PANEL DISCUSSION - TRAVERSING THE CONTOURS OF AI: LOOKING AT A JUST FUTURE?

By RGNUL Student Research Review

In association with Mishi Choudhary and Associates

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Speakers: 1. Ms. Smriti Parsheera, Lawyer and Policy Researcher, National Institute of Public Finance and Policy;

2. Mr. Ameen Jauhar, Senior Resident Fellow and Lead (Advocacy), Vidhi Center for Legal Policy;

3. Mr. Prasanth Sugathan, Legal Director, SFLC.in; Partner, Sugathan & Associates; and

4. Mr. Abhayraj Naik, Advisor, Educator, Justice Consultant.

Moderator: Ms. Apurva Singh, Associate, Mishi Choudhary and Associates.

INTRODUCTION

Ms. Apurva Singh, the moderator, welcomed the attendees to the webinar on "Traversing the Contours of AI: Looking at a Just Future?", which is the second part of the webinar that had been organised by RGNUL Student Research Review in association with Mishi Choudhary and Associates on 25 June 2020. Ms. Apurva elucidated that the purpose of the webinar was to discuss the various sectors affected by Artificial Intelligence (**hereinafter "AI"**), including education and criminal justice system. She further mentioned that the panelists would also review the issues posed by AI from ethical and gender perspectives. She then described the format of the webinar as follows: each speaker panelist would discuss their respective topics; this would be followed by a question and answer session with questions curated by the organisers as well as those received from the attendees.

ROUND 1

Ms. Apurva, after briefly introducing the panelists, requested them to begin with the discussion on the various facets of AI, starting with Ms. Smriti Parsheera, who spoke on AI from the lens of gender, as well as facial recognition.

I. AI through the Lens of Gender – By Ms. Smriti Parsheera

Ms. Parsheera iterated that she would address the issues of fairness and non-discrimination in the context of AI, particularly from a lens of gender. She started by stating that a discussion around AI often brings up issues like the growth of and responsibility of AI, however, these statements often indicate that AI has an agency of its own. In reality, she pointed out, we are very far from that kind of strong AI coming into existence. Therefore, most of the decisions driving AI were being made by men and women. This makes it important to question who are the people that design these tools, where they come from, what problems they find worth solving, and how they classify something as intelligent. Ms. Parsheera noted that a lot of debate on AI has been around these issues.

i. History of AI through the Lens of Gender

Ms. Parsheera stated that even though people think that AI is a cutting edge technology, research on AI has been going on since the 1950s. The first proposal where the term AI was used for the first time was in 1955 in a proposal called a 2-month, 10-man study on AI.

She mentioned how the term '10-man' which would otherwise be thought to be taken as a general term for both men and women, persisted through all the decades since then, and it has been observed that men have majorly been at the cutting-edge of making major decisions on how this technology is to fair and what it would be used for. She added that through the years, it is a trend that has persisted, and even in places like STEM, there is a chronic underrepresentation of women in the higher positions, and hence, women are not the ones setting the agendas at these places.

She further posed a question as to why the representation of women matters? She explained, that questions that are found worth solving by AI are decided by individuals who are in these positions to make decisions; and even besides this, AI has a huge link with data, hence, where the data is coming from and what it is used for, becomes a very gendered question.

To elaborate on this statement, she provided certain examples, such as **hiring decisions**, wherein many companies use AI to perform the initial screening of the applications, by simply feeding an algorithm,so as to avoid going through them manually. It had been found that even in a company as big as Amazon, because the AI was fed historical data to make inferences and take actions on the basis of it, when women candidates applied for a job, they were filtered out, as most of the data from the previous 10 years, that was fed, was male centric. It was then realized that in their quest of making this process easier through AI, they had instead facilitated a discriminatory process.

ii. AI and Facial Recognition

Ms. Parsheera, then went on to give an example on facial recognition. She mentioned a popular study known as the 'Gender Shades', wherein researchers from MIT took popular facial recognition tools like the ones used by IBM, Microsoft etc. and put a set of photographs through them. The purpose of this study was to see whether, when the pictures were put through the tools, the tools could classify them as a male or a female. The results of the study showed that the error rate for white-males was extremely low, almost less than 1%, whereas for darker skinned females the error rate was as high as 34%.

Hence, because the training data on which this AI was built, was not equipped with the same representational pool of dark-skinned females faces, the end result was that they were not classified. Yet, she also mentioned that whether or not an AI is more biased towards recognizing a particular type of face, can be both good or bad, depending on the purpose of its usage. If it is used for surveillance, one would hope to not get recognized, while if it is used to claim an entitlement, in that case, one would want to be recognized. With this she concluded.

