
AUTHORSHIP IN THE AGE OF ARTIFICIAL INTELLIGENCE: A CRITICAL ANALYSIS OF COPYRIGHT PROTECTION FOR AI-GENERATED WORKS

Maibram Lisa Devi, LLM, Faculty of Law, University of Delhi.

ABSTRACT

The fast-paced development of artificial intelligence (AI), especially the advancements in generative AI technologies, has led to major disruptions in conventional copyright laws owing to the challenge posed to their fundamental principles of authorship. Traditionally, copyright laws have been based on the assumption of human creativity, originality, and intellectual input in making the works legally protectable. However, the advent of fully autonomous AI-generated works, which are created without much or any human input, raises a plethora of legal issues regarding authorship, ownership, originality, and extent of copyright protection.

This study will examine the applicability and viability of traditional copyright laws in protecting AI-generated works. While conducting a comprehensive comparative analysis of copyright laws in various countries, the focus will be laid on the applicability of copyright laws in India, the Indian copyright regime, specifically. The aim is to analyze the constraints associated with the current doctrinal approach adopted by copyright laws, which continues to rely on the concept of human authorship and excludes full-fledged AI-generated output. It is contended in the paper that the current laws and regulations governing copyright issues are not adequate enough to tackle all the issues related to the application of AI technologies. To counter such problems, a middle ground approach has been suggested which would consider "significant human input" as the criterion for deciding on issues related to authorship and copyright. Thus, under this system, only those literary works created with significant human input can be accorded the protection of copyright whereas any literary creation made entirely without the involvement of humans would fall in the public domain category.

This sort of approach would ensure that technological advancement and innovation are encouraged along with the preservation of the basic concepts of copyright laws.

I. Introduction

The emergence of Artificial Intelligence (AI) has brought about a revolution in the creative industry by allowing the creation of music, literature, art, and software without much or any human involvement.¹ This advancement brings out critical issues in copyright laws that relate to who owns the copyright rights in AI-generated work and whether such work qualifies for copyright protection.

Copyright laws have always operated based on the notion that human minds possess the ability to create through skill, labor, and judgment.² However, generative AI, through learning from huge amounts of data, is now capable of generating outputs that mimic human creativity.³ Such developments put pressure on the foundational concepts of copyright laws, especially the issue of authorship and originality.

The lack of clear statutory guidelines governing AI-generated works makes it difficult to establish legal clarity in this matter. In India, the Copyright Act of 1957 only acknowledges authorship concerning natural persons and, sometimes, juristic persons, thus excluding non-humans.⁴ Moreover, courts in other jurisdictions, especially the US, have made it clear that authorship must come from a human mind.⁵

In light of this, this paper examines the increasing conflict between established copyright law and new developments in the field of AI. The paper seeks to analyze whether the current laws governing copyright are enough to handle issues brought about by AI technology or whether they need to be reformed in light of such issues.

II. The Concept of Authorship under Copyright Law

Authorship forms one of the key pillars of copyright law, because it decides both the source of the right as well as who would be eligible to claim such rights. In terms of the Copyright Act, 1957, “author” means the person by whom the work is created, where certain sections specify the definition of authorship of literary, artistic, and cinematographic works.⁶ Thus, the very

¹ See generally U.S. Copyright Office, *Copyright and Artificial Intelligence* (2023).

² *Eastern Book Co. v. D.B. Modak*, (2008) 1 S.C.C. 1 (India).

³ Dep’t for Promotion of Indus. & Internal Trade, *Generative AI and Copyright Issues* (2025).

⁴ Copyright Act, 1957, § 2(d) (India).

⁵ *Thaler v. Perlmutter*, 687 F. Supp. 3d 140 (D.D.C. 2023).

⁶ Copyright Act, 1957, § 2(d) (India).

concept of an author inherently presumes a role played by humans, along with the element of creativity and mental effort, excluding any form of non-human participation.

It is not only in Indian law that the concept of human participation is considered crucial. Various international instruments of copyright law such as the Berne Convention also make it clear that copyright is extended to literary and artistic works, which are essentially those works that are created as a result of human creativity.⁷

In India, for instance, the issue has been further elucidated through the adoption of a principle of originality, which necessitates the application of human skill and judgment. As observed by the Indian Supreme Court in the landmark case of *Eastern Book Co. v. D.B. Modak*⁸, only those works that display an element of creativity receive protection under copyright laws and cannot rely on the “sweat of the brow” doctrine. It is clear from the above-mentioned cases that human involvement is essential to constitute authorship.

This is because copyright legislation is based on the assumption that humans are responsible for creating their works independently without any machine assistance. However, when it comes to AI systems, especially autonomous ones, which create content without any human intervention, then copyright laws face severe problems since such systems lack the capacity for consciousness, personality, and intent, among other qualities associated with authorship.

