# You Can't Mimic Progress: Why AI-Generated Works Should Not Be Granted Copyright Protection

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#### I. INTRODUCTION

In a recent attempt to gain publicity, the Mauritshuis museum held an open call for artists to submit their own version of Vermeer's infamous "Girl with a Pearl Earring" to replace the work while it was on loan.<sup>1</sup> Of the works selected was Julian van Dieken's "A Girl With Glowing Earrings," which is a perfect representation of the dangers that Artificial Intelligence (AI) poses to artists.<sup>2</sup> Created with the use of Midjourney, an AI-powered art generator, van Dieken's work bears a striking resemblance to the original work by Vermeer and raises questions as to

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<sup>1.</sup> *Mauritshuis Hangs Artwork Created by AI in Place of Loaned-Out Vermeer*, NL TIMES (Feb. 22, 2023), https://nltimes.nl/2023/02/22/mauritshuis-hangs-artwork-created-ai-place-loaned-vermeer [https://perma.cc/RZD5-M5Z9].

<sup>2.</sup> *Id.* 

what this means for the future or copyright, authorship, and infringement.<sup>3</sup> Artificial Intelligence has the capabilities to make new works that can seemingly pass as works made by some of the greatest artists in history, such as Vermeer.<sup>4</sup> And while mimicking the style of some of the greats such as Van Gogh, Picasso, or Dali is nothing new, more current artists who are working to get their names and styles noticed are not as excited about the mimicking capabilities that AI brings.<sup>5</sup>

Artificial Intelligence raises many questions in terms of copyright ownership and copyright protection for existing artists. Art generators that use Artificial Intelligence take in datasets of art pulled from the internet and learn how to create new outputs based on these datasets and the user's input. At what point though, will AI be able to make works so similar to an artist's style and portfolio that they are able to disrupt the market? Will artists ever be compensated from the unauthorized use of their work to train these programs for commercial purposes? These are just some of the questions that have yet to be addressed.

Copyright law has the primary objective of promoting "the Progress of Science and useful Arts," and extending copyright to artificial intelligence may threaten that very purpose.<sup>6</sup> There have been many articles addressing the paucity of law when it comes to computer generated works. Many of which advocate that in the "3A" era of automated, autonomous, and advanced technology, computer programs should be viewed as "talented" authors.<sup>7</sup> I disagree. Mark Lemley, director of Stanford Law School's Program in Law, Science and Technology, once stated, "[i]f you train the AI to make Picasso-like works, or Mondrian-like works, and it makes one that is sufficiently similar, that could be a copyright infringement claim," and I could not agree more.<sup>8</sup> Granting copyright protection to an AI art generator goes

<sup>3.</sup> *Id.* 

<sup>4.</sup> Ruby Helyer, *What Are the Copyright Rules Around AI Art?*, MAKE USE OF (Oct. 3, 2023), https://www.makeuseof.com/copyright-rules-ai-art/ [https://perma.cc/RR6M-LW4W].

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

<sup>6.</sup> Andrew J. Wu, From Video Games to Artificial Intelligence: Assigning Copyright Ownership to Works Generated by Increasingly Sophisticated Computer Programs, 25 AIPLA Q. J. 131, 133 (1997).

<sup>7.</sup> Shalomit Yanisky-Ravid, *Generating Rembrandt: Artificial Intelligence, Copyright, and Accountability in the 3A Era-The Human-Like Authors are Already Here—A New Model,* 2017 MICH. ST. L. REV. 659, 663 (2017).

<sup>8.</sup> Riddhi Setty & Isaiah Poritz, '*Wild West' of Generative AI Poses Novel Copyright Questions (1)*, BLOOMBERG LAW (Nov. 18, 2022, 4:15 AM), https://news.bloomberglaw.com/ip-law/wild-west-of-generative-ai-raises-novel-copyright-questions.

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against the objective of copyright law and fails to address many valid concerns.

Part II of this Comment serves as an introduction to how AI functions and how it ties into copyright law. This Part starts off by explaining the different types of AI and how programs use adversarial networks to learn how to mimic different art styles and trends. The Comment then discusses the intersection of AI-generated art and copyright law and introduce some of the nuanced issues presented by AI-generated art.

Part III of this Comment takes a deeper dive into the issues presented at the end of Part II. This Part starts by evaluating the authorship requirement and different cases and U.S. Copyright Office decisions that should be considered. This Part then goes into some of the other complexities and considerations of the topic such as the self-infringing nature of AI, policy considerations regarding incentives and the market, and the liability issues and problems that have not been answered. Considering the issues, it seems unlikely that AI-generated works should be eligible for copyright protection at all.

#### II. ARTIFICIAL INTELLIGENCE AND COPYRIGHT LAW

#### A. What is Artificial Intelligence?

Artificial intelligence is a rapidly evolving form of computer technology that attempts to mimic human intelligence.<sup>9</sup> AI can be applied to a wide range of markets such as banking, healthcare, law, and education, but an area raising concern is when AI intersects with art.<sup>10</sup> While AI-produced art is not a particularly new development, software introduced in the past few years, including DALL-E 2, Midjourney and Stable Diffusion, has provided tools to "even the most inexperienced artists [which allow them] to produce intricate, abstract, or photorealistic" works.<sup>11</sup> To better understand the complexities of the issues when it comes to copyright law and artificially generated works, it is important to have a general understanding of how Artificial Intelligence functions with respect to art generators.

