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The Legality of AI-Generated Art: Copyright Ownership and Current Developments

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Abstract: *The emergence of AI-generated artwork is challenging traditional notions of authorship, originality, and ownership. As a result, copyright norms worldwide are being reassessed. This study covers four major jurisdictions: the US, the European Union, the UK and China, through current theories and recent court cases. The data shows that the US and European Union adhere to strict rules that require human authorship, while the UK and China are exploring more flexible models. We also examine industry responses and issues of privacy and ethics in relation to the unlicensed use of copyrighted material for AI training. Based on the research on responsible AI and frameworks that prioritize transparency, fairness, and privacy, we suggest that a new legal category for machine-assisted creativity should be established. This would recognize both human creators' dignity and economic interests while emphasizing joint authorship. The analysis concludes with recommendations for the visual arts sector, including enforceable rules that require transparency around terms and conditions, a licensing system, ethical audits, and global governance of the sector through organizations such as WIPO.*

Keywords: AI-generated art, copyright law, machine-assisted creation, intellectual property, ethical governance, cyber risk.

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1. Introduction

AI technologies have developed faster than expected in recent years, compelling creative industries to rethink the concepts of authorship and copyright. Generative models, such as DALL-E, Midjourney and Stable Diffusion, can produce artworks that are visually complex and conceptually sophisticated, comparable to those of human artists (Ploennigs & Berger, 2023). As a result, AI tools have sparked debate worldwide over how copyright should adapt in the age of machine creativity, particularly regarding authorship, originality, and ownership.

Historically, copyright law has been grounded in human-based principles that require demonstrable creativity and intention to warrant protection (Hugenholtz & Quintais, 2021). This implicit framework has come under increasing strain as AI systems produce artefacts that are entirely independent of human thought. Leading courts and copyright offices, notably in the US, the European Union (EU), the UK and China, have struggled with these questions, resulting in a variety of approaches (Zhuk, 2024). However, although the US and EU maintain the requirement of human authorship, the UK and China have adopted more lenient positions in some instances, recognizing authorship where there has been a significant human contribution (A&O Shearman, 2023; US Copyright Office, 2023). This international disparity reinforces the pressing need for better coordinated frameworks (Akpuokwe et al., 2024).

This study makes a scholarly contribution on three fronts. First, it identifies measures across four principal jurisdictions and provides insights into how courts and legislatures perceive authorship and originality in the context of AI-generated art (Gaffar & Albarashdi, 2025). Second, it connects theoretical concepts—authorship theory, economic incentive theory, deontological ethics, and posthumanism—to modern legal disputes, such as *Thaler v. Perlmutter*. (Ginsburg & Budiardjo, 2019). Third, it recognizes a new category, that of 'machine-assisted creation', for emerging technologies as an authentic form of creativity that would benefit both human creators and machines.

Exploring some recent developments and research on the ethical use of AI systems, as well as the cyber-vulnerabilities of generative models in critical sectors, Radanliev et al. (2024) highlight urgent threats to data integrity, data attribution, and cyberattacks related to AI in creative fields. To prevent intellectual property theft or the exploitation of private information, differential privacy, federated learning or ethical audits of generative AI are crucial. Based on this, Radanliev (2025) argues that transparency, fairness, and privacy should be necessary at all stages of the AI development process within an interdisciplinary ethical framework.

Different international perspectives—that of the EU, US and China—complicate governance efforts while underlining the need for global coordination on creators' rights and innovation protection efforts. Understanding these issues, which cannot be separated from copyright, authorship, and industry disruption, is key to any changing legal position (Zhuk, 2024). This study is guided by several key research questions that structure the legal, theoretical, and policy analysis, as outlined in Table 1.

Table 1: Research questions

Thematic area	Research questions
Legal foundations and jurisdictional analysis	To what extent do current copyright laws across jurisdictions recognize or reject the authorship of AI-generated art?
	How do legal interpretations differ among the US, the EU, the UK and China?
Authorship, ownership, and originality	Who should be considered the rightful author or owner of AI-generated artwork—the developer, the user, or another party?
	Can AI-generated works meet the legal threshold of originality in the absence of human intent?
Case law and institutional practice	What do key legal cases such as *Thaler v. Perlmutter* and *Naruto v. Slater* reveal about the limitations of current copyright doctrine?
	How are copyright offices adapting to disputes involving AI-generated content?
Ethical, economic, and industry implications	What ethical concerns arise from training datasets, attribution, and fair compensation?
	How are creative industries—particularly artists and developers—responding to the rise of AI in art?
Theoretical and policy development	Which legal and ethical theories best support the creation of new copyright categories, such as 'machine-assisted creation'?
	What future legislative models could balance innovation with the protection of human creativity and dignity?
Future research and governance	What types of longitudinal and intervention-based studies are needed to guide adaptive frameworks?
	How can ethical standards be standardized internationally?

