

Transforming Frontiers of Copyright Regime under the Emerging Artificial Intelligence Framework and its Comparative Analysis

**Pankaj Chhuttani*

*** Kritika Gandhi*

ABSTRACT

At the very outset, the artificial intelligence known to us by A.I. indicates the computer or can be called as a machine that acts like that of human beings which includes all the activities from voice to the movement, from thought processing to decision making. This machine called A.I. is evolving in all the fields and the need and demand are rising nowadays and soon will become a part of our day-to-day activities.

As the developments are taken in the emerging A.I. we need to focus and discuss the various aspects and domains where social, financial, and moral and along with administrative and legal changes need to discuss upon. And talking about the innovations and advancement of AI from making music to molding it or other different types of work which as a human resource is being engaged in and here the work that is being done by a computer resource.

The Indian Copyright Act preserves the writer's rights, and it is evident from the action's construction that the proprietor of protected content may be a natural or legal person and not some other person, but such individual has only the privileges allowed by the law. What about if, on either hand, the complete work is created by artificial intelligence? On only one hand, AI is indeed a beneficial characteristic for enhancing market productivity, yet under Indian Copyright Law, AI-generated works are not regarded as copyright-protected works made by members of humans. As a result, the author of this paper will analyze certain circumstances and suggest a solution to address the growing interaction between AI and the Indian Copyright Regime.

Key Words: Artificial Intelligence, Indian Copyright Regime, Innovation, Business Efficiency, Business Growth, Technological Development

1. Introduction

At the very outset, the artificial intelligence known to us by AI indicates the computer or can be called as a machine that acts like that of human beings which includes all the activities from voice to the movement, from thought processing to decision making. This machine called AI is evolving in all the fields and the need and demand are rising nowadays and soon will become a part of our day-to-day activities. As the developments are taken in the emerging AI we need to focus and discuss the various aspects and domains where social, financial, and moral and along with administrative and legal changes need to discuss upon. And talking about the innovations and advancement of AI from making music to molding it or other different types of work which as a human resource is being engaged in and here the work that is being done by a computer resource.

In terms of copyright, which is recognized as one of the legal rights where the innovation, the original creation is being appreciated and rewarded as the work is done on

the intellect and human mind. As AI is also a creation made through human intellect and if such a machine creates such a work that can be covered under the copyright law, then who will be rewarded for such works? Along with that if AI does any kind of copyright infringement who will be held liable for such an infringement?

The above subject will lead to various legal issues in the upcoming future which has no answers to it in the present law due to the fast emergence of AI and the importance of copyright. Under this paper, the author would like to manifest the issue in this article. This paper focuses on the issue of entitlement of the work done by the AI and its maker are under the umbrella of this huge pool of Intellectual property laws. The paper also discusses the intersection of AI and copyright laws. At last, the paper will cover the suggestions and solutions to the emerging issue shortly.

Evolution of Copyright law in India?

The world's first copyright regulation turned into the Statute

*Student, Master of Law (LLM), Dharmashashtra National Law University, Jabalpur, Madhya Pradesh.

**Student, BBA-LLB, Jaipur National University, Jaipur, Rajasthan.

of Anne, enacted in England in 1710. This Act delivered for the primary time the idea of the writer of a piece being the proprietor of its copyright and laid out constant phrases of safety. The legislation primarily based totally on the Statute of Anne progressively seemed in different countries, together with the Copyright Act of 1790 withinside the United States, but copyright rules remained uncoordinated at worldwide degree till the nineteenth century.

If we talk about the Indian Scenario; the Copyright Act 1957 (the Act), supported via way of means of the Copyright Rules 1958 (the Rules), is the governing regulation for copyright protection in India. Substantial amendments had been accomplished to the Copyright Act in 2012. India follows a not unusual place regulation prison system, so is predicated on case regulation to interpret, and set precedents in regulation and so the judicial choices contribute to the re-assets of copyright regulation in India. India is a member of the Berne Conventions and Universal Copyright Convention. The Government of India has additionally handed the International Copyright Order, 1999. According to this Order, any paintings first posted in any of us of that may be a member of any of the above conventions is granted the equal remedy as though it turned into first posted in India.

