

Artificial Intelligence: Measuring the Sufficiency of International Laws

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Research Article

Abstract

The curiosity in humans have led to great discoveries and developments, Artificial Intelligence is one of them. Artificial Intelligence (AI) is a technological development where the study of computations is designed in the best possible way to perceive the situation, apply reason and act accordingly or in simpler terms “the automation of intelligent behavior”. The researcher in this paper will focus on the critical analysis of the automation developments, as with the new development we are posed to new threats too, which requires new laws to regulate the same. The developments in AI are expected to bring economic and social benefits to the mankind and the ultimate benefits can be determined by finally measuring the threats posed against its use and comparing it with the beneficial outcomes. As with the advancement in automation we accept the immediate risks and challenges to the existing cyber security threats and the vulnerabilities into the AI dependent systems. Moreover, whether the AI will ever be able to achieve cognition and decision-making abilities as what humans hold today? Whether the continuous strive to achieve ease in life will lead to artificial general intelligence or super intelligence that will ultimately surpasses human intelligence? The researcher will focus on the cyber security threats and human right violations due to the advancement in the technology. The efforts towards AI will push us through a transition which will lead to proliferation of new rules, values, norms, standards, laws and declarations making huge changes in the Public as well as Private International Laws. Whether the existing national and international laws are sufficient or the legislators need to come up with a different set of law regulating the new set of crimes which will always be dynamic?

Keywords: Artificial Intelligence, Automation, Duplication, Technological, Mankind

1. Introduction

The era of artificial intelligence is approaching, bringing a tremendous revolution along with it. Across the range of industries like transportation, medicine, security, finance, etc. are using

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AI and machine learning displacing human resources and employing artificial intelligence. The global economy and international security environment will be highly affected by these developments. The whole business setup and world politics are swaying towards AI, right from Elon Musk to Donald Trump to Vladimir Putin, anticipate that the AI is going to catalyze and trigger the new industrial revolution in the world. The world has seen industrial revolution after the invention of steam engine, combustion engines and electricity and, these machines had the ability to replace human physical labor for specialized tasks. In the recent years, an unprecedented pace has been observed in AI with remarkable and rapid gains in various performance metrics. In the present time, human is being replaced by special-purpose machines which once required human cognitive labor for specific jobs².

“Artificial Intelligence will enliven inert objects, much as electricity did more than a century ago. Everything that we formerly electrified we will now cognitize”

- Kevin Kelly³

Artificial Intelligence in technical sense means, *“That activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment”*. If we understand it in common language, Artificial intelligence is a technology with the aim of replacing or advancement for automation and improving the accuracy, predicting different things in complex environment and speed up the different procedures of decision-making.

For general decision-making tasks in technological domains, the author believes that there are few things that this advanced technology might not help us. For the improvement of lives and addressing global challenges, the Artificial Intelligence holds large promise, for e.g., the different set of goals targeted to achieve in UN 2030 Sustainable Development Goals⁴. And then for that particular substance we will still be highly dependent on human minds.

To improvise the working mechanism in the world of medical science, and to extend helping hands in our daily life like automation in driving, enhance security by using software for facial

² Paul Scharre, Michael C. Horowitz and Robert O. Work, “The Artificial Intelligence Revolution, Artificial Intelligence”, available at: <https://www.jstor.org/stable/resrep20447.4>. (Last visited on Jun. 20, 2020).

³ The co-founder of Wired Magazine, Kevin Kelly and former editor/publisher of The Whole Earth Review.

⁴ Matthijs M Maas, “Introduction: Globally Disruptive AI and International Law”, International Law Does Not Compute Artificial Intelligence And The Development, Displacement Of Destruction Of The Global Legal Order available at:

<http://classic.austlii.edu.au/au/journals/MelbJIL/2019/3.html#:~:text=AI%20may%20change%20the%20international,states%20interacting%20with%20international%20law> (Last visited on Jun. 24, 2020).

recognition and improvising decision-making procedure, the governments and private sector actors are utilizing Artificial Intelligence. In spite of the fact that the advanced technology is penetrating deep into the various fields like military, medicine, commerce and scientific areas, the respective nations have been extremely slow-paced in the international arena in forming new international instruments or amending the existing said agreements, to equate the pace of these technological advancements. This brings us to anticipation that AI might bring huge changes in the use of force, the approach towards Human Rights, the existing trans boundary laws enforcement mechanism, intellectual property laws, global health and International labor laws along with many others. If we look into the current situation, AI-driven facial recognition software is used store the data base not only for criminal records but also to monitor people who are serving quarantine period due to coronavirus.

