A summary of my opinions on copyright and AI generated content can be summed up in the following two sentences:

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

Generative AI is a tool that is used by humans to create content. The structure and process of using Generative AI is no different than using a paint brush.

1. As described above, generative AI systems have the ability to produce material that would be copyrightable if it were created by a human author. What are your views on the potential benefits and risks of this technology? How is the use of this technology currently affecting or likely to affect creators, copyright owners, technology developers, researchers, and the public?

I believe that AI systems should be treated like a "tool". Like a paint brush, or a paint system or other physical or digital tools and media – for example a canvas in the real world, or an image file in Photoshop.

It has always been possible to copy existing works, though the copying process has become much simpler and therefore wider spread through the advance of technology. When the only way to copy a painting was to paint it by hand in the same style and with exactly the process and actions of the original painter, obviously this was very difficult and only a few highly skilled human forgers were capable of doing it. Once high resolution scanners and paint programs became available, the process became simpler, though producing a hand painted copy of something on a physical canvas is still as difficult as always. However since most art is now transmitted and viewed digitally, digital copies of copyrighted work are some that is easy and simple to create and distribute.

This issue is an on-going problem in the music industry where sampling has become very common place. How much can you sample before it becomes a copy of the original work?

For AI the questions revolve around the prompts that were used to control the AI and any source images that were supplied to the AI. So the use of the AI tools becomes central to the discussion of what constitutes copyright violations… just as the use of less sophisticated tools like paint brushes and paint programs is central to the same discussions prior to the advent of Generative AI.

2. Does the increasing use or distribution of AI-generated material raise any unique issues for your sector or industry as compared to other copyright stakeholders?

I work in the interactive entertainment industry which is a very art intensive field. Everything from game design, to scripts, to videos, the real-time sound and graphics, pre-recorded sound and graphics, audio and graphical design materials and many more forms of both audio and graphical art are involved.

It is critical that game creators can protect not only their products but also the content created in the development of the products. Without those protections the monetization of those products will become increasingly difficult and could threaten the viability of the entire industry. As AI becomes a more and more important tool for those creators, the content being generated by those creators using AI tools must be protected.

3. Please identify any papers or studies that you believe are relevant to this Notice. These may address, for example, the economic effects of generative AI on the creative industries or how different licensing regimes do or could operate to remunerate copyright owners and/or creators for the use of their works in training AI models. The Office requests that commenters provide a hyperlink to the identified papers.

4. Are there any statutory or regulatory approaches that have been adopted or are under consideration in other countries that relate to copyright and AI that should be considered or avoided in the United States? [40] How important a factor is international consistency in this area across borders?

I have not undertaken any research into the approaches taken in other countries. However given the global nature of business in general, and certainly the global nature of the interactive entertainment industry it is critical that there be consistency in definition and enforcement of copyrights internationally.

5. Is new legislation warranted to address copyright or related issues with generative AI? If so, what should it entail? Specific proposals and legislative text are not necessary, but the Office welcomes any proposals or text for review.

I do not believe new legislation is required at this time, however a clear set of guidelines about how the parameters and process of creating Generative AI works fit into the existing legislation is necessary.

Training

If your comment applies only to a specific subset of AI technologies, please make that clear.

6. What kinds of copyright-protected training materials are used to train AI models, and how are those materials collected and curated?

At this point, any materials that are relevant to the type and style of the content that an AI is to create can and in fact, should be used as training materials. When a human artist creates new materials, especially if those are materials specifically target commercial use, there are often discussions of what types of art, images, sounds, music and other references can be used to guide the creation of those new materials. That human artist might then very well research and look and listen to the types of source materials discussed in order to "get a feel" for the work that needs to be created.

The same process happens when the human provides prompts and source material to an AI model to train it on the content that AI model is to create.

6.1. How or where do developers of AI models acquire the materials or datasets that their models are trained on? To what extent is training material first collected by third-party entities (such as academic researchers or private companies)?

