
AI'S SHIELD: NAVIGATING COPYRIGHT'S MAZE

Dr. B. Santhi, Chief Librarian, The Central Law College, Salem

S. Prethee, B.A.L.L.B., The Central Law College, Salem

ABSTRACT

“If a human being reaches such unfortunate end, then them as termini doesn’t still has any full stop. Humans are considered the most intelligent living creature who can create something by using their intelligence. Artificial Intelligence (AI) is the result of humans using their own intelligence to create something that is similar to something else. In addition to the already-existing content, this AI has added literary and artistic works that we might want to refer to as “creative, “all protected by copyright. Conversely, the artificial intelligence-generated content could also infringe on the Intellectual property of other parties. In order to produce intellectual property that might be considered a “invention” or “creation” under legal definitions, an AI system has taken ideas from and incorporated information to which its creator is not a party. This paper seeks to explore AI as a ‘creative’ machine and to tackle this new challenge. Additionally, it will cover the following topics related to current system compliance for mechanical creations by machines and intelligence that are most likely copyright able autonomously created: What current legal structure prohibits machines and intelligences from being protected by copyright? The role that computer-generated works play in US, UK, and New Zealand legislative frameworks has been examined in light of each nation’s current copyright laws. In summary, hypothetical responses have been provided to the question posed in the current legal discussion surrounding copyright laws and creative commons authorship rights.

Keywords: Artificial intelligence, Intellectual property, Copyrights law, Jurisprudence, Technology.

Introduction:

AI's integration with the world is presenting unprecedented opportunities and challenges. Computers now generate intellectual property in fields like music, art, and design, thanks to AI advancements. This technology involves systems performing tasks requiring human-like intelligence, such as visual perception and decision-making, poised to significantly reshape our lives¹. To control the kinds of creative works that are currently emerging, this new era of innovation necessitates a careful understanding and redefinition of intellectual property laws (hereinafter, "IP laws"). As AI-produced creative works proliferate, it's crucial to redefine intellectual property laws to address ownership issues in this new era of innovation. Current copy right laws don't yet recognize that machines can produce intellectual content.

Is there a Common legal definition for “Artificial Intelligence”

The US Congress is currently debating a landmark law aimed at defining artificial intelligence. Known as the Fundamentally Understanding the Usability and Realistic Evolution of Artificial Intelligence Act of 2017, or the FUTURE ofAIAct, this represents the first major effort by Congress to regulate the high-tech industry more comprehensively. This legislate on directs the Department of Commerce to establish a Federal Advisory Committee (FAC).The FAC's role is to advise The Secretary of Commerce on matters related to AI advancement.

The definition and descriptions of artificial intelligence (AI) in legislative effort soften contain significant ambiguities, which is typical in early attempts by any jurisdiction to define such a rapidly evolving technology². In related development, the New York City Council passed the Algorithmic Accountability Bill in 2017, creating the New York Algorithm Monitoring Task Force³.Incontrast to the US, the European Union recently published a paper titled" A definition of AI: Main Capabilities and Scientific Disciplines" by the High-Level Expert Group on Artificial Intelligence, which was established by the European Commission. The notion of artificial intelligence (AI) as it is stated in the Commission Communication on AI is broadened and clarified in this text.

“Artificial intelligence (AI) refers to systems that display intelligent behavior by analyzing their environment and taking actions—with some degree of autonomy—to achieve specific goals”⁴

Laws and regulations across different places are now trying to define AI by looking at its technical aspects and how they connect with its goals. It's crucial to have a clear definition of AI because regulations and governance depend on it to function effectively.⁵

Artificial Intelligence: Is Whether 'Creation' or 'Creator'?

There are two distinct facets to AI. AI technology as a "creation" as a component of technology, which refers to technology or technologies with AI capabilities, or AI as a "creator," where AI has developed the capacity to produce original works that may be covered by copyright laws or inventions that may be subject to patent protection.

