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# Indian Strategy for AI & Law, 2020

#AIforNewIndia

Preliminary Recommendations  
April 2020

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**INDIAN  
SOCIETY OF  
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## About

The Indian Strategy on AI and Law (ISA) is our policy project under the Indian Society of Artificial Intelligence and Law, where we intend to enlighten and discover various avenues of AI Ethics and Law in its multidisciplinary content, and devise solutions for the Indian Economy through policy recommendations, internship programmes and academic conferences.

The Executive Council of the Indian Society of Artificial Intelligence & Law has mandated the production of the Indian Strategy on AI and Law (ISA), 2020, which we intend to submit to various stakeholders in the AI Ethics and Law ecosystem present in India, which includes various state and non-state actors.

We hope that by **December 2020**, we come up with a comprehensive policy draft that guides for a vibrant and intelligible New India!

Thank you.



**Abhivardhan  
Chairperson &  
Managing Trustee**

# Areas of Research under Recommendation

- AI & Constitutional Law: Legal Personhood of AI  
Sarmad Ahmad & Baldeep Singh Gill, **Research Interns**
- AI & Intellectual Property Law: AI, Creativity & Innovation Ethics  
Ankur Pandey, **Research Intern**

# **AI & Constitutional Law: Legal Personhood of AI**

Sarmad Ahmad  
**Research Intern**

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Constitutional Adjudication is important to understand the legal and administrative challenges that the existing public and private legislations do have to tackle the redemptions in the area of technology law. This area is specific to AI Ethics, which signifies that our key focus is to propose resolutions on the issues of Constitutional Law and AI Ethics.

## Recommendations

- **AI is once again a centre of discussion amongst the many technological advancements of the 21<sup>st</sup> century. While discussions, talks and developments of sentient machines have occurred since the inception of the Turing Test and the Dartmouth conference, research and development into this field that happens now is unprecedented, and large-scale adoption and incorporation of AI into various institutions; from company boards, organisations and firms to schools, parliaments, hospitals, etc is inevitable as the technology becomes democratized.**
- **A human-centric approach to defining AI, is that it is a variety of computer programs that are capable of assessing, performing and solving tasks that would require human-like intelligence to execute. The method of approach towards creating such programs is essentially developing them to mimic their human counter-parts. Much like humans, AI is capable of operating through various degrees of autonomy, taking upon decisions to be executed independently, and are capable of "reflecting upon their past actions" by understanding errors in their execution and re-writing their program independently to ensure that the task is executed effectively in the future when it does arise again. This process is referred to as Machine Learning, and allows AI to not only re-write its own code but also enables it to take upon new skills and methods of task execution.**

## Recommendations

- **Machine learning is present as a trait across all the known forms of AI; whether existent or hypothetical. The various kinds of AI are categorised as Artificial Narrow Intelligence (ANI/Weak AI), Artificial General Intelligence (AGI/Strong AI) and Artificial Super Intelligence. ANI is the only known and manifested form of AI today, and is essentially any AI that is strong at one task only, wherein its strength in executing that specific task surpasses human capability. AGI is a speculated form of AI, which can operate, function and perform tasks as well as, or even better than their human counter-parts. ASI is also a speculated form of AI, wherein it is hypothesised that the functioning and operations of this AI will surpass the understanding and comprehension of even the most gifted of humans, across all fields of cognitive thought. AGI and ASI exist only as hypotheticals, whereas ANI and its associated research and development constitutes the majority of the field of AI today.**
- **It is through understanding Machine Learning, the capability of a machine to "Meta-learn", wherein a vacuum is observed with regards to the responsibility and accountability of any action executed independently by an AI. If an AI teaches itself by re-writing its own code, and executes a new action which results in an error inflicting damage to life or property, or even poses as a threat, who eventually is responsible? As the research and development towards AI grows and flourishes, making AI more autonomous and independent to the extent where we lean towards the creation, use and application of AGI in various fields, holding the creators liable for the actions of autonomous AI will eventually fall short if not done effectively.**

