

Human dignity, moral damage, and killings by Autonomous Weapons Systems

Dignidade da pessoa humana, dano moral e assassinatos por armas letais autônomas

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1. Introduction

A 2021 United Nations Security Council (UNSC) report¹ stated that Lethal Autonomous Weapon System (LAWS) STM Kargu-2 were used in Libya. This was the first time that a United Nations (UN) official document recognized the use of LAWS². The UNSC report affirms that the LAWS “were programmed to attack targets without requiring data connectivity between the operator and the munition(…)”³ but does not say if there were any causalities. Supposing LAWS caused deaths or injuries to human beings, is there moral damage?

The present article aims to discuss if the fact that a person was killed or injured by LAWS causes moral damages and gives rise to reparation. It also aims to discuss whether it is necessary to prove and persuade the court as regards moral suffering or it can be considered in re ipsa.

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1 UNITED NATIONS SECURITY COUNCIL, 2021, pp. 17.

2 CAMPAIGN TO STOP KILLER ROBOTS, 2021.

3 UNITED NATIONS SECURITY COUNCIL, 2021, pp. 17.

LAWS are weapons, such as those used in Libya, that, once activated, can select and engage targets without further human intervention. There is no internationally agreed definition of AWS. Nonetheless, key stakeholders such as the United States (US)⁴, the International Committee of the Red Cross (ICRC)⁵, and the Campaign to Stop Killer Robots adopt definitions that gravitate around the aforementioned concept.⁶ Since this paper aims not to discuss the definition of LAWS, the concept provided suffices for the proposed inquiry⁷.

The article will start by briefly analyzing moral damage in international law. Next, it will discuss if LAWS's breaches violate human dignity, present case law on moral damage in *re ipsa*, and finally, address the question if killing or injuries by LAWS generate moral damage in *re ipsa*. Considering that the object of study is moral damage, it is outside the scope of the article to discuss LAWS challenges regarding attribution of responsibility. We acknowledge this problem that is the object of a forthcoming publication. For the purposes of this study, we will consider that the conducts are attributable to the State.

2. A brief perspective of the Draft Articles on State Responsibility and international law scholarship on moral damage

States are obliged to make full reparation of the injury they cause, according to article 31 of Draft Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA).⁸ In line with ARSIWA, Rule 150 of International Humanitarian Law (IHL) Customary International Law Database states that: "A State responsible for violations of international humanitarian law is required to make full reparation for the loss or injury caused."⁹ Injury

4 UNITED STATES DEPARTMENT OF DEFENSE, 2012, pp. 13. "A weapon system that, once activated, can select and engage targets without further intervention by a human operator. This includes human-supervised autonomous weapon systems that are designed to allow human operators to override operation of the weapon system, but can select and engage targets without further human input after activation."

5 INTERNATIONAL COMMITTEE OF THE RED CROSS, 2016. "The ICRC has proposed that "autonomous weapon systems" is an umbrella term encompassing any weapon system that has autonomy in the critical functions of selecting and attacking targets."

6 AMOROSO, 2020, pp.15-17.

7 For further understanding LAWS definitions see TADDEO and BLANCHARD, 2021.

8 INTERNATIONAL LAW COMMISSION, 2001. Art 31.

9 INTERNATIONAL COMMITTEE OF THE RED CROSS, rule150.

encompasses any damage caused by the internationally wrongful act, both material and moral.¹⁰ While material damage can be evidenced in terms of money, moral damage cannot be financially evidenced.¹¹

The victims of moral damage are those who experienced the harm and might be both the State¹² and individuals. Moral damages to the State is the loss or detriment a State experiences to its honor or dignity.¹³ It “refers to injury which is not financially assessable but amounts to an affront to the state, for example a violation of its sovereignty or territorial integrity.”¹⁴ Moral damage to State’s national embraces “individual pain and suffering, loss of loved ones or personal affront associated with an intrusion on one’s home or private life.”¹⁵ The Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of IHL explains that victims might also embrace immediately family, dependents, or those who intervened in favor of the victims.¹⁶

In sum, in the ASRIWA framework, those who suffer moral damage have the right to claim reparation, and victims might be both the State and individuals. Based on this right, in the following section, we will analyze moral damage as regards LAWS killings.

3. Human dignity and LAWS killings

The principle of human dignity underpins International Human Rights Law (IHRL) and IHL.¹⁷ The Universal Declaration of Human Rights refers to

10 INTERNATIONAL LAW COMMISSION, 2001.

11 GRAEFRATH, 1984, pp. 20.

12 GRAEFRATH, 1984, pp. 20.

13 GRAEFRATH, 1984, pp. 20.

14 CRAWFORD, 2013, pp. 486-487.

15 INTERNATIONAL LAW COMMISSION, 2001. pp. 92, par. 5.

16 UNITED NATIONS GENERAL ASSEMBLY, 2006. See Paragraphs 8, 9, 11 to 17 and 24.
“8. For purposes of the present document, victims are persons who individually or collectively suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights, through acts or omissions that constitute gross violations of international human rights law, or serious violations of international humanitarian law. Where appropriate, and in accordance with domestic law, the term “victim” also includes the immediate family or dependants of the direct victim and persons who have suffered harm in intervening to assist victims in distress or to prevent victimization.”