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<sup>9.</sup> Vincenç Feliú, *Our Brains Beguil's: Copyright Protection for AI Created Works*, 25 U.S.F. INTELL. PROP. & TECH. L. J. 105, 106 (2021).

<sup>10.</sup> Nicole Laskowski, *What is Artificial Intelligence (AI)? Everything You Need to Know*, TECHTARGET, https://www.techtarget.com/searchenterpriseai/definition/AI-Artificial-Intelligence [https://perma.cc/6UGY-AAE5] (last updated Apr. 2024).

<sup>11.</sup> Atreya Mathur, Art-istic or Art-ifical? Ownership and Copyright Concerns in AI-Generated Artwork, CENTER FOR ART LAW (Nov. 21, 2022), https://itsartlaw.org/2022/11/21/ artistic-or-artificial-ai/ [https://perma.cc/EX6E-RFLK].

Artificially intelligent computer systems are deemed to have three cognitive skills: learning, reasoning, and self-correction.<sup>12</sup> Using these cognitive abilities and "thousands of years of art history, styles, and imagery," AI programs like Midjourney and DALL-E 2 are capable of producing images resembling the work of humans.<sup>13</sup>

Artificially intelligent programs are designed with a particular function in mind so that when a user enters an input, the AI generates the output.<sup>14</sup> Inputs and outputs can come in different forms when it comes to AI art generators, though the most common type is the "text-to-image generator."<sup>15</sup> All that an AI art generator program requires of a prospective "artist" is the ability to string together a few words for their input, which the computer then uses to generate new works that look like they could have been created by an actual artist.<sup>16</sup> For the purpose of this Article, "text-to-image" generators will be the primary focus and type of AI discussed.

Art generators are a form of AI in which the AI is incorporated with machine learning technology.<sup>17</sup> A technology displays machine learning when it learns by "ingesting large amounts of labeled training data" and can pick out common patterns and correlations.<sup>18</sup> By analyzing the data, machine learning technology is able to "extrapolate[] patterns" and develop a list of constraints for outputs without being explicitly programmed for these constraints.<sup>19</sup> Overtime, the program's ability to generate images becomes more and more refined, through the use of feedback.<sup>20</sup>

Feedback for an AI art generator can come in multiple forms and is either supervised or unsupervised.<sup>21</sup> Adversarial networks are supervised

20. Id.

21. *Id.* Supervised learning is commonly used when the input is predetermined and unsupervised learning, is when a machine "is given data but not told what the expected output should be, and the machine has to learn to recognize patterns in the data." Henrique Centieiro & Bee Lee, *AI Image Generators Can Create Images Out of Thin Air . . . Here's How It Works!*, LEVEL UP CODING (Jan. 12, 2023), https://levelup.gitconnected.com/ai-image-generators-can-create-images-out-of-thin-air-heres-how-it-works-1369fb1058f8 [https://perma.cc/Q9MX-FP46].

<sup>12.</sup> Laskowski, supra note 10.

<sup>13.</sup> Helyer, *supra* note 4.

<sup>14.</sup> When discussing these technologies, the text entered into a program is referred to as an input, while the image generated by the program is the output.

<sup>15.</sup> Helyer, *supra* note 4.

<sup>16.</sup> Mathur, *supra* note 11.

<sup>17.</sup> Jessica L. Gillotte, *Copyright Infringement in AI-Generated Artworks*, 53 U.C. DAVIS L. REV. 2655, 2660 (2020).

<sup>18.</sup> Laskowski, supra note 10.

<sup>19.</sup> Gillotte, supra note 17, at 2660.

learning models that are used in AI art generators and feed data to the program that it learns from.<sup>22</sup> There are two main types of adversarial networks: (1) Generative Adversarial Networks (GAN) and (2) Creative Adversarial Networks (CAN).<sup>23</sup> Both of these networks learn from being fed training sets and have two "sub networks," which are a generator and discriminator.<sup>24</sup>

There are a few key differences in how a GAN and CAN model operate and learn.<sup>25</sup> For GAN models, the discriminator is filled with a training set of data that is divided into different categories.<sup>26</sup> From these categories, the discriminator learns to identify symbolism, patterns, and other insights from this data without human input.<sup>27</sup> The generator, working independently from the discriminator into thinking the images with the intent to deceive the discriminator into thinking the images belong to the training set.<sup>28</sup> The generator sends the images to the discriminator, which will then use the training set to determine whether the image appears to be real or fake data.<sup>29</sup> Over time, the generator will learn from the discriminator and the system will reach "equilibrium," meaning the discriminator cannot tell the difference between the real training set images and the images the program generated.<sup>30</sup>

CAN models differ from GAN models in a few ways.<sup>31</sup> The main difference is that the discriminator in the CAN model is not loaded with a training set of images but instead has access to data associated with different styles of work.<sup>32</sup> In a CAN model, instead of the discriminator deciding between real and fake, the discriminator sends two different signals about the images they create.<sup>33</sup> First, the discriminator decides whether the generated image fits into the parameters of any of the styles the discriminator has access to.<sup>34</sup> Over time, the generator will learn to fit the images it generates into these parameters and styles.<sup>35</sup> The second

23. *Id.* 

- 24. *Id.* at 107.
- 25. See id. at 106-09.
- 26. *Id.* at 107.
- 27. Id.
- 28. *Id.*
- 29. Id.
- 30. *Id.*
- 31. *Id.* at 108.
- 32. *Id.*
- 33. *Id.*
- 34. *Id.*

<sup>22.</sup> Feliú, supra note 9, at 106.

signal pinpoints which particular style the generated image falls into so when an input specifies a style it picks the right attributes to include.<sup>36</sup> The way these models function, CAN models are able to generate images outside of the training set, while a GAN model only learns to generate images that seem to fall within the training set.<sup>37</sup> This means that CAN models have more creativity and possibilities than GAN models.

