Science of Law Journal (2025)
Clausius Scientific Press, Canada

DOI: 10.23977/law.2025.040215
ISSN 2616-2296 Vol. 4 Num. 2

Research on the Copyright Issues of AIGC Artistic Works

Xuan Zhao[1], Fanyu Zhou[2,*]

[1]Beihang University, Beijing, 100191, China
[2]Changchun Humanities and Sciences College, Changchun, Jilin, 130117, China
**Corresponding author*

Keywords: AIGC; Copyright; Infringement; Artistic Works

Abstract: AI technology is rapidly evolving into an overwhelming productive force. Generative AI has subverted traditional methods of artistic creation, yet legal frameworks have lagged in addressing copyright issues regarding AI-generated content (AIGC). This paper explores three key questions: Who holds the copyright to AIGC works? Do AIGC works meet the originality requirement for copyright protection? Does generating works in a style similar to existing artworks constitute infringement? Through empirical observation, practical creation, and literature review, this paper argues that AI software providers merely offer tools and cannot claim copyright over generated works. AIGC works satisfy the originality criteria under copyright law, while AI-generated imitations of existing artists' styles may constitute infringement.

1. Introduction

Artificial Intelligence Generated Content (AIGC) refers to technologies that enable the automated or semi-automated generation of textual, visual, auditory, video, and programming content through artificial intelligence systems. Its core mechanism involves training AI models on extensive datasets to simulate human creative processes. The emergence of AIGC originates from the massive datasets of text, images, and audiovisual materials provided by internet platforms. Driven by continuous breakthroughs in deep learning technologies and increasing demands for high-efficiency, low-cost content creation in creative industries and entertainment sectors, this field has catalyzed the emergence of numerous AIGC software platforms.

In the domain of visual content generation, domestic platforms such as Keling, Jimeng, Hailuo, and Doubao have established leadership positions, while international counterparts including MidJourney, Stable Diffusion, and Runway dominate the global market. A significant milestone occurred in 2021 when OpenAI introduced its text-to-image generation model, marking AIGC's transition into the multimodal era. Since 2022, the field has experienced exponential growth, with MidJourney and Stable Diffusion achieving technological maturity in image generation that enables non-professionals to produce high-quality visual outputs. The evolutionary trajectory continued in 2024 with OpenAI's deployment of video generation models, propelling AIGC into the dynamic visual era. Current applications extensively utilize these generated works across artistic creation, advertising design, game development, short video production, and cinematic special effects domains.

Table 1: Applications of AIGC (Data source: https://cloud.tencent.com/developer/article/2208548)

Modes of AIGC	Applications
Text	Structured writing, writing assistance
Audio	Voice cloning, music composition, arrangement
Image	Image editing, innovative image production
Video	Video editing, special effects, clip generation
Multimodal	Text-to-image, text-to-video, video-to-text
Strategy	Game AI, plot generation, digital asset creation
Virtual Humans	Digital avatars, interactive agents

As illustrated in Table 1, AI-generated content (AIGC) has entered an explosive growth phase and period of unregulated expansion within a short time. Artificial intelligence generation technology has been widely applied across various domains, gradually replacing human professionals in news writing, editing, illustration, animation, game design, and music composition. With technological advancements, AIGC is poised to play an increasingly significant role in more fields. However, the rapid development of AIGC has outpaced legal and regulatory frameworks, revealing the limitations and challenges of lagging supervision and legislation. Given the distinct characteristics of AI-generated textual works versus artistic images and animations, this paper primarily focuses on copyright issues concerning AI-generated artistic images and animations.

Academic discussions predominantly revolve around two core debates: whether AI-generated artworks qualify as copyright works and the determination of authorship. Regarding the legal characterization of AI-generated artistic images and animations and their eligibility for copyright protection under existing laws, scholar Wang[1] contends that AI-generated content lacks distinctive personal characteristics and fails to meet the "originality" requirement, thus not constituting "works" protected by copyright law.

Zhu[2] similarly argues that AI-generated content represents machine-produced outcomes rather than direct intellectual creations of natural persons. He maintains that denying copyrightability would not impede technological advancement or industrial application of artificial intelligence.

On the contrary, Yang[3] argues that from the perspectives of both artistic value ant logic, AIGC works of art meet the criteria for “woks” under current copyright law.