We begin with a review of the foundations of copyright law and its application to AI-generated works. The study then examines the rise of AI in the creative process, followed by an analysis of copyright challenges, legal precedents, and ongoing cases. The subsequent sections evaluate legislative developments, industry perspectives, and theoretical frameworks, before moving on to future research directions and policy recommendations. The conclusion proposes urgent measures for industries most affected by AI-generated art.

2. Methodology

This study employs a narrative review methodology, combining doctrinal legal research with an interdisciplinary analysis of the literature in law, ethics, and creative industries. The first method involves reviewing primary legal sources such as statutes, case law, and policy documents. In contrast, our interdisciplinary review builds on the scholarship pertaining to intellectual property, ethics, and computer science. This method is also suitable, given the rapid pace at which AI is being used in art production, allowing for conceptual exploration and comparative synthesis (Chesterman, 2025).

We analyze the US, EU, UK and Chinese jurisdictions as the leading legal regimes influencing the global discourse on AI art at present. While the US and EU have established restrictive human authorship standards, the UK offers a designation for computer-generated creations under the Copyright, Designs and Patents Act 1988, while China has recently adopted a hybrid conditional recognition model (Guadamuz, 2017; Zhuk, 2024). These jurisdictions also reflect approaches that struggle to converge and diverge in meaningful ways, making them useful for a comparative assessment of public policy.

To ensure rigor, sources were drawn from a balanced range of materials, including peer-reviewed journal articles, high-impact legal commentaries, policy reports, and landmark judicial decisions such as *Thaler v. Perlmutter* (2023) and *Naruto v. Slater* (2018). Our review emphasizes recent scholarship, with more than 20 percent of references published in the last three years (2022–25), thereby ensuring contemporary relevance. The key search terms for this methodology are described in Table 2.

Table 2: Key search terms

Theme	Search terms
AI and copyright	AI-generated art, artificial intelligence AND copyright, AI AND authorship
Originality	Originality AND generative AI, human authorship AND originality
Legal cases	Thaler v. US Copyright Office, Naruto v. Slater, machine-assisted creation AND copyright
Intellectual property	Machine learning AND intellectual property, AI AND ownership, dataset transparency AND copyright
Generative models	Stable diffusion OR DALL·E OR Midjourney AND ownership, GANs AND creative industries

The search was conducted across multidisciplinary databases, including Google Scholar, SpringerLink, SSRN, IEEE Xplore, and legal repositories such as Westlaw, LexisNexis, and official government copyright offices and news reports for the latest developments. Boolean operators (AND, OR) were applied to broaden and refine search results, and purposive sampling ensured inclusion of the literature most relevant to copyright ownership, originality, and ethical concerns in AI-generated art.

This narrative review, however, has several limitations. The legal landscape is rapidly evolving and, therefore, the interpretations presented here may soon be outdated (Feuerriegel et al., 2024). Additionally, while the analysis encompasses four major jurisdictions, it notably omits some smaller yet significant regions, such as Japan and Canada, which are not only major players but also provide important perspectives. The doctrinal analysis is also limited by the fact that there are significantly few judicial precedents. The study also overlooks the non-Anglophone literature on transnational private law, which may limit some of its analyses. Thus, comparing what constitutes an original and creative work is not straightforward, given the varying legal systems, as what is original and innovative is often a matter of dispute and depends on the context (Millet et al., 2023). Despite its limitations, the paper offers a comprehensive overview of the literature and asks important questions about the regulation of AI art.

3. Literature Review

With the development of AI systems, the area of copyright law has been increasingly impacted by legal scholars and litigators alike (Zhuk,

2024). This review draws together contemporary academic and legal studies to present copyright concerns related to AI-generated artworks.

3.1. Foundations of Copyright Law and Artistic Ownership

The purpose of copyright law is to protect the rights of human creators against unauthorized use or misrepresentation of their works, based on specific criteria (Bridy, 2015). According to Hugenholtz & Quintais (2021), such frameworks, which are human-focused and have been ratified in many countries, rely on the concepts of 'originality' and 'authorship', which require human creativity and moral judgment. However, since AI machines can generate increasingly complex creative works without human input, this challenges the notion that creativity is a unique human trait. This presents problems that existing legal regimes cannot handle.