Therefore, it can be said that copyright laws find it difficult to accommodate fully autonomous AI systems as authors.

III. Nature of AI-Generated Works

Depending on the extent of human participation in the creative process, AI-generated works may be classified into two main groups. First, there are AI-assisted works the term refers to outputs created through the use of artificial intelligence by human users to assist their own creative activities. Here, humans remain free to decide on selecting, arranging, and editing the content produced by AI systems, thus meeting the criterion of human authorship.⁹

Next, there are AI-generated works, which are produced without any human assistance. Such

⁷ Berne Convention for the Protection of Literary and Artistic Works art. 2, Sept. 9, 1886, as revised.

⁸ *Eastern Book Co. v. D.B. Modak*, (2008) 1 S.C.C. 1 (India).

⁹ Copyright Act, 1957, § 2(d) (India).

AI systems as generative AI models are able to generate texts, images, music, and other creative outputs relying on their training experience. In this case, human input may be reduced to just providing prompts to the system, thus making the concept of human authorship questionable.¹⁰

The differentiation of AI-generated works into AI-assisted and autonomous is important because of the implications for copyright protection. While in the first case the involvement of humans is enough to fit the concept of authorship, the latter presents a real challenge in this respect because of the lack of human authorship. Moreover, AI systems are usually developed using huge volumes of data, which might contain copyrighted information. Using the algorithms of machine learning, the system analyzes and duplicates patterns, styles, and structures of the works from the training database to produce output, which resembles original works very much.¹¹ In turn, such technology triggers complicated legal problems, not only concerning authorship but also involving copyright infringement and illegal use of works protected by copyrights.

Moreover, the probability and iterative nature of creation of AI-generated works make it problematic to apply traditional criteria of originality since the created work does not necessarily display an independent intellectual contribution by its creator.

IV. Legal Status in India

India's copyright legislation is silent on the issue of ownership rights with respect to creations made by AI. Therefore, the situation creates an element of legal uncertainty in light of the emerging technological advances. Under section 3(5) of the Copyright Act of 1957, copyright arises only for "natural" persons and juristic bodies such as corporations.¹² However, non-human creators have not been taken into consideration, and AI systems do not qualify as legal persons entitled to rights or liabilities under Indian law.¹³ Thus, it may be concluded that the concept of authorship cannot be attributed to the machines, which cannot be granted copyrights as per the current legal position.

Indian judicial pronouncements have been consistent in placing importance on human

¹⁰ U.S. Copyright Office, Copyright Registration Guidance: Works Containing AI-Generated Material (2023).

¹¹ World Intell. Prop. Org. (WIPO), WIPO Conversation on Intellectual Property and Artificial Intelligence (2020).

¹² Copyright Act, 1957, § 2(d) (India).

¹³ See generally N.S. Gopalakrishnan & T.G. Agitha, *Principles of Intellectual Property* (2d ed. 2014).

ingenuity in copyright laws. There have not been many direct cases pertaining to copyright claims made in respect of creations by AI systems; nevertheless, some recent instances indicate that Indian courts favor a human-centered approach. In *Raghav Artificial Intelligence vs Union of India*¹⁴, it was reiterated that copyright can arise only with human intellectual labor and creativity, thus implying that machine-generated work falls outside the scope of copyright law.

Additional complexities exist when considering AI training methods. Legal disputes such as *ANI v. OpenAI*¹⁵ in the Delhi High Court have brought into question whether copyrighted content can be used to train an AI model without explicit permission. Such instances have made relevant concerns related to data scraping, fair use or fair dealing, and copyright infringement, thereby widening the scope of investigation to incorporate legal issues relating to AI development in addition to its authorship.

The prevailing academic debate in India is consistent with the idea that purely AI-generated products are not eligible for copyright protection in the absence of significant human contribution.¹⁶ The reasoning behind this line of thought is that minor contributions to training models, like prompt inputs, may not be sufficient to meet the standard of originality established by Indian law.

Thus, the current legal stance in India can be briefly stated as follows:

Artificial intelligence programs are not eligible for copyright protection as authors;

A certain level of human creativity and contribution must be proven for copyright protection;
and

Legal uncertainty persists concerning the copyright eligibility of AI-generated products.

Such legal uncertainty has created an exigency for further legislation or judicial decisions to resolve the difficulties associated with artificial intelligence in copyright.

V. Major Legal Challenges

The advent of AI-generated works has led to several significant legal challenges that cannot be

¹⁴ *Raghav Artificial Intelligence v. Union of India*, (2024) (India).

¹⁵ *ANI v. OpenAI*, Delhi High Court (pending).