The Artificial Intelligence also has both positive as well as negative aspects like the AI tool have the potential to complicate trans boundary application of laws, for example a country making extradition or asylum request informed by impervious algorithms entirely derived from probable cause determinations based on various factors. The world is witnessing extensive use of AI tools, yet the nations in specific and the international society in general, haven't consented on a particular point of understanding regarding the extent of application of the existing International instruments to regulate these developments. The international negotiations these days particularly focus on the banning dangerous and lethal weapons but these discussions are not at all swaying towards any conclusions and were complicated as far as usage of AI tools are concerned⁵.

It must be observed here that the Artificial Intelligence may cross its path with international law in two different ways. Firstly, for different treaty discussions amongst the states or any international adjudication of dispute, the respective states may deploy intelligence tools which can help them position procedurally. The contesting states might be able to recognize the different alignment within long and large number of declarations which have been made by the contracting states to the UN General Assembly and then draft their discussions accordingly by deploying learning or computational text analysis machine tools. Apart from this, for a quick and thorough process of information about the appointment of arbitrators or for realizing the

⁵Ashley Deeks, "Introduction to the Symposium: How will Artificial Intelligence affect International Law", available at:

<https://www.cambridge.org/core/journals/american-journal-of-international-law/article/introduction-to-the-symposium-how-will-artificial-intelligence-affect-international-law/CD26AD55818677B9B28FB59EAD96D4BB>, (Last visited on Jun. 29, 2020).

patterns followed within the arbitral/judicial decisions, the contesting nation states may use Artificial Intelligence to improvise their approach⁶.

Secondly, AI could help the state to set up sensors to detect violations of weapons treaties and help them monitoring the various activities through the sensors. Thus, it can be said that AI tools may help the nations to ascertain the enforcement of International law. For example, the international criminal lawyers with the help of Artificial intelligence tools recognize the various records of manifests of war crimes that will help the parties to prove their innocence in the eyes of law. But no doubt it might be easy to write it down on the paper but it involves a lot of technicalities and complexities to enforce these procedural laws with the help of machine because it might store a lot of data for various things but when comes to the application of mind, taking into consideration various factors which can't be fed in the machine, definitely requires human beings to play their role.

2. An Abridged History of Technological Change and International Law

As noted by Colin Picker⁷, the lack of focus and attention on the ways the AI is affecting the International law and the way it might affect the same in future is alarming as the world has witnessed 'creation, modification or destruction of international law' by the technological innovations throughout the history. In fact, in primitive societies, even after the agricultural revolution brought by machines, the world felt the requirement of exclusive and persistent control of land, known as sovereignty and diplomatic relations. During the 16th and 17th centuries the advancement in ships and navigation technologies, led to the increment of good governance by the coastal states regarding their military forces and to control enemy activities at their trade routes and this particularly has led to the principle of "*mare liberum*"⁸ (freedom of the seas)" which has been extremely relevant in the foundation of International Maritime law.⁹

The key development in International Law has been motivated by the technological advancement and procreation of military weapons by incorporating the new technologies, enabling to control the unforeseeable and unpredictable brutality committed in different systematic wars. For example, the rapid increase in use of gunpowder weaponry in wars has

⁶ *Ibid.*

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⁸ A concept given by Hugo Grotius.

⁹ *Supra* note 4.

contributed to the repetition of war brutality through the *Treaty of Westphalia* in 1648. The First World War, during the 20th century the advancement in technology created trench warfare and threat of lethal weapons used in the World War II respectively led to the formation of UN and establishment of Permanent Court of International Justice (PCIJ). In the above-mentioned examples, the advancement in technology had led to scourge of wars, mass destruction and unprecedented bloodshed during the most sensitive political considerations. These were mandatory for various landmark legal innovations and creativity which were focused at eradicating the future conflicts or threats which had the tendency to disturb the international peace and security.