17 HEYNS, 2017, pp. 62-63.

dignity and prohibits inhuman treatment.¹⁸ The African Charter on Human and Peoples' Rights foresees in article 5 the individual right to respect human beings' inherent dignity, and that inhuman treatment of punishment shall be prohibited.¹⁹ The African Commission of Human and Peoples' Rights adopted the General Comment 3 on the right to life,²⁰ in which it stresses the vital link between right to life and the right to human dignity and affirms that the aims are to protect a right to a 'dignified life.' The American Convention on Human Rights is also explicit in article 5 on the right to humane treatment and recognizes the right to dignity²¹. Even relevant IHRL documents that are not explicit regarding the right to human dignity, such as the Association of Southeast Asian Nations (ASEAN) Human Rights Declaration²² and the European Convention on Human Rights²³, do recognize it implicitly since both forbid inhuman treatments.

Regarding IHL, common Article 3 of the four Geneva Conventions of 1949, forbids "outrages upon personal dignity, in particular, humiliating and degrading treatment" of those taking no active part in the hostilities.²⁴ In the same sense is rule 90 of ICRC's customary international law database.²⁵

18 UNITED NATIONS. UNIVERSAL DECLARATION OF HUMAN RIGHTS. 1948, arts. 1, 5, 22, 23.

19 ORGANIZATION OF AFRICAN UNITY. AFRICAN CHARTER ON HUMAN AND PEOPLES' RIGHTS ("Banjul Charter"), 1981, art. 5.

"Every individual shall have the right to the respect of the dignity inherent in a human being and to the recognition of his legal status. All forms of exploitation and degradation of man, particularly slavery, slave trade, torture, cruel, inhuman or degrading punishment and treatment shall be prohibited."

20 AFRICAN COMMISSION ON HUMAN AND PEOPLES' RIGHTS, 2015.

21 ORGANIZATION OF AMERICAN STATES, AMERICAN CONVENTION ON HUMAN RIGHTS, "Pact of San Jose", 1969, Art. 5, par 2.

"2. No one shall be subjected to torture or to cruel, inhuman, or degrading punishment or treatment. All persons deprived of their liberty shall be treated with respect for the inherent dignity of the human person." See also articles 6 and 11.

22 ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN), ASEAN HUMAN RIGHTS DECLARATION, 2012. See articles 1, 14 and 31

"1. All persons are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of humanity. "14. No person shall be subject to torture or to cruel, inhuman or degrading treatment or punishment."

23 COUNCIL OF EUROPE, 1950.

24 INTERNATIONAL COMMITTEE OF THE RED CROSS, GENEVA CONVENTION RELATIVE TO THE TREATMENT OF PRISONERS OF WAR (Third Geneva Convention), 1949 Convention (III) relative to the Treatment of Prisoners of War. Geneva, 12, Article III.

25 INTERNATIONAL COMMITTEE OF THE RED CROSS, Rule 90.

The victim need not be individually conscious of the indignity, and those who are no longer alive can be subjected to degrading treatment.²⁶

This paper presents three main reasons by which LAWS violate human dignity: first, LAWS reduce people to data points through algorithmic profiling; Second, non-humans take life and death decisions; Third, LAWS are inherently biased and unpredictable.

3.1. LAWS reduce people to data points through algorithmic profiling

LAWS modify the human-technology relationship, as they transfer decisions over life and death to autonomous devices.²⁷ In line with former Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, this article claims that reducing people, including in the war context, to zeros and ones, to objects of algorithmic labeling and targeting challenges the right to dignity.²⁸ Algorithmic killings do not protect the value of individual dignified life since the death of one person is indistinguishable from the death of all others that also fallowed under the boundaries of the LAWS's algorithmic target profile²⁹.

“The person against whom the force is directed by autonomous weapons is reduced to being an object that has to be destroyed, and that is even more clearly the case where incidental casualties are at stake. They have no avenue, futile or not, of appealing to the humanity of the enemy, or hoping their humanity will play a role because it is a machine on the other side”³⁰.

A linchpin of human dignity is the moral constraint that humans cannot be treated as means, as objects. Allowing AI to take life and death decisions means disregarding the concept of human dignity and treating humans as objects.³¹ LAWS algorithmic targeting implies that “(...)people are reduced

26 INTERNATIONAL COMMITTEE OF THE RED CROSS, Rule 90.

27 STOP KILLER ROBOTS. Problems with autonomous weapons.

28 HEYNS, 2017, pp. 62-63.

29 HEYNS, 2017, pp. 62-63.

30 HEYNS, 2017, pp. 62-63.

31 JOHNSON & AXINN, 2013, pp. 134.

“Is there a loss of dignity when a human fights with a machine, compared to fighting with another human? As a non-lethal game it is acceptable; but in a fight to the death the matter

to certain data points and then killed or injured, not as ‘people’ as a human would understand them, but simply as producers or possessors of certain sensor-identifiable characteristics”³²

This paper refutes opposing views, such as Amoroso’s claim that the formula of the object framework is not persuasive reasoning to assess LAWS’s breach of the principle of human dignity regarding those who were targeted³³.

The book provides an insightful interpretation of the right not to be subjected to a decision based solely on algorithmic decision-making, on the basis of the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data³⁴, the Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (EU Convention 233),³⁵ and Regulation (EU) 2016/679 of the European Parliament and the Council.³⁶ According to Amoroso, the right not to be subjected solely to algorithmic decision-making is rising at least in Europe, flowing from the principle of human dignity and a progressive assessment of the *Objektformel*. Nonetheless, he concludes that due to the few ratifications on Protocol amending the Convention for the Protection of Individuals with regard to EU Convention 233, such an understanding grounded on an evolutionary interpretation of the *Objektformel* still has a long way to go³⁷.

