Understanding LAWS

An autonomous military system, known as LAWS, may independently seek for and engage targets on land, in air and at sea, based on predetermined limitations and descriptions. With a variety of sensor suites and pre-programmed computer algorithms, LAWS are extremely advanced autonomous military weapon systems that can autonomously find, identify, track, engage, and kill enemy targets. Once activated, these weapon systems may eliminate targets without additional assistance from anyone. Therefore, by integrating AI into systems that manage weaponry, where humans would not be involved, LAWS on a large scale can change the way that war is fought.[2] The world's top military establishments are experiencing the AI-triggered Revolution in Military Affairs (RMA). Many developed nations have already deployed fully autonomous defence systems to thwart air assault. The Missile Defence Systems (MDS) are the most prevalent type of autonomous defence armament. MDS has been successfully deployed and tested in both the US and Israel. Israel and the UK have both used fire-and-forget systems. Even South Korea employs the SGR-A1, an autonomous mode sentry robot, in the demilitarised zone along the North Korean border. Under the NATO Joint Strike Missile program, Norway has an offensive autonomous system that will be used. A target ship or land-intervention can be hunted, recognised, and detected by this system. Similar systems are being developed more quickly in both China and Russia. But there seems to be considerable disagreement about what constitutes significant human control.

Employment Philosophy

Autonomous systems provide several benefits to military. They have the potential to be 'faster, better, and less expensive' systems. The quantity and quality of AI used in such systems would determine their success. As per some experts, such technologies might cost one-third the price of manned platforms and two-thirds the price to run. More significantly, the introduction of life support systems would not restrict the system architecture. Typically, all of this frees up essential space and weight, allowing for the creation of smaller and stealthier devices. Furthermore, this provides for increased range, durability, and persistence, as well as a reduction in logistical footprint.[3] The method of initiating an attack with weapon

systems is completely professional. Machines can make split-second judgements based on intelligence inputs and other relevant data. Another significant benefit is that there is no human presence surrounding the weapon system. In the absence of people, the system is able to launch an assault in any high-threat circumstance or in nuclear, chemical, or biologically polluted situations, thus, obviating investments in the NBC suits and assorted nuclear hardened wherewithal.

In regard to quantum of autonomy, there is a school of thought that there is no such thing as absolute autonomy in the context of current technological advancement. Science fiction scenarios such as runaway robots have yet to become a reality. Robots today do not have the ability to sense or smell, and they cannot plan on their own in reaction to the current 'environment'. In general, there are no robotic agencies that will decide on their own to begin work and deploy AWS, which will again decide independently on the kind, type, target, and location of the assault. In that regard, today's weapon systems in service, or under manufacturing, might be regarded to have limited autonomy. After launch, modern systems are self-sufficient. They are pre-programmed to do a certain activity. There is no turning back once the system is activated and decides to fire based on the knowledge gained by the system. Because the machine lacks situational awareness in terms of deciding whether or not to kill, there is very little opportunity for the system to modify the target/s or decide against shooting. Understanding the nature of offence-defence of such systems is also required for delving into the legality of the disputes around LAWS. Nonetheless, these LAWS scenarios imply that some type of human interaction will always exist, even if at a remote level.

Legal and Ethical Aspects

When it comes to the governance of these technologies, many researchers think that regulations will have to arise alongside technology because 'morality will coevolve with technical growth'. The rapid advancement in AWS presents certain challenges to the basic tenets of the laws of war or international humanitarian law (IHL). Though there are international agreements to specifically ban or regulate a number of inherently problematic weapons, such as expanding bullets, poisonous gases, antipersonnel landmines, biological and chemical weapons, blinding lasers, incendiaries,

and cluster munitions, there is no regime for LAWS.[4] IHL provides that in the conduct of military operations, whether on land, at sea or in the air, the parties to a conflict must take all reasonable precautions to avoid loss of civilian lives and damage to civilian objects. The parties to a conflict are under an obligation to spare the civilian population and civilian objects from the effects of armed conflict. This obligation covers actions in both offence and defence and applies to all personnel; even an act of a single solider in attack could be covered. For instance, a pilot who is on a bombing mission is required to meet this obligation. Likewise, those who plan or decide upon an attack must do everything feasible to verify that the objectives to be attacked are military objectives and are not under any form of protection.[5] What is 'feasible' would depend upon the resources and technology available with a commander who is planning an attack.[6] This customary obligation of taking 'feasible precautions' can be justly expected from a military commander in conventional warfare. However, in an armed conflict in which LAWS are deployed, it would be nearly impossible for such systems to take all 'feasible precautions'.[7]

