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# AI AND COPYRIGHT - WHO OWNS AI GENERATED CONTENT?

Dan Valeriu VOINEA
University of Craiova, Romania

**Abstract**

The rapid development of artificial intelligence (AI) capable of generating creative works challenges traditional intellectual property frameworks, particularly copyright law's reliance on human authorship. This paper synthesizes current legal, ethical, and economic perspectives on the ownership of AI-generated content. Legally, most jurisdictions maintain the requirement of human authorship for copyright protection, leaving purely AI-generated works largely unprotected, though variations exist (e.g., the UK's computer-generated works provision, China's pragmatic approach to human-guided AI). The European Union, guided by the principle of "author's own intellectual creation," similarly requires human input for copyright eligibility. Ethically, debates center on the nature of creativity, fairness to human creators facing displacement, attribution, bias, and accountability for AI outputs, with specific concerns arising within professions like journalism regarding accuracy and trust. Economically, AI offers productivity gains and democratization but also risks job displacement, market saturation, and value concentration. Analysis reveals a persistent legal and ethical emphasis on the human element, while economic models adapt to AI integration. Significant gaps remain regarding international consensus, creator compensation for training data, and defining the threshold for human authorship in AI-assisted works. The paper concludes that while AI transforms creative industries, current frameworks prioritize human agency, incentivizing AI as a tool rather than an autonomous creator, though ongoing evaluation is crucial

*Keywords: Artificial Intelligence, Copyright, AI-Generated Content, Authorship, Intellectual Property, Ethics, Creative Economy, Human Creativity, European Union Law, Journalism, Media Ethics*

## Introduction

The rapid advancement of artificial intelligence (AI) presents a fundamental challenge to established intellectual property (IP) paradigms, particularly copyright law. Algorithms capable of autonomously generating creative content necessitate a re-evaluation of ownership principles traditionally grounded in human authorship. This paper synthesizes current scholarship and legal developments surrounding the ownership of AI-generated content, examining the issue through legal, ethical, and economic lenses. It analyzes patterns, contradictions, and gaps in existing frameworks and discourse, moving beyond mere summarization to offer a synthesized perspective on how different jurisdictions and stakeholders are grappling with AI's role in creative production.

## Legal Perspectives on AI-Generated Content Ownership

Established IP frameworks, designed for human creators, face significant stress when confronted with AI-generated works. Copyright law, central to this debate, traditionally requires "original works of authorship" created by humans (Jones Day, 2023a). The threshold of originality, often described as requiring a "creative spark," is implicitly tied to human intellect (Caldwell, 2023). Consequently, works generated solely by AI, without sufficient human creative input, are generally deemed ineligible for copyright protection in many jurisdictions, including the United States (Jones Day, 2023a).

Patent law faces similar challenges, with major patent offices and courts in the US, UK, and EU consistently ruling that only natural persons can be inventors, thereby excluding AI systems like DABUS from being named as such (Juve Patent, n.d.; Norton Rose Fulbright, n.d.). Trademark law appears less directly challenged, as rights stem from commercial use identifying a source, rather than inherent creativity; a company using an AI-generated logo can typically register and own the trademark, provided it meets distinctiveness criteria (Nelson Mullins, 2023).

The requirement for human authorship in copyright has been tested and affirmed in key legal decisions. In the US, the Naruto v. Slater case, although involving an animal, reinforced the principle that non-humans cannot hold copyright (Jones Day, 2023a). More directly, Thaler v. Perlmutter (2023) saw a US federal court confirm the Copyright Office's refusal to register AI-generated art lacking human involvement, labeling human authorship a "bedrock requirement" (Jones Day, 2023a; Jones Day, 2023b). The US Copyright Office further solidified this stance through guidance requiring disclosure of AI-generated material in registration applications and denying protection to non-human authored elements, as seen in the partial refusal for Kristina Kashtanova's Zarya of the Dawn graphic novel (Privacy World, 2023; Jones Day, 2023c).