Few of the technologies can also bring disappointment when it comes to laws. There few examples to quote, “At the 1907 IIInd Hague Conference, the *Convention Relative to the Creation of an International Prize Court* was committed particularly to be presented with cases relating to the capturing of prizes like ships, during the war period”¹⁰. Since it was the beginning, soon it proved to be failed; the political prospects were not at all promising and during 1912 it was pretty clear that the proposal of the establishment of Prize courts was no more existent and it became absolutely evident from the fact that the major powerful states refused to ratify the key developments of 1909 *Declaration concerning the Laws of Naval War*¹¹. In spite of its failure, it gained the recognition to be called as the history’s first ever international treaty willingness showed by the states for an international court in true sense. And if it would ever led to success in international politics, the growth in the technological advancement at that particular moment would have definitely made a plausible impact on the mission. In particular, the possible appearance of submarine fighting saw a move in the useful idea of naval fighting that would have tested or supplanted a large number of the Court's key operational suppositions. Interestingly with surface naval force vessels, submarines depended on astonishment and secrecy; they thought that it was difficult to unmistakably or dependably recognize trader from naval force vessels while lowered and were helpless against little arms fire on the off chance that they surfaced to give admonitions or solicitation right of visit and search. Besides, submarines at any rate didn't have the extra space to convey foe prize group back to port. In reality, the key and operational requests in the high level mechanical change

¹⁰ Convention (XII) relative to the Creation of an International Prize Court. The Hague, 18 October 1909, *available at*:

<https://ihl.databases.icrc.org/applic/ihl/ihl.nsf/Treaty.xsp?documentId=FEFF373CB0480A04C12563CD002D685E&action=openDocument>, (Last visited on Jun. 25, 2020).

¹¹ Final Protocol of the Naval Conference, signed 26 February 1909, 208 CTS 338 (not in force), *available at*: <http://hrlibrary.umn.edu/instate/1909b.htm> (Last visited on Jun. 26, 2020).

towards the new idea of marine combat would also prove to be a hurdle in the upcoming methodology of International law which particularly aim at the regulation and management of naval warfare. Submarines were not different from surface warships and they're bound by a prohibition whereby the safety of the sailors of the enemy merchants are supposed to be ensured – this prohibition became functionally eroded by the subsequent emergence of new customary international law relating to submarine warfare¹². In fact, it has been argued, that rendering the older treaties as dead letter and during the World War II, matured the customary international norms, and expanded the rights of the states regarding the legal use of submarines. So, this is an illustration whereby the technology continuously persists to challenge or cross the approaches taken by the respective governments, like the collections of fragmented, not-so-flexible treaty provisions which look good on paper but practically very confusing to the relevant legal regimes¹³.

Technological up gradation to the existing ones played very decisive roles in the post-war era during the initial framing and process of growth of the different aspects of international law. Communication technologies and other technological advancements has brought a huge change, and has altered the institutional and logistical landscape of international law formation and enforcement right from the laws of sea to the international law of fisheries and Non-proliferation regimes relating to the modern mass destruction weapons to the different space laws¹⁴. The advancement in communication technologies with the help of internet can definitely make the whole process easier for the nations get through the state's practices and learn their pattern of practice which will facilitate legal harmonization and avoiding any conflicting of laws. These technologies to a great extent have given a shape to new emerging international law. For example, the technological advancements have made treaty negotiations and discussions even faster and easier as the representatives from various states can receive the guidance and approval immediately.

¹² Rebecca Crotof, "Jurisprudential Space Junk: Treaties and New Technologies", *available at*: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3352614. In this paper Rebecca Crotof has discussed How the 1930 Limitation and Reduction of Naval Armament (London Naval Treaty) and the 1936 Limitation of Naval Armament (Second London Naval Treaty) became functionally eroded by the subsequent customary laws (Last visited on Jun. 28, 2020).

¹³ *Ibid.*

¹⁴ *Ibid.*

“Now information can be transmitted quickly in both directions, and the process of final approval can be expedited. ... Thus, new application of technology and science lead not only to new rules but also to new methods of creating new rules”¹⁵.

