BURDEN OF CRIMINAL LIABILITY ON ARTIFICAL INTELLENGENCE

ABSTRACT

Human civilization is progressing towards the evolution of Artificial intelligence. Artificial intelligence is transforming every sphere of life. This evolution brings a great revolution towards a conducive environment. It simulates the intelligence or approximation of humans in machines. Just in years, it has become a reality from the fantasy, happening at a rapid pace but it was not easy and smooth as it seemed to us. Being a revolutionary technology, it focuses mainly on problem-solving rather than on the effects of AI on users. Bearing the consequence of AI is in a grey area of thought rather than waiting for the cure, it is better to take preventive steps before it catches wildfire as "precaution is better than cure". It is the product of human intelligence. Humans possess the right and incur liability from the following act. Human will discharge the Liability of the act of inventing artificial intelligence or the other way around. Culpability lies unknown to inventors of artificial intelligence as of now. The paper discusses in detail about the future prospect of AI and Criminal Liability in India.

Punishment is a prominent feature of criminal jurisprudence. The essence of punishment is pain, regret and precedent to society against the wrongdoing. AI cannot be treated on the same footing as humans. The applicability of the Indian criminal manual is far from resolving the danger & unprecedented action from the AI.

INTRODUCTION

"With the fourth industrial revolution on the horizon, India is prepared to leverage the opportunities. This comes through the right adoption of AI technologies and by preparing future generation" - Union Minister Ashwini Vaishnav

Human civilization is progressing towards the evolution of Artificial intelligence. Artificial intelligence is transforming every sphere of life. This evolution brings a great revolution towards a conducive environment. It simulates the intelligence or approximation of humans in machines. Just in years, it has become a reality from the fantasy, happening at a rapid pace but it was not easy and smooth as it seemed to us. Being a revolutionary technology, it focuses mainly on problem-solving rather than on the effects of AI on users. Bearing the consequence of AI is in a grey area of thought rather than waiting for the cure, it is better to take preventive steps before it catches wildfire as "precaution is better than cure". It is the product of human intelligence. Humans possess the right and incur liability from the following act. Human will discharge the Liability of the act of inventing artificial intelligence or the other way around. Culpability lies unknown to inventors of artificial intelligence as of now.

Before explaining the criminal liability of AI first get into what AI is Artificial intelligence (AI) is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment. Although there are no AIs that can perform the wide variety of tasks an ordinary human can do, some AIs can match humans in specific tasks.[1]

The increasing role of AI in human life and advancements in its functioning has raised various questions. Ai has escaped labs and even took several lives. Most of the ai crimes are either done by humans or used by humans for their benefit. Most of the AI is developed by humans so the liability of its acts is often put on to the humans. It is believed that AI has no cognitive skills of its own so the Mens reus and Actus reus of the crime committed by AI is put onto the humans.

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[1] Copeland, B.J.. "Artificial intelligence". *Encyclopedia Britannica*, https://www.britannica.com/technology/artificial-intelligence. available at (last visited on September 12, 2023).

Ai is becoming more and more self-sufficient day by day due to daily scientific advancements, it is becoming capable of deciding on its own so the question arises who should be held liable for offences committed by Ai. In the case of Criminal acts committed by Ai on its own without any human interference, it gets very much difficult for legal institutions to derive on the conclusion what was the intent and reason behind committing that act by AI. Our current legal system has no rules to deal with the liability of AI. The biggest question is even if AI is held liable how to punish it. It becomes pretty much impossible to conduct inquiry in such cases. If we see AI as a man-made machine which works on commands of its human developers; AI in itself incapable of forming mens rea but gabriel hallvey[2] says that AI has all mens rea requirements required to impose criminal liability on it i.e. knowledge, intent and intelligence. Knowledge means Ai is able to understand and interpret factual data. Nowadays AI has fully developed sensory receptors to sense voice, human touch etc but it is argued that AI do not have cognition to understand that the certain act is criminal in nature.AI do not have feelings and can't be held liable for crimes which include feelings like hate crimes. ´john searle[3] says that AI after recognizing a situation, replicates the behaviour of those who have been in the same situation or just responds mechanically according to the rules, without comprehending the meaning of its actions. So, from this we can say that AI is unable to fulfil all the conditions required for mens rea applicable in criminal liability.

