USING ARTIFICIAL INTELLIGENCE TO ENHANCE COMPLIANCE WITH INTERNATIONAL HUMANITARIAN LAW

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INTRODUCTION:

International humanitarian law regulates the use of force during armed conflicts. And of course, it protects the victims of armed conflict by humanizing, to some extent, some of humankind's most brutal acts. Accordingly, principles of international humanitarian law such as distinction, humanity, unnecessary suffering, and proportionality facilitate the application of the principle of military necessity. In the age of emerging technologies, the international community is deeply debating how to implement these principles, particularly weapon systems that make autonomous life-and-death decisions through machine learning and the development of artificial intelligence. Such discussions lead us to reflect on a fundamental question concerning the application of international humanitarian law – is the law regulating armed conflict designed to provide the "best possible protection" for victims of armed conflict or the "best possible humanitarian protection?" In other words, current standards of compliance with IHL are often described in terms of the human decision-making process, i.e., the commander must make a specific legal decision as is the case for the principle of proportionality described below. Does this mean that the actual legal standard is linked to the human decision-making process? If the criterion is "the best possible human protection," any emerging technology must be subject to humanity's determination to apply IHL, including the recognition that such decisions continue to be subject to human oversight and potential human error.

RESEARCH IMPORTANCE

The importance of the research lies in clarifying the role that artificial intelligence can play at the level of general international law in general and international humanitarian law in particular in terms of the extent to which artificial intelligence is used in making weapons, as it should be noted at this stage that all weapon systems, including Any autonomous weapons powered by machine learning and artificial intelligence must be subject to weapons review requirements. There is no legal possibility of using weapons that do not comply with all requirements of legal review. The importance of defining the role of the human factor in the lethal targeting decision is to provide the rationale for this review. In order for an autonomous weapon to be used, it must be thoroughly examined and demonstrated that international humanitarian law can be properly applied to it on the battlefield.

RESEARCH PROBLEM:

The most important question that may be asked here is this standard of arms review. If this criterion is for a weapon system to be law enforcement capable of providing the best possible human protection, then there is no need to research and develop certain types of autonomous capabilities. However, if the criterion is the application of international humanitarian law in order to obtain the best possible protection for potential victims of armed conflict, a wide range of autonomous weapons, powered by machine learning and artificial intelligence without immediate human participation, may be able to evolve and deploy at present.

RESEARCH METHODOLOGY

In this research, we followed the descriptive approach and the analytical approach, as it is necessary to know what artificial intelligence is, the extent to which it complies with the rules of international law in general, and its relationship to some principles of international humanitarian law. And as for the analytical approach, by analyzing some of the texts of the four Geneva Conventions of 1949 and their suitability with technical development in weapons that rely on artificial intelligence.

RESEARCH STRUCTURE:

We will address the topic of (Using Artificial Intelligence to Enhance Compliance with International Humanitarian Law) through the following two demands, where we devoted the first to examining the conceptual framework of artificial intelligence within the framework of public international law, and the second requirement, in which we dealt with the role of artificial intelligence in activating some principles of international humanitarian law.

The first requirement:
Conceptual framework of artificial intelligence in the framework of public international law

Enthusiasm is spreading about the potential of artificial intelligence to automate public decision-making. The emergence of machine learning and computational text analysis combined with the proliferation of digital platforms has increased the potential for "robots" and "robots" from an IHL perspective. Optimists herald the potential to democratize legal services and make decision-making more efficient and predictable. This requirement examines the nature of artificial intelligence within the framework of public international law through the following two sections. We will address the definition of artificial intelligence in the first section, while the second section we devoted to examining the compliance of artificial intelligence with public international law.