Contrasting approaches exist internationally. The United Kingdom's Copyright, Designs and Patents Act 1988 uniquely provides for "computer-generated works" where no human author exists, assigning authorship to the person who made the necessary arrangements for the work's creation (Privacy World, 2023; UK Government, n.d.). This grants a shorter term of protection and assigns ownership even without direct human creative input, a position currently under review amid advancements in generative AI (Privacy World, 2023; UK Government, 2023). China presents a more pragmatic approach; while its law defines authors as persons or entities, courts have granted protection to AI-generated content where sufficient human intellectual input was demonstrated. The Tencent "Dreamwriter" case (2019) found an AI-written news article protectable, implicitly assigning rights to Tencent (Deeth Williams Wall LLP, n.d.). Similarly, a significant 2023 Beijing Internet Court decision protected an AI-generated image, deeming the user's extensive prompting and refinement as sufficient intellectual achievement for authorship.

Regulatory bodies worldwide are actively discussing potential reforms. The US Copyright Office continues inquiries into AI's impact (Jones Day, 2023a), while the UK re-evaluates its unique stance on computer-generated works (Privacy World, 2023; UK Government, 2023). International bodies like WIPO are facilitating global conversations, revealing a general reluctance to grant AI legal personhood or IP ownership, focusing instead on clarifying human contribution thresholds or considering alternative rights frameworks (WIPO, n.d.). A pattern emerges: a global reaffirmation of human authorship, with variations in how much human involvement is needed to secure protection for AI-assisted works.

## The European Union Perspective

The European Union's copyright framework, harmonized through directives and interpreted by the Court of Justice of the EU (CJEU), centers on the principle that a protected work must be the "author’s own intellectual creation" (Erickson, 2023). This standard inherently requires originality stemming from the author's free and creative choices, reflecting their personality. Consequently, this strongly implies the necessity of a human author, as only a human can exercise such intellectual creativity and imprint a personal touch (Erickson, 2023).

Currently, there is no specific EU legislation addressing the authorship of AI-generated works directly. Instead, the general standard of originality, as defined above, governs the assessment. In practice, this means that works created with AI assistance can be protected under EU copyright law, provided a human exercises sufficient creative control over the process, using the AI as a tool under their direction. Conversely, content generated autonomously by an AI, without meaningful human creative intervention or decision-making, would likely fail the originality test because it does not result from a human mind's creative choices (Erickson, 2023). To date, no landmark CJEU case has specifically ruled on the copyrightability of works created solely by AI.

While not altering the core copyright framework, recent EU legislative efforts acknowledge the intersection of AI and IP. The EU's Artificial Intelligence Act includes provisions mandating transparency regarding AI systems, including disclosure requirements when content is AI-generated (aimed partly at combating deepfakes) and potentially relating to the use of copyrighted data for training AI models (Erickson, 2023). This indirectly impacts the copyright sphere by facilitating identification of AI involvement and addressing concerns around training data. Furthermore, the 2019 Directive on Copyright in the Digital Single Market (DSM Directive) introduced a mandatory exception for text and data mining (TDM) for scientific research, along with an optional exception for general TDM, crucial for training AI models. This included an opt-out mechanism allowing rights holders to reserve their rights against TDM, attempting to balance innovation with IP protection (Erickson, 2023).

Overall, the EU's stance aligns closely with the US position: human authorship is paramount. There is currently no significant movement towards granting copyright protection to works generated autonomously by AI or recognizing AI as an author. The policy focus appears directed more towards regulating AI development and deployment responsibly (through transparency, data governance via TDM exceptions/opt-outs, and liability frameworks) rather than fundamentally revising the concept of authorship within copyright law (Erickson, 2023). National courts within EU member states apply this human-centric understanding when faced with AI-related copyright issues.

## Ethical Considerations

The legal debates are intertwined with profound ethical questions about the nature of creativity and authorship. One perspective maintains that creativity requires inherently human qualities like consciousness and intentionality, which current AI lacks (TechPolicy Press, 2023a). From this viewpoint, attributing authorship to AI diminishes human creativity and ignores the fact that AI operates based on patterns in data without genuine understanding. This aligns with the historical justification for IP rights rewarding human creative labor (Berkeley Law, n.d.).

Alternatively, AI can be viewed as a sophisticated tool extending human creativity, analogous to cameras or synthesizers (Caldwell, 2023). This perspective emphasizes the human role in prompting, curating, and directing the AI, arguing that this constitutes sufficient creative input deserving of recognition and protection (Caldwell, 2023). Denying rights to the human user could stifle innovation and disregard their intellectual contribution (Caldwell, 2023). A middle ground acknowledges AI's generative capabilities but questions whether the output possesses the depth and meaning of human creation, suggesting originality alone may not warrant the moral weight of authorship, especially considering the lack of moral rights (like personality connection) applicable to AI.

