

POST-HUMAN CREATIVITY AND THE EVALUATION OF INTELLECTUAL PROPERTY JUSTIFICATIONS: A SUSTAINABLE DEVELOPMENT PERSPECTIVE

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Abstract:

In the age of Generative Artificial Intelligence (Gen AI), the foundational justifications for intellectual property (IP) are being strained by the rise of non-human creative agents. Historically grounded in philosophical traditions emphasizing labor, personhood, and social utility, IP law presumes human intention and moral desert as core rationales for granting exclusive rights. However, generative models—capable of producing art, code, literature, and inventions autonomously—challenge these assumptions.

This chapter interrogates whether existing human-centric IP justifications remain normatively sound when the “creator” may be an algorithm devoid of consciousness or volition. It argues that this epistemological and ontological shift exposes the need for considering the role of IP theory. This chapter advocates for a normative reappraisal of IP theory in light of the United Nations Sustainable Development Goals (SDGs).

The SDGs, with their emphases on inclusive innovation, access to knowledge, climate action, and global equity, offer a values-based framework to assess whether IP rights for AI-generated works support or hinder broader social objectives. By engaging critically with theories of Lockean labor, Hegelian recognition, utilitarianism, and the commons, the paper explores whether post-human creativity calls for a re-evaluation of IP policies reconciled with IP theory.

Ultimately, it posits that IP regimes are and have always been evolving to prioritise human flourishing. Rather than asking who owns AI output, the chapter attempts at asking how exclusive rights can serve the public interest in a post-human creative economy. This reorientation—from entitlement to responsibility—may be a turning point to align IP with the challenges of sustainable development in the 21st century.

Keywords: artificial intelligence; intellectual property; IP justification; creativity; sustainability.

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1. Introduction

The rapid emergence of Gen AI has unsettled long-standing assumptions about creativity, authorship, and the purpose of intellectual property (IP) rights. Traditionally anchored in

human intention, labor, and moral or economic reward, copyright law in particular now faces a foundational challenge: how to respond to creative outputs generated autonomously by machines. Gen AI systems such as OpenAI’s GPT-4, Stability AI’s Stable Diffusion, or Google’s DeepMind increasingly produce content—texts, images, music, and code—that closely mimics or even surpasses human authorship in complexity and originality. This raises urgent legal questions about whether, and under what conditions, such outputs are eligible for copyright protection¹.

The legal uncertainty is far from theoretical. Courts and regulators worldwide are beginning to address these questions directly. In *Thaler v. Comptroller-General of Patents, Designs and Trade Marks*, the UK Supreme Court ruled that an AI cannot be considered an "inventor" under existing patent law, reinforcing the principle that legal inventorship requires human agency. Similarly, recent lawsuits in the United States and Europe—including *Getty Images v. Stability AI*—highlight the contentious use of copyrighted material as training data², and whether outputs derived from such data infringe existing rights or qualify as new, protectable works. These cases reveal a deep and unresolved normative tension: the current IP system is not built to handle creativity without a human creator.

Against this backdrop, it is critical to revisit the philosophical foundations of IP to assess whether they still provide normative guidance in a post-human creative economy. Theories based on Locke’s labor, Hegel’s personality, and utilitarian notions of innovation incentives all presuppose a human subject. As AI systems assume creative functions without possessing consciousness or moral agency, these justifications face what may be described as a “crisis of fit.” At the same time, alternative models—such as commons-based or stewardship approaches—have emerged to challenge the exclusivist and anthropocentric assumptions of traditional IP regimes. But these too require scrutiny, particularly as global governance becomes more complex.

To evaluate the ongoing relevance and limitations of these IP theories, this chapter introduces the SDGs as a normative benchmark. The SDGs offer a values-based framework—grounded in global consensus—that prioritizes inclusive innovation, reduced inequality, quality education, and environmental sustainability. These goals are particularly relevant for assessing whether and how IP rights, including copyright protection for AI-generated works, align with the broader public interest in a global, digital society. They shift the evaluative lens from individual entitlement to systemic impact, and from ownership to responsibility—making them uniquely appropriate tools to examine the future of IP in the era of Gen AI.

The chapter adopts a theoretical and conceptual approach, combining legal philosophy with normative policy analysis. While the discussion addresses IP broadly, the examples and case studies focus specifically on copyright law—the branch of IP most intimately tied to human creativity and therefore most affected by the emergence of non-human creative agents. Special attention is given to the legal question of copyrightability: whether AI-generated

¹ Trapova, ‘Copyright for AI-Generated Works: A Task for the Internal Market?’ (Social Science Research Network, 14 April 2023) <<https://papers.ssrn.com/abstract=4418936>> accessed 29 May 2025; Bonadio and McDonagh, ‘Artificial Intelligence as Producer and Consumer of Copyright Works: Evaluating the Consequences of Algorithmic Creativity’ (Social Science Research Network, 2 June 2020) <<https://papers.ssrn.com/abstract=3617197>> accessed 9 June 2025.

² Gervais and others, ‘The Heart of the Matter: Copyright, AI Training, and LLMs’ (Social Science Research Network, 21 September 2024) <<https://papers.ssrn.com/abstract=4963711>> accessed 29 May 2025.

outputs can or should be eligible for protection, and what criteria—such as human involvement or societal benefit—should guide that decision. The analysis is guided by two overarching questions: *What are the normative limits of existing IP justifications in the context of AI?* And *how can we reconcile those limits with the ethical imperatives set out by the SDGs?*

This chapter is divided into five core sections. In Section 2, it revisits the major philosophical justifications for IP, including Lockean labor theory, Hegelian personality theory, utilitarian models, and alternative frameworks like commons and stewardship. A concluding discussion in this section identifies the tensions each theory encounters when confronted with AI-generated outputs. Section 3 turns to the concept of post-human creativity, examining how Gen AI challenges the legal and moral concept of authorship, and whether personhood is a necessary criterion for IP protection. Section 4 evaluates these theories in light of the SDGs, analyzing how IP frameworks interact with global goals like education (SDG 4), innovation (SDG 9), inequality (SDG 10), climate action (SDG 13), and cross-border partnerships (SDG 17). This section includes a focused case study on the copyrightability of AI-generated works, using the SDGs as a lens for evaluating reform options. Section 5 shifts to the normative framework for future IP law, exploring the role of incentives and ethical models of responsibility. It discusses concrete governance proposals including collective rights management, global licensing trusts, and transparency obligations for AI developers. Finally, Section 6 summarizes the analysis and reflects on how the values embodied in the SDGs can guide IP reform in a post-human creative economy.

2. Philosophical Foundations of IP

The justifications for IP have long drawn upon foundational philosophical traditions. These frameworks—Lockean labor theory, Hegelian personality theory, utilitarian instrumentalism, and commons-based models—each propose different normative grounds for assigning ownership over intangible creations. Yet, the emergence of generative AI disrupts these theories by introducing nonhuman creative agents, challenging the assumptions of authorship and inventorship, intention, and reward. This section critically examines the classical foundations of IP and evaluates their relevance in the context of post-human creativity.