Copyright is a shape of highbrow belongings protection granted beneath Indian regulation to the creators of unique works of authorship together with literary works (inclusive of laptop programs, tables, and compilations inclusive of laptop databases which can be expressed in words, codes, schemes, or in every other shape, inclusive of a gadget readable medium), dramatic, musical, and inventive works, cinematographic movies, and sound recordings.

Under section thirteen of the Copyright Act 1957, copyright safety is conferred on literary works, dramatic works, musical works, inventive works, cinematograph movies, and sound recording. Copyright protection is conferred on all Original literary, inventive, musical, or dramatic, cinematograph, and sound recording work. Original means, that the paintings have now no longer been copied from every other source. Copyright safety commences the instant a piece is created, and its registration is optional. However, it is so far usually useful to reap a registration for higher safety. Copyright registration does now no longer confer any rights and is simply prima facie evidence of access in recognize of the paintings withinside the Copyright Register maintained via way of means of the Registrar of Copyrights.

In India, the registration of copyright isn't obligatory as the

registration is dealt with as a mere recording of a fact. The registration does now no longer create or confer any new proper and isn't a prerequisite for starting up motion in opposition to infringement. The view has been upheld via way of means of the Indian courts through the judgments.

What is an Artificial Intelligence?

This extraordinary thought was presented through Allen Newell, Cliff Shaw, and Herbert Simon, Logic Theorist. The Logic Theorist was a program expected to mimic the basic thinking capacities of a human and was financed by the Research and Development (RAND) Corporation. It was believed by various people to be the chief man-made mental ability program and was presented at the Dartmouth Summer Research Project on Artificial Intelligence (DSRPA) worked with by John McCarthy and Marvin Minsky in 1956.

In this paramount social affair, McCarthy, imagining an inconceivable synergistic effort, joined top experts from various fields for an open-completed discussion on man-made thinking, the term which he wrote at the very event. Tragically, the meeting missed the mark concerning McCarthy assumptions; individuals went back and forth however they wanted, there was an inability to concede to standard techniques for the field. Despite this, everybody sincerely lined up with the opinion that AI was attainable. The meaning of this occasion cannot be subverted as it catalyzed the following twenty years of AI research.

The Artificial Intelligence in India as India National methodology for Artificial Intelligence has been prepared by NITI Aayog has defined the way forward to outfit the force of Artificial Intelligence (AI) in different fields. Man-made brainpower (AI) practices and endeavors advantage India intending to cultural necessities in regions like medical care, schooling, farming, brilliant urban communities, and framework, including savvy portability and transportation utilizing such unique information. The beginning of the 21st century saw gadgets becoming unavoidable in pretty much every produced object on the planet.

There are presently mind-boggling propels in information assortment, handling, and calculation power. Keen frameworks would now be able to be sent in an assortment of errands and dynamics to empower better availability and upgrade usefulness. This article follows the improvement of AI, globally its range of utilization, and its advancement in India.

Artificial Intelligence is everywhere as we now live in the period of large information at an age where we can gather gigantic amounts of data excessively lumbering for an

individual to measure. The use of man-made brainpower in such a manner has effectively been very productive in a few ventures like innovation, banking, showcasing, and diversion. We have seen that regardless of whether calculations don't work on a lot, huge information, and huge figuring permit artificial intelligence to learn through brute power.

If we think about the future of AI, AI languages seem to be the next major thing shortly. It was previously in progress. I can't recall the last time I phoned a business and spoke with a human being. Machines are beckoning me these days! Imagine communicating with an expert system in a fluid conversation or having a conversation in two languages that is rephrased in real-time.

We may also expect to see autonomous buses on the road in the next twenty years, and that is an optimistic estimate. In the long run, what matters is general intelligence or a machine that can perform all activities better than humans. This is like the conscious robots we've seen in photos. To me, it seemed improbable that this will be realized in the next 50 years. Indeed, if the potential exists, ethical concerns will act as a severe deterrent to consummation. We will need to have a meaningful conversation about machine policy and ethics (unfortunately both abnormally mortal concerns) when that time arrives (but better still, before that time comes), but meanwhile, we will let AI slowly improve and run madly in society.