Even though technology has always had an effect on the creation of music, recent advancements in AI technology are now making it possible to create creative compositions that, in some ways, resemble human creations. David Cope's AI named Emily Howell has earned a name for itself in the world of algorithmic computer music.⁶

AI is making waves in music and art creation. For instance, the algorithm powering Emily Howell has even been patented in the US. In 2012, Iamus made history by releasing the first classical album composed entirely by a computer⁷. Following closely behind is the Artificial Intelligence Virtual Artist, gaining recognition from established music bodies⁸. Google is also set to innovate in AI with its upcoming project, Magenta, a machine training AI systems to produce music and art. This marks a significant step forward in the evolving intersection of technology and creativity.⁹

Robots will likely create novel solutions to issues in the future, generating intangible outputs that, technically at least, may be recognized intellectual property. If it is impossible to tell from listening to something that it was created by a machine, such as a piece of music. One might question whether the idea of machine authorship should be accepted, whether it was written by a computer or a human.¹⁰

Debates surround whether creations produced by intelligent machines can be eligible for copyright protection. Some argue that these machine-generated works deserve recognition, while others advocate for traditional human authorship, questioning the applicability of intellectual property rights (IPR) laws. Addressing these concerns, the EU-funded Robot Law project presented guidelines to European policymakers, highlighting the ambiguity in current

IPR regulations regarding computergenerated or robot-generated works. In the UK, the Copyright, Designs and Patents Act 1988 stands as the primary legislation acknowledging such works, yet their exact legal standing remains a subject of debate and interpretation.¹¹

However, the best strategy depends on a variety of criteria, including the type of AI to be secured, the technology's expected lifespan, the value of the AI, and its importance to the organization. However, the purpose of this article is to investigate whether a work or invention made by AI is qualified for intellectual property protection, and if so, who owns those rights.

Can AI be given Intellectual Property Ownership under the Current Copyright Law?

There are a few requirements for a work to be protected under copyright law. Because it is the expression of ideas rather than the ideas themselves that can be copyrighted, the form of the art must be tangible and creative enough to distinguish itself from or be an original work.¹² Intellectual property rights hinge on "author ship" in copyright law. This means the person claiming copyright must either be the creator or legally inherit the right¹³. These laws allow creators and inventors to safeguard their inventions, designs, and artistic creations. Their purpose is to motivate people to produce valuable works for society and enable them to benefit financially by preventing others from using their creations without permission.

In the *Andrien v. Southern Ocean Country Chamber of Commerce* case, the court established that a work of author ship must be created by legally recognized author. Typically, this author is the individual who creates the copy right able content and ensures it is recorded in tangible form¹⁴. According to copy right law, an author is strictly defined as a living human being. This criterion is evident throughout various sections of the statute that discuss the author's life, relatives, and even death.¹⁵

However, as artificial intelligence becomes more "intelligent" in their role as the assistants of humans in the creation of a wide range of products, the law does not provide a clear resolution; can AI then be deemed as an inventor, author, and own/sell intellectual property? In the majority of cases where those software creators are humans, application of law is unchallenging as it suits the copyright law's concept of person being the original author/creator.

In *Tata Consultancy Services v. State of Andhra Pradesh*, it was ruled that computer programs are considered tangible.¹⁶ *R.G. An and v. Deluxe Films* highlighted that abstract ideas aren't

protected by law; copyright only applies once an idea is expressed in a tangible form¹⁷. With AI now capable of performing tangible tasks, assigning authorship rights becomes complex, often defaulting to the human closest to the creation process. To qualify for copyright under the Indian Copyright Act, a work must exhibit a certain level of creativity. Section 2(y)¹⁸ defines works as literary, dramatic, musical, or artistic creations, cinematograph films, or sound recordings, while Section 2(o)¹⁹ adds computer programs and compilations to this list. Section 13²⁰ specifies eligible works for copyright claims, with limitations detailed in Section 52²¹. AI has also ventured into music composition, with platforms like Google Magenta's N Synth Super, Amper Music, IBM's Watson Beat, Spotify's Creator Technology Research Lab, and Juke deck using deep learning networks to create entirely unique music with minimal to no human input²². The question of copyright protection for AI-generated music and literature arises, but the challenge lies in determining who should rightfully hold these copyrights²³. Current legal frameworks typically require a legal person to claim copyright, posing a hurdle when the creation process involves no human intervention.

