

Robotic Weapons: A Threat To Humanity

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List of abbreviation

AI	Artificial Intelligence
AWS	Autonomous weapon systems
CGI	Center for Geospatial Intelligence
ICC	International Criminal Court
ICRC	International Committee of the Red Cross
IHL	International Humanitarian Law
LARs	Lethal autonomous robotics
LAWS	Lethal Autonomous Weapons Systems
LOAC	Law of Armed Conflict
NATO	North Atlantic Treaty Organization
SIPRI	Stockholm International Peace Research Institute
UCLASS	Unmanned Carrier-Launched Airborne Surveillance and Strik
UN	United Nations

ABSTRACT

This research study is a Liberal Critique on the use of Robotic Weapons in modern warfare that how Robotic Weapons and Law of War do not comply with each other. This study is a critical analysis in greater depth of Robotic Weapons and how they are threat to human, animal and environment contributing to the critique of the use of Robotic Weapons in modern warfare. IHL and its doctrine precaution, need, distinction/difference, accountability and proportionality/balance are used as standards to check the legality of Robotic Weapons in war. A sound theoretical framework is constructed to position this paper in the already published work on the use of Robotic Weapons. This research finds that deployment of Robotic Weapons doesn't comport with the IHL and doctrine/principle/values enshrined therein. The use of Robotic Weapons fails the military necessity test. They also fail to differentiate between a civilian and combatant. Likewise, doctrine/principle/values of accountability, proportionality, and precaution are not complied with.

Since the use of Robotic Weapons don't qualify any of the ethics of IHL, therefore, it is concluded that there should be placed a total prohibition on Robotic Weapons.

Keywords: Robotic Weapons, Liberal Critique, IHL, Law of War, Accountability

INTRODUCTION

1.1 Introduction

The military and security sectors have started using quantum computing (AI) more often. This may be helpful in any number of scenarios and may even save lives if anything should fail. Additionally, it raises the chances of victory for armies by providing them with robotic friends. Some academics think that the arrival of lethal autonomous Weapons systems (LAWS) signals the start of the Third uprising in conflict, after gunpowder and nuclear Weapons. (Carpenter. C, 2013) it was the day when completely autonomous robotic armies wage war without needing humans to command them is long overdue. This study focuses on robotic Weapons in contemporary warfare.

There is much discussion about fully autonomous missiles and robots. Weapon systems that are capable of learning or adapting to altering conditions in the surroundings in which they are deployed have been described as follows. A system that's put in place should be able to identify legal targets as well as civilian targets, such as people who are unintentionally in the path of the assault and will be injured or killed. A choice on how to react will be made by processors or artificial intelligence, and that decision will be based on many variables. (Sydney. J, 2016) says autonomous arms can select and engage targets without having to rely on human contact in open worlds with unstructured and complicated circumstances. No Weapons system possesses these qualities at present moment. One of the most important things to

recognize is that people aren't always needed to interfere with one another. For example, there's a big difference between humans being "in the loop" and those who are "on the outside." Even if the system is completely autonomous, people will be engaged, either via service control or at the very least through weapon design and programming. Even though these ideas have not yet been developed, there is general agreement that they will be created within the next two decades. A large number of individuals want to see them banned entirely, arguing that their usage might be stopped if they were not permitted to be used. The UN Conventional Weapons Convention's States Parties have agreed to hold a four day intergovernmental meeting to address questions pertaining to Deadly automatic arms/weapons System, in order to draught a set of rules VI to the Convention if necessary. Even the United States, one of the most technologically advanced countries in the world is reportedly in need of assistance. "Such weapon systems should be designed that could allow commanders and operators to exercise appropriate levels of judgment over the use of force" says (Michael N. Schmitt & Jeffrey S, 2013). This ensures that producers are not allowed to program machines that make final decisions on the goals to use force against opponents. First reaction of this research is not distrust, but hope for improved IHL respect, perhaps because it has been seen that humans in real armed conflicts have also committed so many abuses and mistakes, but unfortunately never with atrocities committed by robots (although sadly they did not occur in the armed conflicts it is witnessed). Only humans are capable of being superhuman and only

humans can attempt to disobey the laws that have been imposed on them. This argument is also taken in greater consideration when critiquing the use of Robotic Weapons in modern warfare.