A machine cannot be programmed with every futuristic scenario of an armed conflict. While a military commander may cancel or suspend an attack, such possibility may be ruled out with the deployment of LAWS. The lack of multiple intelligence sources could also inhibit the ability of LAWS to identify targets accurately. Developing LAWS with an 'intelligent system' that is similar to or better than 'human' is perhaps not feasible in the near future.[8] Giving machines the power to release violent force without meaningful human control would cross a fundamental moral line and may lead to serious violations of IHL and human rights law. According to Liu (2012), IHL in its current manifestation is insufficient to regulate the growing use of LAWS. He attributes two reasons for this; first, the permissive nature of IHL based on military necessity; and second, the structural inability of IHL to cope with the challenges raised by this novel means and method of armed conflict.[9] According to Heyns (2013), if the nature of a weapon renders responsibility for its consequences impossible, its use should be considered unethical and unlawful.[10] Recognising the urgent need to engage state players in this issue and to explore potential preventative measures, the United Nations formed a Group of Governmental Experts (GGE) on LAWS in 2017.

The outsourcing of decision-making to computers, particularly choices concerning a person's life or death, is a frequent concern of many who oppose AWS. Widely respected scholars and researchers have called for a ban on 'lethal autonomous targeting' because it violates the 'Principle of Distinction' under IHL; that is, AWS will have a difficult time determining who is a civilian and who is a belligerent in periods of conflict, which is challenging for humans in many cases. Individuals have a recurring anxiety that trusting AI to make judgments regarding target engagement may result in intolerable collateral harm. As a result, another key worry, 'accountability' would arise. This problem emerges when robots make their own judgments, making it difficult to discern whether an incorrect conclusion is the result of defects in the software or the autonomous reasoning of this automation. The essence of this issue was revealed when an autonomous automobile went faster than the authorised speed limit on a highway, while it was uncertain to whom the penalty should be given. When a human being makes a judgement on a target, there is a clear line of accountability that extends from the person who 'pulled the trigger' to the 'commander' who gave the command. When compared to the identical situation on AWS, however, no such certainty exists. In the event of an incident, it is uncertain who or what will be accused or held accountable. These arguments prove that it is past time for nations to concentrate on defining norms and principles to guide and restrict research and development of LAWS, as well as their ultimate implementation. These standards might aid in the establishment of legally or ethically acceptable behaviour. This even argues for just an international agreement or multilateral framework to control or even outlaw them, if necessary, considering the accelerated advances the governments are making in fusing LAWS with state-of-the-art armed systems.

India's Position

Lieutenant General RS Panwar, a noted expert on the subject, brings out that India's approach at international fora has been to prepare for the future and work to preserve the balance of conventional strength it presently has in the subcontinent until such weapons are produced. India reaffirmed its approach during the Informal Conference of Experts on LAWS that took place in Geneva in April 2016. The United Nations Convention on Conventional Weapons (UN CCW) on LAWS "should be enhanced

in a manner that does not exacerbate the technical gap among nations", according to our permanent representative at the UN, Ambassador DB Venkatesh Varma who also endorsed the necessity to follow IHL while creating and deploying LAWS. It is doubtful that international discussions about the moral and legal implications of LAWS would limit the rate at which different nations create and implement them. Pakistan is anticipated to use its strategic partnership with China to leverage China's progress toward becoming a leader in this sector of technology. India must, thus, act quickly to guarantee that it maintains a significant lead in this race. By utilising the advantages of participants in the private and public sectors, it may achieve this. Setting up a collaborative environment so that organisations such as the Defence Research and Development Organisation may engage with civilian academia and business is a problem for the political leadership in India.[11]

