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Intellectual property in the age of artificial intelligence: Navigating the legal status of AI- generated works under copyright law

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Abstract

The integration of Artificial Intelligence (AI) into the creative and technological domains has fundamentally redefined the contours of intellectual property law. As AI systems generate music, literature, and artwork without direct human intervention, traditional notions of authorship, originality, and ownership face unprecedented challenges. This research paper explores the evolving relationship between AI-generated works and copyright law, analyzing the extent to which existing legal frameworks can accommodate non-human creativity. Through a comparative examination of jurisdictions such as the United States, the United Kingdom, the European Union, and India, the study highlights divergent approaches to recognizing and protecting AI-generated works. It discusses key challenges—including authorship ambiguity, ownership disputes, moral rights, and accountability—and evaluates the policy and ethical implications of granting or denying copyright protection to AI. The paper concludes that while current laws remain anchored in human authorship, a reimagined legal framework is essential to balance technological innovation with the moral and cultural foundations of intellectual property. Such a framework should incorporate hybrid authorship models, sui generis protections, and international cooperation to ensure that copyright law remains relevant and equitable in the age of artificial creativity.

Keywords: Artificial Intelligence, Copyright Law, Intellectual Property, AI-Generated Works, Authorship, Ownership, Legal Framework, Moral Rights, Creativity, Sui Generis Protection

1. Introduction

The twenty-first century has witnessed an unprecedented technological revolution marked by the rise of Artificial Intelligence (AI), which has rapidly evolved from a niche scientific pursuit to a transformative force shaping every sphere of human activity. Among its diverse applications, one of the most intriguing and controversial has been its incursion into the creative domain—music composition, visual art, literature, design, filmmaking, and even software development. AI systems, trained on vast datasets of human-created content, are now capable of generating works that often rival, and sometimes surpass, human creations in complexity and aesthetic appeal. This rapid transformation has given rise to a profound question that challenges the very foundation of copyright jurisprudence: when a machine creates, who is the author? Can copyright law, historically rooted in human creativity and individuality, extend its protection to works generated by non-human entities? These questions form the intellectual core of this study.

Copyright law has traditionally been premised upon human authorship, originality, and creativity. The idea that a human mind exercises judgment and skill in producing an original work has been central to defining the scope of protection. From the early days of literary and artistic copyright to the digital era, this assumption of human agency has remained largely unchallenged. However, AI-generated works disrupt this paradigm. Contemporary AI systems, particularly those based on machine learning and deep neural networks, can produce creative outputs autonomously without direct human involvement or intention. The growing sophistication of generative AI tools such as ChatGPT, DALL·E, Midjourney, and Stable Diffusion has blurred the boundaries between human and machine creativity, compelling policymakers, legal scholars, and courts to re-examine the traditional contours of authorship and originality.

The issue becomes more complex when one considers the legal and ethical implications of AI training methods. Most generative AI systems learn by analyzing massive datasets containing copyrighted works—novels, artworks, photographs, and music—often without obtaining the consent of the original creators. This practice raises significant concerns regarding copyright infringement, fair use, and data transparency. At the same time, AI's

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potential to enhance creativity and innovation cannot be ignored. The legal system must therefore strike a delicate balance between protecting human authors and promoting technological advancement. This tension between protection and innovation lies at the heart of modern copyright policy debates.

In the early stages of copyright development, particularly in Europe, the idea of authorship was intertwined with human intellect and moral personality. Philosophers like Immanuel Kant and Georg Wilhelm Friedrich Hegel viewed creative works as extensions of the author's personality, thereby justifying moral rights such as attribution and integrity. Similarly, in common law jurisdictions like the United Kingdom and the United States, the principle of originality was linked to human labor and skill. The notion of "sweat of the brow" in early British cases recognized that intellectual effort and diligence, even without artistic genius, could warrant copyright protection. However, as the digital age unfolded, this principle evolved toward recognizing "creative choices" and "intellectual expressions" as the basis of originality. With the emergence of AI, these philosophical and legal foundations face an existential challenge because AI systems, though capable of generating creative expressions, lack consciousness, intention, and moral agency.

