
REGULATING GENERATIVE AI: SOLVING THE COPYRIGHT CONUNDRUM IN INDIA

Ms. Parnika Basak & Mr. Kaustav Chowdhury, Kalinga Institute of Industrial Technology
(Deemed to be) University, School of Law, Bhubaneswar

ABSTRACT

The rapid evolution of generative artificial intelligence (AI) technology has fundamentally altered the concept of copyright law by upsetting established concepts of authorship, originality, and infringement. Copyright law in India, developed on the understanding of human creativity, fails to deal with the issues of AI outputs and the mass use of copyrighted material for training AI. This essay posits that rather than destroying Indian copyright law altogether, the law should be reworked in a doctrinal fashion. A human-centric test for authorship, an adapted test for output infringement, and a well-defined text-and-data-mining exception should form part of such an effort.

By doing so, the paper draws a distinction between the training process of a generative AI system and its output process to analyze whether doctrines like reproduction, adaptation, and fair dealing in the Indian Copyright Act, 1957 are adequate enough to resolve the arising issues. Further, the developments that have taken place in the US and the European Union will also be analyzed to understand where the issue stands on a global level. The paper emphasizes the need for striking a balance in the reform by keeping in mind fundamental constitutional concepts like freedom of expression and proportionality.

Keywords: Generative AI, Copyright Law, Artificial Intelligence, Intellectual Property Rights, AI-Generated Content, Copyright Infringement, Authorship, India, Technology Regulation, Machine Learning.

Introduction

“Robots cannot be sued, but they can cause devastating damage”- Judge A. Leon Higginbotham Jr.

The generative AI systems now generate text, images, audio, music, and audio-visual works¹, which are on par with the works created by humans. It raises the most fundamental concerns about copyright law, such as who is the author of AI-created works, whether there is fulfilment of the condition of originality, if there is any infringement of copyrighted works used for training AI, and if liability arises when the output of AI matches protected work.

Such issues do not merely concern technology but go deeper into the core of copyright laws, as this branch has always relied on human creativity, morality, and responsibility. The stance of US Copyright Office and Federal Courts not to grant authorship to AI systems like DABUS is indicative of such an approach to copyright law.² The same issues might emerge in India as well.

The requirement of human authorship is not limited to the United States. In *Naruto v. Slater*³, the Ninth Circuit affirmed that a non-human being a macaque could not be accorded standing under the Copyright Act as copyright implies human agency. Likewise, in *Thaler v. Comptroller-General of Patents (2023)*⁴, the UK Supreme Court declined to accept the idea of an AI as an inventor in patent law. All these cases highlight the wider judicial trend of keeping the intellectual property regime based on human legal personality.

This paper contends that Indian copyright law must stay rooted in its anthropocentric origins while making necessary changes to its doctrines considering technological developments. Instead of conferring authorship status to machines, the Indian legislature should develop more stringent criteria for originality and apply adaptation principles to AI-generated works.

This paper argues that the copyright theory applicable to adaptations and derivative works is a better starting point when analyzing the AI outputs in comparison with the exclusive use of the

¹OECD, OECD, *Generative AI in the Workplace* (2024); World Intellectual Property Organization AI/IP Issue Paper

² *Thaler v. Perlmutter*, 687 F. Supp. 3d 140 (D.D.C. 2023)

³ *Naruto v. Slater*, 888 F.3d 418 (9th Cir. 2018)

⁴ *Thaler v. Comptroller-Gen. of Patents, Designs & Trade Marks* [2023] UKSC 49 (appeal taken from Eng.)

reproduction right⁵. As opposed to the reproduction right which mostly deals with direct copying, the adaptation right considers if the subsequent work adopts the expressive features of the previous work through transformation and modification. Thus, it serves as a theoretical foundation for analyzing the outputs of AI systems without having to reconstruct their technical structure and establish the occurrence of a traditional act of copying.⁶ The right to adaptation set out in Section 14 acknowledges the possibility that an infringement might be based on transformation as opposed to duplication.⁷ Comparative research has shown that lawsuits involving generative AI technology are more effectively handled using derivative works analysis as opposed to reproductions since AI does not copy in its operations but uses elements of copyrighted expression in its transformations.

Expanding upon this premise, the article introduces an output-based approach that would focus on assessing whether an output produced by the use of artificial intelligence has a clear and significant association with the protected expression of the copyrighted work. Such an approach allows for differentiating between the problem associated with training an artificial intelligence with respect to its legality and the assessment of the output, taking into consideration that the scope of protection under copyright law extends not only to exact reproduction but also economically significant appropriation of creative expression⁸. Further, the author maintains that any attempt to extend the doctrine of adaptation to works generated by artificial intelligence should include the assessment of substitution and potential harm to the economic interest of copyright owners.

At the same time, the author stresses that expansion of output-based copyright protection needs to be combined with limitations and exceptions, which should be clearly developed. The excessive expansion of the adaptation right would create barriers for legitimate creative activity and transformation, which will have a negative impact on the overall purpose of the copyright regime.

