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Filed electronically via www.regulations.gov, Docket No. COLC-2023-0006

Suzanne V. Wilson
General Counsel and Associate Register of Copyrights
United States Copyright Office
101 Independence Avenue, SE
Washington, DC 20540

Re: Request for Comments on Artificial Intelligence and Copyright, Docket No. COLC-2023-0006, 88 Fed. Reg. 59942, pp. 59942-49 (October 30, 2023)

Dear Ms. Wilson:

The Entertainment Software Association ("ESA") welcomes the opportunity in the U.S. Copyright Office's artificial intelligence ("AI") study reply comment round to emphasize the video game industry's positions on certain key issues on generative AI and copyright. We understand you have received thousands of comments in the first round of the proceedings, including from coalitions, all with various viewpoints in response to the study's questions. ESA's full filing (appended to this reply) represents the association's current consensus positions.

Respectfully submitted,
Bijou Mgbojikwe

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Dear Ms. Wilson:

The Entertainment Software Association[1] ("ESA") welcomes the opportunity to respond to the Copyright Office's notice of inquiry ("NOI") requesting stakeholder perspectives on generative artificial intelligence ("AI") and copyright. Because AI technologies and how ESA members use these technologies are still evolving, until the surrounding issues come further into focus, and because we want to encourage innovation, we encourage the Copyright Office to continue to engage with all industry stakeholders and proceed with caution before making or recommending changes to either law, regulations, or policy.

About the Industry

Every day, millions of Americans play video games. Research has shown that 212 million players in the United States drove industry growth to the tune of $56.6 billion in 2022 with $47.5 billion spent on content, $6.57 billion on

[1] ESA is the U.S. trade association for companies that publish interactive entertainment software for video game consoles, handheld devices, personal computers, and the internet. Our members not only create some of the world's most engaging interactive experiences for consumers, but also develop novel technologies that are at the cutting edge, such as virtual, augmented, and mixed reality hardware and software as well as the latest consoles and handheld video game devices.

hardware and an additional $2.5 billion on accessories.[2] The industry is fast-growing and leaves a deep economic footprint. In 2019, the industry generated direct economic output of more than $90 billion, added more than $59 billion in GDP to the U.S. economy and created over 143,000 direct jobs and 428,000 indirect jobs.[3] Video game companies distribute their games, hardware, and services globally. Through innovative subscription business models, some companies have been able to achieve monthly totals of tens of millions of active users in continual and ongoing engagement with new and extra content and live services.

General Questions

Artificial intelligence technology has been deployed in games for over two decades as useful tools for a variety of purposes, such as background and terrain generation,[4] processing or analysis of data within the game, or quality control.[5] Although certain uses of generative AI have launched questions of copyrightability and authorship, it is important to remember that AI technology is and should be treated as any other software tool with respect to copyright protection. We believe regulation of generative AI, if any, should take a risk-based approach where the sort of uses in video games should be considered the lowest risk and therefore subject to the least restrictive transparency, disclosure, and reporting requirements.

[2] ENTERTAINMENT SOFTWARE ASSOCIATION, "U.S. Consumer Video Game Spending Totaled $56.6 Billion in 2022," Jan. 17, 2023 *at* https://www.theesa.com/news/u-s-consumer-video-game-spending-totaled-56-6-billion-in-2022/.
[3] Simon Tripp, Martin Grueber, Joseph Simkins and Dylan Yetter, *Video Games in the 21st Century: The 2020 Economic Impact Report available at* https://www.theesa.com/video-game-impact-map/wp-content/uploads/sites/2/2020/12/Video-Games-in-the-21st-Century-2020-Economic-Impact-Report-Final.pdf.
[4] Electronic Arts, "How Procedural Tools are Reshaping Terrain Workflows," *available at* https://www.ea.com/frostbite/news/procedural-terrain-in-ea-sports-pga-tour.
[5] Electronic Arts, "SEED Applies Machine Learning Research to the Growing Demands of AAA Game Testing," *available at* https://www.ea.com/seed/news/seed-ml-research-aaa-game-testing. Accessed Oct. 20, 2023.

Copyright protection is vital to the innovative AI technologies incorporated into video games. We urge the Office to consider both generative AI's current and future potential and make legal and policy recommendations to Congress that will incentivize creativity, encourage copyright registration as well as the advancement of generative AI technology. Copyright laws and regulations are already drafted to address the advent of new technologies making government intervention needed only under certain limited circumstances, such as for example, where a market failure can be identified and even then, it should be thoughtful and restrained. U.S. copyright law has adequately addressed other technological innovations over the last century, and we should not assume a different result is called for here.

While the Copyright Office can play a helpful role in providing guidance on the application of copyright law, especially with respect to new technological uses, the Office should nevertheless refrain from taking categorical and formalistic approaches to the eligibility of AI-assisted content for copyright protection, especially when the technology is still evolving. We also ask the Office to be wary of calls to mandate either the marking of expressive works or new disclosure requirements that could result in the disclosure of confidential information and instead allow different creative industries to take the approach that works best for their stakeholders.