The EU copyright framework exemplifies this tension. In 2009, the EU Court of Justice laid down a new standard of 'originality' that is, 'the author's own intellectual creation' in *Infopaq International A/S v. Danske Dagblades Forening*. The authorship standard becomes increasingly difficult to apply to machine-generated outputs that lack human intent (Hugenholtz & Quintais, 2021). Experts claim that this inflexibility has caused the so-called protection gap—a term coined for AI-generated works for which it is uncertain who owns the rights (Feuerriegel et al., 2024). As in the UK, US doctrine and practice, as illustrated by *Thaler v Perlmutter* (2023), hold that works with no human author cannot be copyrighted (US Copyright Office, 2023).

Academics also argue that merely condemning AI authorship is not sufficient in the long term. This is a reasonable concern, as when large datasets train AI systems, they can produce human-level creativity, and this uniqueness cannot be assessed through traditional personality-based tests or 'creative choice' standards (Anantrasirichai & Bull, 2021). This has prompted authors such as Radanliev (2025) to suggest that new forms of intellectual property protection need to be developed—such as 'machine-assisted creation'—to address ownership ambiguities without infringing on the rights of human creators.

Copyright disputes are now viewed through the lens of cyber risk, driven by new ethical considerations. According to Radanliev et al. (2024), the use of generative models trained in sensitive, proprietary works is more likely to result in data leaks, unauthorized use, and privacy violations.

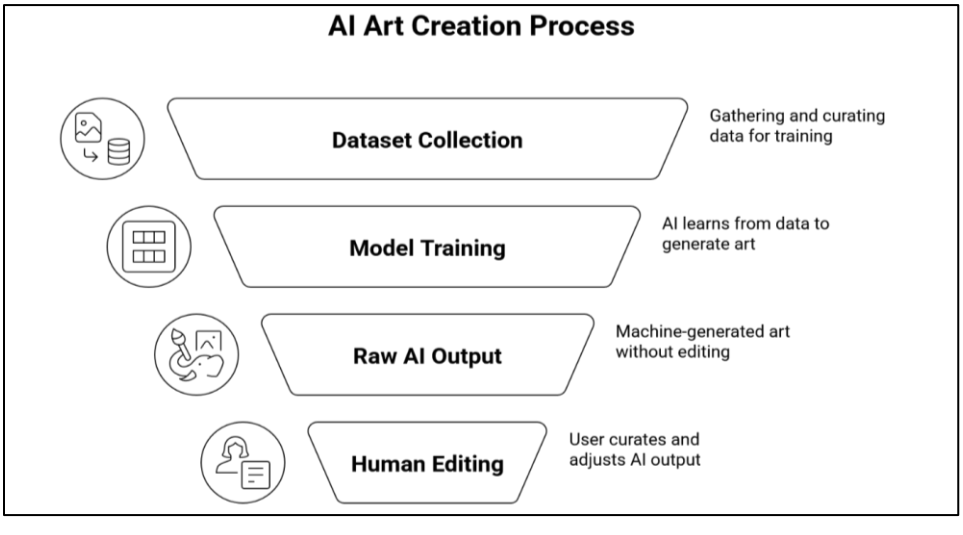
Addressing the risks that these systems pose cannot depend solely on changes to copyright law. Instead, it should incorporate safeguards such as differential privacy, transparency standards, or fairness-aware algorithms.

3.2. The Rise of AI in the Creative Process

With the emergence of advanced generative models, such as generative adversarial networks, diffusion models, and transformer-based architectures, it is now possible to produce visually stunning works using simple text prompts (Ploennigs & Berger, 2023). Tools such as DALL·E, Midjourney, and Stable Diffusion have streamlined the creation of artistic work, making high-quality art accessible to both professionals and enthusiasts. As Cheng (2022) observes, the 'computational imagination of machines' has blurred the line between tool and artist.

These tools, however, throw up important questions about human involvement. As noted by Oppenlaender (2022), human users remain involved in the co-creation process through prompt engineering, curation, and post-processing, even if an AI tool has carried out the generative work (Figure 1). As a result, hybrid models of authorship are being developed that utilize both machine and human capabilities to create art. Such models can make it difficult to discern the actual authorship, primarily because AI-generated imitations of existing styles occur without the authors' consent (Jiang et al., 2023).