The academic community further debates whether software owners should hold copyrights for AI-generated works. Xiong[4] proposes that AIGC could be legally construed as creative acts reflecting the will of designers or trainers, suggesting there exists no legal barrier to recognizing AI software owners as authors.

Tang [5] also holds that AI software are, in nature, Algorithmic techniques, which are no more than collaborative creation tools, rather than the subject to create with initiative.

Through systematic observations and interviews with creators utilizing AI-generated software, this paper argues that AI-generated artistic works should be recognized as copyrighted works. The authors hold that creators employing AI software as creative tools should be legally established as legitimate copyright subjects.

2. Issues Concerning the Copyright Subject of Text-to-Image and Text-to-Video Works

Table 2 illustrates diverse ownership models across AI platforms. Current service agreements for generative artificial intelligence (AI) predominantly adopt four models for determining copyright ownership of AI-generated works, reflecting the absence of a unified legal consensus on this issue, which may lead to copyright disputes. A critical question arises: can the owner of AI software qualify as the copyright holder of generated works?

Table 2: Copyright Ownership Models for Generative AI (Data source: JunHe Legal Review [6])

Software Developer	Ownership Model
OpenAI	Full rights assigned to users
Canva	User ownership with usage restrictions
Midjourney	Rights depend on user subscription status
Storyboard That	Rights retained by developer; users receive licenses

The answer lies on the role of the software in the creative process.

Generative AI distinguishes itself by learning stylistic, sensory, or inspirational elements from existing works at an abstract level to produce vast quantities of novel expressions distinct from their sources. Under AI technology, "generation" encompasses three modes: partial generation based on prompts, fully autonomous generation, and optimized generation from draft inputs [7].

Under copyright law, the unique aesthetic choices, artistic perspectives, and conceptual techniques of human creators constitute the protected subject matter. In contrast, AI algorithms operate unconsciously, executing predefined data-processing routines. Crucially, AI-generated visual works result from human-authored textual instructions that specify style, scene, creativity, layout, color, and details. These directives determine the output's form and reflect the human creator's originality and personalized judgment. Some platforms further permit post-generation modifications, allowing creators to refine outputs to better align with their intent. Here, AI functions analogously to traditional artistic tools—akin to a sculptor's chisel or mechanized carving instruments—with technological advancement merely enhancing efficiency. The creator's intellectual labor remains central; tool sophistication does not negate authorship.

The copyright subject of AI-assisted works resides in the human issuing creative directives. While modern AI reduces the temporal and physical exertion historically associated with artistic production, such efficiency gains do not alter the fundamental principle of human authorship. Copyright law protects natural persons' creative outputs, as only humans possess subjective consciousness, legal capacity, and capacity to assume liability. China's *Copyright Law* (2020 revision) explicitly restricts authorship to "natural persons" engaged in direct intellectual creation, emphasizing human-centric authorship to address emerging technological challenges. Although China has not yet established specific criteria for AI-generated works, judicial precedents increasingly reflect this stance. Courts have ruled that copyright protection applies only to works originating from human or corporate intellectual activities, with AI serving merely as a creative instrument.

AI software owner cannot qualify as an author due to its lack of subjective consciousness, inability to exercise free will, and incapacity for legal liability. The U.S. Ninth Circuit Court of Appeals reaffirmed that "only works created by humans merit copyright protection," paralleling the exclusion of non-human creators (e.g., animal "artists"). Similarly, U.S. copyright doctrine adheres to the human authorship principle and creative originality standard, positing that rights reallocation debates become relevant only if AI evolves to generate content wholly independent of human input [8].

3. Are AI-Generated Works Eligible for Originality Recognition?

Regarding whether AIGC qualifies for copyright protection, the U.S. Copyright Office has adopted a clear stance of non-recognition. In February 2022, the U.S. Copyright Review Board denied Stephen Thaler's request for reconsideration of copyright registration for an AI-generated artwork, reaffirming that copyright protection requires human authorship and that AI-generated content cannot be registered under U.S. law.

In 2022, Jason Allen applied for copyright registration of his AI-generated artwork. Allen argued that he had made over 624 text prompts and modifications to distinguish the final output from raw

AI-generated content. However, the U.S. Copyright Office cited *Thaler v. Perlmutter*, emphasizing that works must be created by humans. It concluded that Allen's image was determined entirely by technology, devoid of human creative input, and granted registration only after excluding the machine-generated portions. Similarly, Kristina Kashtanova's graphic novel, which incorporated AI-generated images, initially received copyright registration in 2022. Upon discovering the AI involvement, the Copyright Office revoked the certificate, asserting that Kashtanova's use of unpredictable AI tools lacked sufficient human control or creative guidance, and reissued a limited certificate covering only her human-authored textual elements. These cases demonstrate that U.S. copyright law and practice categorically deny copyright protection to AI-generated content.