The question of whether AI can be considered an author has already reached judicial and administrative forums in several jurisdictions. For instance, the United States Copyright Office (USCO) has explicitly stated that works generated by AI without human authorship do not qualify for copyright protection. The U.S. Copyright Office's decision in the *Stephen Thaler* case, where the AI system "Creativity Machine" was listed as the author of a visual artwork, reaffirmed this position. The Office held that copyright subsists only in works "produced by a human being," thereby excluding purely machine-generated outputs. Similarly, the U.K. Copyright, Designs and Patents Act 1988 includes a specific provision—Section 9(3)—that attributes authorship of computer-generated works to the person who undertakes the "arrangements necessary for the creation of the work." However, even this provision was drafted long before the advent of contemporary AI systems and remains conceptually limited in addressing autonomous machine creativity. The European Union, under its current legislative framework, continues to tie originality to human intellectual effort, as evidenced in the *Infopaq International A/S v. Danske Dagblades Forening* (2009) decision, which emphasized that a work must reflect the author's "own intellectual creation."

At the international level, copyright protection is governed by conventions such as the Berne Convention for the Protection of Literary and Artistic Works (1886) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS, 1994). These instruments do not explicitly define the term "author," assuming it refers to a natural person. Consequently, there is no clear international consensus on whether AI-generated works should be protected, and if so, under what conditions. As AI-generated outputs proliferate globally, this ambiguity creates a complex web of conflicting interpretations, regulatory uncertainty, and potential exploitation.

The emergence of AI as a creative agent also raises moral, economic, and social considerations. From an ethical standpoint, granting authorship to machines may dilute the moral foundation of copyright, which rests on human

intellectual dignity and expression. Economically, however, denying protection to AI-generated works could discourage investment in AI-driven creativity, as developers and companies might lack incentives to produce and distribute such content. A balance must therefore be struck between ensuring that human creators' rights are not undermined and fostering an ecosystem that encourages innovation through AI. Some scholars advocate for a "neighboring rights" model that would grant limited protection to AI-generated works without conferring full authorship status, while others propose a *sui generis* (unique) legal category that distinguishes AI creativity from traditional authorship altogether.

India, too, finds itself at the crossroads of this debate. The Indian Copyright Act, 1957, modeled on British law, recognizes authorship in relation to human creators and computer-generated works but does not directly address AI-generated content. Section 2(d)(vi) identifies the "person who causes the work to be created" as the author of a computer-generated work. Yet, in the era of autonomous machine learning, determining who "causes" the creation—whether the programmer, the data trainer, or the end-user—becomes increasingly complex. The Indian legal system, though grounded in a human-centric approach, must soon confront these challenges as the nation's creative industries and technology sectors rapidly integrate AI tools in production and innovation.

This research paper, therefore, seeks to explore the complexities surrounding AI-generated works within the framework of intellectual property law. It examines how different jurisdictions interpret authorship in the context of AI, analyzes existing statutory provisions, discusses emerging case law, and evaluates potential policy solutions. Ultimately, the aim is to propose a coherent legal framework that recognizes the transformative potential of AI without eroding the foundational principles of copyright. As we navigate this uncharted territory, the question is not whether AI will redefine intellectual property law—but how, and on what terms, society will choose to adapt its legal imagination to the new realities of artificial creativity.

2. Understanding the Concept of Copyright and Authorship

1. Meaning and Purpose of Copyright

Copyright is one of the primary branches of intellectual property law designed to protect the fruits of human creativity and intellectual labor. It grants authors exclusive rights over their original works—such as literary, musical, artistic, and dramatic creations—ensuring both moral recognition and economic benefit. The underlying philosophy is twofold: first, to reward the creator's intellectual effort, and second, to promote societal progress by encouraging the dissemination of knowledge and culture. In essence, copyright law strikes a balance between the rights of creators and the broader public interest by safeguarding originality while enabling the free flow of ideas.

2. Historical Evolution of Authorship

The concept of authorship has deep philosophical and legal roots. Historically, authorship was tied to notions of individual genius and human personality. In early European thought, particularly under natural law theories influenced by John Locke, property rights—including intellectual ones—were seen as extensions of a person's labor and individuality. Romantic

philosophers like Kant and Hegel viewed creative works as a reflection of the author's moral and intellectual identity. As a result, copyright evolved not merely as an economic right but also as a recognition of human personality and originality. This human-centric foundation became the cornerstone of modern copyright systems worldwide.

