

INTERNATIONAL JOURNAL OF LAW MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

Volume 7 | Issue 2

2024

© 2024 *International Journal of Law Management & Humanities*

Follow this and additional works at: <https://www.ijlmh.com/>

Under the aegis of VidhiAagaz – Inking Your Brain (<https://www.vidhiaagaz.com/>)

This article is brought to you for “free” and “open access” by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in the International Journal of Law Management & Humanities after due review.

In case of **any suggestions or complaints**, kindly contact Gyan@vidhiaagaz.com.

To submit your Manuscript for Publication in the **International Journal of Law Management & Humanities**, kindly email your Manuscript to submission@ijlmh.com.

Technologies and Traditional Laws: Interrogating the Nexus of Generative AI and IPR in Indian and U.S.A Context

ESHITA GUPTA¹

ABSTRACT

The growing incorporation of Artificial Intelligence (AI) into creative processes has sparked significant inquiries regarding intellectual property rights (IPR). This paper explores the intricate relationship between generative AI and IPR, specifically examining copyright laws and use of copyrighted data for training AI models. By conducting a thorough analysis of legal frameworks in the United States and India, we explore the contrasting approaches to safeguarding AI-generated works and the obstacles presented by the use of copyrighted material in AI training. In addition, we delve into the impact of these legal uncertainties on the advancement and effectiveness of AI models. Our study seeks to offer a thorough grasp of the legal and ethical aspects of this ever-changing field.

Keywords: Generative, Artificial, Intelligence, AI, US, India, HC.

I. INTRODUCTION

The global recognition of AI's substantial influence in the realm of creativity and invention is widely accepted. Copyright, patents, designs, and trade secrets are just a few areas of intellectual property rights (IPRs) that have been significantly impacted by the rise of artificial intelligence (AI) in the creative business. Music, blogs, novels, poetry, paintings, and drawings can all be produced by artificial intelligence. Having said that, it's crucial to differentiate between works that are composed by humans with the help of AI and those that are entirely produced by AI. The proliferation of AI-generated works has caused copyright laws, which traditionally safeguard only human-created originals, to be rethought. The question this begs is whether human-provided input signals for AI qualify as "creative interventions" requiring copyright protection.² Understanding the inner workings of generative AI systems is essential for properly grasping the complexities of this issue.³ Despite the common belief that AI tools effortlessly generate new content, these platforms actually depend on extensive collections of data. Through the use of software processing, they analyze a vast array of factors, finding patterns and

¹ Author is a student at Amity University, Amity Law School, NOIDA, India.

² Casanovas, Pompeu, Mustafa Hashmi, and Marta Poblet. "Generative AI and the Rule of Law." (2022).

³ Ibid.

correlations that are then used to construct rules and make decisions in response to prompts. Although this groundbreaking procedure allows for exploration of uncharted territories in terms of creativity, it also brings about legal vulnerabilities, particularly with regards to the violation of intellectual property rights. Moreover, significant legal inquiries remain unresolved. Does the violation of copyright, patent, or trademark laws apply to creations generated by artificial intelligence? It is also very difficult to ascertain who exactly owns the content that generative AI systems create.⁴

The issue of whether generative AI, whether it involves human participation or not, should be eligible for copyright protection is complex and has several aspects to consider. In the next parts, we will comprehensively analyze the legal and ethical aspects of this matter, meticulously evaluating the consequences for both artists and society at large. Our goal is to provide a thorough comprehension of the copyright challenges presented by the increasing use of generative AI and encourage future research in this burgeoning field.

(A) Significance of Research paper

This research paper aims to fill a significant knowledge gap regarding the relationship between generative AI and intellectual property rights (IPR), specifically focusing on copyright laws and the use of copyrighted data to train AI models. The paper explores the different methods used in the United States and India to protect AI-generated works and the difficulties posed by copyright limitations in AI training. This study's findings have significant implications for policymakers, legal practitioners, AI researchers, and content creators. They offer valuable insights into the legal and ethical aspects of AI innovation.

(B) Research Question

The central question driving this research paper is: “How do copyright laws and the use of copyrighted data for training AI models intersect with generative AI, and what are the legal and ethical implications of these intersections, particularly in the contexts of the United States and India?”

(C) Research Objectives

- Examining the legal frameworks in United States and India concerning the treatment of AI-generated works under copyright law.

