AUTONOMOUS WEAPONS:

the lawfulness of the system under international law

Armas autônomas:
a legalidade do sistema sob o direito internacional

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ABSTRACT: Within the next few years, autonomous weapons will be the primary discussion under international law. Although machinery functioning with artificial intelligence seems to be a dream, utilizing the technology in armed conflicts can be dangerous to civilians. One of the main issues of autonomous weapons is the lack of understanding concerning its scope. Thus, it prevails a need to analyze how the system will comply with the law and inquire if the current law framework is capable to protect humans from machines. This paper examines the lawfulness of those kinds of weapons, utilizing as methodology international law treaties and judicial decisions. Calling into question the validity of its use by state governments.

KEY WORDS: Autonomous Weapons. Artificial Intelligence. International Humanitarian Law. International Human Rights Law. Martes Clause.

RESUMO: Nos próximos anos, armas autônomas serão uma das principais discussões no direito internacional. Embora máquinas funcionando sob inteligência pareça ser um sonho, a utilização da tecnologia em conflitos armados pode ser abalável para civis. Um dos principais problemas das armas autônomas é a falta de entendimento sobre o

seu escopo. Portando, é necessário analisar como o sistema cumprirá a lei, e indagar se o atual quadro jurídico é capaz de proteger os seres humanos das máquinas. Este texto examina a legalidade desse tipo de arma, utilizando como metodologia tratados internacionais e decisões judiciais. Questionando assim, a validade de seu uso pelos Estados.

PALAVRAS-CHAVE: Armas Autônomas. Inteligência Artificial. Direito Internacional Humanitário. Direito Internacional de Direitos Humanos. Cláusula Martes.

1 INTRODUCTION

Artificial intelligence is real, and the full automaticity of weapons is only another step for those machines (FORBES,2019). Presumably, the human replacement in military activists is only a matter of time. It is well known the efforts of states like the United States, Russia, and China to produce intelligence, and currently, those three states are battling to develop an autonomous system regarding armament government (THE CONVERSATION, 2019). Within the next few years, weapons will be capable of fully deploying by itself, making decisions without human interference. The problematic of this work falls into a contemporary challenge to international law, in other words, the urge to assure the lawfulness of those projects, persuading its development with the right legal framework. International law has always dealt with polemics subjects, especially regarding armament. The International Court of Justice advisory opinion on Legality of the Threat or use of Nuclear Weapons, per example, established not only a legal but academic framework concerning weapons and its scope.

When it comes to a definition, autonomous weapons can be defined as a "human-out-of-loop system", or as stated by the Human Rights Watch "killer robots" (HUMAN RIGHTS WATCH, 2018). In this sense, the human part of the system is only during its development, after active, the computer will make all the decisions (HEYNS,

2017, p. 2). Therefore, it has "the ability to make decisions as a free and independent moral agent" (BEARD, 2014, p. 622). Delimitating the work presented, only weapons that lack human interaction will be considered.

The core problem regards the absence of regulation to this kind of machinery and artificial intelligence. Not only it has an unknown scope, but also the results of a possible deployment are still very unsure. Since autonomous weapons are increasingly becoming real, it's pivotal to set some international law provisions that the machinery must fully comply with. To conclude, this work has the ambition to answer if the current technology is able to function within the parameters of international law. To respond to such inquiry, the methodology chosen falls into an analysis of International Humanitarian Law and Human Rights Law treaties, with an emphasis of the International Court of Justice cases and the teaching of qualified publicists (following article 38 of the ICJ statute that establishes the sources of international law). I must highlight that this this work has the ambition to review only international provisions that are pivotal to guarantee human safety, not extending the research to all international treaties. Within the following pages, this paper will establish a baseline of lawfulness regarding artificial intelligence, guiding international law researchers to understand the power of artificial intelligence and its current difficulty to understand basic law provisions.

2 INTERNATIONAL HUMANITARIAN LAW

Armed Conflicts, international or non-international, are more often then we presumed, affecting not only military personals but also all the population caught in between. Consequently, International Humanitarian Law was created to avoid humanitarian gaps in moments of conflicts, seeking to protect the population from hostilities and delineating the so-called "methods of warfare" (SHAW, Malcom, 2008, p.

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1167). In this sense, humanitarian law assures that conflicts in general respect basic principles, for the sake of establishing a legal framework while in warfare.

