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Juxtaposition of AI-Generated Works and Copyright Law under India's Intellectual Property Regime

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ABSTRACT

The juxtaposition of Artificial intelligence (AI)-generated works and copyright under the Indian intellectual property regime is a rather meekly addressed topic of discussion across various precedents and statutory overviews. Unlike any other technology previously seen before, AI embedded with deep learning software even have the ability to generate works with little to no human interference and can be considered an entirely original work. This phenomenon is often referred to as 'AI emergence' and has led to the conception of several original creations. The key originality feature of the AI work raises disputes pertaining to ascertaining authorship and ownership over the AI generated work and its subsequent copyright and begs the question of whether AI ownership can break the traditional definition of a person under section 2(d)(vi) under the Copyright Act, 1957 to include artificial entities. In response to this conundrum, this paper warns against awarding authorship rights to AI, in light of several legal complex issues starting with infinite duration of protection and the dangerous precedent of extended human like recognition to AI. Instead, to balance the need to copyright the AI generated work against the creator's and user's interest, this paper proposes the introduction of clearer guidelines on how the creator's authorship and ownership is determined over the AI generated work, in terms of the extent of contribution made. It further proposes the introduction of clarity through statutory provisions on the regulation of copyright of the AI generated work.

Keywords: Copyright, AI, India, protection, ownership.

I. INTRODUCTION

The swift progression of artificial intelligence (AI) and its inclusion in various spheres has revolutionized the manner in which creative endeavours are pursued. Modern AI tools are equipped with independent generation of art works, be it literary, artistic or musical. Several of the creative pieces even stem beyond what the original creator of the AI intended the program to perform, resulting in the final product to be completely devoid of any human touch while

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possessing a uniqueness of its own.² This phenomena where the AI brings forth outcomes free from human interference, is known as 'AI emergence'.³ *Though this may seem astounding and marvellous, the regulation of 'AI emergence' or the consequences of 'AI emergence' brings forth several issues, which the legal world is barely ready to face.* For instance, the independently produced AI works blur the lines between what may amount to human creativity and work that is produced purely through machine intelligence. Such blurring of lines leads to a myriad questions about the resulting ownership over the consequential work, subsequent proprietorship and other copyright related issues.⁴ In a country like India, which has a rich cultural heritage and intellectual property regime, the juxtaposition of AI-generated work and copyright related issues have been circling in various discussions, in academia, legislative debates and even judicial discourses. However, the copyright regime in India which primarily stems from the Copyright Act, 1957 barely discusses the concept of technology produced artworks, let alone multifaceted mechanisms like AI.⁵

Under the Copyright Act, 1957, the production of any creative work, be it literary, artistic or musical presents its copyrighted owner with various rights such as proprietary rights extending to monopolistic control, protection against infringement, royalties from licensing and distribution and other financial incentives. However, to be considered eligible for the obtainment of the accruing benefits of a copyright under the Copyright Act, 1957 any supposed owner of the work must establish that the product is an original work that is truly created by them and is of tangible nature.⁶ This question then begs the answer to the following two issues:

- (i) To what extent can the owner of the AI claim copyright ownership of the AI produced work and
- (ii) Whether AI produced work can be subjected to the legal regime of copyright at all if it is an independently produced work beyond the programmed algorithm of its owner?

In order to answer these two questions from the Indian legal standpoint, the forthcoming sections will delve into the intricate dynamics of the copyright regime and its intersection with

²H K, 'Protection of Artificial Intelligence Autonomously Generated Works Under the Copyright Act, 1957 - An Analytical Study' (2023) 28(3) *Journal of Intellectual Property Rights* 38, doi:10.56042/jipr.v28i3.708.

³ Margot E. Kaminski, 'Authorship, Disrupted: AI Authors in Copyright and First Amendment Law' (2017) *Colorado Law Scholarly Commons* 593.

⁴ Amber Sinha, Elonnai Hickok and Arindrajit Basu, 'AI in India: A Policy Agenda' (The Centre for Internet and Society, 2018) 17; Margot E. Kaminski, 'Authorship, Disrupted: AI Authors in Copyright and First Amendment Law' (2017) *Colorado Law Scholarly Commons* 593.

 ⁵ H K, 'Protection of Artificial Intelligence Autonomously Generated Works Under the Copyright Act, 1957 - An Analytical Study' (2023) 28(3) *Journal of Intellectual Property Rights* 194, doi:10.56042/jipr.v28i3.708.
 ⁶ Id K, H. 194-195

AI related works.

II. EXCLUSIVITY OF AI-GENERATED WORKS AND ITS ACCOMPANYING COMPLICATIONS

Prior to engaging in a discussion on the legal implications associated with AI, it is imperative to have an understanding of how AI produces works and the extent to which AI can engage in the creation of original works. AI is a system that is powered by algorithms which is fed an enormous amount of data, on the basis of which various outputs are produced, either from the combination of existing data or by creation of new data.⁷ The newly created data can often mimic human creativity and to a certain extent be considered completely isolated from the data that had been fed to the system by its algorithm creator. This includes activities like generating paintings, musical compositions and even poetry.⁸ Over the course of last few years, AI has demonstrated an extensive capacity for creating original creative expressions. *However, unlike* humans, AI does not have a consciousness of its own and lacks intentionality or emotional intelligence.⁹ The creative product is a result of the complex computational mechanisms instead of being a subjective or emotional experience which is what most human creative works are a result of. Despite lacking this human touch, AI-generated works do display a great extent of complexity that tests predictable and orthodox philosophies of creativity and authorship. Sometimes the AI produced work surpasses the limitations that were originally set or expected by the programmer and is termed as "emergence" or "surprise" in AI.¹⁰

