

**JURISPRUDENTIAL ANALYSIS OF LEGAL AND ETHICAL CONUNDRUM
SURROUNDING ARTIFICIAL INTELLIGENCE**

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ABSTRACT

The issue of ethics revolving around Artificial Intelligence tends to be divisive and the contenders usually come from two fundamental basis of arguments, The first of them being the optimistic scientists who believe that their creation shall usher humanity into a new era of progression and the other one houses the pragmatist people of law and academicians who hold a rather conservative outlook of the same. The pre-emptive notion in the minds of the pragmatists is that AI shall always be inherently unsympathetic and calculative, thanks to the lack of a moral compass, and shall, in any given situation choose the more expedient option, without considering its ethicalities.

The legislative void surrounding AI has reinvigorated the jurisprudential debate of law reflecting human morality within itself. Most lawmakers agree on the setting up of a moral guideline to oversee the functioning of AI, but what needs to be addressed first, is the lack of legislations pertaining to the same. At present, India has no substantial legal base to rely upon, when it comes to AI. While certain developed nations do have legislations at nascent stages that act as supportive legal frameworks, the most substantial regulation upon AI is still maintained by the Three Laws of Robotics, that at best, are incorporeal. Thus, a holistically drafted umbrella framework needs to be enacted, that exists as a universal law governing AI, making the handling of AI, safer and undemanding.

Keywords: Artificial Intelligence, Jurisprudence, Ethics, Universal Legal System

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I. INTRODUCTION TO THE NUANCES OF ARTIFICIAL INTELLIGENCE

If the entire evolutionary process of planet Earth, starting from its very conceiving were to be condensed in a period of twenty-four hours, then human beings would not appear until the very last second of the said twenty-four hours. This not only puts into perspective the minuscule nature and the banality of human existence but also speaks volumes about how our actions have changed the face of the Earth. Thus, the majority of the human world and its intricacies that exist around us came into being in the last thousand years. Out of these, only the past few hundred years have been immortalized thanks to the scientific and technological breakthroughs that were propounded during this time. The most significant human invention to have graced us is probably the creation of computers. Recently, the development of Artificial Intelligence has seemed to transmute the scenario completely.

Artificial Intelligence (hereafter, AI), is an extended branch of Computer Science that mainly revolves around producing machines that are capable of performing actions and achieving goals that were previously thought to only be possible by human ventures. As such, seemingly 'smart' technology paradigmatically changes the world as we know it. We are inevitably standing on the brim of a technological revolution, one that shall change the nature of human continuance forever. Without doubt, every ingenious innovation has its shortcomings that more or less depend upon how it is put to use. Similar is the case with AI, given that it is a technology that is self-driven and autonomous, the downfall of which is that it taps into the user's data to study his behavioral patterns to 'impersonate' him better. Being perfectly candid, the repercussions of AI are mostly ethical. They tend to go against basic human principles of goodwill which raise the question of whether we rushed into inventing something that we do not have the skill-set to regulate yet.

Stephen Hawking reflected that "*Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks.*"² Such apprehensions are not unfounded given the fact that the cosmic levels of intellectual prowess possessed by AI imply that if any part of our interaction were to go 'wrong', it would be irrevocably so and there shall be no recovering from such blunders. Thus, jumping head-on into such uncharted territory in order to relish the glory of human inventions is a folly, especially when it comes to these hyper-intelligent technologies.

² Rory Cellan, 'Stephen Hawking warns artificial intelligence could end mankind' *BBC News* (2 Dec 2014) <<https://www.bbc.com/news/technology-30290540>> accessed 25 August 2022.

The Evolutionary Growth of Artificial Intelligence

The idea of the existence of intellectual brilliance in non-human orientations was a mere fragment of human imagination that found its being in story tales, legends, and dystopian literature throughout the 19th and early 20th century. Such an idea was considered to be both awe-inspiring as well as scary and the aftermath of such hyper-intelligence was usually denoted as a threat to human existence.