Ms. Apurva thanked Ms. Parsheera, and invited Mr. Ameen Jauhar to talk about AI in the criminal justice system.

II. AI in the Criminal Justice System - By Mr. Ameen Jauhar

Mr. Jauhar, informed the audience that he is leading Vidhi Centre for Legal Policy's fairly nascent work on AI, access and governance, which is part of the larger team that works on law and technology research. He commended Ms. Parsheera for having laid down an appropriate foundation for the discussion, and stated that even after all these years there is no definitive definition of AI. He quoted an American scientist, who stated that if an AI works, people stop calling it AI.

In the yesteryears, computer science was so innovative, that a majority of people were conflating intelligent computation with conventional computation. He gave a brief example of what an intelligent computation was and what a conventional computation was, by stating that, typically a programme is based on an input-output sequence, where we input certain criteria to yield a particular output.

He addressed an important question, also posed by one of the attendees – *Are we very close to having AI judges or replacing human lawyers with AI?* To this he said that we are indeed not ready, and cited Ms. Parsheera's statement of contemporary AI being a narrow form of AI, different from what one would call Artificial General Intelligence, and undoubtedly far from Artificial Super Intelligence. Artificial Super Intelligence is a longer-term perspective, which some of the western authors like Nick Bostrom and few other scholars have delved into, while talking about existential threats that are posed by such transformational technology.

Coming back to narrow AI, he explained that we look at machine learning and deep learning as some of the key models that we associate with AI, so large input of data sets is vital, as it drives AI currently. In conventional computation, the algorithm does not automatically learn through usage, it is the programmer who will learn, and through an iterative process, try to refine it. Whereas, machine learning and deep learning have that difference with intelligible algorithms that refine their accuracy rates through usage. This makes adoption of such technology crucial for the purpose of making a meaningful impact through accurate AI.

Mr. Jauhar stated that for India, the topic of AI policies and AI ethics have been a very recent development. Before 2017, there were only a handful of people talking about it, and most of our technology and law questions were focused on data protection, Aadhar and most of the offsets of Aadhar. However, NITI Aayog published its paper in 2018, which was deemed internationally and domestically as India's national strategy on utilizing AI. It talks about the usage of AI in 5 sectors, and the judiciary/justice system was not a part of any of these 5 sectors.

Nonetheless, the Supreme Court of India, had undertaken some efforts to talk about how AI could be used within the Indian courts and the Indian judiciary. Most recently one of the tools that were released last year was a neural machine translation tool, called, SUVAS (Supreme Court Vidhik Anuvaad Software), which was launched on the National Constitution Day, on November 26th last year.

This tool was stated to be a fairly simple algorithm that utilized the existing pool of orders, judgments and legislations available in different languages, to curate a database, and through this database, the algorithms were trained to translate in 10 local languages. The idea was simply to facilitate an easy translation of judgments and later other legal documents, without resorting to paid translation tools, or general translation tools which may not give accurate legal translations.

i. Facial Recognition in the Criminal Justice System

Mr. Jauhar, then referred to Ms. Parsheera's comments and stated that in the criminal justice system, AI was majorly used for its facial recognition system. He claimed that the usage of AI for facial recognition in the criminal justice system is at a 'frenzy state' and much discussions and debates on its regulation are needed. He explained that this has left lot of arbitrariness and discretion in the hands of the state governments and particularly the state police forces to extend its usage.

This also often results in a facial recognition tool being used for a purpose contrary to what it was built for. An example given by Mr. Jauhar was of the Delhi police, which on one hand, had deployed an AFRT (Automation Facial Recognition Tool), which successfully helped in locating missing children, while on the other hand, there were also reports where the Delhi police was said to be considering using this tool to investigate and identify protestors, in the CAA-NRC protests.

He added that, these two situations could not be painted with the same brush, and that there were not only privacy and surveillance issues involved, but also constitutional and due-process issues involved, which Mr. Jauhar kept aside to be dealt with at a later stage.

Ms. Apurva Singh, the moderator, further suggested readings on the topic. She suggested exploring the MIT Technology Review Blog, and looking into the works of the Telangana and the Delhi government. She then, emphasized on the question of ethics in the world of AI, and requested Mr. Prashant Sugathan, to take the stage.

