

LEGAL ARGUMENTS

Bonnie Docherty and Matthew Griechen

Harvard Law School International Human Rights Clinic (IHRC)

The legal case against fully autonomous weapons, or “killer robots,” reinforces the moral, technological, and security arguments for banning this emerging technology.¹ Fully autonomous weapons threaten to violate international humanitarian law and international human rights law and would create a gap in accountability for unlawful acts.

INTERNATIONAL HUMANITARIAN LAW

International humanitarian law (IHL), also known as the laws of war, would govern the use of fully autonomous weapons on the battlefield. Because the weapons would operate without meaningful human control, they would face particular difficulties in complying with two fundamental rules of IHL.

First, customary international law and Article 48 of Additional Protocol I to the Geneva Conventions obliges warring parties to distinguish between civilians and soldiers and between civilian objects (such as homes or schools) and military objectives. Weapons that cannot make such distinctions are considered “indiscriminate” and unlawful.

Killer robots would encounter significant obstacles to complying with the rule of distinction. Differentiating between civilians and soldiers, particularly in an era in which combatants often blend in with the local population, depends on more than recognizing a uniform. It also depends on understanding a person’s intentions through such clues as tone of voice, facial expressions, or body language. Humans are better equipped to understand such nuances than machines are.

Second, customary international law and Article 51(5)(b) of Additional Protocol I requires warring parties to weigh the proportionality of an attack. This rule prohibits attacks in which the expected harm to civilians and civilian objects is excessive in relation to the anticipated military advantage. Proportionality is not a mathematical equation. It depends on context, and the test is whether a “reasonable military commander” would have found it lawful to launch the attack.

Fully autonomous weapons could not replicate the human judgment necessary to assess the proportionality of a specific attack. Because programmers cannot account in advance for the infinite number of scenarios that might arise on the battlefield, fully autonomous weapons would encounter unforeseen and changing circumstances. Unlike humans, however, these machines could not apply human reason and experience when balancing the relevant factors of this subjective test.

THE MARTENS CLAUSE

States developing or using new technology must consider the so-called Martens Clause, a provision of international humanitarian law that links law and ethics. The Martens Clause, articulated in many places, including Article 1(2) of Additional Protocol I, is a gap-filling provision. It declares that in the absence of specific treaty law on a topic, people are still protected by “custom,” “the principles of humanity,” and “the dictates of public conscience.” The clause creates a moral standard against which to judge fully autonomous weapons.

Fully autonomous weapons raise serious concerns under principles of humanity. Humans are motivated to treat each other humanely because they can feel compassion and empathy for the experiences of other people. Fully autonomous weapons, by contrast, would lack the emotional capacity that underlies humane treatment. The principles of humanity also require respect for the dignity of human life. As inanimate machines, fully autonomous weapons cannot truly understand the value of a life and the significance of its loss. They would determine whom to kill based on algorithms and would not consider the inherent worth of an individual victim.

The dictates of public conscience, which refer to shared moral guidelines, similarly argue against fully autonomous weapons. In a December 2018 survey of public opinion in 26 countries, more than 60 percent of people responded that they opposed killer robots.² In addition, leaders in disarmament and human rights, peace and religion, science and technology, and industry have all condemned this technology, particularly on moral grounds. Finally, states have frequently appealed to conscience when calling for a ban on fully autonomous weapons or a requirement of human control over the use of force.

INTERNATIONAL HUMAN RIGHTS LAW

Given that fully autonomous weapons would likely be used in law enforcement situations beyond the battlefield, they should also be assessed under international human rights law, which applies during times of peace as well as armed conflict. Fully autonomous weapons have the potential to violate three foundational human rights.

First, under Article 6 of the International Covenant on Civil and Political Rights, all people have the fundamental right to life, meaning they cannot be “arbitrarily deprived” of their lives. Killing is only lawful when it is necessary to protect human life, constitutes a last resort, and is applied in a manner proportionate to the threat. The test is context specific, and killer robots would not have the human qualities,

notably empathy and judgment, necessary to make such determinations in unforeseen situations.

Second, victims of human rights abuses have a right to a remedy. As discussed

more below, however, it is not clear who could be held accountable if fully autonomous weapons violated international human rights law by, for example, arbitrarily killing a civilian.

Third, the principle of human dignity underpins human rights law. All human

life has worth and deserves respect. As discussed above, delegating life-and-death decisions to machines that cannot fully appreciate the value of human life would undermine human dignity.

ACCOUNTABILITY

Both international humanitarian law and international human rights law require individual accountability for unlawful acts. Such personal accountability helps deter future violations while providing retribution for victims of past harm. Holding a person liable for the unlawful acts of a fully autonomous weapon, however, would be challenging and in most cases, nearly impossible.

A robot itself could not be held responsible under the law. Crimes involve both an act (such as causing death) and a mental state (such as intent). While a fully autonomous weapon could commit the act, as a machine, it would lack the mental state. Furthermore, fully autonomous weapons could not be punished because, unlike

humans, they cannot experience suffering.

In most cases, humans also would escape criminal liability for the robot’s actions. The relationship between an operator and a fully autonomous weapon can be likened to that of a commander and a subordinate because the robot and the subordinate both act autonomously. Commanders are legally responsible for the actions of a subordinate only when they knew or should have known of the subordinate’s criminal act and failed to prevent or punish it. While a commander who deployed a fully autonomous weapon with the clear intent to commit a crime might be found guilty, it would be legally difficult—and unfair—to hold him or her accountable for the unforeseeable actions of an autonomous machine.

Programmers and manufacturers would likely elude liability under a civil suit. In some countries, such as the United States, weapons manufacturers are immune from suit as long as they follow government specifications and do not deliberately mislead the military. In addition, proving a product is defective requires overcoming significant evidentiary hurdles. Finally, civil suits are time-consuming and expensive, especially for victims living far from the country that deployed the weapon at issue.

Thus, fully autonomous weapons would not only face potentially insurmountable barriers to complying with international law, but would also allow commanders, operators, programmers and manufacturers to escape responsibility for violations that did occur.

“Holding a person liable for the unlawful acts of a fully autonomous weapon, however, would be challenging and in most cases, nearly impossible.”

ENDNOTES

- 1 For an overview of the problems of fully autonomous weapons and detailed responses to the views of critics, see Human Rights Watch and Harvard Law School’s International Human Rights Clinic, Making the Case: The Dangers of Killer Robots and the Need for a Preemptive Ban (December 2016), https://www.hrw.org/sites/default/files/report_pdf/arms1216_web.pdf. These organizations have also co-published stand-alone reports examining such issues as the Martens Clause, the human rights implications of killer robots and the accountability gap. For a comprehensive list of these publications, see Human Rights Watch, “Reviewing the Record” (2018), http://hrp.law.harvard.edu/wp-content/uploads/2018/08/Killer_Robots_Handout.pdf.
- 2 Campaign to Stop Killer Robots, “Global Poll Results Shows 61% Oppose Killer Robots,” January 2019, <https://www.stop-killerrobots.org/2019/01/global-poll-61-oppose-killer-robots/>.