The technological advancements have not only played the role of catalyst which have fastened the growth and development of international laws but gradually evolved with a new character without changing its basic features i.e., the states, the institutions and the NGOs can easily mobilize and participate in the different procedures followed in the treaties. Apart from this, transparent approaches of internet with respect to information have helped in the growth of democratization of international law formulation processes, and then it has also showed off opaqueness of identity giving it a reverse face. It has enabled a tendency to interfere in the territorial matters of one state by another state inviting undeniable threat of cyber-attacks and misdirection either through trolls or bots towards campaigns is another form whereby there is a political threat on the sovereignty of the state or aggression. But this discussion is not to reflect that these advancements are always unidirectional, straightforward or irresistible, still has brought huge transformation in International law¹⁶.

3. Military Use

An automated system is a working mechanism that carries out any particular act without any human indulgence.¹⁷ Technically, there's a semantic difference between automatic and autonomous technology. The term 'autonomous' is used for systems with complex automation that are able to perform complex tasks in a complex environment.

Automation is developing at a high rate and it has been used extensively in different systems but to mention, this concept isn't new. Automation has been deeply researched to be included in vehicle industry. World War I gave birth to the invention of autonomous flying machines

¹⁵ Louis B Sohn, “The Impact of Technological Changes on International Law” 30(1) *Washington and Lee Law Review* 1 (1973), available at: <https://scholarlycommons.law.wlu.edu/cgi/viewcontent.cgi?article=3141&context=wlulr> (last visited on Jun. 28, 2020).

¹⁶ *Supra* note 12.

¹⁷ Vincent Boulanin, “The Impact Of Artificial Intelligence On Strategic Stability And Nuclear Risk”, 1 *Euro-Atlantic Perspectives* (2019), available at: <https://www.sipri.org/publications/2019/other-publications/impact-artificial-intelligence-strategic-stability-and-nuclear-risk-volume-i-euro-atlantic#:~:text=This%20edited%20volume%20focuses%20on, strategic%20stability%20and%20nuclear%20risk> (Last visited on Aug. 2, 2020).

and different weapons including automation which was remote controlled in 1930s.¹⁸ The automation has led to the emergence of automation in aircrafts from takeoff till landing with minimum of human interference. Self-driving cars have been under development for more than 20 years. As early as 1998 a self-driving car demonstrated automated driving along Italian highways.¹⁹

US topping the list amongst all the developed nations have recognized these advancements in technology and have made preparations to include it in their military capability.²⁰ Therefore it is observed that large amount of effort will be in direction for the development of automated military weapons, including weapon system. As automation in weapon system is being used for past century, many challenges still remain for the wide-ranging, generic weapon application of autonomy.

Artificial Intelligence has come across a huge transition in these 100 years and the advances in machine learning have unlocked numerous possibilities, including that of creating increasingly autonomous systems. Nevertheless, the researchers and developers have focused on the best possible usage of these machines and consequences for of misuse.²¹

Man-made intelligence innovation is as yet youthful and in this manner any endeavor to gauge its effect will stay theoretical. Regardless, the critical inquiry of how ongoing advances in AI may affect atomic weapons can at present be tended to, “A fundamental pillar of nuclear deterrence during the cold war was mutually assured destruction between the USA and the USSR: the concept is based on the logic that, as each side maintains nuclear forces that could

¹⁸ K. P. Werrell, *The Evolution of the Cruise Missile* 23-24 (Air University Press: Maxwell Air Base, AL, Sep. 1985), available at:

https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0006_WERRELL_EVOLUTION_CRUISE_MISSILE.pdf (Last visited on Aug. 3, 2020).

¹⁹ A. Broggi, et al., “The Argo autonomous vehicle’s vision and control systems”, 3(4) *International Journal of Intelligent Control and Systems* 409-41 (1999), available at:

<http://www.ce.unipr.it/people/bertozzi/publications/cr/ijics.pdf> (Last visited on Aug. 3, 2020).

²⁰ US Department of Defense (DOD), Defense Science Board, *The Role of Autonomy in DoD Systems*, Task Force Report (DOD: Washington, DC, July 2012); US Department of Defense (DOD), Defense Science Board, *Report of the Defense Science Board Summer Study on Autonomy* (DOD: Washington, DC, June 2016), available at: <https://fas.org/irp/agency/dod/dsb/autonomy.pdf> (Last visited on Aug. 4, 2020) and M. Kalbarczyk, “Autonomy in Defence: Systems, Weapons, Decision-making”, 14 *European Defence Matters* 22 (2017), available at: <https://www.eda.europa.eu/webzine/issue14/cover-story/autonomy-in-defence-systems-weapons-decision-making> (Last visited on Aug. 5, 2020).