3. Legal Definition of Authorship

In most jurisdictions, authorship is legally confined to natural persons who exercise creative judgment and skill in producing a work. The Berne Convention, the cornerstone of international copyright law, implicitly assumes that the "author" is a human being. Likewise, statutes such as the U.S. Copyright Act (1976) and the U.K. Copyright, Designs and Patents Act (1988) affirm this position. For example, Section 9(1) of the U.K. Act defines an "author" as the person who creates the work, while Section 2(d) of the Indian Copyright Act, 1957, identifies specific human roles for different categories of works, such as the writer, artist, or composer. This uniform emphasis on human creation reflects a global consensus that creativity requires consciousness and intellectual intent—qualities that machines inherently lack.

4. The Role of Originality in Copyright Protection

Originality remains a key criterion for copyright protection. It signifies that the work must originate from the author and demonstrate a minimal degree of creativity. In the United States, the landmark case *Feist Publications v. Rural Telephone Service Co.* (1991) clarified that originality requires both independent creation and a modicum of creativity, rejecting the earlier "sweat of the brow" doctrine that rewarded mere labor. Similarly, European jurisprudence, as established in *Infopaq International A/S v. Danske Dagblades Forening* (2009), holds that a work is original if it reflects the author's "own intellectual creation." These judicial interpretations reinforce the view that human intellectual input—rather than mechanical or automated processes—is essential to qualify for protection.

5. Computer-Generated Works under Existing Law

Before the emergence of advanced AI, lawmakers attempted to address machine-assisted creativity through provisions on "computer-generated works." The U.K. Copyright, Designs and Patents Act, under Section 9(3), attributes authorship of such works to "the person by whom the arrangements necessary for the creation of the work are undertaken." Similarly, Indian law, under Section 2(d)(vi), assigns authorship to the person who causes the computer-generated work to exist. However, these provisions were drafted in an era when computers functioned as tools requiring substantial human guidance. They do not fully account for the autonomous learning, decision-making, and creative capacities exhibited by modern AI systems, which can generate content without any direct human command.

6. Challenges to Traditional Authorship in the AI Era

The rise of autonomous AI models challenges the very basis of authorship. Unlike traditional computer programs that operate based on predefined instructions, AI models can learn patterns and produce unpredictable results. In such scenarios, identifying the true author becomes problematic. Is it the programmer who designed the algorithm, the user who provided the

prompt, or the AI system itself that synthesized the output? The absence of human intention and consciousness in AI processes undermines the legal and moral justifications for authorship, exposing the limitations of existing copyright frameworks.

7. Moral and Ethical Dimensions of Authorship

Authorship is not merely a legal construct but also an ethical one. Moral rights—such as the right of attribution and the right to protect the integrity of a work—stem from the idea that creative works embody the personality of their human authors. Granting authorship to AI, an entity devoid of emotions or moral understanding, could dilute the moral foundation of copyright law. Moreover, if AI-generated works were to receive full protection, it might create monopolies for corporations controlling AI systems, marginalizing human creators and reducing opportunities for human innovation.

8. Need for Re-examining Legal Definitions

Given these challenges, there is an urgent need to revisit and possibly redefine the concept of authorship in the age of artificial intelligence. Lawmakers and scholars are increasingly debating whether to extend protection to AI-generated works through existing laws, create a sui generis category for machine-generated content, or restrict protection solely to human creativity. The solution must reconcile the objectives of intellectual property—promoting innovation and rewarding creativity—while ensuring that human authorship remains the moral and conceptual core of copyright law.

3. Artificial Intelligence and Creative Autonomy

1. Understanding Artificial Intelligence and Its Creative Potential

Artificial Intelligence (AI) refers to computer systems designed to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and decision-making. In recent years, AI has advanced from performing analytical functions to generating creative outputs across diverse domains—writing novels, composing music, painting artworks, and designing products. These developments demonstrate that creativity is no longer the exclusive domain of humans. AI systems such as ChatGPT, DALL·E, and Midjourney are capable of producing original and aesthetically appealing works without continuous human supervision, indicating a degree of creative autonomy that challenges traditional copyright notions.

