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LETHAL AUTONOMOUS WEAPON SYSTEMS (LAWS) ENFORCEMENT OF HUMAN RIGHTS BY ALGORITHMS?

The aim of present article is to approach the relatively new field of lethal autonomous robots and weapon systems (LARs or LAWS) from the perspective of international law with a focus on human rights compliance. Initially, the topic became the subject of public awareness and discussions in 2009 and soon acquired both interest and criticism. The development of such weapon systems rises at the same time legal, moral, practical and ethical questions. In the absence of specific sui generis legal provisions regarding them, the article shall try to evaluate to what extent such concepts find legal and moral justification by the existing provisions of humanitarian law. In any case, as LAWS provide for important benefits, they should be considered under serious legal safeguard due to their impact on human rights, out-of-combat units and civilian population. All such benefits must be guided by ethical principles and legal provisions, either those already applied or new ones that would better fit this specific field.

Keywords: LAWS, UN, Geneva Convention, humanitarian law.

1. INTRODUCTION

The aim of the present article is to approach the relatively new field of lethal autonomous robots and weapon systems (LARs or LAWS) from the perspective of international law with a focus on human rights compliance.

Initially, the topic became the subject of public awareness and discussions in 2009. As one of the most important stakeholders in questions of humanitarian intervention it was via the Red Cross that the topic entered the domain of public discussion.

“Given the rapid pace of development of military robotics and the pressing dangers that these pose to peace and international security and to civilians in war, we call upon the international community to urgently commence a discussion about an arms control regime to reduce the threat posed by these systems. We propose that this discussion should consider the following: The prohibition of the development,

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deployment and use of armed autonomous unmanned systems; machines should not be allowed to make the decision to kill people.”¹

The next level of such discussion was brought in by the UN through its independent human rights expert Heyns that urged a “pause in progress to ‘a world where machines are given the power to kill humans’ was” to elaborate “a global moratorium on the development and deployment of lethal autonomous robots” aiming at declaring and implementing “national moratoria on the production, assembly, transfer, acquisition, deployment and use of LARs, until a framework on the future of LARs has been established.”²

2. PRESENT CHALLENGES

Once a public concern, several members of the UN have addressed the LAWS issue, by specifically considering them as an emerging threat to many established values of humanity. Nevertheless, since this is a relatively new domain at the present stage, it requires further discussion and thought as well as a need to de-lineate clearly what type of systems are included.³

The Canadian representative at the preparatory discussions on the Convention on Conventional Weapons as one of the most interested and initial investors on the issue specified: “We hope that a substantial report could be used as basis for further work (...) Canada supports the proposal to organize an informal meeting of experts to discuss emerging technologies in the field of lethal autonomous weapons systems. We have followed discussions closely and think it would be encouraging to look at issues pertaining to the development of these weapons. We’re pleased to note that this view is shared by many states to the Convention on Conventional Weapons.”⁴

On the other side, the UN Secretary-General “took note of ‘killer robots’ in his report on the Protection of Civilians in Armed Conflict issued in November 2013, saying important questions have been raised as to the ability of such systems to operate in accordance with international humanitarian and human rights law.”⁵

The UN meeting of experts on LAWS took place under the auspices of the United Nations Office in Geneva where: “The Meeting decided to convene under the overall responsibility of the Chairperson an informal meeting of experts of up to five days during the week of 13 to 17 April 2015 to discuss the questions related to emerging

¹ Asaro, P. 2012. On banning autonomous weapon systems: human rights, automation, and the dehumanization of lethal decision-making. *International Review of the Red Cross*, 94(886), pp. 687-709.

² United Nations. 2013. UN human rights expert urges global pause in creation of robots with ‘power to kill’. Available at: <https://news.un.org/en/story/2013/05/440982> (10. 10. 2024).

³ United Nations. 2013.

⁴ Campaign to Stop Killer Robots. 2014. Country Statements on Killer Robots - Compilation by the Campaign to Stop Killer Robots. Available at: https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_CountryStatus_14Mar2014.pdf (10. 10. 2024).

⁵ United Nations. 2014. UN meeting targets ‘killer robots’. Available at: <https://news.un.org/en/story/2014/05/468302-un-meeting-targets-killer-robots> (10. 10. 2024).

technologies in the area of lethal autonomous weapons systems, in the context of the objectives and purposes of the Convention.”⁶

2.1. Initial Concerns and Human Rights

Among a broad variety of issues discussed during the aforementioned activities, most of them being very specific, human rights have been addressed rather general in point 7:

“Overarching issues (a) Human rights and ethical issues (i) What would be the impact of the development and deployment of LAWS on human rights, in particular the right to life and the right to dignity?”⁷

In this context point 4 should be read in a more creative form as below: “(b) in what situations are distinctively human traits, such as fear, hate, sense of honour and dignity, compassion and love, desirable in combat? In what situations do machines that lack emotions offer distinct advantages over human combatants? (c) international humanitarian law indicates how a party to a conflict should behave in relation to people at its mercy, how would machines comprehend such situations?”