Through the reanalysis of the adaptation right in the light of generative artificial intelligence, the present paper aims to add to the current interdisciplinary discussions surrounding AI

⁵ Margaret A. Boden, *AI: Its Nature and Future*

⁶ Christophe Geiger, *Elaborating a Human Rights-Friendly Copyright Framework for Generative AI*, 55 *Int'l Rev. Intell. Prop. & Competition L.* 1129 (2024).

⁷ Copyright Act, 1957, No. 14 of 1957, § 14(a)(vi) (India)

⁸ Orit Fischman-Afori, *Generative AI Art and Copyright Governance: Rethinking the Adaptation Right and Its Limits*, *Hum. & Soc. Sci. Commc'ns* (2026).

governance and copyright law. This article illustrates how well-known principles of copyright law can be applied in order to regulate new practices of cultural production through AI while maintaining balance.

Originality, Idea-Expression and Human Rights Basis of Copyright Law in the Age of Generative AI

Originality is the basic threshold of copyright law. It is the primary test a creation must undergo for any claim of copyright ownership, infringement, and adaptation to be made. In light of generative artificial intelligence, the concept of originality takes paramount importance since it decides whether creations generated by AI qualify for copyright protection in light of the prevailing norms of copyright laws. Here, it is not just the question of statutory interpretation but the maintenance of the human-centric basis of copyright.

Section 13⁹ of the Indian Copyright Act, 1957 provides protection only to “original” literary, dramatic, musical, and artistic works. Even though there is no definition of originality under the Act, case law is quite clear on the matter. In *Eastern Book Company v. D.B. Modak* (2008)¹⁰, the Supreme Court of India explicitly repudiated the “sweat of the brow” test and applied an originality test where a creation must have a “minimum level of novelty and creativity, with an element of exercise of skill and judgment”. The rationale of EBC in *D.B. Modak* flows from precedents like *Feist Publications v. Rural Telephone Service Co.*¹¹ (U.S.) where simple hard work was considered insufficient to qualify for copyright protection. The Indian courts are converging on this standard of minimal creativity that favours intellectual input over manual labour. It is particularly important for the AI debate since algorithmic works can repeat structure without making an intellectual decision.

The new doctrine places Indian jurisprudence in harmony with international trends, such as that of the European Union and its principle of “intellectual creation of the author,”¹² as well as the Canadian “skill and judgment” doctrine¹³. In all cases, originality is based on human intellectual intervention. It is neither an innovation in the sense of a patent, nor work in the

⁹ The Copyright Act, No. 14 of 1957, § 13 (India)

¹⁰ *Eastern Book Co. v. D.B. Modak*, (2008) 1 S.C.C. 1.

¹¹ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991)

¹² *Case C-5/08, Infopaq Int'l A/S v. Danske Dagblades Forening*, 2009 E.C.R. I-6569

¹³ *CCH Can. Ltd. v. Law Soc'y of Upper Can.*, 2004 SCC 13, [2004] 1 S.C.R. 339 (Can.)

sense of labour; it is human cognitive intervention reflected in expression.

With generative AI, the notion of originality is called into question. Generative AI produces output by way of statistical models, probabilistic predictions, and recognition of patterns. However, this process does not involve deliberation, imagination, or intention of the kind that is human. Even if the product may be perceived as creative, there is no subjective judgment or aesthetic awareness involved.

According to some authors, the originality criterion must be judged based on the end product itself and nothing else, regardless of the mode through which it is created. But in India, there is no separation of originality from human intelligence. The "skill and judgment" test as enunciated in *Eastern Book Company v. D.B. Modak*¹⁴ implies an active role of human intelligence in the creation of the work. In cases where the end product has been created autonomously by the software, the rationale of originality gets lost.

This difference between AI-enabled and AI-autonomous creations is important as it allows us to distinguish between situations where the contribution of human in the process of creation is significant. This means that human has to craft the prompts to use for generating the AI output, select the outputs among the several possible options, refine the expression used and apply his/her aesthetic judgment. In such situation, AI only acts as a tool similar to camera or editing software.

The necessity to retain the doctrine of human effort is more than just a doctrinal concern; it is an absolute requirement. The copyright regime is well entrenched in the international human rights regime. Article 27(2) of the Universal Declaration of Human Rights¹⁵ states that:

“Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.”

This stipulation necessarily assumes that the author is human. The moral and material rights that are afforded by international laws belong to individuals who have the ability to maintain dignity and reputation. They even have financial needs. An artificial intelligence does not have

¹⁴ Id. at 24

¹⁵ Universal Declaration of Human Rights art. 27(2), G.A. Res. 217 (III) A, U.N. Doc. A/RES/217(III) (Dec. 10, 1948)

the right to moral protection and cannot suffer from an attack to its reputation.

While at the same time, according to Article 27(1) of the UDHR¹⁶:

“Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.”

This twin approach of protection and participation represents the very essence of the balance of copyright law. Generative AI stands at the crossroads of these two principles. Overzealous regulation of AI creations may hinder society’s access to the fruits of scientific development. On the other hand, unregulated use of copyrighted works by means of AI technologies may harm the economic interests of the author. The criterion of originality serves as a mediator here.