²¹ H. Vogt, “Artificial intelligence rules more of your life. Who rules AI?” *Wall Street Journal* (2018); available at: <https://www.hcinnovationgroup.com/clinical-it/article/13009385/artificial-intelligence-rules-more-of-your-life-who-rules-ai> (last visited on 6th August 2020) and K. Hao, “Why AI is a threat to democracy—and what we can do to stop it”, *MIT Technology Review* (2019), available at:

<https://www.technologyreview.com/2019/02/26/66043/why-ai-is-a-threat-to-democracyand-what-we-can-do-to-stop-it/> (Last visited on Aug. 7, 2020).

survive a first strike and inflict retaliatory damage that the aggressor would consider unacceptable, nuclear war became irrational.²² It is frequently credited with lessening the probability of an atomic first strike and adding to key security.²³

The two super powers of international community, USA and the USSR has devoted their efforts and invested their resources in the maintenance of defence power specifically towards nuclear capability during the cold war, which they realized that automation could have brought more effectiveness in nuclear weapon systems.²⁴

Recently, USSR and USA have adopted all the measures to enhance their nuclear power, including nuclear command-and-control systems, by retiring some of these legacy systems and adopting state-of-the-art digital technologies.²⁵ In the case of Russia, there have been some reports that Perimeter has been upgraded, but it is impossible to determine to what extent these upgrades involve AI technology.²⁶

4. National Legal Regime Regulating AI in India

Like most of the countries, India is not so quick on its feet, because AI in India has become a visible policy priority very recently, 2018. Compared to other Countries, India is in its early phase of its vision and policy making on AI.

²² L. Brooks, “Can the United States and Russia reach a joint understanding of the components, prospects and possibilities of strategic stability?”, *Revitalizing Nuclear Arms Control and Non-Proliferation* 80-95 (International Luxembourg Forum on Preventing Nuclear Catastrophe: Moscow, 2017), available at: https://www.sipri.org/sites/default/files/2020-06/artificial_intelligence_strategic_stability_and_nuclear_risk.pdf (Last visited on Aug. 7, 2020).

²³ B. Brodie, *Strategy in the Missile Age* 264-305 (Rand Corporation: Santa Monica, CA, 1959), available at: https://www.rand.org/content/dam/rand/pubs/commercial_books/2007/RAND_CB137-1.pdf (Last visited on Aug. 8, 2020).

²⁴ J. Borrie, “Cold war lessons for automation in nuclear weapon systems”, 41-52, Boulanin (ed.) (note 7), available at: <https://www.sipri.org/sites/default/files/2019-05/sipri1905-ai-strategic-stability-nuclear-risk.pdf> (Last visited on Aug. 9, 2020).

²⁵ D. Deptula, and W. A. LaPlante, with Haddick, R., *Modernizing US Nuclear Command, Control, and Communications* (Mitchell Institute for Aerospace Studies: Arlington, VA, 2019), available at: <https://www.mitchellaerospacepower.org/single-post/2019/02/14/Modernizing-US-Nuclear-Command-Control-and-Communications> (Last visited on Aug. 11, 2020).

²⁶ A. Valagin, “Assured retaliation: How the Russian ‘Perimetr’ system works”, *Rossiiskaya Gazeta*, Jan. 22, 2014 (in Russian), available at: <https://www.businessinsider.in/defense/Russia-May-Still-Have-An-Automated-Nuclear-Launch-System-Aimed-Across-The-Northern-Hemisphere/articleshow/41726405.cms#:~:text=To%20deter%20the%20possibility%20of,known%20as%20%2020Dead%20Hand.%22&text=It%20was%20created%20to%20ensure,West%20and%20NATO%20in%20retaliati> on (Last visited on Aug. 10, 2020).

