

A Sui Generis Approach to the Protection of AI-Generated Works:

Balancing Innovation and Authorship

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Abstract

As artificial intelligence (“AI”) reshapes creative production, debates intensify around the protection of works authored by or with AI (“AI-generated works”). The debate over whether to protect these works under the copyright system is a complex and ongoing discussion that raises significant legal, ethical, and practical considerations. The consensus is that works generated by or with AI are not protectable simply because copyright only protects the creative works of human authors. The current debate would then leave such works without protection. One issue this presents is disincentivizing the use of AI in the creation of books, art, or music.

However, just as with human-created works, consumers can enjoy the art or prose of AI works, and thus these works have the same intrinsic value. Generally, the creation of value is a worthy societal and economic goal—hence the clause in the U.S. Constitution that refers to promoting “the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”

In addition, the current consensus is undervaluing human inputs into AI-generated works that initiate and/or enable the work’s creation. For example, if a human gives the AI a plot and writing style details and then tells the AI to write a short story, the resulting work is only created

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because of that human's inputs. Therefore, merely as a matter of equity and fairness, the human should be rewarded for initiating the AI-generated work, thereby creating value. However, this doesn't mean that copyright protection should apply in such a case.

Indeed, it is this last point where we have been missing an opportunity. Debate in this area has been limited to the idea that there are only two possible outcomes, namely, copyright protection or no copyright protection. This article hopes to open the debate surrounding the intricate terrain of legal protection for AI-generated works by proposing a *sui generis* framework for such works. This framework, characterized by limited protection terms, well-defined rights, a registration requirement, a notice requirement, and a system providing a source of funds for public good, seeks to address the major obstacles to a way forward on solving the AI/copyright debate.

Introduction³

The emergence of artificial intelligence as a creative force⁴ brings forth a captivating paradox.

On one hand, AI's capacity to generate art⁵, music⁶, literature⁷, and more has ignited new realms of artistic possibility, redefining the scope of what human creativity can achieve. This integration of AI into the creative process is transforming how creators approach their work and enabling innovative possibilities.

This very progress has sparked complex questions about authorship, ownership, and the essence of artistic expression itself. As AI algorithms learn, adapt, and compose, they challenge the long-held premise that creative endeavors stem solely from human intellect and intention. This

³ Much of this section was drafted with the help of ChatGPT.

⁴ The examples in the footnotes below were the result of a query to ChatGPT as to how AI is being used in art, music, and literature.

⁵ Generative Art: Artists harness AI algorithms to co-create artwork. They input certain parameters, allowing AI to produce unique visuals inspired by established patterns or styles. The output often combines AI's insights with the artist's intent, yielding fresh perspectives.

Style Transfer: AI algorithms analyze the stylistic elements of one artwork and apply them to another, leading to a harmonious fusion of artistic aesthetics. This process results in captivating visual blends that challenge traditional notions of artistic creation.

Interactive Art: Creators construct installations with AI components that respond to audience engagement. By interpreting human inputs, these installations offer personalized and dynamic art experiences, blurring the lines between creator and viewer.

AR and VR: AI enhances immersive experiences in augmented and virtual reality realms. Artists craft digital worlds that interact with viewers in real time, allowing for unparalleled engagement and exploration.

⁶ Music Composition: AI algorithms trained on vast musical databases assist composers in generating original pieces. This ranges from classical compositions to innovative electronic tracks, expanding the horizons of musical creativity.

Music Production: AI serves as a creative partner throughout the production process. It suggests instrument choices, mixing techniques, and arrangement variations, enabling musicians to explore diverse sonic landscapes.

MIDI Generation: AI can translate non-musical inputs, such as textual descriptions or visual cues, into musical scores. This dynamic approach transforms the way music is conceptualized and materialized.

⁷ AI-Generated Writing: Authors collaborate with AI models to facilitate content creation. AI generates drafts, aids in ideation, and even crafts variations of sentences, streamlining the writing process and inspiring new directions.

Language Translation: AI-driven translation tools bridge language barriers, making literature accessible to a global audience. This capability fosters cultural exchange and dissemination of stories across borders.

Editing and Proofreading: AI-powered tools analyze text for errors, inconsistencies, and stylistic improvements. This iterative process enhances the quality of writing and contributes to a polished final product.