III. Ethics, Algorithm, and Transparency - By Mr. Prasanth Sugathan

Mr. Sugathan, thanked the moderator and acknowledged Ms. Parsheera's earlier brief introduction on AI and ethics. He then went on to mention that AI is not a recent topic, and although the discussions about AI started recently, even in the earlier years, most of the computation technology definitely had an AI element. He then talked about the kind of applications where AI is used, and cited the screening process example as given by Ms. Parsheera. He also mentioned content moderation on platforms like FB, where AI is used in a big way. He said that, even the government, when it is talking about regulating intermediaries, talks about using automated features. Hence, we are at a point where from a conceptual stage, we are looking at almost all businesses relying on AI one way or the other. Right from the HR stage to talking to the customers via a chatbot or a customer contact mechanism, all these aspects rely extensively on AI.

Mr. Sugathan stated that this was a stage where the problems would align, and provided two examples of the type of problems we could face due to the extensive adoption of AI.

The first example was of Facebook, wherein, he talked about how Facebook provides a facility of targeted advertisements, i.e. anyone could advertise on Facebook and also decide whom to target the advertisements towards. A news organization found that one could even target a select group, such as advertisements targeting people who hate Jews. Facebook eventually claimed that it was a mistake as far as the AI was concerned, and that the platform was being run by an AI engine, and so this category was automatically generated. Hence, Mr. Sugathan concluded that these issues would be more and more evident as we increasingly rely on AI.

The second example was of Google, wherein Google Home Minis were found to be surveilling on their owners. These devices were said to be recording conversations and transmitting them without the knowledge of the owners, which was undoubtedly problematic, and was pointed out by several security researchers. Google eventually did come out with a plan addressing the issue.

By mentioning these examples Mr. Sugathan established that there is a need for some framework or regulation in place, where it can be self-regulated, through frameworks provided by the company itself, by civil society organizations or also by the governments, like the OECD Framework.

The question here was then -*How can we regulate AI? /What are the various ways in which we can ensure that ethics stay in place?* Here, he added a caveat and said that the term 'ethics' could also be a misleading term to use, and it could be such, that the onus is on the companies, and it is for the company to decide whether something is ethical or not, which may not be right; ultimately it is a debatable topic.

i. <u>The OECD Principles</u>

He then mentioned that as of now OECD has come with a few principles which have also been adopted by the G-20. These principles of AI provide the kind of basis to start this discussion on ethics. There are 5 major principles, the *first* principle is on inclusive growth, sustainable development and well-being, i.e. any AI technology that is used, should be used in such a way that it encompasses everyone, and should also result in sustainable development; the *second* principle, is that it should be firmly based on human rights; the *third* principle is that there should be transparency, and this is where the question of algorithmic transparency comes into the picture.

He added that, as mentioned before, it also depends on the type of data that an AI is fed, and that in computational terms, it is often said that "if you feed your computer garbage, you will get garbage back", i.e. garbage in, garbage out, hence all depends on the data. Therefore, there should be greater transparency, and it should be facilitated by the corporations that are involved in such work.

He further added that the *fourth* principle states that any AI technology we adopt should be robust and secure and that as far as users are concerned, it should be a safe technology. Lastly, the *fifth* principle is the question of accountability. Mr. Sugathan provided an example of self-driving cars which are now being used majorly, and so it is vital that the people using these cars should adopt accountable practices, and the corporations should be held accountable as well.

Mr. Sugathan wrapped up with these initial thoughts on the topic of AI and ethics. Ms. Apurva thanked him, and reiterated that AI accountability by corporations was indeed one of the key areas

that needed attention of policy makers. She then requested Mr. Abhayraj Naik to talk about AI in the education sector.

IV. AI in the Education Sector – By Mr. Abhayraj Naik

Mr. Naik started by referring to the discussion around the present topic. He also acknowledged, that the complexities around this topic, forced us to bring in not just inter-disciplinary and multi-disciplinary aspects between the natural sciences and the social sciences, including the law and policy fields, but also urged us to take stock of the history of science and technology, in terms of all the developments that have supplemented the growth of AI. Such a 360-degree view of AI, brought into focus the whole relationship between technology and society.

Mr. Naik expressed his intention of presenting a set of 'visual stories' to elaborate on the issue he was to speak on. He mentioned an article he had come across, wherein a poor agrarian family in a rural part of India, sold their sole cow, so that they could buy a smartphone for their child to attend online classes on. Here, the cow was a source of milk, a matter of pride, and a measure of the well-being of the family, and it had to be exchanged for a smartphone which was essential for the continuation of the child's education.