The Indian Government's in its beginning stage has the objective to assemble two teams – one under the protection of the Ministry of Commerce and Industry (MOCI) and one under the Ministry of Defense (MOD) - to investigate what India's needs should be for the advancement of AI in the regular citizen and military circles. Both the gathering's specialists have worked equal and conveyed their finding in 2018. The proposal of both the gatherings anyway is yet to be formalized in a complete public system equivalent to those of different nations, this show that India is as yet hesitant in articulating official military precepts.

Both the work force has different missions. The mission of the MOCI was to look inwards and find a way so that Indian Government can integrate the AI to solve socio-economic problems, rather than just develop the economic growth of the nation.²⁷ The finding of the task force, which is available in public domain, is to focus on how to improve the quality of life of the people and solving the social issues at a large scale, while creating opportunities for growth and employment. On the other hand, the aim of the MOD was to look outwards: “To study the whole gamut of issues surrounding the strategic implications of AI from a national security perspective, in the global context’.²⁸ It was to provide recommendations on, among other things, (a) step by step instructions to make India a huge AI power in public protection, explicitly in airborne, maritime, land, digital, atomic and organic fighting; (b) the approach and institutional intercessions needed to direct and support strong AI-based advancements for the military area; and (c) coordinated effort with new businesses and business industry in the utilization of AI for national defence.”²⁹

As AI is a new idea which is being embedded into the Indian society through various modes as suggested above resolving the socio-economic issues within the country, there is certain repercussion which arises out of it, one of the major concerns is the privacy of the citizens information’s with the introduction fully digitalized nation. The AI is capable of making inferences, classification and categorizations, and these are used throughout different sectors, from advertisement to law enforcement. The tendency of AI to derive raw data from different patterns reflects that vital information can be extracted to the point of relevance and intimacy.

²⁷ Artificial Intelligence Task Force, Report of Task Force on Artificial Intelligence” 1 (Ministry of Commerce and Industry, 2018), available at: <https://dipp.gov.in/whats-new/report-task-force-artificial-intelligence> (Last visited on Aug. 18, 2020).

²⁸ Indian Ministry of Defence, “Raksha Mantri inaugurates workshop on AI in national security and defence”, Press Information Bureau, May 21, 2018, available at: https://realtime.rediff.com/news/realtime/Raksha-Mantri-Inaugurates-Workshop-on-AI-in-National-Security-and-Defence/52e785ee268711e6?src=results_extra_article_c_n_2.2.p0 (Last visited on Aug. 20, 2020).

²⁹ *Ibid.*

The author takes into consideration the current applications of these advancements currently utilized in India. Law enforcement agencies in Punjab use the Punjab Artificial Intelligence System (PAIS) which adopts a “smart policing” approach using “*proprietary, advance hybrid AI technology*”³⁰ to digitize criminal records, and encourages criminal inquiry by utilizing advancements like facial acknowledgment to foresee and perceive crime. Somewhere else, an exploration venture at the University of Cambridge as of late distributed a paper named Eye in the Sky that depicts plans of preparing robots to recognize rough conduct openly spaces and to test these robots out at concerts in India.³¹

The idea behind such programs is to reduce the crime rates, manage crowded public place making it safer, and bring efficiency to the law enforcement. Not only do systems discussed operate in the absence of safeguards to prevent their misuse, making them ripe for surveillance and privacy violations, they also operate at questionable levels of accuracy.³²

The extent to which these AI technologies can safeguard and respect the privacy also depends on the legal framework within which they function. In August 2017, the Supreme Court of India unanimously upheld the right to privacy as a fundamental right under the Constitution of India.³³

The Apex court of India has recognized the right to privacy as fundamental right and has vehemently criticized the tendency of misusing private information derived through machines. This judgment pointed out the lacunae in legal systems dealing this field and focused on the urgency for robust regime for data protection in our country³⁴.

In particular, the Court observed,

“Informational privacy is a facet of the right to privacy. The dangers to privacy in an age of information can originate not only from the state but from non-state actors as well. We commend to the Union Government the need to examine and put into place a robust regime for

³⁰ G. Sathe, “Cops in India are Using Artificial Intelligence That Can Identify You in a Crowd” *Huffington Post*, Aug. 15, 2018, available at: https://www.huffingtonpost.in/2018/08/15/facial-recognition-ai-is-shaking-up-criminals-in-punjab-but-should-you-worry-too_a_23502796/ (Last visited on Sept. 1, 2020).