Summing up, one main question remains: How may an algorithm ensure compliance with human rights? This question entails the sub-question as to application of humanistic concepts in modern warfare.

Apparently, the impacts of human rights on LAWS (and vice versa) are not yet sufficiently analysed and requires a detailed approach. At the same time, it is highly unlikely that LAWS will be subject to a worldwide ban.⁸

However, a producer of intelligent weapon systems in Canada (Clearpath Robotics) stated: “Those who might see business opportunities in this technology to seek other ways to apply their skills and resources for the betterment of humankind (...) despite our continued involvement with Canadian and international military research and development, Clearpath Robotics believes that the development of killer robots is unwise, unethical, and should be banned on an international scale (...) would a robot have the morality, sense, or emotional understanding to intervene against orders that are wrong or inhumane? No. Would computers be able to make the kinds of subjective decisions required for checking the legitimacy of targets and ensuring the proportionate use of force in the foreseeable future? No. (...) In our eyes, no nation in the world is ready for killer robots—technologically, legally, or ethically.”⁹

⁶ United Nations. 2015. Convention on Certain Conventional Weapons – Informal Meeting of Experts. Available at: <https://meetings.unoda.org/ccw-ime/convention-certain-conventional-weapons-informal-meeting-experts-2015> (10. 10. 2024).

⁷ United Nations. 2015. Meeting of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects. Available at: https://digitallibrary.un.org/record/3856238/files/CCW_MSP_2015_9-EN.pdf (10. 10. 2024).

⁸ Despite the fact that there are some rather political attempts to do so: ICRC. 2015. Model United Nations urges Ban on Killer Robots. Available at: <https://www.icrac.net/model-united-nations-urges-ban-on-killer-robots/> (10. 10. 2024).

⁹ ICRC. 2014. Canada’s biggest robot company rejects ‘killer robots’. Available at: <http://icrac.net/2014/08/canadas-biggest-robot-company-rejects-killer-robots/> (10. 10. 2024).

It can be said with a certain degree of security as we shall try to show below that as far as there is demand there shall also exist supply, without forgetting that in the present discussion, the concept of technical capabilities, which not only exist, but expend every day, also needs to be added to the idea of demand.

As the vast majority of producers will take a different position, such statements cannot substitute the need to find a legal basis for the use of such systems in the future. According to Down: "...limits ensure there is always an element of human decision-making in carrying out lethal force. No matter how advanced the technology, there is always the potential for glitches and malfunctions with technology that could harm soldiers or civilians."¹⁰

At the same time, an "international coalition of human rights activists, academics and security experts called the Campaign to Stop Killer Robots says that because technology is advancing so rapidly, world leaders must adopt a treaty to ban the weapons. Alex Neve, Secretary General of Amnesty International Canada, said lethal weapons without human control — whether they're used for policing or military purposes — would violate international humanitarian law."¹¹

The Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects inclusive of its decision and Protocols (as last amended on 21 December 2001) has not yet been amended with regard to LAWS, but "taking a wait-and-see approach could lead to further investment by states in the development of these weapons systems and their rapid proliferation in a new arms race."¹²

However, to-date no comprehensive analysis of the threats and potential solutions to problems has been made publicly available. Therefore, the present article aims at pursuing a detailed investigation in the relevant issues and intends to achieve identification of the aspects justifiably raising concern. In so doing, necessary aspects for future amendments to the said Convention will be outlined. It will contribute to substantiated decision-making at domestic, community and international level. The article will try to give a modest contribution to substantiate the position on the IHL taking into consideration, *inter alia*, the new international situation during the ongoing war between Russia and Ukraine and possible escalations in both warfare tactics and human rights protection.

3. ADVANTAGES OF APPLYING LAWS

3.1. Technology

Technology is taking over more and more parts of our lives. Most of us today are incapable of remembering for example a certain phone number because we have it stored at our smart phone memory, therefore there is no need to use our own. Lethal Autonomous Weapon Systems does not have to be a priori excluded from such application.

¹⁰ Harris, K. 2015. Killer robots pose risk and advantages for military use. CBC. Available at: <http://www.cbc.ca/m/news/politics/killer-robots-pose-risks-and-advantages-for-military-use-1.3026963> (10. 10. 2024).

¹¹ Harris, K.