(a) Labour Theory

John Locke’s labor theory asserts that individuals acquire property rights by “mixing their labor” with resources from the commons. In the realm of IP, this theory has historically justified granting rights to creators on the basis that their intellectual effort entitles them to the fruits of their work.³

However, this justification becomes unstable when applied to generative AI. Algorithms do not “labor” in any meaningful sense—they do not exert will, feel effort, or pursue goals. As Olubiyi and Irumekhai (2024) note, attributing property rights to AI-generated outputs undermines the Lockean idea of labor as a morally relevant justification for ownership.⁴

Drahos further critiques the Lockean model by suggesting that its application to intangible intellectual goods risks commodifying knowledge in ways that contradict Locke’s own

³ Roy, ‘Intellectual Property Rights: A Western Tale’ (2008) 16 Asia Pacific Law Review 219.

⁴ Olubiyi and Irumekhai, ‘AI Authorship/Inventorship Through the Lens of Theoretical Justifications of Intellectual Property Rights.’ (2024) 12 ABUAD Law Journal 119.

emphasis on sufficiency and non-harm.⁵ Likewise, Cwik proposes the “productive capacities” view, which ties IP to human capability development—again excluding non-conscious agents like AI.⁶

(b) Personality Theory

The personality theory, as developed by Hegel, justifies property on the grounds that externalizing one’s personality in the world is necessary for individual self-realization. This framework underlies moral rights in IP law, which protect the author’s expression of their unique self⁷.

Yet AI systems, devoid of self-awareness or agency, cannot express a “personality.” Kulchii explores how the lack of legal or moral personhood in AI renders personality-based justifications irrelevant when applied to algorithmic authorship.⁸ Similarly, Moore contends that personality-based rights require a human subject to ground the moral claim, which AI cannot fulfil.⁹ While some scholars have analysed prompts as expression of the authors’ personality,¹⁰ entirely AI-generated works do seem to pose a fundamental question to personality justifications of copyright.

(c) Utilitarian/Instrumentalist Theories

Utilitarian justifications focus on promoting the greatest good by incentivizing innovation and knowledge production. This theory underpins most modern IP systems, which aim to balance private rewards with public benefit.¹¹

However, AI complicates the utilitarian calculus. As Chesterman notes, generative models can drastically reduce the costs of creation, but this does not necessarily increase societal benefit—especially if those benefits are concentrated among a few powerful tech firms.¹² Titov argues that although utilitarianism remains the most pragmatic justification, its assumptions require reexamination in light of AI’s non-human productivity¹³. Additionally, Rosenblatt introduces the concept of “negative space”—areas where innovation thrives

⁵ Drahos, ‘A Philosophy of Intellectual Property’ (Routledge 2016)

<<https://www.taylorfrancis.com/books/9781351962094>> accessed 29 May 2025.

⁶ Cwik, ‘Labor as the Basis for Intellectual Property Rights’ (2014) 17 *Ethical Theory and Moral Practice* 681.

⁷ Roy (n 3).

⁸ Kulchii, ‘Copyright in the Context of Development of Generative Artificial Intelligence Tools’ (2025) 2 *Uzhhorod National University Herald. Series: Law* 140.

⁹ Moore, ‘Personality-Based, Rule-Utilitarian, and Lockean Justifications of Intellectual Property’ in Himma and Tavani (eds) *Information and Computer Ethics* (Wiley 2008)

<<https://onlinelibrary.wiley.com/doi/10.1002/9780470281819.ch5>> accessed 29 May 2025.

¹⁰ Mazzi, ‘Authorship in Artificial Intelligence-Generated Works: Exploring Originality in Text Prompts and Artificial Intelligence Outputs through Philosophical Foundations of Copyright and Collage Protection’ (2024) 27 *The Journal of World Intellectual Property* 410.

¹¹ Menell, ‘Intellectual Property: General Theories’ (2003)

<https://www.semanticscholar.org/paper/Intellectual-Property%3A-General-Theories-Menell/7a6650591fe61b4f251fc8ff223591c62af4e9c8?utm_source=consensus> accessed 29 May 2025.

¹² Chesterman, ‘Good Models Borrow, Great Models Steal: Intellectual Property Rights and Generative AI’ [2023] *SSRN Electronic Journal* <<https://www.ssrn.com/abstract=4590006>> accessed 29 May 2025.

¹³ Vice-Rector for Education and Methodology of the Ulyanovsk State Pedagogical University and Sergey N Titov, ‘Utilitarian Concept as a Basis for the Criminal Law Protection Of Intellectual Property’ [2023] *Justice of the peace* 10.

without IP protection—suggesting that utilitarian IP theories may overstate the necessity of exclusivity in motivating innovation.¹⁴

(d) The Commons and Stewardship Models

Commons and stewardship approaches are not foundational IP theories, but they are normative models or governance philosophies that offer critical alternatives—especially relevant in the age of generative AI and the SDGs, where equity and access are central. Traditional IP theories—Labor, Personality, and Utilitarianism—focus on justifying exclusive rights. Including Commons and Stewardship Models introduces alternative philosophical paradigms that prioritize access over exclusion, collective benefit over individual entitlement, and long-term responsibility over short-term reward.

The chapter thus discusses a sort of “justification crisis” in the age of generative AI, or, at least, a need for evaluation of those theories. That crisis emerges precisely because classical theories assume a human author with moral or economic claims to exclusivity. Commons and stewardship models help highlight why these assumptions might be in crisis with nonhuman creators.

In contrast to exclusionary models, commons-based theories view knowledge and creativity as shared resources. This perspective draws from traditions of civic republicanism, open source collaboration, and environmental stewardship. Commons-based systems like Creative Commons, open-source licensing, and patent pools are already operational.

Moreover, Taeihagh presents a governance framework in which stewardship replaces ownership, emphasizing collaborative regulation and public responsibility in managing AI-generated content.¹⁵ Drahos also supports commons-based approaches, warning against the enclosure of the intellectual commons under rigid property regimes.¹⁶ And Jaiswal et al. further argue that stewardship frameworks may offer a path forward in addressing the anomalies created by AI, particularly in balancing innovation with public interest.¹⁷

(e) Discussion

Each of the classical theories of IP—labor, personality, utilitarian, and commons—offers partial insight into the logic of ownership. Yet none were designed to address the ontological rupture introduced by post-human creativity. As AI systems become more central to cultural and scientific production, these foundations might need to be re-evaluated or expanded to remain normatively coherent and socially equitable.

The emergence of AI-generated works challenges each foundational justification of intellectual property, particularly in the domain of copyright. Locke’s labor theory, for instance, struggles to account for authorship when the “labor” is performed by an algorithm.