In contrast, the U.K. Copyright, Designs and Patents Act 1988 grants 50 years of protection to computer-generated works without human authorship. Saudi Arabia further recognized a robot, Sophia, as a legal citizen in 2017[9]. Notably, India's Copyright Office temporarily acknowledged the RAGHAV AI program as a co-author of an artwork in 2020 but retracted this decision the following year. The EU, through judicial precedents, mandates that AI-generated works must reflect the author's "own intellectual creation" to merit protection, excluding algorithmically controlled outputs devoid of human intellectual contribution.

China's judicial practice has predominantly affirmed copyright eligibility for AI-generated works. In *Lee v. Liu*, Beijing Internet Court ruled that an AI-generated image labeled "AI Illustration" met originality criteria, recognizing the plaintiff as its author and upholding copyright infringement claims. Similarly, in *Lin v. Hangzhou Gauss Co.*, Jiangsu Changshu Court protected an AI-generated image ("*Companion Heart*") created via text-to-image software, deeming it sufficiently original for copyright.

Chinese academia remains divided. One group argues that AI outputs, derived from algorithms and templates, lack human creative essentials; neither developers nor users exercise direct control over the outputs, thus disqualifying them as copyright works [1]. Conversely, others contend that AI-generated content satisfies originality standards as human intellectual labor underlies its creation. Granting protection, they argue, incentivizes AI innovation and aligns with copyright's purpose[2].

To determine the copyrightability of AIGC works of art, discussion should be made from subjective and objective criteria in the creation process.

Subjective criteria: Copyright protection is aimed at works with creative personality and subjective intention[10]. The process of independent creation constitutes an essential prerequisite for the subject matter of copyright law. Artworks generated through artificial intelligence, at least in the current developmental stage, cannot be produced autonomously without human directives. The emergence of an artistic work "from conception to realization" represents the materialization of the author's subjective conceptualization. The genesis of any work relies on the independent creative process of the subject, thereby forming distinctive stylistic characteristics. For AI-generated artworks, it is evident that they originate from human-initiated creative processes encompassing survey, argumentation, conceptualization, and imagination within human consciousness, subsequently actualized through software instructions. Therefore, AI-generated artworks ultimately manifest as the independent creative achievements of natural persons rather than autonomous software creations. Such works still embody human "thoughts and emotions"[3].

Objective criteria: Copyright protection applies to works that demonstrate formal distinctiveness from existing expressions and can be differentiated from other works, thereby satisfying the originality requirement. AI-generated artworks have fully acquired the external characteristics of human-created works while possessing equivalent artistic and economic value. Although the current technical level of AI-generated works may exhibit relatively low aesthetic quality and technical refinement - comparable to machine-carved products that fall short of the meticulous craftsmanship achieved by human artists - copyright law does not impose qualitative standards regarding artistic

merit. Legal protection is granted provided that the formal expression distinguishes itself from existing works, thereby qualifying for copyright status.

4. Whether Stylistic Similarity Between AI-Generated Artworks and Existing Works Constitutes Copyright Infringement

Should the AIGC works indistinguishably similar in style to existing copyrighted works constitute infringement? This raises critical questions regarding the liability allocation between AI software developers and users.

The copyright dispute between Shanghai New Chuanghua Cultural Development Co., Ltd. and Guangzhou Nianguang Network Technology Co., Ltd. provides a seminal case study. As the successor-in-interest to Ultraman artwork copyrights, New Chuanghua alleged that Nianguang's proprietary text-to-image platform Chatstudio AI generated Ultraman images substantially similar to its copyrighted works, thereby instituting legal proceedings demanding cessation of infringing image generation, implementation of technical safeguards against similar outputs, and financial compensation.

The Guangzhou Internet Court adjudicated that Nianguang's operations violated New Chuanghua's reproduction rights and adaptation rights, mandating technical measures to prevent user generation of infringing Ultaman images alongside compensatory damages. This case highlights fundamental jurisprudential tensions in AIGC regulation.

