

A Snapshot of the Intersection of AI and Copyright Law: **The Author Dilemma**

Chebet Koros, Calvin Mulindwa



Strathmore University
*Centre for Intellectual Property and
Information Technology Law*

This booklet is a summary of the copyright law related to authorship in the context of Artificial Intelligence (AI). It includes key findings, examples of AI-generated works, and recommendations proposed by CIPIT on how to incorporate the copyright aspect of authorship with AI.

Copyright Law and Artificial Intelligence

Copyright grants exclusive rights to creators for a wide range of artistic and literary works, including books, music, art, films, software, and more.¹ To qualify for copyright protection, a work must be original (involve sufficient creative effort) and be recorded in a tangible form.² Tangible form means that a work must exist in a format that can be reproduced or communicated.³ In most countries, the person who creates a work is considered the author for copyright purposes.⁴ Additionally, in most countries, the presence of a human author is a fundamental requirement for a copyright to be valid.⁵

The widely accepted definition of AI is 'computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision making and translation between languages'.⁶ There is a clear distinction between AI-generated works and AI-assisted works. AI-generated works refer to the creation of a work by AI without any human intervention, while AI-assisted works are generated with significant human intervention and/or direction.⁷ This booklet's primary focus is on AI-generated works.

Most countries do not provide copyright protection for AI or computer-generated work. Nevertheless, some countries do protect computer-generated works where no human author is involved. The author of a computer-generated work is typically defined as 'the person by whom the arrangements necessary

¹Section 2, Copyright Act (No. 12 of 2001).

²Section 22 of the Copyright Act (Act no.7 of 2001). See also Article 2 of the Berne Convention.

³Section 2, Copyright Act (No. 12 of 2001).

⁴Feist Publications, Inc v Rural Tel Service Co., Inc 499 U.S. 340 (1991).

⁵Nzuki C, 'Intellectual Property and Artificial Intelligence: Can Artificial Intelligence Receive Copyright Protection', <[intellectual Property And Artificial Intelligence: Can Artificial Intelligence Receive Copyright Protection? - Centre for Intellectual Property and Information Technology law \(strathmore.edu\)](https://www.strathmore.edu/academic-intellectual-property-and-artificial-intelligence-receive-copyright-protection/)> accessed on 26 May 2023.

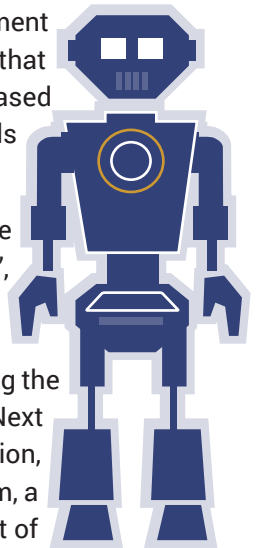
⁶Oxford English Dictionary, Definition of Artificial Intelligence

⁷WIPO Conversation on Intellectual Property (IP) and Artificial Intelligence (AI) – Revised issues paper on Intellectual Property and Artificial Intelligence, 21 May 2020.

for the creation of the work are undertaken'.⁸

AI has been creating works that closely resemble human creations, and continues to improve in this regard. In the past, computer-generated works were typically viewed as creations made exclusively by humans using computers. However, thanks to advancements in machine learning, computers can now make creative decisions independently.⁹ Creative industries are increasingly using AI for creation, including painting, poetry, and music. In 2016, an AI program that wrote a short novel came close to winning a prestigious literary award in Japan.¹⁰ AI-generated art has also ventured into the commercial market, as exemplified by 'Portrait of Edmond Belamy', which sold for approximately \$620,500.00 (AUD) at a Christie's Auction in 2018.¹¹ In early 2019, Warner Music signed the first record label agreement with an AI algorithm, intending to release 20 albums that year.¹² At the Google I/O conference, Onformative showcased 'Meandering River', an art installation with real-time visuals generated by an algorithm and AI-composed music.¹³

In 2016, a group of museums and researchers in the Netherlands unveiled a portrait entitled 'The Next Rembrandt', an artwork autonomously generated by a computer that analyzed thousands of works by the 17th-century Dutch artist Rembrandt Harmenszoon van Rijn.¹⁴ When considering the thresholds that must be met for copyright protection, The Next Rembrandt qualifies as a work eligible for copyright protection, as it is an artistic work, and was reduced into a tangible form, a 3-D print. However, the question arises whether the element of



⁸Gov.UK, 'Consultation outcome, Artificial Intelligence and Intellectual Property: copyright and patents' <[Artificial Intelligence and Intellectual Property: copyright and patents - GOV.UK \(www.gov.uk\)](https://www.gov.uk/artificial-intelligence-and-intellectual-property-copyright-and-patents)> on 21 September 2023.