(A) Emergence or surprise in AI

Emergence or surprise in AI is defined in the following manner "*Emergence in AI is the phenomenon in artificial intelligence systems where complex behaviours, patterns, or structures arise from the interaction of simpler elements, leading to emergent properties not explicitly programmed.*"¹¹ This includes AI systems, especially those that are programmed with the capability to produce or discover multifaceted designs, patterns, generate innovative solutions or responses that were not explicitly programmed into its algorithm by its creators. As a result,

⁷ Rohan Whitehead, 'Emergent Properties in AI: A Sign of the Future?' (Institute of Analytics, 2023) https://ioaglobal.org/blog/emergent-properties-in-ai-a-sign-of-the-future/> accessed 10 February 2025.

⁸ Id Rohan Whitehead; M Kaminski, 'Authorship, Disrupted: AI Authors in Copyright and First Amendment Law' (2017) *Colorado Law Scholarly Commons* 596.

⁹ Id M Kaminski 596

¹⁰ Rohan Whitehead, 'Emergent Properties in AI: A Sign of the Future?' (Institute of Analytics, 2023) https://ioaglobal.org/blog/emergent-properties-in-ai-a-sign-of-the-future/ accessed 10 February 2025.

¹¹ 'Emergence in AI' (LatentView Analytics, 2024) <https://www.latentview.com/glossary/emergence-inai/#:~:text=Emergence%20in%20AI%20is%20the,emergent%20properties%20not%20explicitly%20programme d> accessed 10 February 2025; M Kaminski, 'Authorship, Disrupted: AI Authors in Copyright and First Amendment Law' (2017) *Colorado Law Scholarly Commons* 593.

the outcomes can sometimes go beyond the intention or purpose of its creation.¹²

AI systems that are fed a vast amount of data pertaining to artistic work can sometimes produce a work that is wholly original, such as art works, musical compositions and even written content that exhibits a great deal of creativity and novelty which even the programmer might not possess or be able to create.¹³ Especially, AI systems that have been powered by deep learning algorithms possess the ability to create works of art and other works on its own even without any explicit command to do so. Here are some of the following ways in which AI can produce creative work beyond what was programmed originally.¹⁴

- a. **Establishing creative spaces for producing novelty work:** A few AI algorithms, such as generative models including Generative Adversarial Networks (GAN) and Variational Autoencoders (VAE) have the capacity to explore a broad spectrum of creative spaces to produce novel and original combinations or renditions of any existing artistic element.¹⁵
- b. **Synthesising and detection of patterns:** AI systems that have been trained with large sets of data on artworks usually self-automate the learning of underlying patterns, techniques, styles or forms which then is used to synthesize the creation of new artworks that is either reflective of the existing patterns or create combinations of patterns which amounts to a whole new novel variation.¹⁶
- c. Automated self-learning abilities: AI systems are designed to 'learn' and grow with the data that is being fed to them even in the absence of explicit instructions from their programmers. This learning also comes with automated generation of new knowledge which leads the AI to create new artistic styles, compositions or techniques that does not previously exist.¹⁷
- d. **Incorporation of feedback to further growth:** AI systems are also installed with feedback mechanisms, wherein they are fed any response or criticism on their work to reinforce their learning or interactive interfaces. This helps the software self-refine and

¹² M Gunnel and N Medelva, 'Emergent Behavior in AI' (2023) https://www.techopedia.com/definition/emergent-behavior> accessed 10 February 2025.

¹³ Ramón López de Mántaras and Artificial Intelligence Research Institute (IIIA), 'Artificial Intelligence and the Arts: Toward Computational Creativity' (OpenMind, 2023) <https://www.bbvaopenmind.com/en/articles/artificial-intelligence-and-the-arts-toward-computational-creativity/ > accessed 10 February 2025.

¹⁴ Ibid

 ¹⁵ Katja de Vries, 'You Never Fake Alone: Creative AI in Action' (2020) 23(14) *Information, Communication & Society* 2113, doi:10.1080/1369118x.2020.1754877.
 ¹⁶ Ibid 2112

¹⁷ Ibid

improve its outputs which results in more complex artistic works being produced and may potentially surpass the intentions or knowledge of existing experts on the subject or artwork.¹⁸

e. **Emergent properties:** AI also has the ability to bring out emergent properties through interaction with other AI components that may lead to original and even unexpected artistic works.¹⁹

Even though AI generated artworks can be quite impressive, they do raise a lot of potential questions on the following aspects:

- (i) The authorship over such work
- (ii) Whether the process of AI generative work constitutes 'creativity' and
- (iii) The role of human involvement in the process.

There is no doubt that AI will only continue to advance and as a result, it is imperative to explore such issues and understand the legal implications associated with AI generated art, both for the benefit of the creators as well as the consumers of the content created.

III. LEGAL ISSUES SURROUND AI GENERATED WORKS

Somehow, it is this very complicated algorithm that produces unique outputs that creates serious legal concerns about the following issues.