All of these elements put together allow AI-powered art generators to perform tasks that "normally require human intelligence, such as recognition, decision-making, creation, learning, evolving, and communicating."<sup>38</sup>

#### B. The Intersection of Art, Copyright, and Artificial Intelligence

Artificial intelligence is based on knowledge learned through data.<sup>39</sup> For a computer program to have the ability to generate "never-ending stream[s] of unique artworks," it must learn from different kinds of existing visual works.<sup>40</sup> A consequence of this method of machine learning is that AI uses existing works to make works that are "not newly imagined but made from existing ideas and images."41 Since these images are collected throughout the internet, most of the images used to train these programs are protected by copyright law and used without the authors consent.<sup>42</sup> This is one of the many causes for concern when it comes to Artificial Intelligence and artist rights. Copyright protection is intended to protect the rights of authors of creative and "useful" arts. Allowing AI programs to use other art pieces for commercial purposes seems to violate this premise.<sup>43</sup> One attorney in the field has even suggested that "[p]laintiffs who can show that the AI had access to their work could bring successful infringement claims ... the only [other] question is whether [the generated work is] substantially similar."44

U.S. copyright law is currently silent when it comes to the ownership of AI-generated works.<sup>45</sup> For a work to be eligible for copyright protection, the work must be (1) a work of authorship, (2) original, and

<sup>36.</sup> *Id.* at 109.

<sup>37.</sup> *Id.* 

<sup>38.</sup> *Id.* at 106.

<sup>39.</sup> Laskowski, *supra* note 10.

<sup>40.</sup> Mathur, *supra* note 11.

<sup>41.</sup> Helyer, *supra* note 4.

<sup>42.</sup> Mathur, *supra* note 11.

<sup>43.</sup> Wu, *supra* note 6, at 133.

<sup>44.</sup> Setty & Poritz, *supra* note 8.

<sup>45.</sup> Gillotte, *supra* note 17, at 2666.

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(3) fixed in a tangible medium of expression.<sup>46</sup> Copyright ownership "vests . . . in the author of the work."<sup>47</sup> If a work meets the requirements for copyrightable subject matter, then the author has exclusive rights to reproduce, sell, make derivative works, publicly perform, or publicly display their work.<sup>48</sup> They also gain the right to enforce these rights, and if they register their copyright, then they can sue for infringement.<sup>49</sup>

When considering the complex issues presented with copyrighting AI-generated work, the only one of the three requirements that is not heavily disputed is the third requirement—that a work be fixed in a tangible medium.<sup>50</sup> A work can be considered tangible even if it requires the use of a machine to be viewed, such as with films.<sup>51</sup> Most scholars and commentators agree that AI-generated work is considered to be in a fixed tangible medium of expression. The only limitation to this agreement is when the user does not save a copy of the work, since most AI generators, such as Deep AI, delete information from their server's memory within an hour.<sup>52</sup>

Copyright law does not currently recognize Artificial Intelligence, or computers for that matter, as authors of works, leaving many questions unanswered.<sup>53</sup> Commentary on the subject of AI-generated works and copyright mainly focuses on the authorship requirement, and scholars have argued both for and against granting authorship to AI.<sup>54</sup> When determining whether or not the authorship requirement has been objectively met, "the doctrines of incentives, independent creation, and creativity" are often considered.<sup>55</sup>

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<sup>46.</sup> *Id.* 

<sup>47.</sup> Sarah Ligon Pattishall, *AI Can Create Art, but Can It Own Copyright in It, or Infringe?*, LEXIS NEXIS (Mar. 1, 2019), https://www.lexisnexis.com/community/insights/legal/ractical-guidance-journal/b/pa/posts/ai-can-create-art-but-can-it-own-copyright-in-it-or-infringe (quoting 17 U.S.C.S. § 201).

<sup>48.</sup> Gillotte, supra note 17, at 2666.

<sup>49.</sup> Id.

<sup>50.</sup> Id.

<sup>51.</sup> *Id.* 

<sup>52.</sup> *Terms of Service*, DEEP AI, https://deepai.org/terms-of-service/terms-of-service (last updated May 8, 2024); *DALL-E API FAQ*, OPENAI, https://help.openai.com/en/articles/6704941-dall-e-api-faq (last visited May 22, 2024).

<sup>53.</sup> James Grimmelmann, *There's No Such Thing as a Computer-Authored Work—And It's a Good Thing, Too*, 39 COLUM. J.L. & ARTS 403, 403 (2016).

<sup>54.</sup> Yvette Joy Liebesman & Julia Cromer Young, *Litigating Against the Artificially Intelligent Infringer*, 14 FIU L. REV. 259, 259 (2020).