The materials or dataset that the AI models are trained on are selected by the human creators who are using those AI models as tools to create new content. In some cases that material might have be collected by a third party – just as that might be true if a human was creating that work with older tools like a paint brush or a paint program, or a violin or a synthesizer. For example a human visual artist might visit a museum or gallery, or search online for images or websites that will help inspire their work.

6.2. To what extent are copyrighted works licensed from copyright owners for use as training materials? To your knowledge, what licensing models are currently being offered and used?

In my experience, copyrighted works that are being used to train AI models are not being licensed from their copyright owners. Anymore than if I as an artist look at art or listen to music before creating my own art.

If I look primarily at one piece of art and then create a painting that is materially the same as that original piece of art – that clearly constitutes a copyright violation. In the music industry a lot of thought and discussion has gone into how much of a melody or piece of music must be a direct copy of an existing work to constitute a copyright violation – and some standards have evolved.

Just like reasonable standards must be applied to whether an image is so derivative of an existing image, or some song is so derivative of an existing song, that it constitutes a copyright violation;

those same standards should be applied to AI generated work. ***It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.***

6.3. To what extent is non-copyrighted material (such as public domain works) used for AI training? Alternatively, to what extent is training material created or commissioned by developers of AI models?

Just like a lot of copyrighted work is being used to train models, a lot of non-copyrighted work is being used. Again I would argue this is no different than a human content creator looking at existing works to derive inspiration for their own work. In my experience some of the most interesting AI content can be created by having a human first create examples of that content first, and then using the AI to create additional similar works.

6.4. Are some or all training materials retained by developers of AI models after training is complete, and for what purpose(s)? Please describe any relevant storage and retention practices.

The retention and use of training materials must be subject to the exact same copyright restrictions as materials used for a different purpose or acquired in a different manner.

7. To the extent that it informs your views, please briefly describe your personal knowledge of the process by which AI models are trained. The Office is particularly interested in:

7.1. How are training materials used and/or reproduced when training an AI model? Please include your understanding of the nature and duration of any reproduction of works that occur during the training process, as well as your views on the extent to which these activities implicate the exclusive rights of copyright owners.

In our own use of AI models, we use a combination of existing works and original works created by our team to train the AI. In order to match the artist style of our products, it is often most effective to use works that our team has created to train the AI – this insures that the specific art style we are targeting can be achieved by the AI as well. In some case we do use existing works. At this point we do not obtain permission from the copyright holders, nor do we believe that we should need those permissions. As previously argued in this paper, the observation of those works by either humans and AI as part of the creative process does not constitute a copyright violation.

7.2. How are inferences gained from the training process stored or represented within an AI model?

We do not develop actual AI technology ourselves so I cannot speak to how training data is used internally to the AI models.

7.3. Is it possible for an AI model to "unlearn" inferences it gained from training on a particular piece of training material? If so, is it economically feasible? In addition to retraining a model, are there other ways to "unlearn" inferences from training?

To my knowledge it is not possible for the AI model to "unlearn" the influence of specific training materials – since it will effectively have been "mixed" into the aggregate training solution created by all of the training works. It would however not be that difficult to train a new AI model using all of the same training materials except those specific materials.

As the feasibility and economic cost of the new or "retrained" model, it depends so much on the complexity of the model and quantity of training materials. In some case it would be a trivial undertaking, in others it might not be feasible at all.

7.4. Absent access to the underlying dataset, is it possible to identify whether an AI model was trained on a particular piece of training material?

I am not aware of any way to identify beyond any shadow of doubt what training materials were used. Educated guesses might in fact be quite accurate, however I am not aware of any way to prove those inferences.

8. Under what circumstances would the unauthorized use of copyrighted works to train AI models constitute fair use? Please discuss any case law you believe relevant to this question.

I am not a lawyer and am not qualified to discuss case law, however I do not believe the use of copyrighted works to train AI models is a copyright violation. The exceptions would be as I have said earlier are if the AI model was specifically trained only on a single or small set of works from the same copyright holder, or if it was specifically directed to copy an existing copyrighted work.