Artificial Intelligence and Video Games

Video game companies are sources for generative AI training input, creators of generative AI output, developers of generative AI models and users of third-party generative AI software tools. For example, some game developers and publishers use image-, text- and code generator technological tools (including proprietary, licensed third-party and open-source software) to generate output, such as content generation, ideation, concept testing and development, generating mock virtual worlds or generating computer-controlled character dialogue.

As noted previously, video game companies have long utilized AI within games and consider generative AI and other emerging technologies to be instrumental for developing and operating the next generation of video games. AI has been and continues to be used to improve content creation, art generation,[6] animation, sound and music,[7] natural language processing (for example, natural speech and responses from non-player characters within the game), as well as automating repetitive and tedious tasks on the developer side.

Some ESA members use generative AI tools to accomplish all the tasks listed above in a much more efficient manner. Current generative AI tools have the potential to improve workflow and reduce game development costs. If game development becomes easier, companies will seek to do more, be more innovative and productive and do so more efficiently. Generative AI tools allow artists to spend more time on the truly creative aspects of making in-game artwork, while freeing up time from the more tedious, less creative tasks, such as, fleshing out backgrounds once the artistic direction has been set. Scripting an open world game can run almost 100,000 lines of dialogue. One example of the use of generative AI in games would be a scriptwriting tool[8] that frees writers to spend their valuable time on the core game plot and narrative rather than on "barks", a term for non-player character (NPC) dialogue, which are often short and tedious though intelligent barks can nonetheless be a central feature of player immersion in video games because the more responsive they are to players, the better and more realistic the gameplay experience. The vast majority of these types of uses of AI in games, both generative and not, should not be subject to disclaimer requirements in applications for copyright registration. We note further that the *de*

[6] Shannon Liao, "AI May Help Design Your Favorite Video Game Character," in N.Y. TIMES, May 22, 2023 *available at* https://www.nytimes.com/2023/05/22/arts/blizzard-diffusion-ai-video-games.html.

[7] Marcin Frackiewicz, "Crafting Sonic Realms: AI in Video Game Sound Design," *in* TS2, Sept. 9, 2023 *available at* https://ts2.space/en/crafting-sonic-realms-ai-in-video-game-sound-design/.

[8] Roxane Barth, "The Convergence of AI and Creativity: Introducing Ghostwriter," Mar. 21, 2023, *available at* https://news.ubisoft.com/en-us/article/7Cm07zbBGy4Xml6WgYi25d/the-convergence-of-ai-and-creativity-introducing-ghostwriter. Ghostwriter was developed in close collaboration with game narrative designers and could eventually allow them to "create their own AI system [. . .] tailored to their own design needs."

minimis standard articulated in the Office's March 2023 Guidance Memorandum differs from the "more than an appreciable amount" standard in the Office's Compendium of U.S. Copyright Office Practices for other unclaimable material.

With the advent of new technologies, or new iterations of old technology, as in the case of video games and generative AI, there are promises of potential, but we know they also raise concern among consumers and the professionals who propel these innovations. However, we also believe that generative AI technology gives video game publishers the opportunity to elevate the game experience for players and be responsive to their expectations while supporting the programmers, artists, writers, musicians, and others that are integral to game development in ways that allow those creatives to focus less on tedious tasks and more on meaningful projects that will ultimately enrich the gameplay experience.

Training and Transparency

Because the U.S. generally eschews overly prescriptive approaches with respect to technology regulation, a variety of methods and business models has emerged to train AI models. We endorse flexibility in the legal framework where possible to allow businesses to employ different technologies and approaches that govern access to, the acquisition and the use of content that advance both creativity and innovation.

Consistent with our position that the U.S. government should encourage a robust marketplace for emerging technologies, such as generative AI, we believe that the mandated disclosure of the use of copyrighted works used in machine learning needs careful consideration and balancing of priorities, especially when the AI developer owns or licenses the works at issue or the resulting output, or when mandated disclosure could jeopardize confidential information, trade secrets or other protected data.

Mandated disclosure of the use of copyrighted works used in machine learning needs careful consideration and the balancing of objectives of such a

requirement, which will differ in different contexts, such as, for example, closed AI models versus AI models used by the general public. If the purpose is to enable the ability of copyright owners to enforce their exclusive rights, then there would appear to be little justification for the imposition of a transparency and disclosure requirement on a developer of a non-public-facing AI system that is trained on the developer's own works, internal, licensed or legally accessed data, or on an implementer of a foundation model that fine tunes the model on its own works. In these types of situations, transparency and disclosure mandates should not apply.

Transparency and record-keeping mandates with respect to generative AI models also raise questions of feasibility. Any requirements should be narrowly tailored to the particular purpose. Training materials for foundational models may constitute millions, or even billions, of data entries, the maintenance of which becomes onerous for developers. And to the extent that a developer or publisher is also a user of open-source or other third-party software, an attenuated chain of responsibility becomes burdensome and does not substantially advance the goals that spurred the demand for such mandates in the first place. We would therefore recommend that any such mandates must consider both feasibility and relevance to the objective they seek to achieve.