First Branch:
Defining artificial intelligence

A term that has recently become more sustainable in light of the technical renaissance the world is witnessing in the field of machinery development. Although "artificial intelligence" was just a dream that directors put forward in science fiction films until the middle of the twentieth century, today it has become a tangible reality that we resort to many times, even if we sometimes do not realize it. In fact, determining whether the machine we use is characterized by artificial intelligence is a difficult and relative matter. There is no specific definition of intelligence, but we can say in short that artificial intelligence is a branch of science that is concerned with machines that can solve the kind of problems that human's resort to when solving them. his intelligence. This definition was presented by Marvin Minsky, one of the most famous scientists specializing in administrative sciences and knowledge in the field of artificial intelligence in his book "On the Way to Building Artificial Intelligence." Based on this definition, not all machines that perform certain tasks fall under the term artificial intelligence.[7]

Artificial intelligence (a branch of computer science, primarily concerned with the automation of intelligent behavior) may take into account such behavior from all areas of the human, animal, and plant worlds. And artificial intelligence is defined as (a science that aims to understand the nature of human intelligence through the work of a computer program, and the ability to simulate intelligent human behavior, and it means the ability of a computer program to solve a problem, or make a decision in a situation, that is, the program itself Finds the method that should be followed to solve the issue or reach a decision to identify the similarities between different situations and adapt to emerging situations.[8] It is also known as (a large-scale branch of computer science concerned with building intelligent machines capable of performing tasks that normally require human intelligence). So, there is no straightforward, agreed-upon definition of artificial intelligence.[9] Artificial intelligence is best understood as a set of technologies that aim to approximate some aspect of human or animal cognition using machines. Early theorists conceived of symbolic systems - the organization of abstract symbols using logical rules - as the most fruitful path toward computers that could "think". But the approach to building a thinking machine on which all other cognitive tasks can be supported, as originally envisioned by truing et al., has not met initial expectations. What seems possible in theory has yet to yield many viable applications in practice. Some blame excessive commitment to token systems in relation to other available technologies (e.g., reinforcement learning) dwindling research funding in the late 1980s known as the AI winter. Regardless, as limitations on the ability of "good old AI" to offer practical applications become apparent, researchers have pursued a variety of other approaches to approximating cognition based on the analysis and processing of real-world data.

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[7] Suleiman Yaqoub Al-Farra, Artificial Intelligence, Volume 4, Volume 1, Al-Badr Magazine, Bashar University, 2012, Algeria, p. 3.

[8] Jamal bin Subaih Al-Hamlan Al-Sharari, The Impact of Artificial Intelligence on the Quality of Administrative Decision from the Point of View of Secondary School Leaders in Al-Jouf Educational Region, Volume 8, Part 1, Solouk Magazine, Ibn Badis University Mostaganem, Algeria, 2021, pp. 18-19.

[9] Built In, Artificial Intelligence. What is Artificial Intelligence? How Does AI Work? https://builtin.com/artificial−intelligence (16/1/2021).

An important result of these shifts is that researchers are trying to solve specific problems or master certain "areas", such as converting speech to text or playing chess, rather than seeking comprehensive intelligence capable of performing every cognitive task within a single system. All methods of artificial intelligence techniques see study and use today. However, much of the contemporary excitement about AI stems from the enormous promise of a particular set of technologies known collectively as machine learning. Machine Learning ("ML") refers to the ability of a system to improve its performance on a task over time.

This task often involves recognizing patterns in data sets, although ML output can include everything from translating language moles to assimilating objects or helping to drive a car. As noted above, most of the technologies that support ML have been around for decades. The latest explosion of efficacy comes from the combination of much faster computers and much more data. In other words, artificial intelligence is an umbrella term made up of many different technologies. Distinguished practitioners today tend to emphasize approaches such as deep learning within ML that take advantage of multi-layered structures to extract features from large data sets in the service of practical tasks that require pattern recognition, or use other techniques to similar effect.[4]

Second branch:
Compliance of artificial intelligence with public international law:
Here we explore the ways in which developments in artificial intelligence (AI) will affect the substance of international law and, conversely, how international law can guide states' decisions to deploy AI.

