
EFFECTS OF ARTIFICIAL INTELLIGENCE ON THE PRINCIPLES OF INTERNATIONAL LAW

Vaishnavi Soni, University of Petroleum & Energy Studies

ABSTRACT

Nearly every aspect of life has been impacted by the rapid expansion of AI. The legal profession has been slow to keep up throughout this fast transformation. This is especially true for international law, which continues to seem unsure of whether it even has a role to play. Numerous news reports and academic articles describe the impact that artificial intelligence (AI) will have on society. International law has long been a difficult research discipline due to both jurisdictional overlap and jurisdictional gaps, making its application in the online setting extremely difficult. This is mainly because someone's internet activities, which have a nearly worldwide reach, will readily expose them to the authority and laws of many other nations. As a result, anyone who uses the Internet, from individuals to the largest e-commerce businesses, could face unforeseen legal repercussions. The current research paper explores the problem of artificial intelligence with an emphasis on international law. The potential of AI having a legal personality and the ways in which AI might come within the purview of international law are examined by disentangling important components of the concept and nature of AI.

Keywords: artificial intelligence, AI, international law, public international law, AI regulation on international law

Research Methodology

This paper is of a descriptive nature, and the research is based on secondary sources for a deep analysis of the impact of the uses of artificial intelligence on the rules of public international law. Secondary sources of information like journals, websites, etc.

Review of literature

This part of the paper discusses the effects of artificial intelligence on the rules of international law. The chapter would contain some instances that would clearly represent or give an idea of the possibilities that are currently existing in the law since the law is very diverse and AI can have numerous applications. In order to do this, the author had studied publications from several major innovative articles, journals, and blogs that were published.

The first part of the paper deals with the introduction of Artificial intelligence and international law and how AI impacts on the rules of international law. It discusses the effects of the uses of artificial intelligence on the rules of public international law related to the conclusion of international treaties; international humanitarian law; and medical law. An article published by Matjis M. Maas discusses how the growth of artificial intelligence will affect international law and how, if sufficient revision is not made in a timely manner, it will ultimately fail. When talking about potential global disruptions brought on by artificial intelligence. He claims that AI has the potential to upset the balance of power in global politics. He goes on to explain that a fine line needs to be established in order to determine whether an application of AI is having a positive or negative impact on society.

The second part of the paper deals with how AI affects International law as AI has the potential to directly and indirectly alter the international legal landscape. By establishing new legal organizations or by authorizing new behavior, it directly produces new legal situations. AI may indirectly change the values or incentives that states have when interacting with international law. This allows us to identify three different legal effects caused by sufficiently disruptive technologies like AI. The first is legal development (a change in circumstances necessitating a change in the law to account for or address the new circumstance), the second is legal displacement (a systematic replacement of the regulatory approach, or the "automation" of international law), and the third is legal destruction (systemic disruption of key premises; erosion). To understand the circumstances in which a technology like AI might create

manageable (non-disruptive) progress or change, where it might be vulnerable to legal displacement, and where it might result in international legal destruction, I will look at each of these three separately.

Finally the paper talks about the current regulations of AI on an international level. Over a hundred states, multiple international organizations, and non-governmental organizations (NGOs) have all pushed for some kind of global regulation during the past ten years. States have developed strategies to direct domestic growth, particularly those with a high level of interest in developing AI research and development. The establishment of policies or building the framework for future collaboration has been assisted by a number of NGOs and research institutes, including the Centre for AI and Digital Policy. Also, AI is being used by judicial systems all over the world to analyze vast amounts of legal data in order to support judges with predictions on topics like sentence length and recidivism rates, assist lawyers in identifying precedents in case law, and enable administrations in streamlining judicial processes.