³¹ Vincent, J. 2018 Drones Taught to Spot Violent Behavior in Crowds Using AI. *The Verge*. Available at: <https://www.theverge.com/2018/6/6/17433482/ai-automated-surveillance-drones-spot-violent-behavior-crowds> (last visited on 4 September, 2020).

³² Staff Reporters, “Police Facial Recognition Software Inaccurate” *The Hindu*, Aug. 24, 2018, available at: <https://www.thehindu.com/news/cities/Delhi/police-facial-recognition-software-inaccurate/article24764781.ece> (Last visited on Sept. 24, 2020).

³³ *K.S. Puttaswamy v. Union of India*, (2014) 6 SCC 433.

³⁴ *Ibid.*

data protection. The creation of such a regime requires a careful and sensitive balance between individual interests and legitimate concerns of the state."³⁵

After such remark from the Highest Court of the Country, the Indian Government formed a committee headed by headed judge of Supreme Court of India Justice B.N Srikrishna, and the committee was known as 'Srikrishna Committee'. The role of the committee was to review and recommend data protection norm in the country, following which the Union Government introduced the Personal Data Protection Bill, 2018.³⁶

The draft charge makes some certain strides towards information insurance. For instance, it places obligation on information trustees to hold fast to standards of direction impediment, assortment constraint, and information break warning.

Notwithstanding, certain arrangement of the Bill nullifies the information assurance rights by giving out worryingly wide special case for the Government information preparing. The Bill, in its present structure permits government preparing of individual information without assent if is demonstrated to be important, for "*any function of Parliament or any State Legislature,*", "*necessary for the exercise of the State "authorized by law for the provision of any service or benefit,"* or for "*the issuance of any certification, license or permit for any action or activity*" of the individual by the State.³⁷

Sensitive personal data can be processed without consent if the processing is shown to be "*strictly necessary*", for "*any function of Parliament or any State Legislature*", or "*the exercise of any function of the State authorized by law for the provision of any service or benefit...*"³⁸

Thus, the privacy implication of AI is still in the gray area, as because on one hand the State has the unrestricted power over the sensitive personal data and personal data and on the other hand the not batting an eye on the AI application in the field of carrying out surveillance and profiling, granting them free reign in this regard as the Bill does not address surveillance concerns that currently plague India's legal framework.

³⁵ *Ibid.*

³⁶ The Personal Data Protection Bill, 2018, *available at:* http://meity.gov.in/writereaddata/files/Personal_Data_Protection_Bill,2018.pdf (Last visited on Sept. 5, 2020).

³⁷ *Ibid.*

³⁸ *Ibid.*

5. Need for Legal Developments

The AI and its impact on the international society, demands for a set of new sui generis rules, forms of conduct to ban and allow certain technology and applications. AI came into our lives with a tendency to disrupt the different forms of conduct, say for example, population control with advanced surveillance systems and by continuous monitoring it; cyber warfare, fully automated weapons, etc. These conducts may be extremely hazardous and dangerous by all the states engaging such machines and thus, it creates a need of formulation of new treaties, banning and controlling such developments and deployments. In international legal context, this can be multilateral or bilateral like 1968 *Treaty on the Non-Proliferation of Nuclear Weapons*³⁹ or the 1972 *Treaty on the Limitation of Anti-Ballistic Missile Systems*. But it has not always been politically easy to fill the gaps by any new technology-specific treaty, but at least efforts should be invested to fill the void created by AI and control the same.

The pace at which the transformation is taking place is tremendous and it is creating uncertainty and ambiguity that how the existing laws should be made applicable on the new arenas of forms of conduct. It incorporates creating ambiguities as to how the various activities, entities or activities will be classified, because it fits either in more than one classification or none. This demands reformation of the existing laws or formation of new laws as it may create uncertainty over various concepts such as responsibility, attribution and control⁴⁰.

Another aspect that the author comes across is that with the emergence of this new technology many laws will become obsolete as those laws are no longer required or it has lost its cost-effective feature. For example, laws governing communication through postal pigeons or by telegram, are absolutely outdated and can only be used to provide key legal metaphors but can no longer be invoked. In the similar manner the whole international that is existing today might completely change, like the International Humanitarian Laws (*jus in bello*) whereby once in a while, the place of human on battlefields will be taken by machines. This situation would render the whole set of conduct obsolete and non-applicable, like the principles governing the treatment of prisoners of war⁴¹.