¹⁴ Rosenblatt, ‘Intellectual Property’s Negative Space: Beyond the Utilitarian’ [2011] Intellectual Property: Other eJournal

<https://www.semanticscholar.org/paper/Intellectual-Property's-Negative-Space%3A-Beyond-the-Rosenblatt/c0d0cc25d72c030842fb7e40632ccc0b9a0c4e67?utm_source=consensus> accessed 29 May 2025.

¹⁵ Taeihagh, ‘Governance of Generative AI’ (2025) 44 Policy and Society 1.

¹⁶ n.5.

¹⁷ Jaiswal and others, ‘Role Of Intellectual Property Theories in Addressing Anomalies Created By The Intersection of Artificial Intelligence and Intellectual Property Rights: An Analysis’ (2023) 10 International Journal of Membrane Science and Technology 2560.

While programmers, data curators, or end-users may contribute indirectly, quantifying their effort and assigning ownership remains deeply ambiguous. Should copyright reward those who design or prompt generative systems—even if they do not determine the final creative outcome? If so, how does this align with the traditional spirit of copyright law, which values the originality and expression of a conscious author?

The personality theory fares no better. Since AI lacks consciousness, intentionality, or personal expression, Hegelian justifications do not seem to be applicable to non-human creators. Copyright grounded in moral rights cannot coherently be extended to entities that have no self to express. Even assigning rights to developers or users on moral grounds risks distorting the logic of personhood rights, which traditionally protect personal dignity, not commercial infrastructure.

Then, utilitarianism, the most flexible and policy-oriented of the theories, raises its own dilemmas. While copyright can incentivize the human innovation behind AI systems, granting exclusive rights over AI outputs risks creating perpetual monopolies on mass content generation. Without limits, this could crowd out human authors and worsen information asymmetries in the creative economy. Moreover, the duration of copyright protection, originally intended for slow, labor-intensive creation, may be excessive when applied to instantaneous AI outputs.

Alternative models, such as the commons and stewardship frameworks, appear to offer partial remedies by reorienting IP around public interest, sustainability, and knowledge sharing. Yet even these require robust mechanisms to balance open access with fair reward—particularly where human inputs remain integral, albeit indirect, to AI creation.

Thus, the philosophical foundations of IP must now contend with a dual imperative: to incentivize both human and post-human creativity, while preventing the overextension of exclusive rights in a world where creation is no longer uniquely human. This tension lies at the heart of the contemporary IP justification crisis—and it signals the need for a measured, pluralistic approach that integrates traditional theories with evolving realities of creative production in the AI age.

3. Post-Human Creativity and Legal Personhood

Having introduced the philosophical foundations of IP law, and the potential challenges with AI-generated content, we are now going to categorise the phenomenon of AI as post-human creativity. This analysis will allow us to understand how we move from who to how, and to then analyse how this shift might affect legal and moral personhood and related rights.

(a) Defining Post-Human Creativity

The concept of *post-human creativity* emerges from the convergence of posthumanist philosophy, new materialism, and the rise of creative AI and hybrid systems. It challenges anthropocentric assumptions that creativity is an exclusively human faculty, reframing it as a distributed, relational, and emergent process involving both human and nonhuman agents.

Historically, creativity has been tightly coupled with notions of human genius, intentionality, and consciousness. However, contemporary philosophical developments—especially in

posthumanist and post-anthropocentric thought—have begun to unravel these associations. In this context, creativity is no longer seen as a property emanating from individual human minds, but as a co-constructed phenomenon involving a network of actants including machines, algorithms, environments, and materials.

Chappell introduces the notion of posthumanising creativity as a conceptual evolution beyond traditional models like "Wise Humanising Creativity." She argues that such traditional models are insufficient to address the complex, dynamic, and unpredictable creative challenges of the 21st century. Her model includes a broader range of "creative players," such as technologies and ecologies, and emphasizes ethics and emergence over control and ownership.¹⁸ Building on this, Roudavski and McCormack propose the term post-anthropocentric creativity, advocating for the inclusion of nonhuman organisms, tools, machines, and even ecosystems as legitimate creative agents. They argue that creativity should not be defined by human intentionality or authorship but by its capacity to generate novel and valuable configurations through interaction and emergence.¹⁹ This perspective is supported by empirical work such as that of Alekh and Dasgupta, who document how human and material agents jointly contribute to creative outcomes in collaborative making environments.²⁰

In educational contexts, posthuman creativity has been championed as a way to democratize and diversify creative experience. Rousell et al. argue that posthumanism "de-centers the human" in educational discourse and acknowledges the co-agency of spaces, objects, and nonhuman life in shaping creative expression. They map four key areas of inquiry—process philosophy, affect studies, place-based education, and creative ecologies—to show how creativity emerges through complex relational dynamics rather than from individual cognition alone.²¹

To formalize this paradigm, Harris and Holman Jones present a Manifesto for Posthuman Creativity Studies, articulating ten commitments that reposition creativity as emergent, ecological, and collective. They reject individualist and proprietary views of creativity, advocating instead for dynamic, more-than-human creative agency that is deeply entangled with the material and affective world.²²

Applications of this framework are increasingly visible in digital art and media. Łapińska, for instance, analyzes ASMR videos as artifacts of posthuman creativity, produced through the entanglement of human performers, microphones, digital platforms, and sensory affect. She introduces subtypes such as "techno-creativity" and "sensual creativity" to describe how creative agency flows across both human and nonhuman actors in these works.²³

¹⁸ Chappell, 'From Wise Humanising Creativity to (Posthumanising) Creativity' in Snepvangers and others (eds) *Creativity Policy, Partnerships and Practice in Education* (Springer International Publishing 2018) <http://link.springer.com/10.1007/978-3-319-96725-7_13> accessed 29 May 2025.

¹⁹ Roudavski and McCormack, 'Post-Anthropocentric Creativity' (2016) 27 *Digital Creativity* 3.

²⁰ Alekh and Dasgupta, 'Posthumanizing Creativity and Material Histories' [2023] *International Conference on Computers in Education* <<https://library.apsce.net/index.php/ICCE/article/view/1505>> accessed 29 May 2025.

²¹ Rousell and others, 'Posthuman Creativities: Democratizing Creative Educational Experience Beyond the Human' (2022) 46 *Review of Research in Education* 374.

²² Harris and Jones, 'A Manifesto for Posthuman Creativity Studies' (2022) 28 *Qualitative Inquiry* 522.

²³ Łapińska, 'Creativity Of Human And Non-Human Matter Interwoven: Autonomous Sensory Meridian Response Videos In A Posthuman Perspective', *Creativity Studies* (2020) <<https://journals.vilniustech.lt/index.php/CS/article/view/11703>> accessed 29 May 2025.

Finally, Henriksen, Creely, and Mehta expand the discussion into the domains of AI and Indigenous epistemologies, noting that creativity often emerges in more-than-human contexts such as natural systems or machine learning algorithms. They caution against Eurocentric models of individual genius and advocate for recognizing creative emergence that transcends human cognition.²⁴

Together, these perspectives define *post-human creativity* as:

“An emergent, distributed, and relational phenomenon involving both human and nonhuman agents—where creativity arises not from individual intention, but through entangled interactions among technologies, environments, and systems.”