Introduction

Over the past few decades, the fields of computer science and artificial intelligence (AI) research have advanced quickly, yielding new discoveries and creative applications for the findings. This has also sparked a natural challenge to the idea that humans are superior to other species. The fear of an advanced AI, as portrayed in literature, science fiction, and the media, is deeply ingrained in human awareness and greatly affects our attitude and decision-making. A number of legal areas, including criminal, contract, labor, and intellectual property law, to mention a few, have been significantly impacted by the development of AI. The rush to create and maintain offensive and defensive AI systems has sparked a new arms race in international relations that has so far evaded any attempt at binding regulation. Vladimir Putin, the president of Russia, in 2017 said:

“Artificial intelligence is the future, not only for Russia but for all of humankind... It comes with colossal opportunities but also threats that are difficult to predict. Whoever becomes the leader in this sphere will become the ruler of the world.”¹ International Law of Artificial Intelligence means "this branch of public international law that is embodied in a set of international written or customary legal rules related to artificial intelligence that address the

¹ <https://www.theverge.com/2017/9/4/16251226/russia-ai-putin-rule-the-world>

subjects of international law of artificial intelligence within the international community in peacetime and war." ²

The Council of Europe defines AI as "a set of sciences, theories, and techniques whose purpose is to reproduce by machine the cognitive abilities of a human being." Current developments aim, for instance, to be able to entrust a machine with complex tasks previously delegated to a human³ The Council also draws a distinction between "weak" to "moderate" AI, which can only "perform very well in their field of training," and "strong" AI, which has the capacity to "contextualize quite varied specialized problems fully independently." In general, "strong" AI is beyond the capabilities of present technologies. Fortunately, none of the below-listed duties under international law call for "strong" AI; as a result, the necessary technology already exists.

Even with the limited AI technology we currently have, their use is starting to influence the power structure. This is especially true of the legal profession. The use of AI-based technology is spreading throughout the legal industry, having a significant impact on areas including trademark law, intellectual property law, civil litigation, company law, and tax law, all of which have already undergone comprehensive analysis. Even so, due to the nature and traits of AI technologies, public international law has some resistance to them. It is challenging to directly apply machine learning to international law. There are several causes for this. There are many reasons for this, including the fact that different areas of international law have different rights and obligations, some treaty texts are notoriously difficult to interpret, it can be challenging to determine what international customary law is in some situations, there are many sources of jurisprudence that can influence decisions in unpredictable ways, there are few international court decisions, and there are language barriers when domestic courts are deciding cases involving the application of international law. Currently, only the foundations of sectoral impact and rules are visible. For example, semi-automated and fully automated defense systems, unmanned aerial vehicles (UAVs), and automated satellite systems are currently on the minds of decision-makers in the field of international humanitarian law. The current academic agreement on autonomous weapon systems might be summed up as follows: fully automated weapons are not thought to be legal, but weapons with a modest level of automation and significant human control might be acceptable under international humanitarian law.

² https://mjle.journals.ekb.eg/article_217245_7da5a4ed128c87f5bf73467503276b9a.pdf

³ <https://www.coe.int/en/web/artificial-intelligence/glossary>

Nature of AI

AI is tasked with solving complicated issues and is capable of doing calculations with a variety of results, but this is done through heuristic machine learning, not cognition as we understand it, to build a database of its own based on experience. It is also important to note that many different fields, including statistics, linguistics, robotics, electrical engineering, mathematics, neuroscience, economics, logic, and philosophy, to name a few, are involved in the development of AI, though it can also be viewed as a subfield of computer science. The most common type of AI is machine learning, which uses the word "learning" to help people better grasp how a machine steadily improves its performance and gets closer to a predetermined objective. The other is the complete understanding, logic, and rules seen in tax law software today. It is not as sophisticated as it is imagined or feared, despite the fact that computer science is developing at an increasingly rapid rate and its impacts appear to be spreading to almost every aspect of existence. The advantages of the former over the human brain lie in faster computation, accurate information retrieval, longer retention of information, the capacity to store more information, and the ease with which it can be upgraded and updated.⁴

Impact of uses of Artificial Intelligence on The Rules of International Law

We will discuss the effects of the uses of artificial intelligence on the rules of public international law related to the conclusion of international treaties; international humanitarian law; and medical law