³⁹ Treaty on the Non-Proliferation of Nuclear Weapons (NPT), (Jul. 1, 2020), available at: <https://www.un.org/disarmament/wmd/nuclear/npt/#:~:text=The%20NPT%20is%20a%20landmark,and%20general%20and%20complete%20disarmament> (Last visited on Jun. 28, 2020).

⁴⁰ *Supra* note 4.

⁴¹ *Ibid.*

Secondly, the AI can also make many laws obsolete which possess great relevance today and that rule will no longer be justified. For example, UDHR⁴² and ICESCR⁴³ incorporates one of the human rights i.e., right to work explaining the notion of the society that the government is supposed to ensure that the citizens are getting employment opportunities in various fields. There will be a time when humans will be replaced by AI machine tools possessing far more skills and better than the humans and this will simply render all the job opportunities obsolete and leave the population permanently unemployed or employed on an extremely low wage. This will ultimately render concrete changes in employment market and affect the existing legal regimes built up by the International Labour Organization. The technology can aid in keeping proper surveillance and it can predict the human rights abuses going around the globe or these machines can help to keep a track of mass violence, but AI have a tendency to produce “Deep Fakes” methods that can at large forge video documentation which can affect the supportive value of the evidence adversely, eroding the foundation of judicial proceedings and human rights investigators⁴⁴.

6. Conclusion

The AI revolution is extremely relevant for national security community as the community needs to be prepared for the consequences. Almost all the anticipated aspects of National security can be shaped by this advanced technology⁴⁵. So, in order to incorporate the advancement of technologies in our legal system effort should be made to frame new laws to a bridge the gaps. The new criminals pertaining to new advancement between us will get away as there will be no law criminalizing them. The revolution brought by the technology could also change the balance of powers amongst the states and even the fundamental building blocks of the global market. For example, USA is one of the most powerful states and has many advantages over the rest of the states but Russia and China are competing the country having most advanced economy through technological advancements. If we look into the competition of space objects launched by the states, China and USA are giving tough competition to each other with respect to technology. Thus, China is considered as a major player when it comes to

⁴² The Universal Declaration of Human Rights, 1948 *available at*: Universal Declaration of Human Rights | United Nations (Last visited on Dec. 15, 2020).

⁴³ International Covenant on Economic, Social and Cultural Rights, 1966 *available at*: OHCHR | International Covenant on Economic, Social and Cultural Rights (Last visited on Dec. 15, 2020).

⁴⁴ *Supra* note 4.

⁴⁵ Paul Scharre, Michael C. Horowitz and Robert O. Work, The Artificial Intelligence Revolution, Artificial Intelligence, *available at*: <https://www.jstor.org/stable/resrep20447.4> (Last visited on Jul. 8, 2020).

technology and are having concrete plans to be the world's leader by 2030. Similarly, Russia has shown its great interest in technology and Putin has stated that "the one who becomes the leader in AI will be the ruler of the World".

The Legal automation will definitely won't change the basic structure of the international legal framework and it won't change the regulation of states and the manner in which it is being applied. The AI will have the tendency to bring certain types of undesired behavior which will more technologically difficult or absurd to understand, so there will be a shift from the "regulatory modality to technologically-mediated management".

The above discussions not in any way reflect that the technological advancements cannot influence the dynamics of law at international stage for anything better but it means that it has different aspects that has to be taken by the States positively. The AI has the tendency to identify the new ideas, hidden patterns and can also predict the emerging challenges which definitely help the states to accumulate customary international laws. These systems can ultimately be used for smarter and conducive global governance specifically in the areas where the international interests are aligned. No doubt that AI will not actively and directly participate in the international judicial decision-making but it can definitely concretize the implementation of legal regimes across the boundary and enable achieving the different goals that the international society is yearning for like maintaining international peace and security, protecting human rights, etc. The AI can help in the formulation of problems and help in improving the understanding of the problems better, ultimately giving specific solutions. The new technological advancement can aid the humans in improving the implementation, efficiency and work pace of the international treaties being executed by enabling direct participation of the world and processes of global governance.

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