1.1 Emerging Interface between copyright and AI

This part of the article emphasizes the rights of the work created by the AI. The treatment of AI copyrightable work differs from that of a work product. For instance, the code that a programmer writes for an AI may be different from the code that the AI produces itself. The difference between the AI's work product and the code is that the AI's product is created without the input of the programmer. Instead, its work product is created by the AI itself. And as per the Indian Copyright Regime, the AI cannot be considered the copyright owner of the work they create; they should be considered agents and not consumers. If the AI is created by an individual, the individual will not be considered an individual copyright holder. If the AI is sold as a product, the end-user will be the copyright holder. And the one who sells the AI will lose its copyright on the same.

Copyright law in India is governed by the Copyright Act, 1957 (hence referred to as "the Act") and falls within the category of intellectual property rights. Copyright law grants authorship to the creators of any genuine work, which can be expressed in a variety of ways, including

codes, schemes, and other formats. The purpose of authorship under Indian copyright law is to protect the writer's economic rights, while the case of *Amarnath Sehgal v. Union of India* established the writer's ethical rights under Section 57 of the Copyright Act. In the case of artificial intelligence, the question is whether artwork generated with the help of evolving artificial intelligence and specific human input may be accorded authorship. These issues must be addressed because the growing intervention of artificial intelligence with both private and public entities necessitates the creation of regulations and changes to legal standards to close any gaps.

Section 2(d)(vi) of the Act defines an 'author' as "on the subject of any literary, dramatic, musical or inventive paintings that's computer-generated, the individual that reasons the paintings to be created;" Since the term uses the phrase "the man or woman who causes the paintings be made," the flaws in the Indian copyright legislation are discussed here. As a result, the Act no longer accurately portrays the production of labor in circumstances when the genuine creator isn't a person.

The basic argument is that authorship is defined to include both human and non-human writers. Professor Ryan Abbott proposed that nonhumans be given authorship and inventorship to sell the advancement and enhancement of artificial intelligence. Since non-human entities aren't normal humans, they can't be held legally liable in a courtroom. This may make them wish to tackle difficult conditions. In India, problems arise because the Act presumes that authors are human beings.

Only human-assisted computer systems are allowed to operate. Section 2(d)(vi) stipulates that the human behind any painting created with the help of a machine might be the author. considered; computer networks are the tools used by humans to create. The 1984 case *Sony Corp. v. Universal Studios Inc* established that the benefits of copyright ownership are intended to encourage inventors and authors to engage in innovative activities by providing a monetary incentive. Copyrighted work encourages innovation while also increasing the diversity of works available in the public domain once the work is completed.

The motivation for considering human authorship is to provide financial incentives and copyright to human writers. Artificial intelligence machines don't require monetary incentives, and their total effectiveness isn't based on material rewards, but on the investment of time via the use of AI programmers, as well as the financial support of the organizations for which they work. The United States decision of *Alfred Bell v. Catalda Fine Arts* ruled that the writer contributes to the primary as much as something recognized. Because they are no longer

copied, the artificial intelligence framework decides to ensure copyright of the yield.

In the case of *Burrow Giles Lithographic v. Saron*, another issue that emerged in 1884 was whether copyright covering could be provided to a photograph. The ruling established a distinction between creative and mechanical paintings by extending copyright protection to pictures. In this situation, the digital dig cameras utilized are seen as a gadget that aids the creation of an actual work of art. The court discussed mechanical yield with no one else innovating, and how this method may make it difficult to grant copyright protection to artworks made with the use of them. This precedent set in 1884 remains used to justify the issuance of copyright to photographs.

As a result, making artwork using synthetic intelligence software may be compared to the technology that has come a long way since and the cameras are virtual and in every mobile phone. An artificial intelligence machine, like digital cameras, is essential equipment employed with the help of a writer to give their thoughts a real shape. The law on copyright must be updated to include how artificial intelligence is governed. Growing technical advancements, as well as the growing reputation of artificial intelligence-related technologies, need a focus on legitimacy and legality.

If we discuss the issue under section 2(d) (vi) of the existing Copyright Act in India, then it surely covers the idea of work created by the A.I. in terms stating the work created by computer and it directly mentions that if created by the human intervention then the author and ownership with him/her. Hereinafter, the question which is yet to cover that if the work which is created by an A.I. does not involve any human intervention then such an issue still lays in the grey area.