- 1. International treaties-** International treaties must pass through a number of phases before being signed and ratified, as well as the stages of negotiations, editing, signature, and publication. If we suppose that artificial intelligence is used during the stage of international negotiations; Furthermore, the bearer of the credential is actually a robot using one of the AI algorithms that have been programmed to negotiate treaties on behalf of the nation that designated it. Then we make a few assumptions that the 1969 Vienna Convention on the Law of Treaties between States may address; The limits of his mandate, but he came to an agreement that was not in the best interests of his country. Negotiations are conducted by a man carrying a document of authorization, and it does not exceed the limits of the authorization granted to it unless the state in which it was

⁴ AK JOURNALS, https://akjournals.com/view/journals/2052/62/4/article-p320.xml#ref_fn15(last visited Feb. 10,2023)

authorized has approved what exceeded its limits during negotiation. This agreement requires a new text that regulates the idea of utilizing artificial intelligence in the drafting and negotiation of international treaties, i.e., referring to the state as long as the international treaty is concluded with this algorithm developed by the artificial intelligence negotiator. Therefore, we suggest that the international treaty's approved text be modified, with reference to the nation, particularly if it is reached through AI negotiation.

2. **International humanitarian law** - International humanitarian law is concerned with preventing military attacks from the parties to the war on civilians and civilian-related objects during armed conflict, whether it is international or not. The use of artificial intelligence, particularly unmanned aircraft, or what are now referred to as "Drones" has a significant impact on the accuracy of targeting civilian targets. As a result, countries that have access to these technologies bear nearly absolute responsibility for accurately defining military targets and fighters.
3. **International medical law**- The legal status of the insured person is impacted by artificial intelligence-based insurance programs as soon as the insured person wears a hand watch that uses artificial intelligence technology and changes as a result of the insured person's commitment to health practices appropriate to his condition on daily basis clauses of his contract with the insurance company such as the application of Validity; as well as the possibility of using Robots and application. In particular, biologically developed or treated in specialized laboratories with the goal of using them to produce serums or drugs for certain treatments or used in biological wars that can end the hump, provided that dealing with several criteria, including transparency, accountability, equality, non-discrimination, and data protection are taken into consideration, as well as their use also in cases of epidemics rather than human dealing in areas of the epidemic or the spread of malicious viruses.

AI and International Law Effects

AI has the potential to, directly and indirectly, alter the international legal situation. By establishing new legal organizations or by authorizing new behavior, it directly produces new legal situations. AI may indirectly change the values or incentives that states have when

interacting with international law. From this, we can derive 3 types of legal impacts affected by AI:

1. AI and legal development

Bennett Moses has supported the "law and technological change" theory.⁵ Although not every technology provides the necessity or occasion for fresh litigation or legal studies, she contends that technological progress frequently poses a recurring challenge to the law by giving rise to new entities or making it possible for new behavior. Despite the fact that there are significant operational distinctions between domestic and international law, her model's insights are independent of either system and instead focus on the characteristics of the legal issues that need to be resolved, which are problematic for all normative legal systems. Therefore, types of legal systems are discussed how to apply these in the context of AI:

- a. **Need for new laws** - It is obvious that new sui generis laws are required as a result of technology to address novel situations or behaviors or to outright prohibit the use of a specific technology or set of applications politically or strategically disruptive behaviors could be made possible by AI, such as the systematic monitoring and control of populations through improved surveillance, the use of fully autonomous weapons or (cyber)warfare systems, or the tracking of adversary nuclear assets in ways that jeopardize deterrence stability. This may resemble other (bilateral or multilateral) arms control initiatives, including the 1968 Treaty on the Non-Proliferation of Nuclear or the 1972 Treaty on the Limitation of Anti-Ballistic Missile Systems, in the framework of international law⁶
- b. **Legal uncertainty** - The use of technology raises questions about how the legislation now in effect affects new types of behavior. This includes any ambiguity regarding the classification of a new activity, entity, or relationship due to the lack of a suitable classification, the fact that it falls under more than one category and is thus subject to conflicting rules, the emergence of new forms of