To researcher it seems fairer to assume and ensure compliance with IHL from someone who designs and builds an autonomous weapon in a friendly office rather than a soldier on the battlefield or in a hostile area. A robot is incapable of hating, fearing, being hungry or exhausted or having a survival instinct. According to U.S Department press 2012 “Robots should not rape”, says the narrator. They have the ability to feel and store more information at the same time as a person. If the arms that produce physical force get faster and more sophisticated only then it is possible that humans will become frustrated by the amount of knowledge available and the choices that must be made to guide it. Some other argument are given under prohibition of AWS is that “Humans sometimes murder people in order to prevent themselves from being killed by other people” says (U.S DEPT report, 2010). The robot will postpone the use of force until the last most suitable moment they respond only after determining that the target and the attack is valid. There may be technological faults but anyone who drives a vehicle and every traffic cop knows that the majority of crashes are caused by human failures and not because of technical failures (although drivers, unlike soldiers are usually not seeking to kill or injure). As soon as robots have artificial intelligence it is clear that such intelligence must not be used in the same way that any human intelligence is used, i.e., to circumvent the rules or to determine from a strictly utilitarian standpoint that non-compliance with IHL instructions will make it easier to achieve the key goals says (Vinjek, 2013). Moreover, States making fully

automatic machines must and should become their own concern to take actions to prevent the foe from hacking with such systems and directing them in opposition to the producing State and its citizens.

LITERATURE REVIEW

2.1 The History of Robotic Weapons

Military robots have been there since World War II and the Cold War in the shape of German Goliath tracked mines and Soviet tanks, to name a few of examples. According to the report (AI&MLAC, 2021) "CIA officials started to witness the first realistic returns on their decade-old dream of employing aerial robots to gather intelligence" when the Predator drone was deployed for the first time. The employment of robots in combat is now being investigated as a potential future method of waging conflicts, despite the fact that it has historically been a subject for science fiction. Diverse militaries from across the world have already begun developing combat robots of their own. Some think that Automated Weapons Systems will be used in the future of contemporary warfare. To test and deploy more automated technologies, the United States Military is pouring millions of dollars into research and development. At the moment, the unmanned aerial vehicle (UAV) is the most notable system in use, since it can be equipped with air-to-ground missiles and controlled remotely from a command centre in reconnaissance missions. In 2004 and 2005, it sponsored contests to engage commercial businesses and universities in the development of unmanned ground vehicles for navigation. The development of autonomous fighter aircraft and bombers has made considerable strides in recent years. The employment of autonomous fighters and bombers to attack enemy targets is

particularly promising due to the lack of training needed for robotic pilots; autonomous aircraft are capable of executing military exercises that would be impossible for human pilots to do.

2.3 Understanding the Operation of Robotic Weapons

A robot's way of learning from humans is via the use of algorithms. In order to make a computer do anything, you must first write a computer program. To write a computer program, you must tell the computer exactly what you want it to do and how you want it to do it step by step. The computer then "executes" the program, automatically completing each step in order to accomplish the ultimate goal set by the user. When you tell the computer what to do, you have the option of selecting how the computer will carry out your instructions. (Arkin. RC, 2013) in this particular instance, computer algorithms are the primary technique that is used to accomplish the job. According to (Asaro. P, 2021) The only portion of the statement that is wrong is the part where it says that you must tell a computer what you want it to do step by step in order for it to work.(Berinsky Aj & Druckman Jn, 2007) It is the goal of certain computer algorithms that they allow computers to learn on their own rather than just obeying clearly stated instructions (i.e., facilitate machine learning). Machine learning is used in a variety of applications, including data mining and pattern identification. The internet nowadays, according to Klint Finley, is controlled by algorithms.

Algorithms, being mathematical equations, are neither good nor bad. Algorithms, on the other hand, have clearly been employed by humans with both good and evil purposes. Dr. Panos Parpas, a professor at

Imperial College London's computer department, told Hickman, Algorithms have been ingrained in our daily lives. As (Berinsky Aj, Huber Ga & Lenz Gs 2012) said on the one hand, they are beneficial since they free up our time and do routine tasks for us. It also has to do with how models are utilized to forecast the future. Data and algorithms are presently married in an uncomfortable way. There will be errors as technology advances, but it's essential to remember that they're only tools. We must not place blame on our tools.