The factual situation has changed since Amoroso’s book was written. By then only three States had ratified the modernized EU Convention 233. Significantly enough, the situation is shifting: as of March 1, 2022, seventeen States ratified it, and only seven out of the Members of the Council of Europe have not signed it yet.³⁸ In our view, this progressive adhesion to the

is different and far from trivial. To give a programmed machine the ability to ‘decide’ to kill a human is to abandon the concept of human dignity. Humans are sometimes accidentally killed by machines, but for an autonomous robot/drone to be programmed to kill a human is to treat a rational being as if it were merely an object.”

In an opposing view, AMOROSO, 2020, pp. 187.

32 RICHARD MOYES, 2019, pp. 5.

33 AMOROSO, 2020, pp. 187.

34 COUNCIL OF EUROPE, 1981.

35 CETS No.223.

36 SALIBA, BARBOSA, 2020, pp.602.

37 SALIBA, BARBOSA, 2020, pp.602.

38 COUNCIL OF EUROPE PORTAL.

convention demonstrates that if decisions are taken solely by algorithms, as it occurs with LAWS, they treat humans as objects and violate human dignity.

3.2. Inhumans take life and death decisions

There is a deprivation of dignity when an autonomous device confronts a human, as compared to human-human battles. LAWS can kill but they are not humans end hence incapable of understanding the value of human life and its lost, and respecting human dignity.³⁹ Thus, if human decision is absecent “to the extent that machines have effectively, and functionally, been delegated these decisions, then it undermines the human dignity of those combatants targeted, and of civilians that are put at risk as a consequence of legitimate attacks on military targets.”⁴⁰ The process by which persons are killed or injured and the decision-making path that underpins it matters regarding respect to human dignity.⁴¹ “There is a difference between dying a ‘good death’ and dying a ‘bad death’, and this difference affects the meaning we attach to human life”⁴². Human lives are stories that have a start, development, and end. Terminating human life due to autonomous machines’ actions violates the human right to a dignified death⁴³.

In an opposing view, Paul Scharre does not envision a difference between a death caused by LAWS and other weapons about diminishing human dignity. He states that “it is hard to see how this difference matters from the perspective of the victim, who is dead in any case”⁴⁴. We disagree

39 HUMAN RIGHTS WATCH, 2015.

40 INTERNATIONAL COMMITTEE OF THE RED CROSS, 2018.

In the same sense, ACHESON, 2021.

“ICRC argued that the use of target profile impedes human consideration. Death by algorithm entails an ethically problematic change in exercise of human agency and use of force, which is a change that is dehumanising and runs contrary to principle of humanity.”

41 INTERNATIONAL COMMITTEE OF THE RED CROSS, 2018 p. 2.

42 HEYNS, 2017, p. 62-63.

43 HEYNS, 2017, p. 62-63.

“An end at the hand of machine differs from an end at the hand of humans (...) This is supported by the fact that IHL recognizes the notion of the dignity of the dead.”

See also INTERNATIONAL COMMITTEE OF THE RED CROSS rule 90 “Rule 90. Torture, cruel or inhuman treatment and outrages upon personal dignity, in particular humiliating and degrading treatment, are prohibited.” And rule 113 “Rule 113. Each party to the conflict must take all possible measures to prevent the dead from being despoiled. Mutilation of dead bodies is prohibited.”

44 SCHARRE, 2018, pp. 288.

with Scharre, since it is unnecessary that the victim is aware of the inhuman treatment, and even dead people can be subjected to degrading treatment, in line with rule 90 of ICRC's customary international law database⁴⁵.

Paul Scharre further argues that "Some might say, yes, that automating death by algorithm is beyond the pale, a fundamental violation of human rights; but when compared to the ugly reality of war this position seems largely a matter of taste."⁴⁶ We are not arguing that other weapons do not violate human dignity, we are claiming that LAWS breaches violate human dignity. Other weapons might also do so, and this must be assessed on a case-by-case basis.

3.3. LAWS's have inherent bias and unpredictability

Algorithmic bias is another factor that enhances the thesis that killings violate human dignity.

Based on research by scientists, tech workers, and activists, as well as real-world experiences with emerging technologies including artificial intelligence, machine-learning, algorithms, data sets, and surveillance, it's clear that the deployment of this technology in autonomous weapon systems (AWS) will lead to human suffering and discrimination, and undermine compliance with international human rights law (IHRL) and international humanitarian law (IHL)"⁴⁷

Autonomous devices are likely to encompass bias in gender, age, race, sexual orientation, and others⁴⁸. Concrete examples of those flaws are that "(f)acial recognition software struggles to recognize people of color; voice recognition struggles to respond to women's voices or non-North American accents; photos of anyone standing in a kitchen are labeled as women; people's bail is denied because a program decided that a woman of color was more likely to re-offend than a white woman."⁴⁹ This bias arises from diverse

45 INTERNATIONAL COMMITTEE OF THE RED CROSS, Rule 90.

46 SCHARRE, 2018, pp. 289.

47 ACHESON, 2021.

48 ACHESON, 2019.

49 ACHESON, 2019.

factors, such as the devices' information sources, a lack of diversity in the programmer's team, and of preventive measures. When LAWS is allowed to target a person it means that deployers accepted it to strengthen or enlarge prevailing frameworks of inequality: "The prejudices in our society live in our data-sets, our categories, our labels and our algorithms. Killing people based on pre-programmed labels and identities will always pull us towards reinforcing prejudices or structures of oppression."⁵⁰

Worsening the scenario, autonomous devices are inherently unpredictable, and their decision-making process might be a black box even to programmers⁵¹. Thus, it is not only impossible to foresee the LAWS course of action, but also to trace back its path to targeting. This means that LAWS might fire a target based on bias, and verifying the existence of this bias might be (almost) impossible.