Figure 1: AI art workflow diagram



One concern pertains to cybersecurity challenges. Radanliev et al. (2024) report that the use of AI platforms in sensitive areas may displace human artists or creators, potentially increasing data theft or other forms of wrongful claim theft. A second concern is that image and text generation training require considerable effort, which could lead to various creative sectors being exploited. In the absence of federated learning, transparency audits, and privacy-centered data governance, this could amount to noncompliance. Other problems arise not only from ownership but also other ethical issues, including whether biased outputs are being replicated and concerns regarding cultural appropriation and fair compensation of human creators (Radanliev, 2025). Because AI tools enable people to generate new art, those who would not otherwise be able to do so, now can (Feuerriegel et al., 2024). As a result, professional artists have expressed concerned about being displaced by algorithm-generated artworks in galleries, e-commerce platforms, and publishing venues.

3.3. Copyright Challenges of AI-Generated Art

There is significant friction between copyright systems that rely on human authors, which are becoming increasingly irrelevant, and the rapidly growing volume of AI-generated content (Li, 2025). The necessity for human will and creative thought continues to exclude purely AI-generated works from protection in both the US and EU (Hugenholtz & Quintais, 2021; US Copyright Office, 2023). This was reaffirmed in *Thaler v. Perlmutter* (2023), in which the court determined that a work created entirely by Stephen Thaler's 'Creativity Machine' was not copyrightable because nothing that was not human could be considered an 'author'. While this position is clear in doctrine, it leaves valuable creative work in legal limbo, with no rights holder.

It is also problematic if AI systems are trained to use data that includes copyrighted prints without the consent of rights holders. As Jiang et al. (2023) state, this creates derivative works that compete with the original without crediting or compensating the artists who created them, raising ethical and economic concerns. Therefore, courts and policymakers must decide whether originality or transformative use should be permitted under copyright law.

The inclusion of cyber risks amplifies this challenge. The literature finds that AI models, trained in the use of sensitive data, risk copying or violating intellectual property rights (Radanliev et al, 2024). When AI

systems violate copyright on a grand scale and fail to employ privacy-preserving techniques (such as homomorphic encryption or differential privacy) during their development phase, ethical frameworks that emphasize transparency, fairness, and accountability become necessary (Radanliev, 2025). Copyright challenges undermine human-centered ideals; unless adapted, traditional copyright standards will continue to leave a rapidly growing body of work unprotected by law, while also failing to safeguard human creators from the risks posed by generative systems.

3.4. Legal Precedents and Ongoing Cases

Various landmark judicial decisions and ongoing litigation have increasingly shaped the legal treatment of AI-generated art. Together, these cases highlight the continuity of human-authorship requirements and the emergence of new legal theories addressing unauthorized training data and hybrid authorship (Table 3).

Table 3: Key legal cases

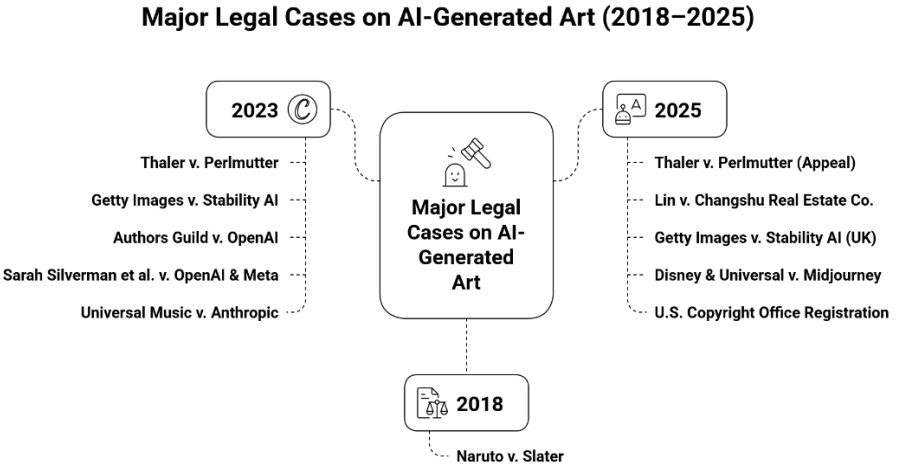
Case	Plaintiff(s)	Defendant(s)	Year	Claim summary	Legal status / outcome
Getty Images v. Stability AI	Getty Images	Stability AI	2023	Alleged unauthorized use of copyrighted images for AI model training.	Pending in UK and US courts (Pinsent Masons, 2025).
Authors Guild v. OpenAI	Authors Guild	OpenAI	2023	Alleged derivative infringement using literary works for ChatGPT training.	Ongoing (*Authors Guild v. OpenAI*, 2023).
Sarah Silverman et al. v. OpenAI and Meta	Sarah Silverman and others	OpenAI, Meta	2023	Unauthorized use of books in AI training datasets.	Ongoing (*Sarah Silverman v. OpenAI*, 2023).
Universal Music Publishing Group v. Anthropic	Universal Music, Concord, ABKCO	Anthropic	2023	An AI chatbot reproduced copyrighted song lyrics.	Ongoing (*Universal Music v. Anthropic*, 2023).
Andersen v. Stability AI	Andersen et al. (artists)	Stability AI, Midjourney, DeviantArt	2023	Training without consent using artists' works.	Direct copyright claims allowed to proceed.
New York Times v. OpenAI and Microsoft	The New York Times	OpenAI, Microsoft	2023	Alleged direct and contributory infringement by using NYT articles for AI training.	Ongoing (*New York Times v. OpenAI and Microsoft*, 2023).