Furthermore, in various areas of study, the term "autonomy" has distinct connotations. It may refer to a machine's capacity to function without human intervention in engineering. It may relate to a person's moral independence in philosophy. In political science, it may relate to a region's capacity to govern itself. The distinction between autonomous and non-autonomous Weapons is not as obvious in military weapon development as it is in other fields. The particular norm involved in the notion of autonomy may range dramatically across academics, countries, and organizations. Scholars like Peter Asaro and Mark Gubrud are working to reduce the bar so that more military systems may be classified as autonomous. They think that any weapon system capable of delivering a deadly force without the intervention, judgment, or approval of a human supervisor is autonomous. A weapon system that operates partly or entirely without human interaction is deemed autonomous, according to (Gubrud 1998) He claims that for a weapon system to be considered autonomous, it does not need to be able to make choices entirely on its own. Instead, it should be regarded as autonomous if it actively participates in one or more stages of the "preparation process," from locating the target through shooting.

2.4 Arguments in Support of Autonomous Weapons Systems

Assistance for autonomous Weapons systems may be divided into two categories. Certain elements of the defense industry support autonomous Weapons because of the military advantages they provide. Others believe that using them is justified on moral grounds. Each speaker highlighted the challenges of dealing with international humanitarian law, proportional harm, and unnecessary harm in dynamic encounter situations. In terms of these evaluations and decisions, the process seems to be unique to humans (what they refer to as "subjective appreciation"), making programming an automated weapon to carry them out a difficult task. Without advances in technology, says (Mark Gubrud & Ju" Rgen, 2013) it would be difficult to distinguish exact distinctions between soldiers and noncombatants, such as recognizing military uniforms and Weapons. Evidently, software is being created to enable for the making of qualitative judgments that are now difficult to make with the technology that is already available. Some speakers expressed skepticism about the possibility of doing so in the future due to technological limitations.

The military advantages of the system are addressed in this section. When arguing in favor of the continuing development and deployment of autonomous arms, guns, and weaponry systems, proponents frequently point to a variety of military advantages. For starters, the mechanism may be used as a force multiplier, which is very useful. In other words, fewer war fighters are needed to do a given job, and the efficiency of each war fighter is enhanced. On the same account (Mark Gubrud & Ju" Rgen, 2013) Additionally, proponents argue that self-aware weapons, firearms, and armament systems have contributed to the expansion of the battlefield by allowing combat to reach

previously inaccessible areas, a claim that has been challenged. The use of fully automated Weapons systems may also be able to reduce the amount of deaths in battle by removing the need for human combat fighters to participate in potentially lethal missions. In addition, it has been said that the deployment of a military robot army has the potential to result in long-term cost savings for the United States of America. David Francis wrote a piece for *The Fiscal Times* in 2013 in which he stated that "each soldier in Afghanistan costs the Pentagon about \$850,000 per year," using Department of Defense data to back his assertion. A very tiny percentage of individuals think that the yearly cost will be much higher than the current estimate. TALON robot, which is a miniature rover that can be outfitted with Weapons, is believed to have cost \$230,000 in total, according to Francis, who worked on its development. At the 2014 Army Aviation Symposium, retired Gen. Robert Cone, former head of the United States Army Training and Doctrine Command, said that the Army could decrease the size of a brigade from four thousand to three thousand troops without compromising efficiency.

The following are the moral reasons for the system, summarized as follows: Military specialists and robot cists have claimed that autonomous Weapons systems should be considered not just as ethically permissible, but also as being superior to human combatants in terms of ethical concerns, rather than as merely acceptable. In the case of autonomous robots, robot cist Ronald C. Arkin believes that they will be able to act more humanely on the battlefield in the future for a variety of reasons, including the fact that they will not need to be programmed with a self-preservation instinct, thereby potentially eliminating the need for a "shoot first, ask questions later mentality in combat

situations." Because they will not be influenced by fear or panic, autonomous Weapons systems will be able to acquire much more sensory information than humans, without rejecting or altering it to conform to preexisting ideas about the world. For the last point, Arkin posits that, in teams that include both human and robot troops, the robots are more likely to disclose ethical violations than a team of people who may be inclined to keep their collective mouth shut.

The removal of people from high-stress combat zones in favour of robots, according to Lt. Col. Douglas A. Pryer of the United States Army, may have ethical benefits. Based on neuroscience studies, he argues that when the brain circuits responsible for conscious self-control are overwhelmed with stress, they may shut down, resulting in troops committing sexual assaults and other crimes that they would otherwise refrain from doing. Pryer, on the other hand, does not address the issue of whether or not sending robots to fight wars is ethical in the abstract, since he does not think it to be so. The author concludes that robot warfare has significant strategic drawbacks and is a contributing factor to the continuation of a never-ending cycle of conflict due to the fact that it creates so widespread moral indignation among those who the United States most urgently needs assistance.