The argument suggests that while artificial intelligence efforts are often seen as derivative of their programming, computer-generated works typically don't directly copy identifiable parts of the software or data bases they draw from²⁴. Therefore, labeling such outputs as "derivative works" solely because they stem from a generator program isn't necessarily accurate. There's a growing recognition that AI can indeed be creative and generate original content. The main hurdle for AI to claim copyright lies in legal recognition. For AI to qualify as an author, it needs a distinct legal identity separate from its human creator²⁵.

Currently, AI seems to meet the criteria for copyright protection in many respects—it's creative and produces unique content in tangible forms. However, existing laws don't allow AI to be granted authorship rights. To change this, AI must be legally distinguished from its creators in order to qualify for authorship rights. This perspective supports the idea that as AI becomes more integral to various services, granting it authorship rights could make practical sense in the future.

Can AI be a legal entity?

If humans with cognitive challenges can be granted legal personhood, why not consider the same for AI, which is similarly clever if not more so? The legal system is flexible, and as such, it is possible to create new entities by altering the present legal system, and such an act will be

an inventive means of stimulating the growth of Artificial Intelligence research²⁶. AI is more intelligent than animals and more dynamic than inanimate objects like idols or rivers, Suggesting it could own the work it creates. Yet, there are valid concerns about granting these rights to Artificial Intelligence.

Theories of intellectual property and AI-generated works

The philosophical foundations of IP Law provide great insight into much of the existing IPR legislation across the world. It is argued that claims in favor of machine-ownership of intellectual property for AI generated works do not find basis in philosophical and theoretical foundation of IP Law. Some of the traditional theories are discussed below:

Utilitarian Theory

The Utilitarian Theory of Intellectual Property, championed by Jeremy Bentham and J.S.Mill, aims to maximize societal welfare by balancing exclusive rights for innovation with concerns about monopolization and public access²⁷. According to Landes and Posner, many intellectual goods are easily replicated and enjoyed by multiple people simultaneously, making it challenging for creators to recover their costs of creation, including time and financial investments²⁸. Exclusive rights help address this issue by encouraging creators to produce valuable intellectual works without fear of being undercut by cheap copies.

Personality Theory

The personality theory of property rights posits that individuals should have exclusive rights to their creations, reflecting their identity and fulfilling basic human needs. This idea draws from philosophers like Hegel and Kant, emphasizing that creative expressions are deeply personal and essential for human flourishing²⁹. In the realm of intellectual property, granting creators ownership of their artistic, musical, or literary works supports environments where creativity can thrive³⁰. This theory underscores the connection between an individual's character and their creations, highlighting the importance of respecting and protecting these expressions as extensions of personal identity³¹.

Social Planning Theory

The Social Planning Theory advocates for property rights that foster a just and dynamic culture.

Influenced by Jefferson, Marx, Legal Realists, and classical republican thinkers, it aims for a society promoting social welfare and inclusivity³². Unlike utilitarianism, it prioritizes adverse and participatory civil society, supporting democratic institutions through effective governance, including copyright legislation according to Neil Netanel.

AI-Generated works across jurisdiction:

Since 1965, the US Copyright Office has pondered whether computer-generated works are Primarily authored by humans using machines as tools, or if machines themselves execute the creative elements traditionally associated with human authorship³³. In the UK, the Copyright Designs and Patents Act of 1988 clarifies that for computer-generated works in literature, drama, music, or aesthetics, the author is considered the person who makes essential creative decisions during development³⁴. In contrast to English law, which defines the author of computer-generated works as the person arranging for its creation³⁵, US law takes a different stance. American jurisprudence holds that authorship is inherently human and cannot be replicated by intelligent computers. This view point extends to patent law, where the term "inventor" explicitly refers to individuals who concept unitize ideas, as stated in Section 100(f) of Title 35 of the United States Code³⁶. The US Patent and Trademark Office's Manual for Patent Examining Procedure reinforces this by emphasizing that inventor ship hinges on human conception³⁷. This perspective poses challenges when considering whether computers could be recognized as inventors, especially in contexts like automated data analysis or pattern recognition, where computers may assist but do not contribute to the conceptualization of ideas³⁸.