Plot Generation: AI assists writers in developing storylines by suggesting plot twists, character arcs, and narrative structures. This augmentation of creativity sparks new possibilities in storytelling.

juxtaposition has unfurled a dynamic discourse at the crossroads of law and technology—a discourse that transcends traditional boundaries and necessitates innovative legal approaches.

In an era where artificial intelligence is reshaping the landscape of creative expression, a profound conundrum emerges for legal scholars and policymakers alike: how to effectively safeguard and preserve works generated by AI, especially in the context of creating a sustainable economy which has fully integrated the potential of AI. As the intersection of technological advancement and artistic innovation becomes increasingly intricate, the conventional frameworks of copyright and intellectual property law find themselves facing unprecedented challenges.

Why Not Copyright⁸

Throughout modern history, creative works have found their safeguard in the realm of copyright laws, offering authors the exclusive right to duplicate, distribute, and present their creations to the public. The overarching goal of copyright protection is to spark the flame of creation by endowing authors with a means to derive value from their artistic endeavors. This established system has grown and flourished over the course of centuries, contributing to an expansive reservoir of music, films, software, art pieces, and literary works. The fruits of these labors permeate our lives, easily accessible through the screens of our phones, the interfaces of our computers, and the hallowed aisles of public and private libraries. But providing copyright protection to AI-generated works would come with overwhelming cost and challenges.

⁸ Despite what you've learned on the Internet, not everything goes in the square hole.
<https://youtu.be/6pDH66X3CIA>

The idea that AI, computers, and robots be allowed to compete with humans in the realm of creativity is viewed as profoundly unfair. First, there can be no doubt that AI can generate a new work of literature, music, or art, just as humans can. However, an AI generates works in a fundamentally different way from how humans create works. The AI copies and recalls virtually instantaneously a large amount of digitally stored works of human creativity, spanning thousands of years, and then can generate, over a very short time period, hundreds of millions of photos, poems, books, songs, and even sculptures (using 3D printing technology) that would vary in “quality.” But we can be certain of one thing: the best works that AI generates will be at least as good, if not better, than its human competitors. For evidence of this, one need only look at the performance of AI-generated works in international art and photo competitions.

Confounding the issues further, recall that copyright protection is automatic in the vast majority of the world’s countries. If AI-generated works are given copyright protection, some enterprising entrepreneurs will begin mass creation of works, including songs, images, and literature, and make a business of suing large numbers of defendants under copyright law for substantial similarity. Alternatively, or additionally, because of the ease of using AI to generate new works, the current creative economy that has been built around human-created works could collapse. The entire market for licensed images and licensed songs could go extinct. Why buy when AI can generate a photo or song for free? Why risk capital over the span of months or years hiring screenwriters, actors, camera operators, and the thousands of others that contribute to the making of a movie, when AI can generate an entire movie on its own, perhaps in a matter of minutes? These are real fears already expressed by those in the creative industries.

In this context, there is an inherent tension between humans and AI. This tension can be explained at least in part on certain, considerable advantages that AI enjoy over their human

counterparts. These advantages include the amount of material accessible (and accessed) and retained in memory (limited solely by what has been stored digitally), an ability to perfectly recall such material at a speed humans cannot come close to, and, most importantly, an ability to quickly process, merge, and assimilate diverse material into a single work.

One way around the bar to non-human authorship is to conceptualize AI as a mere tool of the human author, like any other technology used by humans to assist, facilitate, or enable the author to create an expression of their idea. A human author uses AI to generate any number of works, such as images, literature, and music. Copyright protection, it is argued, should attach because the human is the author, i.e., the party responsible for the creation of the work. As an example, consider photographs taken by a human. Current law protects such photographs under copyright. In this case, the human uses a camera as the tool to create the photographs. In a similar way, if the human uses AI as a tool to create an image in the style of a photograph, why shouldn't the resulting image also be protectable by copyright? There is something simple and logical about this analogy, but we think it ultimately fails.

For the authors, the ultimate downfall of the AI-as-a-mere-tool began by framing the issue beyond photographs. If a camera is just a tool, then what about a piano or pen and paper? All are necessary elements to enabling the author's expression of their idea: A photograph could not exist without a camera; Piano music could not exist without a piano. The technology, the equipment, the tools were required for ultimate creation of a work—the expression of the author's ideas. Unlike these tools, AI isn't simply a tool guided solely by the hands of the author. The inputs into AI do not equal, and in fact are less than, the output generated by AI. This is both the true value of AI-generated works, but also the very reason why such works have not been found to enjoy copyright protection.