Here, Mr. Naik stated, that even though the present case did not involve any complex algorithm or any problems related to AI, but it really brought out how particular choices related to technology, and involved questions of class, inequality and entitlement. He stressed that one must acknowledge this, as a part of any discussion on AI that happens in this country.

i. Western Approach to Ethics in AI

He observed that, the discussion of ethics from this aspect, is not much prevalent in India as, most of the conversation around ethics comes from the West, such as from Harvard, the Berkeley Centre, Oxford, the Future of Life Institute, the Future of Humanity Institute, or from celebrity philosophers like Nick Bostrom, etc.

Mr. Naik explained that he had instead focused on the context of technology and education in Ghana or a rural school in India that is suddenly forced to translate its already problematic education model to an ICT (Information and Communications Technology) enabled framework with some kind of systemic pressure to apply analytics, machine learning or big data frameworks. Therefore, the story of a farmer selling his cow to buy a smartphone for his child's education is useful in the context of AI and education to be mindful of what is really at stake in a country such as India.

With remorse, Mr. Naik pointed out that an organisation such as the NITI Aayog had been captured by a Euro-centric and pro-capitalist vision of AI as promoting India's Gross Domestic Product in figures that had little to do with grassroots-level development. He further stated that even the National Strategy document was a result of consultancy among big companies like Accenture and had been simply endorsed by the NITI Aayog, rather than being produced by it. For Mr. Naik, especially in the context of COVID-19, a discussion about education in India should go back to the situations of poverty, inequality, patriarchy, cast stratification, religious tensions and the absolute vulnerability of the Adivasi communities in India. He thus juxtaposed two worlds: the cool world of AI and robots that can do everything with the other India that is not talked about often enough.

ii. Safety Concerns in Fiduciary Relationships

Mr. Naik then referred to the second story, which was of an educator in an Indian state, who used the ICT framework adopted by the school he was in, to get the phone number of a young female student, and began harassing her on Whatsapp. The perpetrator was an educator, a fiduciary in a sense who used the lack of safety that was built into the technological apparatus, to then carry out real-world harassment.

In this context, Mr. Naik brought out the safety dimension of AI, and highlighted that while there might be a few elite educational institutions in India that indeed had teachers who are trustworthy; in the context of unequal relations between teachers and students, or schools and students, and specially of students who come from vulnerable communities, an AI generated approach to education heavily impacted thedynamics of safety, welfare and risk.

iii. Change in the Pedagogy

The third and final story, was out of Mr. Naik's personal experience from having taught at the Azim Premji University, in the past two months. He mentioned how, the experience of teaching, had been one of looking at the screen, where even the videos were mostly turned off by the students, and how at some level it was extremely different than him teaching in a classroom.

Several points such as, barely being able to see the students; not being able to listen to them because of the muted audio; not being able to crack any jokes to lighten up the mood, due to the uncertainty of how it would be received over this medium; or not being able to use his body-language to convey his message, all these situations brought about a sense of dullness and went on to prove how operating in this technological realm reduced the novelty and the possibilities present in a physical classroom.

He stated, that as we think of machine learning, personalized learning, and AI generated learning at a large scale in India, this became an important factor as well. What AI does to the actual nature of the pedagogy was highlighted as an important question.

Mr. Naik, ended his opening comments by mentioning that in most conversations on this aspect of AI, the general tendency of people is of bashing AI, and of emphasizing the need for it to be controlled. People talk about the need for a code of regulation, or of following the fact approach from within the technology arena, where fairness, accountability and transparency are part of the design of the technology, or that we need a human rights approach to technology.

He stated that all these takes were very important, and that a lot of his work on this topic revolved around these takes. He expressed that one must acknowledge that technology and artificial intelligence has immense potential, when it came to the millions of children and millions of young people who do not have access to education, and therefore one has to be balanced when talking about AI in the context of education, in India.

Ms. Apurva Singh, the moderator, thanked Mr. Naik, and emphasized on the importance of looking at AI from a sociological perspective as well, before taking the webinar to the 2nd Round.

ROUND 2

The second part of the discussion comprised of questions, curated by MCA & RSRR, which were used to facilitate the panel discussion. The Moderator, Ms. Singh addressed each speaker with questions on issues related to AI.