¹² Axworthy, L. & Walter, D. 2016. New Technology for peace and protection. Walterdorn. Available at: <https://walterdorn.net/pub/236/> (10. 10. 2024).

In most of the cases, opinions included some provisions of humanitarian law to justify these weapons. Autonomous weapon systems are in some way a modern and very sophisticated weaponry as well as highly automated weapon systems that are created generally to set up in environments areas such as air, land or sea in which the risk for the civilians is very small.¹³

Moreover, those weapons are limited generally to use in defensive contexts against other machines. In that way, such systems can be considered even more reliable than a human military unit in the heat of battle always assuming that their ultimate control relies on a person or group of persons, highly trained, ethically and morally sound whom have either designed the algorithm or operate the device remotely.¹⁴

3.2. Accuracy

Therefore, autonomous weapon systems have the privileges to identify and collect targets more easily than a simple soldier, and in this way, it can provide more protection not only of its own personnel, but also of civilians, civilian property and other nonmilitary targets.

3.3. Decision-Making

Another point which needs to be considered as an advantage for the usage of LAWS is that the machines are much faster in decision-making than people. The specific automation in military systems of all kinds, can provide a quicker response than people who need to assess, calculate and respond. Also, they can sometimes be more precise and accurate in responding to a military threat.¹⁵

Moreover, the use of robots would decrease the level of casualties since no direct impact shall occur between the armed forces and the enemy, and military operation shall be carried out only using a remote operator.¹⁶

Therefore, the exact and right usage of these machines by well-trained personnel, in addition to the old and standard forms of warfare can provide a safer environment, despite the oxymoron concept of having both war and safety.

4. DISADVANTAGES

The highest risk of such weapon systems relies on the volatile concept of the respect of human rights in the field of battle and even beyond it. Humanitarian law per se, since the Antigone and Polynices, wants to take into account the direct applicability of the person with everything human nature has, such as feelings, compassion, dilemmas, love, hate, etc.

¹³ Guizzo, E. 2016. Autonomous weapons 'could be developed for use within years', says arms-control group. IEEE SPECTRUM. Available at: <https://spectrum.ieee.org/autonomous-weapons-could-be-developed-for-use-within-years> (10. 10. 2024).

¹⁴ Guizzo, E.

¹⁵ Van Den Boogaard, J. 2016. Proportionality and autonomous weapons systems. *Journal of International Humanitarian Legal Studies*, 6(2), pp. 247-283.

¹⁶ Van Den Boogaard, J. 2016. Proportionality and autonomous weapons systems. *Journal of International Humanitarian Legal Studies*, 6(2), pp. 247-283.

4.1. *The Geneva Convention of 1949*

The Geneva Convention of 1949 on its article 22 explicitly mentions, *inter alia*, that: “...They shall be treated humanely and cared for by the Party to the conflict in whose power they may be, without any adverse distinction founded on sex, race, nationality, religion, political opinions, or any other similar criteria. Any attempts upon their lives, or violence to their persons, shall be strictly prohibited; in particular, they shall not be murdered or exterminated, subjected to torture or to biological experiments; they shall not wilfully be left without medical assistance and care, nor shall conditions exposing them to contagion or infection be created.”¹⁷

In case we want to see and analyse this article in *stricto sensu*, there is a direct need of “human treatment,” therefore comes the question: can a certain machine, despite of being remotely, if so, operated by humans, provide a human treatment? Is human treatment an exclusivity of humans only? At least this is what IHL has been providing us for centuries now, the importance and necessity of humans behind weapons.

4.2. *Proportionality*

A core element of humanitarian law especially when applied in the battlefield is proportionality, of actions, response and decision-making.¹⁸ Such proportionality must therefore apply the concept of distinction, including civilians, wounded and other hors de combat personnel. Up to now there is no direct evidence that AI, can provide such a distinction.

4.3. *Public Conscience*

According to the aforementioned Geneva Convention, wherever codified legislation does not apply or has not been developed yet, then the general norms of humanity and the dictates of public conscience shall take their place in being therefore a direct application of the general principles of justice.¹⁹ The development of technology can push humans far away from the battlefield and the application of conscience can become quite relative if applied at a different place and also at different times. The role of humans becomes therefore ethically questionable by transforming the operator from an actor into a spectator of warfare, comparable to a film lover who watches their favourite action movie in a cinema.

¹⁷ Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Geneva, 12 August 1949. Available at: <https://ihl-databases.icrc.org/en/ihl-treaties/gci-1949?activeTab=1949GCs-APs-and-commentaries> (10. 10. 2024).

¹⁸ International Committee of the Red Cross. 2016. Views of the ICRC on autonomous weapon systems - paper submitted to the Convention on Certain Conventional Weapons Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS). Available at: <https://www.icrc.org/en/document/views-icrc-autonomous-weapon-system> (10. 10. 2024).