## Recommendations

- **One of the methods to circumvent and bridge the responsibility and accountability gap effectively is the legal recognition of AI, through the imposition of a legal personality upon it. Legal personhood is a concept imposed upon an animate or inanimate being in order to have the legal system around it recognise it as a legal entity. Once recognised, the legal entity is essentially holds a bundle of rights and responsibilities enforced in relation to its surrounding legal system, and can essentially be held liable for not adhering to its responsibilities and claim an infringement of rights against another entity.**
- **While the distinction between legal person and natural person remains intact, the granting of legal personhood to AI is often approached with concern or uneasiness. However, a look a jurisprudential history of the world and understanding the variety of legal systems that once existed and are present today, shines light on the fact that legal personhood is a flexible and variable aspect of any legal system; dynamic enough to accommodate any legal subject as per the need of the society (the collective of legal subjects) governed by that system.**
- **The concept is also not static in its traits and characteristics, as the concept of legal personhood has always evolved and currently exists in many shades to accommodate a variety of legal subjects, such as natural persons, corporations, governmental organisations, etc. Human slaves under Roman law during the heights of the Roman Empire were not considered as natural persons or legal subjects, but rather as legal objects; property that could be bought or sold by Roman masters. Similarly, slaves were also treated as property in the United States of America until the passage of the 13<sup>th</sup> U.S Constitutional amendment in 1865.**



## Recommendations

- Ironically, the abovementioned examples highlights not only the treatment of human beings as legal objects who would be considered natural persons in the 21<sup>st</sup> century, but also lacks the distinction between the concepts of legal subjects and legal objects. Roman slaves, being property themselves, were also granted property rights to a degree allowed for by their masters, and American slaves were almost always held responsible for their criminal acts so as to have their masters excluded from criminal liability.
- With context to the Indian legal system, the application of legal personhood to AI does not seem like a farfetched idea. Although there is nothing explicitly codified within the provisions of the Constitution of India, 1950 that concerns legal personality, several precedents identify the Indian recognition of the legal personalities of several animate and inanimate entities. The honourable High Court of Punjab and Haryana, Chandigarh, emphasised in the case of *Karnail Singh v. State of Haryana*, that the entire animal kingdom including avian and aquatic species has a "distinct legal persona with corresponding rights, duties, and liabilities of a living person". It is further emphasised in *Animal Welfare Board v. Nagaraja* that animals are entitled to fair treatment and dignity under Article 21 of the Constitution. Lastly, inanimate beings, such as naturally occurring water bodies have been given some form of recognition as well, the example of this being the Whanganui river in New Zealand.

## Recommendations

- **The legal recognition of AI therefore is very foreseeable. However, much like the ever-changing concept of legal personhood itself, it needs its own flexibilities and types of recognition. This distinction could be made on the basis of the strength of the AI itself; having ANI legally recognised as legal agents, and recognising a potential AGI as a legal person. A legal person bears rights and responsibilities to be enforced in accordance with their actions and behaviours that are conducted out of their own will. A legal agent however, acts within a specific requirement as prescribed by the principle entity on behalf of whom the agent functions.**
- **This classification is justified, as although ANI can execute decisions through its own autonomy, it requires a degree of human interference in order to function effectively; be it the input of data, training of the algorithm etc. Such is the case that is observed with any example of AI that exists today, all of which are predominantly ANI.**
- **Through this distinction and the recognition of ANI as a legal agent, the responsibility and accountability of an ANI's actions can then be imposed upon an existing legal person that is involved in its operations and functioning. As legal agents, liabilities arising out of an AI's act shall be imposed upon the principal. The role of the principal herein, is circumstantial and dependent on the situation. This can either be:**
  - 1. the legal entity that manufactures the AI,**
  - 2. the developer/s responsible for the algorithmic error,**
  - 3. Or even the end user of the AI, if the AI is used outside its intended situation. (example of such being numerous instances of Tesla accidents wherein the driver had activated the self-driving feature outside its intended use on a highway)**