2.5 Arguments Opposed to Autonomous Weapons Systems

While certain moral reasons are used to favor the Autonomous Weapons System, others are used to oppose it. Others argue that moral objections to the system are misplaced. This is the point at which moral disagreement is voiced. An open letter asking for a prohibition on autonomous weapons, firearms, and armament was published during the International Joint Conference on Artificial

Intelligence (IJCAI) in July 2015, and it was signed by over 2,000 people (AAW). After decades of development and experimentation, artificial intelligence technology has progressed to a point where the deployment of such systems is feasible, if not legally feasible, within years rather than decades, and the stakes are high: autonomous Weapons have been dubbed the third revolution in warfare, after gunpowder and nuclear Weapons says (liberalists, 2010) In addition, the letter warns that the United States is on the brink of becoming a nuclear-armed power. Additionally, the letter points out that artificial intelligence (AI) has the ability to help mankind, but that if an AI weapons race breaks out, AI's image will be damaged, and there would be a public reaction that will likely limit future AI advantages. Signatories to the letter include Elon Musk (creator and founder of Tesla), Steve Wozniak (cofounder of Apple), physicist Stephen Hawking (University of Cambridge), and Noam Chomsky (author of "Noam Chomsky's Red Scare") (Massachusetts Institute of Technology). The letter has been signed by over 3,000 experts in the fields of artificial intelligence and robotics. "A ban on offensive autonomous arms, guns, and weaponry that is beyond meaningful human control," according to the open letter's author, "is now being sought." This is important to note since it is not always apparent whether a weapon is intended to be aggressive or defensive in nature. Despite the fact that many people believe that an effective missile defense system is purely defensive in nature, if it enables one country to conduct a nuclear attack against another without fear of reprisal, it may have a destabilizing impact on the whole area.

In April 2013, the Special Rapporteur of the United Nations Human Rights Council

on extrajudicial, summary, or arbitrary killings delivered a report to the Council on Human Rights and Development. According to the study, member states should declare and enforce moratoria on the testing, manufacturing, transfer, and deployment of lethal autonomous robotics (LARs) until an international framework for LARs is created in order to prevent these activities from taking place. The Scientists Call to Ban Autonomous Lethal Robots was issued in the same year by a collection of engineers, artificial intelligence and robotics specialists, as well as other scientists and researchers from 37 nations (SCBRA). A key point made in the statement is that there is no scientific proof that robots are capable of activities like as precise target recognition, situational awareness, or making choices about the proportionate use of force, among other duties. It is possible that they will inflict a large amount of collateral damage as a result of this. The declaration concludes by emphasizing that choices regarding the use of lethal force should not be entrusted to computers, as has been proposed by some (Protocol I Additional To The Geneva Conventions, 1949).

The opposition to autonomous arms, guns, and weaponry systems often raises concerns about delegating decisions that may result in the loss of human life to nonhuman actors. This is understandable. The most visible expression of this issue is the widespread usage of technologies that have the capability of selecting their own targets for attack. As a result, Noel Sharkey, a well-known computer scientist, has called for a ban on lethal autonomous targeting, arguing that it violates the Doctrine, Principle, and Values of Distinction, which is widely considered to be one of the most basic rules of armed conflict. It will be difficult for autonomous weapons, firearms, and armament systems to distinguish

between civilians and combatants, something that is challenging even for humans to accomplish on their own. Unacceptably huge levels of collateral damage will very certainly occur from the deployment of artificial intelligence to make targeted choices, which will almost certainly end in the deaths of innocent people.

In addition, the issue of accountability for the deployment of autonomous Arms, Guns, and Weaponry systems has been a significant cause of worry in recent years. As ethicist Robert Sparrow points out, one of the basic requirements of international humanitarian law, often known as *jus in bello*, is that someone be held accountable for civilian deaths be held accountable for civilian casualties be held accountable for civilian casualties Anyone who employs a weapon or other technique of warfare that makes it difficult to assign blame for the deaths it causes does not meet with the criteria of the *jus in bello* and should not be allowed to fight. Whenever artificial intelligence-enabled devices make choices on their own, it becomes difficult to establish whether a poor outcome is the consequence of software mistakes or the independent deliberations of the AI-enabled (so-called smart) machines themselves. According to (Richard P. Dimeglio Et Al., 2014) While travelling too slowly on a highway, an autonomous vehicle brought attention to the issue's complexity, which left it uncertain as to who should be penalized. Eventually, a solution was found for the problem. When a human being decides to use force against another, a clear line of responsibility is established, beginning with the person who actually pulls the trigger and continuing through the commanding officer and other senior officers. Similarly, there is no such guarantee of efficacy in the case of autonomous arms, guns, and weaponry