8.1. In light of the Supreme Court's recent decisions in *Google* v. *Oracle America* [41] and *Andy Warhol Foundation* v. *Goldsmith*,[42] how should the "purpose and character" of the use of copyrighted works to train an AI model be evaluated? What is the relevant use to be

analyzed? Do different stages of training, such as pre-training and fine-tuning,[43] raise different considerations under the first fair use factor?

I first and foremost believe that the process by which a new work is created is not relevant to whether or not that work constitutes a copyright violation.

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

8.2. How should the analysis apply to entities that collect and distribute copyrighted material for training but may not themselves engage in the training?

I believe that anyone who collects, distributes or uses copyrighted materials for any purpose should be subject to the same restrictions and responsibilities. I do not believe that showing a person or an AI existing content as part of a training process constitutes a copyright violation. If that were true every art university, college, school or other training program would have been in violation of copyrights for 100s if not 1000s of years.

8.3. The use of copyrighted materials in a training dataset or to train generative AI models may be done for noncommercial or research purposes.[44] How should the fair use analysis apply if AI models or datasets are later adapted for use of a commercial nature? [45] Does it make a difference if funding for these noncommercial or research uses is provided by for-profit developers of AI systems?

I do not believe that individuals or organizations involved in noncommercial work or research should be restricted from using copyrighted materials in their work – regardless of whether this includes the training of AI models.

8.4. What quantity of training materials do developers of generative AI models use for training? Does the volume of material used to train an AI model affect the fair use analysis? If so, how?

The quantity of training materials that is used varies greatly. I believe the volume of material used should impact the fair use analysis. For example and AI model trained on a single copyrighted image is much more likely to produce a result that violates the that copyright.

Again I would repeat my underlying belief:

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

8.5. Under the fourth factor of the fair use analysis, how should the effect on the potential market for or value of a copyrighted work used to train an AI model be measured? [46] Should the inquiry be whether the outputs of the AI system incorporating the model compete with a particular copyrighted work, the body of works of the same author, or the market for that general class of works?

I believe AI generated works should be treated like works produced by a human. The AI is only a tool. AI actually creates nothing. The human operator of the AI tool creates the work and it should be subject to the same analysis that any other work created by that individual would be.

9. Should copyright owners have to affirmatively consent (opt in) to the use of their works for training materials, or should they be provided with the means to object (opt out)?

No. If the work is available in any way to the public then it is fair use for it to be used as part of a training dataset for an AI in the same way it is fair use for a human creator to be inspired by experiencing that work.

9.1. Should consent of the copyright owner be required for all uses of copyrighted works to train AI models or only commercial uses? [47]

The consent of the copyright owner should not be required in either case. ***It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.***

9.2. If an "opt out" approach were adopted, how would that process work for a copyright owner who objected to the use of their works for training? Are there technical tools that might facilitate this process, such as a technical flag or metadata indicating that an automated service should not collect and store a work for AI training uses? [48]

This is a completely unworkable approach. There is no point in pursuing this. For every tool that could possibly be created to facilitate this strategy, a tool to defeat that system will be developed and made available to the public.

9.3. What legal, technical, or practical obstacles are there to establishing or using such a process? Given the volume of works used in training, is it feasible to get consent in advance from copyright owners?

No it is not feasible and should be necessary.

9.4. If an objection is not honored, what remedies should be available? Are existing remedies for infringement appropriate or should there be a separate cause of action?

Yes. The copyright violation should be based on the work that was created regardless of the techniques (AI or other) used to create it. The remedies already exist.

9.5. In cases where the human creator does not own the copyright—for example, because they have assigned it or because the work was made for hire—should they have a right to object to an AI model being trained on their work? If so, how would such a system work?

No they should not. And the owner of the work-for-hire should not either. If that work is specifically copied, then of course they should have the ability to pursue remedies – this is already given to them by the existing system.