1. **Ms. Parsheera was asked about the existence of and the reasons behind the problem of gender stereotyping in the way various AI products are programmed.**

Ms. Parsheera affirmed the existence of this problem in the programming of AI. She referred to the voice of "Siri", the Apple virtual assistant which was originally programmed with a female voice. This reflected a reaffirmation of the gender norms that are persistent in the society. Subsequently, people complained that the use of a female voice for "Siri" was sexist and demanded that a male version for the programme should be released. Apple responded by launching a male version for its application.

She then referred to the difference in construction of AI robots with stereotypical male and female names, by mentioning an AI robot named "Atlas". This was a huge muscular robot who was portrayed as a male and was responsible for search and rescue operations. Whereas, the marketing-oriented AI robot named "Sophia", was modelled as the American actress Audrey Hepburn. Sophia was given a citizen status in Saudi Arabia and was used for marketing the country as a tourist and investment hub. The stark difference between the roles played by the AI robots with predominantly male and female names is reflective of gender stereotyping. She concluded that there is a need to find a solution to tackle such gender stereotyping in the digital space.

2. **Mr Jauhar was asked about the possibility of AI replacing Judges and Lawyers.**

Mr. Jauhar answered that there are scholars that believe AI can replace judges and lawyers after a century or a millennium and this isn't an immediate concern. He referred to CJI's Bobde speech on AI which stated that the idea reflected in the mandate for AI is to supplement judges and not to supplant them. The aim is to make the justice system efficient through the use of the automation and not to dismantle it and recreate something wholly automated.

He then stated that there have been instances where predictive justice tools have been deployed in the West. These tools might have the trappings of a judicial function. An infamous example of this was a software named "COMPAS" (Correctional Offender Management Profiling for Alternative Sanctions) in the USA. It was deployed by a parole board to identify the potential risk of recidivism in inmates and accordingly gave them a score on which their ultimate parole application was decided. The software utilised historically biased data, which caused the tool to calculate a higher risk of recidivism for African American males.

He then turns to the issue of facial recognition technology and AI. There has been an increasing emphasis on its regulation. For instance, initially the EU's Draft White Paper on AI proposed amoratorium of five years on any such technology being deployed. This was later rescinded in the final version. Recently, California passed a legislation that suspended the use of facial recognition technology within their state departments for the next five years. African American Congressman, Cory Booker has introduced similar bills in the US Senate.

He pointed out that the governance of AI is a fairly recent discussion that has emerged in the last decade. He agreed with Mr. Naik that there is a predominance of Western scholars engaged in this

discussion and there is a need to introduce a diverse perspective. Issues related to ethics and governance vary from country to country. India needs to have a robust policy to deal with the issues related to AI and it will not be feasible to adopt a policy template from the international diaspora.

The Moderator agreed that it's not the debate of AI vis-a-vis humans. The focus should be on how they complement one another.

3. **Questions were raised on data ethics being side-lined during the development of AI software. Mr Sugathan was asked about mechanisms to ensure that AI software abide by the principles of data ethics.**

Mr. Sugathan commented that it was a complex issue as there was no concrete method to regulate companies and corporations to ensure abidance by ethics. There are three possible methods: self-regulation, co-regulation and government regulation. Self-regulation, where companies themselves ensure that the technologies that they develop respect the human rights principles, is not a dependable solution. Governments need to set a framework or follow global standards to regulate the issue.

He suggested that India needs a robust legislation on data protection and privacy to regulate AI, for instance, the GDPR in EU, under which AI is analysed from the perspective of data protection and privacy. Many countries are individually harbouring discussions on these aspects. There is a need to initiate this discussion on a global level. The regulation of AI and use of data from an ethical perspective is essential.

The Moderator suggested the participants to explore the guidelines on AI by UNESCO. The guidelines are under the consultancy stage and are accepting recommendations by individuals.

4. **Mr Naik was asked a question on how AI can play a role in enhancing the quality of education system while addressing the questions of privacy and security which may arise.**

Mr Naik referred to the UNESCO working paper on AI in Education released in 2019 and recommended it to people who are interested in the field. He stated that current discussions on AI are generic and the paper provides specific examples, which is a step forward. He then proceeded to answer the question in two parts.

The use of AI promotes inclusion.

For instance, a platform named "Liulishuo" in China, can teach English to six lakh students at the cost of one teacher's salary in the country. This would aid in the inclusion of children living in the rural areas of China who lack access to conventional tuition. Similarly, the "Plan Ceibal" in Uruguay is an adaptive learning programme powered by AI, which has three thousand exercises which can be solved by the user. The system is designed to grasp the gaps and flaws in one's mathematical thinking. He compared this with the biased approach that teachers might have towards their students, which can devoid them of the required attention that they might need to improve. He concluded his point by stating that AI promotes inclusion.

