Copyright[X]

Spring 2025

Professor William Fisher

Final Examination

This is an "open-book" examination. When preparing your answer, you may read, listen to, or watch any material you wish. However, you must abide by the following rules:

(1) When preparing and drafting your answer, you may not consult in any way with any other person.
(2) Plagiarism is strictly forbidden. Guidelines concerning mandatory attribution of sources and associated citation requirements are available at https://usingsources.fas.harvard.edu/harvard-plagiarism-policy.
(3) Although you are permitted to use artificial intelligence when preparing your answer, you must abide by the following constraints:
   a) As you likely know, large language models (LLMs), such as "ChatGPT" or "Claude," sometimes "hallucinate." In other words, they fabricate material and then present it as real. If, as a result of using such a model, your answer contained false information, you would be penalized – in much the same way that a journalist who included false information in an article, or a lawyer who included false information in a brief, would be penalized. Thus, if you consult a LLM when preparing your answer, you should certainly verify the accuracy of the information it provides you.
   b) Appropriate attribution of material obtained from a LLM is just as essential to academic integrity as it is for any other source. Thus, if you derive an idea or an argument from such a model, you must include in your answer a footnote clearly identifying the model in question.
   c) Finally, if any of the text you include in your answer consists of language generated by artificial intelligence (or a paraphrase of such language), you must underline the text at issue in addition to providing an appropriate footnote.

The exam contains two Parts; you must answer both. Part I contains seven questions; you must answer all of them. Part II has three options; you must answer one and only one. The word limit for each question and the weight that will be assigned to each of your answers are indicated below.

	Word Limit	Weight
Part I, Question a	600 words	15%
Part I, Question b	200 words	5%
Part I, Question c	300 words	6%
Part I, Question d	300 words	7%
Part I, Question e	400 words	9%
Part I, Question f	400 words	9%
Part I, Question g	400 words	9%
Part II	1500 words	40%

The exam will be available starting at 21:00 UTC on May 1, 2025. It is due no later than 21:00 UTC on May 5, 2025. Answers must be submitted via the CopyrightX portal; email submissions will not be accepted. To submit your answer, please follow these steps:

(i) log in your CopyrightX account;
(ii) click on the "Exams" option in the main menu;
(iii) click on "CopyrightX 2025";
(iv) click on the "Choose File" button and then select your answer file; and
(v) click "Upload."

Please note that only one (1) file in **PDF format** can be uploaded. You should receive an **email confirmation** shortly after the submission of you answer file; if you do not receive it, please reach out to copyrightcourse@law.harvard.edu as soon as possible.

When submitting your exam, please adhere to the following formatting guidelines:

- Please name your exam file as follows: [Last name], [First name] – CopyrightX Exam
  - *For example:* Warhol, Andy – CopyrightX Exam
- Please include your name and email address at the top of the first page of your submission.

During the examination, all of the course materials (including the assigned readings, recorded lectures, and maps of copyright law and theory) will remain available at http://ipxcourses.org/copyrightx/.

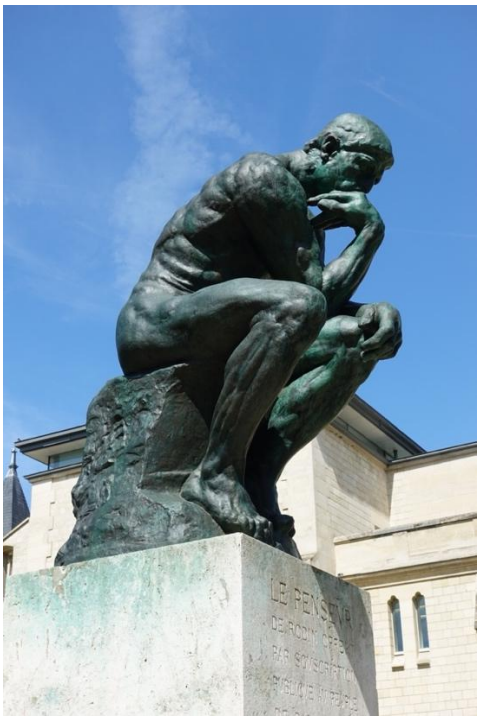
Neither the course team nor your teaching fellow will respond to questions concerning the exam unless those questions involve emergencies. If an emergency does arise, please email copyrightcourse@law.harvard.edu, providing details. Someone will respond as soon as possible. Exam answers should NOT be submitted to this email account.