Significant ethical challenges arise from AI's potential to replace human creators. Concerns about job displacement in creative fields are widespread, raising questions of fairness and the societal value placed on human creative labor (World Economic Forum, 2023; PYMNTS, 2023a). The 2023 WGA and SAG-AFTRA strikes highlighted creators' ethical stance against unchecked AI use threatening their livelihoods and creative control (World Economic Forum, 2023). Fairness in attribution is another critical issue; transparency regarding AI use is increasingly mandated by publishers and institutions to ensure accountability and prevent misrepresentation (Factor NIEHS NIH, n.d.). Furthermore, the use of vast datasets, often containing copyrighted works, to train AI models without creator consent or compensation raises ethical concerns about exploitation and appropriation (TechPolicy Press, 2023b).

Broader societal risks include the perpetuation of biases embedded in training data (Computer Society - IEEE, 2023) and the proliferation of misinformation and deepfakes, which undermine trust and truth (Erickson, 2023). The question of accountability for harmful AI-generated content remains critical; assigning ownership might clarify responsibility, but the ethical consensus points towards human oversight being indispensable (Computer Society - IEEE, 2023; Factor NIEHS NIH, n.d.). Granting extensive rights to purely AI-generated content could incentivize the mass production of low-quality "AI slop," potentially crowding out human creativity (TechPolicy Press, 2023b). Conversely, leaving all AI output in the public domain might disincentivize investment but could promote access. The prevailing ethical inclination favors transparency, fairness to human creators (including potential compensation for data usage), and maintaining human accountability.

## A Journalist's Perspective

For journalism professionals, the integration of AI into newsrooms presents a complex mix of opportunities and profound challenges directly intersecting with copyright, ethics, and the core tenets of the profession. While AI offers potential efficiency gains – automating routine tasks like generating sports scores, financial summaries, or transcribing interviews, thereby freeing up journalists for more complex investigative work – these benefits are weighed against significant concerns (World Economic Forum, 2023).

A primary anxiety revolves around accuracy and accountability. AI models can "hallucinate" or generate factually incorrect information, a critical failure in a profession built on truth and verification (Computer Society - IEEE, 2023). The potential for AI to produce biased or even libelous content raises serious questions about editorial oversight and legal responsibility. If an AI generates a defamatory article, the publisher remains liable, highlighting the indispensability of human judgment and rigorous fact-checking processes, regardless of how the content was initially drafted (Computer Society - IEEE, 2023).

Ethical considerations are paramount. Transparency about AI's role in content creation is crucial for maintaining audience trust. Issues surrounding bylines – whether and how to credit AI involvement – are actively debated, with many outlets establishing policies against listing AI as an author, emphasizing human responsibility (Factor NIEHS NIH, n.d.). Furthermore, the ease with which AI can generate disinformation and realistic deepfakes poses an existential threat to the information ecosystem, making the journalist's role as a verifier and arbiter of truth more critical, yet simultaneously more challenging (Erickson, 2023).

From a copyright standpoint, while the ownership of AI-generated routine news reports (often factual and low in originality, or created as work-for-hire) may be less contentious internally, journalists and news organizations are deeply concerned about the unauthorized use of their archived, copyrighted work to train AI models without permission or compensation. This relates directly to the economic viability of the profession, as news outlets see

their valuable content potentially fueling systems that could eventually compete with them, perhaps through low-cost, AI-driven "content farms."

Economically, the fear of job displacement, particularly for roles involving formulaic writing or data processing, is tangible (PYMNTS, 2023a). The profession anticipates a shift in required skills, demanding proficiency in verifying AI outputs, utilizing AI tools for investigation and data analysis, and emphasizing uniquely human capabilities like critical thinking, ethical judgment, interviewing, and nuanced storytelling. Ultimately, journalists grapple with harnessing AI as a productivity tool while rigorously upholding ethical standards, ensuring accuracy, maintaining transparency with their audience, and navigating the economic pressures exacerbated by AI-driven content generation.

## Economic Implications for Content Creators and Industries

AI-generated content significantly impacts the economics of creative industries. Potential benefits include increased productivity and output, allowing businesses to scale content creation and potentially lower costs (World Economic Forum, 2023). AI tools can also democratize creation, lowering entry barriers for individuals and small businesses (PYMNTS, 2023b; OpenAI, 2023). However, this democratization risks market saturation, potentially devaluing content and depressing prices, especially for routine creative work (Future UAE, n.d.).

