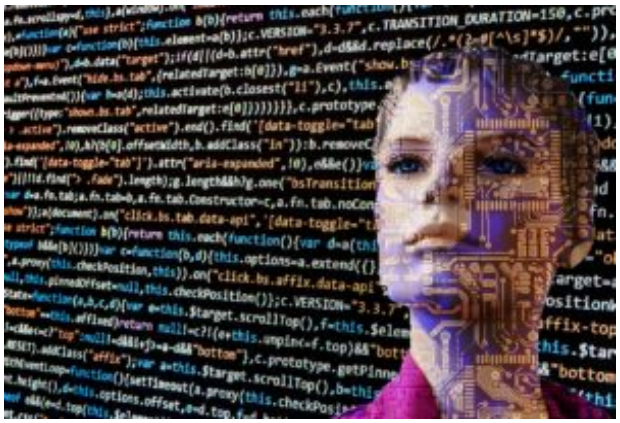
Kluwer Copyright Blog

Artificial intelligence, machine learning and creativity in visual art: what are the protectability requirements? Part 2: the US Thaler vs Perlmutter case

Gianluca Campus (University of Milan) · Thursday, September 7th, 2023

Introduction



Part 1 analysed an Italian case related to the copyright protection of a "floral fractal" generated via machine-learning (see *RAI* vs *Biancheri*). Even more recently, another case dedicated to protection of AI generated visual art has been decided by the United States District Court for the District of Columbia (*Thaler* vs *Perlmutter*, Civil Action No. 22-1564 (BAH)). Stephen Thaler owns a computer system called the "Creativity Machine", which he claims generated a piece of visual art of its own accord. He sought to register the work for a copyright in the US, listing the computer system as the author and explaining that the copyright should transfer to him as the owner of the machine. The US Copyright Office denied the application on the grounds that the work lacked human authorship. The District Court confirmed the decision of the US Copyright Office.

The US "Creativity Machine" case

Stephen Thaler alleged that he had developed a computer program he describes as having "artificial intelligence", capable of generating original pieces of visual art, akin to the output of a human artist. This AI system — the so-called "Creativity Machine" — produced the artwork titled "*A Recent Entrance to Paradise*". After its creation, he attempted to register this work with the Copyright Office. In his application, he identified the author as the Creativity Machine, and explained the work had been "*autonomously created by a computer algorithm running on a machine*", but Thaler sought to claim the copyright of the "*computer-generated work*" himself "*as a work-for-hire to the owner of the Creativity Machine.*"

The Copyright Office denied the application on the basis that the work "*lack[ed] the human authorship necessary to support a copyright claim*," noting that copyright law only extends to works created by human beings (based on *Burrow-Giles Lithographic Co. v. Sarony* and citing 17 U.S.C. § 102(a); U.S. Copyright Office, Compendium of U.S. Copyright Office Practices § 306 (3d ed. 2017)). Thaler requested reconsideration of his application, confirming that the work "*was autonomously generated by an AI*" and "*lack*[ed] *traditional human authorship*", but contested the Copyright Office's human authorship requirement and urged that AI should be "*acknowledge*[d] . . . *as an author where it otherwise meets authorship criteria, with any copyright ownership vesting in the AI's owner*."

The summary judgment of the District Court of Columbia

The District Court held that under the Copyright Act of 1976, copyright protection attaches "*immediately*" upon the creation of "*original works of authorship fixed in any tangible medium of expression*", provided those works meet certain requirements (*Fourth Estate v. Public Benefit Corporation v. Wall-Street.com*; 17 U.S.C. § 102(a)). A copyright claimant can also register the work with the Register of Copyrights. Upon concluding that the work is indeed copyrightable, the Register will issue a certificate of registration, which, among other advantages, allows the claimant to pursue infringement claims in court (17 U.S.C. §§ 410(a), 411(a); *Unicolors v. H&M Hennes & Mauritz*). Conversely, if the Register denies an application for registration for lack of copyrightable subject matter, then this means that the work at issue was never copyright protectable.

