I am Mark Duncan, a professional artist in the video game industry since 1993. In that time, I have worked in a variety of roles, created an array of differing art, and eventually transitioned into lead and Art Director positions. In short, I have a great deal of experience with creating art for the purpose of use in a product. I have witnessed the evolution of many art tools, without which the production of modern video games as we know them would simply not be possible. Art created by generative AI like products such as MidJourney, Stable Diffusion, and Leonardo.AI, is simply the next step in the evolution of these tools.

In this document, I will only be addressing a few specific points on this rather broad topic quoted directly from the copyright office document below. There is a section generally addressing the concept of training, and I close with some general comments. These opinions are formed from 30-years as a professional artist in my industry, and more recently as an end-user of Generative AI products for creating visual art. This document may be quite brief compared to other submissions, but I am specifically touching on points where I believe I have experience and expertise.

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 have personal experience with the benefits of generative AI in my field. I am currently employed at a small independent game development firm. There are 5 employees on the development staff. We are using Generative AI extensively to create 2D images. Our desire is not to copy any one specific artist's style, or any other nefarious purpose. As I will continue to highlight throughout this paper, Generative AI is simply a tool. It is a tool that allows us freedom previously not imagined to create a vast amount of art for the small independent product we are creating. Before we started down this path, our product would have included *far* fewer art pieces, and would have cost us *thousands* if not *hundreds of thousands of dollars* more – depending on how much art we decided to include. Generative AI is allowing us an opportunity to create a higher quality product at a fraction of the cost. It is also allowing me personally as a professional artist to generate finalized artwork for our product at a quality and speed which I could not have previously achieved. This technology is a boon for independent developers such as ourselves in the video game industry.

An adverse effect that this technology could have is a reduction in the amount 2D illustrator/artist positions in the games industry and other related tech industries. However, given the current level of this technology, I don't believe this will be rendering artists irrelevant any time soon. These tools are not simply magic buttons that accurately create whatever you describe. They require a lot of cajoling, handholding through the input of prompts and parameters. The user is still not guaranteed to get a result that is representative of their ultimate goal. In my personal case, I still must do quite a bit of painting-over most of these images to achieve the desired final result. In some cases, we may still be required to outsource some works

of art to a contract artist, because no amount of prompt crafting is going to yield the required results.

Many industries have introduced forms of automation throughout history. Video game art has always striven to automate as much as possible for artists. Early automation for our industry was mainly about streamlining menial repetitive tasks. As the games industry has matured, more emphasis has been placed on the automation of the actual art creation because it is one of the most time-consuming parts of game development. There are tools that create entire expansive 3D outdoor environments procedurally so that content creators (artist and designers) are left with the task of editing what was procedurally produced for the product's needs. Without tools like this, modern games like the Horizon Zero Dawn Series, Red Dead Redemption, Assassins Creed, and many others simply would not exist in the form we know them today. While I am aware of these techniques and tools being utilized by the teams that created these games, I cannot provide concrete numbers on how much of the work was completed by procedural tools. Based on my personal experience with similar tools on similar projects, it is likely that more than 75% of the work is being completed by the automated process. I actually believe that estimate may be low, but I am hedging.

AI Generative tools are simply the latest form of automation. As with all new automation, some employment opportunities will be lost. Artists who possess the ability to adapt to this new technology will flourish. While some may be concerned about this future, I feel this outcome is not only inevitable, but desirable.

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?

For the last 2 years, I have been using Generative AI art packages. In that time, I often browsed public forums online that focus on this topic. It is an understatement to say that there is a great deal of contention around this specific topic, as well as whether a person crafting a text prompt to create an image is an *Artist*. While I am open to the debate of whether a person who crafts prompts and parameters is worthy of the label *Artist*, I firmly believe that the person who crafts the prompt and provides parameters is the *Creator* of that output.

Generative AI software at this point in history, no matter how *intelligent*, is not sentient. Without a human providing prompts and parameters, it would not be creating output. Generative AI is not at a level in this point in history where it simply *decides* on its own to create an image. A human *must* provide prompts and parameters. As stated in the previous section, generative AI is a *tool*. I reiterate, a tool that requires human input.