The impact on employment is a major concern. While AI may automate certain creative tasks, potentially leading to job displacement (PYMNTS, 2023a; Happy Future AI, n.d.), it may also augment human roles and create new job categories like prompt engineering or AI content curation (World Economic Forum, 2023). Compensation models face pressure; demand for entry-level creative work may fall, potentially hollowing out the middle class of creators, while high-end, uniquely human skills might command premiums (Future UAE, n.d.). The debate over compensating creators for data used to train AI models is economically significant; establishing licensing or royalty systems could provide new revenue streams for artists and writers whose work fuels AI development (PYMNTS, 2023b).

Creative industries are adapting their business models. Media outlets use AI for routine reporting while potentially branding human-led journalism as premium. Publishers face an influx of AI-generated books while exploring personalized content services. Art and design platforms integrate AI tools, shifting the role of designers towards curation and strategy (Shutterstock, n.d.; Getty Images, n.d.). Music and film industries leverage AI for technical tasks while unions push back against its use in core creative roles (World Economic Forum, 2023). Uncertainty around IP ownership encourages reliance on trade secrets, branding, or contractual controls to monetize AI outputs.

The economic balance sheet shows potential gains in efficiency, innovation, and market expansion offset by risks of job loss, increased inequality, quality control challenges, potential consumer fatigue, and legal costs associated with IP ambiguity. The distribution of economic benefits—whether they accrue to tech platforms, content industries, creators, or consumers—remains a critical uncertainty shaped by market dynamics, technological accessibility, and regulatory choices.

## Discussion and Synthesis

Synthesizing the legal, ethical, and economic dimensions reveals several patterns. Foremost is the persistent centrality of the human element. Legally, the human authorship requirement remains the dominant global standard, albeit with varying thresholds for AI-assisted works (Jones Day, 2023a; Privacy World, 2023; Erickson, 2023). Ethically, this reflects a deep-seated valuation of human intention, creativity, and accountability (TechPolicy Press, 2023a; Berkeley Law, n.d.), a principle strongly echoed within professional codes like journalism. Economically, while AI offers efficiency, the market may increasingly value uniquely human contributions, potentially creating a premium for authenticity (Future UAE, n.d.).

Contradictions are evident in the differing legal approaches (e.g., the UK's specific provision for computer-generated works versus the US/EU's stricter human authorship standard) and the tension between AI's potential for democratization and the risk of market saturation and value concentration (PYMNTS, 2023b; TechPolicy Press, 2023b). Ethical frameworks also clash, pitting utilitarian arguments about efficiency against deontological concerns for creator rights and fairness (World Economic Forum, 2023).

Significant gaps exist in current understanding and policy. There is no international consensus on a specific legal framework for purely AI-generated works beyond the general denial of copyright. Standardized, fair mechanisms for compensating creators for the use of their data in AI training are underdeveloped but crucial for ethical and economic balance (PYMNTS, 2023b). The long-term economic impact on creative employment and industry structure remains speculative, requiring ongoing monitoring and research. Furthermore, the precise

threshold of human input required to confer authorship on AI-assisted works remains ambiguous in practice across jurisdictions, creating legal uncertainty.

## Conclusion

The question of who owns AI-generated content transcends simple legal definition, touching upon core societal values regarding creativity, fairness, and economic progress. The current landscape largely denies ownership rights to purely AI-generated works due to the absence of human authorship, reflecting legal tradition and ethical considerations about the unique nature of human creativity. AI is predominantly framed as a tool; when wielded with sufficient human creative input, the resulting work can be protected, with ownership vesting in the human creator or their employer. This approach incentivizes AI's use in augmenting human capabilities rather than replacing them entirely. However, the rapid evolution of AI necessitates ongoing evaluation of these frameworks. Future developments may involve refining authorship thresholds, establishing novel rights categories, or implementing robust systems for data licensing and transparency. Ultimately, navigating the complexities of AI and copyright requires balancing the drive for technological innovation with the imperative to uphold human dignity, ensure ethical accountability, and foster a sustainable and equitable creative economy. The human element, whether as creator, curator, or ethical arbiter, remains indispensable in shaping the future of creativity in the age of artificial intelligence.

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