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# Constitutionality and the Morality behind Implementation of AI technology

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## ABSTRACT

*Technological advancement into the fields of artificial intelligence and its intersectionality with vehicles has led to a rapid emergence in the development of autonomous vehicles. The law must be conscious in matching step with these developments as the public rollout of this technology starts to materialise. This paper attempts to take cognizance of the primary legal challenges that the Indian state faces when dealing with a new legal object such as self-driven vehicles. Which level of government holds jurisdiction over it? How does the state deal with the privacy violations? What if machine learning leads to a replication of the prevalent discriminatory structures that plague the country? Not only are these questions themselves relevant in the current reality, but there is an urgent need to find their answers and create laws in dealing with the issues that have emerged with this technological development so as to avoid letting these problems grow exponentially to a point where finding solutions becomes difficult, as this paper intends to show with instances from industries internationally. It demands Indian law to be proactive and act in wake of a technological renaissance, rather than react to it when it has already passed them by.*

**Keywords-** Autonomous vehicles, Artificial Intelligence, constitutionally, morality.

## I. INTRODUCTION

Autonomous vehicles are rapidly moving towards becoming an accepted form of commute as research and monetary investment into this industry increases. Corporations like Tesla, the Google-backed Waymo, Ford and General Motors have been working on developing and popularizing autonomous vehicles, which are driven by artificial intelligence (hereon, AI). Tesla has already commodified the technology and is selling vehicles with an AI driven ‘self-driving’ mode while Waymo has already begun testing their fully autonomous cars. As this technology evolves every day and these companies chalk up plans to expand internationally, targeting the global commodification of this product, the legal challenges increase since it is imperative to understand the socio-legal challenge of the introduction of AI into everyday life.

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Primarily, litigators in India have to sort out which level of government regulates and controls the rules for AI driven vehicles or essentially, the List in which such vehicles would fall into. Furthermore, the law must inspect the level of invasion of privacy that such technology can achieve and as it collects it data, the ramifications of discrimination and bias emerging in AI behaviour. The aim of highlighting these problems is to emphasize on the need for prudent legal discourse before letting AI-driven machines enter the public sphere and an emerging necessity of legally defining such machines to create mechanisms to govern their usage.

Since India is a quasi-federal nation, it consists of two levels of government, the central and the state. Often, these governments function independently and their area of operations are divided in Seventh Schedule of the constitution. Union List postulates the boundaries of central power, the State List does the same for the state government while the Concurrent List consists of matters where both governments have a say. But it must be noted that India is a federal system with a unitary bias.

Entry 97 of the Union List states that any matter not Listed in List II or III will be dealt under List I. Therefore, any matter not Listed in these Lists will be considered under the centre's power. As AI or autonomous vehicles have advanced to a point that they can be used in vehicles, the Indian Constitution has to keep up with these emerging changes in the way humans interact with their environment. Prima facie, one can make the assumption that AI vehicles fall into List I as per Entry 97 but there are arguments to be made for both sides. While the conclusion here will most likely be in favour of the centre, for the sake of argument and legal discourse, an argument for the state can be made in the following way.

## **II. STATE GOVERNMENT HAVING THE COMPETENCE TO DEAL WITH AI VEHICLES**

According to Entry 13 of the State List, roadways fall under the jurisdiction of the State government. Additionally, Entry 64 states that any offence related to any matter mentioned in the State List will be under the dominion of the state government.

In the case of *India Cement Ltd. v. State of Tamil Nadu*<sup>3</sup>, it was stated that the matter mentioned within the List must be given wide interpretation to include matters which would be ancillary to the main subject. Further courts have held that an approach which compromises power of any government should not be adopted.<sup>4</sup> Hence, it seems reasonable to consider any vehicle operation on any communication ways which includes roads will fall under the state jurisdiction.

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<sup>3</sup> (1990) 1 S.C.C. 12 (India).

<sup>4</sup> *S.R. Bommai v Union of India*, (1994) 3 S.C.C. 1 (India).