¹⁶ See Arul George Scaria, *Artificial Intelligence and Copyright Law in India* (2023).

easily managed by current copyright laws. In particular, the issues revolve around authorship, originality, ownership, and liability, all of which form the cornerstone of copyright law.

1. Authorship

First and foremost, there is the question of the identity of the author of AI-generated works. Copyright law relies on the premise that there is always a human author who retains intellectual control over the creation. In the case of AI-generated works, however, there may be numerous claimants for authorship. First, it could be AI developers who develop and maintain the system, next, it can be the user providing prompts for the generation, and lastly, the works from which training data have been created.¹⁷ At the same time, it is questionable whether any of these parties qualifies as an author since they may not necessarily exercise direct creative control over the end result.

2. Originality

Originality is a crucial criterion for copyright ability and is essentially seen as a result of a human's intellectual labor using skill, efforts, and judgment.¹⁸ However, works generated by AI do not meet this criteria since they are created using algorithmic and probability-based techniques. Whereas some researchers call for expanding the idea of originality beyond human intellect to include machine-generated creativity, others state that it would weaken the essence of the concept as the basis of copyright laws.¹⁹ The lack of a standard definition of originality makes the problem even more complicated.

3. Ownership

The lack of clear ownership of AI-generated work can create a difficult situation even when there is no controversy about who the author of a creation is. In particular, there might be disputes between the developer of the system itself, a person who starts the process of its usage, and the owner of the program used to create a work.²⁰ The Copyright Act, 1957, is silent on the topic and fails to address the problem adequately.

¹⁷ World Intell. Prop. Org. (WIPO), WIPO Conversation on Intellectual Property and Artificial Intelligence (2020).

¹⁸ Eastern Book Co. v. D.B. Modak, (2008) 1 S.C.C. 1 (India).

¹⁹ U.S. Copyright Office, Copyright and Artificial Intelligence (2023).

²⁰ Copyright Act, 1957 (India).

4. Liability

The problem of infringement liability is another significant problem related to AI-generated works. The fact is that AI tools are normally trained using huge amounts of data, including copyrighted materials, making it possible for outputs to reproduce or closely mimic some of these protected works.²¹ As can be seen, it is rather difficult to establish liability in such situations, as it is uncertain whom exactly should be held liable—developers of AI technologies, consumers, or those intermediaries who make these technologies available.

IX. Need for Legal Reform

Given the fast-paced growth in the field of AI technology, it becomes imperative to reassess the existing copyright regime in India. Although the Copyright Act, 1957, has worked well in terms of safeguarding the creative works produced by humans, it fails to meet the requirements of AI-generated works.²² The lack of explicit statutory laws on such works leaves room for ambiguity, especially concerning authorship, ownership, and liabilities.

It is essential that reforms be made in the existing copyright law to resolve these issues. An immediate action that can be taken by the legislature is to come up with a statute that defines AI-generated works and differentiates them from those assisted by AI. This would help provide more doctrinal clarity to courts when dealing with AI-generated works.²³ In addition, legislation needs to provide guidelines regarding ownership in cases of AI systems where multiple parties have been involved in the generation of the work, such as the developer, user, and platform provider.

Yet another important sphere that needs to be addressed via legal reforms is that of liability. Due to the fact that AI programs are usually trained on materials protected by copyright, it becomes imperative to set down rules of liability in case infringement occurs, which could include the developers, users, and third parties who use or facilitate the use of an AI program.²⁴

Moreover, the laws must take into account the phenomenon of AI-assisted creativity and

²¹ See generally Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. Pitt. L. Rev. 1185 (1986).

²² Copyright Act, 1957 (India).

²³ World Intell. Prop. Org. (WIPO), *WIPO Conversation on Intellectual Property and Artificial Intelligence* (2020).

²⁴ U.S. Copyright Office, *Copyright and Artificial Intelligence* (2023).

provide for the protection of such works that require human contribution. While being cautious in protecting all works generated through the help of AI technology, it is necessary to bear in mind the basic requirement that any work must originate from a person the author of a creative work.

It would not necessarily be appropriate to introduce special legal categories for AI-generated content. Rather, an effort can be made in the direction of the flexible interpretation of already established notions in copyright law, which will facilitate the adaptation of current law to the changes taking place in technology.

X. Conclusion

The works generated by AI technologies pose a threat to the fundamentals of copyright laws, especially in terms of authorship and originality. The existing legal systems, whether in India or internationally, fail to keep up with AI technology as they were designed to cover creations of human nature only.

This paper contends that copyright should remain limited to human creations. This can be achieved through using the criterion of significant human input which provides a reasonable compromise between protecting the works created with the use of AI and those that are generated by AI itself.

As AI technology advances further, copyright legislation will have to be updated accordingly without jeopardizing its basic concepts.