- 1. Ownership and authorship issues: Determining the exact nature of ownership to be exercised over AI generated works is a complex issue since the legislative intent behind the traditional copyright laws is applicable to only works created by humans. However, while it can be argued that the AI was indeed created by a human, the role of human involvement in the creative process may not necessarily be present due to AI emergence. Subsequently, the question that follows is whether AI systems can be considered an 'author' for the purposes of assigning copyright and if yes, then to who would the proprietorship rights and infringement rights be granted to? To the AI user or the AI system.²⁰
- 2. Attributing creativity and originality to AI-generated works: The copyright regime is extended to original and creative work, however, defining what constitutes

¹⁸ Ibid 2115

¹⁹ Ibid 2117

²⁰ Atif Aziz, 'Artificial Intelligence Produced Original Work: A New Approach to Copyright Protection and Ownership' (2023) 2(2) *European Journal of Artificial Intelligence and Machine Learning* 10, doi:10.24018/ejai.2023.2.2.15.

'originality' changes from subject to subject. For instance, even though AI based algorithms can create new content on the basis of existing data and patterns, the issue that arises is with respect to whether such artificially produced work can meet the human threshold of what constitutes creativity.²¹

- 3. **Duration of protection offered to such works**: Any copyright work is protected until the author's lifetime and then for an addition of ten years. However, AI is an eternal entity, unless it is destroyed by human interreference. Its perpetual existence will ensure infinite duration of protection to AI. This goes against the legislative intent of providing a finite period of protection to copyrighted work.²²
- 4. Determining Fair use and derivative work: AI-generated works make use of existing copyrighted material for programming algorithms for progressive or deep learning AI. This does raise concerns on whether such usage of existing copyrighted work amounts to fair use and whether the creation of AI generated work, however original in a manner that is derivative of the existing copyright work is indeed legal.²³
- 5. Ethical implications of AI-generated works: Such works indeed raise issues of ethical and social implications, including but not limited to who is accountable for such work and the cultural impact stemming from such work. Every individual is responsible for ensuring ethical and respectful creation of artistic work, but can the same obligations also be attributed to a machine?²⁴

These questions will be further analysed in section four.

IV. THE INDIAN COPYRIGHT REGIME

(A) Copyright Act of 1957

The Copyright regime in India primarily stems from the Copyright Act, 1957. Ever since its inception, the Act has been amended multiple times to resonate with the international standards on copyright and to be inclusive of various technical advancements.

Establishing ownership and authorship rights of copyright holders

Section 17 of the Copyrights Act, 1957 discusses and defines the first owner of copyright in the following manner: "Subject to the provisions of this Act, the author of a work shall be the owner

²¹ Ibid

²² Paarth Naithani, 'Issues of Authorship and Ownership in Work created by Artificial Intelligence -

Indian Copyright Law Perspective' (2022)11(1) NTUT Journal of International Property Law & Management 2 ²³Dimple Jodha and Poonam Bera, 'Copyright Issues in the Era of AI - A Critical Analysis' (2023) 13(3) Res Militaris 1738

²⁴ Ibid

of copyright therein."²⁵ The statutory interpretation of section 17 shows that it recognises the author of the work to be the first owner of the copyright exerted over the product.²⁶ The author is defined to be various individuals depending on the nature of work.²⁷ For instance, for musical or dramatic creations, the author is the composer, for cinematographic creations, it is the director, for literary works, it's a writer and for established arts, it is an artist. The role of the author generates ownership and authorship rights by way of which a copyright holder is bestowed with the complete control over the manner in which a copyrighted work will be used. This ownership is primarily granted to either the original author of the work or to the person the author is obligated to present the work to.²⁸

The copyright owner of an existing work or even a prospective work which might be generated in the future also have the right to assign the copyright to any third party, be it partially or wholly, with or without being subjected to limitations, or for either perpetuity for a limited duration.²⁹ In cases where the copyright is assigned for any future work however, the assignment will only take effect upon the work coming into existence. If an assignee of the copyright at any point becomes entitled to the rights arising from a copyright, the assignee with respect to the rights assigned to it and the assignor with respect to the rights not assignee' with respect to the assignment of the copyright includes all future work such as the legal representatives of the assignee if he dies prior to the work coming into existence.³¹

Works that are protected under the Act

The Copyright Act, 1957 extends protection to a broad array of creative works which are inclusive of but not limited to literary and musical compositions, artistic work such as paintings and sculpture, dramatic and cinematographic works such as films and recordings. Both unpublished as well as published works are protected under the Copyright Act,1957.³²

²⁵ Copyrights Act, 1957, s.17

²⁶ Navdeep Kour Sasan, 'Rights of the Author: Possible Extensions Under Copyright Law in India' (2013) *International Journal of Innovation and Applied Studies* 105.

²⁷ 'Position of Artificial Intelligence Under Copyright Law' (Drishti Judiciary, 2023) <https://www.drishtijudiciary.com/editorial/position-of-artificial-intelligence-under-copyrightlaw#:~:text=Section%2017%20of%20the%20Act,interpreted%20as%20per%20the%20Act > accessed 10

February 2025. ²⁸ Navdeep Kour Sasan, 'Rights of the Author: Possible Extensions Under Copyright Law in India' (2013) *International Journal of Innovation and Applied Studies* 105-106.

²⁹ Paarth Naithani, 'Issues of Authorship and Ownership in Work created by Artificial Intelligence -

Indian Copyright Law Perspective' (2022)11(1) NTUT Journal of International Property Law & Management 2

³⁰ Navdeep Kour Sasan, 'Rights of the Author: Possible Extensions Under Copyright Law in India' (2013) *International Journal of Innovation and Applied Studies* 107.

