THE AI PARADOX IN INTELLECTUAL PROPERTY LAW.

Abstract

Artificial Intelligence (AI) has evolved from an assistive technology into an autonomous generator of content, thereby challenging the human-centric foundations of intellectual property (IP) law. While copyright law is premised on human authorship and originality, trademark law is rooted in consumer perception and brand distinctiveness. Generative AI disrupts both by producing creative outputs and replicating brand identities at scale. This paper examines the dual impact of AI on copyright particularly authorship and training data and trademark law, especially in relation to brand dilution and deepfakes. Adopting a comparative perspective across India, the United States, and the European Union, the paper highlights doctrinal gaps, emerging 2026 legal developments, and proposes a hybrid regulatory framework combining licensing, traceability, and algorithmic accountability.

I. Introduction

The emergence of generative AI represents a paradigm shift in the field of intellectual property law. Unlike traditional tools, AI systems autonomously generate text, images, music, and commercial designs by learning patterns from massive datasets. This capability disrupts foundational assumptions of IP law, which historically link legal protection to human creativity, intention, and accountability. The central paradox is evident: AI requires access to existing protected works for training, yet such access may itself constitute infringement. This tension necessitates a re-evaluation of traditional doctrines governing authorship, infringement, and liability.

II. AI and Copyright: The Battle for Creative Control

1. The Human Authorship Threshold

Copyright law traditionally requires that a work originate from a human author and exhibit a minimal degree of creativity. This principle has been reaffirmed in *Thaler v. Perlmutter*, where the court held that works generated entirely by AI without human intervention are not eligible for copyright protection.[1] The U.S. Copyright Office has further clarified that only human contributions within AI-assisted works may be protected.[2]

In India, the Copyright Act, 1957 does not explicitly address AI-generated works, but its provisions assume human authorship.[3] Judicial interpretation in *Eastern Book Co. v. D.B. Modak* established a "modicum of creativity" standard, which may allow recognition of human contributions in AI-assisted outputs.[4] Consequently, a hybrid authorship model is emerging, wherein human users may claim authorship if they exercise sufficient creative control over AI-generated outputs.

2. Training Data and the Fair Use Conflict

AI systems are trained using vast datasets that often include copyrighted material, raising concerns of input infringement. In the United States, this issue is analyzed under the fair use doctrine.[5] In *Silverman v. Meta Platforms, Inc.*, courts considered whether AI training constitutes transformative use and whether it harms the market for original works.[6] While early rulings favored technological innovation, recent developments emphasize the economic rights of creators and the need for compensation frameworks.

The European Union adopts a statutory approach through Text and Data Mining (TDM) exceptions under Directive (EU) 2019/790, allowing AI training subject to certain safeguards.[7] Meanwhile, the UK is considering a compulsory licensing model requiring AI developers to compensate rights holders.[8] India, however, lacks explicit provisions, creating legal uncertainty regarding the permissibility of AI training under existing fair dealing provisions.

3. Output-Based Infringement

Even where training is lawful, AI outputs may infringe copyright by reproducing or closely imitating protected works. Courts apply the substantial similarity test, which becomes complex in the AI context due to the opacity of training datasets. This raises concerns about derivative

works and unauthorized adaptation, particularly where AI outputs compete with original creations.

III. Copyright Beyond Authorship: Emerging 2026 Doctrines

1. Prompt Engineering as Creative Control

A significant development in 2026 is the recognition of prompt engineering as a potential form of creative authorship. Where users engage in iterative prompting refining outputs through multiple stages their contribution may amount to creative direction sufficient for copyright protection.[9] Courts are increasingly considering "human-to-AI contribution ratios" to assess whether the human user has exercised meaningful control over expressive elements.[10]

2. The De Minimis Defense in AI Training

Technology companies argue that AI training constitutes de minimis copying because models store only statistical representations rather than actual text.[11] However, critics contend that such use remains unauthorized and enables derivative outputs, thereby conflicting with creators' rights.[12] This debate reflects a broader tension between technological abstraction and legal formalism.

3. Moral Rights and Style Protection

The ability of AI to replicate artistic styles has led to calls for recognizing synthetic moral rights. Under the Copyright Act, 1957, authors have the right to protect their work from distortion.[13] Artists argue that AI-generated imitations of their style may violate this right by distorting their creative identity.[14] This challenges the traditional exclusion of "style" from copyright protection.

IV. AI and Trademark: Protecting Brand Integrity

1. Likelihood of Confusion in AI Outputs

AI-generated logos and branding elements may closely resemble existing trademarks, leading to consumer confusion. Courts apply the likelihood of confusion test, as established in *Cadila Health Care Ltd. v. Cadila Pharmaceuticals Ltd.*[15] Even if AI-generated works lack copyright protection, they may still infringe trademark rights if they dilute brand identity.