Now, if we throw some light on an issue then the first question which arises is even if can the A.I. be considered and given a legal entity? It has been suggested that AIs are considered legal entities. This concept is based on their autonomy and creativity. Scholars believe that AIs can act autonomously and are responsible for their actions. This concept is supported by various studies claiming that the evolution of AIs has allowed them to become more creative and autonomous.

Let's see if the owner is entitled to an AI for the work which they created without the intervention of the human mind. To understand this, we need to value the contribution of computers in the field of innovation as well as the area of literary and other artistic works. But still, till now the computers and machines are evolution is at the level of the creative mindset. Without the human intellect,

programming, and command inputs the machines are still in the hands of their owners which is yet a point where they need to be considered in the phase of learning.

These programming and commands are given to help the machines to act and make their decisions. In the end, the data which is being entered accordingly they create the work and accordingly the individual made by these machines lead to the production of a piece of work or of art which the reason of the data which specifies how the new work looks and created. But it would not be right if they ignore the fact that the work is created by the A.I. which is an advanced and modified version of the inputs given to it. But then such work might be held to have the lack of originality in them as an essential element for copyright. It won't be wrong to say that the A. I was created to make human work easy. The A.I developments have covered a long way but are still somewhere at the premature stage.

1.2 Infringements by an AI

Considering the judgment of the Hon'ble Supreme Court of India in *Eastern Book Company&Ors v. D6 Modak&An* which discovered that "To declare copyright in a compilation, the writer has to produce the fabric with exercising of his talent and judgment which won't be creativity withinside the feel that its miles novel or non-obvious, however at the equal time it isn't always a made from simply labor and capital. The spinoff paintings produced with the aid of using the writer have to have a few distinguishable capabilities and flavor." And consequently, it's miles a demand for any compilation or spinoff paintings to expose Skill and Judgment.

Issue of Infringement: If AI is famous as the essayist and owner of the work produced with the guide of utilizing it, then, at that point, a significant question brought up in who might be held chargeable for any encroachment accomplished with the guide of utilizing such AI or its creation. Area 51 of the Copyright Act 1957 refers to that:

As indicated by the Indian Copyright Regime, it is a piece will be considered to be encroached (a) while any individual, without a permit conceded with the guide of utilizing the owner of the copyright or the Registrar of Copyrights underneath this Act or in repudiation of the circumstances of a permit so allowed or of any situation forced with the guide of utilizing a skilled authority underneath this Act-(I) does anything, the particular appropriate to do that is with the guide of utilizing this Act presented upon the owner of the copyright, or (I) allows in for money any locale for use for the verbal trade of the canvases to the overall population wherein such verbal trade comprises an encroachment of the copyright

withinside the artworks until he transformed into now as of now not cognizant and had no reasonable floor for accepting that such verbal trade to the overall population could be an encroachment of copyright; or (b) while any individual-

(i) makes on the market or hire, or sells or shall we for hire, or with the aid of using manner of change presentations or gives on the market or hire, or

(i) Distributes both for the motive of change or to such a volume as to affect prejudicially the proprietor of the copyright,

Or (ii) with the aid of using manner of change well-known shows in public, or(iv) imports into India, any infringing copies of the paintings

Provided that not anything in sub-clause (iv) shall follow to the import of 1 replica of any paintings for the personal and domestic use of the importer

Analyzing the above provision, it may without difficulty be stated that copyright in a piece can handiest be infringed with the aid of using a person. Since the criminal popularity of the AI .remains is now no longer categorized as a criminal entity, consequently, any infringement due to AI will come to be a critical issue. In the case of AI, it becomes much greater hard to the region the legal responsibility for any infringement due to AI. Since the AI has no criminal popularity of its own, consequently, the problem of giving AI - authorship rights, may come to be vulnerable until a right channel and chain can be established to create liabilities for the acts of Artificial Intelligence.

2. Comparative Analysis

The artificial intelligence enterprise in India is booming. While non-public groups, colleges, universities, or even proficient people are riding this change, one cannot neglect the position that the Government of India has performed in the latest years. The sheer push from the Government to provide you with policies, tasks or even partnerships with different countries has helped India to have a stronghold in AI.

