

# THE EVOLUTION OF WEAPONS UNDER AN ANALYSIS OF INTERNATIONAL HUMANITARIAN LAW

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**Abstract:** This abstract analysis the evolution of the technology of the weapons used in the First and Second World War as well as the possibility of a Third World War and the armament that are being developed for this possible moment, which are the autonomous weapons. Afterwards, the use of the autonomous weapons is studied under international humanitarian law, based on international treaties and principles of this subject, with the purpose to reach a conclusion about the legality of its use in wars.

**Keywords:** International Humanitarian Law. War Crimes. War Weapons. Autonomous Weapons. Killer Robots.

## INTRODUCTION

Under international law, all States has the *jus ad bellum*, which allows States to war against each other (the pacific means are always the first attempt in solving international conflicts, but in some situations the war can be inevitable). In opposition, all States due respect to *jus in bello*, the laws of war. The latter expresses that although States are allowed to war, they are under some conditions or limitations that regulates their conducts in the battlefield.

The objective of *jus in bello* is to avoid the atrocities of the last wars, mainly the ones committed against civilians, the citizens that were not evolved in the armed conflicts like children, women and everyone that was not in the armed forces. Thus, after the second world war a system of international obligations and responsibility for crimes committed during a war was inaugurated.

Thereby, this work will firstly approach the weapons that were used in the First and Second World War and the current development of armaments for a possible next World War, based on autonomous systems of attack. Afterwards, some rules of international humanitarian law will be studied with the purpose of trying to find an answer about the legality of the use of autonomous weapons in armed conflicts.

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## **1 THE EVOLUTION OF WEAPONS USED IN THE WORLD WARS**

The objective of a war is to defeat the enemy and this purpose stimulates the development of new ways to attack the larger number of the adversary's soldiers. In view of that, the wars demonstrate the evolution not only of the technology used to construct armaments but also the evolution of international law, particularly the international humanitarian law with the purpose to control the potential of destruction of these weapons.

The First World War (1914-1918) is remembered as the "trenches war" because of the technique used on the battlefield, based on digging holes on the ground to hide the soldiers and they attacked only by pointing their guns with the body protected with the objective to avoid soldier's deaths, nevertheless, in the First World War many soldiers were killed. The technology of the weapons was very rudimentary, guns as "rifles", machine guns, tanks and grenades were the most used weapons in this war, and they all have a low potential of killing, reflecting in few deaths of civilians compared to soldiers.

The period of time until the Second World War (1939-1945) allowed States to develop their techniques in war. Besides that, the feeling of revenge contributed to the development of weapons of mass destruction, as bombs used in surprise attacks from the sky and the sea (SCHEFFER, 1999, p. 03). It is to say that, differently of the First World War, in the Second one the killing of civilians increased, once these new weapons were created to attack everyone who was around and were unable to make distinction between civilians and soldiers. Furthermore, in this period the nuclear weapons were developed and tested (MALANCZUK, 1997, p. 346)., as happened in Hiroshima and Nagasaki, but their evolution was stopped by international law.

There was never a Third World War, however, it does not mean that war techniques are not being developed. Regional wars with an international character, as the wars in Iraq and Syria, evolved States of all over the globe and they used these conflicts to test new weapons in a way to prepare themselves for a possible next war.

Specialists says that, in view of avoiding unnecessary deaths (mainly of civilians), these new weapons will not need a human intervention, they will be fully autonomous. The artificial intelligence has been developed since the Cold War (1947-1991) and on the contrary to the weapons already known, the autonomous weapons,

also called killer robots, do not need a human to guide them, they are programmed to execute some activity, for example to attack only the combatants of the enemy's army, and from them, it act by itself.

The development of these new kinds of armaments started a discussion in international law concerning the legality of its use in an armed conflict, once some says it violates the rules of war. Issues as the ability to adapt to unexpected situations and who can hold responsibility for crimes committed by these autonomous systems are also being discussed. Without a human control, there is not a subject element that allows it to evaluate the value of a human life and they can take some actions that may violates the principle of dignity and the right to life, both non-derogable rules, even during armed conflicts (HUMAN RIGHTS WATCH, 2014, p. 23-24).

A large number of Non-Governmental Organizations (NGOs) have called attention for the danger of the use of artificial intelligence as weapons, United Nations itself has called countries to discuss the rules applicable, but never reached a consensus. Meanwhile, many countries continue to develop this technology.

## **2 THE NEW WEAPONS AND THE PRINCIPLES OF INTERNATIONAL HUMANITARIAN LAW**

The international humanitarian law emerges mainly with the objective to regulate the conducts during specific context (*lex specialis*), like in wars. This subject of law inserts a humanistic view into warfare and uses a human rights perspective in the interpretation of rules of war. In this matter, four rules of international humanitarian law are very important in trying to regulate the legality of the use of autonomous weapons, all of them are already considered customary international law.

The Rule of Distinction demands the armed forces of the States involved in a war to be able to make distinction between combatants and civilians and avoid the utilization of methods of war that may affect non-combatants (HUMAN RIGHTS WATCH, 2012, p. 31). The Rule of Proportionality is very similar to the first rule and require the attacks to be proportional with the results, which is to say that there is a restriction in the use of weapons that may cause an excessive harm or risk of harm to civilians (HUMAN RIGHTS WATCH, 2012, p. 33). The Military Necessity requires a subjective analysis of the situation and establishes that is inherent to armed forces in

war to act in conformity of the imperatives of winning, but they also must consider the “humanity” element in the battlefield (HUMAN RIGHTS WATCH, 2012, p. 34).

Lastly, the Martens Clause basically says that in the absence of a treaty to regulate issues related to the army’s behavior at war, the customs, principles of humanity (humane treatment and respect for human life and dignity) and the dictates of public conscience (shared moral guidelines that shape the actions of states and individuals) regulates the protection of civilians and of the soldiers (HUMAN RIGHTS WATCH, 2018, p. 28). The codification of the laws of war in treaties did not diminish the continuing role of customary principles. The Martens Clause is literally a legal provision laid down in the preamble of the Hague Convention of 1899 and later in the four 1949 Geneva Conventions (MALANCZUK, 1997, p. 344-345).

Therefore, there is a great issue concerning the use of autonomous weapons in wars, once it may violate the most important principles of international humanitarian law. These new kinds of armaments are not able to make distinction between civilians and combatants or to interpret the particularities of a situation and act with mercy when it allowed and necessary. In conclusion, the autonomous weapons do not have a subjective character required to comply with the rules of war.

Moreover, there is another issue concerning who can held accountability of war crimes or crimes against humanity committed by autonomous systems. Even if the developers of these weapons say that the chances of making mistakes are near to zero, the absence of a subjective character indicates a high possibility of committing international crimes. Trying to solve that question, some says the *principle of command responsibility* could be applied, however sometimes it is impossible to know who are behind autonomous weapons, actually, nobody is behind them because they were designed to operate with complete autonomy (HUMAN RIGHTS WATCH, 2012, p. 43).

## **CONCLUSION**

There are many questions to answer concerning the use of fully autonomous weapons in armed conflicts, nevertheless, their risks can not be denied. The utilization of this kind of armaments threatens international peace and clearly may violate the rules of war under international humanitarian law, once the lack of a subjective character prevents to adapt to unexpected circumstances and make distinction between their targets and those who are not.

In view of that, there is an urgent need to establish some legal parameters for the development and use of this kind of weapons based on international cooperation and then avoid technology overrides human rights.

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