British code-breaker Alan Turing who is regarded as a torchbearer in the field of technology in the 20th century did extensive research and published a landmark paper that talked about the possibility of creating machines that possess the ability to think and simulate human mind. His hypothesis was based on the fact that if human beings draw inspiration from pre-existing literature and studies as well as their environment and past experiences to solve complex problems, then a machine too, should be able to do the same, following similar *modus operandi*. For the very same purpose, he devised a test that helped in determining whether or not a machine is capable of thinking like a human being. This test went on to become one of the most extensively used control experiments in the field of AI.³ According to him, defining 'thinking' was an abstract thing to do, and thus, his experiment was designed in such a manner that it helped prove his hypothesis as a workable model. Notwithstanding the concrete proofs of his working hypothesis, he was ridiculed for having imagined something so whimsical. Later on, his experiments ushered humanity into a new area and the term 'AI' started its journey in the mid-1950s.⁴ There began the journey towards what was believed to be the most behemoth task in the history of mankind; creating something that was beyond imagination.⁵ This was followed by the Golden Era of Artificial Intelligence during the 90s wherein computers started making appearances in common households as hyperbolically smart gadgets.⁶ The gradual use of the Artificial Intelligence in almost all the fields requires transparency as well as accountability. In order for a system of checks and balances to be established and for such technology to be retained under human control, it is quintessential on our part to establish formal policy regulations to manage the same. In such circumstances, even the nature of the legislations so promulgated, need to be such that they

³ Alan M Turing, *Computing Machinery and Intelligence*, (Mind, LIX 1950) 433-460.

⁴ McCorduck & Pamela, *Machines Who Think* (2nd edn, Taylor & Francis 2004).

⁵ *Id.*

⁶ Turing (n. 2).

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are holistic enough to act as a safety-net against any offshoots of AI while being flexible enough to not stand in the way of human dexterity.

II. JURISPRUDENTIAL ANALYSIS OF ARTIFICIAL INTELLIGENCE AND ITS LEGAL RAMIFICATIONS

In the dystopian classic, *Nineteen Eighty-Four*, George Orwell paints a rather bleak picture of how technology without mind, sentences human beings to their dooms while running on the commands of a despotic dictator. "Big Brother is always watching...."⁷, the novel reads, over and over again, but truth be told, had it not been for technology, such magnanimous control would have never been available to 'Big Brother' at the first place.

As Jacob Weisberg, a very famous Political journalist writes, "*Algorithms are developing their capabilities to regulate humans faster than humans are figuring out how to regulate algorithms.*"⁸ In such a scenario of impending doom, humans must hold back for a moment and reconsider their idea of AI which might end up obliterating the very notion of human ethics once it breaks the shackles of control of its human masters.

Though it is undoubtedly exigent to understand the ethical bearings of AI and the legalities behind the same, it needs to be established beforehand that even in the field of law, thinkers are divided between two schools of thought when it comes to the role played by morality within the *Rule of Law*. There exists a fundamental jurisprudential contention between the positivists and the naturalists on whether the law should reflect the circumstantial morality that guides the society. To oversimplify, legal positivists claim that one can say what the law is without making moral judgments about what it should be.⁹ Whereas, the naturalists are men of the old ways and believe that, for a law to qualify as 'good' law, it needs to stand up to a certain threshold of morality.

Furthermore, when it comes to the question of ethicality in AI, these two schools of thought seem engaged in a never-ending debate upon whether there should be a set of laws, guided by human standards of morality, to police the developments in technology or whether the

⁷ George Orwell, *Nineteen Eighty-Four* (Secker & Warburg 1949) 8.

⁸ Jacob Weisberg, 'The Digital Poorhouse', *The New York Times Review of Books* (New York, June 7, 2018) 47.

⁹ Joshua P. Davis, 'Legality, Morality, Duality', (2014) 1 ULR 61,63.

scientists should be allowed to play God on the particular subject and have autonomy upon how they want their creations to function.

Any discussion on the question of the ethicality of AI would remain incomplete if we were not to touch upon the problem of automated vehicles. While most car manufacturers would unflinchingly claim that their 'smart' cars shall prioritize human lives over the actual vehicle, the truth remains that though the AI would hold the driver's life in precedence, it would most likely not carry a duty of care for other commuters down the road or the pedestrians. Thus, if an automated car was to be faced with a situation in which he can either ram down five pedestrians or swerve the car right down a sinkhole in the road, thus killing the driver, it would spend no time considering the two sides of the situation and choose the expedient way out, i.e., kill the five pedestrians to save the driver. Undeniably, in such desperate circumstances, human minds would stop to consider the ramifications of their action of killing five people, in both, moral and legal senses and more often than not, human beings would try to find a middle ground between two bleak options in order to minimize the impact of the accident. However, once a machine is developed on a certain set of principles, it will not budge from the same because it does not possess the ability to think for itself. Thus, it will not be wrong to reflect that, programming them involves not just technical knowledge, it would seem, but also moral philosophy¹⁰. The Court was faced with such conundrum in the case of *Nelson v. American Airlines*¹¹ wherein injuries were suffered by the petitioner while one of the planes was on autopilot mode. The Doctrine *res ipsa loquitur* which means that "the thing speaks for itself" was applied by Hon'ble Court in the case of *Nelson v. American Airline*¹² for finding of the negligence caused while the airplane was on Autopilot mode. The court ruled out that the same can be rebutted if the Airlines could prove that Autopilot mode was not the main cause for the same; or there was some unpreventable reason behind the same.

