
AI-GENERATED WORK AND COPYRIGHT PROTECTION: EXPLORING THE LANDSCAPE OF PROTECTION AVAILABLE IN THE USA, THE EU, INDIA AND CHINA

Shivang Tandon, Faculty of Law, University of Lucknow

ABSTRACT

Originality and authorship have always remained the premise of copyright protection. However, these traditional notions have been challenged by the AI-generated output, as it involves no or minimal human intervention. AI-generated works challenge this foundation by enabling machines to autonomously produce content ranging from literature to visual art. The outcome solely depends upon the prompt given. This raises the issue of copyright protection of the AI-generated content.

Divergent views seem to appear from different jurisdictions, where few are of the opinion that AI should be granted the ownership right, while others believe that AI shouldn't be given ownership. Thereby, it becomes imperative to delve into this debate and find a solution. Rapid progress has been made in the jurisdiction of the United States, the European Union, India and China. The divergent views taken by the Chinese courts are also of the utmost importance. There appears to be an urgent need for international harmonisation by the World Intellectual Property Organisation (WIPO), including differentiating AI-assisted works from fully autonomous AI-generated work in contemporary times. It is also necessary for policymakers to suggest a legal framework that ensures all stakeholders are fairly compensated.

Keywords: Artificial Intelligence, Originality, Authorship, Copyright Protection and WIPO.

“Generative AI is the most powerful tool for creativity that has ever been created. It has the potential to unleash a new era of human innovation.”

---Elon Musk¹

I. INTRODUCTION

In a fast evolving technological era, Artificial Intelligence (Hereinafter ‘AI’) has acquired a centre place as one of the greatest achievement of mankind. AI tools like Gemini, Chat GPT & Grok etc., are easily available, which could be effectively used for generating images, music, art and computer coding etc without involving human intervention or minimal intervention in the form of prompts to be given.

The term “Artificial Intelligence” was originally coined in 1956 by John McCarthy in 1956²; since then, it has undergone immense changes and development. As per the estimates, the UN Trade and Development (UNCTAD) report³ the global AI market will rise to \$4.8 trillion by 2033 in comparison to \$189 billion in 2023, this sums up to a 25-fold increase in just a decade.⁴ This ultimately raises a serious question about the authorship and ownership of the AI-generated work.

The foremost questions is can automated works attract copyright protection? AI has challenged the conventional copyright laws, which recognise the creative endeavours of “human-authorship” only. None of the major international treaties defines the term “originality” nor the level of originality required to secure copyright protection.⁵

This paper examines the evolving intersection of AI-generated works and copyright law, with emphasis on the issue of innovation and the traditional human-centric framework of intellectual property. This paper deals with the issue revolving the AI generated work and its copyright protection, especially in the jurisdiction of the United States of America, the European Union,

¹ Andrew DeLanzo, *Exploring the Power of Generative AI: 10 Key Points*, AI Time Journal (Aug. 6, 2025), <https://www.aitimejournal.com/key-points-in-generative-ai/46011/>.

² John McCarthy et al., A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence (1955).

³ *AI Market Projected to Hit \$4.8 Trillion by 2033, Emerging as Dominant Frontier Technology*, UN Trade and Development (Apr. 7, 2025), <https://unctad.org/news/ai-market-projected-hit-48-trillion-2033-emerging-dominant-frontier-technology>

⁴ *Ibid.*

⁵ M. Thomas, *The Harmonisation of EU Copyright Law: The Originality Standard* (June 29, 2016), <https://ssrn.com/abstract=2802327>

China and India. This paper is divided into four parts. *First* part is the introductory part, *Second* part is related to the conceptual framework of the AI generated work; its meaning and scope, *Third* part makes a comparative analysis of the jurisprudential development in the jurisdiction of the USA, EU, India and, China, *Fourth* i.e., last part is the conclusion.

II. ARTIFICIAL INTELLIGENCE: MEANING AND SCOPE

The term “Artificial Intelligence” was originally coined in 1956 by John McCarthy in 1956⁶; however, till now no standard legal definition exists. It has been defined over a period of time. Philip C. Jackson defined it as “the ability of machines to do things that people would say require intelligence”.⁷ It is the “ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving, and decision making”.⁸ In words of Russ Perlman, “the central goals of AI include reasoning, knowledge, planning, learning, natural language processing (e.g., understanding and speaking languages), perception, and the ability to move and manipulate objects”.⁹ European Commission Communication (2018) report defines¹⁰ “AI refers to systems that display intelligent behaviour by taking action – with some degree of autonomy – to achieve specific goals.” WIPO (World Intellectual Property Organization) has divided AI into three parts – “1) expert systems, 2) perceptions systems and 3) natural systems”.¹¹

Since 1956, humans have gradually entered into the era of AI due to the continuous development of computing technology. In the 21st century, humans have also begun to use AI to engage in creative activities. It is rapidly changing the domain of creativity and has become the main driver of the emerging technologies.