Governments and private sector actors today are using AI tools to improve medical diagnoses; Enabling greater autonomy on day-to-day activities such as driving, enhancing the accuracy of facial recognition software, and improving judicial decision-making. Although AI is increasingly penetrating the commercial, military, and scientific fields, countries have been slow to create new international agreements or modify existing ones to keep pace with these technological advances. However, AI is certain to bring about changes in the areas of human rights, use of force, transnational law enforcement, global health, intellectual property systems, and international labor law, among others. For example, the fact that many governments have started using AI-powered facial recognition software, not only to identify

criminal suspects, but also to record lifestyles and monitor people quarantined with the coronavirus. This use includes international human rights norms relating to privacy, freedom of association, and freedom of expression. AI tools also have the potential to complicate transnational cooperation and compliance in law enforcement, such as when a country makes a request for extradition that is derived entirely from the probability of reason for selections informed by opaque algorithms.

Moreover, countries are developing autonomous cars and ships that may eventually operate across national borders. However, the international community in general, and states in particular, have not reached a common understanding about the adequacy of existing international law to regulate these developments. The most intense international negotiations on artificial intelligence have focused on whether to ban lethal autonomous weapons systems, but the discussions so far have proven complex, contentious, and indecisive.

This seminar provides the opportunity for international legal experts to reflect on how AI affects - and how it will be affected - by the substantive rules of international law. But it should be noted that AI may intersect with international law in two other ways as well. First, states may begin deploying machine learning tools to help take a procedural stand for treaty negotiations or international court rulings.[5] Countries may, for example, use machine learning or algorithmic text analysis to identify patterns within large numbers of statements made by their negotiating partners before the UN General assembly and shape their negotiating positions accordingly. In addition, states may use AI tools to improve the way they handle dispute resolution, by processing information about arbitrators faster and more comprehensively or by revealing unseen patterns in arbitral or judicial decisions.

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[1] Ryan Calo, Artificial Intelligence Policy: A Primer and Roadmap, vol.51 UC Davis L. Rev., 2017, p.404-406. https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf (16/1/2022).

[1] - Wolfgang Alschner, The Computational Analysis of International Law, in RESEARCH METHODS IN INTERNATIONAL LAW (Rossana Deplano & Nicholas Tsagourias eds., forthcoming 2020); Ashley Deeks, High-Tech International Law, 88 GEO. WASH. L. REV. (forthcoming 2020).

Second, AI tools may assist states in enforcing international law. The state could, for example, develop and deploy sensors to detect violations of arms treaties and use artificial intelligence to monitor the sensors. International criminal lawyers may be using AI tools to help identify evidence of war crimes - or evidence that helps prove their clients' innocence. But these procedural and executive tools largely await us; The fundamental developments discussed by the authors of this symposium are here and now.

Collectively, the articles take a traditional approach to international law: they explore how states can, and should, modify the application of current international law to the new realities and scenarios posed by AI-based technologies, and consider how existing law shapes the way states develop and deploy these technologies. The articles are based on the real world and offer practical suggestions for countries as they collectively transition to a world where artificial intelligence plays a critical role. In short, these articles proceed to the hard work of assessing loopholes, ambiguities, and guidance in existing treaties and customary rules, and begin to chart a road map forward. In doing so, the articles offer an important lesson for international lawyers: that it is critical - for both those

working for governments and those who wish to influence state decisions from abroad - to understand the basics of these technologies.

The seminar begins with an article by Malcolm Langford of the University of Oslo. Langford's article explores the potential impact on human rights of automated decision-making and machine learning by governments. Using "the right to social security" and "the right to a fair trial" as examples, he outlines the arguments that exist about how automating these processes would undermine the very essence of these rights. But Langford challenges critics to go beyond easy assumptions about the new "digital wave".

[1]-Wolfgang Alschner et al., The Data-Driven Future of International Economic Law, 20 J. INT'L ECON. L. 217 (2017).

[2]- Wolfgang Alschner et al., The Data-Driven Future of International Economic Law, 20 J. INT'L ECON. L. 217 (2017)

2 Matthijs Maas, International Law Does Not Compute: Artificial Intelligence and the Development, Displacement or Destruction of the Global Legal Order, 20 MELB. J. INT'L L. 1, 15-17 (2019) (discussing possible uses of AI to enforce international law).

[6]M.L. Cummings et al., Artificial Intelligence and International Affairs: Disruption Anticipated 3, CHATHAM HOUSE (June 14, 2018).