¹⁰ Joshua P. Davis, 'Law without Minds: AI, Ethics and Jurisprudence', (2018) 5 USFSL 2.

¹¹ *Nelson v. American Airlines, Inc.*, 70 Cal. Rptr. 33 (Cal. Ct. App. 1968).

¹² *Id.*

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III. LIBERAL JURISPRUDENCE: ALTERING THE CONVICTIONS SURROUNDING LAW

No matter how rosy or ingenious the entire arena of AI and its related sciences might sound, the reality is that they present a diverse multitude of problems when it comes to their legal implications, thanks to the ethical dilemma discussed above. If we were to continue with the example of the automated car and assume that the AI fitted within such a car did choose to run over the pedestrians in order to save the driver, then, whom does law hold liable for the death of the innocent men? How does the law pin the liability upon something that does not exist in the real world, but can actively choose to kill the five pedestrians? Can the concept of vicarious liability be made applicable to such a scenario? In general terms, vicarious liability is a specific type of liability that a supervisory party (such as an employer) bears for the actionable conduct of a subordinate or associate (such as an employee) based on the relationship between the two parties. As the software for the AI was designed and developed by the manufacturer who had absolute control over the actual manifestations of the AI, then will the manufacturer be held liable for the decisions made by his creation after the product is sold?

Given that AI can be designed in a way that it can overcome and vanquish the greatest of human intelligence models and establish itself as the one with higher acumen, should the establishment and interpretation of laws applicable to it, be left for itself to decide on its own? The idea behind such an argument is that human beings make and abide by said laws because they have enough rationale to do so and such complex behaviour is what sets them apart from other species. Similarly, the intelligence of AI is also unparalleled, so how long will it be before AI starts formalizing laws for itself? Though the very proposition of such an idea might sound preposterous, it is also true that time and again, technological developments have proved human beings wrong. Pundits once doubted that a computer would ever beat the world champion of chess because, the human mind, they argued—with its intuition—was simply superior¹³. However, now the greatest grandmasters of chess, rely upon the predictive models based upon AI to hone their skills at the game. Even in the Medical industry, there are automatic surgical instruments and treatment devices which have the capability and potential to diagnose and treat a person. However, the questions of liability, medical ethics, and medical malpractice still exist which may or may not encourage the use of these automated products in medical field and it is very difficult for a person to win suits relating to injuries

¹³.David Cole, 'The Chinese Room Argument' (*The Stanford Encyclopaedia of Philosophy*) <https://plato.stanford.edu/archives/spr2020/entries/chinese-room/> accessed 25 October 2022.

caused by medical treatment devices, the doctrine of which, was observed by the Court in the

case of *Banker v. Hoehn*¹⁴ Wherein a plastic surgeon, undertook to remove the birthmark from the body of the person using Machines.

Max Tegmark, in his book, *Life 3.0: Being Human in The Age of Artificial Intelligence*¹⁵ opines that the work of judges in the judicial system is merely interpretive. He goes on further to shed light upon what he called, 'robo-judges' which according to him are, "AI systems that tirelessly apply the same high legal standards to every judgment without succumbing to human errors such as bias, fatigue or lack of the latest knowledge"¹⁶.