4. International Case Law and moral damage *in re ipsa*

The general rule is that the party alleging damage has the burden⁵² of producing evidence on the disputed facts and mixed issues of law and facts (such as moral damage), and persuading the court on this regard, which means that the doubt favors the party who does not carry the burden. However, there are cases in which the burden of proof rests on the counterpart or in both parties, especially considering who possess the proof or is able to produce them, the imbalance of power among parties, and the vulnerability of one of the parties. In sum, statutes or courts make an equitable distribution of the burden of proof and persuasion or even shift it based on legal presumptions. For example, many courts presume the moral suffering once it is demonstrated a situation of inhuman or degrading treatment, extrajudicial killings or violation of human rights and shall therefore award moral damages.⁵³ The Inter-American Court of Human Rights (ICHR) has a vast jurisprudence on moral damages⁵⁴ and, in many cases, has stated that

50 STOP KILLER ROBOTS, Problems with autonomous weapons.

51 MATTHIAS, 2004, pp.175.

52 PERMANENT COURT OF INTERNATIONAL JUSTICE, The Mavrommatis Jerusalem Concessions, 1925.

53 REDRESS, 2013, pp.63-64.

54 INTER-AMERICAN COURT OF HUMAN RIGHTS, Velásquez Rodríguez, 1989; Aloeboetoe Et. al. vs Suriname, 1993; Loayza Tamayo vs Peru, 1998; and Cantoral Benavides Case vs Peru, 2001.

considering the inhuman and degrading treatment, no evidence is necessary to recognize the moral damage. In *Velásquez Rodríguez vs. Honduras*, in the merits sentence, the IACR stated that the simple fact of long-lasting isolation and coercive incommunicability represents an inhuman and cruel treatment that causes moral damage.⁵⁵ In *Aloeboetoe et al. vs. Suriname*,⁵⁶ the IACHR stated that no evidence is required to conclude that each of the following acts are part of the moral damages suffered by the victims: were deprived from liberty, had to grab their own graves, knew they were condemned to die for no reason, and were latter killed.⁵⁷ In *Loayza Tamayo vs. Peru*, the IACHR again stated that all human beings subject to that kind of aggression and abuses of the case would experience moral suffering and that evidence is required to arrive at this conclusion.⁵⁸ In *Cantoral Benavides Case vs. Peru*,⁵⁹ ICHR reaffirmed the its jurisprudence in the sense that moral damages need not to be proved as regards the victim's parents.⁶⁰ In *Mapiripán Massacre* the IACHR affirmed that there is no burden of proof to demonstrate the mental harm to the victim's next of kin.⁶¹

In sum, some violations have as inevitable consequence a presumption of moral damage:

55 INTER-AMERICAN COURT OF HUMAN RIGHTS, *Velásquez Rodríguez Case*, 1988. At the reparation sentence, the Court expressly referred to the probationary file that demonstrated moral damages INTER-AMERICAN COURT OF HUMAN RIGHTS, *Velásquez Rodríguez Case*, 1989. par.51.

56 INTER-AMERICAN COURT OF HUMAN RIGHTS. *Aloeboetoe Et. al. Case vs Suriname*, 1993.

57 INTER-AMERICAN COURT OF HUMAN RIGHTS. *Aloeboetoe Et. al. Case vs Suriname*, 1993.

58 INTER-AMERICAN COURT OF HUMAN RIGHTS. *Loayza Tamayo vs Peru*, 1998 "138. La Corte considera que el daño moral a la víctima resulta evidente, pues es propio de la naturaleza humana que toda persona sometida a agresiones y vejámenes como los que han sido probados en el presente caso experimente un sufrimiento moral. La Corte estima que no se requieren pruebas para llegar a esta conclusión."

59 INTER-AMERICAN COURT OF HUMAN RIGHTS. *Case of Cantoral-Benavides v. Peru*, 2001.

60 INTER-AMERICAN COURT OF HUMAN RIGHTS. *Case of Cantoral-Benavides v. Peru*, 2001. par 61.

61 INTER-AMERICAN COURT OF HUMAN RIGHTS. *Case of the "Mapiripán Massacre"v. Colombia*, 2005.

"146. Beyond the above, in a case such as that of the Mapiripán Massacre, the Court deems that no evidence is required to prove the grave impact on the mental and emotional well-being of the next of kin of the victims."

The Inter-American Court, as well as the ICJ, apply a 'presumption of immaterial damage' in cases of gross human rights violations, as 'non-material injury is an inevitable consequence of such violations. (...) The Court also relies on circumstantial evidence and presumptions where they 'lead to consistent conclusions as regards the facts of the case.'. In relation to moral harm for instance, where the Court has found that an individual has suffered gross human rights violations such as torture or ill-treatment, it will rely on the same evidence to consider that a person has also suffered moral damage. No additional evidence is needed for the consideration of compensation for moral harm⁶².