An argument can also be made in favour of AI vehicles falling under The Motor Vehicles Act, 1988 as they are, *prima facie*, motor vehicles. But it is a different case for AI-driven trucks. Entry 35 of the Concurrent List states that mechanically propelled vehicles are under purview of this List. To prove that AI trucks don't fall under the purview of the central government, one must prove that it won't fall under Motor Vehicles Act. To do so, one has to rely on foreign jurisdiction since case laws for AI are hard to come by in nation-states wherein the technology is still under a preliminary state. There is a precedent of Indian courts relying on foreign judgements in situations where the law is underdeveloped domestically.<sup>5</sup> One such judgement is *Municipal District of Sugar City v. Bennett & White (Calgary) Ltd.*<sup>6</sup> wherein the Supreme Court of Canada held that if a vehicle is used for hauling then it cannot be termed as a vehicle. A vehicle, as defined by the Oxford English Dictionary, is "a means of conveyance provided with wheels or runners and used for the carriage of persons or goods"<sup>7</sup> and hauling is an act of pulling or dragging with force.<sup>8</sup> Therefore, one might argue that freight trucks do not fall under Motor Vehicles Act and powering them with AI technology could lead to further legal challenges as long as there is no specific law in place for such vehicles.

### III. CENTRAL GOVERNMENT HAVING THE COMPETENCE TO DEAL WITH AI VEHICLES

It is clearly specified under Entry 35 that mechanically propelled vehicles fall under the Concurrent List, which means both the State and the Central government have the power over matters related to them. For the issues mentioned under Concurrent List both the state and central government have powers to make laws pertaining to such matters.<sup>9</sup> It is also a well set principle, which shows unitary bias of our federalism, that in case of any conflict between the State and the Central government, the latter's dominion will prevail.<sup>10</sup> Further in the conflict of Concurrent and State Lists, the former prevails.<sup>11</sup>

Finally, even if one is to conclude that AI vehicles are not mechanically propelled vehicles and do not fall under any List, the central government still has the power to make law for such

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<sup>5</sup> *Kharak Singh v. State of Uttar Pradesh* A.I.R. 1963 S.C. 1295 (India). *Bachan Singh v. Union of India* A.I.R. 1980 S.C. 898 (India).

<sup>6</sup> S.C.R. 450 (1950).

<sup>7</sup> Oxford Learner's Dictionaries, [https://www.oxfordlearnersdictionaries.com/definition/american\\_english/vehicle#vehicle\\_\\_11](https://www.oxfordlearnersdictionaries.com/definition/american_english/vehicle#vehicle__11) (last visited Nov. 10, 2020).

<sup>8</sup> Oxford Learner's Dictionaries, <https://www.lexico.com/definition/haul> (last visited Nov. 10, 2020).

<sup>9</sup> INDIA CONST. art. 246, cl. 2.

<sup>10</sup> *ITC Ltd. v Agricultural Produce Market Committee*, (2002) 9 S.C.C. 232 (India).

<sup>11</sup> *State of West Bengal v Committee for Protection of Democratic Rights*, (2010) 3 S.C.C. 571 (India).

items in accordance with Article 248 of the Indian Constitution. The Central Government's argument is thus, much more straightforward but given the legal ambiguity regarding the nature of AI, it is difficult to decisively conclude which level of government holds a control on the laws pertaining to AI. But even if clarity is achieved, there still remains a question regarding the competence of these bodies to make decisions on such complex matters some of which will be elucidated in this paper. Artificial Intelligence was first founded around 1956<sup>12</sup> and the study of the capabilities of this technology is still in its infancy. It is not fully understood and explored yet.

Therefore, to deal with such cases, a separate body composed of a combination of litigators and field experts which keeps up with the developments in this technology and determines the legal recourse to be made to accommodate for such developments. As for administration justice one must consist of experience or knowledge in the field of law.<sup>13</sup> Hence if the matter falls within the purview of the parliament they are fully competent to form courts for such matters<sup>14</sup> and if it doesn't then such responsibility falls on to the shoulders of the state government. This legal ambiguity can be disastrous in situations wherein it is left upon the AI to make human choices.