[9] Malcolm Langford, Taming the Digital Leviathan: Automated Decision-Making and International Human Rights, VOL.114, AJIL UNBOUND P.141 (2020).

Critics urge to look at technologies in a way that they avoid. Romanticize the complex (human-led) systems and processes currently in place in the welfare state, basing its judgments on empirical evidence rather than cherry-picking examples of notable technological failures. He concludes by saying that the main way to protect human rights is to fight fire with fire: there is already evidence that new technologies themselves can help ensure compliance with the rights of other new technologies. Stephen Hill, who until recently served as NATO's Legal Counsel, offers us a government-focused perspective on AI. Hill's article examines the kinds of challenges that AI poses to a strong military alliance that shares common values but with different obligations under international and local law.[10] Hill explains how NATO has deployed AI to enhance its members' awareness of conditions and to conduct cyber defense, for example, by identifying trends in cyber threats. But he also argues that it is important for NATO to bring all allies together with the various uses of AI to avoid a backlash against these technologies. This includes achieving Allied agreement on data ownership, sharing, and use – the main fuel for AI, and challenging in an international organization whose members each have different views on data regulation and privacy. Hill suggests that a good way to achieve stability and confidence in this area is to foster ongoing legal and ethical dialogues, drawing on NATO's tradition of seeking "legal interoperability" among its members.

Bryant Walker Smith of the University of South Carolina School of Law sees a different, multilateral challenge posed by AI: How should states adapt existing treaties to new technologies?[11] States parties to the 1949 and 1968 Road Traffic Conventions are currently grappling with this critical question as they seek to update those treaties to reflect the new reality of automated driving. Smith's analysis takes a deep look into the potential ambiguities embedded in the treaties order that every vehicle must have a driver. Also, it explores why different states may take different approaches to interpreting this phrase, and why states may prefer somewhat formal approaches to clarifying treaty language. Away from the example of automated driving, an article stands out. Smith types of questions that states face across a wide range of existing treaties and new technologies. Finally, the article identifies the important role of corporations in a system of international law that is forced to face changes made by A.I. Like Langford, Darage Murray of the University of Essex considers the complex interplay between AI and human rights, but Murray focuses on using human rights law as a precursor to state decision-making.[12] Murray argues that states should use a well-established European approach to human rights as a regulatory framework within which their choices about AI can be analyzed and shaped before they choose to deploy it.

Using direct facial recognition as an example, Murray explains why countries should assess whether the deployment of this type of AI-led tools is "essential in a democratic society". The requirement is derived from the European Court of Human Rights rulings. Murray carefully explains that this test requires states to determine the basis for the goal of propagation, to explain why artificial intelligence is necessary to achieve that goal, and to determine how the state will spread the technology. Murray's article "Aldirz" takes a "just-in-time" approach, [12-] arguing that states will be better suited to responding to legal challenges in the future if they consider human rights foundations when making decisions to deploy AI today. Overall, these articles invite us to think seriously - and specifically - about other thematic areas of international law that intersect with states's deployment of AI technologies. International lawyers face a difficult but exciting challenge in helping to ensure the responsible use of AI by nations and individuals in the years to come.

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[10] Steven Hill, AI's Impact on Multilateral Military Cooperation: Experience from NATO, VOL.114, AJIL UNBOUND P.147 (2020).

[11] Steven Hill, AI's Impact on Multilateral Military Cooperation: Experience from NATO, VOL.114, AJIL UNBOUND P.147 (2020).

[12] Daragh Murray, Using Human Rights to Inform States' Decisions to Deploy AI, VOL.114, AJIL UNBOUND P.158 (2020).