The European Court of Human Rights (ECHR) has also decided that victim might not need to demonstrate moral harm. Moral damage might be presumed considering the existence of a gross violation or torture. "In some cases, such as *Orhan v Turkey* or *Selçuk and Asker v Turkey*, the European Court of Human Rights awarded 'non-pecuniary damages' on account of the 'gravity of the breaches in question' or, in cases of gross violations such as torture, on account of the simple finding of the violation."⁶³ In *Hutchison Reid v. The United Kingdom*, the claimant stated that he was wrongly detained in a psychiatric hospital and had no access to a prompt and adequate review of the legality of his deprivation of freedom. According to the ECHR, the "long period of delay in the proceedings brought by the applicant for his release and considers that some feelings of frustration and anxiety must have arisen which justify an award of non-pecuniary damage".⁶⁴ In *Abu Zubaydah v Lithuania* the ECHR affirmed that if the facts occurred mainly in the helm of knowledge of the authorities of the State, a strong presumption arises regarding the injury.⁶⁵ In the same sense, in *Selmouni v. France*⁶⁶

62 REDRESS, 2013, pp. 63/64.

63 INTERNATIONAL COMMISSION OF JURISTS, 2006, pp.137.

EUROPEAN COURT OF HUMAN RIGHTS. Case *Orhan v Turkey*, 2002, par. 443.

64 EUROPEAN COURT OF HUMAN RIGHTS. Case of *Hutchison Reid v. The United Kingdom*, 2003 par. 87.

65 EUROPEAN COURT OF HUMAN RIGHTS. Case of *Abu Zubaydah v Lithuania*, 2018, par. 483 "the Convention proceedings do not in all cases lend themselves to a strict application of the principle *affirmanti incumbit probatio*. According to the Court's case-law under Articles 2 and 3 of the Convention, where the events in issue lie wholly, or in large part, within the exclusive knowledge of the authorities, for instance as in the case of persons under their control in custody, strong presumptions of fact will arise in respect of injuries and death occurring during that detention."

66 EUROPEAN COURT OF HUMAN RIGHTS. Case of *Selmouni v. France*, 1999, par. 87.

Salman v. Turkey⁶⁷, and Altay v. Turkey⁶⁸ strong presumptions of facts and the States have the burden to elucidate how the injuries occurred and bring forth proof that opposes the victim's allegation.

The conclusion is similar as regards to the African System of Human Rights, where moral damage shall also be presumed in cases of serious violations:

“(...) the African Commission is aware of its longstanding practice that the burden of proof rests on the government in cases of human rights violations. If the government provides no evidence to contradict an allegation of human rights violation made against it, the African Commission will take it as proven, or at the least probable or plausible.”⁶⁹

In sum, “Harm and suffering should be presumed in cases of serious human rights violations, including unlawful killing, enforced disappearance, arbitrary detention, torture and inhuman treatment.”⁷⁰ In this sense is the regional human rights mechanisms case-law.

5. LAWS killings and moral damage *in re ipsa*

Considering the provided framework on moral damage, LAWS killings and human dignity, and case law on moral damage *in re ipsa*, we turn back to the question of this paper: if the fact that LAWS killed or injured a person causes moral damages and gives rise to reparation, and also if it generates a presumption of moral damage, being unnecessary for the plaintiff to prove the moral suffering.

We claim that the fact that LAWS took the decision to kill or injury violates the human dignity of the person who was killed and her/his relatives

67 EUROPEAN COURT OF HUMAN RIGHTS. Case of Salman v. Turkey, 2000, par.99“Persons in custody are in a vulnerable position and the authorities are under a duty to protect them. Consequently, where an individual is taken into police custody in good health and is found to be injured on release, it is incumbent on the State to provide a plausible explanation of how those injuries were caused”

68 EUROPEAN COURT OF HUMAN RIGHTS Algür v. Turkey, 2002, par. 44.

69 AFRICAN COMMISSION ON HUMAN AND PEOPLES' RIGHTS. Gabriel Shumba v Republic of Zimbabwe, 2004, par. 140.

70 REDRESS, 2013, pp.63-64.

and his/her State. UDHR proscribes inhuman treatment⁷¹ and is grounded on the Kantian “Formula of humanity”⁷² that states that humans cannot be treated as objects.⁷³ A person killed or injured by LAWS is a mere object. LAWS are inhuman, do not feel remorse compassion, and do not have a sense of otherness. If a human being has the power to kill or not, her or his intrinsic features of humanity might decide to give the victim a second chance, an algorithm not. A killing or injury by LAWS disrespects human dignity since they are incapable of grasping the value of human life. It is arbitrary to lose a life based on the algorithm’s decision.⁷⁴ Furthermore, algorithms encompass bias that might impact the LAWS decision on a target. This bias is unlikely to be discovered considering the inherent unpredictability of LAWS and the incapability to trace back the decision-making process when complex algorithms and environments are at stake. Thus, LAWS misdoings violate human dignity and give rise to reparation. We also recall that there is the right to be compensated for moral damage as well established in human rights mechanisms case-law.⁷⁵

Regarding the presumption, killing or injury of LAWS are necessarily inhuman treatment. Therefore, such killings violate human dignity. Furthermore, international case-law favors the presumption of moral harm in cases of grave breaches of human rights. This paper argues that the fact that LAWS killed or injured a person generates a presumption of moral

71 UNITED NATIONS. UNIVERSAL DECLARATION OF HUMAN RIGHTS, 1948, Art. 5. “No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.”