Aspects of AI That Are Important to Criminal Law

From the perspective of imposing criminal liability[4], there are a few important characteristics of AI systems:

1. Independent decision-making based on algorithms and training data is possible with autonomous capability. It is challenging to assign intent because of this.

2. The capacity to consistently learn from performance feedback and improve. Thus, future actions might not necessarily coincide with the goals of the initial programming.
   3. Due to algorithmic complexity, it is difficult to link decisions to specific code, leading to opacity.

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[2] **Gabriel Hallevy, "Artificial Intelligence vs. Human Intelligence" Dangerous Ideas 205, 210-216 (2018).**
[3] **The Chinese Room Argument (ed.), Stanford Encyclopedia of Philosophy (Thu Feb 20, 2020).**
[4] **Zou, J., Schiebinger, L., Miller, T. & Koussa, M., AI can be sexist and racist — it's time to make it fair. (2018) Nature, 559(7714), 324-326.**

4. Data-dependence as an output significantly relies on the accuracy of the training data, which may contain prejudice.

These qualities make it difficult to apply established criminal law ideas to AI.

2. AI systems were made for the welfare of humans but with time AI has come into the wrong hands which use it for wrong and illegal acts. AI is the upcoming future. Various new inventions in ai are made daily and still a lot of scope is left for the future as well. Be it present or future there are some traits of the AI which will remain the same and those are AUTONOMY; UNPREDICTABILITY; UNACCOUTABILITY.

AI AND ACTUS REUS

The developer and user of an AI tool are responsible for Its acts based on the commands given by them to AI to perform a task, so in general sense they are held liable for the acts of AI but the question arises when AI ignores the commands of the user and acts on its own and causes an act very much damaging in nature. Also, another scenario here is who is liable when a third party is controlling the AI for e.g. a hacker. These situations impose a serious duty on the law to inspect the external element of liability
i.e., actus reus. The important components for actus reus in any criminal act is BEHAVIOUR; CIRCUMSTASNCES; CONSEQUENCES.

Human control is very necessary for a crime.an act in criminal law is act of will, act in human control. But the liability problem comes in place when ai acts on its own and lacks control by a human. So, it can be said that actus reus can be attributed with AI as it can physically act on.

CRIMINAL RESPONSIBILITY UNDER INDIAN LAW

1. To be found guilty of a crime, one must demonstrate both mens rea and actus reus[5]. According to section 39 of the Indian Penal Code (IPC), an individual may be held

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[5] **Kadish, S.H., Schulhofer, S.J. & Steiker, C.S, Criminal law and its processes: Cases and materials (2007). Aspen Publishers.**

accountable for an unlawful act or omission[6]. Mens rea is the legal term for the mindset and purpose behind the crime[7].

2. Although general IPC defenses like insanity and intoxication may apply to people, it is uncertain if they may apply to AI systems[8]. Additionally, there are restrictions on sentencing because computers cannot receive penalties like imprisonment or the death penalty[9].

There are basically three factors of proving criminal liability:

☐ ORIGIN IN SOME MENTAL OR BODILY ACTIVITY,

☐ ITS CIRCUMSTANCES, AND
☐ ITS CONSEQUENCES.

But these are factors for proving criminal liability which are very difficult to establish for AI. At present there are no laws to govern Ai, but instant legislature is required for the liability of Ai.