III. GLOBAL DEVELOPMENT

A. *The United States of America*

⁶ M. Thomas, *The Harmonisation of EU Copyright Law: The Originality Standard* (June 29, 2016), <https://ssrn.com/abstract=2802327>.

⁷ Philip C. Jackson, *Introduction to Artificial Intelligence* 1 (Dover Publ’ns, Inc. 1985).

⁸ Sanjivini Raina, Artificial Intelligence through the Prism of Intellectual Property Laws, in *Intellectual Property Rights: Contemporary Developments* 133 (V. K. Ahuja & Archa Vashishtha eds., Thomson Reuters 2020)

⁹ Russ Pearlman, Recognizing Artificial Intelligence (AI) as Authors and Inventors under U.S. Intellectual Property Law, 24 Rich. J.L. & Tech. 4 (2018).

¹⁰ European Commission, *Communication on Artificial Intelligence for Europe*, COM (2018) 237 final (Apr. 2018).

¹¹ World Intellectual Property Organization, WIPO Worldwide Symposium on the Intellectual Property Aspects of Artificial Intelligence (Mar. 25, 1991), https://www.wipo.int/edocs/pubdocs/en/wipo_pub_698.pdf

1. Frame Work In The United States Of America

The issue related to the copyright law in the United States of America is governed by the Copyright Act of 1976¹². It “grants an author an exclusive right to produce his work, not as a special reward, but in order to encourage the production of works that others might reproduce more cheaply”.¹³ This ensures that the work is protected and individuals are further encouraged to take efforts to create original works that might be easily copied.

A copyright “vests initially in the author or authors of the work”¹⁴ and “copyright subsists in original works of authorship”¹⁵. This means an “author gains ‘exclusive rights’ in her work immediately upon the work’s creation”.¹⁶

The Copyright Act does not define the word “author” and has been subject to multiple judicial decisions. The concept of human authorship is an essential requirement of copyright protection. Traditionally, copyright protection is given to the “original work” which presumes the existence of a human creator who would exercise skill and creativity.

In *Feist Publications v. Rural Telephone Service Co*¹⁷, U.S. Supreme Court held that originality requires “independent creation”, “creativity” and “intellectual input”.¹⁸ Copyright protection in United States fundamentally requires human intellectual creativity, in the case *Burrow-Giles Lithographic Co. v. Sarony*¹⁹, established that copyright protection to be granted when photographer (a human being) uses originality and creativity. Similarly, in *Naruto v. Slater*²⁰, where a monkey’s “selfie” was denied protection due to the authorship prerequisite. In *Kelley v. Chicago Park Dist*²¹, it was held that authors, “of copyrightable works must be human”. The author must be a “worldly entity”.²² In addition, the Copyright Office consistently interpreted the word author to mean a human.

¹² Copyright Act of 1976, 17 U.S.C. §§ 101–810 (2018).

¹³ Google LLC v. Oracle America, Inc., 593 U.S. 1, 16 (2021).

¹⁴ Copyright Act of 1976, 17 U.S.C. § 201(a) (2018).

¹⁵ Copyright Act of 1976, 17 U.S.C. § 102(a) (2018).

¹⁶ Fourth Estate Public Benefit Corp. v. Wall-Street.com, LLC, 586 U.S. 296, 300–01 (2019).

¹⁷ 499 U.S. 340 (1991).

¹⁸ *Ibid.*

¹⁹ 111 U.S. 53(1884).

²⁰ 2018 SCC Online US CA 9C 94.

²¹ 635 F.3d 290, 304 (7th Cir. 2011).

²² *Urantia Foundation v. Maaherra*, 114 F.3d 955, 958 (9th Cir. 1997)

2. A Turning Point In Copyright Protection Of AI-Generated Work

In 2023, the US Copyright Office refused to grant protection to the novel ‘Zarya of the Dawn’, which was created using AI by the artist Kristina Kashtanova, because it was not the “fruit of human creation”.²³ However, the office granted copyright for the human-authored text and arrangement of the images.²⁴

The 2025 report²⁵ on copyrightability, the US Copyright Office emphasised that “prompt alone does not provide sufficient human control to make users of an AI system the authors of the output”.

In the case *Thaler v. Permuter*²⁶, Dr. Stephen Thaler, a computer scientist developed a generative artificial intelligence named “creative machine” and with the machine made a picture that Dr. Thaler titled “A Recent Entrance to Paradise”. He submitted the work for copyright registration to the United States Copyright Office and listed the machine as the sole author and himself as the owner of the work.