<sup>55.</sup> *Id.* at 261.

Section 101 of the Copyright Act itself does not define "author," but case law suggests that authors can only be human, and not a computer.<sup>56</sup> In Naruto v. Slater, the Ninth Circuit Court of Appeals held that animals were unable to meet the authorship requirement of copyright law and that works by animals were ineligible for copyright protection.<sup>57</sup> In Naruto. the animal rights organization People for the Ethical Treatment of Animals (PETA) argued that Slater's use of a "selfie" taken by a monkey named Naruto was infringing on Naruto's copyright.<sup>58</sup> The Naruto court argued that animals are without the ability to hold authorship in a work due to what the Copyright Act does say.<sup>59</sup> The Copyright Act gives copyright authorship in some circumstances to the "children' of an 'author" as well as to widows, widowers, and grandchildren of an author.<sup>60</sup> The argument made here is that all of these terms (children, widow, grandchildren) "imply humanity and necessarily exclude animals that do not marry and do not have heirs entitled to property by law."<sup>61</sup> Following that logic, it seems unlikely that a computer program itself would be able to hold property rights in the form of copyright. Personally, it seems compelling that AI generated works should not be eligible for copyright protection at all. Much like a selfie taken by a monkey, even an artificially intelligent computer system does not consciously know what they are producing and is not entitled to protection over the work.<sup>62</sup> The fact that AI has the capabilities of creating art does not put it above an animal's attempt to make art. Inserting text into a text box is in some ways similar to leaving a camera in an animal enclosure; if you get something artistically aesthetic or not, it is entirely up to the program and not the human.<sup>63</sup>

To escape this issue, some scholars try to argue that the user or owner of the AI program should be able to claim authorship of the generated work. Corporations "are considered 'persons' under U.S. Supreme Court precedent," since they are formed and owned by humans, and this is one angle that can be taken.<sup>64</sup> If it were deemed possible for the user or owner of the AI program to own the copyright, it is uncertain if they would even want that power. A critical aspect of authorship is that the author of a work

<sup>56.</sup> Pattishall, *supra* note 47.

<sup>57. 888</sup> F.3d 418, 429 (9th Cir. 2018).

<sup>58.</sup> *Id.* at 420.

<sup>59.</sup> Id. at 426.

<sup>60.</sup> *Id.* 

<sup>61.</sup> *Id.* 

<sup>62.</sup> See generally id.

<sup>63.</sup> See generally id.

<sup>64.</sup> Pattishall, *supra* note 47.

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is liable for infringing on another's copyrighted work.<sup>65</sup> Due to the uncontrollable nature of AI, either would open themselves up to liability in a way they may not have considered. AI programs are trained on datasets of images used without the original author's consent.<sup>66</sup> This means that a strong argument could be made against the images originality since all decisions are based on original works.

#### III. THE ISSUES

#### A. Authorship

Upon creation, the Copyright Act grants exclusive rights to the owner of an original work of authorship that is fixed in a tangible medium.<sup>67</sup> The caveat to this grant of power is that registration is a prerequisite to enforce these rights, meaning the Copyright Office needs to see that the work was made by an author that is eligible for copyright.<sup>68</sup> Congress intentionally left the phrase "original work of authorship" broad so that it could incorporate the evolving standard of authorship and originality made by the courts, but this does not mean that the scope of authorship is unlimited.<sup>69</sup> As of today, the Copyright Office only recognizes humans and corporate entities as authors of works.<sup>70</sup> Copyright law in the Artificial Intelligence landscape has been rightfully coined the "wild west" by some.<sup>71</sup> This uncharted territory includes the question of whether or not visual works generated by AI are capable of passing the authorship requirement. Nonetheless, when considering the question there are four possible arguments to be made as to who should own the copyright in an AI generated work: (1) the user, (2) the developer, (3) the AI itself, and (4) no one.

Based on existing case law and understanding of the authorship requirement, it would make the most sense that works created by AI would remain in the public domain. As previously discussed in Naruto, the Ninth Circuit held that animals are ineligible to receive the copyright

- 69. Perlmutter Letter, supra note 67.
- 70. Johnson, supra note 68, at 22.

Liebesman & Young, supra note 54, at 259. 65.

Mathur, *supra* note 11. 66.

<sup>67.</sup> Letter from Shira Perlmutter, Reg. of Copyrights, U.S. Copyright Off. Rev. Bd., to Ryan Abbott (Feb. 14, 2022), https://www.copyright.gov/rulings-filings/review-board/docs/arecent-entrance-to-paradise.pdf [https://perma.cc/QS45-7VSU ] [hereinafter Perlmutter Letter]; 17 U.S.C. § 102(a).

<sup>68.</sup> Dane E. Johnson, Statute of Anne-Imals: Should Copyright Protect Sentient Nonhuman Creators?, 15 ANIMAL L. 15, 21 (2008).

<sup>71.</sup> Setty & Poritz, supra note 8.

in a work since they do not meet the authorship requirement and that works created by animals are to remain in the public domain.<sup>72</sup> If an animal is not considered an author, why should a computer program be held to a different standard? It seems unlikely that one could make a plausible argument as to why a computer program should be seen as more human than an animal, and therefore, AI-generated works should follow the same standard.