³¹ Ibid

³² Dr Mezei Péter et al, 'Unravelling the Limitations of Indian Copyright Law in Tackling Generative AI

Duration of Protection

The Copyright Act 1957, extends protected to the copyrighted work for the entire lifetime of the creator or author of the work and then an additional 60 years. This right is however, only extended to copyrighted work. For anonymous works or works carried out under pseudonyms, or posthumous works, a different standard of duration applies. Similarly, even for motion arts such as cinematography, sound recordings and for works by government agencies, the length of protection will differ.³³

Fair use of the copyrighted product

The Copyright Act, 1957 mandates the fair use of copyrighted works. This implies that besides the copyright holder, other entities can also use the protected work under reasonable restrictions, which constitutes fair use. Activities that constitute fair use under the Copyright Act, 1957 are inclusive of but not limited to, using the work for critiquing it, for presenting a review, for reporting it on the news, for teaching about and for research purposes (so long as they are adequately referred in alignment with the principles of prevention of copyright infringement).³⁴ The interpretation of the term 'Fair Dealing or use' is inclusive of various facts and elements. With respect to the Copyright Act 1957, the court will apply the test of reasonable understanding to determine what would constitute as 'fair dealing' in various types of works involving diverse procedures.³⁵ The court will thus determine what amounts to fair dealing on a case-by-case basis since the permission of fair use of a copyrighted work places a significant limitation on the rights of copyright owner to exclusive usage of his work. In cases such as India TV Independent News Services Pvt. Ltd. vs Yashraj Films Pvt. Ltd³⁶ and Civic Chandran vs Ammini Amma³⁷, Indian courts have attempted to balance the economic interest against the necessity of the public to use a copyrighted product. In both these cases, the courts determined that while fair use is indeed crucial to the growth of innovation through reasonable public access, economic interests may not always be considered a significant factor for determining fair dealing.³⁸

Challenges: An In-Depth Analysis' (COPY21, 2023) https://copy21.com/2023/10/unravelling-the-limitations-of-indian-copyright-law-in-tackling-generative-ai-challenges-an-in-depth-

analysis/#:~:text=Additionally%2C%20Indian%20copyright%20law%20protects,a%20comprehensive%20umbr ella%20of%20protection.&text=Generative%20AI%2C%20which%20epitomizes%20the,of%20original%20cont ent%20by%20machines>accessed 10 February 2025.

³³ Ibid

³⁴ Ibid

³⁵ 'Exception to Infringement of Copyright Section 52 of the Copyright Act, 1957' (IIPRD Blog - Intellectual Property Discussions, 2022) https://iiprd.wordpress.com/2022/04/19/exception-to-infringement-of-copyright-section-52-of-the-copyright-act-1957/ > accessed 10 February 2025.

³⁶ India TV Independent News Services Pvt Ltd v Yashraj Films Pvt Ltd AIR 2013 (NOC) 315 (DEL)

³⁷ Civic Chandran v Ammini Amma 16 PTC 329 (Kerala).

³⁸ 'Exception to Infringement of Copyright Section 52 of the Copyright Act, 1957' (IIPRD Blog - Intellectual Property Discussions, 2022) https://iiprd.wordpress.com/2022/04/19/exception-to-infringement-of-copyright-

Extended rights of copyright holders

Owners of the copyrighted product, have the right to duplicate and copy the original work, license its usage, publish it, present it anywhere so desired, communicate it to the public and adapt it into any future works. They also have the right to transfer the copyright ownership to another entity.³⁹

Mandatory registering of copyright is not required

Even though it is not mandatory to register the copyright in India, doing so is encouraged since it provides prima facie evidence of ownership. Once registered, the work will be backed by legal provisions to protect against infringement such as pursuing civil remedies in the form of damages, accounts of profits, injunctions and if required even criminal remedies.⁴⁰

Digital Rights Management

The Copyright Act, 1957, lays down various provisions that also extend the measures of protection to digital rights which include prevention of infringement of the protected work on online platforms and to regulate and hold internet service providers for failing to prevent infringement or circulation of infringing content.⁴¹

Compliance with international treaties

India is a signatory to multiple international copyright treaties, which are inclusive of but not limited to the Berne Convention, 1887 as well as the Agreement on Trade-Related Aspects of Intellectual Property Rights, 1995 (TRIPS) which primarily deal with how copyrights are to be enforced internationally.⁴²

The copyright regime in India on an overall perspective seeks to bring stability towards the fostering of creativity, innovation and cultural development while also protecting the interests of its authors, creators and the public. Despite this intent, new technological advancements that breach the general perspective of how technology functions can challenge the objective of copyright protection.

section-52-of-the-copyright-act-1957/ >accessed 10 February 2025.

³⁹ 'The Digital Dilemma: AI and Copyright' (Juris Centre, 2023) <https://juriscentre.com/2023/10/14/the-digital-dilemma-ai-and-copyright/>accessed 10 February 2025.

⁴⁰ Ibid

⁴¹ Ibid

⁴² Vijay Kumar Tyagi and Yashdeep Chahal, 'Infringement of Copyright in Computer Programs in India: Understanding the State of Virtual Non-Liquet and Challenges Vis-À-Vis Artificial Intelligence' (2019) 2 *ILI Law Review* 71.

V. INTERSECTION OF COPYRIGHT AND AI IN INDIA

AI generated works have a very complicated standing under copyright law regime, wherein there exists almost little to no provisions that discuss or shed any light on how mechanically produced creations devoid of human connections are to be protected. While the Indian Copyright law regime on its own is quite vast and embracing of various technological developments, AI is not entirely touched upon. To position AI under the copyright law regime, the questions presented in the introduction section must be answered. They are:

- (i) To what extent can the owner of the AI claim copyright ownership of the AI produced work and
- (ii) Whether AI produced work can be subjected to the legal regime of copyright at all if it is an independently produced work beyond the programmed algorithm of its owner?

