"Reevaluating Copyright: From Photography to AI Imagery"

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Past Copyright Concerns

In 1884, the Supreme Court of the United States ruled that Burrow-Giles Lithographic Co. violated the copyright of Napoleon Sarony. The main issue at hand is that photography, new at the time, was not considered something that could be copyrighted as Burrow-Giles Lithographic Co. asserted, “The company argued that photographs could not qualify as "writings" or as the production of an "author," in the language of the grant of power to Congress under article I, section 8, clause 8 of the United States Constitution to protect copyrights, and so § 4952 of the Copyright Act of 1865” (https://supreme.justia.com/cases/federal/us/111/53/) This interpretation is based on the premise that a camera is a machine, machines are not human and that the works by humans using a camera (machine) are not copyrightable.

Unfortunately, the Supreme Court ruling did not directly address the relationship between machines and humans. It failed to provide guidance for when actions are unitarian, allowing for machines to be extensions of the author (human), thus copyrightable. Instead, the court narrowed its decision by trying to find a correlation between actions performed by photographers in creating portraits and the process performed by painters. Citing that, a photographer puts the subject in a chair, provides the clothing, and adds props to the scene.

By today's standards, the evidence provided might seem less applicable to current technological challenges, setting up society for the current dilemma that text-to-image artificial intelligence imagery is the construct of a machine, not humans. If a strict interpretation of “human authorship” had been followed, many innovations since this case would not have been possible. Courts make different decisions as new technology arises, or many issues are ignored because the benefit to society is so overwhelming.

Here are a few examples of how the interpretation of human authorship is accepted primarily by the passing of time:

A. The 15th-century Gutenberg Press is a machine, yet the authors of the work maintain potential copyright because the mechanical action is unitarian to the human author. This means the text could not exist without human input, regardless of the machine's capabilities.

B. The word processing software developed in the 1980s is another set of machines assisting humans in writing. Today, no one questions human authorship when a work is produced using a word processor instead of written by hand. Again, the premise here is that humans and machines are unitarian. The computer cannot produce the work without intervention and input from the human. Humans are not simply providing instructions to the computer.

C. If grammar and word correct software assist in writing an article, do we need to give grammar and word correct credit for the writing? Both use some aspect of AI. How much assistance makes the machine the author and human intervention just instruction to a machine. 100%? 50%? 1%? Where does the line need to be drawn? It would be difficult

today to find an example of a writing that has given credit to grammar or word correct. As far as is known, humans can retain a copyright using these tools.

D. Once photography became a regular part of society, another change happened in 1969 when Boyle and Smith created the charged coupled device. The digital camera.(https://www.techtarget.com/searchstorage/definition/charge-coupled-device) An integrated circuit that converts light from the environment into digital information and, ultimately, a digital image. If we follow the progression, imagery starts with hand painting and drawing. Then film. Then digital pictures. Today, all these methods are copyrightable and are accepted by society as true works by humans despite the interaction of machines in the latter two.

E. Even painting requires a paintbrush, a technology that could be considered a machine. Would we consider humans not authors who painted works because it is unlike the hand cave paintings of humans 40,000 years ago? Yet even then, paint was also a technology.

F. Also, consider race car photographers who use burst mode to take 100 shots continuously at medium resolution, equaling seven shots per second.(https://support.usa.canon.com/kb/index?page=content&id=ART104912) Yet all the images created in this mode are copyrightable even though the camera's computing is creating the images automatically. This illustrates that no guidelines distinguish burst mode from manual shutter initiation, which is one shot at a time. Burst mode requires human interaction to start the process and instructs the camera computer to activate its prescribed sequence. The human and the machine that is a digital camera on burst mode are unitarian because the sequencing action cannot be initiated without the actions of a human. It is, again, circulating back to the notion that humans are accepted as authors when using machines.

Current Copyright Concerns

The extrapolation of the human-machine unitarianism paradigm seems relevant in today's text-to-image generative artificial intelligence imagery. As in the mentioned examples and dozens more, a reasonable person understands and experience these outcomes as human-authored.

The US Copyright Office and other copyright institutions should establish a different standard for evaluating text-to-image generative artificial intelligence imagery. The rationale is directly in front of us. AI is just another new yet difficult-to-understand machine. Its relationship with humans and its outcome deserve the same consideration humans have for photography, word processing, and printing presses.

The prompt used to create AI images represents an inextricable interaction between humans and machines and that the machine cannot produce works without the intervention of a human. Just as a human pushes a button on a digital camera to produce a photo work, a prompt is a creative intervention that presses the button of AI. One could also argue that a prompt requires far more creativity and intelligence than pressing the button on a camera. This leaves intact the assertion that a Crested Macaque monkey (NARUTO v. Slater, 888 F.3d 418, (9th Cir. 2018) https://casetext.com/case/naruto-v-slater-2) cannot be the author of a photo when it pushes the

button on a camera because it does not possess the intelligence to contemplate issues of composition or design principles.