Since the advent of AI art generators, there have been no court cases determining whether AI should be granted authorship. However, in recent years, attempts to establish some parameters for the landscape of Artificial Intelligence rights have been made.<sup>73</sup> One interesting player in the development of the AI-copyright landscape is Stephen Thaler, a computer scientist and Artificial Intelligence creator.<sup>74</sup> Thaler has gained attention in the AI-intellectual property realm as a result of his work with a team of attorneys led by Ryan Abbott in forming what they call "The Artificial Inventor Project."75 This project started with filing patent applications, U.S. and international, for an invention of Thaler's generated by Artificial Intelligence.<sup>76</sup> Abbott has coined this "an academic project" to test the standards of copyright.<sup>77</sup> More recently though, Thaler attempted to register an AI-generated work entitled "A Recent Entrance to Paradise" with the U.S. Copyright Office ("Office").<sup>78</sup> Thaler utilized DABUS, an AI program that he developed, to generate the image.<sup>79</sup>

In his application to register the work, Thaler identified the author of the work as the "Creativity Machine" with himself as the claimant.<sup>80</sup> Thaler indicated that the work was created by an AI-powered art generator

<sup>72.</sup> Mathur, *supra* note 11.

<sup>73.</sup> Setty & Poritz, *supra* note 8.

<sup>74.</sup> Blake Brittain, *Computer Scientist Says AI 'Artist' Deserves its Own Copyrights*, REUTERS (Jan. 11, 2023, 1:41 PM), https://www.reuters.com/legal/litigation/computer-scientist-says-ai-artist-deserves-its-own-copyrights-2023-01-11/.

<sup>75.</sup> THE ARTIFICIAL INVENTOR PROJECT, https://artificialinventor.com/ [https://perma.cc/5 XMT-2ER9] (last visited May 30, 2024).

<sup>76.</sup> *Id*.

<sup>77.</sup> Jane Recker, U.S. Copyright Office Rules A.I. Art Can't Be Copyrighted, SMITHSONIAN MAG. (Mar. 24, 2022), https://www.smithsonianmag.com/smart-news/uscopyright-office-rules-ai-art-cant-be-copyrighted-180979808/ [https://perma.cc/TM3H-96GL].

<sup>78.</sup> Min Chen, A Scientist Has Filed Suit Against the U.S. Copyright Office, Arguing His A.I.-Generated Art Should Be Granted Protections, ARTNET (Jan. 12, 2023), https://news.artnet. com/art-world/ai-art-intellectual-property-lawsuit-stephen-thaler-2242031 [https://perma.cc/MWP4-2287].

<sup>79.</sup> Id.

<sup>80.</sup> Perlmutter Letter, *supra* note 67.

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and that he was seeking to register the work as a work-for-hire.<sup>81</sup> The Office refused registration in August of 2019, stating that work did not meet the "human authorship" requirement.<sup>82</sup> Thaler requested that they reconsider, arguing that prior case law did not support the human requirement and that the Office's authorship denial was unconstitutional.<sup>83</sup> Affirming its original decision, the Office once again stated that the work lacked the human authorship requirement and did not provide evidence of sufficient creative input by a human.<sup>84</sup> Thaler made a second request for reconsideration and reasserted his original argument for unconstitutionality.<sup>85</sup> Thaler also claimed that there was no binding authority preventing computer generated works from gaining copyright protection and that copyright law allows for non-human entities to be authors by using the work "made for hire" doctrine.<sup>86</sup> The Office again remained firm on its stance, stating that the work is ineligible for copyright protection because it was not made by a human.<sup>87</sup> The Office stated that copyright law exists to protect intellectual labor that is the product of human creativity, which this is not.<sup>88</sup> Further, the Office held that Thaler would either need to prove that the work was the product of human authority or provide an argument that would convince the Office to depart from "a century of copyright jurisprudence," neither of which he did.<sup>89</sup> It seems plausible, though, that Thaler *could* have an argument for authorship that he failed to address. Unlike other users of AI-generated machines, Thaler claims to have developed the AI program that he used to make this work.<sup>90</sup> If there is any argument at all to combat the Copyright Office's decision, it could be to argue that since he developed the program, he may have also had a say in what data was used, how the AI was trained, and therefore, had more authorship in the piece then the typical AI user. Nevertheless, it would appear that there is a strong argument against AI itself gaining copyright protection in a work it creates. Overall, it seems unlikely that AI will ever be granted eligibility for authorship.

- 81. Id.
- 82. Id.
- 83. Id.
- 84. Id.
- 85. Id.
- 86. Id.
- 87. Id.
- 88. Id. 89.
- Id.
- 90. Chen, supra note 78.

Despite AI not being eligible for authorship, there is still the question of whether the developer or user should be able to gain the copyright in a work. I would argue that the developer and user should not eligible based on case law and recent U.S. Copyright Office decisions.

In terms of cases, the Ninth Circuit in *Naruto* determined the work would go into the public domain.<sup>91</sup> The court did not go on to say that the copyright should belong to the owner of the camera, the animal trainers, or the owner of the zoo or monkey.<sup>92</sup> So, why should the developer in the AI scenario? Furthermore, why should the user? When it comes to AI-generated art, the output is largely attributed to the program, not the user, and simply being the owner of something capable of creating art does not mean that authorship is always found.