systems. In this case, it is unclear who or what should be held responsible or blamed for the event. Sharkey and Sparrow, as well as the other signatories to the open letter, have put forward the idea of "upstream regulation" as a solution to this problem. In the field of autonomous arms, guns, and weaponry systems, upstream regulation is a notion for putting limits on the development of new technologies, as well as for establishing red lines that future technical advance should not be allowed to exceed. It is the goal of this kind of upstream strategy to anticipate the direction of technical progress as well as the risks that such advancements may imply in the future. Some people favor the downstream regulatory approach, believing that rules should be created as new discoveries are discovered rather than waiting to see what occurs. This is known as the scientific method. As the legal academics Kenneth Anderson and Matthew Waxman contend, regulation will be needed as a consequence of technological development since morality will change at the same rate as technology.

3.1 History of IHL

A system of principles known as international humanitarian law (IHL) is designed to minimize the consequences of armed conflict when it is conducted for humanitarian purposes. This law protects civilians who are not or are no longer involved in hostilities and imposes limitations on the use of firearms, ammunition, and fighting techniques in conflict situations. (Abi-Saab R, 1997) says The International Humanitarian Law (IHL) is sometimes referred to as the Law of Armed Conflict or the Law of Armed Conflicts in certain circles. Moreover, (Doswald-Beck L, Vité S, 1993) also said that international humanitarian law (IHL) is a subset of international law, which is a collection of laws that govern interactions between

governments. International humanitarian law is a subset of international law, which is a collection of rules that control relations between nations. Beyond treaties or conventions between states, international law may be found in customary norms, which are state practices that are regarded legally enforceable by those who follow them, and in general doctrine/principle/values that are held to be universally applicable.

Armed conflicts are governed by the principles of international humanitarian law (IHL). Contrary to this, it does not establish whether or not a state has the right to use force; this is decided by another element of international law specified in the United Nations Charter, which is both as important and different from the one discussed here. (Fleck D, 2006) asks in what country did international humanitarian law have its start? International humanitarian law (IHL) is based on the norms of ancient civilizations and religions, and warfare has always been governed by specific doctrines, concepts, values, and traditions, as well as by the laws of the land. The eighteenth century witnessed the beginning of the universal articulation of international humanitarian law, which was codified in the Hague Conventions of 1949. Because of this, nations have reached an agreement on a set of realistic criteria that are grounded in the harsh realities of modern combat. These regulations strike a challenging balance between humanitarian considerations and the needs of the state's military establishment. Due to the increase in size of the international community, a growing number of countries have made contributions to the creation of international norms and standards. International humanitarian law (IHL) is now a collection of laws that applies to everyone on the planet. I'm searching for IHL, but I can't seem to find it anywhere on the internet. It is important to note that the four

Geneva Conventions of 1949 form a significant portion of international humanitarian law. Every country in the world has committed to maintain and execute them, and almost every country has done so. In addition (Grossrieder P, 1999) says to the Conventions, the Additional Protocols on the Protection of Victims of Armed Conflict, which were signed in 1977, as well as the Additional Protocols on the Protection of Victims of Armed Conflict, which were signed in 1980, have been added.

3.2 Relevant Articles Regulating the Conduct of War

After the September 11th terrorist attacks, the doctrine of just war (also known as the doctrine of just war) examines whether a government is justified in declaring war or arguably using force against another country or, in the wake of the attacks, against a non-state organization. (Roberts A. & Guelff R, 2009) says A consequence of this is that the act of going to war is restricted by the law of bellum. Despite the fact that international law allows for the use of military force in some situations, international law does not fully delegate control over combat tactics to the fighting parties. When it comes down to it, international law provides a very thorough structure for how nations should go about conducting war. This body of laws is referred to as the jus in bello (justice in battle). The term "international humanitarian law" (IHL) is often used to refer to the law that regulates the conduct of war. When referring to the "law of war," the words jus ad bellum and jus in bello are used interchangeably to mean "law of war." This article concentrates on the doctrine of jus in bello, which is addressed in more depth under the heading International Law and the Use of Military Force. According to (Rey-Schyr C, 2007) the idea of jus in bello is primarily drawn from international treaties