#### **IV. WHAT WILL BE THE MORAL IMPLICATIONS AND CONSTITUTIONALLY EGALITARIAN STANDARDS IN WHICH AI CHOOSES WHICH INDIVIDUAL TO PROTECT?**

One of the most crucial abilities an individual has is the ability to make a choice. It is now established that humans are not rational actors but irrational beings<sup>15</sup> who make choices based on their set of biases and social conditions. This irrationality is then compounded by the study of human morality. A prime example of both these factors combining is the 'trolley problem' as coined by Judith Jarvis Thompson. The trolley problem, in its most basic form, is a thought experiment where one is put in the position of standing near a switch on the tracks of a fast moving trolley. The track forks into two directions. In one direction, stands one person while in the other, there are five people. Now one has to make the choice of either pressing the switch or changing the direction of the trolley to the track where one person is in its way or one can not press the switch and let the trolley kill the five people in its path. The problem gets more

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<sup>12</sup> Andreas Kaplan and Haenlein, Michael, *Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence*, BUSINESS HORIZONS (Nov. 10, 2020, 11:58PM) <https://www.sciencedirect.com/science/article/abs/pii/S0007681318301393?via%3Dihub>

<sup>13</sup> Namit sharma vs UOI (2013) 1 S.C.C. 745 (India).

<sup>14</sup> State of Karnataka v Vishwabharathi House Building Cooperative Society, (2003) 2 S.C.C. 412 (India).

<sup>15</sup> Dan Ariely, *The End of Rational Economics*, HARVARD BUSINESS REVIEW (Nov. 10, 2020, 11:50 PM) <https://hbr.org/2009/07/the-end-of-rational-economics>.

complicated if the people on the tracks are given distinct identities or even a relationship to the person standing at the switch.<sup>16</sup> A utilitarian, rational, answer would be to save the greatest number but with added knowledge about the people on tracks, rationality is likely to fail given the irrational nature of humans. This conclusion is relevant to the discourse regarding artificial intelligence since their algorithms are designed by humans.

Consider the following situation. An overspeeding AI electric car has the choice to either continue on its track and kill two Hindus, uppercaste cis-gendered men or swerve to the other side and kill a non-binary individual identifying with an oppressed caste. How would the algorithm deal with such a problem wherein it has to choose between harming one of two parties? Firstly, designer bias has a large role to play in how AI would determine a solution to this problem. As previously established, humans are irrational beings and this irrationality also forms a basis for discriminatory practises such as racism.<sup>17</sup> With this premise, it is imperative to understand how AI can contribute to systemic forms of discrimination. In India's case, this can take the form of casteism, violence against gendered others and suppression of minorities. The discrimination can start right from its design algorithm and there are various examples of this being true in countries which have delegated human roles to AI. In the US, the Department of Housing and Urban Development has allowed algorithm-based AI softwares to provide housing loans. This has led to a situation where high earning black households with strong credit scores would not even be able to see advertisements, let alone successfully apply for a loan for acquiring housing loans in comparison to a significantly low income white household.<sup>18</sup> The legal challenge that arose from this situation in the USA is that American law does not allow for discriminatory practises under private organisations as under the Fair Housing Act<sup>19</sup> but the act does not accommodate artificial intelligence and thus arises a need for specific laws dealing with AI. In the Indian context, this problem is accentuated due to the fact that Article 14 of the Constitution only protects the rights to equality for all in the eyes of the state. Therefore, private control of AI creates a situation wherein discrimination may occur while not violating any existing laws. Even if legislation is created to counter discriminatory algorithms, there still remains the problem of machine learning.

Machine learning is the ability of the AI to learn and grow through the use of data it gathers. The problem with this ability is that the data it uses to grow is man-made data and this will

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<sup>16</sup> Peter Unger, *Living High and Letting Die* (Oxford: Oxford University Press, 1996).

<sup>17</sup> Goldberg DT, 'Racism and Rationality: The Need for a New Critique' (1990) 20 *Philosophy of the Social Sciences* 317-350.

<sup>18</sup> Emily Badger, *Who's to Blame When Algorithms Discriminate?*, THE NEW YORK TIMES (Nov. 10, 2020, 11:45 PM) <https://www.nytimes.com/2019/08/20/upshot/housing-discrimination-algorithms-hud.html>.

<sup>19</sup> The Fair Housing Act, 1968.

create the same behavioral patterns in the AI that appear in humans.<sup>20</sup> Unconscious biases, racial biases as well as the ability to do profiling would eventually be learned by the AI even if its original algorithm is not discriminatory in nature. Machine learning is critical to the US housing racial bias with the algorithm learning its bias through analysis of historical transactions.<sup>21</sup> This exact situation can be applicable to the oppressed classes in India. The problem is not only limited to housing algorithms but can also extend to the AI driven thought experiment presented above and with AI using machine learning, the conclusion can be derived that the car may very well hit the non-binary oppressed class individual over the upper caste cisgendered men. The long term implications of AI, therefore, can be a dystopian future where inequality is driven to its highest standard and exploitation and oppression is weaponized through a scientific method without even the need to involve human actors in carrying out such oppression.