Conclusion

A more automated battlefield littered with LAWS is likely to bring new dimensions to fighting. At the moment, much of the discussion about autonomous weapons is centred on legal and ethical concerns. However, militaries are viewing these armaments on two separate levels: as useful and deployable weapons in battle, and as a tool for ensuring strategic stability. Some see LAWS as destabilising weapons, which might lead to an arms race in the future. The genuine deterrent potential of these weapons is yet to be explained and sold appropriately. Once LAWS are completely created and effectively proven as weapons, they do have potential to destabilise certain present weapon systems as well as the prevailing character of war. As military's technical progress accelerates, the international community must recognise the possible uses and hazards of LAWS and guarantee that adequate rules and legal frameworks are in place. India is beset with disruptive technology centric collusive hybrid threat. Laced with LAWS, our adversaries are capable of altering the military balance in their favour. It is, therefore, a strategic impetrative for Indian thinkers and policy- makers to invest in the niche and disruptive technology based systems and develop a holistic understanding of ethical and legal aspects associated with the R&D and deployment of these platforms. Such knowledge will help India in presenting its case better at the armament / disarmament talks.

Endnotes

[1] Waiting for the singularity- "Getting to Grips with Military Robotics." *The Economist*, The Economist Newspaper, https://www.economist.com/special-report/2018/01/25/getting-to-grips-with-military-robotics.

[2] From USI National Security Paper 2021 by Lt Gen PJS Pannu, PVSM, AVSM, VSM (Retd)

[3] R Shashank Reddy*, India and the Challenge of Autonomous Weapons*, Carnegie Endowment for International Peace, Jun 2016.

[4] Jha U. C., 2016, Killer Robots: Lethal Autonomous Weapons Systems' Legal, Ethical and Moral Challenges, New Delhi: Vij Books India Pvt Ltd, p. 69.

[5] The 1977 Additional Protocol I, Article 57 2 (a), (i) and (ii) dealing with "Precautions in Attack" provides that those who plan or decide upon an attack shall: (i) Do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection but are military objectives…..and that it is not prohibited by the provisions of AP I; and (ii) Take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects.

[6] The term "Feasible Precautions" has been defined under the 1980 CCW Protocol III (Prohibitions or Restrictions on the Use of Incendiary Weapons) as, "those precautions which are practicable or practically possible taking into account all circumstances ruling at the time, including humanitarian and military considerations.

[7] Henderson Ian. 2009. The Contemporary Law of Targeting: Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I, Leiden: Martinus Nijhoff Publishers, p.162.

[8] Large teams of people and organizations are involved at all stages of the development of modern weapons, with extensive interaction between military decision makers, producers and those responsible for testing and approval for production. McFarland Tim and Tim McCormack, Mind the Gap: Can Developers of Autonomous Weapons Systems be Liable for War Crimes? Vol. 90, International Law Studies, 2014, p. 361-385.

[9] Liu Hin-Yan, Categorization and legality of autonomous and remote weapons systems, International Review of the Red Cross, Vol. 94, No. 886, Summer 2012, p. 627-652.

[10] Heyns C., Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, UN General Assembly Doc. A/HRC/23/47, 9 April 2013, paragraph 80.

[11] "Artificial Intelligence in Military Operations: Technology and Ethics Indian Perspective." *USI*, https://usiofindia.org/publication/usi-journal/artificial-intelligence-in-military-operations-technology-and-ethics-indian-perspective/?_sfm_journal_autho...8%2F12.