Current Argument Against AI Image Copyright

United States District Court Judge Beryl A. Howell recently wrote that “copyright has never been granted to work that was “absent any guiding human hand,” adding that “human authorship is a bedrock requirement of copyright.” (https://www.theverge.com/2023/8/19/23838458/ai-generated-art-no-copyright-district-court) At the same time, Judge Howell sinks the argument because the decision did not recognize that many machines require a “guiding human hand.” In review, cameras, printing presses, and word processors require a guiding human hand. The argument that text prompts are insignificant to AI falls apart because AI is “just an arm of an algorithm.” Consider computer software, “Copyright Law defines computer programs as literary work, and as such is protectable under copyrights.” (https://milleripl.com/blogs/patents/is-software-protected-by-copyrights-or-patents#:~:text=Your%20actual%20software%20and%20app,be%20protected%20under%20patent%20law.&text=Copyright%20Law%20defines%20computer%20programs,such%20is%20protectable%20under%20copyrights.) Here it is. If computer programs that are instructions for computers are copyrightable, then text prompts used to create AI images are the same—a literary work.

Current Argument For AI Image Copyright

“Judge Howell did, however, acknowledge that humanity is “approaching new frontiers in copyright,” where artists will use AI as a tool to create new work. She wrote that this would create “challenging questions regarding how much human input is necessary to copyright AI-created art, noting that AI models are often trained on pre-existing work.” (https://www.theverge.com/2023/8/19/23838458/ai-generated-art-no-copyright-district-court)

The biggest concern about this statement “approaching new frontiers in copyright,” is that few realize that the new frontier is happening now, today, yesterday! “More than 15 billion images have been created using text-to-image algorithms since last year. To put this in perspective, it took photographers 150 years, from the first photograph taken in 1826 until 1975, to reach the 15 billion mark.” (https://journal.everypixel.com/ai-image-statistics#:~:text=Key%20Insights,image%20algorithms%20since%20last%20year.) It may be that text-to-image artificial intelligence imagery is one the most prolific and fastest developing tool in the history of humankind. All in less than 24 months.

Regarding the concerns by Judge Howell that “AI models are often trained on pre-existing work,” If we wanted to design a museum, consider traveling to the best 100 museums globally. It may take years to reach them all. In correlation, we have created an analog version of AI training. The author would be influenced by everything seen, and its visual sum would affect the final design solution. Society accepts this as a legitimate method of absorbing typology and context in pursuing a new work. AI can do this in seconds. However, if one only traveled to a single museum in Switzerland and then returned to produce a work that was nearly a copy of the original, such an action would be considered plagiarism. Is not AI just a faster airplane that

allows one to see all the museums needed for the creative process in an exponentially shorter time frame?

Proposal: The Unity Test

The US Copyright Office should develop a standard called the “Unity Test”:

“The Unity Test fairly assesses the relationship in human-machine interactions and recognizes the outcomes that cannot be achieved without human intervention. Upon successful explanation and analysis, works produced in this manner shall be granted copyright.”

To address Judge Howell's primary concern, “challenging questions regarding how much human input is necessary,” The Unity Test must establish a threshold between trivial input from that of a literary work to generate an AI image using text prompts. It is up to study further how many words or characters are needed to be considered creative work.

This proposal recommendation is twenty-five words. Why twenty-five words? If an artist uses the one-word text prompt “house.” A reasonable person could understand that such content is not a literary work. Like as a book with a thousand blank pages with the one word on the first page, “The” would not be considered a literary work under reasonable assessment. Here is an example of a house prompt that would be considered a literary work under the Unity Test:

“Right side view, house partially in a cliff, factory, glass::2 blue metal::2 concrete::1, minimalism, desert landscape, overhangs, lighted pool, vertical louvers, balconies, bridges, fountains, people, trees, dusk, extremely detailed, photo-realistic, ray trace, Vray --ar 16:19”

Thirty-five words that require human intervention, creativity, and intelligence. Again, it requires vastly more creativity and intelligence than a human pressing a button to initiate burst mode on a digital camera.

Conclusion

Humanity is already on the path of making text-to-image generative artificial intelligence imagery a normal part of life. Government institutions should move quickly and decisively to bring AI imagery into the world of creative works authored by humans. Given a fair assessment, AI imagery is a creative work and art by many accounts. The time to reconcile these issues is now, not eventually, or when the new frontier arrives. Maintaining the status quo based on an 1884 precedent and downgrading the potential for human authorship in this genre significantly risks the entire concept of copyright becoming irrelevant and obsolete.

Further reference:

https://s3.documentcloud.org/documents/23919666/thalervperlmutter.pdf