The second requirement:

The role of artificial intelligence in activating some principles of international humanitarian law

Since the development of the digital computer in the 1940s, it has been demonstrated that computers can be programmed to perform very complex tasks - for example, figuring out proofs for mathematical theorems or playing chess - with great mastery. However, despite continuous advances in computer processing speed and memory capacity, there are still no programs that can match human flexibility in broader areas or in tasks that require a lot of everyday knowledge. On the other hand, some programs have achieved the levels of performance of human experts and professionals in performing certain specific tasks, so that artificial intelligence in this limited sense exists in diverse applications such as medical diagnosis, computers, search engines, voice recognition or handwriting. What matters here is that this development has It has been heavily harnessed in the manufacture of weapons, especially with drones, which have begun to compensate for conventional weapons in a large way, and it is important that they be organized legally and study their effects more in order to realize their advantages and disadvantages, but it is noted that most legal studies have focused on the disadvantages of these Modern weapons that rely on artificial intelligence, and here we will adopt a different approach by trying to find out the advantages that can be obtained through the use of these weapons, which we will try to clarify through this requirement, as we focused on some basic principles in international humanitarian law and whether artificial intelligence He can come up with something that serves to promote respect for these principles through the following sections.

First branch

Distinction principle:

Who can and cannot be killed in war? The principle of distinction states that combatants are legitimate targets of attack in war, while civilians (non-combatants) are not. In addition to being codified in the laws of international war, this principle ranks first among philosophical prescriptions for how wars should be fought. In common parlance, it may be better known as "civilian impunity", and throughout world history - from the contemporary laws of armed conflict to ancient China and early Islam - humanitarian restrictions on war have included a version of this principle. Despite widespread agreement in principle with the principle of distinction, its application to any military action of war is difficult—both for soldiers who use this principle to direct their actions, and for third-party judges evaluating the conduct of war after the fact. This is due in part to the challenge of defining "combatant" or "soldier" appropriately – a challenge attested by the fact that 97 of the 161 rules of customary international humanitarian law (IHL) are attempts to articulate more precisely who and what counts as a legitimate target of attack in the war.[13]

So, the principle of distinction protects civilians and civilian objects from the effects of military operations. It requires parties to an armed conflict to distinguish at all times and in all circumstances between combatants and military objectives on the one hand, and civilians and civilian objects on the other—and targeting only the former. It also requires that civilians lose this protection if they take a direct part in hostilities. The International Committee of the Red Cross has also found that the principle of distinction is reflected in the practices of states, and therefore it is an established rule of customary international law in international and non-international armed conflicts.[14] Failure to comply with these legal requirements is a violation of the law of war and members of the armed forces are held individually criminally responsible for failing to properly apply the principle of distinction, and such violations are routinely made.[15] At the same time, a minority of those involved in armed conflict will say that mistakes never happen and that civilians are never wrongly targeted. Unintentional deaths often occur through misapplication of the principle of distinction, due to intelligence failure or sometimes simply human error. In such decisions, the ability to quickly collect and analyze all available data on a target usually makes a difference to the military commander who makes the targeting decision. Currently, it is noteworthy that the autonomous weapon system can connect to a wide range of sensors and is designed to work with a machine learning system that can collect and analyze massive amounts of data much more quickly than the human brain. Such weapons might be able to do this, for example, by having a greater ability to tell the difference between a hostile combatant and a non-enemy civilian in a crowd, with sensors scattered across an area that provide data on individuals that cannot be detected in a crowd What. It is noteworthy that Autonomous systems, powered by machine learning, have already demonstrated their superiority over humans when performing highly complex and opaque analyses, such as correctly diagnosing medical conditions and playing intelligence games. If this system is provided with a better statistical chance of getting a correct discrimination result

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[13] Hanne M. Watkins, Simon M. Laham, The principle of discrimination: Investigating perceptions of soldiers, Group Processes & Intergroup Relations, Vol 23, Issue 1, 2020, p.3-4.

[14] 20— Eric Tablot Jensen, A Verifiable Challenge… Humanizing Autonomous Weapons, https://blogs.icrc.org/alinsani/2018/11/01/2145/ (14/1/2022).

[14] Huma Haider, International Legal Frameworks for Humanitarian Action: Topic Guide, 2013, p.17.

https://gsdrc.org/wp-content/uploads/2015/07/ILFHA.pdf (17/1/2022).