Generative AI Output

In its NOI, the Office seeks comment on the proper scope of copyright protection for material created using generative AI. We think that, given the current uses of generative AI in video games and the likely uses of such advanced tools in the future, a work containing AI-assisted content should be eligible for copyright protection if it meets the legal requirements for eligibility; that is, human input or origination, fixation, and originality.

The Office has already determined that wholly machine-generated works are not eligible for copyright for lack of human authorship and as such, machine-

generated aspects of a work, according to the March guidance memorandum, must be disclaimed in an application for registration as not copyrightable. This conclusion might rightly apply to a work that is machine-generated with no meaningful human contribution, and whether this has occurred will depend on the circumstances and is a fact-specific analysis. But we think the Office's focus on the lack of predictability of the output or that AI-generated content is a result of a "mere mechanical process that operates randomly or automatically without any creative input or intervention from a human author" may represent an overly narrow frame for analysis (which requires further consideration), and we think should not form the basis of an approach that denies copyright protection without taking into account the manner in which the human-led input has played a part in the result. Such an approach would not be consistent with existing principles.

Contrary to the Office's position in the guidance memorandum, it has not been and should not be the requirement, for registration purposes, that one has to specifically predict every aspect of the resulting work with complete certainty. We recommend the Office avoid overly rigid rules for determining human authorship and should instead look at whether the human's use of AI is done with sufficient creative control and in such a way that the output reflects the product of human creativity. There are myriad uses of AI in video games that would evidence a level of creativity that meets the current legal standard.

We believe that if there is sufficient human contribution to either the input or the output, consistent with existing legal principles, the resulting work should be eligible for copyright protection. Though we agree with the Office that the inquiry should remain case-by-case, we think a more helpful test should focus on whether the creative aspects of the work are originated or generated by a human where such contribution meets the current legal standards necessary for eligibility. This should be the case even when there are generative AI elements in the video game that are more than *de minimis* and constitute an appreciable portion of the

work overall. The focus should be on both the quantitative and qualitative aspects of human contribution.

In addition, we are likely to see technology in the future that increases the level of human contribution necessary to help guide generative AI tools to a specific result. The Copyright Office should remain abreast of these developments in order to understand the nuances around human contribution rather than articulate bright line rules. Just as current categories of unclaimable content in an application for registration are not *per se* uncopyrightable, so should AI-assisted content as well. Taking such a categorical approach assumes that circumstances and analysis are always clear when they are not.

Copyright eligibility for machine-assisted output with the requisite human creative contribution is the right policy result and advances the goals of the Copyright Clause of the Constitution[9], which is to incentivize creativity and innovation and which, in turn, spurs the creation of new types of works.

Infringement

The Office has stated in its notice of inquiry that it is interested in "how copyright liability principles could apply to material created by generative AI systems." We think that current principles of copyright liability can and do apply to new technologies and new technological uses. We believe that current U.S. copyright law should remain the model with respect to AI technology generally, and generative AI, especially. Current U.S. law remains an adequate framework within which to analyze legal questions involving generative AI, such as authorship, ownership, and liability for infringement, given the current state of the technology. At this point, there is no reason to believe that existing statutory and common law doctrines based on fact-intensive inquiry are insufficient to address complex questions of access to content/training data, protection and ownership of

[9] U.S. CONST. art. 1, § 8, cl. 8.

the resulting output and use. New legislation on copyright liability is not needed at this time.

Labeling or Identification of AI-Generated Content

A labeling obligation imposed on expressive works, such as video games, represents a redundant and unnecessary imposition: if content is evidently fictional, or artistic (like sports games that replicate authentic real-world experiences and events), there is no reason to demand a disclosure of the game's fictional nature or that it contains AI-generated content. Creative works should not be burdened with labeling obligations in contexts where players are already expecting to interact with AI-assisted and AI-generated content, such as in video games. To demand and implement otherwise would be highly disruptive to the user's in-game experience. The concerns over synthetic media and fraud, misinformation, invasion of privacy and other harms are not generally present in expressive works for entertainment, such as video games, where consumers expect to be interacting with fictional and/or creative worlds and characters. Different creative industries must be permitted to take the approach that works best for their stakeholders.

Conclusion

In sum, we thank the Copyright Office for conducting this study and seeking to clarify the legal landscape on emerging technologies and copyright. We recommend that the Office continue careful study and analysis of the responses from stakeholders as well as the state of technology, which is still evolving. For example, we are likely to see technology in the future that "amps up" the human contribution to help guide generative AI tools to a specific result. The Office should remain abreast of these developments in order to understand the nuances around human contribution. Lastly, we would like to express our appreciation to the Office for its sustained collaboration with industry

stakeholders in these and other matters involving emerging technologies. We are available to answer any additional questions you may have.

Respectfully submitted,
Bijou Mgbojikwe – Senior Counsel, Policy