## Recommendations

- It is also recognised that although still considered as ANI, there are a variety of AI that exist, operate and function as a collective of multiple ANI algorithms working together to generate an outcome. This is because in order to respond to the specific task they are to tackle, one algorithm may require specific and processed data that can only be delivered by another algorithm. This creates a chain of processing, wherein the output of one algorithm is utilised as the input for the next in the chain.
- Such clusters or collections of ANI algorithms functioning together may be classified as Artificial Adept Intelligence (AAI), and can be considered stronger than ANI but weaker than AGI, hence creating a category right in between of those two classifications. AAI can hence be defined as an AI that is a group of various ANI algorithms working towards one specific function, such as driving.
- The objective of creating such a classification is to further extend the imposition of liability; for if an AAI maybe responsible for any error, liability can be imposed upon the developer/ developing team specific to algorithm that committed an error. For example: if one of the many the visual-centric ANI of a self-driving car is at fault, then it imposes no liability on the developer responsible for the ANI that handles locomotive function of the vehicle.
- With regards to the legal personhood of AGI, it is observed that no AGI exists in our present day and hence, within the current legal scenario. However the likelihood of an AGI is inevitable and can create disruption if appropriate measures aren't in place to smoothen the adoption, incorporation and existence of the same. Hence, it is recommended that councils or bodies are established with the objective that they work towards AGI and its potential legal personality. These bodies ought to involve inter-disciplinary efforts towards the solving of questions posed by the legal personhood of AGI, and will have to incorporate risk assessment strategies to assess the consequences of the same.

## Recommendations

- **Such questions may transcend legal, technical, ethical and philosophical boundaries, and hence will require cross-cultural effort aside from just inter-disciplinary effort, towards the creation of neo-legal theories, such as a list of criteria establishing AGI personhood, the requirements of artificial consciousness, or even a theory of penology for AI.**
- **Lastly, a legislation can be drafted, bringing the recognition of the extensions of legal recognition of AI into codification. Important and dynamic social changes can be emphasised and addressed effectively once they are codified and are brought to consideration with regards to their potential implications. Such a consideration is reflected in the motion passed by the European Parliament resolution of 16<sup>th</sup> February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (59f, 2015/2013 (INL)) A8-0005/2017.**

# **AI & Intellectual Property Law: AI, Creativity and Innovation Ethics**

**Ankur Pandey  
Research Intern**

Intellectual Property Law is important and integral to the juxtapositioning of the legal entitlement of AI in a polity. It is therefore required to understand to provide relevant solutions in the paradigm of utmost requirement to expand the horizons of AI and IPR.

**Mr Abhinav Misra**, Member of the Advisory Council is the lead in the area of AI & IPR in the organization.

## Recommendations

- **The World Intellectual Property Rights Organization defines Copyright as the rights creators have over their literary and artistic work. These include Economic Rights and Moral Rights. While Economic Rights allow authors to gain financially by granting them the right to exclusively use or authorize to use their work, Moral Rights allow the author to prevent any unauthorized distortion of their work. Ever since the 1970s creators have used technology to create content in which the creative input was provided by the programmers and the technology was merely a tool, just like a camera. However, with the advancement in the field of Artificial Intelligence and the ability of AI to take autonomous decisions, the creative input of the programmers has reduced significantly. Now we have AI programs creating content such as news articles, novels, art, music which involve minimal human intervention. However, our Copyright laws have not evolved to take into consideration the authorship issues involved with content generated by AI programs. Can an AI program be given copyright over the work it generates? If not, then should the work be placed in the public domain free of copyright, or should the humans behind that AI program be given the copyright? This research considers the above issues and recommends that we should have specific provisions for AI-generated works outside the framework of traditional copyright, synonymous with related or neighboring rights. The Copyright Act, 1957 can be amended to confer neighboring rights on humans behind the AI program, just as it has provisions for Broadcasting organizations and performers.**

### **Possible Scenarios**

- **No human author, no copyright: Section 13 of the Copyright Act, 1957 states that Copyright shall subsist in ORIGINAL literary, dramatic, musical, and artistic works. The test of originality has shifted from the "doctrine of the sweat of the brow" to "modicum of creativity", requiring the author to demonstrate certain minimum creativity to claim copyright over his work**