Adobe Photoshop is an art and photo editing package that was initially released to the public in 1990. It is a tool with a user base of 21 million as of 2023. Photoshop is a powerful piece of software with a wide variety of features which includes the manipulation of photographic

images. An artist could open 30 images (photos, digital drawings, etc.), and create a new and unique piece of art using pieces of all 30 images. This is a process colloquially known as *photobashing*. Assuming the artist had the right to all the images used as a base in this new image, wouldn't that new image be a copyrightable item by the human that used photoshop to manipulate and blend these source images? Assuming the human using photoshop did *not* necessarily have the rights to the source images, but the resultant image is so distant from resembling any single one of them, could the human using Photoshop copyright that image? Would anyone notice? Does the resultant image resemble any one of the constituent parts enough to be considered a breach of copyright? At this point, I believe we are back in the traditional territory of the copyrighting of images.

> *An Appendix at the end of this document contains links to videos that are examples of artists using the* photobashing *technique. I highly recommend readers view at least a few of these links to learn about what I am describing.*

I do not see the difference between a program like Adobe Photoshop and Generative AI Art Models. They are tools that allow the user to create a new image through the manipulation of existing images. In the case of the Generative AI, the database of source it is pulling from is *massive*.

I am *adamantly* of the opinion that humans should be able to hold copyright to images created using Generative AI. Stating otherwise is as bizarre of a notion as to state it is impossible to copyright anything authored in Photoshop. The basis of this opinion is further explored in the later section: *Philosophy Concerning Training.*

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?

I work in software development, but my position is as an artist. I feel I am only qualified to provide opinions on the first two questions in this section.

As stated previously, Generative AI is a *tool*. A tool that many small businesses may be able to use to their advantage. Our company desires to be able to use this tool to create images for use in our products. It would be a tremendous setback for us, and other small organizations like ours, if we were not allowed to copyright portions of our product or forced to abandon this technology. It is unthinkable to me that a piece of artwork could not have a copyright holder simply because of the tool used in its creation. Again, Photoshop is a tool that can easily aid the user in the blending of multiple images. Because Photoshop has the ability to blend multiple copyrighted images, should images created by Photoshop not be copyrightable? This sounds absurd.

Without legal protection for AI generated materials, I firmly believe its development will continue no matter what. The people involved in the development of this technology are passionate. However, I think a lack of legal protection on the materials the Generative AIs produce would have a *huge* deleterious effect on the development of these technologies and their applications.

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?

In most general cases, I offer a resounding *no*. The products of Generative AI are not consumables with the ability to physically harm a human being in the manner a food product or a medicine might. With the amount of AI art that has already been unleashed on the world via electronic means, this would not only be a pointless task moving forward, but ungainly. I can see no advantage for anyone or what protection is being afforded through labeling the products of Generative AI.

Imagine a hypothetical Generative AI user creates a simple image of a girl holding a flower. They then make prints of this image and sell them via an online marketplace such as Etsy. Why is it pertinent information to the consumer that Generative AI was used as the tool of its creation? If it doesn't visually impinge on the copyrighted work of another artist, this is completely irrelevant information. Again, I propose the question: should any image processed with Photoshop be labeled? Should a house built with Ryobi tools be labeled as such?

What do I consider an outlier? As stated at the beginning of this document, these opinions spawn from a place of someone whose interest and focus is on the use of Generative AI for the creation of visual art. For this opinion, I must step outside of that specific focus just a little. In cases where AI may be used to *imitate* or *copy* a person's likeness, their voice, or an artist's *specific* style to the point of intentionally copying them, I feel it may be reasonable to require some type of identifier so that consumers of this product are not intentionally deceived. This basically stems from the possibility of parodies intended as satire being mistaken for reality, in the form of images, audio, videos.

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?

As touched upon in the previous section, this is a reasonable concern. As has been discussed earlier, AI is a tool that provides automation. This means there may be some displacement of employment opportunities. This is a trade-off that must be accepted with any new technology. However, if there is an artist who is well known enough to display a signature style, this is akin to an actor desiring to protect their likeness or voice.