Before AI, the author of a photograph selected all the variables necessary to the creation of the photograph, including location, angles, lighting, composition, etc. In essence, the author guided the camera to express nearly exactly the author's idea or vision of what the photograph would look like before using the tool to create the work. With AI, human inputs do not dictate the output. Imagine, for example, the inputs providing more and more detail. Create an image of a cat, black, sitting on a chair, mouse in the corner by a small hole in the wall, in a library room of a house, red curtains, ray of light through the window. Even with all these details as inputs, the resulting AI-generated work cannot be the product of the author because there are infinite ways for the AI to apply these inputs to an image.

The adaptation of traditional copyright frameworks proves inadequate, both because AI lacks consciousness, emotions, and intrinsic creative intent,⁹ and because of the imbalance in capabilities between humans and AI. Notwithstanding all the other arguments for not protecting AI works under copyright, we believe that the human factor is a dispositive and absolute barrier. The US Copyright Office has consistently maintained a human author requirement for creative works.¹⁰ Given the imbalance in abilities discussed above, this rejection of copyright protection for AI-generated work should be maintained. However, that does not mean that AI-generated works cannot and do not create economic and social value. Therefore, rather than continue to debate extending copyright protections to AI-generated works, it's time to look for alternative solutions to protecting such works. In doing so, our goal should be to incentivize the creation of

⁹ Whether AI may one day possess consciousness, emotions, and intrinsic creative intent, and any other attribute we attribute to sentient life, we know it currently does not. We leave for another day how to treat AI-generated works when such a day arrives. However, even if one day AI becomes sentient, we believe that such enhanced capability would increase, rather than decrease, the inherent tension that exists between humans and AI.

¹⁰ The U.S. Court of Appeals for the Federal Circuit, the court with patent jurisdiction, has similarly held that an inventor must be a human (natural person) in order to qualify for patent protection. *Thaler v. Vidal*, 43 F.4th 1207 (Fed. Cir. 2022), *cert. denied*.

such works, while maximizing the combined economic and social benefits of both human-created and AI-generated works.

Why Not ‘No Copyright’

If we accept the conclusion that AI-generated works should not be protected under copyright, then the current debate would leave us with no protection for such works. There are at least two fundamental problems with that scenario.

First, laws should incentivize the creation of value and public goods; however, a lack of protection for AI-generated works necessarily discounts and trivializes the value that is created. It is undeniable that AI-generated works have value, or at least the potential for value, in the exact same way that human created works have value.

Second, providing no protection also undervalues the way in which the work was created. Think of the inputs into an AI algorithm as “ideas”. You have an idea for novel that would include various characters and their personality traits, a setting or location for the novel, a plot or theme for the storyline including what generally happens, and perhaps an idea of a writing style. You provide these inputs to the AI algorithm, which then efficiently (and quickly) writes the novel. Without your (human) input, the novel never gets written. Under copyright law,¹¹ ideas, disembodied from their expression, are devalued and are explicitly excluded from protection. We think this makes sense. The U.S. Constitution recognized this by explicitly allowing Congress to make laws that promote the progress of science and useful arts by giving authors and inventors the right to their creations. It was well understood that ideas themselves have no intrinsic public

¹¹ Ideas are also devalued under patent law and are explicitly excluded from protection. Under both copyright law and patent law more is required; copyright requires expression and patent requires reduction to practice.

value unless placed in a form suitable for consumption and commercialization by the public. The idea needs expression or reduction to practice—to be translated into a book or an invention, for instance.

Throughout our creative history, a small percentage of the population would/could have an idea for a creative work, such as a book, whereas the majority has neither the time, interest, nor capacity. However, of that small percentage of conceptualists, perhaps less than 1% can express an idea (e.g., writing a book) in a way that people attribute value to it (i.e., want to read the book). The value in the book context is very clearly the ability to make prose that is engaging enough to make people want to buy and read the book.