The US Copyright Office's Compendium requires human authorship for works to be eligible for registration, excluding those created solely by machines or mechanical processes without human creative input³⁹. The classic conundrum in AI intellectual property is how to assign credit among its programmer, operator, server, and data provider, highlighting two key emergent issues:

- The questions of authorship and conception in AI-generated works and inventions, and
- The existence of multiple stakeholders in the creation processes of AI-generated works.

In the United States, machine-produced works without human involvement are not eligible for

copyright protection. Similarly, robots are not considered potential inventors under US law, which requires humanlike cognitive abilities and traits like personality and legal personhood for inventor ship. This distinction arises because machines lack the capability to think and create independently without human interaction.

Copy Right and Ai-the issues unsettled

Traditionally, copyright laws have centered around human creators who produce works through creativity, originality, and personal autonomy. However, the advent of AI introduces a paradigm where humans may not be involved in the creative process at all. AI systems, autonomous and sophisticated, autonomously generate surprising and artistic creations, making independent choices about what to create and how. This raises the critical question of ownership: should it lie with the human or the AI system itself? This conflict at the intersection of art, creativity, and AI is not just a distant possibility but a current reality. The financial implications are substantial, given AI's increasing role in creating literary, musical, journalistic, and artistic works worldwide.

In the digital age, a significant legal challenge arises in determining copyright to ownership when an autonomous and advanced AI system independently creates original and creative works without human intervention. This raises uncertainties regarding licensing rights, royalties entitlement, and responsibilities for copyright infringement and defense against infringement by humans or other entities. Another critical issue is identifying who, if any one, holds moral rights. Should one entity take precedence, or should multiple stakeholders be considered?

Conclusion:

Artificial intelligence promises to enhance human efficiency while potentially eroding human autonomy, agency, and capabilities. As AI advances, it may even rival or exceed human intellect, becoming an integral part of our lives with vast opportunities and challenges. This shift is poised to shape how the legal system approaches technology, though the intersection of AI with the law is still nascent. While some jurisdictions have begun exploring AI's implications, comprehensive forms to intellectual property laws, particularly in regions

like the EU, Singapore, and India, have yet to fully address AI. The evolving landscape raises important questions about how governments and courts will navigate these issues under existing IP frame works. Despite India's efforts with a National AI Strategy, integrating AI into IP law remains uncharted territory. As AI continues to evolve, the inadequacy of current copyright laws in addressing AI-generated content becomes increasingly apparent, highlighting numerous legal challenges ahead.

Thus, it appears that the current Intellectual Property Law can be retained, but a new interpretation can be provided that encourages growth in this developing technology while maintaining the principle that for an intellectual work to exist, the closes human agency must be found, or the law could be amended to include artificial as an author, such as a corporation, to put ownership rights in

Endnotes:

¹Artificial intelligence',
<https://www.oxfordreference.com/display/10.1093/oi/authority.20110803095426960> (Last visited June 18, 2024).

² "Congress takes aim at the FUTURE of artificial intelligence", (Last visited, June 17, 2024)
<https://www.blankrome.com/publications/congresstakes-aim-future-rtificial-intelligence>.

³"AlgorithmicAccountabilityActof2022"1(2022)<https://www.wyden.senate.gov/imo/media/doc/2022-02-03%20Algorithmic%20Accountability%20Act%20of%202022%20Onepager.pdf>.

⁴The European Commission's High-level Expert Group On Artificial Intelligent, 'A Definition of AI: Main Capabilities and Scientific Disciplines'(2018),
https://ec.uropa.eu/futurium/en/system/files/ged/ai_hleg_definition_of_ai_18_december_1.pdf.

⁵GaryLea, "Why We Need a Legal Definition of Artificial Intelligence", The Conversation, (June19, 1:06PM), <https://theconversation.com/why-we-need-a-legaldefinition-of-artificial-intelligence-46796>

⁶JacquiCheng,'Virtual composer makes beautiful music—and stirs controversy', Ars Technica, (June22,06:42 PM) <https://arstechnica.com/science/2009/09/virtual-composermakes-beautiful-musicand-stirs-controversy/> ⁷Philip Ball, 'Iamus, Classical Music's Computer Composer, Live from Malaga', The Guardian, (June 23,04:58AM)<https://www>.