In another U.S. Copyright Office decision, it would also appear that the user should not be eligible for copyright. Kashtanova, an artist, attempted to register her eighteen-page comic book, "Zarya of the Dawn," with the Office.<sup>93</sup> In doing so, she became the first person to register a copyright for a work assisted by Artificial Intelligence. Specifically, the images in the comic were generated with the AI art generator Midjourney.<sup>94</sup> While copyright registration was originally granted, the Office reconsidered this registration after it was informed by Kashtanova's social media presence that the images were AI generated.<sup>95</sup> The Office found that Kashtanova had not "disclose[d] that she used Artificial Intelligence to create any part of the Work," and nothing was disclaimed.<sup>96</sup> The Office stated that because of Kashtanova's nondisclosure, the application was "incorrect, or at a minimum, substantively incomplete."<sup>97</sup>

In the Office's opinion letter sent to Kashtanova's attorney, associate Register of Copyright, Robert Kasunic, stated that Kashtanova was only the author of the "text as well as the selection, coordination, and arrangement of the Work's written and visual elements."<sup>98</sup> Furthermore,

<sup>91.</sup> See generally Naruto v. Slater, 888 F.3d 418 (9th Cir. 2018).

<sup>92.</sup> See generally id.

<sup>93.</sup> Setty & Poritz, supra note 8.

<sup>94.</sup> Richard Lawler, *The US Copyright Office Says You Can't Copyright Midjourney AI-Generated Images*, THE VERGE (Feb. 22, 2023, 8:06 PM), https://www.theverge.com/2023/2/22/23611278/midjourney-ai-copyright-office-kristina-kashtanova [https://perma.cc/3GF7-PAK7].

<sup>95.</sup> *Id.* 

<sup>96.</sup> Letter from Robert J. Kasunic, Assoc. Reg. of Copyrights & Dir. of Registration Pol'y & Prac., U.S. Copyright Off., to Van Lindberg (Feb. 21, 2023), https://www.copyright.gov/docs/ zarya-of-the-dawn.pdf [https://perma.cc/7MBL-5GLR] [hereinafter Kasunic Letter].

<sup>97.</sup> Id.

<sup>98.</sup> Lawler, supra note 94.

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the letter asserted that because the images were not the product of human authorship, the registration was cancelled.<sup>99</sup> Justifying its decision, the Office cited "previous cases where people weren't able to copyright words or songs that listed 'non-human spiritual beings' or the Holy Spirit as the author—as well as the infamous incident where a selfie was taken by a monkey."<sup>100</sup> The Office also stated in the letter that editing images generated by AI does not make the images eligible, and the changes exhibited in Kashtanova's work were too minor "to supply the necessary creativity for copyright protection."<sup>101</sup> The decision to cancel the registration was the first decision by a U.S. agency or court concerning the "scope of copyright protection for works created with AI."<sup>102</sup>

General Counsel for Midjourney, interestingly enough, considers this to be "a great victory," proposing that the Office's opinion should be interpreted to mean that "if an artist exerts creative control over an image generating tool like Midjourney . . . the output is protectable" and eligible for copyright.<sup>103</sup> However, Midjourney's logic fails to understand the cited references that clearly state works created by non-humans are ineligible for copyright, and edits to an image would not be enough.<sup>104</sup> Kashtanova's attorney, Lindberg, disagreed with the Office, contending that the Office failed to understand "the role that randomness plays in Midjourney's image generation."<sup>105</sup> Lindberg asserted that Kashtanova did meet the modicum of creativity requirement and took it a step further by predicting that "AI-assisted art is going to need to be treated like photography. It is just a matter of time."<sup>106</sup>

Lindberg's assertions are quite the leap considering the Office clearly stated that Kashtanova—or anyone else utilizing AI art generators—is not the "master mind" behind AI-generated works.<sup>107</sup> They also view that Midjourney outputs and similarly programmed AI are unpredictable by the users which differentiates them substantially "for copyright purposes [from] other tools used by artists."<sup>108</sup> To explain why

<sup>99.</sup> Id.

<sup>100.</sup> *Id.* 

<sup>101.</sup> Id.

<sup>102.</sup> Blake Brittain, *AI-created Images Lose U.S. Copyrights in Test for New Technology*, REUTERS (Feb. 22, 2023, 7:41 PM), https://www.reuters.com/legal/ai-created-images-lose-us-copyrights-test-new-technology-2023-02-22/.

<sup>103.</sup> *Id.* 

<sup>104.</sup> Lawler, supra note 94.

<sup>105.</sup> *Id.* 

<sup>106.</sup> Id.

<sup>107.</sup> Kasunic Letter, supra note 96.

<sup>108.</sup> *Id.* 

this tool is so different, the Copyright Office referenced Burrow-Giles Lithographic Co. v. Sarony, stating that "[w]hile an 'author' may be viewed as an individual who writes an original composition, the term in its constitutional sense, has been construed to mean an 'originator,' 'he whom anything owes its origin."<sup>109</sup> The origin of any image put out by an AI art generator is inherently the art generator and not the user, even if they were to make a few edits to the photograph later on. This differs from the use of other tools such as a camera, where a user has the ability to take the camera with them, decide when to take the photo, what they are focusing on, and so on. Consider a piece of visual art consisting of a landscape; when a photographer takes a landscape image, they pick the location, pick the angle, pick the time of day, and make other artistic choices. On the other hand, when a prospective artist uses an AI art generator, all they need to input into the system is the word "landscape." The output generated by the program could be at any time of day, any angle, any country or even made up, and takes very little original thought from the user. The origin of any AI-generated work is the AI program, meaning the author should not be considered to be the user or the developer.