Another crucial principle of copyright is the idea-expression dichotomy that is linked with the notion of originality. Ideas cannot be copyrighted, but their expression can be. This means that all the abstract elements of a work remain in the public domain. As far as India is concerned, in *R.G. Anand v. Deluxe Films*¹⁷ the Indian Supreme Court stated that copyright does not extend to the idea, subject matter or the theme of any work. Idea-expression dichotomy has also been reconfirmed in *Baker v. Selden*¹⁸, where the United States Supreme Court has established that systems and methods could not be monopolized by copyrighting their expression. In the case of AI, the doctrine becomes all the more crucial. Once courts start protecting artistic “style” or “method”, the idea-expression distinction would cease to exist altogether and copyright would overstep its limits.

The issue of idea-expression dichotomy takes on even greater significance in the context of generative AI systems. Often, these systems generate creative works “in the style of” certain creators. However, as noted above, style cannot be protected by copyright law since it is not fixed expression but rather the vocabulary of artists. Therefore, treating stylistic similarities as an instance of copyright violation would mean that copyright law will cover more than just expression itself that it will protect abstract aesthetic techniques. This approach will run counter both to doctrinal purity and Article 27(1) right of everyone to participate in cultural life of the

¹⁶ Id. art. 27(1)

¹⁷ *R.G. Anand v. Deluxe Films*, (1978) 4 S.C.C. 118.

¹⁸ *Baker v. Selden*, 101 U.S. 99 (1879)

community.¹⁹

The test of substantial similarity, proposed by the R.G. Anand case²⁰, may be applied in cases involving AI systems. The court inquires whether the defendant has copied expression of the plaintiff's work. It is important for the court to make a distinction between permissible stylistic influences and impermissible copying of expression in cases involving AI systems.

This analysis also touches upon constitutional provisions. According to Article 19(1)(a)²¹, the Indian Constitution guarantees the right to freedom of speech and expression. An expansion of the definition of copyright to include style and ideas will limit the scope for creativity and intercultural exchange. Proportionality mandates that any restriction on the expression of an individual should be necessary and reasonable. In reaction to AI, there will be a disproportionate limitation on freedom of expression. In *Modern Dental College vs. State of Madhya Pradesh*²², the Supreme Court of India established a proportionality test which demands that any curtailment of fundamental rights be "suitable," "necessary," and "balanced." Therefore, any attempt to broaden copyright in view of the development of artificial intelligence should comply with constitutional standards, especially regarding freedom of speech under Article 19(1)(a).²³

Therefore, both the concept of originality and the idea-expression doctrine function as structural protections. While originality protects intellectual works only when there is human intervention in the process of creation, the idea-expression doctrine limits the extent of the protection only to the expression of ideas and not the ideas themselves. Both of these doctrines are bolstered by the provisions in the UDHR and ICESCR.

In this era of AI generation, the preservation of these basic tenets becomes indispensable. The copyright doctrine should be human-focused, balanced constitutionally and normatively. Although technological advancement necessitates the need for updating the copyright tenets, it certainly doesn't mean that one should give up the very basic tenets that determine the extent of protection available. Through the reaffirmation of the significance of human originality and

¹⁹ Universal Declaration of Human Rights art. 27(1), G.A. Res. 217 (III) A, U.N. Doc. A/810, at 71 (Dec. 10, 1948)

²⁰ *Id.* at 128

²¹ INDIA CONST. art. 19(1)(a)

²² *Modern Dental Coll. & Research Ctr. v. State of Madhya Pradesh*, (2016) 7 S.C.C. 353 (India)

²³ INDIA CONST. art. 19(1)(a)

the idea-expression dichotomy, India's copyright law can deal with the creativity generated by AI.

Authorship and Legal Personality in the Era of Generative AI

The concept of authorship is integral to copyright law. Not only does it serve as a technical term but also acts as the fundamental bridge connecting creativity, property, liability, and protection. Authorship dictates who owns rights in the first place, who enforces them, and what interests copyright law protects. The advent of generative AI complicates this concept as it brings to light the potential for creative works to be created without human intervention and creativity. Thus, the issue of whether generative AI can qualify as an "author" becomes a more profound problem than just one of statutory construction.²⁴ Those who believe in machine authorship say that by failing to protect AI-generated works we may end up dissuading investments in the development of innovative AI, which creates uncertainties in business practices. However, while there is some logic behind this, such an approach runs the danger of mixing clarity with legitimacy. Clarity in law cannot be equated with legitimacy in and of itself.

According to the Indian Copyright Act, 1957, "author" is explained in Section 2(d)²⁵, where the author is described as the author of various kinds of works. As regards literary and artistic works, the author is someone who creates the work. However, as regards computer-generated works, according to the said Act, the author is the one who "causes the work to be created". The above definition was included in an era when computer-generated works were works created by the automation process under direct human control, like tables and graphics generated by procedures or algorithms. It did not envisage current machine learning systems that generate complicated outputs without any human intervention.