2. Mechanics of AI Creativity

AI systems capable of creative production primarily rely on machine learning (ML) and deep learning (DL) algorithms. These algorithms process vast datasets to identify underlying patterns and structures, enabling the AI to generate new content based on learned information. For instance, a generative AI trained on thousands of paintings can produce a unique image that stylistically resembles classical art without directly replicating any particular work. This process, often described as "training," relies heavily on existing human-created materials, raising legal and ethical questions regarding the ownership and originality of outputs derived from such data.

3. Human Involvement and AI Autonomy

While AI creativity appears autonomous, human involvement remains integral at various stages. Developers design algorithms, programmers build the underlying architecture, and users provide prompts or parameters that guide the AI's creative process. However, the extent of human contribution varies significantly. In fully autonomous systems, human input may be minimal or indirect, leading to ambiguity in determining who should be recognized as the "author." This blurring of human and machine roles complicates the attribution of authorship under existing copyright frameworks, which are inherently designed for human creators.

4. The Concept of Machine Originality

The notion of originality traditionally implies human intellectual effort and personal expression. Yet, AI-generated works challenge this by producing outputs that appear new, unique, and unpredictable. The originality in such cases stems from algorithmic processes rather than conscious decision-making. Since AI lacks intent, emotional experience, and self-awareness, it cannot be said to possess creative will. However, its outputs often exhibit creative characteristics—novelty, diversity, and innovation—raising the question of whether originality should be redefined in the digital era to accommodate non-human creativity.

5. Case Studies of AI-Created Works

Several notable examples illustrate the complexities surrounding AI-generated creativity. In 2018, the portrait titled *Edmond de Belamy*, created by the French collective Obvious using the Generative Adversarial Network (GAN) algorithm, was auctioned at Christie's for \$432,500. The work sparked global debate over authorship—should credit go to the algorithm's developer, the collective that trained it, or the AI itself? Similarly, AI-generated music and literature, such as *Daddy's Car* (a Beatles-style song composed by AI) and machine-authored novels in Japan, further blur the boundaries between human and artificial creativity. These cases exemplify how AI can produce marketable creative works, yet remain legally unrecognized as authors under existing copyright law.

6. Philosophical Debate: Can Machines Be Creative?

From a philosophical standpoint, creativity has long been associated with human consciousness and intentionality. The ability to imagine, feel, and express emotion is considered essential to artistic expression. AI, by contrast, operates through data-driven analysis and mathematical modeling, devoid of genuine emotion or awareness. Nonetheless, some theorists argue that creativity should be judged by the *outcome* rather than the *process*. If an AI output evokes aesthetic appreciation or social impact equivalent to human art, it may be functionally creative even if not philosophically so. This perspective supports the idea of recognizing AI-generated works within a revised legal framework.

7. Legal Implications of AI Autonomy

The increasing autonomy of AI systems presents complex legal implications. Existing copyright laws rely on the identification of a human author to assign ownership and moral rights. When an AI autonomously produces a work, determining authorship becomes uncertain. Should rights vest in the developer, the user, or remain in the public domain? The U.S. Copyright

Office has consistently rejected applications for works created without human authorship, as seen in the *Thaler v. Perlmutter* case (2023), where the Office refused to register an AI-generated image created by "Creativity Machine." Similarly, other jurisdictions continue to emphasize human authorship as a prerequisite for protection. The absence of clear statutory guidance on AI autonomy creates legal ambiguity and potential exploitation risks.

8. Ethical and Economic Dimensions

Beyond legal complexities, AI's creative autonomy raises broader ethical and economic issues. On one hand, AI democratizes creativity by allowing anyone with access to technology to produce sophisticated works. On the other hand, it may undermine human artists by flooding markets with AI-generated content, devaluing human creativity, and threatening livelihoods. Ethically, granting authorship or ownership to AI might erode the human-centered moral foundation of copyright law. Economically, however, denying protection to AI-generated works could discourage investment in creative AI research and development. Hence, a balanced approach is needed—one that ensures fair recognition of human contributions while enabling technological innovation.