The application was rejected by the copyright office on the basis of the requirement of ‘human-authorship’. A human being is required to be the author for the copyright registration. Dr. Thaler sought the review of the decision in federal district court and that court affirmed the Copyright Office’s denial of registration, and concluded that “human authorship is a bedrock requirement of copyright”.

Subsequently and appeal was made and the appellate court rejected the content and held that “the creativity machine cannot be the recognized author of a copyrighted work because the Copyright Act of 1976 requires all eligible work to be authored in the first instance by a human being”. It was emphasized that “the human-authorship requirement...eliminates the need to pound a square peg into a textual round hole by attributing unprecedented and mismatched meanings to common words in the Copyright Act”. The court also rejected the argument that the Act’s work-made for hire provisions allow him to be considered the author, holding that

²³ *Copyright and AI-Generated Works: Zarya of the Dawn*, Garrigues (Mar. 16, 2023), https://www.garrigues.com/en_GB/garrigues-digital/copyright-and-ai-generated-works-zarya-dawn

²⁴ *Ibid.*

²⁵ U.S. Copyright Office, *Copyright and Artificial Intelligence, Part 2: Copyrightability* 26–27 (2025), <https://www.copyright.gov/ai/Copyright-and-Artificial-Intelligence-Part-2-Copyrightability-Report.pdf>

²⁶ No. 22-CV-384-1564-BAH.

the human-authorship requires that all “original works of authorship”.

B. EUROPEAN UNION

At present, there no specific law governing the copyright protection of the AI generated work. There is no clarity regarding whether AI tools could be treated as authors of copyright-protected works. The existing copyright law of the EU was adopted prior to the massive surge in the use of AI.

1. Requirement of Human-Centric Approach

In *Infopaq International A/S v. Danske Dagblades Forening*²⁷, European Court of Justice recognized that for the protection of copyright the work should “contain elements which is, in itself, the expression of the intellectual creation of the author of that article” and Article 2(a) of Directive 2001/29²⁸ is liable to apply only in relation to “a subject-matter which is original in the sense that it is its author’s intellectual creation”. Similarly, in *Eva-Maria Painer v Standard Verlags*²⁹ held that “an intellectual creation is an author’s own if it reflects the author’s personality”.

2. Subsequent Developments

The Artificial Intelligence act, 2024³⁰ give a holistic regulatory approach; however, it doesn’t specifically deal with the copyright. These provisions give a transparent framework regarding the training data and incidentally deal with the policies of EU copyright law. General Purpose AI (GPAI) must disclose the details of the contents or data used for training purposes which includes copyrighted works as well. The AI Act is further supplemented by the European Commission’s General-Purpose AI Code of Practice³¹ which requires the developers to ensure lawful access to training materials and avoid the reproduction of the protected works. Though these frameworks aren’t sufficient but undoubtedly it aims to protect againdy the potential infringement.³²

²⁷ *Infopaq International A/S v Danske Dagblades Forening* (Case C-5/08)

²⁸ Directive 2001/29/EC art. 2(a), 2001 O.J. (L 167) 10.

²⁹ (C-145/10) [2012] ECDR 6

³⁰ Artificial Intelligence Act, 2024 (EU AI Act).

³¹ European Commission, *General-Purpose AI Code of Practice* (July 10, 2025), <https://digital-strategy.ec.europa.eu/en/policies/contents-code-gpai>.

³² Bertin Martens, *The European Union Is Still Caught in an AI Copyright Bind*, Bruegel (Sept. 10, 2025),

C. CHINA

On December 24, 2019, the Nanshan District Court in Shenzhen made a judgment, which affirmed the copyright protection to the AI-generated work. The plaintiff, Tencent- developed a writing robot called “Dreamwrite” in 2015. It was used to publish a financial report on its website; the Yingxun company copied and published the whole article on its website. This gave a rise to copyright dispute between Tencent and Yingxun.

The court held that the article, as the final output constituted a literary work as during the formation of the article, the ideas and expressions were originally derived from the human creator’s personalized choice and arrangement. Hence, the process used by the “Dreamwriter” software fulfilled the conditions for protection under copyright law.

In *li v Liu*³³, the Beijing court recognized the copyright protection to a picture titled “Spring Breeze Brings Tenderness” generated through the prompts given to Stable Diffusion, an open source software. The Court noted that the plaintiff had made an intellectual investment which includes “designing the presentation of the character, selecting prompt words, arranging the order of prompt words, setting parameters, and selecting the picture that he wanted”.³⁴ Hence, the element of “intellectual achievement” as required by the Chinese copyright law was fulfilled.