The 2023 wave of litigation focused on unauthorized training-data use, with plaintiffs ranging from individual authors, such as Sarah Silverman, to major organizations, including The New York Times and Universal Music Publishing Group. These cases underline growing industry concerns about the uncompensated use of copyrighted content for AI training purposes. By 2025, attention had shifted toward the judicial clarification of authorship standards. In *Thaler v. Perlmutter* (2025), the DC Circuit reaffirmed that copyright requires a human author, effectively excluding autonomous AI works (Carlton Fields, 2025). In contrast, in the Chinese 'Half-Heart' case (*Lin v. Changshu Real Estate Co.*, 2025), the court granted copyright where the user had demonstrated substantial human input in the creative process (Chatterton et al., 2025). This divergence illustrates international inconsistency: US law remains rigid while Chinese jurisprudence has evolved toward conditional recognition. Table 4 describes these cases and recent developments, further illustrated in Figure 2.

Table 4: Recent developments in legal cases

Case	Jurisdiction	Holding	Significance
Thaler v. Perlmutter (2025)	US (DC Cir.)	Denied copyright to fully AI-generated work; human authorship required.	Confirms strict US standard
Lin v. Changshu Real Estate Co. ('Half-Heart' case, 2025)	China	Granted copyright for AI art where a human user provided substantial iterative input.	Shows China's growing recognition of 'substantial human input' (Chatterton et al., 2025).
Getty Images v. Stability AI (2025, UK)	UK	Getty withdrew its copyright claims and pursued trademark infringement for the use of watermarks.	Highlights liability concerns for training data provenance
Disney & Universal v. Midjourney (2025)	US Federal Court	Filed over reproduction of copyrighted franchise characters without consent.	Major studios are challenging AI under fair use and derivative work doctrines
US Copyright Office Registration (2025)	US	Registered 'A Single Piece of American Cheese' after confirming sufficient human contribution.	Marks shift toward nuanced recognition of AI-human collaboration.

Figure 2: Major legal cases (2018–25)



Despite this, industry litigation has continued to intensify. The *Getty Images v. Stability AI* proceedings in the UK demonstrate how difficult it is to prove infringement tied to training data provenance (Pinsent Masons, 2025). Disney and Universal's lawsuit against Midjourney is a critical test of how copyright law applies to AI-generated outputs that resemble established intellectual property (BBC, 2025). Finally, the US Copyright Office's (2025) registration of 'A Single Piece of American Cheese' reflects a more nuanced policy shift toward recognizing AI-human collaborative works, provided that substantial human authorship is documented. Collectively, these cases highlight the shortcomings of current copyright doctrine and underscore the need for global regimes that balance protecting human creative rights with accommodating the imperatives of AI art.

This duality at the core of AI-generated art is reflected in the rapidly changing legal landscape, which seeks to balance the belief that human authorship has intrinsic value with a new model of hybrid creation that considers the degree of human involvement in the creative process (Li, 2025). Together, these cases highlight three key developments: (a) the reaffirmation of the human authorship principle in the US and EU, (b) conditional recognition of human/AI co-creation in some instances in China and the UK, and (c) a growing wave of industry litigation over unauthorized training data.

3.4.1. US: Human Authorship as an Absolute Requirement

The DC Circuit clearly expresses the US stance in *Thaler v. Perlmutter* (2025). A recent ruling states that copyright cannot apply to works created entirely by AI, clarifying that legal terms such as 'author' imply human involvement and a capacity for legal responsibility and moral accountability (Carlton Fields, 2025). This approach is deontological, emphasizing moral duty rather than a utilitarian goal aimed at promoting innovation. Nonetheless, critics see this strict stance as risky, arguing that it could result in valuable works entering the public domain without proper credit or payment (Chesterman, 2025). It also creates a significant obstacle to future efforts to secure recognition for AI authorship without legislative intervention.