72 KERSTEIN, 2019.

“Kant sets forth several formulations of the categorical imperative, that is, the principle he holds to be the supreme principle of morality. One formulation, often called the “Formula of Humanity” states:

“So act that you treat humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means. (Kant 1785: 429)” The Formula of Humanity contains the command that we ought never to treat persons merely as means.”

73 JOHNSON & AXINN, 2013.

“The concept of human dignity is complicated and explained variously. As a minimum, although not without controversy, we may take the statement of the Universal Declaration of Human Rights (1949, article 1): ‘All human beings are born free and equal in dignity and rights.’ Dignity is often taken as the property that makes humans eligible for the human rights listed in the Universal Declaration. Put another way, in Kant’s (1959: 435) phrase, dignity means that the individual has ‘an intrinsic worth,’ and has ‘no equivalent.’ This is to say that each human must be respected for his or her unique inherent or intrinsic value”

74 HUMAN RIGHTS WATCH, 2015, pp 8-9.

75 REDRESS, 2013, pp.63.

damage, being unnecessary for the plaintiff to prove the moral suffering. On the ground of justice, the counterpart might produce a probationary file to counter this presumption.

6. Conclusion

This paper claims that the fact that LAWS killed a person not only violates human dignity and gives rise to reparation, but also generates a presumption of moral damage, being unnecessary for the plaintiff to prove the moral suffering. Nonetheless, this is an interpretation of ARSIWA, which is also open to other perspectives. From a *de lege ferenda* perspective, it would be advisable that a treaty or other regulations that hopefully will be developed to address LAWS are explicit about the moral damage of the killings of LAWS. However, it is unlikely that heavily militarized States such as the United States, Russia and China would agree on such a provision. Another possible venue would be an advisory opinion or judgment of the International Court of Justice or another international court in this regard. This treaty, or even the advisory opinion or ruling, would have a threefold impact: access to justice, education, and push for a ban. On access to justice, it would facilitate the victim's redress as plaintiffs would not face an unsurmountable technological probationary obstacle to pursue their cases. This framework is relevant not only for international courts but also to domestic courts that apply international law and are often the first to deal with international humanitarian law breaches. On the pedagogic side, it would stimulate States to take measures to act to prevent killings by LAWS. It would also contribute to step towards a ban on LAWS, or at least that it is used solely against non-human targets, as States would face the burden of reparation every time a human is killed or injured.

Referências

ACHESON, Ray. Women's International League for Peace and Freedom. *The Human Element*. Civil society perspectives on the Convention on Certain Conventional Weapons (CCW)'s Group Governmental Experts on Lethal Autonomous Weapon Systems 3–13 August 2021. CCW Report VOL. 9. N. 3. Reaching Critical Will, 2021.

- ACHESON, Ray. Gender and Bias. Women's International League for Peace and Freedom. What does gender have to do with killer robots? Women's International League for Peace and Freedom In Campaign to Stop Killer Robots Campaigner's kit, 2019. https://www.stopkillerrobots.org/wp-content/uploads/2019/04/Campaigners-Kit-FINAL_EN.pdf Accessed March 21 2022.
- AFRICAN COMMISSION ON HUMAN AND PEOPLES' RIGHTS. Gabriel Shumba v Republic of Zimbabwe (288/2004) *Par. 140*. Available at https://www.achpr.org/public/Document/file/English/288_04_gabriel_shumba_v_zimbabwe.pdf Accessed March 22 2022.
- AMOROSO, Daniele. Autonomous Weapons Systems and International Law: A Study on Human-Machine *Interactions in Ethically and Legally Sensitive Domains*. Edizioni Scientifiche Italiane, 2020. <https://doi.org/10.5771/9783748909538>
- ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN). *ASEAN Human Rights Declaration*, November 18 2012, available at: <https://asean.org/asean-human-rights-declaration/> Accessed March 20 2022.
- CAMPAIGN TO STOP KILLER ROBOTS. *Response to report of killer robots in Libya*, 2021. Available at <https://www.stopkillerrobots.org/2021/06/response-to-report-of-killer-robots-in-libya/> Accessed March 17 2022.
- COUNCIL OF EUROPE, *European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14*, 4 November 1950, ETS 5.
- COUNCIL OF EUROPE. *Convention for the Protection of Individuals with Regard to the Automatic Processing of Individual Data*, January 28 1981, ETS 108.
- COUNCIL OF EUROPE. *Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data*, October 10 2018. CETS No. 223.
- COUNCIL OF EUROPE PORTAL available at: <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treaty-num=223> Accessed March 20 2022.
- CRAWFORD, James. *Reparation. In State Responsibility: The General Part (Cambridge Studies in International and Comparative Law)*. Cambridge: Cambridge University Press, 2013, pp. 480-505 doi:10.1017/CBO9781139033060.021 Accessed 20 March 2021.
- EUROPEAN COURT OF HUMAN RIGHTS. *Case of Selmouni v. France*. (Application no. 25803/94) Judgement of July 28 1999. Available at