[15] International Criminal Tribunal for the Former Yugoslavia, Prosecutors Ante Gotovina, Ivan Szyrmak and Mladen Markaic, Judgment No. IT-06-90-T, Trial Chamber I, 15 April 2011 (Gotovina Tribunal Judgment); ICTY, Prosecutors Ante Gotovina and Mladen Markaic, Judgment No. IT-06-90-A, Appeals Chamber, 16 November 2012 (Gotovina Appeals Tribunal Judgment).

based on the ability to collect and analyze a larger set of data faster, it will likely lead to a lower death rate for innocent people. From the point of view of international humanitarian law, since the human decision-making process is not an integral part of legal compliance, it is not important for a person to apply the principle of distinction only, but what matters is that this principle is applied correctly in most cases, or that the percentage of deaths and injuries that inflicted on civilians less than that resulting from human decision-making.[16]

Second branch

Principle of proportionality:

Restrictions on the use of weapons arose from general legal principles such as the rule of proportionality derived from Articles (15 and 22) of the Lieber Code, which was established later in Articles (51/5/b and 57/2/b) of Additional Protocol I of 1977. [17]He also accepted it. Petersburg Declaration of 1868 regarding the adoption of the prohibition of the use of certain missiles in time of war, the rule that (the only legitimate aim that states must pursue during war is to weaken the military forces of the enemy), and accordingly (the exclusion of the largest possible number of forces suffices to achieve this purpose) And it may be exceeded if you use (weapons that unduly increase the pain of people who are unable to fight or make their death inevitable) and in this use in violation of (humanitarian laws) as stated in the aforementioned declaration.[18]

This principle was established by the Hague Treaty on the Laws and Customs of War on Land of 1907 under Article 22, which states that "the belligerents shall have no absolute right to choose the means of inflicting harm on the enemy." No international convention explicitly provided for the principle of proportionality except in 1977, through Articles (51/5/b) and (57/2/a/iii) of Additional Protocol I of 1977(). [19]A disproportionate attack is defined as (an attack that may be expected to cause loss of civilian life or injury or damage to civilian objects, or to cause a mixture of these losses and damages that exceeds the concrete and direct military advantage expected to result from that attack).[20] (). The text of Article (51/5/b) of

Additional Protocol I, in the form in which it was approved, was criticized in the diplomatic conference for the years 1974-1977 and thereafter. The criticism focused in particular on the inaccurate wording and terminology and the difficulty of applying the selection of the required budget. The text in practice requires the utmost goodwill on the part of the combatants, as well as a willingness to comply with the general principle of respect for the civilian population.[21] Perhaps the most (humanitarian) aspect of a decision made during military operations is the balance between tangible military advantage and potential collateral damage. For those who believe that international humanitarian law requires the best (humanitarian) decision to be made, the humanitarian aspect of that decision is extremely important, even if the results of some proportionality decisions are highly criticized. In this view, where no decision results in loss of life without human intervention and complies with IHL, talk of technological innovation must be related to finding the best ways to support humans in their inherently human decisions. This view does not render research into AI and machine learning and development sterile, but it should broaden such research and development in a way that supports human decision-making rather than independent decision-making. Best Possible Protection For those who believe that the (best) application of IHL, such as the principle of proportionality, is the one that produces the least collateral damage in the performance of military missions, a subjective decision or a decision based on a machine learning or artificial intelligence system may lead to (Best) Apply the principle because it may result in fewer civilian casualties. Technology optimists believe that the ability of autonomous weapons to draw conclusions (better) than human ones is entirely possible, and in fact, it is likely that they will perform the same role in certain cases after providing enough research and development. Autonomous weapon systems that are not influenced by emotions (such as anger, fear, hostility) or are not subject to physical limitations (such as limited senses, fatigue, or an inability to process all actual data available quickly at the decision stage) may be able to apply these principles in a more compliant manner to the law. To the extent that the optimistic view of technology is accurate, the international community should strongly encourage the search and development of autonomous weapons with these capabilities to enable humans to more accurately apply the principles of international humanitarian law. If you develop autonomous weapons that work with machine learning or artificial intelligence, it is possible to save many civilian lives, and some will say that countries should commit to developing such weapons. Technology Skeptics Unlike optimists, technology skeptics argue that it does not currently exist, and there is no possibility of it ever being developed. Therefore, these

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[16] Eric Tablot Jensen, A Verifiable Challenge… Humanizing Autonomous Weapons, https://blogs.icrc.org/alinsani/2018/11/01/2145/ (14/1/2022)

[17] Dr.. Mahmoud Sherif Bassiouni: Introduction to the Study of International Humanitarian Law, 2nd Edition, International Institute for Human Rights, DePaul University, Chicago, 2003, p. 52.