3.4.2. China: Substantial Human Input as a Threshold

In contrast, the decision of the Changshu People's Court in *Lin v. Changshu Qin Hong Real Estate Development Co., Ltd. and Hangzhou Gauss Air Film Technology Co., Ltd*—commonly referred to as the 'Half-Heart' case—awarded copyright protection to an AI-generated image due to the user's involvement in iterative prompting, aesthetic judgment, and editing (Chatterton et al., 2025; MMLC Group, 2024). This case represents a pragmatic approach that is consistent with utilitarian ethics, in which protection is granted when human creativity significantly influences the output of AI. It also aligns with post-humanist theory by acknowledging creativity as being distributed across human and machine actors (Sarkar, 2023). The ruling indicates China's openness to experimenting with more flexible standards of originality. This may serve as a model for other jurisdictions seeking to balance stringent human-authorship doctrines with the realities of hybrid creation.

3.4.3. UK: Data Provenance and Secondary Liability

Getty Images v. Stability AI (2025) reflects the UK's emphasis on the legality of data acquisition for training purposes. Although Getty withdrew its primary copyright claims, it continued to pursue secondary infringement and trademark claims arising from the unauthorized reproduction of watermarked images (Pinsent Masons, 2025). The case highlights a doctrinal shift from questions of authorship to questions of input legitimacy, specifically whether AI developers may lawfully use copyrighted material without explicit licensing. Section9(3) of the Copyright, Designs and Patents

Act 1988 already allows recognition of computer-generated works by attributing authorship to the 'person making arrangements'. However, Getty illustrates that attribution alone does not resolve the underlying problem of data provenance.

3.4.4. Industry Litigation: Expanding the Battlefield

Cases such as *Authors Guild v. OpenAI* (2023) and *The New York Times v. OpenAI and Microsoft* (2023) demonstrate how traditional publishing industries are mobilizing to prevent the uncompensated appropriation of their content for large-scale model training. Similarly, *Universal Music Publishing Group v. Anthropic* (2023) reflects the music industry's concerns over generative AI reproducing copyrighted lyrics verbatim. Disney and Universal's 2025 lawsuit against Midjourney moves this conflict into the realm of high-value franchise content, thereby questioning the threshold for transformative use in an era where AI can convincingly replicate established styles (BBC, 2025). These legal suits have encouraged courts to establish more precise standards for derivative works in the context of AI.

3.4.5. Emerging Policy Implications

The cases discussed above highlight both convergence and divergence in AI regulation (Li, 2025). The US and EU share strict, human-centered doctrines, while China and the UK differ by recognizing AI outputs conditioned on human input or arrangements (Zhuk, 2024). This lack of harmonization risks creating a fragmented legal landscape, thereby encouraging forum shopping, which would weaken global enforcement and leave creators uncertain of their rights across borders. Additionally, litigation over unauthorized training data exposes a gap in current copyright law: although the authorship of AI outputs is debated, the legitimacy of input—how AI models acquire and process copyrighted works—is insufficiently regulated. Studies such as Radanliev (2025) emphasize that without incorporating transparency, fairness, and privacy measures, copyright law reforms will be incomplete and remain vulnerable to ethical and cyber risks.

3.5. Industry and Artist Perspectives

Most designers and artists use generative tools such as Midjourney, DALL·E, and Stable Diffusion to expedite their workflows and access new forms of creativity, which has also democratized visual art (Ploennigs &

Berger, 2023). According to various surveys, more than 60 percent of digital artists now use AI, primarily to be more efficient and explore new creative possibilities (Oksanen et al., 2023). Nonetheless, many remain fearful of job losses, the devaluation of human labor, and threats to creativity (Jiang et al., 2023).

A major risk is the unauthorized copying of artistic styles. Feuerriegel et al. (2024) explain how several generative models, without permission, have produced lookalikes of works found in the portfolios of living artists. This implies that a living artist's financial security or reputation could be severely compromised. Moreover, training AI models in creative works can infringe copyright laws and is expected to create numerous legal disputes. There is also a difference in attribution standards in terms of ethicality. Radanliev et al. (2024), for example, point out that the use of often opaque large datasets for training may expose artists to intellectual property infringement and cultural appropriation.