(A) Ownership over AI-generated work

To establish ownership over AI work, the required elements to be established are as follows:

- (i) It must be established that AI can come within the scope of the term 'Person' under section 2(d)(vi) of the Copyright Act, 1957.
- (ii) That AI can be recognised as an individual author of the copyright.
- (iii) That the AI will be capable of engaging in creative pursuits as expected of natural persons under the Copyright Act, 1957 and that
- (iv) That AI will be recognised as an individual entity capable of having extended and moral rights as provided under the Copyright Act, 1957.

The term 'person' under section 2(d)(vi) does not yet include AI

The answer to the question "To what extent can the owner of the AI claim copyright ownership of the AI produced work" lies in determining the extent to which ownership can be exerted over the produced work and who would be considered the first author of the work. The Copyright Act, 1957 was amended in 1994 to include all computer-generated works such as but not limited to literary, dramatic, musical and artistic works.⁴³ Section 2(d)(vi) was introduced to define 'authorship' of computer-generated works as "the person who causes the work to be created."⁴⁴ Section 2(d)(vi) thus interprets the human behind the program or the algorithm that generated

⁴³ Vinish Pujari and Bindy Wilson, 'Copyright and Authorship in AI-Generated Music' (2023) 10(12) *Journal of Emerging Technologies and Innovative Research* 353.

⁴⁴ Copyright Act 1957, s.2(d)(vi)

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the work to be the author. This interpretation is derived from the usage of the word 'person' which is assumed to be a human. No amendments have been introduced to include AI within the definition of a 'person'.⁴⁵ As a result, to determine whether the AI can be considered a 'person' in specific circumstances would have to be left to the courts to determine on a case-by-case basis. However, if at all the courts refuse to determine AI as a person by arguing that the legislative intent behind the insertion of section 2(d)(vi) was never to include an AI or mechanical entity, it would then be up to the legislature to introduce an amendment to specify the exact position of AI generated works and its role.⁴⁶

Disputes challenging the ownership of AI-generated work

AI generated works can be subject to the same challenges of disputing its ownership similar to human authored or created works. While on a subsequent position, AI can create work that is completely devoid of human involvement, the very creation of the AI is a product of human intellect and thus, the person behind the development of the AI may be allowed to claim contributory rights over the creative inputs generated by the AI.⁴⁷ Courts around the world have affirmed that programmers can assert ownership over the AI generated work on the basis of the extent to which their intellectual contributions played a role in the final work.⁴⁸ The question that needs to be answered at this point is pertaining to the indicators that determine the extent to which human involvement is found in the final product. While this is indeed a very technical question subject to discussion, the appropriate guidance on this topic is necessary to determine the ownership over the final product. However, until a standard of law governing indicators of contributory ownership over AI generated works is determined, the observation of courts would be inferred that AI generated work in the absence of human interference will belong to the copyright owner of the AI software.⁴⁹ Therefore, either the individual or the organisation that holds the copyrights of the software used to create the AI will be permitted to assert copyrights over the AI generated work.

Drawing parallels between the Indian jurisprudence on copyrights created by artificial

⁴⁵ Vinish Pujari and Bindy Wilson, 'Copyright and Authorship in AI-Generated Music' (2023) 10(12) *Journal of Emerging Technologies and Innovative Research* 353.

⁴⁶Hafiz Gaffar and Saleh Albarashdi, 'Copyright Protection for AI-Generated Works: Exploring Originality and Ownership in a Digital Landscape' (2024) *Asian Journal of International Law* 10 doi:10.1017/s2044251323000735.

⁴⁷ Rajiv Sharma and Ninad Mittal, 'Artificial Intelligence Lacks Personhood to Become the Author of an Intellectual Property' (Live Law, 2023) < https://www.livelaw.in/law-firms/law-firm-articles-/artificial-intelligence-intellectual-property-indian-copyright-act-singhania-co-llp-238401> accessed 10 February 2025.

⁴⁸ Hafiz Gaffar and Saleh Albarashdi, 'Copyright Protection for AI-Generated Works: Exploring Originality and Ownership in a Digital Landscape' (2024) *Asian Journal of International Law* 8, doi:10.1017/s2044251323000735.

⁴⁹ Ibid

entities and the possibility of copyright ownership awarded to AI

To better understand the role of non-human entities and the ownership rights attributed to them over copyrighted works in India, a discussion on traditional cases of copyright and artificial units such as business organisations or government entities is a must to draw parallels on how the court views the possibility of non-human individuals as copyright owners. For instance, in the case of Rupendra Kashyap v. Jiwan Publishing House Pvt. Ltd⁵⁰, a very traditional approach was taken by the High Court of Delhi in answering the question of whether the Central Board of Secondary Education can claim copyright over the question papers created by it. The High Court observed that the Central Board of Secondary Education was an artificial entity that did not fit the definition of an author and that without producing evidence of individual involvement in drafting of the question papers, it cannot be bestowed with rights to own a copyright over its works. The court clarified that under the Copyright Act, 1957 only a natural person can be attributed authorship. The court's position was further strengthened in the case of *Tech Plus Media Private Ltd. v. Jyoti Janda*⁵¹, wherein the case affirmed that no artificial entity or a juristic person can be considered a 'natural person' for the purposes of attributing rights of copyright or ownership of copyright. The same position was echoed yet again by the Delhi High Court in Navigators Logistics Ltd. v. Kashif Qureshi & Ors⁵². In Navigators, the case focused on a claim of copyright over a list generated by a computer program, which the High court believed cannot be presented with copyright ownership since the program generated the list in the complete absence of human interreference. The observation by the Delhi High court in Navigators also aligned with the position taken by the courts in United States, where authorship was held to be not solely attributed to any computer-generated product⁵³