## Recommendations

- **Tested on this principle, the AI seems to lack any creativity of its own. It is designed to execute certain instructions and that is all. The Court of Justice of the European Union in Infopaq decision held that original work must reflect the author's personality, which AI clearly lacks. In the Naruto case US Court of Appeals for the Ninth Circuit held that under the US laws, only humans can hold a copyright and thus denied copyright to a monkey over his selfie.**
- **The US Copyright Office further states that it "will register an original work of authorship, provided that the work was created by a human being." The Federal Courts in Australia also stated that a work generated by a computer without human intervention cannot be protected under copyright laws.**
- **The requirement of human author is obvious in Copyright Act, 1957 itself as Section 22 states that copyright shall subsist until 60 years following the year in which the author dies. Thus, under the current laws, there is no provision for granting copyright to AI generated works.**
- **However, such a position in law will bring all AI generated works in the public domain and the AI programmer will have no incentive to invest in such programs, inhibiting the advancement of AI technologies. Entrepreneurs entering into such AI ventures might choose to keep it a trade secret, keeping the know-how of such technologies away from the public view. Thus, amendment in current law is desired to provide some protection to content generated by AI and incentivize the investment in this field.**

## Recommendations

- **AI as an Author:** If copyright law is to be amended or interpreted so as to protect AI generated works, is it feasible that AI is recognized as an author of such works? The argument that AI lacks the wilful intention to impress its personality on the content it creates can be held to be not decisive because even minors and incapacitated persons can be authors. However, under the current laws, AI cannot be treated as a legal person. The EU Parliament's proposal to grant specific legal status to AI as "e-persons" was met with heavy criticism. In the face of such legal uncertainty over the status of AI, authorship cannot be attributed under copyright laws.
- **Authorship to Humans behind AI:** Since the intellectual property laws are not amenable to non-human authors, a few jurisdictions amended their laws to allocate copyright to humans operating the AI program. This legal fiction of conferring authorship on a person who is not the author-in-fact has been well recognised in "Work For Hire" doctrine under which the employer is taken to be the holder of copyright of work made for hire. This allows the employer to reap economic rewards by exclusive use of the work and incentivises him to invest further in artistic works. A similar analogy has been applied in AI generated works in Hong Kong, New Zealand, UK, Ireland.
- **Section 9(3) of Copyright, Designs and Patents Act 1988 of United Kingdom** states that:  
*"In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken."*

However, there remains an ambiguity over who the law would consider to be the person making necessary arrangements for creation of the work. Should it be the programmer or the user of the AI? The judiciary has approached this question on a case by case basis.



## Recommendations

- In Express Newspaper case, the court held that the computer was being used as a tool just as a pen and hence the copyright should be granted to the user. In Nova Productions case, the Court of Appeal evaluated the authorship of a graphic work in a computer game and held that "the user's input is not artistic in nature and he has contributed no skill or labour of an artistic kind". The authorship of that graphic work was thus awarded to the programmer. Another issue with this approach is will the person who makes necessary arrangements be criminally liable if the AI violates the copyright of any other work, even if he had no mens rea?
- Neighbouring Rights for AI generated works: It is evident that while rationale for granting copyright was rewarding authorship, in case of AI-generated works the rationale is limited to economic incentive as the AI lacks a personality of its own. We must also consider that there remains an inherent gap between human and AI creativity, and the latter itself is a product of human creativity. Thus, it can be inferred that instead of copyright, the legal framework of Related or Neighbouring Rights will be more suitable for the protection of AI-generated works. Related Rights are currently given to Broadcasting Organisations and Performers under Chapter VIII of the Copyright Act, 1957. These are of shorter durations with the aim to protect the investment and provide economic incentives. A separate provision granting related rights to AI generated work can also resolve the contention around the criminal punishment by not attributing offences under Chapter XIII of the Copyright Act, 1957 to the AI programmers or users. Instead the provisions could provide for immediate destruction of such works created by AI which infringe copyright of other authors.

# Recommendations

## Conclusions

- **It is recommended that specific provisions granting neighbouring rights to AI-generated works be enacted after considering the existing and potential state of AI. The provisions must ensure adequate protection to the investment of AI-programmer or user so as to incentivize further advancement in AI technologies. This will ensure that our copyright law adapts well to the technological and economic realities.**

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