This leads us to the next issue of whether an AI system can itself be regarded as an author. The laws in India and many other countries do not treat artificial intelligence as a legal person. Legal personhood has traditionally been afforded only to natural persons and in some cases, juridical persons. Being a legal person means having the ability to have rights and liabilities, the right to sue and be sued, and accountability. An AI system lacks consciousness, intention, and accountability. It is unable to claim any rights, cannot be harmed morally, nor has the

²⁴ Orit Fischman-Afori, *Generative AI Art and Copyright Governance: Rethinking the Adaptation Right and Its Limits*, Hum. & Soc. Sci. Commc'ns (2026).

²⁵ Copyright Act, 1957, No. 14 of 1957, § 2(d) (India).

ability to discharge any liabilities. Thus, giving authorship status to AI systems would necessitate changing the notion of legal personhood by including entities that are neither humans nor sentient beings a radical change in the principles of law as we know them.

This finding is also bolstered by comparative jurisprudence. In America, the DABUS case unambiguously established the principle that AI is not an author.²⁶ It was noted that copyright protection only extends to works authored by humans. This was grounded in the understanding that statutory language, precedent, and constitutional norms all presuppose human authorship. While there are no cases dealing specifically with AI authorship from Indian courts, this same logic will probably be applicable. First, in the Indian Copyright Act, “authors” are always referenced as being human entities, and secondly, AI in India cannot own property separately from people.

If AI itself is not able to be an author then the next question arises regarding authorship by individuals involved in the process of creation through generative technology. According to Section 2(d)(vi)²⁷ of the Indian Copyright Act, “the author of a computer-generated work shall be the person who causes the work to be created”. On the face of it, this seems to imply that the developers of AI, the operators of AI platforms, or even users of such platforms who initiate any prompts can also be considered authors of AI-generated works. Yet, the term “causes the work to be created” should be understood with the context of originality requirement and creativity connection.

Unlike in conventional computer-generated work where the human being controls all the parameters which go into determining the outcome, the AI-based system makes use of trained deep neural networks which produce the outputs based on probabilistic prediction and not the intervention of the human being. In this scenario, the human element in the creation is so attenuated to such an extent that the human element cannot claim to be an author. As such, it is the developer who designs the system but does not design the particular output of the system and so, he cannot exercise the kind of creativity expected of an author.

If copyright authorship is attributed to AI developers simply by virtue of their development of the system, it threatens to turn copyright into an investment protection scheme instead of a creative protection scheme. Although it is true that there is significant investment involved in

²⁶ Thaler v. Perlmutter, 687 F. Supp. 3d 140 (D.D.C. 2023)

²⁷ Copyright Act, 1957, No. 14 of 1957, § 2(d)(vi) (India).

developing an AI system, copyright is generally meant to protect expressions, not the means to express them.

The issue of authorship attributed to AI users is quite different. When the AI users create complex prompts, iteratively enhance their output and make judgments on what should be finally selected, they might satisfy the conditions of originality. Under these circumstances, the AI system becomes just a very advanced tool, similar to a camera or photo editing software, used by humans to convey their creativity. But when the contribution of a human to the process does not go beyond the generic prompt given, then there is no justification for authorship in the sense that granting rights in such cases would mean awarding exclusive rights for algorithmically created output.

Authorship issue is connected with the responsibility issue since copyright grants not only certain rights but also imposes the responsibility for infringement. Should AI be deemed as the authors, then the issue of responsibility for infringement arises? The machine cannot be punished or jailed or blamed morally for anything. Without clear responsibility being assigned, the authorship attributed to an AI system would become meaningless. Moral rights have been protected in India under Section 57 very well.²⁸ The case of *Amarnath Sehgal v. Union of India*²⁹ held that the right of the author for integrity protects the honour and reputation that come with the work. It thus strengthens the anthropocentric nature of copyright laws in India in a manner that makes AI authorship incompatible.

The authorship issue has implications beyond doctrinal considerations. Copyright law impacts cultural production insofar as it regulates who can own creative works. Granting extensive authorship rights for machine-generated expressions may result in the concentration of ownership among larger companies who operate AI technologies and platforms for their creation. In addition, failure to recognize the authorship of human creators involved in generating works which have been used in training AI algorithms may worsen existing inequality in creative industries. At the same time, failure to recognize copyright in AI-assisted works that involve human creativity may stifle innovation.

Furthermore, Indian constitutional principles may be relevant for establishing appropriate

²⁸ Copyright Act, 1957, No. 14 of 1957, § 57 (India)

²⁹ *Amarnath Sehgal v. Union of India*, 117 (2005) DLT 717 (Del. HC)

authorship criteria. Articles 19(1)(a) and 300A of the Constitution³⁰ protect freedom of speech and expression, as well as property rights respectively. Copyright law should balance these interests without placing undue restrictions on both. Recognizing AI as an author may upset such balance, since it would enable property claims in relation to machine-generated expression and thus restrict both expressive freedom and the public domain. On the other hand, denying copyright in machine-assisted works involving human creativity may affect property rights of human authors. The UK is an example which is interesting from a comparative standpoint. Under s. 9(3) of the Copyright, Designs and Patents Act 1988³¹, authorship of any computer-generated works lies with the “person by whom the arrangements necessary for the creation of the work are undertaken.”³² This provision dates before the advent of generative AI and has been described as having conceptual difficulties in the case of an autonomous system which has been set on a machine learning model. India needs to be careful not to take this to extremes.

