Id*.

⁵¹ *Id*.

⁵² *Id*.

⁵³ *Id*.

stated that she doesn't "want to participate at all in the machine that's going to cheapen what [she does]" and possibly lead to the end of her livelihood.⁵⁴

Swedish artist Simon Stålenhag has experienced a similar situation. The same AI that was used to create the award-winning art prize, Midjourney, was used to mimic Stålenhag's artistic style. Stålenhag's unique style of using natural landscapes combined with "eerie futurism of giant robots, mysterious industrial machines, and alien creatures" had been learned by the AI and used to recreate his style with "uncanny accuracy." Stålenhag is unable to sue for any infringement here because while his works are protected by copyright laws, his artistic style does not receive the same protection. The artist has been outspoken about AI image generation and believes that "[i]t basically takes lifetimes of work by artists, without consent, and uses that data as the core ingredient in a new type of pastry that it can sell at a profit with the sole aim of enriching a bunch of yacht owners."

These AIs are able to scrape the internet and learn from millions of artists' copyrighted work because of fair use protections.⁵⁸ The images are being used to teach computers as opposed to making derivative works out of them, so the process is not technically copyright infringement.⁵⁹ While this may seem like a loophole to some, it is a correct application of the fair use doctrine. We do not hold human artists liable for copyright infringement for getting inspiration from others work. On its face it does seem more questionable when a computer does the same, but in a way, it is simply learning how to create art the same way humans do, just on a much larger scale.

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Id.
 Will Knight, Algorithms Can Now Mimic Any Artist. Some Artists Hate It, WIRED (Aug. 19, 2022, 7:00 AM), https://www.wired.com/story/artists-rage-against-machines-that-mimic-their-work.

⁵⁶ *Id*.

⁵⁷ *Id*.

⁵⁸ Metz, *supra* note 38.

⁵⁹ *Id*.

While the process used to teach the AIs and the creative value of the images may be artistically questionable, that does not mean that it is not deserving of copyright protection when there is adequate human involvement. The use of these AIs will most likely be primarily commercial. They will be used to create logos, images for presentations, and art for marketing campaigns. These uses will most likely not encroach into the field of the fine arts, where the object is to create works that "are to be appreciated primarily or solely for their imaginative, aesthetic, or intellectual content." 60

Much of the concern of these programs comes from this distinction. Artists view these images as an insult to fine art and because it dilutes the talent needed in the field and think these images should not be deserving of copyright protection that is afforded to true art. But, again, this view conflates the two questions: what is award-worthy art and what deserves copyright protection? Fine art "aims to invoke emotions, convey a message, or portray a concept through creativity and imagination" and many do not believe AI-generated art has the capacity to invoke these ideas. Because of this, these AIs will most likely be used as a tool to efficiently create commercial images that do not require this level of creativity and imagination. Other than the occasional fraudulent art contest submission, many believe that fine artists should not worry about the ramifications of allowing copyright protection for images generated by AI with human involvement. AI with human involvement.

While most AI art likely is not award-worthy, it does require copyright protection in order for it to be useful in commerce. As these AIs excel in their efficiency and speed, as opposed to their artistic value, they will primarily be used in business. In order for these

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⁶⁰ Fine Art, Oxford English Dictionary (3d ed. 2016).

⁶¹ Andrew Shu, *Opinion: AI 'art' is not a threat*, SCOTSCOOP (Sept. 21, 2022), https://scotscoop.com/opinion-ai-art-is-not-a-threat.

⁶² *Id*.

businesses to create logos and marketing campaigns with this tool, the images need to have some form of legal protection. An author that uses AI to help illustrate a character will need to be able to protect that design. Without these protections, these tools that have raised over a billion dollars in funding would be handcuffed in their use.⁶³

Images created using AI programs that have sufficient human involvement should be eligible for copyright protection. The "modicum of creativity" bar is easily passed when there is sufficient human involvement, the copyright eligibility most likely will not encroach on the fine art sector, and in order for the billion-dollar tool to be useful, it will need have the ability to produce copyright eligible works.

V. CONCLUSION

AI generation programs are amazing technical achievements that could potentially cause a major shift in countless industries. As artists and companies are already using these systems, there will soon need to be a change in the way that the Copyright Office analyzes these works. The Copyright Office has firmly established that purely AI generated images are not eligible for protection, but there must be some level of human involvement that breaches this barrier.

Borrowing from the factors of Joint-Authorship and Proximate Cause, the Copyright

Office should enact a multi-factor analysis to determine when there has been a sufficient level of
human involvement to allow copyright protection. In step one, they should analyze the amount of
substantial and valuable contribution involved. During this step, the examiner should look to (i)
the amount of creative and detailed input prior to the generation; (ii) the amount of oversight and
involvement in the generation process; and (iii) the post generation alterations. Ultimately, the
examiner will be asking: (iv) how difficult would this work be to recreate? The second factor,

⁶³ Metz, supra note 38.

intent of the author and AI creator, should be used to analyze whether the copyright applicant had the legal permission to use the AI in this manner.

These AIs have the potential to be used as an incredible tool of creativity and efficiency. Fortunately for the creative community, it does not appear that the use of these programs will encroach into the field of fine arts and literature but will mostly be used as a tool commercially. While there has always been pushback when a new artistic tool is introduced to the world, this technology is not going anywhere. The Copyright Office will have to do what it has done many times and alter their analysis to allow the use of this tool.

The goal of the human component of copyright eligibility is to protect "the fruits of intellectual labor" that are "founded in the creative powers of the mind." It seems there should be a distinction between when an AI creates a work from a couple word prompt and when users utilize AI as a tool to bring to life the fruits of intellectual labor founded in the creative powers of their mind. At the moment, there is no such distinction. But the use of this proposed test would bring the Copyright Office closer to achieving the goals of copyright law.

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⁶⁴ Trade-Mark Cases, 100 U.S 82, 94 (1879).

APPENDIX

(a) Under "Amount of creative and detailed input prior to the image generation" the second image would weigh more towards copyright eligibility



Image result from the DALL-E search: "Landscape"



Image result from DALL-E search: "Hilly forest landscape with a large oak tree in the center with an owl sitting on it and a multi-colored sunrise in the background with pink and yellow"

(b) Example of possible alterations under "Amount of oversight and involvement in the image generation process" subfactor

Original Search: "Hilly forest landscape with a large oak tree in the center with an owl sitting on it, and a multi-colored sunrise in the background with pink and yellow"

User wanted a desert, so search was changed to:

"Hilly forest landscape with a desert in the
distance with a large oak tree in the center with
an owl sitting on it and a multi-colored sunrise in
the background"

User also wanted a river: "Hilly forest landscape with a desert in the distance with a large oak tree in the center with an owl sitting on it and a river by the tree and a multi-colored sunrise in the background"



(c) Example of "Post Image Generation" subfactor. This alteration only added two generic filters on top of the image, so it would weigh against copyright eligibility.