Since systemic exploitation could become a significant threat in the absence of adequate privacy protection and data governance, Radanliev (2025) advises developing guidelines for technologists on the ethical implications of the technology they create. Likewise, to ensure that technology empowers all stakeholders in the creative economy, it is vital to develop an ethical focus on transparency and fairness from the outset. In this sense, market dynamics reflect both disruption and opportunities. Galleries and online spaces increasingly showcase AI art, with auction houses having made record sales of AI art in 2024/25 (Epstein et al., 2023). While this can create new opportunities for new audiences, it also puts downward pressure on the market price of human artists. This has a significant impact on mid- and early-career artists, where originality is the primary factor in competition. Additionally, when people prefer human-made art, music and effects despite the high quality of any AI used to generate the same outputs, this creates an ironic situation where AI art is commercially successful, but where people still see human-made art as more 'authentic' (Bellaiche et al., 2023).

3.6. The Future of Intellectual Property in the AI Era

The future of intellectual property law regarding AI-generated art depends on how lawmakers and courts balance technological innovation with the need to protect human creativity. Contemporary copyright laws are centered on human authorship, requiring intent and originality from

individuals (Hugenholtz & Quintais, 2021). However, as generative AI becomes more advanced, key questions arise about whether these laws can adapt to new forms of authorship and originality that involve both humans and machines.

One proposal is to establish a new legal category for machine-assisted creation (Chesterman, 2025). While this would not grant AI systems themselves authorship, it would recognize the human effort involved—such as guiding, prompting, and curating outputs—and the work of developers who create and train these models. By emphasizing meaningful human input and shared responsibility, this approach strikes a balance between rejecting AI-created works altogether and solely recognizing machine creativity. In this context, co-authorship models could prove important as they involve both the user and the AI developer sharing rights. However, it also raises practical concerns pertaining to credit, licensing, and the distribution of royalties. Critics also argue that AI systems could infringe on the moral rights of human artists by interfering with the integrity of their work.

Economic and ethical concerns further complicate the matter. Radanliev (2025) believes that future laws should ensure transparency, fairness, and privacy. Lack of disclosure with regard to training data sources and strong protections against cultural misappropriation risks the legal recognition of AI outputs for unethical actions. Cybersecurity studies highlight the dangers of intellectual property infringement, including patent rights, and systemic failings. This is particularly true for AI platforms that do not adopt privacy-preserving measures, such as federated learning and differential privacy (Radanliev et al., 2024). In this case, market trends are expected to accelerate reform initiatives. Art markets—galleries, auction houses, and online platforms—increasingly display AI-generated works (Epstein et al., 2023). Although there is still a bias favoring human-made art, the increasing commercial success of AI art makes excluding it from copyright protection less plausible.

International cooperation and harmonization are therefore essential to ensure a sustainable legal future as AI advances. Currently, different regions adopt contrasting approaches—strict anthropocentrism in the US and EU, conditional recognition in China, and flexible models in the UK—which could lead to a disjointed global system prone to forum shopping and inconsistent enforcement (Zhuk, 2024). Consensus-based frameworks, potentially led by international bodies such as the World

Intellectual Property Organization (WIPO), are essential to developing common standards for attribution, data transparency, and ethical governance. Without such coordination, creators and industries will face prolonged uncertainty, which will undermine both innovation and trust in the creative economy.

3.7. Review of Relevant Theories

The debate over AI-generated art and copyright law is underpinned by several theoretical frameworks that help illuminate competing legal interpretations and policy choices. These theories intersect directly with recent case law and policy debates.

First, traditional authorship theory views the creator as the source of originality and moral accountability, making human intent indispensable for copyright (Bridy, 2015). This principle guided the US court's decision in *Thaler v. Perlmutter* (2025), which denied copyright to AI-generated works on the grounds that machines lack consciousness, intention, and the ability to bear legal responsibility (Carlton Fields, 2025). While this ensures respect for human creative dignity, critics argue that it leaves a legal vacuum for increasingly sophisticated AI outputs that cannot be clearly attributed to a single human (Chesterman, 2025).

From another perspective, copyright is also justified as a mechanism for promoting creativity by ensuring that creators receive economic returns. Under this framework, developers and users of generative AI, who invest resources to design models or create prompts, should receive rights as compensation for their contributions (Chesterman, 2025). The case of *Authors Guild v. OpenAI* (2023) highlights this tension. OpenAI claimed that its training methods promote innovation. At the same time, authors demanded compensation for the use of their works without payment, emphasizing the economic incentive perspective on the creators' side.

Moreover, deontological ethics stresses duties and rights over outcomes. From this perspective, attributing authorship to AI raises ethical issues because machines cannot meet the moral responsibilities of rights-holders, such as respecting moral rights or being accountable (Hacker et al., 2023). This viewpoint reflects the US Copyright Office's (2025) stance that only humans can be considered authors, even when AI produces original work. It also underpins concerns in cases such as *Andersen v. Stability AI*

(2023), where artists claimed that training AI without their consent infringed on their inherent rights, regardless of the AI's creative output.