To prevent such an eventuality, the Indian state has to look back towards its key constitutional values laid down in Articles 14 and 21. The state values equality and quality of life under its regime and allowing private organisations unfettered control over the expediency of AI would not only hinder the state's ability to ensure equality for all but would also go against the state's obligation to protect the life and liberty of all. This is due to the fact that AI would perpetuate systemic discrimination in all walks of life and the state is bound to be wrapped up in its algorithm at some point. The US housing crisis is the prime example of this where state law allowing the use of AI in granting of loans became the means of creating a racial bias. Furthermore, such a society where a systemic bias becomes commonplace where even situations of life and death are even decided on tainted empirical data, the state cannot allow the operation of AI due to its obligation to protect life on an equal standard. The solution to avert such a crisis and a conflict of interest between the state and AI is to regulate the private control of the algorithms and form a proactive law that would govern the use of AI in various fields. To counter machine learning at this point via legislation is a tedious task and the state should rather be cautious in implementing AI in fields where the scope of the technology is still being discovered instead of taking the risk of letting AI be accessible in the public sphere. This entire problem, is subsequently rooted in the AI's ability to gather information, with or without the informed consensual choice of the masses.

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<sup>20</sup> Megan Garcia, *Racist in the Machine*, WORLD POLICY JOURNAL (Nov. 10, 2020, 11:30 PM), <https://read.dukeupress.edu/world-policy-journal/article-abstract/33/4/111/30942/Racist-in-the-MachineThe-Disturbing-Implications?redirectedFrom=fulltext>.

<sup>21</sup> Lu Guangli, *How Machine Learning Mitigates Racial Bias in the U.S. Housing Market*, UNIVERSITY OF BRITISH COLUMBIA, SAUDER SCHOOL OF (Nov. 10, 2020, 11:13 PM), <https://ssrn.com/abstract=3489519>.

## V. RIGHT TO PRIVACY IN INDIAN CONSTITUTION

Matters related to privacy were first brought up in 1954 through the case *M.P Sharma v. Satish Chandra*,<sup>22</sup> where a search was conducted in the petitioner's house who appealed that this acted violated their privacy. But the Supreme Court stated that the Indian constitution doesn't cater to privacy as a fundamental right. In 1962, the case of *Kharak Singh v State of U.P.*,<sup>23</sup> the right to privacy was again brought into the court due to constant surveillance done by the police. Once again, the Supreme Court held that right to privacy was not a guaranteed right under the Indian Constitution. This was followed up by *Govind v State of M.P.*,<sup>24</sup> wherein the court dodged the question of privacy but still held that the act of surveillance by police, similar to the Kharak Singh case, was 'verging perilously near unconstitutionality'.<sup>25</sup>

Finally in the year 2017, in *KS Puttuswami v. Union of India*,<sup>26</sup> the Supreme Court bench consisting of nine judges gave the judgement where they unanimously agreed that the right to privacy is guaranteed under the Constitution. Right to privacy was recognised as a fundamental right provided under Article 21 of the Indian Constitution. A three step test was also formed by the court which is required to be passed for any restriction on privacy:

1. The Existence of Law: A law which requires limitations of privacy for its functioning.
2. Legitimate state aim: A proper objective to be achieve should be behind this law
3. Proportionality: There must be a nexus between the objective and the limitation.

In conclusion, every individual has the right to determine the commercial use of their personal information, i.e. data.<sup>27</sup>

Oxford Dictionary defines 'data' as some information which is used to examine or figure out things.<sup>28</sup> In this day and age is the new oil and knowledge is power.<sup>29</sup> Companies are willing to pay millions of dollars for getting information about a consumer's daily routine. Gathering this data helps a company in various ways. For example, the best time to show one an advertisement of their product, understanding what product will be in demand in the near future, etc. This process is normalised under the pretence that data is being used for product

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<sup>22</sup> AIR 1954 S.C. 300 (India).

<sup>23</sup> (1964) 1 S.C.R. 332 (India).

<sup>24</sup> (1975) 2 S.C.C. 148 (India).

<sup>25</sup> 1975 A.I.R. 1378 (India).

<sup>26</sup> (2017) 10 S.C.C. 1 (India).

<sup>27</sup> Id.