The tendency to overlook the disadvantage in India.

He stated that since AI is India can increase the GDP by 1.9 %, the disadvantages are being ignored. AI strategy put forth by NITI Aayog reflects an intent to absolve companies of strict or criminal liability and limit all issues to the civil law sphere. He commented that people want to monetize AI without considering the harm that it may cause. He suggested that the "Ethics by Design" approach should be taken up. He further commented that the CBSE AI Integration module, which is being developed, has to consider all possible harms such as bias, gender-based stereotyping, invasion of privacy.

He concluded that AI in education brings the promise of inclusion. Machines do not have human constraints and this would provide students with undivided and constant attention. He cautioned that the design should be robust and based on ethics, without which AI in education should not be promoted.

5. **Privacy is often linked with the facial recognition which shapes the surveillance capitalist system. Ms. Parsheera was asked a question about how the right to privacy in India could work alongside facial recognition with reference to targeted advertising.**

Ms Parsheera answered that facial recognition is primarily used by two entities, the State and private organisations. Targeted advertising is mostly done by the latter. She provided two instances to explain the how targeted advertising may be used. In the first instance, there are applications, that asses our age, gender and ethnicity and recommend clothes. In the second instance, there is an algorithm which tracks the movement of an individual through the store. The latter is not specific to the person's identity.

The PDP Bill (India) classifies all biometric data as sensitive data which adds an additional level of security to it. It increases the responsibility of the entities dealing with such data. The data taken is to be minimised and has to be mapped to the purpose that is sought to be achieved. In relation to targeted advertising, the goal is creating a general profile of the individual and not to invade into his/her personal and specific details. If data is attached to a person's face specifically, then it would amount to a violation of privacy. This is because it exceeds the purpose for which the data was originally taken.

There is more focus on the use of AI by the state in comparison to its use by private entities. She cautioned that targeted advertising may not be our most important concern. The use of biometric data to unlock smartphones is a worrying issue in comparison to the use of biometric data by the state. She concluded that biometric data is being used in our everyday lives without a robust mechanism to regulate it.

The Moderator recommended the book "Surveillance Capitalism" by Shoshana Zuboff to the participants who wanted to learn more on the topic discussed.

6. **Mr Jauhar was asked about the effectiveness of the role AI can play in criminal justice system without resorting to surveillance.**

Mr Jauhar answered that the criminal justice system is not limited to criminal trials, and is inclusive of the investigation process which involves surveillance and monitoring. The same has to be done in a regulated and non-arbitrary manner. He stated that facial recognition is highly advantageous as it

enables the authority to conduct mass surveillance from a safe distance, without being endangered physically. He then turns to the constitutional questions that arise out of this system, which relate to the fact that we have to abide by the procedural and substantive due process laid down by the Constitution.

He referred to the high risk of inaccuracies related to facial recognition pointed out by Ms Parsheera. For instance, a citizen in the USA faced wrongful incarceration as he was wrongfully identified by a facial recognition tool. In another instance, a student at Brown University, USA, was wrongfully identified as someone who was involved in the Sri Lankan terror attacks.

The use of AI faces constitutional challenges as it has the ability to wrongfully incarcerate an individual which can possibly strip them of their right to life or liberty. AI functions on data sets and India has a background where there has been systematic discrimination against adivasis and religious minorities. This combination can dismantle the due process protection provided by the law.

He concluded that the application of AI is not limited to surveillance and the above pointed issues need to be considered realistically before the introduction of AI into the criminal justice system. There is a need for concrete guidelines that control the extent to which courts can rely on such evidence, given the fact that that the current IT Act and Evidence Act do not provide much guidance. In the present scenario, it is up to the discretion of the Courts to accept or reject these as technological evidences.

7. **On one hand, the protests against racism in American companies like International Business Machines (IBM) and Amazon have limited the facial recognition technology. On the other hand, such technology is used by companies like Clearview which still operate in the market. Mr. Prashant was asked about the necessity of and to determine the extent of corporate responsibility for the development and operation of facial recognition technology including the problems of inaccuracy and harm.**

Mr. Sugathan emphasised that facial recognition can be problematic, and that it is an ongoing debate in the United States. He further stated that in the current scenario, a lot of law enforcement agencies and governments are using facial recognition in a big way. He cited the example of the recent COVID-19 lockdown, where drones were being used to take photos of people violating the lockdown. This, he noted, could have repercussions for citizens and their rights, especially if they are recognised wrongly, because it might lead to imprisonment, challenging which is a long-drawn complicated process. Mr. Sugathan observed that it is necessary to draw a line, and that facial recognition technology could be used only for a limited number of uses. In the United States, a law has been passed by Washington limiting the use of facial technology to a few areas, for example, to find missing persons. Mr. Sugathan reiterated that there is a need for a more detailed discussion on this issue.