FUTURE OF THE CRIMINAL LIABILTY OF AI

AI is one of the best inventions of mankind, but it can also be the most dangerous one due to its potentially increasingly unpredictable nature. The AI was developed by humans, and it is very much necessary that it is supervised by humans even in the coming future. The legal should implement a supervisory duty on the owner. A breach of such duty can be considered as wrong. This will help in avoiding some unforeseen damaging future events. If AI has a human supervisor; it can never be fully self-sufficient as the human command will always override the

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[6] **The Indian Penal Code, 1860, Sec 39.**
[7] **Williams, G. (1961). Criminal Law: *The General Part*. Stevens & Sons.**
[8] **Hallevy, G, "The criminal liability of artificial intelligence entities-from science fiction to legal social control." *Akron Intell. Prop*. J., 4, 171 (2015)**
[9] **Scherer, M.U., "Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies" 29 *Harvard Journal of Law & Technology* 2 (2016).**

autonomous behavior of the AI. Since it is difficult to fix the criminal liability of AI because it lacks legal personhood. If AI has no legal personhood, it means it lacks legal rights and duties. The supervision duty will create indirect liability as direct criminal liability of ai is not possible because it is not recognized as person yet and it lacks various ingredients necessary for fixation of criminal liability.

The supervision duty has its own faults as it directly makes the human liable but it completely ignores the autonomous acts done by ai on the basis of its own cognitive skills; but still, it is the best way to prevent the wrongdoings of the AI as it will never be fully automated because the human body is there to control its action priorly.

THE NEGATIVE ASPECTS OF ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is hitting the mainstream, although the first form of AI was invented in England, way back in 1951. Ever since the inception of AI, it has been used in various purposes of life. It has aided human beings in a lot of different ways from factory machinery to mobiles and smartphones which play a very important role in the 21st century as slowly but steadily technology has been evolving. AI has the power to make massive improvements and advancements to our quality of life, but it's not perfect.

Artificial intelligence, or AI, is everywhere right now. In truth, the fundamentals of AI and machine learning have been around for a long time. The first primitive form of AI was an automated checkers bot which was created by Cristopher Strachey from the University of Manchester, England, back in 1951. It's come a long way since then, and we're starting to see many high-profile use cases for technology being thrust into the mainstream. As time goes by

technology is becoming a more and more critical part of our lives and it is estimated that within the next 30 years technology will become mainstream.

Artificial Intelligence (AI) has undoubtedly revolutionized various aspects of our lives, from healthcare and finance to entertainment and transportation. However, as AI continues to advance at an unprecedented pace, it brings with it a slew of negative aspects and potential risks, particularly concerning the privacy of individuals. In this article, we will delve into the darker side of AI, shedding light on the significant privacy threats it poses.

PROBLEMS FACED

1. Data Privacy Invasion

AI systems thrive on data, and they require massive amounts of it to function effectively. This insatiable appetite for data often leads to the collection, storage, and analysis of personal information without individuals' consent. Companies and organizations gather data from various sources, including social media, smartphones, and online activities, creating a detailed profile of individuals' behavior's, preferences, and habits. This intrusion into personal data can be alarming and raises concerns about how this information is used and who has access to it.

2. Surveillance State

The proliferation of AI-powered surveillance technology has given governments and authorities unprecedented tools for monitoring citizens. Facial recognition systems, predictive policing algorithms, and mass data collection have the potential to erode personal privacy and civil liberties. Citizens may find themselves under constant surveillance, unaware of when and how their data is being used.

3. Deepfake Threats

AI-powered deepfake technology has the capability to create highly convincing fake videos and audio recordings. This poses a severe risk to individuals' privacy as it becomes increasingly challenging to distinguish between authentic and manipulated content. Deepfakes can be used for blackmail, defamation, and spreading false information, damaging personal and professional lives.

4. Invasive Personalization

While personalized recommendations and content can enhance user experiences, AI's personalization algorithms can also be invasive. They create filter bubbles, where individuals are exposed only to content and information that aligns with their existing beliefs and preferences. This not only hinders personal growth but also exposes users to propaganda and misinformation.

5. Inadequate Regulation

One of the biggest challenges in mitigating the privacy risks associated with AI is the lag in regulatory frameworks. AI technology is evolving rapidly, leaving policymakers struggling to keep up. In many cases, existing regulations are inadequate to address the unique challenges posed by AI, leaving individuals vulnerable to privacy violations.