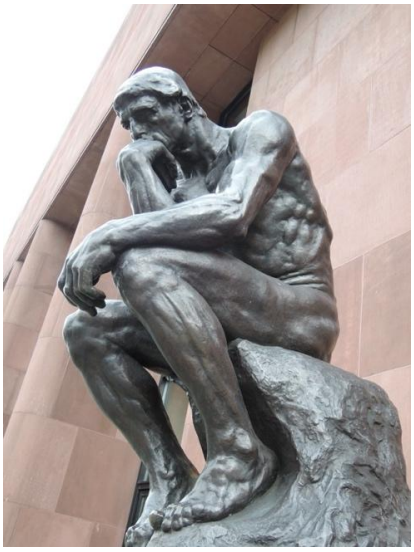
If you find any aspect of the exam's content or instructions to be ambiguous, do not request a clarification. Instead, develop your own interpretation that resolves the ambiguity and make that interpretation explicit in your response.

Part I

[The following is a fictionalized composite of several events. Many of the statements made in the narrative are true, but others are "alternative facts" – i.e., either distortions of true events or outright fabrications. If you happen to know (or learn) about aspects of the actual events that are inconsistent with the narrative, you should ignore that knowledge when framing your answer.]

The most famous work of Auguste Rodin is *The Thinker*. Photographs of two of the bronze castings of the sculpture appear below.





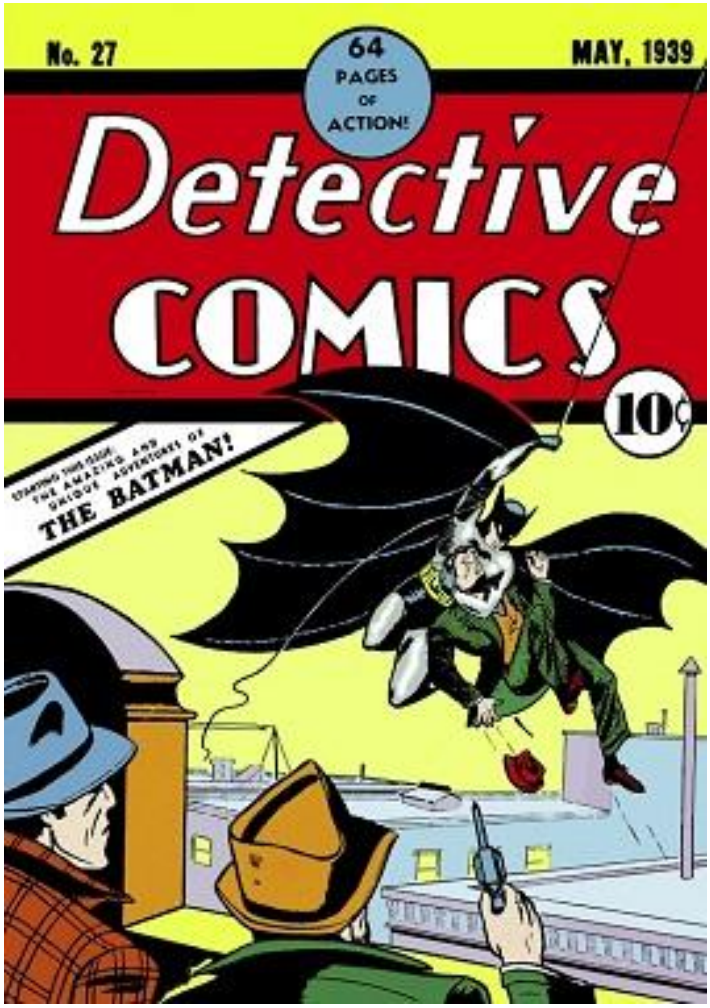
"The Thinker was originally called *The Poet* and was conceived as part of *The Gates of Hell*, initially a commission (1880) for a pair of bronze doors to a planned museum of decorative arts in Paris. Rodin chose for his subject Dante's *Inferno* from *The Divine Comedy* (*c.* 1308–21)…. The nude form is seated on a rock, his back hunched forward, brows furrowed, chin resting on his relaxed hand, and mouth thrust into his knuckles. Still and pensive, he observes the twisting figures of those suffering in the circles of Hell below."[1]

The Gates of Hell, the monumental work for which *The Thinker* was originally intended, was never cast during Rodin's lifetime. However, once disentangled from *The Gates*, the figure of the seated man enjoyed wide acclaim. 27 full-sized bronze castings of *The Thinker* were made, all with Rodin's permission. Several are currently on public display in museums and universities throughout the world, including in the United States.