10. If copyright owners' consent is required to train generative AI models, how can or should licenses be obtained?

The licenses should not be required.

11. What legal, technical or practical issues might there be with respect to obtaining appropriate licenses for training? Who, if anyone, should be responsible for securing them (for example when the curator of a training dataset, the developer who trains an AI model, and the company employing that model in an AI system are different entities and may have different commercial or noncommercial roles)?

The licenses should not be required.

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

12. Is it possible or feasible to identify the degree to which a particular work contributes to a particular output from a generative AI system? Please explain.

It might be possible to develop an AI that would attempt to compare images to determine the degree of "derivation" of one from the other. This could possible to linked to a system like the system that has evolved in the music industry for determining if one song is derivative of another. However in the foreseeable future it will be up to the courts and experts to determine is copyright violations have occurred.

13. What would be the economic impacts of a licensing requirement on the development and adoption of generative AI systems?

Progress would grind to a halt in the US, which would put the US at a significant disadvantage to other countries in continuing the development of these AI models that promise to be of great value to us all. ***It's a really bad idea.***

14. Please describe any other factors you believe are relevant with respect to potential copyright liability for training AI models.

As I've said before:

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

Transparency & Recordkeeping

15. In order to allow copyright owners to determine whether their works have been used, should developers of AI models be required to collect, retain, and disclose records regarding the materials used to train their models? Should creators of training datasets have a similar obligation?

This is not practical and should not be required. ***It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.***

16. What obligations, if any, should there be to notify copyright owners that their works have been used to train an AI model?

There should be no such requirements.

17. Outside of copyright law, are there existing U.S. laws that could require developers of AI models or systems to retain or disclose records about the materials they used for training?

I do not believe that there are, and I do not believe there should be.

Generative AI Outputs

If your comment applies only to a particular subset of generative AI technologies, please make that clear.

Copyrightability

18. Under copyright law, are there circumstances when a human using a generative AI system should be considered the "author" of material produced by the system? If so, what factors are relevant to that determination? For example, is selecting what material an AI model is trained on and/or providing an iterative series of text commands or prompts sufficient to claim authorship of the resulting output?

In all cases the human using the generative AI system should be consider the "author". The AI is just a tool – like a paint brush or paint system or digital audio recording system…

19. Are any revisions to the Copyright Act necessary to clarify the human authorship requirement or to provide additional standards to determine when content including AI-generated material is subject to copyright protection?

I can't speak specifically, but I believe that if treat Generative AI systems as tools – like paint brushes or paint system – most if not all cases become quite clear within the existing copyright system.

20. Is legal protection for AI-generated material desirable as a policy matter? Is legal protection for AI-generated material necessary to encourage development of generative AI technologies and systems? Does existing copyright protection for computer code that operates a generative AI system provide sufficient incentives?

AI is a tool. It is the humans who use that tool who are the creators of those works – be they art, music, code or any other form of content. Content created with AI tools should be owned by the human doing the creating. The tools don't create things, the operators of those tools create things.

20.1. If you believe protection is desirable, should it be a form of copyright or a separate *sui generis* right? If the latter, in what respects should protection for AI-generated material differ from copyright?

As stated previously, AI is a tool. There is no need to create additional forms of protection, they existing with the current system.

21. Does the Copyright Clause in the U.S. Constitution permit copyright protection for AI-generated material? Would such protection "promote the progress of science and useful arts"? [52] If so, how?

I believe it does based on the argument that the AI is tool, just like any other tool used by a human – a text editor, a compiler, a paint program, …

Any work that furthers new techniques or new types of results advances the progress of science and useful arts.

Infringement

22. Can AI-generated outputs implicate the exclusive rights of preexisting copyrighted works, such as the right of reproduction or the derivative work right? If so, in what circumstances?

No. Just like content created using older techniques by a bad actor can not influence the rights of a copyright holder, the content created using AI tools (again by a bad actor) should not influence those rights.