The Geneva Conventions was created in 1949, consisting of a compilation of four treaties that created legal baselines to armed conflicts. As explained by Malcom Shaw, the conventions "is the principle that persons not actively engaged in warfare should be treated humanely" (2008, p. 1169). In addition, its protocols, which came in 1977, expanded the knowledge regarding armament and the security of combatants and civilians. As stated in article 36 of Protocol I, "[...] a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law [...]" (INTERNATIONAL COMMITTEE OF THE RED CROSS, 1977, p. 258). Consequently, this provision-imposed restrictions on the use of weapons that are not in compliance with the Geneva Conventions (INTERNATIONAL COMMITTEE OF RED CROSS, 2014). It must be addressed the premise of non-freedom of choice when it comes to this kind of warfare. Article 36 and Article 35, both draw the line of prohibition when deploying an armament that would "cause superfluous injury or unnecessary suffering" (INTERNATIONAL COMMITTEE OF THE RED CROSS, 1977, p. 258).

Moving to article 48 of the Protocol I from the Geneva Conventions 1949, basic rule regarding conflicts in general, acknowledges the premise of distinguishing between civilians and combatants in case of armed conflict. Proving that the parties "[...]shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives" (INTERNATIONAL COMMITTEE OF THE RED CROSS, 1977, p. 264). Although the principle of distinction is quite sedimented in international law, having a consensus view towards the subject, this provision was established with human interaction in mind. In other words, experts in the subject had already proven that the current technology of autonomous weapons has a problem

distinguishing its targets (UK MINISTRY OF DEFENCE, 2011). This means that a machine is more vulnerable when it comes to identifying who is against it since they "require human judgment and human understanding" to forsake its prevision (SHARKEY, 2018, p. 76). Issue of whether or not autonomous weapons understand distinguish is clouded by the fact that the lack of human control would affect "opportunity for compassion, which can provide a means for reducing the amount of civilian deaths" (SHARKEY, 2018, p. 76).

Since distinguish is one of the bases when it comes to armed conflicts, diminishing their impacts (HEYNS, 2017), autonomous weapons have the duty to comply with this provision. Artificial intelligence has to fully function under international law. The acceptability of an autonomous weapon that excludes the possibility of distinguishing is simply unlawful since it is the base to protect civilians from getting injured from armed conflicts.

Turning to the rule of proportionality, article 51 (5) (b) of Additional Protocol I to the Geneva Conventions of 1977 sets a framework considering indiscriminate "an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated" (INTERNATIONAL COMMITTEE OF THE RED CROSS, 1977, p. 265). Article 57 (2) (a) II from the same protocol, states that parties must avoid injury or accidental loss of civilians, preserving their life (INTERNATIONAL COMMITTEE OF THE RED CROSS, 1977). Proportionality requires that the attack must be proportional to the threat. The issue under scrutiny is to avoid extreme harm, by establishing a baseline to diminish the power of the armament used and measure its actions (HEYNS, 2017). The autonomous weapon here has the duty to postulate other tactics, therefore, applying precautionary measures. Unfortunately, this condition cannot be reached with the current technology, since it would not be capable

to undertake qualitative judgments to apply precaution (INTERNATIONAL COMMITTEE OF RED CROSS, 2014).

3 MARTENS CLAUSE

Since autonomous weapons are a new sort of weapon, there is a foregoing discussion implying a non-coverage by existent treaties (HUMAN RIGHTS WATCH, 2018). As a result, with the absence of regulation in international law, autonomous weapons must respect the *Martens Clause*. The International Court of Justice, at the Advisory Opinion concerning the Legality of the Threat or Use of Nuclear Weapons, already defined the *Martens Clause* as an "effective means of addressing rapid evolution of military technology" (INTERNATIONAL COURT OF JUSTICE, 1996, p. 257). *Martens Clause* appears at the Geneva Conventions 1949, more specific at article 1(2) of the Additional Protocol I. Thus, in cases not covered by the Geneva Conventions or other agreements, the civilians will be "under the protection and authority of the principles of international law derived from established costume, from the principles of humanity and from the dictates of public conscience" (INTERNATIONAL COMMITTEE OF THE RED CROSS, 1977, p. 240). The basic premises forsake that, in cases where international law has not yet codified, exist basic principles must be followed.

This specific clause can be defined as a "baseline of protection for civilians and combatants when no specific treaty law on a topic exists" (HUMAN RIGHTS WATCH, 2018, p. 1). Such a clause embodies a sense of moral framework, giving an option to safeguards from any kind of situation that might cause harm to the population (INTERNATIONAL COMMITTEE OF RED CROSS, 2014). Human Rights Watch (HRW) already discussed the applicability of the Martens Clause, deciding for its use in the absence of international agreement applicable to autonomous weapons (HUMAN RIGHTS WATCH, 2018). The consensus view seems to forsake a ban of weapons that

are not covered by international law (INTERNATIONAL COMMITTEE OF RED CROSS, 2018). Providing "standard for ensuring that civilians and combatants receive at least minimum protection from such problematic weapons" (HUMAN RIGHTS WATCH, 2018, p. 11).