⁴ J Smits & T Borghuis, “Generative AI and intellectual property rights. In Law and artificial intelligence: regulating AI and applying ai in legal practice” 323-344 (*TMC Asser Press*, 2022).

- Exploring the legal and ethical considerations surrounding the utilization of copyrighted data for AI model training, with a specific emphasis on the principles of fair use and copyright exceptions.
- To evaluate the influence of copyright limitations on the progress and efficiency of AI models in both jurisdictions.
- To provide suggestions for policymakers, legal practitioners, and stakeholders in tackling the issues arising from copyright limitations in AI innovation and maintaining a fair approach to protecting intellectual property rights in the age of generative AI.

(D) Research Hypothesis

The hypothesis indicates that the complex legal issues related to copyright restrictions in AI training pose considerable obstacles for innovation and ethical adherence, especially when dealing with the convergence of generative AI and IPR in the United States and India.

(E) Research Method

The research methodology utilized in this study is a doctrinal analysis, which entails a methodical examination of legal principles, statutes, case law, and other legal literature pertaining to the convergence of generative AI and intellectual property rights (IPR), with a particular emphasis on copyright laws. The data collection for this analysis involved a thorough examination of primary legal sources, which included statutes and case law, as well as secondary sources like legal commentaries and scholarly articles. By conducting a thorough examination of these legal documents, significant legal principles, explanations, and past cases concerning generative AI and copyright law were identified and organized.

II. EXAMINING THE ROLE OF GENERATIVE AI WITHIN CONTEMPORARY LEGAL FRAMEWORKS

In the field of law, there are two main approaches that are commonly used to address the issue of how generative artificial intelligence (AI) should be treated in terms of copyright. One viewpoint categorically dismisses the notion of copyright protection, whilst the other attributes authorship to the human responsible for creating the machine.

A substantial chunk of the Western world predominantly adopts the first method. For example, the US CO clearly states that it will only provide registration to a distinct piece of creative work if it was created by a person. In *Infopaq International A/S v. Danske Dagbaldes Forening*⁵, the

⁵ C-5/08/2009.

ECJ determined that only works that demonstrate the author's unique creative contribution are eligible for copyright protection. Legal academics have construed this to indicate that a copyright work must possess a human author in order to be in existence. On the other hand, several regions, like India, have opted to use the second method. As per Sec 2(d)(vi) of Copyright Act, an “author” is defined as the person who is accountable for producing a computer-generated literary, dramatic, musical, or artistic work. Nevertheless, the precise meaning of this phrase is still not well-defined in India. The Indian Copyright Office turned down a claim that artificial intelligence (RAGHAV) was the only creator of a work of art in a noteworthy case in 2020. An application that included RAGHAV, an AI, and a human as co-authors was subsequently approved by the Copyright Office. Nevertheless, a notification of withdrawal was delivered not long after. The petitioner is now waiting for a decision on their appeal after challenging the withdrawal notice. Furthermore, there are clear fundamental problems that have not been addressed, especially in the context of India. The issue of who is legally responsible for the creation of the work—the creator of the AI program or the person using it—begs to be answered.⁶

III. COPYRIGHT OF AI GENERATED DATA

Could works created by AI be eligible for copyright protection? This is an issue that differs from one country to another. Artifacts produced only by an automated apparatus are not qualified for copyright protection in the United States. However, if there is undeniable proof of substantial human contribution, copyright protection may be relevant. The Copyright Act, 1957 in India was amended in 1994 to particularly “address the creation of computer-generated literary, dramatic, musical, or creative works.” Sec 2(d)(vi) was implemented to clarify that authors of “computer-generated works” are considered to be “the individual who is responsible for the creation of the work.” The future of AI's ability to create written works depends on how we understand the term “person” in this definition. The HC’s of Delhi's ruling in *Rupendra Kashyap v. Jiwan Publishing House Pvt. Ltd*⁷ exemplifies a conventional approach within Indian legal system. Because of its status as an official institution, the Central Board of Secondary Education (CBSE) cannot claim copyright without evidence of individual involvement in the creation of the examination papers, according to the court's ruling. Authorship claims must be made by persons in accordance with Indian copyright law. The

⁶ Abhinav Shrivastava and Rahika Jalan, “THE COPYRIGHT CONUNDRUM: EXPLORING THE IMPACT OF GENERATIVE AI ON INTELLECTUAL PROPERTY RIGHTS” (June 1, 2023) <https://gslc.in/the-copyright-conundrum-exploring-the-impact-of-generative-ai-on-intellectual-property-rights/> March 25, 2024.