[18] Dr.. Amer Al-Zamali, Islam and International Humanitarian Law on Some Principles of the Conduct of Military Operations, Articles in International Humanitarian Law and Islam, 3rd Edition, International Committee of the Red Cross, Cairo, 2010, p. 163.

[19] - Dr. Bassem Khalaf Al-Assaf, Protecting Journalists during Armed Conflicts, 1st Edition, Zahran Publishing and Distribution House, Amman, 2010, p. 235.

[20] (Article 51/5/b) of Additional Protocol I of 1977.

[21] The International Committee of the Red Cross: International Humanitarian Law and the Challenges of Contemporary Armed Conflicts, excerpts from the report prepared by the International Committee of the Red Cross for the 28th International Conference of the Red Cross and Red Crescent, Geneva, December, 2003, p. 11.

technologies should not be researched and developed for use with weapons or at least we should proceed with extreme caution. Skeptics claim that there is great doubt that such research and development will lead to the application of a machine learning or artificial intelligence system that will demonstrate the ability to apply IHL principles in a way that leads to "better" results than those obtained by humans. The Role of Human Decision in IHL: Despite the fact that there may be reason to be very cautious about the course of technology in its decision-making capacities, technology skeptics often do not address the fundamental question of the role of human decision in IHL. Whether or not R&D will reach a successful outcome is indisputable as to whether countries that take a more optimistic view can/should participate in R&D for this purpose. The fundamental question is if international humanitarian law prevents non-human decision-making regarding the application of lethal force, then states are prevented from following these technological developments. As technology continues to evolve, questions regarding the development of artificial intelligence and machine learning as part of autonomous weapon systems will bring us back to the fundamental question of whether IHL requires the best "humane" application of law or simply the best "possible" application of law. In fact, it is possible, at some point in the future, to apply international humanitarian law in a way that minimizes the loss of life and injury to civilians due to inhumane decisions, which encourages us to consider and answer this question now.[22]

THE ENDING:

At the conclusion of our research **(Using Artificial Intelligence to Enhance Compliance with International Humanitarian Law)**, we reached a number of conclusions and recommendations, which are as follows:

CONCLUSION:

1-A term that has become more sustainable recently in light of the technical renaissance that the world is witnessing in the field of machinery development.

2-Artificial intelligence (a branch of computer science, primarily concerned with the automation of intelligent behavior) may take into account such behavior from all areas of the human, animal, and plant worlds.).

3-Governments and private sector actors today are using AI tools to improve medical diagnoses; Enabling greater autonomy on day-to-day activities such as driving, enhancing the accuracy of facial recognition software, and improving judicial decision-making.

4-AI is sure to bring about changes in the areas of human rights, use of force, transnational law enforcement, global health, intellectual property systems, and international labor law, among others.

5-The principle of distinction and the principle of proportionality is considered one of the principles most affected by technological development by relying on artificial intelligence with regard to its use in distinguishing between civilians and military personnel and civilian and military objectives and facilities, as well as with regard to the application of the principle of proportionality, as it achieves the least side effects during the performance of military tasks.

RECOMMENDATIONS:

1-Although AI is increasingly penetrating the commercial, military and scientific fields, countries have been slow to create new international agreements or modify existing ones to keep pace with these technological developments, which calls for an acceleration.

2-In any way, if what is required is the "best" application of IHL, and we believe that autonomous weapons – or weapons of artificial intelligence or machine learning – can use force in a way that, in at least some circumstances, leads to better protection for humans, then We come to a different conclusion. In this case, the international community should encourage the development of autonomous weapons powered by machine learning or artificial intelligence on the battlefield because they are (or are likely to be) able to apply the legal requirements of international humanitarian law in a way that leads to greater protection for victims of armed conflict.

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