⁹Guadamuz A, 'Artificial Intelligence and copyright', <[Artificial intelligence and copyright \(wipo.int\)](https://www.wipo.int/artificial-intelligence-and-copyright)> accessed on 26 May 2023.

¹⁰Olewitz C, 'A Japanese A.I. program just wrote a short novel, and it almost won a literary prize' <[Japanese A.I. Writes Novel, Passes First Round for Literary Prize | Digital Trends](https://www.digitaltrends.com/japanese-ai-writes-novel-passes-first-round-for-literary-prize/)> 2016 accessed on 8 May 2016.

¹¹Cohn G, 'AI art at Christie's Sells for \$432,500', <[AI Art at Christie's Sells for \\$432,500 - The New York Times \(nytimes.com\)](https://www.nytimes.com/2018/06/08/arts/design/art-at-christies-sells-for-432500.html)> accessed on 8 June 2023

¹²The Guardian, 'Warner Music signs first ever record deal with an algorithm' <[Warner Music signs first ever record deal with an algorithm | Music | The Guardian](https://www.theguardian.com/music/2019/mar/07/warner-music-signs-first-ever-record-deal-with-an-algorithm)> on 8 June 2023.

¹³onformative <[onformative – Meandering River](https://www.onformative.com/meandering-river)> on 8 June 2023.

¹⁴Andres Guadamuz, 'Artificial intelligence and copyright', WIPO Magazine, October 2017 <https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html#box>

the art being autonomously generated by AI satisfies the originality threshold, which often requires a human author. Different jurisdictions have varying laws regarding whether AI can be recognized as authors and whether AI-generated work can obtain copyright protection.

Different Countries' Laws on Copyright Protection for AI: Authorship

The authorship question in relation to copyright has been interpreted in the famous copyright infringement case of *Naruto v Slater*¹⁵, commonly known as the 'monkey selfie' case where, a monkey took a selfie that was later commercialized by a photographer. An animal rights group sued the man for infringing on the monkey's copyright. The court ruled that works created by a non-human, such as a photograph taken by a monkey, are not copyrightable; consequently, there was no infringement.¹⁶ This ruling can be applied to AI, where the question at hand is whether AI, a non-human entity, can claim authorship of AI-generated works. Different jurisdictions hold differing positions on this matter, as outlined below.



- i** **Europe:** the Court of Justice of the European Union (CJEU) has consistently emphasized, especially in the *Infopaq International A/S v Danske Dagblades Forening* case, that copyright applies exclusively to original works reflecting the 'author's intellectual creation'.¹⁷ This is commonly understood to imply that an original work must reflect the author's personality, which means that a human author is necessary for a copyrighted work to exist.¹⁸ For instance, in Spain and Germany, only works created by a human can be protected by copyright.¹⁹
- ii** **United States:** the US Copyright Office made a declaration that they would only register an original work of authorship if a human being

¹⁵United States Court of Appeal 2018

¹⁶Naruto v Slater, United States Court of Appeal 2018.

¹⁷Case C-5/08; *Infopaq International A/S v Danske Dagblades Forening* < <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:62008CJ0005>>

¹⁸Andres Guadamuz, 'Artificial intelligence and copyright', WIPO Magazine, October 2017 <https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html#box>

¹⁹*ibid.*

created it.²⁰ Additionally, in the case of *Feist Publications v Rural Telephone Service Company, Inc.*²¹ the Court specified that copyright law only protects ‘the fruits of intellectual labour’ that ‘are founded in the creative powers of the mind.’ In the 2023 case of *Thaler v Perlmutter*²², the court found that AI-generated artwork lacks copyright protection.

iii **Australia:** in the case of *Acohs Pty Ltd v Ucorp Pty Ltd*, the court determined that a work created with the involvement of a computer could not receive copyright protection since it was not produced by a human.²³

iv **Kenya:** the Copyright Act defines the author of a work as a person or legal entity that first created it.²⁴ Therefore, it is improbable that AI could be viewed as an author or holder of copyright in a creative work in Kenya.²⁵

v **United Kingdom:** in contrast, the United Kingdom’s law diverges from the above perspectives. It protects computer-generated works, defined as works generated by a computer without human authorship.²⁶ Creative computer-generated works receive copyright protection for 50 years from when it was made,²⁷ which is shorter than the 70-year protection for works solely created by humans.

vi **New Zealand:** the New Zealand’s Copyright Act of 1994 provides for the protection of computer-generated works, with copyright protection

²⁰Compendium of the US Copyright Office Practices, 3rd Edition, 306, <https://copyright.gov/comp3/chap300/ch300-copyrightable-authorship.pdf>.

²¹499 U.S. 340 (1991)

²²Stephen Thaler v. Shira Perlmutter, United States Civil Action No. 22-1564 (BAH). <https://www.documentcloud.org/documents/23919666-thalervperlmutter?responsive=1&title=1>

²³*Acohs Pty Ltd v Ucorp Pty Ltd* [2012] FCAFC 16

²⁴Section 2 of the Copyright Act, 2001.