2. Post-Sale Confusion in the AI Era

The doctrine of post-sale confusion has gained importance in the AI context, particularly with the rise of high-quality "dupes." When AI systems generate products resembling luxury brands such as Hermès, third parties may mistakenly associate them with the original brand, thereby diluting its exclusivity.[16]

3. Algorithmic Search and Initial Interest Confusion

AI-powered recommendation systems may divert consumers by suggesting competing products when users search for specific trademarks. This constitutes a modern form of initial interest confusion, as recognized in *Brookfield Communications, Inc. v. West Coast Entertainment Corp.*[17] The opacity of algorithmic decision-making complicates liability, raising questions about developer responsibility.

4. Deepfakes and Misrepresentation

AI-generated deepfakes can falsely associate brands or individuals with products, leading to trademark infringement and personality rights violations. India's 2026 regulatory framework under the Information Technology Act, 2000 mandates rapid takedown and watermarking requirements to address such risks.[18]

V. Liability and Enforcement Challenges

1. Contributory vs. Direct Liability

Liability in AI-related infringement cases is complex due to multiple actors. In *Cox Communications, Inc. v. Sony Music Entertainment*, the U.S. Supreme Court narrowed contributory liability, holding that platforms are liable only if they actively induce infringement or lack substantial non-infringing uses.[19] This significantly limits platform liability while increasing the burden on rights holders.

2. Safe Harbor 2.0

Traditional safe harbour protections under Section 79 of the Information Technology Act, 2000 are being reconsidered, as AI platforms actively generate content rather than merely hosting it.[20] The concept of Safe Harbor 2.0 suggests that immunity may depend on whether platforms implement adequate safeguards against infringement.

3. The Right to be Un-trained

A novel doctrine emerging in 2026 is the right to be un-trained, which allows individuals to demand removal of their data from AI models. Inspired by the GDPR's right to be forgotten.[21] this concept raises technical challenges, as removing data from trained models often requires retraining.[22] The doctrine reflects a growing emphasis on post-training accountability.

VI. Conclusion

The AI paradox highlights a fundamental conflict between innovation and legal protection. While AI systems rely on access to data for development, such access may undermine the rights of creators and trademark holders. Traditional IP frameworks, grounded in human authorship and intent, are ill-equipped to address the realities of autonomous content generation.

To resolve this paradox, a hybrid regulatory framework is required, incorporating compulsory licensing, enhanced transparency, and algorithmic accountability. Such an approach would ensure that AI innovation continues while preserving the economic and moral rights of creators. Ultimately, the evolution of IP law in the AI era will determine whether legal systems can adapt to technological change without compromising fundamental principles of justice and fairness.

Endnotes:

1. *Thaler v. Perlmutter*, 687 F. Supp. 3d 140 (D.D.C. 2023).
2. U.S. Copyright Office, Copyright Registration Guidance: AI Works (2025).
3. Copyright Act, 1957.
4. *Eastern Book Co. v. D.B. Modak*, (2008) 1 S.C.C. 1 (India).
5. 17 U.S.C. § 107 (2018).
6. *Silverman v. Meta Platforms, Inc.*, No. 3:23-cv-03417 (N.D. Cal. 2025).
7. Directive (EU) 2019/790, 2019 O.J. (L 130) 92.
8. UK Intellectual Property Office, AI and Copyright Policy Paper (2025).
9. Jane C. Ginsburg & Luke Ali Budiardjo, Authors and Machines, 34 Berkeley Tech. L.J. 343 (2019).
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11. 4 Melville B. Nimmer& David Nimmer, Nimmer on Copyright § 13.03 (2024).
12. Pamela Samuelson, Unbundling Fair Uses, 77 Fordham L. Rev. 2537 (2009).
13. Copyright Act, 1957 § 57.
14. Id.
15. *Cadila Health Care Ltd. v. Cadila Pharm. Ltd.*, (2001) 5 S.C.C. 73 (India).
16. *Ferrari S.p.A. v. Roberts*, 944 F.2d 1235 (6th Cir. 1991).
17. *Brookfield Commc'ns, Inc. v. West Coast Ent. Corp.*, 174 F.3d 1036 (9th Cir. 1999).
18. Information Technology Act, 2000.
19. *Cox Commc'ns, Inc. v. Sony Music Ent.*, 2026 U.S. LEXIS ___ (U.S. 2026).
20. Information Technology Act, 2000 § 79.
21. Regulation (EU) 2016/679 (GDPR), art. 17.
22. European Commission, AI Act Proposal, COM (2021) 206 final.