Next comes the question of the drastic change in income and employment dynamics when developed AI technology takes over the entire market. Business experts foresee that the entire hierarchy of blue-collar jobs shall come crashing down once the dominance of AI is reinstated in the field while most white-collar jobs shall stay secure as they more or less need human supervision. This basically means that extensive application of AI would lead to dilution of the job market that would inevitably result in the entrenchment of millions of workers and thus, the wealth disparity shall be greater than ever before. When it comes to the question of distribution of the wealth generated by the virtue of AI and allied technology, the working class is nowhere reflected in the equation. Consequently, individuals who have ownership in AI-driven companies would benefit disproportionately at the expense of the workforce which was eliminated as a result of AI.¹⁷

IV. SECURITY CONCERNS SURROUNDING AI: UNDOING HUMAN HISTORY

It is a common understanding that scientists develop AI in a manner that it closely reflects human interaction and behaviour pattern around itself. However, it is evident that no matter how impeccably designed the system is, it falls shorts of displaying human consciousness. Through this loophole, manifests a gap between the existence of robots driven by AI and human beings. It will not be unfounded to assume that after a given period of time, this gap would be so wide that the question would not be up to what extent robots can copy human beings. Rather, it would be, whether human beings would be able to customize their

¹⁴ *Banker v. Hoehn*, 278 A.D.2d 720.

¹⁵ Max Tegmark, *Life 3.0: Being Human in the Age of Artificial Intelligence* (Vintage Books, 2017) 105.

¹⁶ *Id.*

¹⁷ *Mirjana Stankovic et. Al., Exploring Legal, Ethical and Policy Implications of Artificial Intelligence* (2017).

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behaviour patterns to suit the interests of their robot counterparts. Through the medium of AI, the machines are now being given the status of human. In the past, too many companies, agencies and institutions have used ‘bots’ disguised as humans to influence/change the results and do the acts as specified. In the case of *Go2Net, Inc. v. C I Host, Inc*¹⁸, the court held that *“the parties’ contract permitted visits by search engines and other “artificial intelligence” agents, as well as human viewers, in the advertiser’s count of “impressions”*.

While humans are limited in the attention and kindness that they can expend on another person, artificial bots can channel virtually unlimited resources into building relationships.¹⁹ We already see such real-life manifestation of human beings losing their behavioural control in Virtual-Reality (VR) scenarios that are embedded in games. The game tries to build circumstances that are addictive enough for the gamer to not let go of it and thus, gain control over human reactionary patterns.

The more powerful a technology becomes, the more potently it can be used for reprehensible reasons as well as good. This applies not only to robots produced to replace human soldiers, or autonomous weapons, but to AI systems that can cause damage if used maliciously.²⁰ If one were to go back in time and have a long and hard look at the wars that different human groups fought against each other in a mad-dash to establish their supremacy, one would notice that during a war, the quality of soldiers in an army is one of the deciding factors in the outcome of the war. When one side loses a major chunk of its soldiers, the mental prowess of the surviving soldiers suffers a blow and they usually end up losing the war. Thus, it would make absolute sense if AI is developed in a way that it compensates for the aforementioned human weaknesses and goes on to fight wars for its human masters. There was a famous case in relation to usage of Robots and Artificial Intelligence in the wars in early 90s in U.S known by the name *United States v. Athlone Indus*²¹, wherein it was stated that *“robots cannot be sued”*²² and instead the manufacturer has to be held liable for all the penalties and damage that has been caused due to the defect of the machine. In the near future the situations will change as AI will continue to grow and become more sophisticated than it is in the present time. The Courts will continue their struggle till the time a proper legislation/regulation is introduced answering the question of Liability and Standards, cases

¹⁸ *Go2Net, Inc. v. C I Host, Inc.*, 115 Wash. App. 73 (2003).

¹⁹ *Id* 13.

²⁰ Stankovic (n 16) 12.

²¹ *United States v. Athlone Indus.*, Inc., 746 F.2d 977.

²² *Id.*

that have been decided decades back also mirror the current legal framework revolving around the subject of risk caused through artificial and automatic intelligence.

V. LEGAL DEVELOPMENTS IN THE FIELD OF ARTIFICIAL INTELLIGENCE: THE WAY FORWARD

Laws governing human actions have existed for centuries, throughout different civilizations. However, the idea of the promulgation of laws to govern individual creations of human beings is rather novel and unheard of. Considering that AI is an emerging field and there are many risks involved in the same, the expanding horizons of the discipline is in itself putting great pressure upon governments. Bodies of authority all over the globe feel pressured to enact legislation for its regulation. Now, the real question is whether it is intelligent and viable in the long run to amend and modify the present laws in a way that suits robots driven by AI.