While there are limited Indian cases discussing how artificial entities can be positioned in terms of copyright ownership, there are even lesser cases dealing with copyright and AI in specific. One such case that deals with copyright issues arising from computer or software generated work that provides a little bit more insightful understanding of Indian courts view copyright is *University of Oxford & Ors v. Rameshwari Photocopy Services & Anr*,⁵⁴. In this case, the High Court of Delhi observed that a computer program that generates horoscopes can be submitted for a copyright since it produces unique outputs on the basis of the data fed to it. Thus, AI generated works can indeed qualify for copyright protection. However, no computer program

⁵⁰ Rupendra Kashyap v Jiwan Publishing House Pvt Ltd 1996 (38) DRJ 81.

⁵¹Tech Plus Media Private Ltd v Jyoti Janda CS(OS) 119/2010 & IA No 920/2010.

⁵² Navigators Logistics Ltd v Kashif Qureshi & Ors AIRONLINE 2018 DEL 1483.

⁵³ Cetacean Community v Bush 249 F Supp 2d 1206 (D Haw 2003).

⁵⁴The Chancellor, Masters & Scholars of the University of Oxford & Ors v Rameshwari Photocopy Services & Anr 2016 SCC OnLine Del 6228.

is created from thin air and it requires human input of existing copyright materials to be fed into the algorithm. Therefore, unless such usage of copyrighted material constitutes fair use, the resulting work of any AI generated process cannot be legal. To answer this question, the jurisprudential analysis can be draw from the Delhi High court's observation in the case of *University of Oxford* ⁵⁵ wherein it was observed that, creation of course packs by pulling out excerpts from existing copyrighted material can indeed be copyrighted so long as the resulting product is unique. Furthermore, the court also held that, such use of existing copyright material by AI to generate a unique product as fair use since the AI transforms the copyrighted material which is the very purpose of the software.⁵⁶

There are indeed not many specific cases that directly address how AI and copyright can intersect within the Indian legal system, however, they do indeed demonstrate the path that is being laid down to juxtapose AI and copyright under the intellectual property regime while balancing the interests of the creator of the AI, the copyright holder of existing works and the users of the AI generated work.

Limited statutory provisions and guidelines to regulate copyright governance over AI generated works

The government of India has recognised the importance of AI and its instrumental role in the progress of the society in every sphere. In pursuit of this recognition, it has also introduced the policy 'AI for ALL' where an AI Task force is assigned the role of promoting and inculcating AI to further social and economic benefits.⁵⁷ However, this policy primarily deals with the use of AI and the implications on right to privacy and does not discuss the other more crucial areas of law such as intellectual property or ownership rights.⁵⁸ Due to the rapidly developing AI technology, it has however become important to understand the intricacies associated with its position in law, especially under the copyright framework. *Even though the courts have provided a cursory observation of their analysis of copyrights attributed to AI, this technology has only continued to rapidly grow and the law must keep up pace with such developments. For instance, the law has not yet taken into account circumstances where one person*

⁵⁵ Ibid

⁵⁶ Shamnad Basheer et al, 'Artificial Intelligence and Intellectual Property: Mind the Machine!' (SpicyIP, 2016) https://spicyip.com/2016/12/artificial-intelligence-and-intellectual-property-mind-the-machine.html accessed 10 February 2025.

⁵⁷ 'AI for All: India's AI Strategy for Empowering the Next Billion' (no date) Delhi <https://www.dwihnewdelhi.org/en/topics/ai/ai-for-all-indias-ai-strategy-for-empowering-the-next-billion/>accessed 10 February 2025.

⁵⁸ Urvashi Aneja, 'The Problem with India's "AI for All" Strategy' (Chatham House, 2021) <https://www.chathamhouse.org/2019/02/problem-indias-ai-all-strategy accessed > accessed 10 February 2025...

develops the AI, but the AI on its own volition draws inputs from multiple other people to create its own unique output.⁵⁹ It is due to the possibility of such instances that it becomes necessary to establish a sub-copyright regime exclusively focusing on AI related products.⁶⁰

Potential interpretation of AI as an individual author independent of its human creator will raise serious legal complications

In light of the discussion on disputes pertaining to the ownership over AI generated copyright work, an unorthodox argument has been raised multiple times to recognise AI as an 'individual author' of the work produced and attribute copyright to it.⁶¹ While the AI indeed can be construed as a possible individual creator of the work, the legal implications to term AI as an individual author will lead to detrimental legal ambiguity whose ripples will affect every branch of law. Furthermore, not only is the Indian legal system entirely ill-equipped to deal with such a complex dilemma but so are most legislative frameworks around the world.⁶² Some of the legal complications that can arise with the recognition of AI has an author of a copyright are as follows:

- (i) Complexities arising from ownership transfer from an artificial entity with no will of its own: Section 17 of the Copyright Act, 1957 states that the original creator of a work is usually the initial creator or the proprietor of the work. Sometimes, this can be transferred by way of a contract such as an employment contract or any other contract which explicitly states this. Such transfers are possible between two natural persons, however, transferring ownership with respect to AI creator works may not that be simple. Firstly, because AI is not recognised as an entity capable of having 'ownership' and second, AI cannot of its own volition make any transfers. *Therefore, the assigned copyright will continue to vest with an artificial entity with no will of its own*.⁶³
- (ii) The impossible association of moral rights to an artificial entity: Section 57 of the Copyright Act, 1957 grants the author of the work with special rights, such as moral rights like the right to be associated with the work, to protect the integrity of

⁵⁹ Cooley Alert, 'Copyright Ownership of Generative AI Outputs Varies Around the World' (Cooley - Global Law Firm, 2024) accessed 10 February 2025">https://www.cooley.com/news/insight/2024/2024-01-29-copyright-ownership-of-generative-ai-outputs-varies-around-the-world> accessed 10 February 2025.