- <https://hudoc.echr.coe.int/eng?i=001-58287> Accessed March 22 2022.
- EUROPEAN COURT OF HUMAN RIGHTS. *Case of Salman v. Turkey* (no. 21986/93), Judgment of June 27 2000. Available at: <https://hudoc.echr.coe.int/eng?i=001-58735> Accessed March 20 2022.
- EUROPEAN COURT OF HUMAN RIGHTS. *Case Orhan v Turkey*, Judgment of June 18 2002 available at: <https://hudoc.echr.coe.int/app/conversion/pdf/?library=ECHR&id=003-570780-573224&file-name=003-570780-573224.pdf> Accessed March 21 2022.
- EUROPEAN COURT OF HUMAN RIGHTS *Algür v. Turkey* (no. 32574/96), judgment of October 22 2002. available at: <https://hudoc.echr.coe.int/eng?i=001-65259>
- EUROPEAN COURT OF HUMAN RIGHTS. *Case of Hutchison Reid v. The United Kingdom*. Application no. 50272/99. February 20 2003 <https://hudoc.echr.coe.int/eng?i=001-60954> Accessed March 21 2022
- EUROPEAN COURT OF HUMAN RIGHTS. *Case of Abu Zubaydah v Lithuania*, May 31 2018 <https://hudoc.echr.coe.int/eng?i=001-183687> Accessed March 21 2022
- GRAEFRATH, Bernhard. Responsibility and Damages Caused : Relationship between Responsibility and Damages (Volume 185), in: *Collected Courses of the Hague Academy of International Law*, 1984. http://dx.doi.org/10.1163/1875-8096_pplrdc_A9789024731664_01
- HEYNS, Christof. Autonomous weapons in armed conflict and the right to a dignified life: an African perspective, *South African Journal on Human Rights*, 33:1, 46-71, 2017. <https://doi.org/10.1080/02587203.2017.1303903>
- HEYNS, Christof. *Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions*, 2014 A/69/265 Available at <https://documents-dds.ny.un.org/doc/UNDOC/GEN/N14/497/36/PDF/N1449736.pdf?OpenElement> Accessed March 17 2022.
- HUMAN RIGHTS WATCH. *Mind the Gap The Lack of Accountability for Killer Robots*, 2015. Available at <https://www.hrw.org/report/2015/04/09/mind-gap/lack-accountability-killer-robots> Accessed March 21 2022.
- INTER-AMERICAN COURT OF HUMAN RIGHTS. *Velásquez Rodríguez Case*, Inter-Am.Ct.H.R. (Ser. C) No. 4 (1988), 29 July 1988.
- INTER-AMERICAN COURT OF HUMAN RIGHTS. *Velásquez Rodríguez Case*, Inter-Am.Ct.H.R. (Ser. C) No. 7 (1989), Compensatory Damages, Judgment of July 21, 1989. Available at https://www.corteidh.or.cr/docs/casos/articulos/seriec_07_esp.pdf Accessed March 17 2022.

- INTER-AMERICAN COURT OF HUMAN RIGHTS. *Aloeboetoe Et. al. Case vs Suriname*, Series C No. 15, Reparations, Judgment of September 10, 1993
- INTER-AMERICAN COURT OF HUMAN RIGHTS. *Loayza Tamayo vs Peru*, Series C No. 42, Reparations, Judgment of November 2, 1998 available at https://www.corteidh.or.cr/docs/casos/articulos/seriec_42_esp.pdf Accessed March 18 2022.
- INTER-AMERICAN COURT OF HUMAN RIGHTS. *Cantoral Benavides Case vs Peru*, Series C No. 88, Reparations, Judgment of December 3, 2001. available at https://www.corteidh.or.cr/docs/casos/articulos/seriec_88_ing.pdf. Accessed March 18 2022.
- INTER-AMERICAN COURT OF HUMAN RIGHTS. *Mapiripán Massacre v Colombia*, Judgment (Merits, Reparations, and Costs), September 15 2005. https://www.corteidh.or.cr/docs/casos/articulos/seriec_134_ing.pdf Accessed March 18 2022
- INTERNATIONAL COMMISSION OF JURISTS. *The Right to a Remedy and to Reparation for Gross Human Rights Violations – A Practitioners’ Guide* ISBN: 92-9037-106-4 Geneva, December 2006 ISBN: 978-958-930771-7 Bogotá, Colombia, June 2007. Available at <https://www.icj.org/wp-content/uploads/2012/08/right-to-remedy-and-reparations-practitioners-guide-2006-eng.pdf> Accessed March 18 2022
- INTERNATIONAL COMMITTEE OF THE RED CROSS. *Geneva Convention Relative to the Treatment of Prisoners of War* (Third Geneva Convention), August 12 1949, 75 UNTS 135, available at: <https://www.refworld.org/docid/3ae6b36c8.html> Accessed March 20 2022.
- INTERNATIONAL COMMITTEE OF THE RED CROSS, *Autonomous weapons: Decisions to kill and destroy are a human responsibility*, 2016. Available at <https://www.icrc.org/en/document/statement-icrc-lethal-autonomous-weapons-systems> Accessed March 18 2022.
- INTERNATIONAL COMMITTEE OF THE RED CROSS. *Ethics and autonomous weapon systems: An ethical basis for human control?* Geneva, April 3 2018 p. 2. Available at <https://www.icrc.org/en/document/ethics-and-autonomous-weapon-systems-ethical-basis-human-control> Accessed March 19 2022.
- INTERNATIONAL COMMITTEE OF THE RED CROSS. *Customary International Humanitarian Law Database*, <https://ihl-databases.icrc.org/customary-ihl> Accessed March 20 2022.
- INTERNATIONAL LAW COMMISSION. *Draft Articles on Responsibility of*