6. Algorithmic Bias

AI algorithms are not protected to the biases that exist in society. They learn from historical data, which may contain discriminatory patterns. As a result, AI systems can perpetuate and even exacerbate biases in decision-making processes. For instance, biased algorithms can lead to discrimination in hiring, lending, and criminal justice, violating individuals' privacy and their rights to fair and equal treatment.

7. Profiling and Predictive Analytics

AI systems are adept at creating detailed profiles of individuals based on their online behavior, preferences, and habits. These profiles can be used for targeted advertising, but they also enable predictive analytics that can anticipate an individual's future actions and behaviors. This predictive power can be exploited to manipulate individuals or infringe upon their autonomy, compromising their privacy.

8. Data Monetization

AI-driven data analytics has given rise to a lucrative industry of data monetization. Companies profit by selling or sharing individuals' personal data with third parties, often without the individual's knowledge or explicit consent. This commercialization of personal information not only invades privacy but also raises ethical questions about who benefits from this exploitation.

EU'S REGULATORY RESPONSE

On September 28, 2022, the European Commission revealed AI Liability Directive (Directive)[10], proposing a legal framework to establish liability for damages caused by AI systems. The Directive is expected to introduce a risk-based approach to AI liability, where the level of liability corresponds to the risk associated with the AI system. Additionally, it suggests a strict liability regime for high-risk AI systems, holding developers and operators responsible for damages caused, regardless of negligence. This Directive encourages developers and operators to adopt necessary measures to ensure system safety and reliability. Its rules seek to maximize the benefits of AI while minimizing associated risks. Ultimately, the Directive is set to shape the future of AI liability within the EU and beyond[11].

The European Commission has published its proposal for a directive on adapting noncontractual civil liability rules to artificial intelligence (the "AI Liability Directive "). The Commission's press release stated that the purpose of the AI Liability Directive is to "improve the functioning of the internal market by laying down uniform rules for certain aspects of noncontractual civil liability for damage caused with the involvement of AI systems".[12]

ACCOUNTABILITY OF AI WRONG

When a crime is committed by ai, it's cannot be put into the machine, The present legal system traces the human individual behind it, it is investigated who was controlling the commands of the AI system at that time whether it was the manufacturer, user or some third party affecting the normal functioning of the AI. When the enquiry is conducted, then it is decided who will be held liable

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[10] **"DIRECTIVE of the EUROPEAN PARLIAMENT and of the COUNCIL on Adapting Non-Contractual Civil Liability Rules to Artificial Intelligence Brussels" 496 final 2022/0303 ((2022) EUROPEAN COMMISSION.**
[11] **whos-responsible-addressing-liability-in-the-age-of-artificial-intelligence, available at: https://geciclaw.com (last visited on 9 Sept, 2023).**
[12] **The European Commission publishes a proposal for an AI Liability Directive, India, available at: https://hsfnotes.com/ (last visited on Sept 29, 2022).**

Also, AI in itself can't be sued because it doesn't hold a legal personhood. It holds no rights and duties. While deciding such cases various doctrines are kept in view the manufacturers, operators and developers of the AI are bound by contract which says that if any damage is done by Ai in future due to fault in its system, then they are held liable. Such clauses are explicitly mentioned in these contracts. The doctrine of strict liability is also implemented in such cases, although the user or manufacturer are not directly involved in the damage caused by the ai, but still they are made strictly liable.

As per Section 34[13] which talk about group offenses in which act committed in furtherance of common intention as of now there is no explanation of liability of Ai. It was nowhere held that what liability it is on AI, how much liability is on ai, if act committed by the Ai and human then how liability will discharge by accused.

PUNISHMENT TO AI

The evolution of punishment is as old as human civilization with the advancement in human civilization reforms in punishment. It can be seen from the types of punishment evolve with the time from retributive to reformation, but these are limited to God made creatures. what about man-made creature there are not subjected to any punishment till now.

Punishment is a prominent feature of criminal jurisprudence. The essence of punishment is pain, regret and precedent to society against the wrongdoing. AI cannot be treated on the same footing as humans. The applicability of the Indian criminal manual is far from resolving the danger & unprecedented action from the AI.

