

Artificial Intelligence and The Need for Reform in Copyright Laws

By Gautam Badlani¹

Abstract

Artificial intelligence has witnessed unprecedented growth in the past few decades. AI is now capable of independent decision-making and creating scientific, literary, and artistic innovations. However, this fast-paced growth of AI has left lawmakers struggling to adapt to the new challenges arising out of AI's development. The number of innovations made by AI has been increasing and the existing copyright laws are not suitable to provide copyright protection to the AI-based creative innovations. This article seeks to analyze the copyright-related challenges arising out of the development of AI technology and suggest the solution for the same. Furthermore, this article also compares the various solutions and highlights their implications.

¹ 2nd Year student of B.B.A LL.B at Chanakya National Law University, Patna (Batch of 2025).

Introduction

The human race has long been obsessed with the idea of technology, so advanced, that it can solve complex scientific problems and achieve scientific and technological breakthroughs. Today, artificial intelligence (hereafter AI), has evolved to such an advanced stage that it is capable of creating scientific and artistic innovations on its own. Computers empowered by AI are capable of producing excellent pieces of literature such as a book or poem, writing research papers, drawing pieces of art, etc. AI is also capable of recognizing patterns in human behavior, choices, and preferences and based on such patterns, AI can be used for composing music, writing songs, etc.² Major tech giants such as Google and Intel Capital have invested millions of dollars in AI start-ups to further enhance the capabilities of AI. Investment in AI technology is being anticipated to grow beyond \$110 billion in 2024.³ AI bots are being used to write news articles⁴ and for manufacturing certain products such as chips.⁵ From voice-recognizing features in our smartphones to self-driving cars on the road, AI is playing a major role in shaping our everyday lives. AI has not become an indispensable part of our everyday lives.

From being a tool for human assistance, AI has now become capable of replacing human beings and functioning independently on its own. It is being predicted that at one time, AI may surpass human capabilities. AI-powered robots are faster and more efficient than humans. AI is already outperforming humans by producing superior quality chipsets at a faster pace as compared to humans. A Japanese novel written by AI and co-authored by a human almost ended up winning a Japanese literary prize.⁶ An AI program developed by Google defeated the world's best chess program after teaching the game to itself.⁷ Thus, we see that AI has now become capable of self-

² Maura Barrett and Jacob Ward, *AI can now compose pop music and even symphonies. Here's how composers are joining in* (Sept. 9, 2021, 2:48 PM),

<https://www.nbcnews.com/mach/science/ai-can-now-compose-pop-music-even-symphonies-here-s-ncna1010931>

³ International Data Corporation <https://www.idc.com/getdoc.jsp?containerId=prUS46794720> (Last Visited Sept. 9, 2021)

⁴ Raghav Chopra And Gaurav Jain, *AI Bots Will Soon Write News Articles and You Should Be Worried* (Sept. 9, 2021, 3:29 PM),

<https://www.firstpost.com/tech/news-analysis/ai-bots-will-soon-write-news-articles-and-you-should-be-worried-8952061.html>

⁵ Abhishek Chatterjee, *Google is using AI to design chipsets in just six hours* (Sept. 9, 2021, 3:39 PM),

<https://www.thehindu.com/sci-tech/technology/google-is-using-ai-to-design-chipsets-in-just-six-hours/article34809994.ece>

⁶ *This Japanese AI wrote a novel and almost won a literary prize* (Sept. 9, 2021, 4:27 PM),

<https://www.dnaindia.com/technology/report-this-japanese-ai-wrote-a-novel-and-almost-won-a-literary-prize-2193918>

⁷ *AlphaZero AI beats champion chess program after teaching itself in four hours* (Sept. 9, 2021, 4:58 PM),

<https://www.theguardian.com/technology/2017/dec/07/alphazero-google-deepmind-ai-beats-champion-program-teaching-itself-to-play-four-hours>

learning. It can analyze a given situation and take decisions accordingly. With the likely investment of billions of dollars, AI is certain to become even more efficient in the future.