The biggest concern would be to protect those artists that are still living and are depending on that notoriety for their income. Secondarily, deceased artists whose estates may depend on the income surrounding that artist's notoriety. These seem like reasonable areas in which to extend protections. It seems it would be ridiculous to try to pre-empt generative AI from creating an artwork in the style of Leonardo Davinci. However, for example offering some form protection to the estate of late surrealist H.R. Giger (died 2014) whose art style is very distinctive seems appropriate.

Currently, there are artists and celebrities who have requested that their names be removed from the prompt database from various Generative AI Models. This seems reasonable as well, but definitely presents a difficult problem in the policing of any such regulations that could be enacted. This would be an especially difficult thing to enforce on any open-source platform like Stable Diffusion.

Philosophy Concerning Training

There is a great deal of concern over the source of training materials. Are the images used to train Generative AI models public domain? If not, are they licensed?

At what point does it matter?

This may seem like an odd question on the surface, but it is a question that *should* be asked. For centuries, artists, visual and otherwise, have *always* taken inspiration from other artists. This is how art evolves.

- Artist A creates works and gains notoriety through those works.
- Artists B, C, & D may or may not know Artist A as an individual, but they admire Artist A's works.
- They then create works of varying degrees of similarity without seeking permission from Artist A.
- Artist B, C, & D seek to retain rights for the works they created.
- If Artist A has a copyright on their works, did Artist B, C, & D violate the rights of A?

Given no more information than provided above, it seems the logical answer is *it depends*.

It depends on how similar Artist B, C, or D's work is to A's original work. Also, it may depend on the intent in the creation of the work; was it the intent of B, C, or D to defraud by pretending to be A. This very well could be an argument that is only resolved by a court of law.

As stated previously, I am a professional artist, not a lawyer. I have a laymen's understanding of copyright law. If a Generative AI Model is trained using the entirety of images found on the internet, where is the use of that copyrighted image violating the copyright? One can argue that the downloading of the image and use in training the AI is violating copyright. If the AI is not reproducing that image wholesale and the development company profiting from it, has the copyright been

violated? How is this different from a human artist seeing an image and taking inspiration to create something new from that inspiration?

As a games industry art veteran of 30 years, I have been in countless pitch and planning meetings discussing the design for characters, creatures, vehicles, and game environments. Proposals are often framed as a mashup of known visuals. This process is sometimes colloquially described as an "elevator pitch", a term borrowed from the film industry. It is simply shorthand to convey an idea quickly. Discussions almost always begin in a manner such as the examples below.

> "What if this creature had a head like the xenomorph from Aliens, but a furry body like the snow creature in Empire Strikes back?"
>
> "We want our main character to have an armored body similar to Master Chief from Halo, but no helmet with a face similar to Joel from the Last of Us."
>
> "Our cars should look like they would fit into the same world as the cars from The Fifth Element."
>
> "What if the castle looked like Saruman's tower in the Two Towers, but less gritty and more magical?"

After these discussions, reference materials will be collected and will most likely include copyrighted materials from the Intellectual Properties discussed (e.g. images from movies, or other video games, photos from news organizations or magazine publications). The final result will only bear a general resemblance to the original item referenced, but this is how the visual art process works. Even if this was not a discussion involving a group of people, this referencing of known things, copyrighted and otherwise, is the beginning of the creative process within an artist's mind. No one has ever suggested to me that this process is a breach of copyright, *only that the result cannot resemble the inspiration in a dramatic way.*

Training on collected artwork, copyrighted or not, is Generative AI's equivalent of an artist taking inspiration from artwork they have viewed, copyrighted or not.

Should copyright holders have the right to opt out from the being used as training material for commercially available Generative AI? Definitely. It seems that owners of copyrights should be allowed to restrict use of their intellectual property as they so desire. Should Generative AI tools be considered to be in breach of copyright if they have been trained on copyrighted material, and thus be considered uncopyrightable? No. Not unless they produce something that is significantly similar to a copyrighted work. At that point, the *human* who used the Generative AI tool should bear the responsibility of violating the copyright, not the tool.