Even some bigwigs of the industry have felt the need for AI Regulation. Elon Musk in an interview said that the risks which are present in the field of AI are considerably high and normally set of rules are formed only when something bad happens because the government has to suppress the public outcry and thereafter it takes years for the formation of a regulatory body, same will be the case with AI.²³

Under the Fifth Report of the House of Commons Science and Technology Committee on Robotics and artificial intelligence, it was stated that there needs to be accountability for governing AI and managing the risks posed by it, *"While it is too early to narrow down sector-wide regulations for this nascent field, it is fundamental that cautious investigation of the moral, lawful and cultural elements of artificially intelligent systems starts now."*²⁴

In the year 2018, talks were held between France and Canada to establish a Global Governing body on the lines of the International Panel on Climate Changes. It was backed by the G7 countries, to study, analyze and put forward their opinions regarding effects of AI on the world, and the need and process to regulate the same. The nomenclature for the same was

²³ Samuel Gibbs, 'Elon Musk: regulate AI to combat 'existential threat' before it's too late' (*The Guardian*) <https://www.theguardian.com/technology/2017/jul/17/elon-musk-regulation-ai-combat-existential-threat-tesla-spacex-ceo>.

²⁴ House of Commons Science and Technology Committee report on Robotics and artificial intelligence [2017] ch 4, pr 71 5 HC 145.

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changed in the year 2019 and was named 'The Panel for Global Partnership on AI'²⁵ whose main objective was to bridge the gap between the theoretical and the practical applications of AI which will act as a guiding force towards the holistic development of the field. These were adopted in June 2019.

In May 2019, the 'OECD Principles on Artificial Intelligence' were approved by the member countries and these were the first recommendations to be signed by individual governments. These principles were put forward so that the promotion of AI could be done in a broader and comprehensive manner. These recommendations were accepted by the member countries of OECD with the exception of Costa Rica, Peru, Ukraine and a few others. The OECD Recommendations on AI were based mainly on five value-based principles that are important for the proper regulation and differentiation between AI and human ethics²⁶. These recommendations focused on the development of a transparent law benefiting the stakeholders of society so that everything becomes crystal clear.²⁷

The World Economic Forum also issued its guidelines regarding the use of AI in government affairs which focused on safety and security issues. The Main draft legislation paper was prepared by the European Union²⁸ in early 2020 which was meant to promote and regulate the usage of AI throughout the world and had support from the UNICRI Centre for AI and Robotics.

Given the novel nature of the arena, combined with its intrinsic technicality, it poses a great problem in front of the legislators from both developed and developing countries. Many countries, as well as international bodies, have started drafting legislation, forming committees and strategic plans on AI which are in turn meant for the regulation, promotion, research and development of the field with respect to law.²⁹

In India, many attempts have been made by the government for development and promotion of AI. This has been one of the primarily prioritized fields of the overall development agenda because the government knows that this technology has the potential to make the lives of the

²⁵ 'Global Partnership on Artificial Intelligence' (*AmbaFrance, French Embassy in New Delhi*, 2020) <https://in.ambafrance.org/Global-Partnership-on-Artificial-Intelligence>.

²⁶ 'What are the OECD Principles on AI?' (*OECD* 2019) <https://www.oecd.org/going-digital/ai/principles/>.
²⁷ *Id.*

²⁸ European Commission White Paper on Artificial Intelligence-A European approach to excellence and trust [2020] COM (2020) 65 final.

²⁹ Jamie Berryhill et al., 'Hello, World: Artificial intelligence and its use in the public sector' (*OECD*, 2019) 72-74.

citizens easy and promote the dignity of labor and equality amongst the inhabitants of the subcontinent. There was sufficient allocation of funds by the government in the 2018 budget³⁰ meant for R&D in the field of Artificial Intelligence. The Union Government started a new initiative that went by the name 'Digital India', the main aim of which was to develop the nation on technological grounds and promote the indigenous manufacturing of logistical items. It is noteworthy to mention that research in the field of AI has been taken under this umbrella initiative.

An AI Task Force was set up in the country under the jurisdiction of Union Ministry of Commerce and Industry which was focused to *"implant AI in all the spheres of human thinking process of the citizens in the country- so that there is the fundamental ability to help the objective of India getting one of the pioneers of AI-rich economies"*³¹. The First report by AITF was released in March 2018 which identified some of the main sectors in the country which were lagging behind when it came to the utilization of AI. It also recommended the creation of a Nodal Agency to coordinate the activities related to AI in the country which would be known by the name 'National Artificial Intelligence Mission'. Loopholes were present in this report too because there was no thrust put on data privacy and issue of safety and ethics while using AI and it fails considerably while analyzing the tendency of the decisions which are made by machines having the probability of discrimination or biases.