### B. AI is Self-Infringing

AI art generators are not free of problems, one of which being the ability to self-infringe their own work.<sup>110</sup> DALL-E 2, owned and operated by OpenAI, is one of the most popular AI art generators on the market.<sup>111</sup> OpenAI has preemptively agreed to assign the rights, title, and interest in any outputs to the users, with one troubling caveat.<sup>112</sup> In their terms of use, OpenAI states that "[d]ue to the nature of our Services and artificial intelligence generally, output may not be unique."<sup>113</sup> All that the terms state in regards to this issue is that users are only entitled to the work generated for them.<sup>114</sup>

The self-infringing nature of AI art generators also points to another reason why copyright should not be granted for these works, especially to users. When images are generated by AI art generators such as those owned by OpenAI, the images are outputted as URLs that are only saved

<sup>109.</sup> Perlmutter Letter, supra note 67.

<sup>110.</sup> Mathur, supra note 11.

<sup>111.</sup> *Id.* 

<sup>112.</sup> *Id.* 

<sup>113.</sup> *Terms of Use*, OPEN AI, https://openai.com/policies/terms-of-use (last updated Nov. 14, 2023).

<sup>114.</sup> Mathur, *supra* note 11.

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on the server for an hour and then become inactive.<sup>115</sup> If OpenAI does not maintain these outputs, the art generators can over time create very similar outputs based on similar inputs without any knowledge that they are infringing on the generators' own creation. The ramifications of this, especially for GAN models with a potentially limited amount of options, are that one can make a work on a generator and sell it only to be infringed by someone else later.<sup>116</sup> It would not be sustainable to allow registration and protection for AI works because there is no way to stop AI from infringing on itself. This could mean that future users may be held liable for copyright infringement without ever knowing the piece infringed, which is not how copyright law traditionally works. The fact that AI infringes on itself is a concerning reality and part of the argument against AI works gaining copyright registration.

#### C. The Art Market: A Policy Concern

Granting AI-generated works copyright protection has many potential ramifications that should not be ignored from a policy perspective. The power to grant copyright protection was founded with the intent to promote "the Progress of Science and useful Arts."<sup>117</sup> Granting AI copyright protection goes against this very purpose.

At the heart of the issue is whether copyright law was intended to protect *human* creation and art.<sup>118</sup> AI does a fine job at attempting to blur the lines between computer-made and human-made art, but at its heart many artists argue that "AI-generated art lacks expression, emotions, and details."<sup>119</sup> Computers are incapable of feeling human emotions and instead can only attempt to mimic them.<sup>120</sup> While AI may not be able to capture the whole art market, granting copyright protection could pose as a deterrent for future artists. Some may wonder why they should even attempt to enter a field in which your own work can be used to compete in the same market against you without attributing the work to the original creator.<sup>121</sup> At it's core, AI needs artists to continue developing work to

<sup>115.</sup> DALL-E API FAQ, supra note 52.

<sup>116.</sup> Feliú, supra note 9, at 107-08.

<sup>117.</sup> Wu, *supra* note 6, at 133.

<sup>118.</sup> Kaushik Pal, 5 Ways AI Is Changing Art, TECHOPEDIA (Feb. 1, 2023), https://www.techopedia.com/what-is-the-impact-of-ai-on-art/2/33399.

<sup>119.</sup> Id.

<sup>120.</sup> Id.

<sup>121.</sup> Vadim Cherkasov & Jeffrey Safran, *Who Is the Author—You or AI? Tensions Rise Over Copyright Protection*, REUTERS (Mar. 22, 2023, 10:27 AM), https://www.reuters.com/legal/legalindustry/who-is-author-you-or-ai-tensions-rise-over-copyright-protection-2023-03-22/.

stay relevant. Art has changed significantly over time and if, for example, AI programs were developed and used in 1800, we may have never experienced some of the later greats such as Picasso or Van Gogh. Copyright law was established to protect progress in the useful arts. If copyright protection is granted to machine-made art, we may go against that very nature because a computer can never truly encapsulate what art really is. It can only mimic.

Some are concerned about the alternatives and whether the incentive to develop AI programs will disappear if the works created are not protectable by copyright.<sup>122</sup> However, AI has its own series of consequences that may serve as equal deterrents to AI innovation already. For example, if the developers and owners of the AI programs are given authorship over a generated work, they would open themselves up to a lot of liability. Artists are already anxious to get a cut from programs that have been trained on their work, and granting copyright to the works created can open them up to even more litigation and issues.<sup>123</sup> Furthermore, even if copyright protection was granted to the user of the programs, AI developers could still face liability through the "doctrine of 'vicarious infringement,' which applies to defendants who have 'the right and ability to supervise the infringing activity' and 'a direct financial interest in such activities."<sup>124</sup> This could potentially be a more legitimate disincentive for developers.

Furthermore, the argument that developers of AI would have no incentive to create or improve these systems without copyright protection is baseless.<sup>125</sup> The protection that an AI developer would be concerned with is whether they can gain protection on the AI system itself, not so much the outputs since many AI programs have already agreed to give the rights of any image to the user.<sup>126</sup> Nothing points to the concept that developers have any interest in gaining copyright to the outputs of the generators; the owners of the AI programs make money when they charge for use of the program, not by taking a percentage of the profits made off the outputs.