This reconceptualization shifts the focus from *who creates* to *how creative processes unfold*—a critical distinction in an era where AI, digital media, and ecological interdependence complicate the boundaries of agency and authorship.

(b) Legal vs Moral Personhood

The concept of legal personhood refers to the capacity of an entity to hold rights and duties under the law. In contrast, moral personhood is a philosophical notion that generally requires consciousness, rationality, or some form of agency. When it comes to AI, these two types of personhood diverge sharply, raising profound implications for intellectual property law.

Vivek addresses how ownership and originality standards—historically grounded in human capabilities—become problematic when applied to AI systems that lack consciousness or moral agency.²⁵ The issue is not only whether AI can be legally recognized as an author, but whether it *should* be, based on ethical grounds. Naidoo explores this further by suggesting that legal personhood for AI might be justifiable—not because AI is conscious, but because it would serve functional purposes such as ensuring accountability, promoting innovation, and simplifying liability structures. Drawing from African communitarian philosophy, Naidoo argues that some AI systems could be seen as both objects and subjects of relationships in law.²⁶

Jowitt then proposes a Kantian argument based on *noumenal agency*, asserting that any being capable of rational action—even minimally—ought to be granted moral standing and legal recognition. Under this model, the denial of personhood to AI that meets such criteria risks contradicting the foundational logic of human rights itself.²⁷ However, critics like Mik warn against conflating technological sophistication with moral or legal entitlement. Mik stresses that granting legal personhood to AI should not stem from awe of its complexity but from normative legal decisions grounded in democratic values, not technical jargon or media hype.²⁸

²⁴ Henriksen and others, ‘Rethinking the Politics of Creativity: Posthumanism, Indigeneity, and Creativity Beyond the Western Anthropocene’ (2022) 28 *Qualitative Inquiry* 465.

²⁵ Vivek, ‘Reimagining Copyright: Analyzing Intellectual Property Rights in Generative AI’ [2024] *Journal of Information and Knowledge* 327.

²⁶ Naidoo, ‘AI and Legal Personhood: An African Perspective’ [2022] *Proceedings of the 2022 AAI/ACM Conference on AI, Ethics, and Society* 906.

²⁷ Jowitt, ‘Assessing Contemporary Legislative Proposals for Their Compatibility with a Natural Law Case for AI Legal Personhood’ (2021) 36 *AI & Soc.* 499.

²⁸ Mik, ‘AI as a Legal Person?’ [2020] *SSRN Electronic Journal* <<https://www.ssrn.com/abstract=3616732>> accessed 29 May 2025.

Ultimately, the debate focuses on whether legal rights are contingent on human-like moral agency or whether they can be extended functionally to machines as a matter of legal utility. This distinction—between grounding legal rights in human-like moral agency versus extending them to machines for functional utility—is critical for philosophical theories of IP because each theory depends on a different conception of what justifies ownership. The personality theory, for example, requires that creative works express a conscious, self-aware subject; without moral agency, the justification collapses. Labor theory presumes effort and intention, attributes AI systems do not possess. Even utilitarian theories, though more flexible, risk becoming untethered from ethical considerations if rights are assigned purely on pragmatic grounds. Extending IP protection to machines solely for legal utility may serve efficiency or innovation, but it severs the connection between rights and the human moral subject that classical IP theories were built to protect—raising the question of whether IP remains a human-centered institution or a tool of regulatory convenience. As mentioned earlier, these considerations are particularly valid for what concerns copyright, whereas patent or trademark might be more compatible with less human-centric approach to ownership, at least.

(c) *From Author to System: Rethinking Attribution*

The dominant legal paradigms of authorship and invention assume a singular, identifiable, human agent. However, AI-generated works—created through the input of numerous stakeholders, massive datasets, and opaque learning processes—complicate these assumptions. Specifically, Ni explores how generative AI challenges the individualistic foundations of IP. She proposes shared or collective authorship frameworks that better reflect the collaborative nature of AI systems, in which programmers, data curators, users, and even the AI system itself contribute to the final output.²⁹ Frosio then highlights the policy dilemma this creates: should we grant rights to the machine, the human co-creators, or render AI-generated content as part of the public domain? He evaluates models such as *sui generis* rights, public domain status, or assigning authorship to disseminators or AI operators.³⁰ And Škiljić focuses on the growing tension around authorship attribution, particularly in cases involving multiple humans and one or more algorithmic tools. She advocates for new legal definitions of collaborative and collective works that reflect these layered relationships, especially when liability and royalties are at stake.³¹ Finally, Kop proposes an innovative legal designation—*Res Publicae ex Machina* (Public Property from the Machine)—for highly autonomous AI-generated content. This model avoids the complexity of attributing authorship by treating such works as public property, thereby maximizing societal benefit and avoiding monopolization of culturally significant works.³²

These perspectives illustrate that the transition from author to system is not only a shift in attribution, but a reconceptualization of how creativity is legally and ethically structured in a post-human creative ecosystem. Reconciling this shift with the philosophy of IP requires rethinking the underlying assumptions of each theory. For instance, the labor theory might

²⁹ Ni, 'Intellectual Property Protection Dilemmas and Legal Response Strategies Under the Perspective of Generative Artificial Intelligence' (2024) 28 *Journal of Education, Humanities and Social Sciences* 854.

³⁰ Frosio, 'Four Theories in Search of an A(I)Uthor' [2022] *SSRN Electronic Journal* <<https://www.ssrn.com/abstract=4004138>> accessed 29 May 2025.

³¹ Škiljić, 'When Art Meets Technology or Vice Versa: Key Challenges at the Crossroads of AI-Generated Artworks and Copyright Law' (2021) 52 *IIC - International Review of Intellectual Property and Competition Law* 1338.

³² Kop, 'AI & Intellectual Property: Towards an Articulated Public Domain' [2019] *SSRN Electronic Journal* <<https://www.ssrn.com/abstract=3409715>> accessed 29 May 2025.

evolve to consider distributed human-AI interaction as a new form of creative labor, while the personality theory may need to acknowledge collaborative or mediated expression where human creation is entangled with algorithmic processes. Utilitarian theories, already more adaptable, could frame protection around the systemic benefits of incentivizing responsible AI development, even in the absence of traditional authorship. Meanwhile, commons and stewardship models offer frameworks to emphasize public interest and shared ownership, acknowledging that creativity in the age of Gen AI is often relational, rather than individual.