Beneficiaries

Much of the public debate (media articles, public online forums discussing this topic, etc.) surrounding this topic to highlight the possible *evils* of Generative AI technology. Fears of large corporations to using this technology to replace visual artists, writers and even computer programmers. I will not and cannot argue that this is not going to happen to some extent. I have seen little focus on the positives of how this technology will aid individuals and small business.

As stated multiple times in this document, I have been in this industry for 30 years. I know quite a few artists working in the industry. While I know some that are concerned, or even *vocally* against this technology, the vast majority in my sphere have a different attitude. Much like the tools I referenced when asserting that Generative AI is simply another tool, these artists are more interested in *how* this emerging tool can make their jobs and lives easier.

Generative AI is a tool that can benefit production artists in both large and small organizations, and even on a freelance basis if they take the time to investigate how they can incorporate it into their process.

Conclusions

Generative AI models are *tools*. They were not designed to copy any single artists' style or work, but to take inspiration from all the input given, and create results based on parameters supplied by a human being. The model uses the images upon which it was trained as *inspiration* the same way a human artist would. Generative AI may inadvertently create a result that is very close to a copyrighted work, but a human has that same potential. The only problem is that current Generative AI Models are not yet intelligent enough to evaluate their output to judge if that output resembles any one of its inspirations too greatly. Even with human beings, it sometimes takes a court of law to make those decisions.

Arguably, humans have the exact same ability to do this. A painter could spend time examining another painter's style and produce something that viewer might immediately attribute to the original artist. There is much contention around this topic with classical painters to this very day with debates that have spanned years over a single painting. A writer could study another writer's style and produce a work in that writer's "voice". Again, we have seen examples of this in the works of Shakespeare. Generative AI simply possesses the capability to do this with *greater efficiency* than a human might.

Stating that works generated using these tools is not copyrightable, is painting a very powerful technology with an extremely heavy-handed brush, diminishing its usefulness, and ultimately doing a *disservice* to artists. I strongly feel this is a terrible solution for any problems that may arise around these tools, and the copyrightability of these works should not be quashed.

I welcome any questions, clarifications, or request for further materials that support my position.

Appendix A

Below are links to examples of artists using *photobashing* techniques. This is a common practice among modern digital artists working professionally in video games, film, television, and very likely other industries where quick high-quality concepts are required. I do not have any background on these specific creators, so I do not know if any of them work in these industries or are simply hobbyists. However, these videos are representative of the techniques I have seen used by artists in my industry, as well as used personally.

I have provided several examples. Some of these videos are lengthy, while others are short. If you do not have enough time to watch these in their entirety, I encourage you to watch some of the beginning, skip to some of the middle, and then watch the last 60 seconds. If you only have time for a few, it is suggested that you watch the first link from each section.

Environment Art Examples

Environment Concept Art (Photobashing + Paintover) (Running Time 8 min)

SAMURAI GUARDIAN in Photoshop - Photo Manipulation Speed Art (Running Time 12 min)

This video contains promotional materials embedded at the beginning. This link intentionally skips the first 2:15

Desert City Concept Art - Photoshop Timelapse | Photobashing (Running Time 13 min)

Cheat at Digital Art - Photobashing Concept Art Tutorial Photoshop (Running Time 12 min)

This video contains promotional materials near the middle. The promotional materials also reveal another facet of this artist's workflow where he sources 3D models for inclusion in his artwork.

Character Art Examples

EP 13 - TIMELAPSE - Character Photobash - Valkryie Part 2 (Running Time 7 min)

Apocalypse Soldier / Character design photobash timelapse (Running Time 25 min)

SpaceX Pirate - Character Design Timelapse (Running Time 35 min)

Object Art Examples

Photobash Assault Vehicle ATV Photoshop Digital Paint Demo - Mike Morgan (Running Time 35 min)

Weapon Concept Design - Gun Painting and Photobashing Techniques (Running Time 14 min)

Photobashing - Air Hippo Breakdown (Running Time 20 min)