23. Is the substantial similarity test adequate to address claims of infringement based on outputs from a generative AI system, or is some other standard appropriate or necessary?

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

No new standard is required.

24. How can copyright owners prove the element of copying (such as by demonstrating access to a copyrighted work) if the developer of the AI model does not maintain or make available records of what training material it used? Are existing civil discovery rules sufficient to address this situation?

Yes. ***It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.***

25. If AI-generated material is found to infringe a copyrighted work, who should be directly or secondarily liable—the developer of a generative AI model, the developer of the system incorporating that model, end users of the system, or other parties?

Only the end user of the system should be liable. Should the manufacturer of a paint brush be liable for a forgery created using that paint brush? Of course not. The same logic applies to AI tools.

25.1. Do "open-source" AI models raise unique considerations with respect to infringement based on their outputs? [53]

No. It is the user of these AI models who is solely responsible for the output and its use.

26. If a generative AI system is trained on copyrighted works containing copyright management information, how does 17 U.S.C. 1202(b) apply to the treatment of that information in outputs of the system?

No differently than it would be applied to work create without the use of AI tools.

27. Please describe any other issues that you believe policymakers should consider with respect to potential copyright liability based on AI-generated output.

I come back to my underlying principle. I recommend that all policymakers should consider this statement and it's implications:

It is not the process of creating the new work that should determine whether it constitutes a copyright violation, but the new work itself.

Labeling or Identification

28. Should the law require AI-generated material to be labeled or otherwise publicly identified as being generated by AI? If so, in what context should the requirement apply and how should it work?

I don't believe that the tools used to create AI or otherwise generated materials should be required to be disclosed.

28.1. Who should be responsible for identifying a work as AI-generated?

Nobody. It is not relevant to the use or copyright of that work.

28.2. Are there technical or practical barriers to labeling or identification requirements?

Of course. It's not technically feasible or practical to make this requirement nor to enforce it.

28.3. If a notification or labeling requirement is adopted, what should be the consequences of the failure to label a particular work or the removal of a label?

No such requirements should be made.

29. What tools exist or are in development to identify AI-generated material, including by standard-setting bodies? How accurate are these tools? What are their limitations?

I do not believe that effective tools can be created for this. If any tools are developed, the AI generating system will very quickly learn to defeat them.

Additional Questions About Issues Related to Copyright

30. What legal rights, if any, currently apply to AI-generated material that features the name or likeness, including vocal likeness, of a particular person?

The same requirements that exist for traditionally created content should apply to AI generated content. You cannot use the name, likeness, vocal likeness or other clearly identifiable features of a particular person without their permission. The exception that is reporting on public events

in which there is a clear expectation that by attending that event the individual has granted the right to use.

31. Should Congress establish a new federal right, similar to state law rights of publicity, that would apply to AI-generated material? If so, should it preempt state laws or set a ceiling or floor for state law protections? What should be the contours of such a right?

I think we should exhaust all possibility of using the existing copyright protection to handle AI generated content. Especially since "AI generated" content is almost always some blend of human and AI generated content.

32. Are there or should there be protections against an AI system generating outputs that imitate the artistic style of a human creator (such as an AI system producing visual works "in the style of" a specific artist)? Who should be eligible for such protection? What form should it take?

While whatever people use AI for in the privacy of their own home is clearly excluded, as in my answer to 31, the same laws, regulations and expectations should apply to AI generated content as apply to other content.

33. With respect to sound recordings, how does section 114(b) of the Copyright Act relate to state law, such as state right of publicity laws? [54] Does this issue require legislative attention in the context of generative AI?

No, AI generated content should be handled within the existing frameworks because AI is tool that is used by humans to create content. The AI does not itself create content.

34. Please identify any issues not mentioned above that the Copyright Office should consider in conducting this study.

The most important thing is that we should try very hard to handle AI generated content within the current laws and regulations surrounding copyrights. AI is a tool that is used by humans to create content – no different in structure or process than a paint brush. A very fancy paint brush, but a paint brush none the less.