In this article, we are going to see several of India's main partnerships with different countries to reinforce the country's artificial intelligence enterprise.

The U.S.A

According to the USPTO survey, most participants believe that the present US IP general arrangement of rules and permission should be "updated specifically to suit the expansion of AI," and that current business law standards may cover any gaps left by IP law as AI progresses.

Participants worked together to coordinate AI as just a sample of PCs made progress and discovered that the present Patent course is ready to monitor advancements. An ordinary subject was that AI isn't adequately remarkable-and won't be for a shockingly significant time-frame-to warrant the excusal of a human pioneer, as such taking out the need for novel request. In any event, AI's omnipresence would have an impact on how the USPTO, and judges evaluate the reasonable theoretical norm of a "person possessing standard capacity in the art," and that is critical in determining if a copyright right should be issued.

Different respondents felt that AI may affect the limit for the US IP considered "non-obviousness" by changing the limit level of the hypothetical "average gifted trained professional." A creation that would have been clear to an individual of standard fitness in the workmanship before the pragmatic recording date of the dependable headway isn't patentable.

As to copyright, most respondents concurred that the current requirement for a human creator (with express one of kind cases) ought to remain.

Considering the loss of personhood attributed to AI, the USPTO also asked for views on the suitability of the Lanham Act for brand name infringement via Artificial intelligence-based advancement. Overall, respondents said that the United States' present real and perspective-based legislation framework for brand names is "sufficiently adaptable" to confront Artificial programming.

The USPTO will also investigate what measures it may take to aid in the understanding and consistency of IP for emerging sorts of advancements such as AI. It is seeking to ensure that appropriate IP motives are established to boost future growth in and around this significant region.

The EU

The Eu Parliament (EP) corroborates a much more constructive attitude to the interplay between Intelligence and IPR. The EPs encompass the analysis of the European Commission's White Paper on AI methodology, which was approved in Feb 2020, and emphasize the importance of creating a "down to earth and completely masterminded administrative system in the field of AI types of progress." Unlike the U.s, only 3% of survey participants to the Eu Committee's Policy Document believed that the current endorsement is completely adequate. To facilitate legislation throughout the European Union, the EP suggests that any future administrative structure appear when in doubt, rather than a solicitation.

The EP, like the USPTO, underlines that the focal parts of

guaranteed improvement openings are to get the interest of human makers and connect with movement. The EP concurs that specific AI-made works might be unraveled as "astute works" and be outfitted for copyright with the proprietorship given out to a very human maker.

The European Commission is relied on to pass on a draft legitimate idea on AI in mid-2021.

The UK

The UKIPO's call for sees investigates licenses, copyright, plan benefits, brand names, and restrictive advantages. It sees if AI frameworks can devise indications and regardless of whether there is an ethical case for considering AI to be a pioneer of a patent. The UKIPO besides asks concerning whether more crucial clearness is required as for who is in peril when AI encroaches copyright, and regardless of whether the substance made by AI can be prepared for security by copyright or related benefits.

3. Probable Solutions

As in the era of so many advancements in the field of A.I, the issue is vague, ambiguous, and along with this lots of debates arise, and many are in the favor of giving the entitlement to the owners of the A.I. as there is no law which protects the artificial person and considering the A.I. which are also considered as the artificial person in itself as created through human intellect. It's also stated that such copyrightable issues can be solved as per the case and may differ in the various cases emerging in the field of law. But if we see shortly then it is becoming more complicating, confusing, and difficult to decide between the works created by humans or the machine. So, one of the suitable solutions can be of granting the rights to that of the owner who created the A.I. through its intellect, and the companies who keep on investing their money get the reward in the form of return.

Another, most significant, and probable solution to the above-discussed issue is to make the work created by the A.I. a work opens to the public in other words make the work available in the public domain. And then such work can be used by anyone in the public. Although there can be drawbacks to it the author here is the machine so there are very few limitations by making it open to the public. As here the A. I am not entitled to any legal entity and hence no rights are being infringed of such an AI.

And if talk about the one who programmed everything can get its coding and inputs copyrighted and then he/she will be compensated or rewarded for the same and is also entitled to the required protection. And if we talk about one of the end-users of such work created by AI then such a creator can do its modifications and required changes

and can get its work being copyright under the specified laws and procedures established.