Mr. Sugathan remarked that big corporations like Amazon and IBM, will not sell facial recognition technologies. However, there are other companies that still do that. Therefore, it must be taken into account that there are laws in place to avoid such misuse of these technologies. This is important in the Indian context, where there is still dearth of a data protection law. These technologies are evolving at a rapid pace. Therefore, the law makers and legislation have to amend the act and put proper mechanisms in place so that rights of individuals are not infringed.

The Moderator added that the PDP Bill is problematic as it gives the government a lot of power to exempt government agencies from the ambit of the bill.

8. **Mr Naik was asked about the role of AI, its potential benefits and risks, in assessing characteristics and skills of a student.**

Mr Naik responded that the answer to this question is textured and depends upon the individual and the specific frame of AI that is being used. However, he affirmed that AI has great potential to deliver personalised, adaptive, tailored learning to students. In his opinion, machines surpass human teachers in ability and access to data.

He stated that AI is complex and enunciated the same with an example. He referred to a school in China named Hangzhou No. 11 High School where facial recognition technology was being used to assess whether a student is understanding what is being taught in the classroom. In his opinion, AI in the field of education can be a great tool. It can provide tailored teaching for a large number of students.

He referred to the paper "Making AI Work in Indian Education" by Gurumurthy Kasinathan, commissioned by Friedrich-Ebert-Stiftung. The paper had references to other scholars that point to the risk with AI leading to a process termed as "learnification". It a process where data driven personalised education focuses on learning rather than education and on processes rather than teachers and students. This can break down the social activity of learning into quantifiable, cognitive and pedagogic units, which include instructions, quizzes, assignments, tests, etc. It would significantly hamper the long-term goal of an education which is to instil within the students a sense of discrimination, critical thinking, open-ended exploration, and development of humanistic skills and virtues such as honesty, courage etc. He commented that the use of AI depends upon the user of the platform and in the case of education this would depend upon on the use of AI by the teachers.

He referred to his research project in IIT-B, Bangalore which focuses on humanising automation. He pointed out that AI can never develop the tacit knowledge that humans inherently possess. For instance, the tacit knowledge of an interviewer who can assess gender dimensions in an admission process cannot be captured by an algorithm.

He commented that a lot of research is necessary to be done to prepare students and teachers to work with AI. It is imperative to involve both of them in the design of AI. He then turned to the issue of predatory capitalism, with reference to Zuboff's work, "Surveillance Capitalism". AI in India is commoditized. There is no open source framework and the data sets are not publicly available. In his opinion, people are interested in monetising from the situation and are ignoring the possible harm that can arise if AI is not efficiently regulated. He concluded by stating that there is a need to understand the public dimensions of infrastructure of AI and education.

9. **Mr. Prasanth Sugathan was asked a question regarding the prevention of algorithmic discrimination by Artificial Intelligence to protect the right to privacy of marginalised individuals.**

Mr. Sugathan emphasised the need of algorithmic transparency in the decision making process. He talked about the need of having a thread in place. He compared it to the administrative decisions

made by the governmental bodies, being reviewed by the judiciary- the question asked by the Court is regarding the procedure followed to arrive at that decision. He said that a similar approach must be taken, of finding out what procedure was followed by any AI — with respect to its algorithm — to arrive at a particular decision. By doing so it could be ascertained whether there was any discriminatory process was used to arrive at a particular decision. This approach would allow for having checks and balances in place to ensure no discrimination takes place. It would also allow an affected person to have a remedy. The person should have the right to ask the software company questions like how the process was initiated and how a particular decision was arrived at. The company must be able to explain how the software arrived at a particular decision. The procedure must be not be like a black box wherein there is an input and output, without a method of determining the manner in which the input was processed. Mr. Sugathan stated that this was how discrimination and malpractices by AI could be avoided.