[1] Brittanica, "The Thinker."

In January of 1939, Bob Kane, an independent graphic artist, created a fictional superhero, whom he called "Batman." In Kane's original conception, Batman was a wealthy, obsessive, merciless crimefighter, embittered by the murder of his parents. In February of 1939, Kane wrote and published a few comic books featuring the new character.

In March of 1939, executives of DC Comics, a fledgling company, offered to buy from Kane his interest in Batman – and then to employ him to create additional stories. After a brief negotiation, the parties came to terms. On April 15, 1939, Kane assigned to DC Comics "all my right, title, and interest in Batman" and quickly set to work. The cover of the first publication growing out of this collaboration, is shown below.



Since 1939, DC Comics has deployed Batman in many media – comic books, films, merchandise, etc. During that period, the character of Batman has shifted periodically, partly in response to changing consumer tastes, partly to fit the personalities of the actors who have depicted him in audiovisual works. One of the most memorable of Batman's incarnations was that of "the dark knight," one of the central characters in the acclaimed 2008 film of the same name. That version of Batman, played by the actor, Christian Bale, is shown below.

Bob Kane, the original creator of Batman, died in 1998, leaving all of his assets to his wife, Elizabeth Sanders, who is still alive.

Derek Driver, a resident of Los Angeles, is a passionate fan of the Batman movies. In 2022, he located and purchased one of the few remaining "Batmobiles" that had been produced by Mark Towle before he lost his famous copyright case.

Among Driver's friends is the sculptor, Léo Caillard. (His biography is available at https://leocaillard.com/#fullbio.)

In November of 2023, Driver purchased a Batman costume at a novelty shop, drove his Batmobile to Caillard's home in Tahoe City, California, and (wearing the costume) strode into Caillard's studio with a flourish. Delighted, Caillard asked Driver to pose for some photographs. At one point in the ensuing photo shoot, Driver (still in costume) sat on a stool and adopted the position made famous by Rodin's *The Thinker*. Caillard laughed and took a photograph of Driver in that pose.

After Driver returned home, Caillard decided to create a life-sized sculpture based on the photo he had taken of the costumed Driver. He titled the work *Dark Knight Thinker*.

When the work was completed, Caillard asked the manager of Heavenly Valley (a ski resort near his studio), if he might offer the sculpture for sale by placing it in a prominent location on the slopes of the resort. Thinking that the sculpture would amuse skiers, the manager happily agreed. In January of 2024, Caillard installed the sculpture at Heavenly Valley. A photo of the work in that location appears below.

As yet, no one has offered to purchase the sculpture. However, it has become well known among the visitors to the resort.

In February of 2024, Driver went skiing at Heavenly Valley and saw the sculpture. Annoyed, Driver called Caillard and asked why he had not been given any credit for helping to create it. Caillard brushed him off.

Warren Miller produces documentary films about skiing. (Examples can be found at https://warrenmiller.com/film-archive.) One of the segments of Miller's 2024 film "Breaking Good" features Heavenly Valley. One of the clips in that segment shows Caillard's sculpture. The narrator of the film subtly suggests that *Dark Knight Thinker* is an unimpressive piece of art and moreover that it looks especially ludicrous in a ski resort. Last week, Caillard saw the film and was enraged. He promptly contacted a law firm based in San Francisco and asked for advice.

Caillard's primary concern is what rights he might have against Miller. But he is also worried about his own exposure to liability for copyright infringement, and he is curious concerning the potential claims of other actors in this drama.