This theoretical reconciliation sets the stage for the next analytical step: benchmarking these IP justifications against the SDGs. In the following section, we examine how the core aims of the SDGs—such as inclusivity, innovation, equity, and global cooperation—can serve as a normative compass to evaluate whether and how IP theories remain fit for purpose. This approach acknowledges three interlinked dimensions: IP theories as foundational frameworks that include both individual and social justifications; the IP system as a functioning legal and institutional mechanism for organizing access and control; and Gen AI as a disruptive force that could alter both the philosophical and operational premises of the system. By placing these theories within the broader context of the SDGs—a globally recognized benchmark for sustainable progress—we aim to provide a contemporary and socially grounded lens through which the coherence, fairness, and future viability of IP frameworks can be critically reassessed.

4. Analysing IP Justifications Through the SDGs

The SDGs, adopted by all United Nations Member States in 2015, offer a comprehensive and globally endorsed framework for addressing interlinked challenges such as poverty, inequality, education, innovation, and climate change. As a universal blueprint for human and planetary flourishing, the SDGs offer not only aspirational targets but a normative structure by which existing policies and institutions—including IP regimes—can be critically evaluated.

The intersection of IP and sustainable development has gained growing attention³³. Scholars and policymakers argue that IP law must do more than incentivize innovation; it should actively support equitable knowledge sharing, inclusive technological progress, and global collaboration.³⁴ As Francis Gurry, former Director-General of the World Intellectual Property Organization, emphasized, IP has a vital role to play in achieving SDGs, but it must evolve to serve broader societal objectives—not just proprietary interests.

Given their timeliness, global legitimacy, and emphasis on equity, the SDGs are an ideal benchmark for assessing whether traditional justifications of IP—rooted in labor, personhood,

³³ Mazzi, ‘The Intersections Between Artificial Intelligence, Intellectual Property, and the Sustainable Development Goals’ in Mazzi (ed), *The 2022 Yearbook of the Digital Governance Research Group* (Springer Nature Switzerland 2023) <https://doi.org/10.1007/978-3-031-28678-0_4> accessed 15 November 2023; La Diega and others, ‘Sustainable Patent Governance of Artificial Intelligence: Recalibrating the European Patent System to Foster Innovation (Sdg 9)’, *The Elgar Companion to Intellectual Property and the Sustainable Development Goals* (Edward Elgar Publishing 2024) <<https://www.elgaronline.com/edcollchap/book/9781803925233/book-part-9781803925233-20.xml>> accessed 10 May 2025.

³⁴ Rimmer, ‘A Submission on Intellectual Property and the United Nations Sustainable Development Goals’ (2018) <https://www.semanticscholar.org/paper/A-Submission-on-Intellectual-Property-and-the-Goals-Rimmer/6363d6ebeb2100a342a9b195c7df2a0383671eec?utm_source=consensus> accessed 20 February 2025.

utility, or exclusivity—align with 21st-century ethical imperatives. This section evaluates five key SDGs in the context of generative AI and IP policy.

(a) SDG 4 – Quality Education

SDG 4 promotes inclusive, equitable, and quality education and lifelong learning opportunities for all. Restrictive IP laws, however, often act as barriers to accessing educational content, particularly in low-income settings or where open-access alternatives are limited. AI can further complicate the situation, or make it better. In this sense, Geiger and Di Lazzaro considered sustainability as a potential guiding principle for copyright reform.³⁵ Kostopolus then shows how copyright restrictions can obstruct AI-powered educational tools that personalize learning or automate language translation.³⁶ And Nedungadi et al. argue that generative AI (GAI) can transform SDG 4 by enabling personalized education and equitable content distribution, but this potential is hampered if proprietary control limits access to data and tools.³⁷ Similarly, Artyukhov et al. highlight the tension between AI-enabled academic integrity tools and restrictive IP policies that hinder their deployment.³⁸ And Geiger and Jutte focused on SDG 4 reclaiming the right to research as guarantor for sustainability, innovation and justice in EU copyright law.³⁹

(b) SDG 9 – Industry, Innovation, and Infrastructure

SDG 9 supports inclusive and sustainable industrialization, innovation, and resilient infrastructure. Generative AI contributes significantly to innovation, and the structure of IP rights can either democratize or centralize access to these benefits.

Al-Busaidi et al. demonstrate here how generative AI changes the innovation paradigm and requires legal and ethical recalibration to prevent monopolization of R&D outputs.⁴⁰ For their part, Rimmer and Abdel-Latif & Roffe argue that IP law should not simply reward inventiveness, but also enable infrastructure for innovation that is open, inclusive, and collaborative.⁴¹

(c) SDG 10 – Reduced Inequalities

³⁵ Geiger and Di Lazzaro, ‘Sustainability as a Guiding Principle for Copyright Reform? Moral Rights Issues Concerning the Use of Generative AI in the Field of Research and Education’ (Social Science Research Network, 24 March 2025) <<https://papers.ssrn.com/abstract=5191571>> accessed 29 May 2025.

³⁶ Kostopolus, ‘Student Use of Generative AI as a Composing Process Supplement: Concerns for Intellectual Property and Academic Honesty’ (2025) 75 *Computers and Composition* 102894.

³⁷ Nedungadi and others, ‘The Transformative Power of Generative Artificial Intelligence for Achieving the Sustainable Development Goal of Quality Education’ (2024) 16 *Sustainability* 9779.

³⁸ Artyukhov and others, ‘SDG 4, Academic Integrity and Artificial Intelligence: Clash or Win-Win Cooperation?’ (2024) 16 *Sustainability* 8483.

³⁹ Geiger and Jutte, ‘Chapter 8: The Right to Research as Guarantor for Sustainability, Innovation and Justice in EU Copyright Law’ (2023) <<https://www.elgaronline.com/edcollchap/book/9781803922744/book-part-9781803922744-14.xml>> accessed 29 May 2025.

⁴⁰ n.38.

⁴¹ Abdel-Latif and Roffe, ‘The Interface Between Intellectual Property and Sustainable Development’ [2021] *Handbook of Intellectual Property Research* <<https://consensus.app/papers/the-interface-between-intellectual-property-and-abdel-latif-roffe/949b51b4a2da50c28c62d95c44262d56/>> accessed 20 February 2025.

SDG 10 focuses on reducing inequality within and among countries. Yet, AI development is currently concentrated in the Global North, exacerbating digital divides and economic disparity.

Gajjar outlines here how existing IP regimes often entrench disparities by giving exclusive rights to firms with proprietary access to large training datasets, sidelining actors in low- and middle-income countries.⁴² And Farahani & Ghasemi highlight how AI can help develop countries “leapfrog” developmental barriers - if access to the tools and outputs is equitably managed.⁴³

(d) SDG 13 – Climate Action

This goal emphasizes urgent action to combat climate change. IP rights around AI-generated green technologies can either hinder or promote such action.

While Lasker underscores the ethical imperative to treat climate-related innovations—especially those involving AI—as global public goods,⁴⁴ Muchokore & Kaur further emphasize how AI tools for environmental monitoring and adaptation depend on open access to data, technical models, and patent frameworks that prioritize planetary over proprietary interests.⁴⁵

(e) SDG 17 – Partnerships for the Goals

SDG 17 promotes global partnerships and collaborative frameworks. In the context of generative AI, this includes patent pools, open-source licensing, and cross-border knowledge-sharing frameworks.