- States for Internationally Wrongful Acts*, November 2001, Supplement No. 10 (A/56/10), chp.IV.E.1, available at: <https://www.refworld.org/docid/3ddb8f804.html> Accessed March 20 2022.
- INTERNATIONAL LAW COMMISSION. *Draft articles on Responsibility of States for Internationally Wrongful Acts*, with commentaries 2001 No. 10 (A/56/10), chp.IV.E.1 available at https://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf Accessed March 20 2022.
- JOHNSON, Aaron M. & AXINN, Sidney. *The Morality of Autonomous Robots*, *Journal of Military Ethics*, 12:2, 129-141, 2013. DOI: 10.1080/15027570.2013.818399
- KERSTEIN, Samuel. Treating Persons as Means. *The Stanford Encyclopedia of Philosophy*, 2019, Edward N. Zalta (ed.), Available at <https://plato.stanford.edu/entries/persons-means/> Accessed March 12 2022
- MATTHIAS, Andreas. The responsibility gap: Ascribing responsibility for the actions of learning automata. *Ethics Inf Technol* 6, 175–183, 2004. <https://doi.org/10.1007/s10676-004-3422-1>
- MOYES, Richard. Target profiles, discussion paper regarding ‘autonomy’ and weapons systems, *Article 36*, 2019. Available at: <https://article36.org/wp-content/uploads/2019/08/Target-profiles.pdf> Accessed March 10 2022.
- ORGANIZATION OF AFRICAN UNITY. *African Charter on Human and Peoples’ Rights* (“*Banjul Charter*”), June 27 1981, CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), Entry into force: October 21 1986.
- ORGANIZATION OF AMERICAN STATES (OAS). *American Convention on Human Rights*, “Pact of San Jose”, Costa Rica, November 22 1969.
- PERMANENT COURT OF INTERNATIONAL JUSTICE, *The Mavrommatis Jerusalem Concessions*, 1925 PCIJ (ser A) No 5.
- REDRESS. *Reaching for Justice: The Right to Reparation in the African Human Rights System*, October 2013, available at: <https://www.refworld.org/docid/528343bf4.html> Accessed March 20 2022.
- SALIBA, Aziz Tuffi; BARBOSA, Lutiana Valadares Fernandes. Book review: Autonomous weapons systems and International Law: a study on human-machine interactions in ethically and legally sensitive domains. *Revista de Direito Internacional*, Brasília, v. 17, n. 3, p. 600-603, 2020. DOI: <https://doi.org/10.5102/rdi.v17i3.7550>. Available at <https://www.publicacoes.uniceub.br/rdi/article/view/7550> Accessed March 20 2022.
- SCHARRE, Paul. *Army of None: Autonomous Weapons and the Future of War*, WWNorton, 2018

- STOP KILLER ROBOTS. *Problems with autonomous weapons*. Available at <https://www.stopkillerrobots.org/stop-killer-robots/facts-about-autonomous-weapons/>
- TADDEO, Mariarosaria and BLANCHARD, Alexander. *A Comparative Analysis of the Definitions of Autonomous Weapons* (May 10, 2021). Available at SSRN: <https://ssrn.com/abstract=3941214> or <http://dx.doi.org/10.2139/ssrn.3941214> Accessed March 18 2022.
- UNITED NATIONS GENERAL ASSEMBLY, *Universal Declaration of Human Rights*, December 10 1948, Adopted by General Assembly Resolution 217 A(III) of December 10 1948.
- UNITED NATIONS GENERAL ASSEMBLY. *Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law A/RES/60/147*, 2006.
- UNITED NATIONS SECURITY COUNCIL. *Report S/2021/229*, 2021. Available at <https://undocs.org/S/2021/229> Accessed March 18 2022.
- UNITED STATES DEPARTMENT OF DEFENSE. *Directive 3009*, p. 13, 2012. Available at. <https://www.esd.whs.mil/portals/54/documents/dd/issuances/dodd/300009p.pdf> Accessed March 17 2022.

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RESUMO: O presente artigo tem como objetivo discutir se o fato de Armas Letais Autônomas (LAWS) matarem ou ferirem uma pessoa gera dano moral e se há uma presunção de dano moral, sendo desnecessário ao autor provar o sofrimento moral para ter direito a reparação do Estado. Primeiramente, o artigo define LAWS e fornece uma breve perspectiva sobre dano moral no direito internacional com base no Projeto de Artigos da Comissão de Direito Internacional sobre Responsabilidade Internacional do Estado e na doutrina. Em seguida, discute se mortes ou lesões causadas por LAWS violam o princípio da dignidade humana. Na sequência, ressalta a jurisprudência de cortes internacionais de direitos humanos sobre dano moral *in re ipsa*. O artigo conclui que as mortes ou lesões da LAWS geram uma presunção relativa de dano moral. **Palavras-chave:** Sistemas de Armas Autônomas, Dano Moral, Dignidade da Pessoa Humana, Responsabilidade Internacional do Estado.

ABSTRACT: The present article aims to discuss if the fact that Lethal Autonomous Weapons Systems (LAWS) killed or injured a person generates moral damage, and if there is a presumption of moral damage, being unnecessary for the plaintiff to prove the moral suffering to be entitled to reparation from the State. First, the article defines LAWS and provides a brief perspective on moral damage in international law based on the International Law Commission's Draft Articles on State Responsibility and scholarship. Next, it discusses if LAWS killings or injuries violate the principle of human dignity. Then it highlights international case-law from the international human rights courts on moral damage *in re ipsa*. The article concludes that LAWS's killings or injuries generate a relative presumption of moral damage.

Keywords: Autonomous Weapons Systems, Moral damage, Human Dignity, International State Responsibility.

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