You are an associate in the law firm. The partner in charge of the case asks you to draft a memorandum, in which you address the following questions:

a) Does *Dark Knight Thinker* infringe DC Comic's copyright in *Batman*? (600 words)
b) Might Sanders assert any rights to *Batman*? (200 words)
c) Might Driver claim any interest in *Dark Knight Thinker?* (300 words)
d) Assuming the answer to question (a) is yes, does DC Comics have a copyright claim against Heavenly Valley? (300 words)
e) Assuming the answers to questions (a) and (c) are no, would Caillard prevail in a copyright infringement suit against Miller? (400 words)
f) Would DC Comics prevail in a copyright infringement suit against Miller? (400 words)
g) If the answer to question (e) is yes (and thus Caillard prevailed in a suit against Miller), what remedies would be available to Caillard? (400 words)

You may assume that the law governing all of these questions is the copyright law of the United States as interpreted by the United States Supreme Court and the Court of Appeals for the Ninth Circuit. If you need additional information to answer any of these questions, say what that information is and why it matters.

Part II

Select one and only one of the following three options. Your response may not contain more than 1500 words.

(A) Select one and only one of the four theories of intellectual property that we have considered in this course. Select a country with whose copyright law you are familiar. Suppose that the copyright law of that country were reconfigured to align more closely with the theory you have chosen. How, if at all, would that reconfiguration affect the outcome of disputes of the sort exemplified by question (a) in Part I, above?

(B) Select one and only one major issue in copyright law that we have examined this semester. (Examples of such issues include: originality; formalities; fair use; and secondary liability.) Solicit the opinion of the IP Theory Chatbot concerning how each of the four theories of intellectual property might help guide reform of the rules with respect to that issue. (The Chatbot is available through https://ipxcourses.org/ip-theory-chatbot/.) Then write an essay indicating the respects in which you disagree with the response provided by the IP Theory Chatbot. (At the start of your answer, you should reprint both the prompt(s) you used to solicit the Chatbot's response and the text of the response itself. However, you may exclude the words contained in your prompt(s) and in the Chatbot's response when calculating the total number of words in your answer. In other words, the limit of 1500 words only applies to the essay in which you explain how you disagree with the Chatbot.)

(C) Under what circumstances, if any, should a work created with the assistance of artificial intelligence enjoy copyright protection? Under what conditions, if any, should a for-profit company be permitted to use copyrighted works to train a large-language model without the permission of the owners of the copyrights in those works?

End of Exam

CopyrightX 2025 Final Exam

Part I

(a) Does Dark Knight Thinker infringe DC Comic's copyright in Batman?

600 words

Yes, the Batman character is subject to copyright protection because the design is distinctive, original, creative and fixed. DC also owns the copyright to the work because the character was developed by Bob Kane while employed at DC Comics, which means Batman is a work for hire with rights held by DC Comics.

Caillard violated the rights of reproduction. We show this using the three criteria to prove unauthorized reproduction. Finally we consider possible defenses that Caillard may raise and why they would fail.

Unauthorized Reproduction

First, Caillard copied the likeness from Driver wearing a Batman costume, which means the statue was generated through copying. He had Batman in mind while creating the work, which we can also see from the fact that the statue is named "Dark Knight Thinker" in an allusion to the 2009 Batman movie.

Secondly, the statue is clearly fixed and therefore a "copy".

Third and finally, we must show that the level of copying rises to improper appropriation, specifically comprehensive nonliteral / substantial similarity. 2005 Mannion case: "The standard test for substantial similarity between two items is whether an 'ordinary observer, unless he set out to detect the disparities, would be disposed to overlook them, and regard [the] aesthetic

appeal as the same…'". I believe an ordinary observer (such as myself) would be entirely convinced if someone told them that this statue was official merchandise from DC Comics, because of the pointed ears on the mask, skin-tight suit, cape, and muscular body. Thus this statue is substantially similar to DC Comic's Batman and rises to improper appropriation.

Possible Defenses

There are four criteria for determining fair use: the nature of the possibly infringing work in question, the nature of the copyrighted work, the amount and substantiality of the portion taken, and the effect on the potential market for the copyrighted work. We walk through these four criteria in order. First, this work is commercial in nature because Caillard is offering the statue up for sale. It does not meaningfully comment on any of the Batman works (i.e. parody or criticism); there does not seem to be any particular connection between Rodin's Thinker and Batman as a character. Instead the statue borrows Batman's image to stand out to passing skiers and potential buyers. Put differently, Caillard stands to financially benefit from the infringement and that counts against him. Secondly, the nature of the Batman character, movies, comics, and other works is creative. Third, a significant amount of Batman's image has been copied. Indeed, the statue could be easily mistaken for the Batman character played by Christian Bale in The Dark Knight. The first three criteria therefore fall in favor of DC Comics.