Finally, posthumanism views creativity as a productive partnership between humans and machines, transcending the traditional human-centric perspective. This perspective demonstrates that the law is evolving to recognize creations made by people with the assistance of AI. Sarkar (2023) argues that protecting works that receive sufficient human input demonstrates that creative agency can be shared to a certain degree. In this sense, the establishment of a new legal category of 'machine-assisted creation' accounts for human contribution and algorithm contribution.

4. Future Research Avenues

The regulation of AI-generated art is a rapidly evolving area. As we have seen above, the future of copyright law can be shaped through a combination of legal reasoning, empirical research, and moral thinking. Even though courts and policy decisions have been made with human interests in mind, technology continues to change and preemptive action is thus necessary.

Long-term studies based on real-world evidence are crucial to understanding the impact of AI on creative practice, commercial trends, and legal scenarios. According to Oksanen et al. (2023), much of the literature focuses on short-term responses to technological change. Therefore, we still do not know whether the hybrid authorship business model will persist. A longitudinal dataset composed of a subjective metric (whether people view AI art as supporting or suppressing a human artist) and an objective metric (how much public perception of 'originality' changes) could be useful in this context. In addition, this data could help establish which conditions, such as regulations like the EU AI Act or China's copyright policy, are created to the detriment or benefit of artists' inputs and cultural production.

Experimental intervention studies may also be worth considering. Test-driving frameworks, such as machine-assisted creativity, compulsory licensing of AI training data, or fair attribution processes through pilot interventions, would enable policymakers to assess the feasibility of such interventions before deploying them (Chesterman, 2025). For example, introducing generative AI tools to specific artist communities could reveal perceptions of control, that is, who benefits and from what type of sharing

they would benefit most. Such findings could inform the creation of laws and the establishment of ethical guidelines.

In addition, future research efforts must place ethical governance at their center. Radanliev et al. (2024) indicate that the risks of data leaks, bias, and the erosion of cultural plurality are features of toxic AI use. To avoid any legal disputes concerning the application of AI-created art to further unethical practices, it is essential to ensure better monitoring through the enforcement of transparency, fairness, and privacy principles (Radanliev, 2025) in the relevant experimental policies. Creating ethical guidelines based on bioethics could also help establish international standards for AI-created art.

Finally, without harmonized regulations, differences between strict anthropocentric models, such as those in the US and EU, and conditional approaches, as in China and the UK, may lead to forum shopping and legal uncertainty for global creators (Akpuokwe et al., 2024). WIPO and other agencies could follow up these discussions with evidence, and a consensus could help codify international copyright categories and ethical standards.

5. Conclusion

This study has shown that AI-generated art challenges conventional ideas of authorship, originality, and ownership. The US and EU have imposed stringent regulations on AI companies, mandating proof of human creation, whereas the UK and China are more lenient or conditional. Court cases such as *Thaler v. Perlmutter* (2025) and China's 'Half-Heart' case reflect this pattern, highlighting both the limitations of established frameworks and the potential of new, machine-assisted practices. In this regard, industry reactions are mixed. AI art platforms present new avenues for creative engagement and greater market interest. However, artists are concerned that such technology may lead to job losses, a decline in public recognition, and cultural consequences. Ethical concerns and cyber risks further complicate the situation. Indeed, it is possible that creators might be exploited, and data vulnerabilities may arise due to unclear training methods.

The industry is highly dependent on appropriation, attribution, and reputation. Prompt action must be taken to solve these problems. Laws must state that training data should be as clear as possible. AI developers should disclose the source of their data, while unauthorized use must be penalized.

This openness would allow artists to identify and counteract the misuse of their works. In addition, licensing agreements must be in place for platforms that utilize artists' works to train their systems, ensuring that royalties and/or credit are attributed to the original creator. Auction houses, galleries, and online marketplaces could also ensure better transparency, fairness, and privacy for AI-crafted art through regular ethical audits (Radanliev, 2025).

It is also important to acknowledge hybrid rights. When a human being takes an active role in steering AI-generated art, they should be considered a co-author. As Chesterman (2025) points out, art organizations must create industry governance frameworks that establish codes of ethics for the responsible use of AI, grounded in bioethics principles, thereby ensuring the protection of human dignity and the cultural values of society (Vinchon et al., 2023). This step will ensure that human artists are better protected while promoting the development of AI and creativity.

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