This article seeks to analyze the complex challenges and problems arising out of the fast-paced development of AI technology, particularly in the domain of copyright, authorship, and intellectual property rights and suggests various solutions for dealing with such challenges.

Complexities arising out of Artificial Intelligence-Based Innovations

Just like every other major scientific achievement, the unprecedented developments in the field of AI also pose several complex legal problems. One such problem is deciding who shall be the copyright owner of a creative innovation made by AI. Whether it should be AI itself? Whether AI should be allowed to sue the copyright infringer in the event of a violation of registered copyright? What are the legal rights to which the AI shall be entitled? The original purpose of copyright laws was to promote innovation and creative thinking by rewarding hard work and labor. However, rewarding a computer for its hard work and creativity seems vague. Thus, several questions arise with regards to the legal recognition of the creative innovation of AI. Another major challenge is fixing liability and accountability in the event of registered copyright being violated by AI. Whether AI should be given the status of a legal entity is one of the most heated topics of discussion across the world.

Countries across the world are struggling to bring their laws and legal structures at par with the technologically advanced society. However, legal systems take much more time to evolve as compared to the scientific world. Any major change in the legal structure has to be viewed with a reasonable degree of circumspection and requires extensive discussion and consultation with all the concerned stakeholders. Answering the complex legal question about the ownership and copyright protection for the creation of AI seems to be one of the biggest conundrums of the 21st century.

How the various Countries have Dealt with the Copyright Challenges Posed by Artificial Intelligence?

The copyright laws of several countries provide that only a work that is the result of the creative capabilities of the human mind can be registered as a copyright. In other words, to be registered as a copyright, the work must be the result of the creative skills of a natural person. A non-human

is not entitled to get its innovation registered and to obtain copyright protection for its work. Thus, it might seem simpler to not provide any kind of copyright protection to innovations of AI at all. The US Copyright Office has refused to provide copyright protection to the works of AI. Furthermore, the United States Supreme Court, in the landmark case of *Feist Publications v Rural Telephone Service Company, Inc.*, held that to get copyright protection, a work shall possess “at least some minimal degree of creativity”.⁸ Such creativity can be expected to originate only from a human mind while artificial intelligence merely processes the data provided to it and hence the innovations of artificial intelligence cannot be considered to be “creativity”. The originality of AI’s innovations is also doubtful as AI’s creations are based on the extensive data inputs that are provided to it. Hence, AI is considered incapable of exercising the same level of intellectual creativity that a natural person is capable of. Furthermore, as stated earlier, the purpose of copyright is to reward hard work and rigor to encourage and motivate people. However, AI does not require any sort of motivation or incentivization to produce creative works. Unlike humans, AI is not lured by financial and monetary benefits.

Where the work is produced by the AI along with a natural person, the copyright may be registered in the name of the natural person. The copyright laws of the United States provide that if a natural person uses AI as a medium to support the creation of artistic innovation, then such a person shall be entitled to have legal rights over the creative work.⁹

However, as AI continues to become more and more capable and as the number of non-human innovations increases, the policymakers have been forced to rethink about providing copyright protection to the innovations of AI. Even though AI’s works are based on the processing of data inputs provided to it, as long as the AI extends into the existing theories or expands the input data, it must be considered to be capable of obtaining copyright protection. Human authors themselves exercise their intellectual creativity after undertaking extensive research and it is only after exposure to the already existing data that humans can create original works. Hence, the argument that the AI’s innovations are based on data inputs seems futile and such arguments cannot be considered sufficient ground for denying copyright protection to the innovative creations of AI.

Not providing any copyright protection to the creations of AI might disincentivize investment in self-learning technology capable of leading to more significant AI-based inventions. This would

⁸ 1991 SCC Online US SC 46.