Fourth and finally, I don't see this statue affecting the market or potential market for Batman. Batman is one of the most famous characters in American culture and has already brought in huge amounts of revenue for DC Comics through "comic books, films, merchandise…" over the last 80 years. The sale of a single statue of a Batman look alike would not affect the profitability or marketability of Batman for DC Comics. Therefore I believe the fourth criteria does not fall either way.

All together, three criteria for fair use fall in favor for DC Comics and the fourth one is neutral. The conclusion is that there is no fair use defense for Caillard's Dark Knight Thinker.

Lastly, the statute of limitations (17 U.S. §507(b)) has not yet expired. The earliest the statue could have been built was in November 2023, which is less than three years ago.

(b) Might Sanders assert any rights to Batman? (200 words)

Sanders cannot assert any rights to Batman. Her late husband Bob Kane developed the character of and various works featuring Batman while employed at DC Comics. This means that Batman is a work for hire. There are twelve criteria (CCNV 1989) for determining whether the artist was an employee and the work was for hire. We do not have enough information to be able to evaluate these twelve criteria. Instead, we are told that "DC Comics… employ[ed] [Kane] to create additional stories". This seems to conclusively point to Batman being a work for hire and thus the rights of Batman belonging to DC Comics (17 U.S. §201(b)). We are also told that "Kane assigned to DC Comics 'all [his] right, title, and interest in Batman'", which means that there were no express agreements to make the author of Batman under Title 17 to be anyone other than DC Comics. Indeed, it means the opposite: there was an express agreement to do so. While Sanders received all of Kane's assets after his death, she will never be able to assert any rights to Batman.

(c) Might Driver claim any interest in Dark Knight Thinker? (300 words)

No, Driver does not have a work subject to copyright protection that may have been infringed by Caillard's Dark Knight Thinker. Driver's contributions to the statue were his appearance and pose and neither of them are subject to copyright protection.

His appearance is not fixed "for a period of more than a period of transitory duration" so it cannot fall under copyright protection (17 U.S. §102(a)). Furthermore his appearance is unlikely to have the originality or creative expression that would be required of a work that qualifies for copyright protection.

His pose cannot be copyrighted for a multitude of reasons. The thinker pose is ubiquitous to the point of being a *scènes à faire* as a funny pose when in a sitting position. It also cannot be considered original to Driver because it clearly originated from the eponymous sculpture by Rodin. Lastly, a pose cannot be copyrighted because it is closer to an idea than a creative expression. Remember the 2018 Rentmeester v. Nike case, which was decided in favor of Nike in part because Michael Jordan's "pose inspired by ballet's *grand jeté*" cannot be protected under copyright as an "idea…at that level of generality".

(d) Assuming the answer to question (a) is yes, does DC Comics have a copyright claim against Heavenly Valley? (300 words)

Yes, DC Comics has a claim against Heavenly Valley for secondary liability through vicarious infringement. To show vicarious infringement it is necessary to show three conditions.

First, under the question's premise we know that Dark Knight Thinker is a direct infringement of DC Comic's rights in Batman.

Secondly, Heavenly Valley likely benefited financially from the statue being placed at the ski slopes. The resort profits off of skiers deciding to ski there because of, among other things, the amenities offered at their facilities. The manager agreed to place the statue at a "prominent location on the slopes of the resort…[t]hinking that [it] would amuse skiers". Even if a single person remembers the resort because of the statue and returns the next season, Heavenly Valley would have profited off of the infringement.

Lastly, Heavenly Valley had the right and ability to refuse to publicly display the statue. It could have stopped the direct infringement and failed to do so.

Together these three factors indicate that Heavenly Valley committed vicarious infringement against DC Comics.

(e) Assuming the answers to questions (a) and (c) are no, would Caillard prevail in a copyright infringement suit against Miller? (400 words)

No, Caillard would fail in an infringement suit against Miller because Miller's use of Dark Knight Thinker in Breaking Good counts as a fair use. We consider the four criteria for fair use.