To conclude, authorship in copyright law is based on human agency, creativity, and accountability. The emergence of generative AI poses problems for this model as it creates outputs in the absence of any conventional form of authorship. However, the expansion of authorship to AI would mean a complete revision of the concept of personhood and would destroy the entire normative basis of copyright law. It is thus recommended that Indian copyright law retains a humanistic notion of authorship and protects works only where there is evident involvement of human creativity and control.

Competing Policy Approaches to AI-Generated Works

The regulation of generative artificial intelligence technology is one of the major issues that faces India. As AI technology produces a growing amount of content in literary, artistic, musical, and audio-visual works, Indian legislators and judiciary have to decide whether they will develop current copyright theories further, overhaul these theories, or develop an altogether new approach to regulation. A review of comparative discussions about the issue reveals three major models of policy based on different perceptions of the purpose of copyright.

1. Expanding Existing Copyright Doctrine to Include AI-Generated Works

Approach one suggests incorporating the AI-generated outputs in the existing copyright

³⁰ INDIA CONST. arts. 19(1)(a), 300A.

³¹ Copyright, Designs and Patents Act 1988, c. 48, § 9(3) (UK)

³² Copyright, Designs and Patents Act 1988, c. 48, § 9(3) (UK)

framework through broadening the concept of authorship and originality. In this context, Section 2(d)(vi)³³ of the Indian Copyright Act, which gives authorship of computer-generated works to the person who has caused the making of the work, may be construed in such a way as to incorporate AI-generated outputs. Thus, developers, platform providers, and users can become authors. It is argued that providing copyright protection for AI-generated outputs will foster investments in artificial intelligence technologies. The creation of AI infrastructure involves substantial investments and its protection may contribute to innovations and development. Therefore, this approach corresponds to the incentive rationale for copyright. But there are some important issues associated with this concept. The first issue is that AI systems cannot be influenced by incentive schemes³⁴ in the same manner as human authors. In case of copyright protection of such creations, the protection serves as an incentive for financial investments, and not for human creativity. Secondly, by making the definition of authors broad to include creators of AI products, we may undermine the originality test that was set out in *Eastern Book Company v. D.B. Modak*³⁵. Human efforts in the minimum quantity can be enough for invoking protection, and thereby, the test of “skill and judgment” becomes meaningless.

Given the importance of creative industries in India that is diverse in terms of economy and culture, any unchecked expansion of copyright protection of AI-generated content can harm competition and diversity of cultures. It can thus be said that while there might be need to expand the doctrine to some extent, complete integration of AI outputs in copyright categories seems to be an issue.

2. Abandoning Anthropocentric Foundations and Recognizing Non-Human Authorship

A second option, on the other hand, advocates for a complete breakaway from the anthropocentric basis of copyright and conferring status on AI as an independent creator. In this case, copyright would be conferred on AI products irrespective of human intervention. The emphasis would now move from the intellectual production process of the human being to the existence of intellectual creation. It seeks to update the law of copyright by bringing machine creativity at par with human creativity. Yet it faces major structural challenges because the Indian copyright system operates within the ambit of human-centric assumptions. It has a

³³ Copyright Act, 1957, No. 14 of 1957, § 2(d)(vi) (India)

³⁴ William M. Landes & Richard A. Posner, *The Economic Structure of Intellectual Property Law*

³⁵ *Eastern Book Co. v. D.B. Modak*, (2008) 1 S.C.C. 1.

limited duration that lasts the lifetime of the author along with an additional sixty years. Moral rights conferred through Section 57³⁶ of the Copyright Act protects the honour and reputation of the author. Liability and enforcement in such situations assume that there are accountable persons in law. Further, the rejection of anthropocentrism entails the risk of divorcing copyright from its normative justification. The justification for copyright is based on notions of human dignity, personhood, and labour. When the products of AI become equally protected in the absence of any human participation in the creative process, copyright can turn into a regime of technological protection rather than one of creativity.

Among the competing models, the model based on a balanced human-centric approach is most in tune with the constitutional principles of India and its copyright law principles. India does not need to create a completely new regime of property or completely rework the nature of authorship.

3. Creating a Sui Generis or Neighbouring Right for AI-Generated Works

The third option is that of introducing a sui generis protection system specific to AI generated content. Instead of expanding the existing copyright regime, the legislature could devise a sui generis right that would protect AI generated outputs for a shorter period or on a limited basis. Sui generis protection systems are common in databases protection regimes of the European Union. The justification for the same is investment as against creativity. A sui generis protection regime is flexible. It can provide protection on the basis of technological investment without treating AI generated outputs as human creative work. This reduces the risk of monopoly. However, it increases the risks of legal complexity and uncertainty. It may create an additional proprietary regime. It is time consuming and difficult to legislate on a new IP regime.