In February 2018, the Union Ministry of Electronics and Information Technology established four distinct committees that were focused on the setup of AI in the country. The main aim of these committees was to create a proper roadmap for the development of AI in the country, headed by luminaries of the field that included directors of IITs. These committees were to be focused on Citizen-Centric Services; Data platforms; skilling, reskilling and R&D; Legal regulation and cybersecurity.³²

³⁰ Arun Jaitley's address to the Indian Parliament while presenting Indian budget for the Fiscal Year 2018. See, Indianbudget.gov at <https://www.indiabudget.gov.in/budget2018-2019/ub2018-19/bs/bs.pdf>.

³¹ 'Artificial Intelligence Task Force' (Ministry of Commerce and Industry, Government of India) <https://www.aitf.org.in>

³² Devika, 'Government releases — Artificial Intelligence Committees Reports' (SCC Online 2019) <https://www.sconline.com/blog/post/2019/12/05/government-releases-artificial-intelligence-committees-reports/> 10 October 2022.

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The Legal Regulatory committee in its report that was released in December 2019 said that *"A powerful legal system will be expected to manage those issues too complex or fast-changing to be addressed adequately by enacting a legislation"*³³. The report recommended that the *"stakeholders need to deliberate whether to perceive AI framework as a legal individual or not. On the off chance that legal status is given, it ought to be joined by an insurance scheme or compensation plans which will compensate if any damage takes place."*³⁴

The Union Ministry backed think tank, NITI Aayog, had been tasked with drafting and producing national legislation which would be focused on regulating AI in the country. In order to achieve such ends, it signed an MoU with Google, ABB India, and a few other companies to integrate AI in the different fields of the economy and using the potential to the fullest.³⁵

Hence, we can reflect that the quest for the development of AI in the country has been in itself, a very tough and time-consuming one because the government has not yet created a regulatory body; a department which will provide legal insight into the matter, while committees have been formed only to coordinate and check whether the different sectors of Indian economy are equipped with the infrastructure to use AI in it. To be perfectly candid, however, the purpose of such committees is not fulfilled because the first step towards solidifying their operation, i.e., legislative regulations, does not exist yet.

1. Safeguarding Intellectual Property Rights

At the end of the day, AI too, like any other technological masterpiece, is a brainchild of its respective inventors and it is sheer injustice if their intellectual property rights are not protected just because AI is a novelty. Thus, to look into that matter, laws exist in our country and serve justice when it pertains to such issues. Though the laws exist in papers, their modalities do not really encompass the intricacies of the field.

³³ Report of Committee on Cyber Security, Safety, Legal and Ethical Issues [2018] Ministry of Electronics and Information Technology, Government of India.

³⁴ *Id.*

³⁵ Bureau, 'NITI Aayog, Google in partnership to grow AI ecosystem in India' (*The Hindu Business Line* 2018), <https://www.thehindubusinessline.com/news/niti-aayog-google-in-partnership-to-grow-ai-ecosystem-in-india/article23805535.ece>.

a. The Patents Act of 1970

Under Section 3(k) of the Patents Act, 1970 the computer programs or mathematical methods are not patentable *per se*³⁶ which means that they are categorized as non-patentable subject matters. A solo application for AI-Based Patent would not be entertained in the Patent registration office because such an application for a patent based on AI would not be a single invention rather it would be composed of one or more inventions. For patenting AI, the application needs to meet the parameters as set in the guidelines for Computer-related Inventions.

b. The Copyright Act of 1957

Under Section 13[o] of the Copyright Act, "literary work" includes computer programs, tables, and compilations including the computer³⁷ which means that the source code of the AI-based program made by the developer is protected and the Intellectual Property Rights of the same are vested upon the developer or the company where the developer of the program is employed. It further means that nobody can copy or use the source code of the program without the permission of the developer and he has the right to sue, defend and enforce his intellectual property rights if the same has been violated.

However, while laws do exist in the country regarding the Intellectual Property Rights of AI, we do not have a designated regulatory body nor a framework that talks about the regulation and working of AI. A proper legal definition for AI needs to be formed in accordance with Indian Criminal/Civil Law Jurisprudence which would provide the legal version of AI and answer the question of liability i.e., whether strict or absolute liability is to be enforced in the matters concerning AI.