⁵ Lyria Bennett Moses 'Why Have a Theory of Law and Technological Change?' (2007) 8(2) *Minnesota Journal of Law, Science and Technology* 589, 590, 605–6, [http://classic.austlii.edu.au/cgi-bin/LawCite?cit=\[2019\]%20MelbJIIntLaw%203](http://classic.austlii.edu.au/cgi-bin/LawCite?cit=[2019]%20MelbJIIntLaw%203)

⁶ *Treaty on the Limitation of Anti-Ballistic Missile Systems*, United States of America–Soviet Union, signed 26 May 1972, 944 UNTS 13 (entered into force 3 October 1972), <http://classic.austlii.edu.au/cgi-bin/LawCite?cit=1972%20944%20UNTS%2013>

conduct, or the ambiguity of an existing category. This might necessitate the clarification or sharpening of current legal standards.

- c. **Legal obsolescence** - Certain laws may become obsolete as a result of new technology because they are no longer necessary, justifiable, or practicable to enforce. First, technology can produce legal obsolescence because behavior that was formerly governed by the law has now been rendered unnecessary by new technologies, making the law itself obsolete. Second, because a regulation can no longer be supported, technology may result in legal obsolescence. Thirdly, because it is no longer practical to enforce a law, technology may cause it to become obsolete. These instances show how AI could influence the law by establishing new entities, encouraging novel behavior, or altering actor incentives.

2. AI and legal displacement

As discussed above, an AI system could drive legal change and the development of international law. Now the question arises to what extent AI can be used to displace or substitute for international law.

- a. **Automation for international law** - Could AI be included into the procedures that produce international law? As previously mentioned, the development of communication technologies and the internet had an impact on not only the content but also the institutional, informational, and logistical dynamics of international law, leading to both increased democratization and fresh threats to sovereignty. In the coming decades, the unilateral use of AI systems by many players will undoubtedly change the nature of diplomacy and international discussions. These "unilateral" applications of AI, however, may have certain drawbacks because they require training on pertinent data in order to effectively anticipate the responses or negotiating tactics of other states. A meaningful analysis is frequently hampered by the messy, unstructured, and ambiguous nature of such data. Even in cases when the data stream is structured and unambiguous, there is a chance that a competitor will spoof it in an effort to engage in "data poisoning," confuse the AI, and influence negotiations in their favor. Even if such applications were successful, and even if other states and parties agreed to be "nudged" in this way, it is questionable whether

they would constitute international law rather than a novel use of unilateral "soft power" to influence the development of international law.

The concept of "legal automation" in domestic legal practice has been the subject of significant study in recent years. AI systems have started automating routine legal work in a variety of fields, including administrative law, contract law, tax law, and criminal law. They have also started to outperform judges and legal experts at predicting legally significant information, such as case outcomes or statistics like re-offense rates. According to some academics, this has led to an image of the legal systems becoming increasingly automated⁷ with legal rules and standards gradually being replaced by algorithmically-tailored "micro-directives" that can predict ex-ante, what an ex-post-judicial decision would have held in each individual case.

- b. Technological replacement of international law** - This relates to discussions about changes in "regulatory modalities" brought about by technology. They first have an impact on the core of legal rules. Second, they promote a regulatory shift toward the employment of non-normative "technology management" as a new, prevalent regulatory modality as opposed to trying to control conduct through normative codes or regulations. This is different from using technology to merely monitor "regulated" compliance with normative laws (whether through centralized or decentralized social credit). Instead of making undesirable behavior illegal, technical management entails using technology to alter the decision "architecture" of regulations in a way that makes it functionally impossible (or very difficult). It should be noted that the term "non-normative" in this context does not imply "objective" or being in some way unrelated to social or political objectives. It instead makes use of an operational distinction. Systems of "technological management" (or, less dramatically, nudge architectures) are "non-normative" in that they no longer explicitly invoke or present a social norm with which the regulated should align their behavior. Laws or social norms are "normative" in that they involve an explicit appeal to the regulation to follow a certain norm. Instead,

⁷ Benjamin Alarie, Anthony Niblett and Albert H Yoon, 'Law in the Future' (2016) 66(4) *University of Toronto Law Journal* 423, 424,

such systems only display an environment that is (technologically) structured, making some decision possibilities unavailable.