D. INDIA

The principle of human authorship has always remained a fundamental part of the copyright law in India. The Copyright Act, 1957 (Hereinafter as “*Copyright Act*”), protects the “original” works. Section 2(d) defines “author” of the work in relation to “literary, artistic, musical and other categories” which necessarily presupposes a natural person or in some cases, a legal person acting through human agency. In *Rupendra Kashyap v. Jiwan Publishing House Pvt. Ltd.*,³⁵ Delhi High Court held that only “natural persons are eligible to claim copyright”. *Eastern Book Co. v. D.B. Modak*³⁶, the Supreme Court recognized “modicum of creativity” for copyright protection to subsist. The court rejected the “sweat of brow” doctrine.

<https://www.bruegel.org/analysis/european-union-still-caught-ai-copyright-bind>.

³³ Beijing Internet Court Civil Judgment (2023) Jing 0491 Min Chu No. 11279.

³⁴ *Ibid* page 10-11.

³⁵ 1996(38)DRJ81

³⁶ AIR 2008 SC 80.

In 2024, ANI brought the issue of copyright infringement by Open AI before the Delhi High Court. The main point of contention in the case revolves around whether use of literary works and news articles of ANI by the Open AI for training of Large Language Models (Hereinafter referred as “LLMs”) i.e., Chat GPT constitutes copyright infringement or it would be considered as a “fair dealing” under section 52 of the Copyright Act as the existing law doesn’t provide for copyright infringement. In *Super Cassettes Industries v. Chintamani Rao*³⁷, the Delhi High Court held that exceptions engrafted under section 52 are limited and the courts cannot create new exceptions through liberal interpretation i.e. section 52 is exhaustive in nature. This case is sub-judice and would undoubtedly test the existing framework and the “fair use” doctrine.

In 2025, a panel was constituted by the government to examine the AI related issues with the present copyright act. It proposed reforms to recognize “AI-assisted” an “AI generated” works distinctly. It also suggested mandatory disclosures about AI use and adapting ownership norms a similar line to Section 9(3) of the UK’s Copyright Designs and Patents Act 1988.³⁸

A working paper was released by the Department for promotion of Industry and Internal Trade (DPIIT) in 2025, it proposed a “one nation, one license, one payment” model. Thereby suggesting the implementation of a licensing framework based on royalties for using copyrighted works in training datasets.

IV. CONCLUSION

Originality has always been regarded as the core element of copyright protection. From time immemorial, most of the countries have generally adhered to the subjective definition of originality i.e. focusing on the connection between the work and the author. These countries are deemed to be influenced by the labour theory.

A comparative study of the jurisdiction of the U.S and the EU points out that the copyright protection requires “human-authorship”. In the U.S., this has been confirmed by the *Thaler* case, that the copyright protection is available only where a “human contributes original expression”. In the EU, the court of justice has made the requirement of “author’s own

³⁷ 2012 (49) PTC 1 (Del).

³⁸ Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry, *Generative AI and Copyright – Part I (Working Paper)* (Dec. 2025), <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2200741>

intellectual creation” a *sine qua non*, a standard was carried forward in Directive 2019/790/EU that fully autonomous AI output do not satisfy this test. The AI Act and Code of Practice (July 2025) make sure the obligation of the transparency on the developers of general-purpose AI models and require them to respect copyright law.

In a general sense, the U.S. approach is more judicial and administrative in nature whereby emphasis is more on the issue of copyrightability under existing statutes. There appears to be no or minimal effort to alter the framework. By contrast, the EU has tried to integrate copyright questions through the regulatory scheme, embedding them into a comprehensive scheme of AI governance that requires disclosures about “training data” and it is obligatory for the developers to ensure the compliance.

Both the U.S. and EU seek to acknowledge the possibility for AI-assisted works where “humans exercise meaningful creative control”. Both maintain that AI itself cannot be the author, but when human creators use AI as a tool and contribute original expression, their works may still qualify for protection. The precise threshold of human input sufficient to establish authorship remains unsettled, leaving a gray area that demands close monitoring.

In India the issue is still in nascent stage. ANI case pending before the Delhi High Court could be a turning point for the existing copyright law regime. Government has also taken several measures to deal with the issue but AI based technology is still evolving and how numerous challenges would be dealt by the judiciary and government has to be seen.

Chinese courts have constantly recognized AI-generated objects as original works protected by copyright. This makes the whole issue more cumbersome. For a long time, China has also adopted a subjective standard of originality. However, in recent years, Chinese courts have begun to adopt an objective standard of originality.

It is very much evident that the jurisprudential aspect of the copyright protection of the AI-generated content is still in a nascent stage. Divergent views are emerging from the legal and judicial framework of different jurisdictions. The pertinent issues: who is the author of a work generated by AI? Can AI-generated work be protected by the copyright law? Cannot be answered conclusively in spite of attaining such mass level of global attention. The majority of the countries have directly or incidentally given a negative response to these issues, but the Chinese court has remained affirmative in the present scenario and thereby continuing this debate.