⁹ Kalin Hristov, *Artificial Intelligence and the Copyright Dilemma*, 57 THE LAW REVIEW OF THE FRANKLIN PIERCE CENTER FOR INTELLECTUAL PROPERTY 431, 435-436 (2017).

be detrimental to scientific advancement and innovation. Recently, the United States Patent and Trademark Office sought public comments and opinions on the issue of providing intellectual property rights to non-human innovations.¹⁰

Some countries, such as the United Kingdom, chose to provide ownership rights of the AI's innovation to the person who programmed the AI. The Copyright, Designs, and Patents Act, 1988 of the United Kingdom provides that where a work is generated by a computer without any human involvement, the authorship will be vested on the "*the person by whom the arrangements necessary for the creation of the work is undertaken.*"¹¹ Furthermore, the Copyright, Designs and Patents Act, 1988 stipulates that the copyright in case of computer-generated work would be valid only for 50 years.¹² Thus, the copyright will not be vested with the AI for an indefinite period and will not restrict the free flow of knowledge and information. Countries across the world seem to be moving towards adopting this model.

Vesting copyright and intellectual property rights for AI-based work on the AI itself seems to be a complex task as it would require the recognition of AI as a separate legal entity. The European Parliament has rejected the idea of recognizing AI as a person in the eyes of law.¹³ If the AI is recognized as a legal person, then in the event of any offense or copyright violation by the AI, the AI will have to be held accountable and this might lead to several legal complications as it is not practically feasible to hold a computer accountable for an offense. Furthermore, certain countries limit the duration of the validity of the copyright based on the lifetime of the copyright holder. For example, in Malaysia, the Copyright Act, 1987 provides that in case of copyright of "literary, musical or artistic work" will be valid only up to 50 years after the death of the copyright holder.¹⁴ Since AI does not have any definite lifetime, recognition of AI as a legal entity will make the implementation of such laws improbable. Unlike the United Kingdom model, if copyright is vested in the AI indefinitely then it would restrict the free flow of information and knowledge. Moreover, if someone makes an application to the AI seeking permission to use the copyright registered in the name of AI, then the AI might not be capable of deciding whether to permit the application or not. On what parameters will a computer system decide whether to grant such permission or not? In any case, even if the AI is recognized as a legal entity capable of getting its

¹⁰ Request for Comments on Intellectual Property Protection for AI Innovation <https://www.federalregister.gov/documents/2019/12/03/2019-26104/request-for-comments-on-intellectual-property-protection-for-artificial-intelligence-innovation> (Last Visited Sept. 10, 2021).

¹¹ Copyright, Designs and Patents Act, 1988 § 9, cl 3 (United Kingdom).

¹² Copyright, Designs and Patents Act, 1988 § 12, cl 7 (United Kingdom).

¹³ Vagelis Papakonstantinou and Paul De Hert, Refusing to award legal personality to AI: Why the European Parliament got it wrong (Sept. 10, 2021, 1:58 PM), <https://europeanlawblog.eu/2020/11/25/refusing-to-award-legal-personality-to-ai-why-the-european-parliament-got-it-wrong/>

¹⁴ Copyright Act, 1987 § 17 (Malaysia).

work registered as copyright, it would still not be capable of exercising and enforcing its rights. Thus, recognizing AI as a legal entity would, instead of simplifying the laws, further push the AI industry into precarity.

Recognition of AI as a legal entity is also likely to adversely impact human creativity. If the AI is recognized as a legal person and is held entitled to get its work registered as copyright, then this would essentially imply that the creativity of a natural person is at par with the creativity of a machine.¹⁵ This would be disastrous as it would demoralize and kill the spirit of creativity in humans. The creative skills of humans must be placed above the creative skills of AI as the extent to which the creation of AI extends is determined by its human programmer while the extent of human creativity is indefinite.

In any case, recognition of AI is likely to have consequences that would extend much beyond the domain of copyright and intellectual property laws. If AI is recognized as a legal entity, then it would also be capable of owning property, entering into contracts, etc. Lawmakers are unlikely to take such a large step merely for providing authorship, copyright, and intellectual property rights to AI. In the future, even if AI is recognized as a legal person, copyright concerns would certainly not be the primary driving force behind such a revolutionary step.