2. Learning from the Experiences of Developed Nations

Given our nation's short-sighted dealing with technologies of tomorrow, it only makes sense for us to draw inspiration from the existing legal and regulatory framework of developed countries where they have been acquainted with such technologies for quite a while now.

³⁶ The Patents Act, 1970, No. 39, Acts of Parliament, 1970 (India), § 3(k).

³⁷ The Indian Copyright Act, 1957, No. 14, Acts of Parliament, 1957 (India), § 13(o).

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The United Kingdom takes one of the most holistic approaches towards regulating AI on a global level. As the role of AI in the British Society has gradually increased, the government has looked deeper into the development and research work in the field of AI. The British undertook a two-fold method of approaching the new developments in AI; firstly, the impetus shall be upon creating awareness and resolving apprehension regarding the ramifications of AI; the next step shall be to recognize the importance of regulating the sector and developing comprehensive laws to guard against any fallouts. United Kingdom has its National AI Strategy which was signed in 2019 and is also known by the name AI Sector Deal³⁸ which contained many of the ideas that were given by Professor Dame Hall in its independent review³⁹.

The government formed a Committee on Standards in Public Life which was tasked with providing a complete report on the risks, regulations, laws required to govern in AI efficiently. The report of the aforementioned committee was published in February 2020, namely, *Artificial Intelligence and Public Standards Report* which said that instead of establishing a new regulatory authority or a new law, the existing laws should be molded so that they can look over the field of AI because the belief was that the English Legal system is enough to address the risks and the issues that come in development and working of the field. For the very same purpose, a Centre for Data Ethics and Innovation⁴⁰ was established and tasked with providing recommendations regarding the amendments required in the existing laws in the country.

Most of the European nations seem to have embraced AI and all its modalities whole-heartedly and have well-nuanced measures when it comes to the governance of AI. This is reflected through the European Union framework dictating the same. The European Union in its novel Plan of Actions to administer AI came up with the 'The European Strategy on Artificial Intelligence', an Expert Level Independent Group⁴¹ which was formed in 2018. It was tasked with providing guidelines regarding the regulation on AI including, but not

³⁸ 'AI Sector Deal' (*Policy Paper, The Government of the United Kingdom*, 2019) <https://www.gov.uk/government/publications/artificial-intelligence-sector-deal/ai-sector-deal#key-commitments>.

³⁹ 'Growing the Artificial Intelligence Industry in United Kingdom' (*Executive Summary, The Government of the United Kingdom*, 2017) <https://www.gov.uk/government/publications/growing-the-artificial-intelligence-industry-in-the-uk/executive-summary>.

⁴⁰ 'Driving Forward Trustworthy Data Sharing, Department for Digital Culture' (*Media and Sport, The Government of the United Kingdom*, 2020) <https://www.gov.uk/government/organisations/centre-for-data-ethics-and-innovation>.

⁴¹ 'Report of High-Level Expert Group on Artificial Intelligence' (*European Commission*, 2018) <https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence>.

limited to policy development, addressing ethical and social issues, etc. Under the aegis of these guidelines, a 'White Paper on Artificial Intelligence' was published by EU in February 2020 that addressed the issues pertaining to Fundamental Rights, User Privacy, Data Breach and the Legal Liability. This was based upon two main ideas; "*ecosystem of excellence*" (to achieve excellence in all the fields) & "*ecosystem of trust*" (to comply with pre-existing rules of EU). The Commission concluded the report by reflecting that if any regulation is enacted, it should not be against the basic fundamental principles of the European Union.⁴²

The pre-existing laws in the EU shall apply to the field of AI, and the same shall be amended when needed because there are no specific legislations present to regulate AI at the very moment. The process of public consultation upon the white paper ended on 19th May 2020 and the Commission had collaborated with numerous luminaries in order to cover the legal aspect of AI in relations with comprehensively; *liability, IPR, ethics, Military use, etc.* and these reports will act as a medium to file a motion in the assembly to draw the attention to the matter which will prompt the Commission to start working towards enacting a legislation.