²⁵See Sections 23, 31, 35, and 45 of the Copyright Act, 2001.

²⁶Section 178, the Copyright, Designs and Patents Act 1988, UK, <https://www.legislation.gov.uk/ukpga/1988/48/contents>; See also UK Gov, ‘Artificial Intelligence and IP. Consultation on copyright and patents legislation’, Published 29 October 2021, <https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents/outcome/artificial-intelligence-and-intellectual-property-copyright-and-patents-government-response-to-consultation#-copyright-in-computer-generated-works>

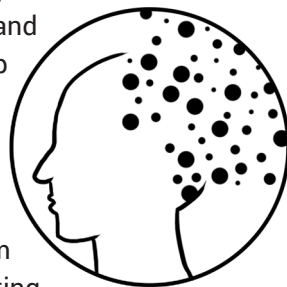
²⁷Section 12(7), the Copyright, Designs and Patents Act 1988, UK.

expiring after 50 years.²⁸ The definition of computer-generated works aligns with that of the UK.

Addressing AI-Generated Works and Copyright Challenges

There are three primary recommendations on how to address the copyright predicament associated with AI.

i Modify existing laws to permit AI to be recognized as authors and owners of creative works.²⁹ There are compelling arguments in favour of acknowledging AI systems as authors of copyright. AI has demonstrated its ability to autonomously generate creative works that possess originality, skill, and even human-like ingenuity.³⁰ Granting authorship and ownership rights to AI acknowledges its creative contribution and creates incentives for further advancements in AI technology.³¹ Arguably, treating AI as an author aligns with the core objectives of copyright law, which aim to foster and protect creativity. Thus, by granting AI the status of an author, copyright laws can effectively adapt to the ever-evolving technological landscape, establishing a fair and comprehensive framework for AI creators. Nonetheless, there are challenges associated with ascertaining liability under this approach.



ii Consider AI as an agent of the principal, typically the person or company responsible for developing the AI.³² This approach considers AI as an agent involved in generating copyrightable content, with the person or companies developing the technology serving as the principal entities.³³ This draws parallels to the

²⁸Section 22, Copyright Act 1994, New Zealand.

²⁹Palace V, 'What if Artificial Intelligence Wrote This: Artificial Intelligence and Copyright Law', Florida Law Review, Vol 71, No. 1, 2019 and Nqavi Zack, 'Artificial Intelligence, Copyright and Copyright Infringement, Marquette Intellectual Property Law Review, Vol 24. No.1, 2020.

³⁰Palace V, 'What if Artificial Intelligence Wrote This: Artificial Intelligence and Copyright Law', Florida Law Review, Vol 71, No. 1, 2019, 223.

³¹*ibid.*

³²*ibid.*

³³Nqavi Zack, 'Artificial Intelligence, Copyright and Copyright Infringement, Marquette Intellectual Property Law Review, Vol 24. No.1, 2020, 234.

concept of 'works made for hire,' where an employee is the author of copyrightable material, but ownership belongs to the employer or the entity that commissioned the work.³⁴ Consequently, if AI generates work, it would be owned by the company or individual responsible for creating the AI. This approach would provide clarity in determining liability for any infringements or torts committed by the AI, placing responsibility on the company or person that developed the AI.³⁵



Place copyrightable material generated by AI directly into the public domain.³⁶ In this approach, neither the AI nor the person or company that created it is granted copyright protection.³⁷ This solution proposes that the absence of copyright for AI-generated works does not hinder incentives and rewards for AI programmers and companies involved in the field.³⁸ The software industry, including AI, thrives on rapid innovation, incremental advancements, and the advantages of being early adopters. Intrinsic motivations and the global race to excel in artificial intelligence, fueled by national pride and policies, ensure continued research and development irrespective of copyright considerations.³⁹ Therefore, allowing immediate entry into the public domain is unlikely to significantly diminish the drive for AI programmers and companies.

Given that the legal framework in Kenya and most countries does not permit copyright protection for AI-generated works, the law has not kept pace with technological advancements and there is a need to introduce legislation or guidelines to address the copyright regulation of AI-generated works. The above recommendations proposed could be adopted. The UK and New Zealand have already introduced the protection of computer-generated work in their law; however, this could be further developed with dedicated law on copyright and AI, encompassing specific definitions, determinations on authorship, ownership and duration of protection.

³⁴*ibid.*

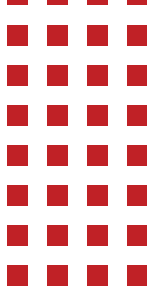
³⁵*ibid.*

³⁶*ibid.*

³⁷*ibid.*, 238.

³⁸*ibid.*, 239.

³⁹*ibid.*



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