⁷ The guardian.com/music/2012/jul/01/iamus-computer-composes-classical-music

⁸12YifeiWuh, AIVA Technology–Composing Music using AI, Harvard University, (Aug22,07:37AM) <https://d3.harvard.edu/platform-digit/submission/aiva-technologycomposing-music-using-ai/>

⁹Aaron Souppouris, Google's' Magenta' project will see if AI scan truly make art, Engaged, (June22,09:16PM), <https://www.engadget.com/2016-05-23-google-magenta-machine-learning-music-art.html>

¹⁰Pamela Samuelson, Allocating Ownership Rights in Computer-Generated Works', 47 Univ. Pittsburgh Law Rev. 1185, 1196-97, (1985)

¹¹Erica Palmeriniand others,'Regulating Emerging Robotic Technologies in Europe: Robotics facing Law and Ethics, Robot Law, (June 23, 2024, 04:09 PM)
<http://www.robotlaw.eu/projectdetails.html>

¹²Bleistein v. Donaldson Lithographing Co. (1903) 188 U.S. 239

¹³Copyright law of United States, 17 U.S.C. § 201(a) (1982)

¹⁴Wooder Samuelson, Intellectual Property Rights in Virtual Environments: Considering the Rights of owners, Programmers and virtual Avatars, 39 Akron L. Rev. 649 (2006).

¹⁵The Indian Copyright Act, No. 14 of 1957, India Code (1957), Ch. V.

¹⁶Tata Consultancy Services v. State of Andhra Pradesh (2004) 137 STC 620 (India).

¹⁷R. G. Anand v. Delux Films, AIR 1978 SC 1613 (India);

¹⁸The Copyright Act, No. 14 of 1957, India Code (1957).

¹⁹Ibid.

²⁰Ibid.

²¹Ibid.

²²Danideahl, How AI-Generated music is changing the way hits are made, The Verge (June 21, 2023, 09:06 AM) <https://www.theverge.com/2018/8/31/17777008/artificialintelligence-taryn-southern-amp-music>.

²³Karl F. Milde, Jr., Can a Computer be an Author or an Inventor? 51 J. PAT. OFF. SOC'y 378 (1969).

²⁴Darin Glasser, Copyrights in computer-generated works: whom, if any one, do we reward? Duke L. & Tech. Rev. 0024 (2001)

²⁵Ibid.

²⁶Ryan Abbott, AI Think, There for relevant; Creative Computer and the Future of Patent Law, 57 B.C.L. Rev. 1079 (2016).

²⁷William Fisher, "Theories of Intellectual Property" in Stephen Munzer (ed), New Essays in the Legal and Political Theory of Property (Cambridge University Press 2001)

²⁸William M. Landes and others, 'An Economic Analysis of Copyright Law', Vol. 18, No. 2, 325-363 (Jun., 1989)

²⁹Justin Hughes, 'The Philosophy of Intellectual Property' (1988) 77 Georgetown Law Journal 287, 299-330.

³⁰Michael A Kanning,' A Philosophical Analysis of Intellectual Property: In Defense of Instrumentalism' (Scholar Commons Graduate Theses and Dissertations, Phil Papers 2012).

³¹Margaret Jane Radin, 'Reinterpreting Property' in Jeremy Waldron(ed), The Right to Private Property (Clarendon Press 1988).

³² James Harrington, The Commonwealth of Oceana (Westport, Conn: Hyperion Press, 1979); Thomas Jefferson, Notes on the State of Virginia (New York: Norton, 1972);Karl Marx, Economic and Philosophic Manuscripts of 1844 (New York: International Publishers, 1964)

³³The Library of Congress, Report of the Register of Copyrights for the Fiscal Year Ending June 30,1965 (sixty-eighth report),L. C. Card No.10-35017, <https://www.copyright.gov/reports/annual/archive/ar-1965.pdf>

³⁴Copyright Designs and Patents Act, 1988, S9 (3)

³⁵Copyright Act 1994, S5 (2)(a)

³⁶535 United States Code, S100.

³⁷Manual of Patent Examining Procedure 2137, S2 (USA)

³⁸Ryan Abbott, I Think, Therefore I Invent; Creative Computer and the Future of Patent Law, 57B.C.L. Rev. 1079 (2016).

³⁹US Copyright office Practices, Compendium, (2017) S312 (3)