Indian Perspective

Currently, the copyright laws in India do not recognize copyright protection for the innovative works of AI. The Copyright Act, 1957, which is the primary copyright-related law in India, envisages copyright protection only for the work of a natural person. The Delhi High Court, in the landmark judgment of *Camlin Pvt. Ltd. vs National Pencil Industries*, observed that to be considered original, a creative work “must originate from an author who must have expended his skill and labour upon it”.¹⁶ Since the skills, as well as labour of AI, is dependent on the input data provided to it, the extent to which the Indian laws recognize the originality of AI’s innovations is still unclear.

In a singular case, the copyright office registered AI “as the co-author of a copyright-protected artistic work.”¹⁷ However, due to the lack of legislative framework dealing with the issue of AI as

¹⁵ V. K. Ahuja, *Artificial Intelligence and Copyright: Issues and Challenges*, ILI LAW REVIEW 270, 275 (2020).

¹⁶ 1985 SCC OnLine Del 378.

¹⁷ Sukanya Sarkar, *Exclusive: India recognises AI as co-author of copyrighted artwork* (Sept. 10, 2021, 8:49 PM), <https://www.managingip.com/article/b1t0hfz2bytx44/exclusive-india-recognises-ai-as-co-author-of-copyrighted-artwork>

a copyright holder, this decision of the copyright office is disputed and likely to be challenged.¹⁸ Certainly, there is a need to reform the copyright laws in India to bring them in line with contemporary times.

Conclusion

Any course that the legal systems take with regards to the copyright protection for AI-based creations will have a significant impact on the future of AI technology. Human and non-human work is becoming increasingly indistinguishable and the line between human and AI innovation is becoming a blur. Providing legal recognition and copyright and intellectual property rights to the creations of AI will certainly encourage and incentivize the investors and technology firms to undertake substantial investment in AI start-ups. AI is likely to be used in more industries and across more fields. It is already influencing every aspect of human life and has immense potential of uplifting the global standard of living. In the future, the number of AI innovations is likely to surpass the number of human innovations. Thus, AI might soon become the central force for innovation and creativity. Most of the existing copyright laws across the world were drafted at a time when AI technology was at a very nascent stage. There is a need to either amend the existing laws or draft new legislation to bring AI-based innovations within the scope of these laws.

However, a universal consensus is needed with regards to the issue of copyright protection for non-human works. If some countries decide to provide copyright protection to the works of AI and some refuse to do so, then it might lead to a myriad of complexities and legal disputes. In today's globalized world, the economy of one country is closely integrated with the economies of other countries and hence, any major decision of one country is likely to have a substantial impact on other countries. Thus, it is particularly apposite that an international treaty must be drafted dealing with the issues of copyright and intellectual property rights in AI-based works. This would bring uniformity in rules and would facilitate the development of AI technology. Having a separate globally accepted copyright and intellectual property rights framework for AI will also facilitate the creation of separate provisions distinct from the provisions of the copyright laws concerned with human innovations. Thus, diluted rights can be provided concerning the copyright of AI-based works and liberal punishments can be provided for the infringement of such copyrights. Certainly, many countries might have their reservations about enforcing AI-based copyrights as stringently as copyrights related to human works. AI's creative works in the

¹⁸ *Ibid.*

fields of medicine, education, and other such important fields could be provided exemption from copyright. However, the governments must rush into adopting any framework and any step must be taken only after deliberate discussions with the concerned stakeholders and AI experts.

The best way seems to be providing copyright and intellectual property rights to the programmer of the AI. It would be easier for the diverse legal systems across the world to adapt to such a model. It would also incentivize the investors to provide funds for the development of AI technology. Accountability for the work can also be fixed on the copyright holder and the copyright holder, being a natural person, can also sue anyone for the infringement of his registered copyright.

