

Robots and International Humanitarian Law Contemporary Challenges

The modern theater of war cannot be seen anymore as the battlefield in the common sense of this word. With the developing military technology directly influencing the means of warfare many new factors are involved in the conduct of hostilities. Especially, development of robotics creates many new risks and challenges for the international humanitarian law. This essay aims to shortly present the main problems of international humanitarian law when dealing with the concept of using robots as a mean in armed conflict.

First of all, taking into consideration the technological development of *inter alia* navigation and artificial intelligence, robots can operate autonomously “to locate their own targets and destroy them without human intervention”.¹ It causes a great danger not only of losing control under such hostilities but even before the actual hostilities start. Therefore, Kanwar states the key issues concerning the deployment of unmanned systems including robotics: **distinction, the prohibition to cause suffering to combatants and proportionality**.² However, it is also necessary to add the question of **roboethics**, especially in case of **morality** and **responsibility** of robots.

¹ N. Sharkey, *Cassandra of False Prophet of Doom: AI robot and war*. IEEE Intelligent Systems, Vol. 23, No. 4, 14-17, 2008, July-August Issue.

² V. Kanwar, *Post-Human Humanitarian Law: The Law of War in the Age of Robotic Warfare* (June 3, 2010). Harvard Journal of National Security, Vol. 2, Forthcoming. Available at SSRN: <<http://ssrn.com/abstract=1619766>>.

The issue is that no autonomous robots have the abilities needed to discriminate between combatants and innocents. Lacking this ability any action taken by robots can violate humanitarian law, which the main aim is to protect the innocents. The question is whether robots can comply with international humanitarian law. Are they able to distinguish between civilians and combatants, to use discretion in order to not cause disproportionate civilian harm? The answer remains negative.

The principle of distinction is the most important rule of international humanitarian law. Only combatants (until they become *hors de combat*) shall be the legitimate aim of an armed attack during the time of conflict. Therefore civilians are the main subjects protected under Geneva Conventions and their Additional Protocols. However, contemporary development of armed conflict of non-international character caused a situation when many civilians (just to mention population of Iraq or Afghanistan) directly participate in hostilities. Such situation forced ICRC to prepare a study concerning the issue of direct participation in hostilities.³ Civilian's behavior may be understood as direct participation in hostilities if the act is committed to

[...] adversely affect the military operations or military capacity of a party to an armed conflict or, alternatively, to inflict death, injury, or destruction on persons or objects protected against direct attack (threshold of harm). Moreover, there is a direct causal link between the act and the harm likely to result either from that act, or from a coordinated military operation of which that act constitutes an integral part (direct causation), and the act must be specifically designed to directly cause the required threshold of harm in support of a party to the conflict and to the detriment of another (belligerent nexus).⁴

The conclusion is that it is even more difficult to distinguish a civilian from a civilian who directly participates in hostilities than

³ N. Melzer, *Interpretive guidance on the notion of direct participation in hostilities under the international humanitarian law*. Geneva 2009.

⁴ *Ibidem*, p. 16.

a civilian from a combatant.⁵ Such task is really hard for humans, so in case of robots it may be nearly impossible to evaluate quickly enough the situation and take the necessary and lawful action.

Secondly the aspect of proportionality is also very important. The main aim of the hostilities is always to weaken the enemy side. However, it shall be done by the means which do not cause unnecessary harm and suffer for combatants as well as civilians. Just to mention the example of the Protocol on Blinding Laser Weapons.⁶ This document totally banned the usage of blinding lasers even before they were used in a real combat. Such precedent may lead us to the conclusion that also in the terms of robotics similar solution should be appointed.

The term of proportionality goes in pair with the question of military necessity. While planning every kind of military operation the decision makers shall take into account it's every aspect. The location, neighborhood of civil objects, potential benefits and losses and also the situation of the enemy side. The main question is then whether the robots as mean of warfare, especially present in the equipment of world powers, are proportionate to fight with non-equipped armed forces of weaker states or guerillas. Robots can be dangerous not only for civil objects but also cultural heritage and other objects protected under international humanitarian law, therefore uncertainty of their conduct is the main disadvantage for precise military operation planning.

Finally, there is also an ethical question of using robots as a mean of warfare. The development of technology also influenced some changes in the area of ethics. The so-called roboethics is a human-centered ethics. It has to comply with the most important human values such as morality. Unfortunately, there is no certainty that such values can be translated into the language of computers.

⁵ For the negative definition of combatant see: art. 4 of the 3rd Geneva Convention as well as art. 5 of the II Additional Protocol (in the case of belligerents participating in the non-international armed conflict).

⁶ Protocol IV of the 1980 Convention on Certain Conventional Weapons, was issued by the United Nations on 13 October 1995.

Dealing with responsibility we must state that the machine is never responsible itself. Then who is? The manufacturer, the programmer, the designer, persons in charge or the operator? Then responsibility is the main factor while evaluating the concept of robots in military operations. In the case of the armed conflict between state A and state B, where state A uses robots which were produced by engineers from state C and programmed by scientists from state D. These robots committed serious breaches of international humanitarian law. Then again which state should be responsible for it? Ethics always develops more slowly than technology. Equipping robots with "moral backbone" is however necessary if we want the armed conflicts in the future to have any rules. But is it really possible to do so?

International humanitarian law governs the rights and duties of soldiers, prisoners of war and issues of protection of civilians. Then, how should we treat robots in the case of armed conflicts? Are they supposed to be combatants or only a new kind of weapon? Should we consider them as a new subject which has to be described international humanitarian law? What particular legal documents should we apply in order to define their status? But in the case of robots, can we put the meaning of this law into three simple phrases?

First Law: A robot may not injure a human being or, through inaction, allow a human being to come to harm. Second Law: A robot must obey any orders given to it by human beings, except where such orders would conflict with the First Law. Third Law: A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.⁷

Would it be so easy to use a solution from literature in a real warfare?

⁷ I. Asimov, *Runaround*. Astounding Science Fiction, 1942.