9. The Need for Legal Adaptation

As AI systems become more autonomous, the law must evolve to address emerging challenges. Current copyright doctrines, rooted in human authorship, are insufficient for regulating AI-generated works. Policymakers must consider whether to extend existing laws, create a *sui generis* category for machine-generated creativity, or develop hybrid frameworks that recognize both human and AI contributions. Such reforms should preserve the essence of human creativity while providing legal certainty for AI developers, users, and industries that depend on automated creation.

4. Legal Recognition of AI-Generated Works: Comparative Jurisprudence

The question of whether Artificial Intelligence can be recognized as an author under copyright law has sparked extensive debate across jurisdictions. Different countries have adopted varying interpretations depending on their statutory frameworks, judicial precedents, and policy orientations. While most legal systems continue to uphold the traditional requirement of human authorship, a few have attempted to accommodate machine-generated creativity within existing laws. This comparative exploration highlights how the United States, the United Kingdom, and the European Union, among others, have approached the challenge of recognizing AI-generated works within their copyright systems.

In the United States, the doctrine of human authorship remains foundational. Although the U.S. Copyright Act of 1976 does not explicitly define the term "author," judicial and administrative authorities have consistently interpreted it to mean a natural person. The U.S. Copyright Office has issued several policy statements and decisions reaffirming that copyright subsists only in works created by human beings. In the notable case of *Thaler v. Perlmutter* (2023), the developer Dr. Stephen Thaler sought registration for an artwork titled *A Recent Entrance to Paradise*, generated autonomously by his AI system, "Creativity Machine." The

Office refused registration, holding that human authorship is an essential prerequisite for copyright protection. Similarly, in *Naruto v. Slater* (2018), popularly known as the “monkey selfie” case, the U.S. Ninth Circuit Court of Appeals held that a non-human entity could not claim copyright ownership, further cementing the human authorship principle. These decisions reflect the American judiciary’s firm adherence to the view that creativity under copyright law must originate from human intellectual effort.

The United Kingdom, however, has adopted a slightly more flexible statutory approach. Section 9(3) of the Copyright, Designs and Patents Act 1988 (CDPA) provides that for “computer-generated works,” where there is no human author, “the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken.” This provision was groundbreaking for its time, but it was drafted decades before the rise of autonomous AI systems capable of self-learning and self-creation. While it provides a legal fiction to attribute authorship to a human agent—typically the programmer or operator—it does not address situations where AI operates independently of human input. The provision thus offers limited guidance in the context of advanced generative models that blur the line between tool and creator.

In the European Union, the concept of originality remains tightly bound to human intellectual creation. The Court of Justice of the European Union (CJEU), in *Infopaq International A/S v. Danske Dagblades Forening* (2009), clarified that a work is original only if it reflects “the author’s own intellectual creation.” This principle has been reiterated in subsequent cases, such as *Painer v. Standard Verlags GmbH* (2011), reinforcing the necessity of human creativity as a precondition for copyright protection. Consequently, purely AI-generated works are excluded from copyright protection under current EU law. However, the European Parliament has initiated discussions on creating a sui generis regime for AI-generated content, recognizing the growing importance of technological creativity in the digital economy.

5. Challenges in Determining Authorship and Ownership

1. Blurring Lines Between Human and Machine Creativity

One of the foremost challenges in copyright law today is identifying the boundary between human input and machine autonomy. Artificial Intelligence systems, particularly those powered by deep learning and neural networks, are capable of producing literary, artistic, and musical works that often lack direct human intervention. While traditional copyright law presupposes that creativity flows from human intellect, AI-generated content frequently emerges through autonomous algorithms processing massive datasets. This raises complex questions about whether the absence of human intent or creativity disqualifies such works from copyright protection. The blurred authorship boundary complicates attribution and ownership, as no single entity can easily be identified as the “creator.”