3. AI and legal destruction

The argument in favor of legal destruction has a light and a hard version.

- a. Legal erosion** - The "soft" argument contends that AI systems have a number of characteristics that make it difficult to manage them (and the changes they bring about) and that there may not be enough political support on the international level to implement at least some of the significant international legal developments or "patches" mentioned above. This effectively makes AI systems an insurmountable problem or puzzle for international law. This is not meant to imply that the only or first technology to pose a threat to such non-incorporation would be AI systems.
- Firstly, because so little physical infrastructure is needed, AI development is frequently covert. AI initiatives can be created without the massive institutional structures required to expand industry in the previous century or the signature components — like uranium or certain chemical agents — required to create strategically important weapons of mass destruction. This distinction should not be emphasized, though, as advanced AI research and applications still call for substantial hardware or computational resources.
 - Secondly, the growth of AI is discontinuous; different parts may be created independently, without top-down coordination, and it may take some time for their full potential to manifest itself.
 - Thirdly, there are many different actors involved in the creation of AI, which is similar to how open-source software development is frequently geographically and organizationally spread.
 - Fourthly, the development of AI is opaque since regulators do not fully understand the underlying technology, and observers or inspectors are unable to accurately identify aspects in an evolving AI system.

- b. Legal decline** - the hard version of the argument states that AI will drive to legal destruction. This is based on the notion that, particularly at the international level, technological development can modify fundamental elements or underlying presumptions, affecting not just particular international laws or provisions but also the foundation of entire legal systems. The "hard" version for legal destruction, therefore, contends that as these AI systems' capabilities progressively change the environment, they may cause a relative fall in the effectiveness of the international legal system. As a result, the "hard" argument for legal destruction contends that the application of AI capabilities may cause a relative decline in the effectiveness of the international legal order because these systems' capabilities may gradually change the environment, incentives, or even values of important states. One argument in favor of this is that whatever advantages a state previously believed it had obtained through participation in, or adherence to, international law (such as security, domestic legitimacy, soft power, or cooperation), if it now perceives (whether or not correctly) that it might achieve these objectives unilaterally through the application of AI, this may undermine the general legitimacy and regulatory capacity of international law.

Current Regulation of AI on International Level

The Global Partnership on Artificial Intelligence⁸, Equal AI⁹, and the Future Society¹⁰ are just a few examples among many. The Organization for Economic Co-operation and Development (OECD) is also heavily focusing on AI development. On the level of international organizations, the United Nations and its specialized agencies play a key role.

The United Nations has its own research facility (UNICRI - Centre for Artificial Intelligence and Robotics)¹¹ in The Hague, focusing on the benefits and possibilities of emerging technologies because it sees these as important tools for both internal organizational process reform and the achievement of the Sustainable Development Goals.¹² The approach taken was a little different by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). It created a global accord on the moral implications of AI in November 2021.

⁸ THE GLOBAL PARTNERSHIP ON ARTIFICIAL INTELLIGENCE, <https://gpai.ai/>

⁹ EQUAL AI, <https://www.equalai.org/>

¹⁰ THE FUTURE SOCIETY, <https://thefuturesociety.org/>

¹¹ UNICRI, <https://unicri.it/>

¹² UN Secretary-General's Strategy on New Technologies

Being by nature a non-binding document, it seeks to establish among the UNESCO Member States a common set of guiding ideals and development-related principles.¹³ The OECD has also tried to grasp the reins of leadership when it comes to global norms about AI. Its Council adopted a recommendation in May 2019.¹⁴ The European Parliament, for instance, adopted three different norms in October 2020: one on civil liability regimes, intellectual property rights, and on the ethical aspects of AI.