Yang & Xu call here for international regulatory coalitions to manage AI’s risks and benefits across jurisdictions.⁴⁶ And Sitaloppi & Ballardini propose re-engineering IP frameworks to support systemic collaboration for sustainable innovation through co-specialized networks, instead of isolated proprietary regimes.⁴⁷

(f) IP theory, SDGs, and the case of copyrightability of AI-generated works

Using the SDGs as a benchmark reveals that existing IP justifications—rooted in individualistic paradigms—are both aligned and misaligned with collective global goals.

Personhood theories, which revolve around the moral rights of creators to control their works as extensions of their identity, often justify strong proprietary protections. However, this rationale can conflict with SDG visions such as equitable education (SDG 4) and reduced inequalities (SDG 10), where rigid IP rights can impede access to essential knowledge and

⁴² Gajjar, ‘The Future of AI Governance: Navigating the Challenges of Generative AI’ (2024) 13 International Journal of Science and Research (IJSR) 1686.

⁴³ Shahvaroughi and others, ‘How Artificial Intelligence Plays a Role in Achieving Sustainable Development Goals?’ (2024) 2 Sustainable Economies 66.

⁴⁴ Lasker, ‘EXPLORING ETHICAL CONSIDERATIONS IN GENERATIVE AI’ (2024) 12 International Journal of Advanced Research 531.

⁴⁵ Muchokore and Kaur, ‘Integration of Artificial Intelligence into Sustainable Development Goals in India’ (2024) 08 International Journal of Scientific Research in Engineering and Management 1.

⁴⁶ Yang and Xu, ‘Study on the Path of Generative Artificial Intelligence Copyright Protection under the Strategy of Intellectual Property Power’ (2024) 6 Scientific Journal Of Humanities and Social Sciences 172.

⁴⁷ Sitaloppi and Ballardini, ‘Promoting Systemic Collaboration for Sustainable Innovation through Intellectual Property Rights’ (2023) 11 Journal of Co-operative Organization and Management 100200.

tools, especially in low-resource settings. At the same time, they can support SDG 4 and SDG 17 by reinforcing the dignity and recognition of educators, researchers, and creators, encouraging their continued contributions to knowledge-sharing frameworks and collaborative innovation.

Utilitarian theories, which justify IP as a means to incentivize innovation for the greatest societal benefit, are more naturally aligned with the SDGs in theory. Yet, in practice, utilitarian logic is frequently co-opted to justify monopolistic control, thereby undermining inclusive innovation (SDG 9) and climate action (SDG 13), particularly when access to AI-driven technologies is constrained by proprietary barriers.

At the same time, if applied with a focus on long-term benefits, utilitarian rationales can justify IP frameworks that promote open licensing models, frameworks for data-sharing, and patent pools—tools that both reward creators and expand access to AI-driven solutions for education, health, and the environment. As generative AI accelerates innovation across sectors, IP regimes guided by these rationales can help steer its development toward sustainable outcomes. Rather than standing in opposition to the SDGs, IP can be an enabler of impactful innovation.

Let’s see it at a more granular level in the context of generative AI, a realignment could be the rationale of the decision regarding the treatment of the post-human creativity.

The focus is, again, on granting copyright protection to AI-generated works, that, especially within the traditionally human-centric domain of copyright, presents a nuanced set of trade-offs. This step is particularly relevant when viewed through the lens of the SDGs, as it can support both short- and long-term objectives of innovation, inclusivity, and economic development.

Aspect	Potential Positive Outcomes	Potential Risks & Concerns
Legal Certainty & Attribution	Enables clear authorship claims, supports licensing, dispute resolution, and cross-border collaborations (SDG 9, SDG 17)	Undermines human-centric moral rights and complicates notions of "expression"
Incentives for Industry Investment	Attracts R&D funding, boosts AI-driven cultural sectors, supports tech entrepreneurship (SDG 8, SDG 9)	Encourages monopolization of creativity by a few AI-owning corporations
Human-AI Collaboration	Motivates hybrid creative practices; ensures human creators are still incentivized to engage with AI tools (SDG 4, SDG 9)	Risk of devaluing human creative labor in the long run
Innovation Documentation & Transparency	Registers creative AI use; promotes fair attribution models; increases accountability and visibility in creative AI ecosystems (SDG 16, SDG 17)	Potential bureaucratic overload; difficult to track AI authorship lineage
Trade & Global Competitiveness	Enhances participation in AI IP markets; positions nations as leaders in ethical AI copyright regimes (SDG 10, SDG 17)	May widen Global North–South disparities in access and benefits from AI innovation (SDG 10)

Recognizing copyright protection for AI-generated works presents a mix of promising opportunities and considerable risks. On the positive side, granting such rights could enhance legal certainty and recognition by clarifying ownership and accountability, thereby making licensing, attribution, and enforcement more predictable—an important factor aligned with SDG 9, which emphasizes innovation and infrastructure. It also creates strong incentives for technology investment; with clearer IP protections, private sector actors may be more willing to fund research and development in generative AI, boosting innovation ecosystems in line with SDG 17’s focus on partnerships. Moreover, offering copyright protection could motivate meaningful human-AI collaboration, as artists, programmers, and designers may be more inclined to contribute creatively if their work alongside AI systems is legally protected and commercially viable. This framework also supports better documentation of AI contributions; through copyright registration, it becomes possible to track the human and algorithmic inputs that led to a given work, enhancing transparency and attribution fairness. From an economic perspective, countries that formally recognize AI-generated works could become more attractive hubs for creative tech industries, maintaining competitiveness within the global IP framework.

However, this approach is not without risks. Perhaps most fundamentally, it may dilute the moral and philosophical foundations of copyright law, which historically rests on the recognition of human intention, expression, and authorship. Allowing nonhuman entities to receive similar protections could blur the ethical boundaries that give copyright its normative force. Additionally, granting rights to AI-generated works could entrench power in the hands of large technology companies that control the most sophisticated generative models, thereby exacerbating global inequalities—especially relevant to SDG 10. There is also the risk of market saturation; the rapid and large-scale production of content by AI could flood creative markets, making it more difficult for human creators to gain visibility or sustain livelihoods. Enforcement presents another challenge, particularly when AI operates autonomously or across legal jurisdictions, raising complex questions about liability, infringement, and cross-border coordination. Lastly, there is the danger of misaligned incentives, where the push for copyright protection may be driven more by corporate lobbying than by any clear societal benefit, risking a framework that serves institutional interests over the public good.

These considerations apply most directly to copyright law, which is more tightly bound to human creativity and moral authorship. For other IP domains—such as patents, trade secrets, or trademarks—different criteria (novelty, inventiveness, source identification) govern eligibility and may be less philosophically entangled with human intentionality.