The work is published in the public domain will be a useful creative work for the users in the public and there will be no injustice and comprise to the producers of the content. On the other side of such work, the problem arises in terms of false copyrights. In such a case the person infringes must mention and prove that the work created was being created by the AI and the exclusive rights entitled are not at all valid in the very first place.

4. Conclusion

As per the discussions above mentioned, it may be easily concluded that our legislation is not yet well equipped and versed to focus on the issue regarding the rights upon the work created by the AI and the rights of the AI itself. As per the status, it is clearly stated that the natural person in the Copyright Act, 1957 can be called an author and not an artificial person. Further, the present Act needs to be amended to recognize such rights of AI, as well as a separate category for AI, need to be introduced. However, neither AI nor legal entity nor the amendments by the legislation can be considered as probable solutions for the upcoming future.

5. Suggestions

The works created by the AI can be recognized under a separate head or class of work.

The work can be divided under two heads that is with and without the interference the work produced with the help of an Artificial Intelligence

When created with the help of humans then the owner can be the human who is fed up with the inputs and the author can be the AI.

And at the other hand if without interference then the owner can be the one that is the holder of an Artificial Intelligence, and the author can be the AI itself.

If the owner is the human, then any infringement will result in legal action being taken against that person.

AI holders must get the benefit, and this will lead to a positive and right step.

The Indian legislation must take a step forward in drafting and implementing an area of punishments whether civil or criminal in the place where the infringement is done Als against the humans.

There must also be legal mechanisms and laws to trace, regulate and investigate the wrongs or any crime performed by the AI's.

References

1. Andrew Griffins, A. (2017). Facebook's Artificial Intelligence Robots Shut Down After They Start Talking To Each Other In Their Own Language, Independent. Retrieved from <<https://www.independent.co.uk/life-style/gadgets-and-tech/news/facebook-artificialintelligence-ai-chatbot-new-language-research-openai-google-a7869706.html>>.
2. Annemarie Birdy, Coding Creativity: Copyright and the Artificially Intelligent Author, STAN. TECH. L. RE. 5(2012). Retrieved from <<https://web.law.columbia.edu/sites/default/files/microsites/kernochan/09.materials-Bridy.pdf>>.
3. Deahl, D. (2018). How Ai-Generated Music Is Changing the Way Hits Are Made, The Verge(2018). Retrieved From <https://www.theverge.com/2018/8/31/17777008/artificialintelligence-taryn-southern-amper-musicon> 31 Aug 2018.
4. Streitfield, D (2018). Computer Stories: A.I. Is Beginning to Assist Novelists, The New York Times. Retrieved from <<https://www.nytimes.com/2018/10/18/technology/ai-isbeginning-to-assist-novelists.html>> on 18 Oct 2018.
5. Intellectual Property Rights in an Age of Electronics and Information (1986). U.S. Office Of Technological Assessment. Retrieved From <<https://www.princeton.edu/~oat/disk2/1986/8610/8610.PDF>>
6. McCarthy, J (2007). What is artificial intelligence? Stanford University. Retrieved from <http://jmc.stanford.edu/articles/whatisai/whatisai.pdf> on 12 Nov 2007.
7. Milde Jr, K. F. (1969). Can a Computer Be and Author or an Inventor. J. Pat. Off. Soc'y, 51, 378.
8. LakshminathA & Mukund Sarda, M (2012). Digital Revolution, and Artificial Intelligence- Challenges to Legal Education and Legal Research,
9. R.G Anand vs M/S. Delux Films, AIR 1978 SC 1613 (India); Bobbs-Merrill Company v. Isidor Straus & Nathan Straus, 210 US 339 (28 S.Ct. 722, 52 L.Ed. 1086).
10. Raquel Acosta, R (2012). Artificial Intelligence and Authorship Rights, Harvard Journal of Law and Technology (Feb. 17, 2012), Retrieved from <<http://jolt.law.harvard.edu/digest/copyright/artificial-intelligence-and-authorship-rights>> om 17 Feb 2017.
11. Tata Consultancy Services v. State of Andhra Pradesh, (2004) 137 STC 620 (India). 239
12. The Indian Copyright Act, No. 14 of 1957, India Code (1957), Ch. V.