Earlier in 2021, in the Commission's proposal to the Parliament, emphasis was put on ensuring transparent processes, safety, and security, as well as meeting existing human-rights obligations. It can be seen that international organizations have just recently started investigating how AI may be used to further their objectives. The few efforts they have made concentrated on opportunity mapping, and even those were done very cautiously. As a result, it is most likely that governments and multinational corporations who have a stake in both national security and profit, will lead the way in regulating and creating AI-based technology.

AI and Rule of Law Building Judicial Systems

Artificial intelligence (AI) is being used by judicial systems all over the world to analyze vast amounts of legal data in order to support judges with predictions on topics like sentence length and recidivism rates, assist lawyers in identifying precedents in case law, and enable administrations in streamlining judicial processes. As legal analytics and predictive justice become more prevalent, there are consequences for human rights because the opaqueness of AI systems can be contrary to the ideals of open justice, due process, and the rule of law.

As AI technology use increases, court systems are wrestling with legal issues relating to AI's effects on, among other things, liability, surveillance, and human rights. The use of AI systems in judicial decision-making processes has also highlighted questions about impartiality, accountability, and openness in the use of automated or AI-enabled systems. Many judicial institutions, including the judiciary, prosecution services, and other domain-specific judicial

¹³UNESCO Recommendation on the Ethics of Artificial Intelligence, No. 61910, <https://www.unesco.org/en/artificial-intelligence/recommendation-ethics#:~:text=UNESCO%20Member%20States%20adopt%20the,setting%20instrument%20on%20the%20object>. (Feb 10, 2023)

¹⁴ OECD Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449, <https://legalinstruments.oecd.org/en/instruments/oecd-legal-0449> (Feb 10, 2023).

organizations, are already exploring the potential of AI in the realm of criminal justice, offering assistance with investigations and automating/facilitating decision-making processes.

However, the application of AI raises a number of issues that must be resolved, ranging from pattern recognition to ethics, biased judgments made by AI-based algorithms, transparency, and accountability.¹⁵

UNESCO's Judge initiative

Since 2014, the Global Judges Initiative of UNESCO has trained approximately 23,000 judicial personnel. The program strengthens the abilities of judicial operators to address new issues and defend fundamental human rights and the freedom of speech through publications, toolkits, and both online and in-person training.

In order to involve judicial professionals in a timely and worldwide dialogue about AI's use and impact on the rule of law, UNESCO and partners have developed a global online course on AI and the Rule of Law. Over 4300 judicial operators from 139 countries have taken the course. As a multi-stakeholder forum that advances the international AI policy dialogue in support of human rights and the democratic order, UNESCO is also hosting the Athens Roundtable on AI and the Rule of Law in collaboration with The Future Society. This event has the potential to inspire and co-produce initiatives with real-world practical impact on a global scale.¹⁶

Conclusion

In the age of AI, fresh changes are required at many levels in light of how new actors—particularly transnational businesses, which have invested more in AI than certain states—have altered the nature of international society. The race towards AI in many disciplines and the significant investments made by states in these technologies show that AI is promoting the emergence of a new international order in the same environment. AI technology is already sufficiently developed and is advancing quickly. AI should be used to address some problems in private international law if humans are going to entrust AI with driving their automobiles

¹⁵<https://www.unesco.org/en/artificial-intelligence/rule-law/mooc-judges#:~:text=Judicial%20systems%20worldwide%20are%20using,sentence%20duration%20and%20recidivism%20scores.>

¹⁶ <https://www.unesco.org/en/artificial-intelligence/rule-law>

and if AI is thought to have the potential to disrupt the legal sector. Despite its advantages, we cannot ignore its potential to become a rival to the human race and for all intelligent life to enter the race of the strongest. This nature has the potential to wipe out or kill the human species. Therefore, in light of the foregoing debate, it is urgent to draft or introduce the required legislation that could be able to limit the potential outcomes that could occur.