2. Absence of Legal Personality for AI Systems

A fundamental obstacle lies in the fact that AI lacks legal personhood. Copyright protection presupposes an author capable of holding and enforcing rights. Since AI systems are not recognized as legal entities, they

cannot own, transfer, or license copyright. Granting such rights to a non-human entity would disrupt the foundational principles of intellectual property law, which are rooted in human moral and economic interests. While some scholars have proposed creating a new category of “electronic personhood,” this concept remains highly controversial and ethically problematic. The absence of legal personhood thus prevents AI from being recognized as a direct rights-holder, leaving the question of ownership open to interpretation.

3. Complex Ownership Claims Among Stakeholders

Determining ownership of AI-generated works involves multiple stakeholders—the programmer who develops the algorithm, the user who inputs data, the entity providing computational resources, and even the dataset owners whose material trains the AI. Each of these parties could arguably claim a degree of creative or technical contribution. In many cases, ownership is governed by contractual terms or employment agreements, but such arrangements often fail to anticipate the autonomous generative capabilities of AI systems. The uncertainty surrounding these roles complicates copyright registration, enforcement, and profit allocation, especially when AI operates with minimal human oversight.

4. Issues of Originality and Human Creativity

Copyright protection hinges on the principle of originality, which traditionally requires an element of human intellectual effort and creativity. Courts and legislators worldwide have maintained that a work must reflect the author’s “own intellectual creation.” However, when AI autonomously produces an artwork or literary piece, determining originality becomes difficult. Is the originality embedded in the algorithm’s architecture, the data used to train it, or the generated output itself? Moreover, if an AI simply recombines existing data patterns, does it truly create something “original”? These philosophical and legal dilemmas strike at the very heart of copyright doctrine.

5. Moral Rights and Accountability Concerns

Another major challenge concerns moral rights such as attribution, integrity, and reputation. Since AI cannot experience emotions or moral responsibility, assigning such rights to it is conceptually impossible. If an AI-generated artwork is modified, plagiarized, or used unethically, there is no moral subject to claim harm. Additionally, if the output of an AI infringes existing copyrights, determining who bears legal accountability—the programmer, user, or AI developer—remains an unresolved issue. This lack of clarity could expose individuals and organizations to legal risks without clear guidance on liability.

6. International Inconsistencies and Policy Gaps

Copyright systems vary significantly across jurisdictions, creating inconsistency in the treatment of AI-generated works. While the United Kingdom and India attribute authorship to the human responsible for creation arrangements, the United States and the European Union require human originality, effectively excluding AI-only works. These divergences complicate global enforcement and recognition of rights in AI-generated content, particularly in cross-border transactions or online platforms where creative outputs circulate globally. The absence of harmonized international standards under WIPO or other global

frameworks further intensifies uncertainty.

7. Ethical and Economic Implications

Beyond the legal complexities, AI-generated creativity poses ethical and economic challenges. If AI-generated works remain unprotected, they may be freely exploited, reducing incentives for human creators. Conversely, granting protection could lead to monopolization by tech corporations controlling powerful AI systems. This would distort creative markets and undermine the moral foundation of copyright as a tool to reward human intellect and labor. Policymakers must therefore strike a delicate balance between fostering innovation and preserving human-centric creativity within the intellectual property ecosystem.

8. Need for Doctrinal and Legislative Reform

The existing copyright framework was not designed for autonomous technologies. Current provisions—such as Section 9(3) of the UK CDPA and Section 2(d)(vi) of the Indian Copyright Act—presume some level of human intervention. However, as AI becomes more sophisticated, these provisions will increasingly fail to address authorship ambiguities. Legal reform is necessary to redefine concepts of originality, authorship, and ownership in light of machine autonomy. This could involve introducing *sui generis* rights for AI-generated works, establishing shared ownership models, or revising the definition of “author” to include hybrid human-machine collaboration.

6. Policy Debates and Ethical Dimensions of AI Creativity

The emergence of Artificial Intelligence as a creative force has ignited profound policy and ethical debates concerning the future of copyright law. Traditional copyright systems were founded on the assumption that authorship originates from human intellect, emotion, and moral judgment. However, as AI systems increasingly generate original art, literature, and music without direct human input, policymakers face the pressing challenge of redefining what constitutes authorship and creative ownership in the digital age. Some scholars advocate for recognizing AI-generated works under a new legal category or *sui generis* protection to encourage innovation and investment in creative technologies. They argue that failing to protect such works could stifle technological development and deprive creators and corporations of legitimate economic benefits derived from AI-generated content.