First, Breaking Good's incorporation of Dark Knight Thinker is transformative because the statue appears in the context of a criticism. Miller's documentary describes the statue as an "unimpressive work of art" and comments on its placement at a ski resort. Criticisms are transformative works and therefore this is a strong factor in favor of fair use (Lennon v. Premise Media Corp. 2008). Miller's documentary is commercial but this factor is outweighed by the previous one described and minor; the documentary and the statue do not compete with each other commercially.

Secondly, the nature of Dark Knight Thinker is creative, which weighs against Miller.

Thirdly, the concept and execution of the sculpture is relatively simple so even a quick pan over of the camera would "copy" the heart of Caillard's work.

Lastly, there is negligible effect on marketability for Caillard's sculpture beyond what one might expect for a negative review. The market of people wanting to buy a life size Batman sculpture would not be affected by a ski resort documentary which briefly mentions said sculpture. If impacted at all, it would be by the negative commentary. But that is a potential consequence for any criticism and would not be relevant for determining fair use; "when a lethal parody, like a scathing theater review, kills demand for the original, it does not produce a harm cognizable under the Copyright Act" (Campbell 1994).

The first and last factors fall in favor of Miller, whereas the second and third fall in favor of Caillard. How can we make the overall determination? We can compare this case to Campbell 1994. The plaintiff's songs were creative and 2 Live Crew's parody copied the "characteristic opening bass riff… of the original". 2 Live Crew prevailed because "[c]opying

does not become excessive in relation to parodic purpose merely because the portion taken was the original's heart". Any argument that can be made against Miller's documentary can also be made against 2 Live Crew, and therefore Miller would prevail in a copyright infringement case on the basis of fair use.

(f) Would DC Comics prevail in a copyright infringement suit against Miller? (400 words)

DC Comics is unlikely to prevail in a copyright infringement suit against Miller. Miller's documentary criticizes the Dark Knight Thinker. If we build off of my argument for (a), Dark Knight Thinker is an infringement on DC Comic's Batman. Works that derive from the illegal copy are also illegal unless they fall under fair use for the original work (17 U.S. §103(a)). Therefore we evaluate Miller's documentary under the four criteria for fair use in relation to DC Comic's Batman.

Let us consider the nature of Breaking Good. Miller's documentary is meant to be sold, rented or streamed for a price. It is commercial in that sense, but its profits are unlikely to come from the infringement because its audience is primarily interested in skiing as a sport and ski resorts. Thus its commercialism does not count against it (Harper & Row 1985). The documentary clearly criticizes Caillard's Dark Knight Thinker but does not meaningfully comment on the Batman franchise. Miller merely notes its passing likeness and makes an offhand comment. There is no "bad faith primarily for profit-making motives" (Rovers v. Koons CA2 1992) and indeed one can easily imagine the sculpture being of any other figure and playing the same role in the documentary.

Secondly, the nature of DC Comic's Batman is creative.

Thirdly, the likeness shown in the documentary is easily recognizable as Batman, perhaps even the specific iteration played by Christian Bale in The Dark Knight (2009). We

recognize the cape and various other factors mentioned in (a). That being said there are many aspects that make up the core of the Batman character, such as his personality, backstory, gruff voice, and crime-fighting behavior. A short glimpse of and an offhand comment about a statue of Batman does not significantly conjure up the character as a whole. One could not mistake the documentary as being a reproduction of Batman as one might with Caillard's Dark Knight Thinker.

Lastly, Miller's documentary would likely have no marketability impact on DC Comic's Batman because they have very different purposes and audiences.

Considering these four factors together, Miller would have a case for fair use. Even if we do not pursue that route, it is possible that Miller's use of the image of Batman is short and trivial enough that it would be permissible under *de minimis*.

(g) If the answer to question (e) is yes (and thus Caillard prevailed in a suit against Miller), what remedies would be available to Caillard? (400 words)

The main remedy available to Caillard is monetary. There are several ways to calculate the amount owed to him. One is as a portion of the profits Miller made off of his documentary. Another is the amount Caillard lost because of his loss of reputation and potential customers being less likely to buy his work(s). Lastly, if Caillard had registered his work with the copyright office before Miller's documentary was produced in 2024, he can opt for the statutory route. The statutory fine would be on the lower end (between $200 and $30000) because Miller is an individual and the copying is innocent, not willful. The statue just happened to be at the ski resort and was not the primary subject of his documentary. It is clear that "the infringer was not aware and had no reason to believe that his…acts constituted an infringement of copyright".