⁶⁰ Ibid

⁶¹ Hafiz Gaffar and Saleh Albarashdi, 'Copyright Protection for AI-Generated Works: Exploring Originality and Ownership in a Digital Landscape' (2024) *Asian Journal of International Law* 11, doi:10.1017/s2044251323000735.

⁶² Ibid 12

⁶³ Hema K, 'Protection of Artificial Intelligence Autonomously Generated Works Under the Copyright Act, 1957
- An Analytical Study' (2023) 28(3) *Journal of Intellectual Property Rights* 28, doi:10.56042/jipr.v28i3.708.

the work and to give due credit to the author of the work. These 'moral' rights cannot possibly be associated to an artificial entity, because doing so would be to assume that this entity now possess the emotional quotient of a natural person that would be harmed upon its moral rights being violated. Furthermore, the concept of 'honour' has never been associated with an artificial entity and cannot therefore be enforced.⁶⁴

- (iii) The duration of protection will be perpetual: As discussed above, copyright protection in India is granted for the entire lifetime of the author and then an additional 60 years after the demise of the author. However, the AI is a perpetual entity with no possible concept of natural demise. Therefore, it creates uncertainty as to whether AI generated work will remain protected perpetually or whether they would be subject to any limitations and even so on what basis would such limitations be placed on the duration of protection of AI generated works.⁶⁵
- (iv) Determining the payment of royalty: The author of a copyright work is entitled to claim royalties. Royalties can only be waived upon making a personal explicit waiver. Therefore, if an AI is to be construed as an author, it has to be determined that the royalty so paid has to go the AI, which is not possible since the AI does not have any legal ownership of its own and neither can the AI on its own use the currency so given to it.⁶⁶
- (v) Lack of accountability: Accountability can only be associated with entities or individuals who have a consciousness and conscience. AI does not possess the required emotional intelligence to be held accountable for any mistakes on its part, since such mistakes are purely made out an unpredictable error, that is often beyond the control of both the software running it as well as of the programmer that designed it. Thus, failure to hold AI accountable will also prevent any legal claims from being brought against it if the AI were to produce work that is defamatory, obscene or in violation of public morals.⁶⁷ At best the AI can be shut down, but then again can any damages be sought? And if yes, then against who?

Such complexities highlight the requirement for further deliberations on the formulation of a legal framework that can address such challenges arising from attributing copyright to AI-

⁶⁴ Ibid 196

⁶⁵ Ibid 195-196

⁶⁶ VK Ahuja, 'Artificial Intelligence and Copyright: Issues and Challenges' (2020) *Journal of the Indian Law Institute* 277.

⁶⁷ Dimple Jodha and Poonam Bera, 'Copyright Issues in the Era of AI - A Critical Analysis' (2023) 13(3) *Res Militaris* 1747.

generated works.

The present resting position of AI and copyrights under the Indian legal regime

A combined analysis of 4.1 and 4.2 presents the following position of the Indian Judiciary on copyright ownership over AI generated works:

- a. Any AI generated work that is submitted for copyright ownership must present proof of human interference.
- b. Copyright or ownership cannot be attributed to the AI alone.
- c. AI is indeed capable of engaging in creative pursuits the programmer or creator of the software behind the AI can assert copyright ownership over the AI generated product (provided proof of human interference in the creation of the final product is established)
- d. AI cannot be recognised as an individual entity capable of having extended and moral rights as provided under the Copyright Act, 1957.
- e. Any disputes pertaining to AI and copyright ownership, or infringement of potential AI generated copyrighted work will be determined by the courts on a case-by-case basis.

VI. POLICY IMPLICATIONS AND LEGAL REFORMS

As discussed above, the Indian legal regime definitely requires a stronger approach to enhance the co-existence of AI generated works and copyright. However, the introduction of any legal framework towards this objective in the direction of AI must not only seek to answer the following questions but must also create space for broad interpretation that provides flexibility to the courts to better enhance the law:

- Legal provisions determining the originality of the AI generated work: Any work submitted for copyright must first be determined to be a novel and original product. However, in cases of AI generated work, it is rather difficult to create a unique work of its own or make discoveries as such since it works off of the existing copyrighted work fed into its algorithm. Therefore, it is important to determine whether the final AI generated work is sufficient enough to qualify for copyright protection.⁶⁸
- Determining the extent of human authorship: The Copyright Act 1957, does not

⁶⁸ Niloufer Selvadurai and Rita Matulionyte, 'Reconsidering Creativity: Copyright Protection for Works Generated Using Artificial Intelligence' (2020) 15(7) *Journal of Intellectual Property Law & Practice* 540, doi:10.1093/jiplp/jpaa062.

include AI within the term 'author' and therefore AI cannot be granted sole authorship over its created work. However, the Copyright Act 1957 is also quite ambiguous on the limitations of human authorship and therefore, clarifications must be introduced in the form of statutory provisions that indicate the extent to which human authorship in an AI generated work will be recognised for the purposes of copyright. The AI generated works are of two types (i) one where there is some sort of human interference present and (ii) works created without any human interference.⁶⁹