In this sense, the *Martens Clause* was made to establish protection due to the rapid evolution of technology. Assuring the principles of humanity and the dictates of public conscience. As a result, if an autonomous weapon is deployed, the *Martens Clause* will preserve states and civilians, avoiding a gap of protection (INTERNATIONAL COURT OF JUSTICE, 1996).

4 INTERNATIONAL HUMAN RIGHTS LAW

Human rights can be defined as the provision that assures basic rights of human beings in society, as a combination of "ethic and morality" (SHAW, Malcom,2008, p. 266). Those rights have an *erga omnes* effect, in other words, serve to protect every person, regardless of gender, nationality, or race. The main source of international human rights law are treaties, therefore states and the population are obligated to follow certain acts, promoting a rightful life for its population.

The International Covenant on Civil and Political Rights was created in 1966, aiming to respect the dignity and the human rights of the human person. Even without postulating about armed conflict, we shall remember that, even in moments of conflict, human rights still have to be assured by states. Therefore, an autonomous weapon must, as such, respect international human rights law, and be reviewed under its provisions.

The basic premises of article 6 (1) assume the inherent right to life. In this sense, no one must be arbitrarily deprived of life (ICCPR,1966). Such provision, emphasizing article 3 of The Universal Declaration of Human Rights, that establishes the right to life

(UDHR,1948). Providing a moral baseline of protection to human beings from external actions. Autonomous weapons are considered machines that may not understand the value of life, concerned with the issue of potentially depriving arbitrarily the life of a population (AMNESTY INTERNATIONAL, 2015). States, while developing this technology, have the duty to prevent such deprivation (HRC, 1982). Parties of the treaty must not arbitrarily deprive life of any sort, even in moments of public emergency which threatens the State, as stated by Article 4 of the ICCPR.

For this reason, even in a state of emergency, provisions established by The International Covenant on Civil and Political Rights cannot be derogated. Assuring basic human rights even in moments of conflicts. To emphasize, states have the main duty to prevent any abuse of power, minimizing the consequences for the population (HRC, 2001). The development of an autonomous weapon must comply with the duty to save lives, and not arbitrarily take them. The system has a commitment to apply all precautionary measures to assure its safety. In the near world, machines must have the power to understand the value of life, in order to be lawful under international law.

5 CONCLUSIONS

This work had, as the overall goal, present an original concern that will be a main topic in the following years, due to the technology development. Following this line of thought, the work had as its specific aim to examine treaties of International Humanitarian Law, International Human Rights Law, and International Court of Justice decisions. The analysis done was in order to identify, in the basic sources of international law, incongruity with the current artificial intelligence software. I must emphasize that this work was based on information concerning autonomous weapons publicized by the Human Rights Watch, UN Council of Human Rights, International

Committee of Red Cross, and Amnesty International. Always remembering the constant technology evolution. technology can switch and polish itself.

Autonomous weapons are a current reality, being under development by several states (HEYNS, 2017). As far as we know, in a brief future, weapons will have a resemblance of free will to decide about its own deployment. Therefore, as a conclusion of this work, the methodologic chosen helped us to infer that current autonomous weapons technology cannot comply with basics international law provisions. We must attempt to the high-level risk of an autonomous armament, with no human interaction, due to the unableness to acquiesce with rules that were meant to create a safe environment. If an armament cannot satisfy international humanitarian and human rights provisions, the system should not be used in any specific case. The ambition of reviewing a non-finished technology falls into the hope, and desire, to give awareness to those who work with artificial intelligence, in other words, presuming unlawfulness of software can change the perspective of those who create it.

This level of automaticity must follow the current international law framework. The discussion about the legality of a weapon to deploy against human beings is still far to conclude, the UN Council of Human Rights, already stated the discontentment with the idea of machines deciding with artificial intelligence the life of human beings (UN COUNCIL ON HUMAN RIGHTS,2014). Of course, the future falls into atomicity, and all technology must, at least, understand the law and respect them. To conclude, autonomous weapons must be in accordance with international law and its provision. If under the framework of the law the system is considered illegal, therefore its deployment must be prohibited (BEARD, 2014, p. 635).

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