Caillard is unlikely to receive a civil remedy where Miller is forced to remove the infringing scene. Whereas injunctions were once commonly issued, 2006 eBay vs

MercExchange marked a shift in the willingness of federal courts to grant injunctive relief. The four criteria for obtaining a preliminary injunction are strictly looser than those for a permanent one, so it suffices to show that Caillard does not meet the former criteria.

The short critical segment of Miller's documentary does not suffice as irreparable injury to Caillard (the first criteria) unless he makes a compelling argument about serious emotional damage caused by the infringement. There is also no reason to believe that monetary damages would be inadequate in this case (the second). As of now, Caillard's primary objection is resentment of Miller's criticism which is, in isolation, protected by fair use. The third criteria – the balance of hardships – does not favor either party. Both are internationally established artists with a large portfolio of award-winning works in their respective niches. Lastly, the public interest would be disserved by an injunction because Miller's criticism provides valuable perspective for anyone considering buying a life size Batman statue or even just skiing at Heavenly Valley.

Three factors favor Miller and one factor does not favor either party. Therefore Caillard does not meet the criteria to obtain a preliminary injunction.

A criminal remedy is highly unlikely; it has historically been used for electronic theft and is disproportionately harsh for this case.

Part II

Under what circumstances, if any, should a work created with the assistance of artificial intelligence enjoy copyright protection?

Who would hold a copyright of an artwork created with artificial intelligence (AI)? There are three parties who may be considered to have "created" the work; the AI model, the company that developed and trained the AI model (henceforth "AI company"), and the user who submits the prompt that generates the work in question. Copyright and law in general are fundamentally human institutions and so the model itself, however supposedly intelligent, cannot hold a copyright (Naruto v. Slater 2018). It would not be able to exercise those rights even if it possessed them. The AI company has no claim on the work created either because they did not have creative input on its production. They made technical choices when defining and training the model, similar to a camera manufacturer designing its lenses and shutter speeds. While their decisions undoubtedly influence the end product, they cannot be considered the author. The author must therefore be the user who prompts the model to generate the work "...such that the final product duplicates [their] conceptions and visions of what the [work] should look like" (Lindsay v. Titanic 1999).

A work is subject to copyright protection if it is original, creative and fixed. Let's consider two extremes of works that may be created with assistance from generative AI.

In the first case, the user prompts the AI to generate an image of a dog. It generates a generic image of a dog and, without modification, the user submits that image for copyright. This work did not require any creativity or originality; it is a very simple application of the tool. The work may portray a Golden Retriever sitting on a couch but the breed and setting were not creative choices made by the user. When given a basic prompt, the model is built to output a correspondingly generic work, meaning that its elements constitute scènes à faire. There is

practically no creative expression from the user. One cannot copyright the idea of generating a picture of a dog with AI.

In the second case, the user has designed a dog character and asks the AI to generate it. For example, they may request an image of a "black and white beagle with a big head, floppy black ears, a red collar and a sleepy expression on its face". When the AI returns an image, the user follows up with changes they want to see and iterates with a specific goal in mind until they are satisfied. This second case requires a lot of creativity and originality. AI is used as a tool to "draw" the picture in the same sense that a camera "draws" the photograph of the scene that the photographer sees and editing software "draws" an image by tweaking contrast, saturation, and so on.

There is no hard differentiation between these two cases, just like how there is no hard cutoff in the test formulated by Judge Learned Hand. Following his precedent, we can consider the spectrum between these two cases and give the courts leeway over deciding where a work must fall to receive copyright protection. Over time, as we better understand the impact of AI-generated artwork, we can refine our placement along this spectrum.

Some factors that may sway a court towards the side of less copyright protection include art being a skill that takes people years to develop, and we want to incentivize people to continue developing those skills even if AI can quickly produce similar works by copying what has been done in the past. Some factors that may sway a court towards more copyright protection include whether the use of AI is growing the useful arts being produced by artists who speed up their work using AI as a tool. Also disincentivizing lying about an AI generated artwork being AI (i.e. development of black market p2p file sharing after Napster loss).

A side consequence of this policy is that it encourages an artist making AI-assisted works to record their process and prompts. This ruling would reward copyright-savvy artists and punish the ones who are not aware of this requirement, which is unideal.