¹⁹ International Committee of the Red Cross. The Geneva Conventions of 12 August 1949. Available at: <https://www.icrc.org/sites/default/files/external/doc/en/assets/files/publications/icrc-002-0173.pdf> (10. 10. 2024).

5. CONCLUSIONS

The use of LAWS on the battlefield is still a new concept in both warfare and its' legal regulatory acts. The core of the debate rests with the dilemma of saving lives on one side and abusing them on the other, if by abusing we would consider the lack of ethics, compassion and judgment which as per today remains an exclusivity of humanity.

In this article, we tried to evaluate and present the advantages and disadvantages of LAWS which concern both human life and dignity either from the attacker's or the defenders' side as such rights make no distinction regarding the side of the battlefield.

Nevertheless, despite the lack of legislation, customary law and practice, the most important element of legality is still there and is immutable: machines and AI are made by humans and humans shall comply with all standards of warfare and be considered responsible for it. It makes absolutely no difference if a soldier or his commander fires an arrow or a smart high-tech bomb, or even if that smart bomb fires itself based on a complicated algorithm. Even in that case the PERSON(S) responsible for that algorithm shall be liable before the humanitarian law and suffer the consequences of their actions.

LIST OF REFERENCES

- Asaro, P. 2012. On banning autonomous weapon systems: human rights, automation, and the dehumanization of lethal decision-making. *International Review of the Red Cross*, 94(886), pp. 687-709. <https://doi.org/10.1017/S1816383112000768>
- Axworthy, L. & Walter, D. 2016. New Technology for peace and protection. Walterdorn. Available at: <https://walterdorn.net/pub/236/> (10. 10. 2024).
- Campaign to Stop Killer Robots. 2014. Country Statements on Killer Robots - Compilation by the Campaign to Stop Killer Robots. Available at: https://www.stopkillerrobots.org/wp-content/uploads/2013/03/KRC_CountryStatus_14Mar2014.pdf (10. 10. 2024).
- Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Geneva, 12 August 1949. Available at: <https://ihl-databases.icrc.org/en/ihl-treaties/gci-1949?activeTab=1949GCs-APs-and-commentaries> (10. 10. 2024).
- Guizzo, E. 2016. Autonomous weapons 'could be developed for use within years', says arms-control group. IEEE SPECTRUM. Available at: <https://spectrum.ieee.org/autonomous-weapons-could-be-developed-for-use-within-years> (10. 10. 2024).
- Harris, K. 2015. Killer robots pose risk and advantages for military use. CBC. Available at: <http://www.cbc.ca/m/news/politics/killer-robots-pose-risks-and-advantages-for-military-use-1.3026963> (10. 10. 2024).
- ICRAC. 2014. Canada's biggest robot company rejects 'killer robots'. Available at: <http://icrac.net/2014/08/canadas-biggest-robot-company-rejects-killer-robots/> (10. 10. 2024).
- International Committee of the Red Cross. The Geneva Conventions of 12 August 1949. Available at: <https://www.icrc.org/sites/default/files/external/doc/en/assets/files/publications/icrc-002-0173.pdf> (10. 10. 2024).
- ICRAC. 2015. Model United Nations urges Ban on Killer Robots. Available at: <https://www.icrac.net/model-united-nations-urges-ban-on-killer-robots/> (10. 10. 2024).

- International Committee of the Red Cross. 2016. Views of the ICRC on autonomous weapon systems - paper submitted to the Convention on Certain Conventional Weapons Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS). Available at: <https://www.icrc.org/en/document/views-icrc-autonomous-weapon-system> (10. 10. 2024).
- United Nations. 2015. Convention on Certain Conventional Weapons – Informal Meeting of Experts. Available at: <https://meetings.unoda.org/ccw-ime/convention-certain-conventional-weapons-informal-meeting-experts-2015> (10. 10. 2024).
- United Nations. 2015. Meeting of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects. Available at: https://digitallibrary.un.org/record/3856238/files/CCW_MSP_2015_9-EN.pdf (10. 10. 2024).
- United Nations. 2014. UN meeting targets 'killer robots'. Available at: <https://news.un.org/en/story/2014/05/468302-un-meeting-targets-killer-robots> (10. 10. 2024).
- United Nations. 2013. UN human rights expert urges global pause in creation of robots with 'power to kill'. Available at: <https://news.un.org/en/story/2013/05/440982> (10. 10. 2024).
- Van Den Boogaard, J. 2016. Proportionality and autonomous weapons systems. *Journal of International Humanitarian Legal Studies*, 6(2), pp. 247-283. <https://doi.org/10.1163/18781527-00602007>