It may not be the best course of action for India, given the existing difficulties in enforcement and access to IP laws.

4. The Training Stage: Licensing, Transparency, and Remuneration

Apart from the authorship of outputs, it is equally essential for India to consider the legality of the training process of AI. A proportionate regulatory regime should differentiate between the

³⁶ Copyright Act, 1957, No. 14 of 1957, § 57 (India)

process of training (input) and the process of generating content (output). Instead of an absolute prohibition of training AI systems through copyrighted works or an absolute lack of any regulation in this area, India can contemplate the possibility of instituting a statutory exception for text and data mining along with mechanisms of remuneration. Through such a system, it would be possible to allow AI developers to train their AI system using copyrighted works while also ensuring that creators get compensated when training helps in developing commercially valuable AI systems. Recent lawsuits being waged in the U.S. are an example of the legal ambiguity of the methods used in training AIs. In *Authors Guild v. OpenAI*³⁷ and *The New York Times v. OpenAI and Microsoft*³⁸ (2023), the claimants argue that using copyrighted material for training language models is an act of reproducing material without authorization. Likewise, in *Andersen v. Stability AI*³⁹, visual artists have challenged the practice of scraping copyrighted material for generative art applications. Although both cases are ongoing, they highlight the global legal debate regarding whether massive data ingestion is an act of infringement or constitutes fair use.

The first doctrinal problem pertains to causality. Traditional copyright infringement necessitates the establishment of the copying process through access and substantial similarities. However, the fact that the generative AI systems operate using datasets consisting of millions or billions of data points makes it close to impossible to prove the material influence of the copyrighted work on the resulting product. In other words, the epistemological impossibility is inherent to the process of establishing causality which implies that probabilistic approaches or the approach of substitution in the marketplace are needed instead of tracing. Apart from licensing solutions, another option for the regulation of the field includes the obligation to be transparent⁴⁰ on behalf of the AI developers. The disclosure of the type of the training datasets used, opting out procedures for the copyright holders, and audits can make it possible.

5. A Balanced Indian Model: Human-Centric but Innovation-Sensitive

Considering the advantages and disadvantages of the three international approaches, the Indian system should be built in such a way that it will have the following elements:

³⁷ Complaint, *Authors Guild v. OpenAI, Inc.*, No. 1:23-cv-08292 (S.D.N.Y. Sept. 19, 2023)

³⁸ Complaint, *N.Y. Times Co. v. Microsoft Corp.*, No. 1:23-cv-11195 (S.D.N.Y. Dec. 27, 2023)

³⁹ Complaint, *Andersen v. Stability AI Ltd.*, No. 3:23-cv-00201 (N.D. Cal. Jan. 13, 2023)

⁴⁰ EU Artificial Intelligence Act

First, the right of authorship shall be linked to the human creative input alone. No AI systems should be awarded the status of the author. In cases when the person who created the output has exerted substantial creative control, the protection can be provided; otherwise, the protection will not be applicable.

Second, the analysis of the infringement of the copyright at the stage of the output creation must be carried out by applying the principles of adaptation rather than reproduction.

Third, the use of the materials for text and data mining should be regulated by creating a statutory exception combined with the licensing or remuneration mechanism.

Fourthly, the provisions for exceptions and limitations under Section 52⁴¹ must be enhanced to ensure protection for transformative creative use and freedom of speech.

The above system retains the anthropocentric base of the Indian copyright regime but accepts the technological reality of today's age. It encourages innovation but protects human interests.

Conclusion of Policy Section

This is an important juncture for the growth of copyright law in India. There lies opportunity and disruption in the advent of Generative AI. The goal ought not to be protecting copyright from technological innovation or submitting copyright law to the vagaries of technological determinism. What Indian law requires is to fine-tune its current doctrines so that copyright law can continue to foster human creativity along with technological innovation.

Risk of Over-Protection: The Need for Strong Exceptions and Limitations

Although there are very valid reasons for being concerned about the issue of copyright violation by means of generative AI technologies, there is also a very real threat associated with overreach in terms of expanding the boundaries of copyright in reaction to the technological changes. It has been seen throughout history that copyright legislation exists in a delicate balance of exclusivity and accessibility. Every expansion of exclusivity has necessitated a matching expansion of the exceptions and limitations.

⁴¹ Copyright Act, 1957, No. 14 of 1957, § 52 (India)

The threat of over-protection includes shrinking the public domain⁴². The public domain is more than just leftovers from copyrights that have expired; it is part and parcel of the copyright structure. The public domain provides for cumulative creation and democratic participation in the culture. In the event that AI-created works that take their cue from public-domain styles or aesthetics become susceptible to wide-ranging proprietary claims, then the interplay between culture and creation could be skewed.