A slightly more complicated question is the copyrightability of a work with a human-produced component on top of an AI-generated one. One way to approach this question is to reference the separability principle developed in response to Mazer v. Stein (1954). In that case, we considered the expressive and functional aspects of a statuette lamp separately for the purposes of copyrightability. Here, it may be useful to consider the copyrightability of the human and AI-produced parts of the work separately. We have plenty of precedence for the human-produced component, and for the AI-generated portion we can use the spectrum evaluation as described above.

One large caveat to the analysis so far is that it is moot if the existence or use of the AI violate any copyrights. There is no copyright protection for a work derived from one that infringes on copyright protection (17 U.S. §103(a)). This ties into the next question; under what conditions, if any, should a for-profit company be permitted to use copyrighted works to train a large-language model (LLM) without the permission of the owners of the copyrights in those works?

First, we break down a couple ways that an LLM might infringe on the copyrights of works used to train it.

The first way is if the works were obtained illegally. The training datasets for LLMs consist of large numbers of formatted records that are potentially shared across many clusters and available to be viewed by any researcher training or evaluating the model. Without going into the complications introduced by the nature of AI, this behavior may be infringing and illegal. As an example, Open AI claims to have obtained much of their training data with help of a third party. Was all of that data obtained legally and with proper permission? Were there exclusive licenses to access that were granted to that third party? We do not know if Open AI has the rights to copy and view those materials, and we will never know until they disclose the details of this third party and their training dataset (which are as of yet considered trade secrets).

A more complicated question arises around works that the AI company possesses the rights to view but not to reproduce and distribute. I argue that publicizing access to an AI model that is trained on a copyrighted work should be considered a form of distribution of that work. And I also argue that the AI company is secondarily liable for right of reproduction infringements if its users generate works that draw heavily from the expressive elements of those copyrighted works.

For the purpose of this analysis we assume that the AI company does not possess distribution rights to a particular copyrighted work in its training dataset. Their AI model trains on the dataset by going through each record (a story, sound file, bit-encoding of a painting, etc.) and tweaking its own parameters in order to improve itself. In some sense, that record has been encoded into the parameters of the AI model. Humans cannot understand this encoding, but the result is that the model can reproduce these patterns and expressions in order to provide human-like responses and comprehensible images, sound recordings and texts. The AI company then charges its customers to access the AI model and prompt it for its learnings. By offering the API publically, the AI company is distributing an encoded form of the copyrighted works in its training dataset. Whether the users know it or not, their prompts resulted in the generation of a response using an encoding of a work that they should not have access to.

With respect to the right of reproduction, actual copying may occur when a user generates a work using AI that looks very similar to a copyrighted work within the training dataset. I argue that the AI company would be liable for secondary infringement via vicarious infringement. The user has directly infringed the original work. The AI company benefits financially from the infringement because the user pays the company for access to the model. Lastly, the company has the right and ability to supervise the direct infringement (i.e. not including the copyrighted artwork in the dataset or monitoring its outputs to make sure it is sufficiently far apart from any protected work in its dataset) but it does not do that.

The training datasets are huge and contain some copyrighted and some not. Many works generated by AI surely do not infringe any copyrighted works, and thus the AI model could be said to be capable of significant non-infringing uses (COSNU). But over time the Supreme Court has moved towards the policy that "willful ignorance" is the equivalent of actual knowledge and the AI company must show that it would have been disproportionately costly to design its product to eliminate or reduce infringements.

Could the model and works generated by it fall under fair use of the copyrighted works in its training dataset? I argue no because the model is not transformative in a way that comments on the original works. The point of the AI is to synthesize its learnings from a body of work that is so large, it would be impossible to properly cite and comment on each of them. Additionally the nature of the API is commercial and the AI company is actively profiting off of the infringements of the copyrighted works (consider the recent trend of making Studio Ghibli-ified animations).

Secondly, many of the works in the training dataset are creative. Thirdly we have no conclusive evidence about how much of the heart has been "copied" by the model because we do not understand how or what the model has learned. Fourthly, generative AI is clearly already shifting the market and landscape against the livelihoods of independent artists, writers and musicians. All of these factors either weigh against or have a neutral bearing on generative AI being considered fair use.