AI has turned this creative process on its head. With AI, the expression, e.g., writing, is now the easy part. The AI can generate expression, whether writing, graphics, or songs, without struggle. Time is not a constraint on the generation of works by AI; conversely, humans need to eat, work, and sleep. With AI-generated work, the value now is in the human input stage and, perhaps most importantly, the initiative to provide the input to the AI so that a work can be generated. AI has automated the expression portion of the creative process. Although this fact may be unsettling, it leaves us with a watershed moment—a huge shift in the way the market for creative production operates. Understanding the change in perspective of where the value of the creation process derives will help us craft a solution that recognizes and rewards the new value inputs into the creative production process...the human idea. Failing to do so merely continues to undervalue human input and initiative and leaves no protection for AI-generated works. Such a result is not only unsatisfactory, it also discourages the very creative process that we want our laws to support.

Proposed Solution

We need a legal framework that can appropriately value human input and initiative when utilizing AI to generate works, yet preserves the traditional protections reserved for human creators. This framework, we believe, should be characterized by a limited term of protection, well-defined rights, a registration requirement, a notice requirement, and should provide a source of funds for a public good facilitating human use of AI for the benefit of the economy and society. Such a framework of protection for AI-generated works will necessarily address the major obstacles to a way forward in solving the AI copyright debate.

Policymakers, and especially Congress, should open a dialogue on this proposal with experts from government, industry, and academia to work out the details for implementing this proposal. The imperative to open the issue to public comment underscores a commitment to inclusive decision-making. By soliciting insights and perspectives from diverse stakeholders, the policy formulation process gains the advantage of a comprehensive understanding of the potential impact of protection terms on creators, consumers, and the cultural landscape at large. This approach ensures that the resultant framework reflects the collective interests of society.

Solution Framework

Limited Term of Protection:

Given the speed and apparent ease with which AI can generate works, the term of protection for AI-generated works should be significantly less than the term provided for under copyright. A range of 5–10 years from registration seems a good place to start the discussion, though with additional research and study a more appropriate term may be determined. The limited term

acknowledges the multifaceted nature of human creative inputs and AI-generated outputs and the rapid evolution of AI technology.

Further, it may be necessary to differentiate between different forms of works, e.g., images versus movies, poem versus novel, etc. In other words, these different categories of works might be viewed as deserving different terms of protection based on the different creative effort needed to provide the inputs into the AI necessary for the generation of those works. For example, the inputs necessary to create an image can be quite simple, e.g., create 20 scenes of heaven in the style of van Gogh. The human creator can then very quickly peruse the 20 images and choose the one to her liking. Perhaps it is the one she thinks is “best” and worth registering because she thinks others will also value the work at something more than zero, or she simply wants to prevent others from using the image because she plans to incorporate it into a logo for her business. Conversely, creating a book people might want to read could require more inputs, e.g., plot, characters, personalities, activities, general theme, etc. We recognize that it isn’t entirely clear that the different forms of works require different terms, but it seems a logical place to start the discussion.

The introduction of limited protection terms for AI-generated works reflects a nuanced approach that balances the imperatives of incentivizing innovation, while clearly still favoring the rights that human authors enjoy under the copyright system.

Registration Requirement:

AI-generated works eligible for protection under this system would need to be registered with the U.S. Copyright Office using the current registration system. Only minor adjustments are likely to be needed to implement this parallel *sui generis* registration system. For example, a box that can

be checked saying AI was or was not used in the creation of the work would determine which type of registration is requested. The proposal to integrate AI-generated works into the existing U.S. Copyright Office registration system offers a pragmatic approach that harnesses the foundation of an established infrastructure, while incorporating tailored modifications to accommodate AI-generated content. This approach ensures a streamlined process for creators, aligns with current practices, and introduces a minimal, yet crucial adjustment to capture the unique nature of AI's contribution in the creative process.

By utilizing the established U.S. Copyright Office registration system, the proposed framework taps into a well-functioning mechanism that has long served as a cornerstone of copyright protection. Leveraging this infrastructure not only expedites the integration of AI-generated works, but also capitalizes on the familiarity of creators with the registration process. This approach mitigates the need for an entirely novel administrative infrastructure, minimizing complexities, and facilitating a swift adaptation to the evolving creative landscape.