The generative AI programs rely on an immense amount of cultural data - the style, genre, motifs, artistic techniques, and methods of expression. If judges start viewing similarities in styles or resemblance as an act of infringement, the scope of copyright will gradually expand from expression to the ideas and aesthetics of artists. As a result, the parts of culture that have always been freely accessible to everyone will be privatized, and this will not only bring disorder to the existing doctrines but limit artistic freedom as well.

Therefore, the adaptation model needs to be used carefully. In spite of the fact that the adaptation model offers an opportunity for non-literal appropriation, this principle should not serve as a pretext for expansion of the scope of copyright. Otherwise, AI generated works will end up being liable to copyright infringement if they show substantial and recognizable linkage to the expression rather than its ideas. As a result, the creation of AI generated works as well as those created by humans will be stifled. Overprotection can also lead to distortion of the market. Should there be extensive copyright protection for outputs of AI with little human input, the major tech companies would end up creating large proprietary collections, thus creating more obstacles for entry into creative fields. It is important to adopt an appropriate strategy so that the copyright does not end up fostering monopolization through technology. Generative AI technologies belong to major corporations with substantial computational and financial power. If the range of copyright protection expands to include outputs of AI without human input, such corporations can build their large collections of copyrighted works generated by AI.

Furthermore, overly stringent restrictions during the training phase might hinder innovation. For instance, when the AI developers need to get separate licenses for each piece of work included in their training data sets, then the cost involved would be very high. This might result in small firms and institutions shunning themselves away from the industry, thus reducing

⁴² James Boyle, *The Public Domain*

competition and innovations within the industry. Although the rights of creators have to be protected, absolute prohibitions or unenforceable licensing schemes might end up achieving nothing. This is further strengthened by the constitutional setting in India. The freedom of speech and expression is enshrined under Article 19(1)(a)⁴³, which includes the freedom to express oneself artistically or creatively. Article 19(1)(g)⁴⁴ also recognizes the freedom to carry on any profession or trade or business, including the freedom to innovate technologically. The application of copyright restrictions that hinder these fundamental freedoms might be subjected to the proportionality test. It is therefore necessary to ensure that copyrights do not infringe on expressions and innovations.

A robust set of exceptions and limitations forms the critical counterweight to exclusive rights. Section 52⁴⁵ of the Indian Copyright Act provides a list of exceptions in the context of fair dealing for various purposes like research, criticism, review, news reporting, and private use. These exceptions, however, were formed in the pre-generative-AI age and do not specifically cover text and data mining and machine learning applications. It will be prudent to update the exceptions to account for transformative technology use without exploitation in order to maintain doctrinal balance. On top of statutory exceptions, courts have been known to interpret exceptions purposively. At times, Indian copyright law has been interpreted by its courts from a public interest perspective in the realm of fair dealing⁴⁶. In light of generative AI, courts should assess if the specific use promotes any scientific, innovative, or experimental activity without causing any significant harm to the marketplace.

In the end, what is most important is not achieving the greatest possible level of protection, but maintaining balance. Too much protection can stifle innovation and restrict access, as well as centralize power. Not enough protection, on the other hand, can undermine incentives for human creators. The best way forward is to strengthen the limits and exceptions as well as any doctrinal development.

Policy Recommendations for India

In view of the above discussion, a balanced regulatory regime in India needs to be adopted that deals with both the stages of training and output of the generative AI system. A balanced regime

⁴³ INDIA CONST. art. 19(1)(a)

⁴⁴ INDIA CONST. art. 19(1)(g)

⁴⁵ Copyright Act, 1957, No. 14 of 1957, § 52 (India)

⁴⁶ Civic Chandran v. Ammini Amma, 1996 PTC (16) 670 (Ker.).

will maintain the anthropocentricity of the copyright law while encouraging innovation and being fair to the creator.

Firstly, authorship must be maintained with meaningful human input. AI cannot be considered as an independent author. Only when a person exerts substantial human effort on the final creation can the protection of copyright be provided to him/her. The courts could devise a “human meaningful intervention”⁴⁷ test for determining whether the threshold of originality has been crossed or not.

Secondly, analysis of infringement at the output stage must involve an adaptation-based test which is based on identifiable linkage. Courts need to ask themselves whether the AI-produced output makes use of identifiable protected expression instead of focusing only on the reproduction doctrine. It is necessary to ensure that mere similarity in style or theme is not used in infringement analyses.

Third, there could be an introduction of a statutory text and data mining exception for AI training in India. The exception would authorize the use of copyright works for the purpose of training AI machines but with safeguards in place. An example would be an exception which involves a remuneration system where those who own the copyrighted works get some form of compensation when their works are used to develop commercial AI machines. From a law-and-economics point of view, copyright protection is appropriate where there is a market failure that copyright can rectify because copyright motivates social value creation through artistic activities. However, when copyright protection is extended to works created by fully independent AI creations, it does not achieve this objective. Copyright does not motivate the creation of AI; on the contrary, it provides benefits to corporate entities.