⁷ 1996(38)DRJ81.

position was reiterated in *Tech Plus Media Private Ltd. v. Jyoti Janda*⁸, wherein the court ruled that a juristic person, despite being the copyright owner, cannot be considered as the author. The HC of Delhi affirmed this interpretation in 2019 in *Navigators Logistics Ltd. v. Kashif Qureshi*⁹. The court ruled that a computer-generated list did not qualify for copyright protection since it did not include any human participation, therefore rejecting the claim. Since AI does not have a right to sole authorship, the situation in India is consistent with the US approach.

IV. PERMISSIBILITY OF EMPLOYING COPYRIGHTED DATA FOR TRAINING AI MODELS

The use of data to build these models is one of the most important problems in the fields of AI and copyright. A lot of the time, large datasets from the internet are used to teach AI systems. These datasets contain a lot of different types of material, like text, code, and pictures. The fair use law is often used to defend the use of protected material by AI experts, companies, and tech giants, especially in the US. Fair use is meant to encourage the use of protected works so that people can express themselves more freely. Although it is possible, it is not always easy to tell the difference between fair use and unfair use. A number of factors, including the nature of the input, the goal, and the desired result, can have different effects on legal decisions.

Section 52 of the Indian Copyright Act of 1957 lays forth a number of defenses or exceptions that have already been created in relation to copyright infringement. The narrow reach of existing laws makes it risky to grant AI entities intellectual property rights, which might result in copyright infringements. Infringement may only be committed by a "person" according to Section 51 of the Copyright Act. Each case's unique facts and legal considerations make determining fair usage an intricate and nuanced process. In the context of artificial intelligence (AI), the problem is worse since there is no established legal precedent that recognises the fair use of copyrighted data for AI training. When it comes to training AI models, the lack of confidence is a major factor. The development and operation of large-scale AI models would be severely disrupted if courts determined that copyrighted information cannot be used for training purposes. Important ramifications may arise for individuals whose images or other materials were used in the training process if the courts decide that these models can be trained on any data, regardless of copyright status.¹⁰

⁸ (2014) 60 PTC 121.

⁹ (2018) 76 PTC 564.

¹⁰ Sandiumenge Torres, I.Y. (2023) "Copyright implications of the use of generative AI".

V. CASE STUDY

The idea for *1 the Road* came from Ross Goodwin's master's thesis at New York University. He looked into the idea of a car writing a novel because he was interested in machine learning and creativity. Goodwin used an algorithm made up of Long Short Term Memory Neural Networks to make "weird associative poetry." This idea came from his project *Narrated Reality*. Google's Artists and Machine Intelligence Project saw this success and gave him money to start his next project, *1 the Road*.¹¹

Goodwin chose not to train the algorithm on works by Jack Kerouac or other Beatnik authors when writing *1 the Road* so as not to be too derivative. Instead, he put together a set of different writings, including poetry, science fiction, and "bleak" writing, along with suggestions from a Polish painter he admired. This set of twenty million words helped Goodwin get the voice and tone she wanted for the book.

Goodwin used both qualitative evaluation and statistical analysis to make sure that the algorithm's results were correct. He saved some of the training data as validation data and used statistics to check how similar the outputs were to this data. After training was over, Goodwin put GPS, clock, camera, and microphone sensors in a car and drove 1,000 miles from Brooklyn to New Orleans. The car sent information like latitude and longitude coordinates, pictures, and conversations between passengers. An algorithm turned this information into text, which was then printed on rolls of receipt paper in real time.

For India, the legal effects of such a project would have been important to note. India and the US both have copyright laws that protect original creative works. This makes people wonder who wrote and owns content that is generated by AI. Also, using copyrighted material to train the algorithm could have caused arguments about what is legal and what is not legal under Indian copyright law. Given that India's AI landscape is growing and its laws are changing, it would have been useful to look into generative AI and intellectual property rights in this setting.