10. **The next question was directed by Ms. Apurva to Ms. Smriti Parsheera. She was asked about the role which law could play in bringing about gender equality in the functioning of AI.**

Ms. Parsheera begun by saying that law could play a big role in bringing about gender equality in the functioning of AI. However, she said, that this must be viewed in the context of the existence of a law on discrimination in India. Even though the Constitution is firm on preventing any discrimination by the State there exists no cross cutting anti-discrimination law. Narrower laws like the Equal Remuneration Act, 1976 and the Rights of Persons with Disabilities Act, 2016 exist, but there is no over-arching anti-discrimination law.

She said that in reference to AI ethics, it is often said that AI must be held accountable for the same standards of discrimination as humans would. She raises the question, that if a private corporation — such as the parent company introducing an AI software — is not subject to certain anti discriminatory provisions, would the software be subjected to such provisions, only by virtue of being an AI software? Here, she emphasized the need to rethink the discrimination framework as a whole in India, since humans and AI cannot be held accountable for differing standards of discrimination. Without a uniform framework on discrimination, there would be constant push back regarding the applicability of higher standards to AI as compared to humans or organizations. She averred that it was not possible to have an isolated conversation on discrimination by AI without addressing discrimination in society in general.

Further she stated that to some extent the question of discrimination is addressed in the Personal Data Protection Bill, 2019 [PDP Bill]. The PDP Bill talks about a set of harms which, if a person suffers, they will be entitled to compensation. One of the harms listed in the PDP Bill is discriminatory treatment. However, she added that this provision was open to variegated interpretation in the absence of a clear theory on what amounts to discrimination by private actors. There would be a regulator interpreting this provision. However, what amounts to discrimination was not clear, which could result in difficulties.

11. **Mr. Abhayraj Naik was asked about the role that artificial intelligence would play in addressing climate change, both globally and domestically.**

Mr. Naik stated that the role of AI in addressing climate change would be centered around its ability to process large amounts of data which scientists have found difficult to do. It would also, through neural network based processes of inference, be able to ascertain patterns.

With regard to climate change, he said, there exists several types of data like atmospheric, temperature, soil level and precipitation data. He said that it is difficult for most scientists to make sense of the numerous moving parts involved in climate change and make accurate forecasts. AI has the ability to process such data better than most scientists. It has the ability to take into account data from the beginning of recorded time and understand what is happening and what could happen, which couldn't otherwise be done.

He added the caveat that any computer intensive process involves a significant amount of energy. He stated that the PDP Bill does not account for the impact that data centers would have on the energy inequality in India. While there are farmers struggling for energy for farming, thousands of data centres in India would take up significant amounts of energy. In order to produce that kind of energy a lot of coal would be required which would in turn lead to carbon emissions. He concluded by saying that AI would have costs in terms of carbon emissions, apart from its benefits.

12. **Ms. Apurva then asked Mr. Ameen Johar how the safety would be ensured in the work done in the legal field through AI, in the absence of stringent cyber laws, keeping in mind the aspect of confidentiality of information.**

Mr. Johar began by generally remarking that he didn't think it could be done. He said that when any kind of technological advancement in India is spoken of, especially in the judicial system, there is always a sense of rush.

He gave the example of narco-analysis being used in the judicial system and how its use was struck down for being not only unconstitutional but also deeply invasive. He talked about how society could not accept the use of narco-analysis, with the due process of law being an underlying argument. He stated, particularly with reference to use of facial recognition within the criminal justice system, that he believed that it had been deployed too soon without any proper mandates for the same. The manner of using facial recognition was entirely to the discretion of the officer using it. In the absence of a law, any matter pertaining to the same would fall with the Courts. The Courts, under the Common Law system will have complete power to either uphold or reverse any decision. Mr. Johar stated that the reality of jurisprudence is that Courts are not as impartial and free of bias as is expected. The biases visible in any algorithm stem from societal biases, which the judges are not free of. Thus, in the absence of a law, it is not certain that courts would always rule in the favour of constitutional morality.

He concluded by emphasising the need for a law on the regulation of AI, stating that in the absence of a law, essentially the cart had been put before the horse.

CONCLUSION

Ms. Apurva thanked the panelists for participating in the session and for addressing the questions posed. She highlighted the need for continued discussion on AI and law. In line with this need, she announced that a blog series on AI and Law is to commence soon, organized by RSRR in

collaboration with Mishi Chaudhary & Associates, and that the series would serve as a platform for detailed discussion of the intricacies of the interface between AI, law and policy within the Indian context.

With this, Ms. Apurva thanked the attendees for being a part of the webinar and concluded the session.