Fourth, fair dealing exemptions of section 52 require clarification and strengthening for addressing any AI-specific issues.⁴⁸ Acceptance of transformative use of technology by courts in the context of permitted exceptions would create legal certainty in this regard and would allow innovative activities in this area. Proportionality analysis might be used by courts for balancing copyright regulation and technological development.

Fifth, some forms of coordination may become necessary regarding other branches of law.

⁴⁷ United States Copyright Office, Copyright and Artificial Intelligence Report (2025)

⁴⁸ Copyright Act, 1957, No. 14 of 1957, § 52 (India)

Issues related to data protection, competition, and consumer protection have something in common with the area of AI governance. Legal certainty is possible only in case there are no regulatory overlaps and contradictions among different branches of law.

Finally, reforming copyright regulation in AI era needs to be based on constitutional principles. The balance between property rights and freedom of speech still needs to be considered in this process. The copyright regulation in the AI era cannot just guarantee investments; the main aim of copyright regulation should remain unchanged – progress of culture, knowledge and science.

It is an important time for India. Generative AI technology comes with its fair share of opportunities and threats. The best way forward is through regulation that ensures retention of human creativity, improvement in doctrine of adaptation, modernization of exception, and implementation of licensing schemes. Through such regulation, India can achieve the goal of innovation while at the same time protecting copyright law principles. Pamela Samuelson, among others, has warned against the expansion of copyright when the rationales of incentives are lacking or dubious.⁴⁹ In like manner, Mark Lemley asserts that intellectual property regimes should be careful about propertization of their systems in rapidly developing technological settings.⁵⁰ Such arguments apply to the area of AI, wherein expanding protections for machine creations might give rise to monopolies in absence of any boost in human creativity.

The World Intellectual Property Organization has taken up extensive consultations pertaining to intellectual property and AI, signifying the search for balance globally.⁵¹ The Indian approach needs to reflect both the developing consensus internationally and our constitutional aspirations at home.

Conclusion

Generative AI is not the end of Indian copyright law; however, it does reveal some fissures within current doctrine that need to be adjusted carefully. The question is how to reconcile advances in technology with maintaining the human-centric principles on which copyright

⁴⁹ Pamela Samuelson, Challenges in Mapping the Public Domain, in *The Future of the Public Domain* 7 (Lucie Guibault & P. Bernt Hugenholtz eds., 2006)

⁵⁰ Mark A. Lemley, Property, Intellectual Property, and Free Riding, 83 Tex. L. Rev. 1031 (2005)

⁵¹ World Intellectual Property Organization (WIPO), WIPO Conversation on Intellectual Property (IP) and Artificial Intelligence (2020–present)

rests. This should not be done through further expansion of machine authorship or stifling of AI technology, but by reforming current doctrine.

However, any attempt at over-restriction in relation to AI innovation would violate Article 27(1) of the UDHR⁵² as well as the right to participation in scientific progress. Similar constraints are imposed on India through Articles 19(1)(a) and 19(1)(g).⁵³ As such, the aim here must be finding the appropriate balance – not prohibition, nor unbridled proprietorship.

The training process raises difficult questions as regards the issues of reproduction and fair use. Whereas the digital absorption of copyrighted material might, in principle, be covered by the reproduction right outlined in Section 14 of the Copyright Act⁵⁴, the insistence on strict enforcement of this provision risks stifling technological development and reinforcing economic power concentration. Similarly, the output process also poses considerable challenges in terms of law application. Conventional reproduction rules might turn out to be inadequate for dealing with AI-created works that do not involve literal reproduction but rather transformation.

Generative AI, however, does not require the disassembly of Indian copyright law. What is required is doctrinal adjustment. Originality, idea-expression divide, and adaptation are still valid concepts so long as they are applied with care and fidelity to constitutional and human rights aspirations. It is critical to uphold the humanist foundation of copyright law to allow technology to coexist with legal protection of human creativity⁵⁵.

Final Reflection

India finds itself at an important juncture regarding intellectual property legislation. On the one hand, generative AI can revolutionize creative enterprises, make production more democratic, and spur scientific discovery. However, it is also fraught with possibilities of market dominance, diminution of human creativity, and conceptual uncertainties. The answer is not to ignore copyright's human-centric nature or protect technology from legal scrutiny. Rather, what India needs to strive for is an approach that protects originality, respects the idea-

⁵² Universal Declaration of Human Rights art. 27(1), G.A. Res. 217 (III) A, U.N. Doc. A/810, at 71 (Dec. 10, 1948)

⁵³ INDIA CONST. arts. 19(1)(a), 19(1)(g)

⁵⁴ Copyright Act, 1957, No. 14 of 1957, § 14 (India)

⁵⁵ World Intellectual Property Organization AI consultations

expression dichotomy, guarantees human rights, and promotes innovation in a responsible manner.

The evolution of Indian copyright in the era of generative AI would depend on more than just capability; it will hinge upon choice. With India maintaining human authorship, protecting the public domain, updating its exceptions, and resisting the expansionist tendency to property, it will ensure that AI is a means toward human progress rather than an instrument for doctrinal decay.