Bibliography

1. "Arms Control Today." *DOCUMENT: Ethics and Autonomous Weapon Systems: An Ethical Basis for Human Control? | Arms Control Association*, https://www.armscontrol.org/act/2018-07/features/document-ethics-autonomous-weapon-systems-ethical-basis-human-control.
2. Author: Dillon Patterson | June 2020, et al. "Ethical Imperatives for Lethal Autonomous Weapons." *Belfer Center for Science and International Affairs*, https://www.belfercenter.org/publication/ethical-imperatives-lethal-autonomous-weapons.
3. Charters, Drew, et al. "Killing on Instinct: A Defense of Autonomous Weapon Systems for Offensive Combat." *Viterbi Conversations in Ethics*, 15 Feb. 2021, https://vce.usc.edu/volume-4-issue-1/killing-on-instinct-a-defense-of-autonomous-weapon-systems-for-offensive-combat/.
4. "The Future Is Limited: The Ethics of Lethal Autonomous Weapons Systems." *The Future Is Limited: The Ethics of Lethal Autonomous Weapons Systems | The Forge*, https://theforge.defence.gov.au/publications/future-limited-ethics-lethal-autonomous-weapons-systems.
5. "Heed the Call." *Human Rights Watch*, 13 Feb. 2020, https://www.hrw.org/report/2018/08/21/heed-call/moral-and-legal-imperative-ban-killer-robots.
6. "Homepage." *Lethal Autonomous Weapons*, 30 Nov. 2021, https://autonomousweapons.org/.
7. "Lethal Autonomous Weapons: Re-Examining the Law and Ethics of Robotic Warfare." *OUP Academic*, Oxford University Press, 22 Apr. 2021, https://academic.oup.com/book/41104.
8. "Pros and Cons of Autonomous Weapons Systems." *Army University Press*, https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/May-June-2017/Pros-and-Cons-of-Autonomous-Weapons-Systems/.
9. Reisen, Erich. "The Moral Case for the Development of Autonomous Weapon Systems." *Blog of the APA*, 27 Feb. 2022, https://blog.apaonline.org/2022/02/28/the-moral-case-for-the-development-of-autonomous-weapon-systems/.

10. Trager, Robert F., and Laura M. Luca. “Killer Robots Are Here-and We Need to Regulate Them.” *Foreign Policy*, 11 May 2022, https://foreignpolicy.com/2022/05/11/killer-robots-lethal-autonomous-weapons-systems-ukraine-libya-regulation/.

11. University, Stanford. “Ethics of Autonomous Weapons.” *Stanford News*, 2 May 2019, https://news.stanford.edu/2019/05/01/ethics-autonomous-weapons/.

12. *YouTube*, 11 Mar. 2019, https://youtu.be/E_TFGdCERYo. Accessed 19 Aug. 2022.

13. *YouTube*, 13 Dec. 2019, https://youtu.be/GFD_Cgr2zho. Accessed 3 Aug. 2022.

14. *YouTube*, 8 Apr. 2016, https://youtu.be/JYQ7p3pWwr4. Accessed 3 Sept. 2022.

15. *YouTube*, 8 May 2018, https://youtu.be/e_DsE9f5gyk. Accessed 2 Sept. 2022.

Civil Society: A New Theatre of Warfare in India's Internal Security Environment

Mr Srijan Sharma[@]

"Those who can make you think the way that's in their interest enjoy the real power"

Ajit Doval

Abstract

Civil Society is being referred to as the new frontier of warfare wherein, the adversary tries to subvert the target population through psychological warfare to an extent that they revolt against their own country or start subversive activities. Although psychological warfare existed since ages in security and strategic paradigm, its snowballing with the modern digital technology and proactive participation of civil society is making it more lethal and worrisome. India has been targeted by our enemies in this manner with success and, sometimes, without success. Where such enemy actions have aided insurrections, the result has been very harmful. It is important for India, and indeed all countries, to know how this process is started and given impetus by the intelligence agencies of the enemy state. Only such realisation can enable this insidious danger to be combated which, if neglected, can hollow out the country from within, leading to its downfall or defeat.

Introduction

During the passing out parade of IPS probationers at Sardar Vallabhbhai Patel National Police Academy (SVPNPA) last year, National Security Advisor Ajit Doval had referred civil society as a new frontier of warfare[1] and this statement triggered a spark in the minds of many intellectuals. Some are taking it differently

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