The cost to register a work should be minimal, but not free; it should reflect the value such protection affords registered works. This fee requirement serves three functions. First, much needed revenue would be generated for the U.S. Copyright Office. Second, the cost would require creators to be somewhat selective about what to register. This process serves as a self-filtering mechanism of fleshing out works likely to be of value (and thus worth registering) and compare that to automatic protection under copyright where everything created is automatically protected...the good, the bad, and the ugly. This requirement will greatly reduce the flood of AI-generated works that could be granted protection, and in turn, reduce to some extent the competition between human authored and AI-generated works. Third, the fees generated would not only enable the U.S. Copyright Office to administer the registration system, but also would

generate funds that Congress could allocate to programs designed to educate and train the labor force with new knowledge and skills to implement and use AI tools in the evolving information age economy. There can be no doubt that AI will transform the economy in ways that we today cannot fathom. Such programs are necessary to ensure that the labor force can continue to be viable in this new economy.

Similar Bundle of Rights:

The bundle of rights granted to AI-generated works should be similar to traditional copyright. These rights could include reproduction, distribution, public performance, adaptation, and derivative works rights. Likewise, the exceptions and limitations available for copyright works would apply equally to the AI-generated works.

By substantially mirroring the bundle of rights associated with traditional copyright, the proposed framework extends a familiar and well-established protection structure to AI-generated works. This approach ensures a consistent legal landscape where both human and AI-generated creations are subject to the same foundational principles. Moreover, this symmetry safeguards against any potential legal discrepancies that might arise from delineating separate rights for AI-generated content.

Distinct Mark or Label:

AI-generated works should also be required to carry a distinct mark or label indicating their AI origin. The implementation of a distinct mark or label on AI-generated works represents a strategic response to the unique challenges posed by the integration of AI into the creative process. This label serves a dual purpose, acting as both an informative signal to users and a mechanism to prevent unwarranted overprotection of AI-generated content.

Overprotection would naturally arise if there were no markings, due to the public's inability to distinguish between human authored and AI-generated works and the potential fraudulent designation of an AI-generated work as human authored without AI assistance. In other words, in the current landscape, users often operate under a default assumption of copyright protection for all creative works. This assumption would result in the over-protection of works generated by AI. That reasonable risk aversion would be negated by the required mark or label that would identify AI involvement, as well as the year of creation and thus its term and expiration date.

A visual representation of this distinct mark further underscores its purpose and efficacy. The symbol of an A enclosed within a circle, akin to the well-recognized copyright symbol ©, serves as an intuitive and symbolic representation of AI involvement. This symbol—readily associated with AI origin—provides an immediate cue to users and consumers, facilitating rapid comprehension and informed decision-making.

Review and Evaluation:

The establishment of a *sui generis* system for the protection of AI-generated works underscores a proactive and pragmatic approach to accommodate the rapid pace of technological evolution and shifting creative paradigms. An integral aspect of such a system would involve regular and systematic reviews, a practice that mirrors existing frameworks and has proven effective in maintaining legal relevance and addressing emerging challenges. As a starting point for discussion, a 5-year review period seems reasonable.

The concept of periodic reviews is not uncharted territory within the legal landscape. A precedent is evident in the Copyright Office's periodic reviews conducted under Section 512. This process assesses the effectiveness of the Digital Millennium Copyright Act (DMCA) in addressing online

infringement issues. The periodic review model acknowledges the fluidity of the digital age and serves as a valuable reference for crafting similar review mechanisms within the *sui generis* framework.

Conclusion

In navigating this uncharted terrain, the *sui generis* approach proposed here emerges as a beacon of adaptability. It acknowledges AI as a dynamic co-creator while upholding the rights and intentions of human participants. By fostering a balanced ecosystem, this approach empowers creators to leverage AI's capabilities, while ensuring that the outputs remain true to their vision.

As legal scholars and policymakers grapple with the intricacies of protecting AI-generated creations, the *sui generis* approach emerges as a formidable solution. Its adaptation allows for the preservation of the inherent value of both AI and human creative input yet recognizes and addresses the inherent imbalance between humans and AI in the creative process. By embracing this nuanced approach, society can fully embrace the artistic possibilities of AI while safeguarding the foundations of creativity, innovation, and the public domain. In a world where human imagination and artificial intelligence converge, the *sui generis* system offers the promise of harmony amidst complexity, embodying the true essence of creative evolution.