Wherever there is a right, there is also a Liability to that. "DO MACHINE HAVE RIGHT"[14]. Even the machines have less right as compared to human basic right of liberty, expression, religion from these instances they cannot be held liable as to have humans.

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13 INDIAN PENAL CODE, 1860.

What standards should be applied to AI. AI cannot work independently if they can't work independently, they might also not said to be liable for that suppose if google map provides you wrong path then you cannot make google maps because they have whole host of internet enable service they have a binding corporation from other service providers also Lauren Rosenberg vs. Patrick Harwood and Google[15] Judge Deno G. Himonas of the Utah District Court dismissed the case as a matter of law after Google easily prevailed. Google had to have owed Rosenberg a duty before it could have been held accountable for negligence. ("Duty" is a key idea in negligence law; if you don't owe anyone any duties, you can't be negligent in how you fulfil those duties.) According to the court, Google was not required to safeguard Rosenberg's safety while following its directions or alert her to potential hazards along the road, such as the fact that Deer Valley Drive lacks sidewalks.

The court's rationale for reaching its judgments is applicable to a far wider variety of digital material than only Google Maps. For instance, the court used decades of legal case law to support its conclusion that mass-market book publishers have no need to check the accuracy of all the information in their works. By arguing that Google was a service provider who she depended on to give one-on-one guidance rather than a mass-market publisher, Rosenberg attempted to draw a distinction between these well-established legal concepts.

[14] **Audrey Millemann and Weintraub Tobin, "Should AI Machines Have Rights",** *Legalnews***, Sept. 12, 2022,** *available at***: https://www.jdsupra.com (last visited on Sept. 13, 2023).**

Users still need to look both ways before crossing the street even though Google tries to make their maps flexible, usable, and accurate. Judge Himonas was confident in assuming that Rosenberg's own negligence was the most likely because of her injuries even without having had a complete trial to explore all the facts in this case. However, the judge disregarded this defense. It acknowledged that the fact that Google Maps is used by individuals does not diminish the database's status as a mass-market publication:

VICARIOUS LIABILITY OF AI

In general, the tort liability of self-driving cars must be examined in line with numerous causes of damage such as driver error, product defects, or autonomous driving behavior of self driving cars rather than being only based on fault liability, strict liability, or vicarious liability. self-driving cars would greatly reduce the possibility and occurrence of road accidents[14]. According to Chinese legislation, every owner of a traditional motor vehicle is required to acquire both a business insurance coverage and mandatory liability insurance for motor vehicle traffic incidents. The tort liability of natural persons should be moved to the self-driving car in the case of autonomous vehicles, as the driver is no longer the subject of the driving, and it is manifestly unjust if only the car owner buys insurance[15]. However, they should differ from the required motor vehicle traffic accident liability insurance in terms of insurance parties, liability limits, and other internal liability mechanisms. In other words, the compulsory liability insurance system can both fairly balance the duties and responsibilities of the designers, producers, sellers, and drivers and safeguard the growth of the self-driving car industry by sharing the risk of harm caused by the autonomous driving behaviors of self-driving cars within the society and allowing victims to receive timely relief.

CONCLUSION

The idea of criminalizing AI systems raises numerous technological, ethical, and legal conundrums with no clear solutions. India needs to take the initiative and think carefully about creating responsible accountability structures that are adapted to the dangers that AI poses in delicate areas. Consideration must be given to legal personhood, shared responsibility, and transparency measures. Innovative thinking and public interest issues can coexist in harmony

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[14] **"Self-Driving Cars: Negligence, Product Liability, and Warranties"** *NYU Journal of Intellectual Property and Entertainment Law Blog* **(2018).**

[15] **C. Iclodean and N. Cordos, "Autonomous Shuttle Bus for Public Transportation: A Review" 13** *Energies* **2917 (2017).**

through collaboration. Unfettered AI has the possibility of undermining constitutional protections for Indian citizens; hence the present quo is unacceptable.