Conversely, opponents caution that extending copyright protection to non-human entities could erode the moral and philosophical foundation of intellectual property law, which is premised on human creativity and moral rights. They contend that AI, lacking consciousness, intent, and accountability, cannot truly “create” in the human sense and therefore should not hold or transfer rights. Ethically, granting authorship to AI could diminish the value of human artistry, leading to the commodification of creativity and widening socio-economic inequalities between human creators and technology owners. These policy debates highlight the urgent need for a balanced legal framework—one that acknowledges technological evolution while preserving the moral and humanistic essence of copyright law in the era of artificial creativity.

7. Towards a New Legal Framework for AI-Generated Works

The unprecedented rise of Artificial Intelligence in creative

industries demands a forward-looking legal framework that reconciles technological advancement with the fundamental principles of copyright law. Current legal systems, built upon the premise of human authorship, are ill-equipped to deal with the autonomous creative capabilities of AI. A transformative approach is therefore required—one that recognizes the unique nature of machine-generated creativity while safeguarding the rights and interests of human contributors. Such a framework should not only clarify authorship and ownership but also ensure that innovation, accountability, and ethical standards remain central to intellectual property governance.

A promising direction lies in adopting a hybrid authorship model, wherein both human and machine contributions are acknowledged. This model could assign primary authorship to the human who designs, trains, or controls the AI system while recognizing the AI as a secondary creative agent. By doing so, copyright protection would remain anchored to human oversight while acknowledging the technological processes that facilitate creativity. Additionally, policymakers could consider introducing *sui generis* rights—a distinct category of protection tailored to AI-generated works. These rights would differ from traditional copyright by offering limited protection focused on economic incentives rather than moral rights, thus balancing innovation with public access.

Another crucial element involves developing transparent accountability mechanisms. Since AI systems can potentially generate infringing or harmful content, legal frameworks must specify who bears responsibility—the programmer, operator, or corporate entity. Establishing clear liability norms would ensure that the benefits of AI-driven creation do not come at the expense of ethical or legal accountability. Moreover, the new framework should encourage data transparency and fair use norms, recognizing that AI creativity often depends on vast datasets that include existing copyrighted materials. Legislators must strike a balance between promoting machine learning innovation and preventing unconsented data exploitation.

Finally, international cooperation will play a decisive role in shaping the future of AI and intellectual property. Given the global nature of digital creativity, harmonization under organizations such as the World Intellectual Property Organization (WIPO) is essential to prevent jurisdictional conflicts and ensure consistent protection standards. The evolution of copyright law must thus move beyond national boundaries to reflect the interconnected digital ecosystem. Ultimately, the goal should be to establish a human-centered yet technology-aware legal paradigm—one that embraces AI’s creative potential while upholding the moral, ethical, and cultural values that define intellectual property law.

8. Conclusion

The advent of Artificial Intelligence marks a defining moment in the evolution of intellectual property law, compelling policymakers, scholars, and jurists to rethink long-established concepts of creativity, authorship, and ownership. As AI systems increasingly demonstrate autonomous creative abilities, the rigid human-centric foundations of copyright law are being challenged like never before. The current legal landscape, which restricts authorship to natural persons, fails to account for the growing contribution of machine-generated works in art, literature, and innovation. While most jurisdictions—such as the United States and the European Union—continue to emphasize human originality, others like the United

Kingdom and India have introduced limited provisions to address computer-generated works, albeit within the boundaries of human control.

The global discourse now points toward the need for a more inclusive and adaptive legal framework. Recognizing AI's role in the creative process does not necessarily mean granting it full authorship; rather, it calls for a nuanced approach that values both human oversight and technological innovation. Policymakers must ensure that the evolution of copyright law maintains equilibrium between protecting human creators, promoting technological development, and safeguarding ethical integrity. Establishing sui generis rights, hybrid authorship models, and international cooperation mechanisms could offer pragmatic solutions. Ultimately, the future of intellectual property in the age of Artificial Intelligence lies in crafting laws that uphold creativity as both a human and technological endeavor—ensuring that progress and principle evolve hand in hand in the digital era.

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