<sup>28</sup> Oxford Learner's Dictionaries, [https://www.oxfordlearnersdictionaries.com/definition/american\\_english/data](https://www.oxfordlearnersdictionaries.com/definition/american_english/data) (last visited 10 Nov. 2020).

<sup>29</sup> THOMAS HOBBS , LEVIATHAN, (Columbia University, Second Norton Critical 2020).

development purposes. But giving out personal data can be very dangerous as it can be used to manipulate behaviour in such a way that one keeps using a company's product.

There is a precedent of data collection being used for social manipulation, Facebook-Cambridge Analytica being one of the more famous incidents. Cambridge Analytica is a company which does advertising for politicians to help them garner popular support for their elections. But the severity of their business increased when they started to manipulate data and information for their client, the eventual 45th President of the USA, Donald Trump. They analyzed people's personalities, their likes, dislikes, biases and preferences and advertised Trump's campaign so as to play into the preferences of the voters.<sup>30</sup>

## VI. PRIVACY ISSUES OF AI VEHICLES

AI works on gathering data. They track the road which one travels the most, the shop they visit, the workplace, live location, biometrics, etc. An AI vehicle will have a lot of information about individual behaviour as the model of its functioning is such that it survives or improves its performance based on gathering data. They claim to smoothen the process by optimizing the process which occurs on a day to day basis, only at the cost of behavioral profiling.

The European Commission and the German government have accepted that AI cars gather personal data of the owner.<sup>31</sup> European Union Agency for Network and Information Security (ENISA) have also suggested taking preventive measures to protect such AI behaviour as it could lead to serious threat and breach of private data.<sup>32</sup> Now if such vehicles are to arrive in India and collect the private data of people who use them, it must pass the three stage test set out on the *KS Puttuswami v. Union of India*.<sup>33</sup>

As per the current scenario there is no existence of any law which would allow the limitation of right to privacy for use of commercial vehicles. If in the future such a law comes into existence it fails at the next step that is 'Legitimate State aim'. It is implausible that the state would make a law which would help benefit a few groups of companies at the cost of the privacy of the population at large. Constitutionally, any such law would fail the standards at which the Indian state holds itself.

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<sup>30</sup> Issie Lapowsky, *How Cambridge Analytica Sparked the Great Privacy Awakening*, WIRED (Nov. 09, 2020, 10:10 PM), <https://www.wired.com/story/cambridge-analytica-facebook-privacy-awakening/>.

<sup>31</sup> Frank Henkel et al, *Autonomous vehicles: The legal landscape of DSRC in Germany*, NORTON ROSE FULBRIGHT (Nov 10, 2020, 9:00 PM), <https://www.nortonrosefulbright.com/en/knowledge/publications/e77157b8/autonomous-vehicles-the-legal-landscape-of-dsrc-in-germany>.

<sup>32</sup>European Union Agency for Cybersecurity, *Cyber Security and Resilience of Smart Cars*, EUROPEAN UNION AGENCY FOR CYBERSECURITY (Nov. 10, 2020, 10:00 PM), <https://www.enisa.europa.eu/publications/cyber-security-and-resilience-of-smart-cars>.

<sup>33</sup> supra note 27.

## **VII. CONCLUSION**

As highlighted above, without solving the issues pertaining to a lack of state mechanism in identifying which level of government would have dominion over AI driven vehicles, it is impossible to deal with all other subsequent challenges. This is particularly alarming as the issues with AI involve the furthering of socio-economic inequality, violation of privacy and subsequent profiling through data collection. Letting the technology develop unchecked without looking at the social interests of the population at large can lead to long lasting repercussions for the interests of the corporations developing and commodifying technology seldom align with the interests of the masses. When the aim is to reap profit, exploitation is a given and it is thus, the responsibility of a welfare state to establish checks and balances on such exploitative measures without stifling the opportunity of innovation in society. With AI, this is a tough task for the Indian government as the technology is too underdeveloped to fully understand its shortcomings. But the small number of precedents that do exist do not offer a reassuring outlook. The Indian government should not only be keeping a keen eye on AI development but also work on defining the legal personality of AI-driven machines. The action should not be passive but instead, look to create legal structures for autonomous vehicles to function in even before their introduction to the public at large. Proactive, informed and a scientific approach is the only way the Indian government can hope to uphold its Constitutional values in the wake of capital-driven scientific discovery.

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