This paper posits that as AI service providers, platforms like Nianguang cannot control users' creative intentions, given that output characteristics depend on subjective user directives and parametric inputs. The user constitutes the copyright holder of generated works, while the software functions merely as a creative instrument, precluding developer liability. Crucially, AI models require continuous training on massive datasets, rendering practical identification of infringing content unidentified for developers, particularly against malicious user manipulation. Imposing proactive technical obligations to prevent stylistic similarity would create unreasonable burdens for developers. Instead, we propose a graduated liability framework: 1) implementation of "notice-and-takedown" mechanisms for general protection; 2) fault-based liability for users demonstrably employing AI to intentionally replicate protected works[2].

From the user’s perspective, AI image generation resembles opening a "blind box" - absent deliberate manipulation, accidental stylistic replication remains statistically improbable. However, when users intentionally prompt AI systems to replicate protected stylistic elements and engage in unauthorized exploitation, such conduct should be deemed infringing, subjecting users to corresponding liability.

To balance copyright protection with technological development, AI providers should fulfill two key obligations: 1) risk warning through service agreements prohibiting copyright infringements; 2) infringement mitigation through reasonable content blocking measures upon notification. Failure to implement these safeguards may incur contributory liability.

5. Conclusion

The proliferation of generative AI has revolutionized artistic creation, precipitating intense academic debates and judicial inconsistencies regarding copyright frameworks. Based on personal practice in artistic creation, review and observation, together with literature review, this analysis concludes that: 1) AI-generated artworks meeting originality criteria under current copyright law merit protection as they manifest creator’s idea; 2) generative AI software serves merely as a creative tool, precluding developer copyright claims; 3) stylistic similarity alone should not constitute infringement unless the creator intentionally imitates protected works through targeted prompt

engineering. A balanced regulatory approach must safeguard creator rights while fostering AI innovation, necessitating clear liability demarcations between developers and users. It is foreseeable that with the accelerating development of AIGC technology, increasing new issues will arise, for instance, AI technology may well play more and more substantial role in artistic creation, therefore, the law and regulation shall give timely response to follow up with the new situation.

References

[1] Wang Q. Legal Status of AI-Generated Content[J]. Law Science, 2017, 5.
[2] Zhu J J. Copyright Infringement in Generative AI[J]. Intellectual Property, 2025.2.
[3] Xiong Q. Copyright Determination for AI-Generated Content[J]. Intellectual Property, 2017, 3.
[4] Junhe Legal Review. Analysis of four highlights of the Interim Measures for the Management of Generative AI Services [DB/OL]. https://mp.weixin.qq.com/s/0kJn318qnGZwQrpd-ahw. 2023.7.24
[5] Tsinghua University & AsiaInfo.A White Paper on AIGC (GPT-4) Enabling Applications in the Communications Industry [DB/OL]. https://download.s21i.faiusr.com/13115299/0/1/ABUIABA9GAAg0KKaoQYogr_N1gc.pdf?f=2023%E5%B9%B4AIGC%EF%BC%88GPT-4%EF%BC%89%E8%B5%8B%E8%83%BD%E9%80%9A%E4%BF%A1%E8%A1%8C%E4%B8%9A%E7%99%BD%E7%9A%AE%E4%B9%A6%EF%BC%882023%E5%B9%B4%E7%89%88%EF%BC%89.pdf&v=1680249168, 2023.4.13.
[6] Sun Y Z. Forum on High-Quality Development and Intellectual Property Innovation [DB/OL]. https://mp.weixin.qq.com/s?__biz=MzIwNDExO-TI5Mw==&mid=2656985492&idx=1&sn=b7fe0591e0181faab1da5ad127143aea&chksm=8d6fcc06ba18451034cc7bd2b42b3f6b040fb769dad410203b282deb8cf2f5e89f0f0a201555&scene=27,2023.4.14
[7] Kong X J. Intellectual Property Protection for AI: Current Status and Prospects [N]. Guangming Daily. 2019.8.30
[8] Nimmer D. Copyright in the Dead Sea Scrolls: Authorship and originality [J]. Houston Law Review, 2001, 38(1),159.
[9] Yang L H. Originality Standards for AI-Generated Content[J]. Journal of Beihang University, 2024, 3.
[10] Tang Y L. On the subject of rights for AI-generated works And the ownership of its copyright[J]. Fujian Forum, 2023.11