With regards to attribution of copyright to the machine owner, the Court held that by denying registration the US Copyright Office concluded that no valid copyright had ever existed in a work generated absent human involvement, leaving nothing at all to register and thus no question as to whom that registration belonged.

With regards to copyright protectability of AI-generated works, the Court stated that, according to the US Copyright Act, copyright attaches to "*original works of authorship fixed in any tangible medium of expression, now known or later developed*". (see 17 U.S.C. § 102(a)). Accordingly, copyright is designed to adapt with the times, but human creativity is the *sine qua non* at the core of copyrightability, even as that human creativity is channelled through new tools or into new media. In the precedent *Burrow-Giles Lithographic Co. v. Sarony*, the Supreme Court reasoned that "photographs" amounted to copyrightable creations of "authors", despite deriving from a mechanical device that merely reproduced an image of what is in front of the device. This was due to the fact that the photographic result nonetheless "*represent*[ed]" the "*original intellectual conceptions of the author*". A camera may generate only a "mechanical reproduction" of a scene but does so only after the photographer develops a "mental conception" of the photograph, which is given its final form by that photographer's decisions. More recently, in *Naruto v. Slater*, the Ninth Circuit held that a crested macaque could not sue under the Copyright Act for the alleged infringement of photographs the monkey had taken of itself, for "*all animals, since they are not human*" lacked statutory standing under the US Copyright Act.

In addition, the US Constitution (U.S. Const. art. 1, cl. 8) enables the enactment of copyright and patent law by granting Congress the authority to "*promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.*". According to the District Court: the act of human creation was thus central to American copyright from its very inception; and non-human actors need no incentives with the promise of exclusive rights under United States law. Hence and copyright law was therefore not designed to reach them.

Copyright and protectability of AI creations

The District Court recognizes that the attenuation of human creativity from the actual generation of the final work via AI will prompt challenging questions regarding how much human input is necessary to qualify the user of an AI system as an "author" of a generated work, the scope of the protection obtained over the resultant image, how to assess the originality of AI-generated works where the systems may have been trained on unknown pre-existing works, and how copyright might best be used to incentivize creative works involving AI. Nonetheless, none of these issues can be addressed in the context of the "Creativity Machine" case, since the plaintiff decided to go through an application for copyright registration alleging that the artwork was autonomously generated by AI and thus requiring the Court to rule only on the question of whether a work generated autonomously by a computer system is eligible for copyright. At a late stage of the trial, Thalertried to modify his representation of the facts, alleging that he "*provided instructions and directed his AI to create the Work*," that "*the AI is entirely controlled by* [him]," and that "*the AI only operates at* [his] *direction*," (but such new allegations were not admissible accepted as they were considered tardive in the course of the trial.

Conclusions

It is interesting to note that, even though such rulings could be interpreted as excluding copyright protection for AI generated visual art works, they seem indeed not to exclude the possibility of protectability of such works, depending on the level of involvement of human intervention. The US District Court has clarified that the mere argument of the creation of a graphic work generated via AI (even if equivalent to a human generated work) cannot lead to copyright protection in favour of the AI system itself (or of its owner via work-for-hire theories). The US judge has nonetheless expressed that there is still a lack of understanding in the rules applicable to AI-generated works and has clarified that there is the need for a factual analysis to evaluate the level of human intervention in the creation of graphic works via AI systems, in order to allow access to copyright protection for such works. Finally, it is worth noting that the US Copyright Office, whose denial for registration of copyright has given rise to the present case, has launched in early 2023 its AI Initiative and, as part of it on 30 August 2023 has issued on a notice of inquiry (NOI) on copyright and AI. This means that the Office will proactively contribute to analyse copyright law and policy

issues raised by generative AI, advising the US Congress and offering information and resources to the public, courts, and other government entities considering these issues (here).

To make sure you do not miss out on regular updates from the Kluwer Copyright Blog, please subscribe here.

This entry was posted on Thursday, September 7th, 2023 at 8:14 am and is filed under Artificial Intelligence (AI), Originality, Subject matter (copyrightable), USA
You can follow any responses to this entry through the Comments (RSS) feed. You can leave a response, or trackback from your own site.