<sup>122.</sup> Id.

<sup>123.</sup> Riddhi Setty, *First AI Art Generator Lawsuits Threaten Future of Emerging Tech*, BLOOMBERG LAW (Jan. 20, 2023, 4:05 AM), https://news.bloomberglaw.com/ip-law/first-ai-art-generator-lawsuits-threaten-future-of-emerging-tech.

<sup>124.</sup> CHRISTOPHER T. ZIRPOLI, CONG. RSCH. SERV., LSB10922, GENERATIVE ARTIFICIAL INTELLIGENCE AND COPYRIGHT LAW 5 (Feb. 24, 2023), https://crsreports.congress.gov/product/pdf/LSB/LSB10922 [https://perma.cc/U9U7-ZHGT].

<sup>125.</sup> Feliú, supra note 9, at 125.

<sup>126.</sup> Terms of Use, supra note 113.

#### D. Liability and Uncollectable Damages

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Another reason why AI should not be granted copyright protection is based on the idea of liability and uncollectable damages. One feature of authorship that is typically ignored by scholars arguing for copyright protection of AI work is the ability to be held liable if the work infringes someone else's work.<sup>127</sup> When considering whether or not copyright protection should be granted to AI-generated works, this should be a consideration.<sup>128</sup> Much like the authorship requirement, the options for liability that are to be considered are the user, the developer, or the AI itself, all of which present a difficult problem with liability.

Granting AI authorship over a work, in particular, sets up an interesting set of problems.<sup>129</sup> When a copyrighted work is infringed upon by another, the original author has a cause of action.<sup>130</sup> So, if AI was the author of an infringing work, it would stand that the original author could sue the AI. How would the rules of civil procedure apply though? Since AI cannot file articles of incorporation without a human "incorporator," AI would need to be considered a human for civil procedure purposes.<sup>131</sup> This does not answer the other questions regarding the rules of civil procedure. We still do not know how to determine what personal jurisdiction or due process would look like in this scenario.<sup>132</sup> Finding AI liable for infringement does not mean it is possible to enforce any remedies, and without a possible remedy, AI could win based on a Rule 12(b)(6) motion to dismiss.<sup>133</sup>

The remedies available for copyright infringement are typically actual damages, statutory damages, or injunctive relief.<sup>134</sup> Both actual and statutory damages would likely not be available when litigating against AI, since AI programs do not have money themselves or even the ability to open a bank account.<sup>135</sup> That leaves injunctive relief as an open, but few scholars see any value in this option since an AI that "refuses to obey an injunction or otherwise stop infringing on a copyright faces no

<sup>127.</sup> Liebesman & Young, supra note 54, at 261.

<sup>128.</sup> Id. at 259.

<sup>129.</sup> Id. at 262.

<sup>130.</sup> *Id.* at 263.

<sup>131.</sup> Id. at 263-64.

<sup>132.</sup> See generally id. at 263-68.

<sup>133.</sup> Id. at 268.

<sup>134.</sup> *Id.* at 269.

<sup>135.</sup> Id. at 269-70.

consequences."<sup>136</sup> Granting AI authorship means that that an infringed author likely will not be able to collect a remedy.

Holding the developer or the user liable for infringement may also not be the right answer. While some scholars are worried about the incentives or disincentives of not granting protection, granting protection opens them up to copyright liability when the AI infringes on others work even without the user's knowledge. Since AI is developed by learning from other images, and trying to make images that look like they could be from the training sets they learn from, any AI generated images are inherently not independently created.<sup>137</sup> The developer or user would then need to rely on a fair use defense in this case, which may be out of their control since they are unaware of how much of an original work was used, which is one of the considerations.<sup>138</sup> The issues relating to liability are crucial to consider when granting AI copyright and point to the idea that copyright should not be granted protection.

#### IV. CONCLUSION

AI art generators and the works they create are rapidly seeping into the art world, and it has many artists raising an eyebrow. Several artists have already come together in attempts to recover from the unauthorized use of their pieces that were utilized to train these programs, and the tensions in the art world will only rise if the works are granted copyright protection.<sup>139</sup> Looking at all the possible issues, case law, and U.S. Copyright Office opinions, it seems unlikely that AI-generated art will be granted copyright, and that is a good thing.

Art is meant to be emotional and proactive and has served for many years as a meaningful way to communicate different ideas and feelings about the human condition, society, religion, and more. Artificial intelligence may be able to generate aesthetic images, but at most, what it creates is a good attempt at mimicking what real art does. To grant AIgenerated art copyright protection would likely hinder progress, not promote progress in the field since it could disincentivize human artists to work hard, push boundaries, and break out into new styles. AI art generators can mimic art well, but these programs cannot predict where art will go in the next ten, twenty, or one hundred years. AI-generated

<sup>136.</sup> Id. at 271.

<sup>137.</sup> Feliú, supra note 9, at 106-13.

<sup>138.</sup> Gillotte, supra note 17, at 2679-80.

<sup>139.</sup> Setty, supra note 123.

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works should not be granted copyright to protect the interest of real artists that use human innovation, invention, and creativity.