VI. SUGGESTIONS

- By changing copyright laws, policymakers can give people the clarity and direction they need to deal with the complicated problems that generative AI brings up. It would be better if there were clearer rules about which AI-generated works should be protected by copyright and which uses of copyrighted data in AI training are okay. This could mean laying out the rules for who owns content made by AI and making sure that

¹¹ "Brian Merchant, When an AI Goes Full Jack Kerouac, *THE ATLANTIC*, Oct. 1, 2018, <https://www.theatlantic.com/technology/archive/2018/10/automated-on-the-road/571345/>."

copyright violations aren't as common in situations where AI is being used to make big changes. To make sure that the new copyright laws promote innovation while also protecting intellectual property rights, policymakers should hold thorough consultations with people in the legal, technological, and creative fields.

- Because AI technology is changing so quickly, lawyers need to keep up with the latest changes in both AI and intellectual property law. This means staying up to date on new AI uses, improvements to machine learning algorithms, and changing legal precedents for using AI-generated content and data. By staying up to date, lawyers can help their clients understand how new AI technologies affect the law and how to handle difficult legal issues that may come up. Lawyers can learn more about AI technology and how it affects intellectual property law by taking part in continuing education programs, specialized training workshops, and working with AI experts.
- When working on AI projects, researchers and developers need to make sure that they follow intellectual property laws and think about what is right and wrong. To do this, strong data screening protocols must be used to find and remove copyrighted content from AI training datasets. It is also important to get the right licenses to use copyrighted data and respect the intellectual property rights of content creators. Researchers and developers of AI can build trust in the community and help the responsible progress of AI technology by following ethical standards and legal requirements.
- People who work for the government, the law, AI researchers, and content creators need to work together to make comprehensive frameworks that balance innovation with intellectual property protection in the age of generative AI. Stakeholders can share what they know, the best ways to do things, and come up with ways to deal with the complicated problems that AI technology brings up if they work together. This group effort should include regular talks, research projects involving people from different fields, and the creation of task forces or working groups whose sole purpose is to look into legal and moral issues related to AI. Finally, stakeholders can help make frameworks that support responsible AI innovation while protecting intellectual property rights by sharing their knowledge and resources. These frameworks should be effective and open to everyone.

VII. CONCLUSION

Ultimately, the intersection of generative AI and intellectual property rights poses a challenging and intricate terrain that demands thoughtful deliberation from policymakers, legal

professionals, AI experts, and content producers. This study has provided valuable insights into the complex connection between AI innovation and copyright laws. It specifically examines the difficulties presented by AI-generated works and the utilization of copyrighted data for AI training. By examining legal frameworks in the United States and India, we have delved into different approaches to protecting AI-generated works and the legal ambiguities surrounding the use of copyrighted material in AI development. In contrast to the United States, India's legal framework acknowledges the importance of attributing authorship to the individual who created the AI-generated work, even if it involves copyright protection. Nevertheless, there are still uncertainties and difficulties in both jurisdictions that require additional scrutiny and explanation.

In addition, the use of copyrighted data for training AI models raises important ethical and legal concerns, which have implications for innovation and intellectual property rights. Clear guidelines and established legal precedents are needed to address the challenges faced by AI researchers and developers in navigating copyright restrictions while pushing the boundaries of AI technology.

VIII. BIBLIOGRAPHY

- Casanovas, Pompeu, Mustafa Hashmi, and Marta Poblet. "Generative AI and the Rule of Law." (2022).
- Smits, J., & Borghuis, T. (2022). Generative AI and intellectual property rights. In *Law and artificial intelligence: regulating AI and applying ai in legal practice* (pp. 323-344). The Hague: TMC Asser Press.
- Abhinav Shrivastava and Rahika Jalan, "THE COPYRIGHT CONUNDRUM: EXPLORING THE IMPACT OF GENERATIVE AI ON INTELLECTUAL PROPERTY RIGHTS" (June 1, 2023) <https://gslc.in/the-copyright-conundrum-exploring-the-impact-of-generative-ai-on-intellectual-property-rights/> March 25, 2024.
- Sandiumenge Torres, I.Y. (2023) "Copyright implications of the use of generative AI".
- Brian Merchant, When an AI Goes Full Jack Kerouac, *THE ATLANTIC*, Oct. 1, 2018, <https://www.theatlantic.com/technology/archive/2018/10/automated-on-the-road/571345/>.