and international conventions. Important elements of the law regulating the conduct of war, on the other hand, have crystallized into a body of law known as "customary international law" as a result of centuries of development. Countries that adhere to a common and consistent practice out of a sense of legal obligation are said to be implementing customary international law. Customary international law applies to all countries, regardless of their political affiliation. Because of this, all nations, including those that have not signed international treaties on the conduct of war, will be bound by those aspects of the jus in bello that are deemed to be customary international law (i.e., those that have been consented to or accepted by states either explicitly or implicitly through international practice). (Stroun J, 2018) says The fundamental ideas that are shared by the world's major legal systems have an impact on the content of jus in bello. It is possible for domestic military operating manuals or rules of engagement to include broad concepts derived from domestic legislation governing military operations, domestic judicial or arbitral judgments, or even the substance of domestic military operating manuals or rules of engagement in their content. When either customary or treaty-based jus in bello fails to address a particular activity, the international community has decided that "usages established among civilized peoples, the laws of humanity, and the dictates of public conscience" will determine whether or not the activity is legal under international law in that particular situation (the Martens Clause of the 1899 and 1907 Hague Conventions). The doctrine/principle/values of jus in bello are particularly important in minimizing the repercussions of war, or at the very least restricting them to the armed forces of the belligerents, and this is especially true in modern warfare. This is an area in which Jus

in Bello has had some success. This progress includes lessening the impact of conflict on people, protecting prisoners of war and prohibiting the use of weapons intended to cause unnecessary suffering. It also includes preserving cultural and religious sites as well as decreasing the use of weapons without regard for the consequences says (Stroun J, 2018).

Historically, many of these advancements were achieved gradually, relying on religious beliefs as well as ancient Greek, Roman, and Indian literature to make them. Nonetheless, the twentieth century saw the most rapid development of codified ideas to ensure that war is conducted in a legal manner, as compared to previous centuries. When it comes to war, it is no longer a free-for-all where there are no rules and where the aim of triumph justifies the use of any means necessary to accomplish it. There is no longer any support for von Clausewitz's notion of war as being devoid of normative limits and international law as a "self-imposed, undetectable limitation, scarcely worth mentioning," as he put it. (Palwankar U, 2008) says not that there aren't still disconnects between the normative content of the jus in bello and how these principles are actually implemented in the practical reality of armed conflict. The world community has reached a crucial crossroads in the development of jus in bello, when it must decide whether or not to intervene. The twentieth century saw the establishment of a slew of legal guidelines for the conduct of war, and the twenty-first century is anticipated to see the development of infrastructure and machinery to penalize those who fail to adhere to these guidelines and regulations. When it first opened its doors on July 1, 2002, the International Criminal Court (ICC) was established as a permanent entity dedicated to prosecuting those who violate the rules of war. "War crimes" are the

term used to describe these breaches. Because of the use of criminal courts to punish serious violations of international human rights legislation and to punish jus in bello offences, there are now substantial connections being made between the jus in bello doctrine, international criminal law, and human rights. It is the actions of the ad hoc criminal courts that have investigated mass atrocities in the former Yugoslavia and Rwanda, which have built on and made significant contributions to the jurisprudence on war crimes established by the Nuremberg and Tokyo Tribunals that demonstrate the existence of these connections. (Lavoyer J.-Ph 2001) says although the global community is concerned with more than only the application of jus in bello, it is also concerned with other issues. It has also been expanded to encompass the deliberate use of the environment as a weapon of war, as well as acts taken by UN officials in the course of a conflict. It now includes, at least in part, the resolution of internal conflicts (and not just international war). Moreover, (Lavoyer J.-Ph, 2004) also said not only are the previously stated rules embedded and reflected in it, but it also contains certain very important values that are not discussed elsewhere. In order to better comprehend them, we will go through them in more depth here, and they will be used for analysis in Chapter Four. These are the ones to look out for:

4.1 Analysis

Precaution is a philosophy, a concept, and a set of values that develops through time. When measures have been attempted in the past, they have shown to be ineffective. In order to prevent such events in the future, it may be necessary to learn from them (and belligerents have, in my opinion, a duty to anticipate relevant processes). While it is important to ensure that weapons/weapony

with artificial intelligence can be recalled and reprogrammed, it is also important to ensure that human beings monitor the development of that intelligence in order to quickly benefit from lessons learned. However, for a machine, it is very difficult to take precautions and safety measures in order to protect humans and animals as well as the environment. The doctrine/principle/values of precaution are very difficult to be applied by autonomous Weapons because robotic Weapons is designed to kill combatants, terrorists and non-state actors. The precaution is a safety system and killing of combatants is a totally different system, such as in cars the automatic breaking system is still a failure. When it comes to robotic Weapons companies' claim a collateral damage rules in robotic Weapons whereas collateral damage is not acceptable in IHL. There is greater likelihood that the use of Robotic Weapons will result in more collateral damage. To sum up, Robotic Weapons fails to pass the test of precaution.

Secondly the core issue is accountability. The accountability are also significant considerations when it comes to robotic arms, guns, and weaponry. There are numerous factors that influence accountability, including accountability in algorithm operation, accountability for manufacturing error, accountability for testing, and accountability if robots cause damage as a result of any change in the environment during a war. Accountability is also important in the military. This raises the question of who will be held accountable when the conflict is finished and courts are established if robots go wrong and murder or damage innocent civilians or their property. This is where the researcher's primary worry lies. The researcher is opposed to robotic Weapons that murder people on their own initiative, both for humanitarian reasons and as a liberal criticism. If robots commit a crime,

accountability must be shifted to the manufacturing company, the state, and the institution that is employing them. This is because such robots, which are capable of killing any innocent life, must not be allowed to be manufactured, owned by any state, or operated without the knowledge and consent of the operator. Unless their algorithms are hacked, robots not only murder ordinary people, but they can also be deployed against friendly troops if the algorithm is compromised. As a result, robotic Weapons that is capable of killing humans must be prohibited. These issues are compounded by the impediments to accountability that would exist if completely autonomous Weapons caused unlawful harm to property or people. This research investigates in depth the difficulties of holding anybody responsible for the actions of a weapon of mass destruction. In addition, it shows that, even when a case is successful in assigning blame, the nature of the accountability that follows may fall short of the objectives of avoiding future harm and providing reparation to victims.

Fully autonomous Weapons cannot be used to substitute for responsible individuals as defendants in any legal action intended at deterrence and punishment, regardless of the level of autonomy. People who are involved in the use or manufacture of these Weapons, such as operators and commanders, programmers, and manufacturers, are unlikely to be held liable for the suffering caused by completely autonomous Weapons, due to a number of legal obstacles that must be overcome. In both criminal and civil law, individuals who are directly or indirectly involved in the use of completely autonomous Weapons are not held responsible for their actions says (Ronald & Arkin, 2005).

Personal responsibility is required in order to achieve the goals of criminal law as well as to fulfill the specific obligations imposed by international humanitarian and human rights law. If we look at the goals, punishing past unlawful acts is intended to deter future criminals and spectators who are aware of the consequences of their actions from committing similar crimes in the future. Aside from that, holding a wrongdoer responsible has a retributive function. In addition to providing victims with the peace of mind that a guilty party has been identified and punished for the harm they have suffered, it helps to prevent collective blame and promotes reconciliation. Under International Humanitarian Law, individuals are held accountable for severe breaches, which are often referred to as war crimes. The creation of a right to remedy, which may take many different forms, is another essential element of international human rights law that should not be overlooked. States are required to investigate and punish grave breaches of human rights legislation, as well as to execute judgments in civil actions filed by victims against private actors, according to the Convention.

4.2 Research Findings

Based on the above critique, following research findings are presented.

1. The use of Robotic Weapons is not a military necessity. Why should one use robots instead of human soldiers when the world population is almost eight billion?
2. Robots are highly likely to fail to differentiate a civilian from a combatant and a civilian object from a military installation or object.
3. Doctrine/principle/values of precaution and robotic Weapons do not comply with each other. Totally autonomous Weapons cannot follow up with the rules of precautions due to their continuous change in surroundings. The doctrine/principle/values of precaution only complies with partially autonomous robotic Weapons.
4. As it is also mentioned that use of robotic Weapons does not comply with the doctrine/principle/values of proportionality because there is a huge difference between the energy and strength of a robot and a human. And the other thing is that a human can feel the pain and die but a machine cannot.
5. The burden of accountability is on the side of the manufacturing company, state and the operating institute because a machine cannot be punished if it does something wrong.

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