3. The Three Laws of Robotics: Paving Way for Universal Laws

In his stellar work, 'The Bicentennial Man', Isaac Asimov laid down the famous Machine Ethics, also known as the 'Three Laws of Robotics'. The rules pertain to the maintenance of a certain degree of required ethicality on the part of machines in order for them to be deemed intelligent in real sense. The work was originally published in a collection of stories that were listed to commemorate the fulfilment of two centuries worth of existence of the United States, and Asimov's work made an everlasting impression through the same by his proposition that machines shall completely change the thought process and behavioural patterns of human beings in the upcoming years. Asimov's Three Laws read as:

*"Firstly, a robot may not injure a human being, or, through inaction, allow a human being to come to harm. Secondly, a robot must obey the orders given it by human beings except where such orders would conflict with the First Law. Lastly, a robot must protect its own existence as long as such protection does not conflict with the First or Second Law."*⁴³

⁴² (n 26) 16.

⁴³ Isaac Asimov, 'The Bicentennial Man', *Philosophy and Science Fiction* (M Philips ed., Prometheus Books, 1984).

Jurisprudential Analysis Of Legal And Ethical Conundrum Surrounding Artificial Intelligence

The aforementioned laws, though platonic in a real sense, suggested at a higher form of relationship between human beings and robots. He, thus, explained why humans feel the need to treat intelligent robots as slaves, an explanation that shows a weakness in human beings that makes it difficult for them to be ethical paragons.⁴⁴ Therefore, based on a similar line of reasoning, it would not be incorrect to propose that while amending municipal laws to regulate the inappropriate use of AI is legitimate, imposing such rules on the AI itself may be crossing a morally precarious line. In such a case, it would make sense to have a basic set of laws like those proposed by Asimov at a universal level while giving enough space for AI to function as independent intellectual beings of their own.

Such a universal set of laws shall be the founding cornerstone of jurisprudence upon the existence of AI. It shall honour them as individual beings, independent of their human creators, and shall address them as inherently rational individuals with high intellectual capability. Primarily, such universal laws would not only exist to check the behaviour of robots but would also make sure that heinous human instincts like that of enslaving another being, are not reinvigorated as we step into a new technologically advanced era.

As is the case with any new technology, it will not come as a surprise if a few developed countries get into a mad dash of weaponizing the same. Thus, in order for another century's worth of warfare to be kept at bay, it would be a rather ingenious idea for the entirety of laws governing AI to be international, thus, effectively checking selfish usage of such intelligent technology by short-sighted nations or hedonistic governments.

VI. CONCLUSION

If one were to take dystopian literature as the parameter for determining the nature of the relationship between human beings and robots, then the scenario would be quite dismal and pessimistic, because the conviction shall always be that human beings need to be wary of such intelligent technological beings. However, the reality is way less scary than the popular narrative and the only pressing question in front of us is whether human beings should decide a level of moral standards and laws for robots or if they should be allowed to govern themselves on their own accord, considering their intellect. The prospect is not quite as

⁴⁴ Susan Leigh Anderson, *Asimov's "Three Laws of Robotics" and Machine Metaethics*, (UCP, 2005).

apocalyptic of computer programs interpreting our laws for us, and perhaps taking over as our judges, awarding damages, and even imposing criminal sanctions.⁴⁵

To sum things up and put them in proper perspective, to date, as stunning as technological developments have been, they seem to run along the lines of description and prediction—of identifying patterns in service of prescribed goals—but not of identifying goals worth pursuing.⁴⁶ Thus, on similar lines of argument, one can say that even if AI does end up surpassing human beings in every field imaginable, their actions would have different ends than ours and rather undeniably so, our actions shall reflect generations worth of indoctrination and life lessons. In contrast, theirs shall reflect nothing but algorithmic programming.

Legal Dualism suggests a potential resolution to that debate.⁴⁷ Legal Dualism in this scenario more or less refers to a legal system based on both, normativism and positivism. If human beings were to retrace their steps, then they would see that nascent legal traditions drew their inspiration from the 'Law of Nature' and the entire judiciary was more or less based upon convictions associated with good and bad that defined the moral standards. While such systems were more or less replaced with the advent of Machiavellian modern political thought, the proliferation of AI might mean that we need our traditions up and alive. So, an actual system of organic balance can only be achieved if human beings take up the more 'humanistic' part of legal interpretation that involves morality and conscience. In contrast, AI can impose upon itself a legal code that shall oversee the more 'technical' and inorganic aspects of its functioning. The aim of integrating AI into the legal system should be to further the scope of jurisprudence while making sure that the AI itself functions within the ambit of such legal philosophy, thus creating a virtuous cycle of sorts.

⁴⁵ Davis (n 8).

⁴⁶ *Id* 40.

⁴⁷ Davis (n 8) 40.