With respect to works created with human interference, the individual providing the creative inputs to the AI has to be considered and recognised as the primary author of the work. However, it may get a bit more complicated in AI generated work in the absence of human interference. In such circumstances, the owner of the AI software or the system can be recognised as the primary copyright owner of the AI generated work as arising from their ownership of the AI itself.⁷⁰

- Determining rights of ownership: Establishing ownership over AI generated works is complex indeed, but as discussed above, it may not be a wise idea to grant authorship to an artificial entity. However, that being said, statutory provisions are required to determine authorship over an AI generated work in complex circumstances where the product is the output of multiple copyrights. The absence of any legal provisions on this subject will create further potential disputes on ownership rights. In determining ownership rights over AI-generated works, consideration must be paid to factors that are inclusive of but not limited to the human creators and the extent of their input, the role of developers and the users of the AI system and the final AI product. The ownership rights have to consider every entity's contribution.⁷¹
- **Provisions dealing with infringement and enforcement**: Since there are no specific provisions relating to infringement of AI generated work, the traditional principles of infringement determination and penalty will apply. Specific provisions dealing with infringement of AI generated work is necessary since there will be cases where the copyright nature of an AI generated work is yet to be determined and during the pendency of such a dispute, such AI generated works cannot be left vulnerable to arbitrary copying, reproduction or resale.⁷²

 ⁶⁹ Paarth Naithani, 'Determining Authorship & Ownership of AI-Generated Work Under Indian Copyright Law' (2022) 11(1) NTUT Journal of Intellectual Property Law and Management 7, doi:10.52783/eel.v14i2.1522.
 ⁷⁰ Ibid

⁷¹ Ibid 11

⁷² Dimple Jodha & Poonam Bera, 'Copyright Issues in the Era of AI - A Critical Analysis' (2023) 13(3) Res

- Provisions to determine what amounts to fair use when using copyrighted works for AI: AI generated work is primarily a derivative work and it is only in rare cases that it discovers new factors on its own. This makes it imperative to draw clear guidelines on what will constitute fair use in such circumstances where the AI is pulling in derivative works involving AI generated content These guidelines must balance the interests of the copyright holders with the objective to promote and foster creativity and innovation.⁷³
- Introduce provisions to establish duration of protection: Since AI lives perpetually, it may be confusing to attribute any duration of protection to AI generated works, however, once ownership is attributed to a human creator, the traditional principles of copyright duration will apply. Clear guidelines are nevertheless necessary on establishing duration of protection of AI generated works, especially if such works are constantly being modified into novel and original creations.⁷⁴
- Mandate registration and documentation of AI generated works to facilitate ownership establishment and enforcement: The introduction of mechanisms to register and document AI generated works for copyright purposes is necessary to facilitate and establish ownership and enforcement claims. This ought to also be supplemented by clarifying the legal liability associated with such AI generated work, attached to the developers of the AI, their users and the platforms they are being used on.⁷⁵
- Policy on international cooperation and public awareness: It is imperative to note that, the Indian legal regime is currently quite underwhelming in terms of how it has grasped the idea of AI within its legal system and it is difficult to predict the extent to which the India legislature and courts will be able to study it enough to understand its complexities within the near future to legislate provisions on the same. Therefore, fostering international cooperation will not only aid the Indian legal system in swift understanding and incorporation of provisions dealing with AI and intellectual property but it will also aid in promotion of public awareness of the same. This in turn will enhance the capacity of the Indian legal system to develop stronger approaches to AI-copyright governance on the foundations of existing international research.⁷⁶

Militaris 1740.

⁷³ Ibid 1739-1740

⁷⁴ Bhagyamma G., 'Protecting Creative Works: Exploring Copyright Protection Under Indian Copyright Law' (2023) 1(1) *ILE International Law Review* 64.

⁷⁵ Ibid 67

⁷⁶ Shweta Bharti and Pranshu Singh, 'EU Artificial Intelligence Act: Comparing India's Approach with Principles

The implementation of the aforementioned reforms can help the Indian legal regime adapt and implement effective governance measures of AI-generated works and their copyrights, while also protecting the interests of both creators and users.

VII. CONCLUSION

The collocation of AI generated works and the various aspects associated with the copyright law under the Indian intellectual property regime is both a complex question of law and at the same time unavoidable due to its growing significance. What sets AI apart from other technologies is its ability to grow, understand and adapt like a child without requiring parent supervisions, however, at the same time AI does not have the human qualities of a child such as a will of its own or any emotional intelligence. This aspect places AI in a position that is a bit beyond the human applicability of law. However, regulation of AI generated work is important given its momentous impact in every sphere of life. Currently there are very limited statutory provisions and guidelines on the regulation of copyright governance over AI generated works in India. Furthermore, while the jurisprudence of the courts does contribute to understanding the present legal position of establishing copyright ownership over AI generated works, they are not entirely adequate. The courts have made it very clear that, any AI generated work that is submitted for copyright ownership must present proof of human interference and that copyright or ownership cannot be attributed to the AI alone. There is not much to dispute with this observation since AI cannot be recognised as an individual entity capable of having extended and moral rights as provided under the Copyright Act, 1957 for its lack of a consciousness or a will of its own. Extending authorship to AI as an individual entity will set a dangerous precedent with cataclysmic consequences in almost every field of law including human rights which will then be hounded with requests to extend such rights to AI entities. In light of such complications, it instead proposed that the legislature extend its support towards addressing existing issues associated with copyrights over AI generated works such as contributory rights, duration of protection and international cooperation instead of having to extend partial or individual ownership to the AI entity.

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