5. Evaluating the Normative Framework for IP

As mentioned, generative AI presents a fundamental challenge to the normative justifications of IP, particularly within copyright law. This section critically discusses how classical theories—rooted in labor, personhood, and utility—can be reconciled with a nonhuman agent of creation. Rather than prescribing wholesale reforms, this section cautiously considers how sustainable development benchmarks (especially the SDGs) can help guide incremental adaptation of IP frameworks.

(a) Limitations, Role of Incentives, and non-IP Policies

Contemporary IP regimes were constructed on the assumption of human creativity and intentionality. As such, they are increasingly inadequate when confronted with AI-generated works. As Al-Busaidi et al. argue, the human-centricity of current copyright systems creates legal blind spots when applied to AI-generated content, especially regarding authorship, originality, and liability.⁴⁸ Poland then emphasizes that courts have already begun grappling with whether AI-generated content satisfies copyright eligibility under current laws, with mixed results.⁴⁹ This uncertainty risks undermining both legal predictability and economic incentives, and makes it difficult for stakeholders to determine whether, or how, to commercialise AI-generated works. Samuel further notes that while AI can generate highly original content, this process may not require traditional incentivization—AI does not need financial or moral encouragement.⁵⁰ Yet, this does not mean that incentives are obsolete. Copyright protection for AI-generated works may still function to:

- Reward and encourage human designers, curators, and developers behind the AI;
- Foster investment in responsible AI innovation;
- Ensure traceability and provenance in hybrid creative systems.⁵¹

When aligned with SDG 9 (Industry, Innovation, and Infrastructure), copyright frameworks can be useful to incentivise sustainable AI innovation, while ensuring public access and equity. The European Union’s AI Act provides a compelling example of how non-IP regulations—particularly those governing AI—can intersect meaningfully with copyright law and reshape how we evaluate, assign, and protect creative outputs in the digital age. While not explicitly designed as a copyright instrument, the EU AI Act introduces regulatory mechanisms that may influence how we understand authorship, originality, and the human role in AI-assisted creation. One of the most significant is the transparency obligation, which requires providers of generative AI models to disclose meaningful information about their systems, including details on training data and the design of content-generation mechanisms. In the context of copyright, this obligation could be critical for identifying whether protected works have been used in the training of AI systems and—more importantly—whether a human agent played a substantive, traceable role in shaping the model’s outputs. Such disclosures help delineate the human contributions that still underlie AI-generated content, potentially forming a basis for attributing derivative or contributory copyright claims.⁵² Moreover, these obligations enhance accountability, which is essential for fair compensation and for upholding moral rights where appropriate.

Equally important are the bias prevention and risk management provisions within the AI Act. While they are primarily intended to ensure fairness, safety, and non-discrimination in AI

⁴⁸ Al-Busaidi and others, ‘Redefining Boundaries in Innovation and Knowledge Domains: Investigating the Impact of Generative Artificial Intelligence on Copyright and Intellectual Property Rights’ (2024) 9 *Journal of Innovation & Knowledge* 100630.

⁴⁹ Poland, ‘Generative AI and US Intellectual Property Law’ (2023) [abs/2311.16023 ArXiv](https://arxiv.org/abs/2311.16023) <<https://consensus.app/papers/generative-ai-and-us-intellectual-property-law-poland/e08c4ce5892c5203a1b485eab37be9e2/>> accessed 29 May 2025.

⁵⁰ Samuel, ‘Challenges and Opportunities in Intellectual Property Rights (IPR) in the Age of Generative AI: Balancing Innovation and Protection’ (2024) 13 *International Journal of Science and Research (IJSR)* 907.

⁵¹ Chesterman, ‘Good Models Borrow, Great Models Steal: Intellectual Property Rights and Generative AI’ (2025) 44 *Policy and Society* 23.

⁵² Another relevant discussion concerns the risk of technological obsolescence of such a system to evaluate copyrightability, however it is out of the scope of the present chapter.

systems, these mechanisms have unforeseen implications for copyright. For instance, if certain types of content or creators are systematically underrepresented or misrepresented in training data due to algorithmic bias, this can affect both the cultural relevance and the originality of AI outputs. This in turn raises ethical questions about whether AI-generated content, trained on flawed or unbalanced datasets, should be eligible for copyright protection—or if such bias undermines the criteria of creativity and expression that underpin copyright regimes. In cases where synthetic data is used both as training input and to generate synthetic output, a deeper problem emerges: *where is the human creativity?* If both the input and output are entirely machine-generated, can there still be a claim to authorship or originality rooted in human agency? These scenarios increasingly blur the boundaries between what copyright seeks to protect and what it should exclude.

Yet, rather than signal the end of human-centered creativity, this evolution may provoke a re-evaluation of the spaces—both legal and cultural—that preserve human expression. If AI becomes dominant in content generation, then other frameworks—such as cultural policy, platform design, and even spatial urban planning—might take on a more prominent role in curating environments that prioritize human authorship. For example, digital platforms might offer labelled zones or certification for “human-made” content, creating a parallel economy of authenticity. Likewise, physical spaces such as galleries, workshops, or public art installations can become sanctuaries for non-algorithmic creation, emphasizing embodiment, temporality, and subjectivity. In this light, the dimensions of space and time—as irreducibly human constraints—may offer the normative and aesthetic grounding to reconcile copyright with its philosophical roots in human dignity and self-expression. The human role in creativity, even in an AI-saturated world, may thus be preserved not only through direct legal intervention but through the cultivation of dedicated environments that sustain and celebrate uniquely human forms of creative agency, in line with SDGs and philosophical theories of IP.

(b) Ethical Models: From Ownership to Responsibility

Classical IP theories emphasize ownership and IP policies have always had to balance that with public access and domain, but AI’s role in creativity seems to suggest a reconsideration of this societal balance.

Kulchii argues that exclusive rights in AI-generated content must be tempered by principles of transparency, equity, and fair compensation, especially when training datasets are derived from public resources.⁵³ And Delacroix suggests that IP rights in relation to generative systems should be seen as privileges, not absolute entitlements—to avoid AI development erosion of cultural and informational commons.⁵⁴ Such idea of shifting from entitlement to responsibility aligns with SDG 10 (Reduced Inequalities) and SDG 17 (Partnerships for the Goals). In practice this would mean to advocate for models such as:

- **Collective rights management** for AI-generated content;
- **Global licensing trusts** for training data and outputs;

⁵³ n.8.

⁵⁴ Delacroix, ‘Sustainable Data Rivers? Rebalancing the Data Ecosystem That Underlies Generative AI’ (2024) 2 Critical AI <<https://read.dukeupress.edu/critical-ai/article/doi/10.1215/2834703X-11205224/390849/Sustainable-Data-Rivers-Rebalancing-the-Data>> accessed 29 May 2025.

- **Transparency obligations** for large model developers to support accountability.⁵⁵

The SDGs serve as a robust normative framework to judge whether copyright protections for AI-generated content support long-term public interests. While it may be premature to declare full legal personhood for machines, cautiously recognizing such works within modified copyright systems can offer short- and long-term benefits—provided these systems are grounded in responsibility, inclusivity, and openness. Let’s see these three options in details:

(i) *Collective Rights Management*

Collective rights management (CRM) is a scalable way to balance access, compensation, and control over copyrighted content—especially in an era where individual attribution and ownership become complex due to AI’s collaborative and automated nature. In this context, CRM can evolve to administer AI-generated outputs, particularly where human input (e.g., data curation, prompting, model tuning) remains significant but diffuse. Kulchii identifies collective management systems—possibly with extended or mandatory frameworks—as one of the most promising tools for mediating between the interests of rights holders and developers in the AI ecosystem.⁵⁶ Similarly, Ismantara & Silalahi recommend establishing blanket licensing systems through Collective Management Organizations (CMOs) to address the unauthorized use of protected works in AI training datasets, particularly where obtaining individual permissions is impractical.⁵⁷ By streamlining rights administration and royalty distribution, CRM systems can reduce transaction costs, improve accessibility for smaller developers, and ensure that human contributors—such as dataset creators and prompt designers—receive fair remuneration. However, this model must be transparently governed to avoid the risks of monopolization or misrepresentation that have historically plagued some CMOs.⁵⁸

(ii) *Global Licensing Trusts for Training Data and Outputs*

A more ambitious extension of the collective licensing model is the creation of global licensing trusts—institutions that manage both the training data used by generative AI and the creative outputs it generates. These trusts could serve as international governance mechanisms, pooling resources and licensing rights across jurisdictions to support equity and innovation in the global digital economy. Specifically, Lee proposes a blockchain-based Extended Collective Licensing (ECL) system that could underwrite the fair use of copyrighted content in AI training while offering a scalable model for licensing rewards and usage accountability.⁵⁹ The global trust model could build on these ideas by integrating

⁵⁵ n.46.

⁵⁶ n.8.

⁵⁷ Ismantara and Silalahi, ‘The Lawfulness of Using Inventions for Generative AI Training : A Case Study of a US Lawsuit against OpenAI and Perplexity AI’ [2024] JUSTISI <<https://consensus.app/papers/the-lawfulness-of-using-inventions-for-generative-ai-ismantara-silalahi/5b140242cfac5695905bdd7ae1c135fc/>> accessed 29 May 2025.

⁵⁸ Band, ‘Cautionary Tales About Collective Rights Organizations’, *SSRN Electronic Journal* (2012) <<http://www.ssrn.com/abstract=2149036>> accessed 29 May 2025.

⁵⁹ Lee, ‘Copyright Protection Against Use of Copyrighted Works Without Permission in AI Machine Learning: Focused on Introducing Blockchain-Based Extended Collective Licensing System’ [2024] Korea Copyright Commission <<https://consensus.app/papers/copyright-protection-against-use-of-copyrighted-works-lee/fe0727ca54685975a6e5c37025328d38/>> accessed 29 May 2025.

ethical oversight and SDG-aligned metrics—ensuring, for example, that AI development using the trust's resources also contributes to educational or climate-focused initiatives. Such trusts would allow creators—especially those in underrepresented or low-income regions—to participate in AI economies without the need for direct, complex legal negotiations. They also provide a central infrastructure to support fair compensation and facilitate collaborations between developers, rights holders, and public institutions, advancing the inclusive innovation principles enshrined in SDG 10 and SDG 17.

(iii) *Transparency Obligations for Large Model Developers*

Transparency is perhaps the foundational precondition for all fair and ethical governance models for generative AI. The EU AI Act already mandates that foundation model providers disclose the nature of their training data, including whether copyrighted works were used and how. This obligation not only enables copyright holders to assert claims but also allows policymakers and public watchdogs to evaluate the extent of human contribution involved. Buick notes, however, that transparency requirements—though necessary—are insufficient on their own, as they rely on existing copyright structures that may not adequately protect creators in the AI context.⁶⁰ Still, by mandating disclosure of training sources, prompts, and algorithmic decisions, transparency measures can help distinguish between fully synthetic outputs and those meaningfully shaped by human creativity. This would allow for more nuanced copyright determinations and enable the development of tiered rights frameworks, where different levels of protection correspond to the extent of human involvement. Moreover, transparency is key to accountability, especially where generative models are trained on biased or sensitive data, thereby supporting both ethical content development and sustainable knowledge infrastructures aligned with SDG goals.

6. Conclusions

This chapter has examined the challenges that generative AI poses to the normative foundations of intellectual property, with a specific focus on copyright law. At its core, the analysis has shown that the emergence of post-human creativity knocks at the door of the traditional justifications for IP, most of which are deeply rooted in human-centric philosophical theories. The labor theory, which grounds entitlement in effort and appropriation, cannot open the door when the entity performing the creative act lacks consciousness, volition, or even a coherent measure of exertion. Similarly, the personality theory, premised on the expression of individual identity, becomes conceptually unable to reach the knob when the action lacks a human subject to reflect. Even utilitarian and instrumentalist models, which focus on incentivizing creation for social benefit, require reconsideration in light of AI's ability to generate vast volumes of content without needing motivation in the human sense (knocking the door might not make them stand up, could it be the time to create a bell to ring?). These foundational challenges are not merely abstract—they have direct implications for how laws attribute authorship, assess originality, and assign rights.

In response to these disruptions, the chapter explored frameworks that shift emphasis from *only* individual entitlement to *also* collective responsibility and long-term social utility. These

⁶⁰ Buick, 'Copyright and AI Training Data—Transparency to the Rescue?' (2025) 20 *Journal of Intellectual Property Law and Practice* 182.

approaches offer valuable tools for navigating a creative ecosystem where outputs are co-produced by humans and machines. Importantly, the chapter has argued that using the SDGs as a contextual benchmark can help evaluate the social relevance and implications of different IP models. The SDGs serve not only as policy objectives but as normative reference points that contextualize the purpose of IP systems: from rewarding creation to fostering inclusive innovation, ensuring access to knowledge, and supporting sustainable development.

By benchmarking IP theories against specific SDGs—including those focused on education (SDG 4), innovation (SDG 9), inequality (SDG 10), climate action (SDG 13), and global partnerships (SDG 17)—the chapter has prompted some points of discussion about how IP regimes are fit for purpose in our times. For example, overly expansive copyright protections for AI-generated works could entrench inequalities and limit access, while more balanced systems rooted in transparency and shared ownership could enable broader participation and foster collaborative creativity. This normative assessment was followed by practical discussions on some governance mechanisms, namely collective rights management, global licensing trusts, and transparency obligations for AI developers. These proposals, while still evolving, illustrate how responsibility-based models can realign some IP law (in this case, copyright) with both traditional IP principles and contemporary ethical challenges.