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The Difficulty Of Applying The Principle Of Proportionality In Precision Weapons

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Abstract
The rapid development of new military technology poses significant challenges, as precision weapons are designed to revolutionize the way war is waged. Although there are currently no fully autonomous weapons systems, they perform some functions independently. The researcher reached the following conclusions:

1. *The International Committee of the Red Cross (ICRC) proposed that precision weapons are an umbrella term that would encompass any type of weapon, whether operating automatically in the air, on land, or at se*
2. *There is relatively little publicly available information to assess the degree of autonomy these weapons possess in selecting their targets.*
3. *Scholars believe that such weapons may not comply with the rules of international humanitarian law, as the principle of distinction between combatants and non-combatants may not be present in these weapons.*
4. *Creating systems that can apply the principle of proportionality even in densely populated areas appears to be difficult to achieve due to the large number of variables that precision weapons must account for simultaneously. This requires a uniquely human mind.*
5. *The principle of proportionality is one of the principles that are difficult to achieve through the use of precision weapons, except by linking them to the human element via the internet. However, with the advancement of technology, it is possible to dispense with the human element, especially in areas where there are no civilians, thus fulfilling the requirements of the principle of proportionality.*
6. *It is not yet clear whether precision weapons can comply with the principles of distinction, proportionality, military necessity, and humanity, and the opposite has not been proven. However, even if autonomous weapons are capable of complying with these principles, they must still adhere to the specific and applicable laws that define the rules and procedures of war and the restrictions imposed on them.*

Keywords: *Artificial intelligence, cyber warfare, precision weapons, drones, air weapons.*

INTRODUCTION

The rapid development of new military technology poses significant challenges. Precision weapons are being developed to revolutionize the way war is waged. Although there are currently no fully autonomous weapons systems, they perform some functions independently. This trend toward increased reliance on modern weapons technology, which can wage wars with a high degree of independence from humans and achieve their objectives with great precision, will continue in military systems in general in the future, with the possibility of land, air, and sea vehicles, as well as the development of autonomous spacecraft, which are likely to impact all areas of warfare**.**

First requirement: The concept of precision weapons

In scientific literature and official government documents, there is no universally accepted definition of precision weapons. The truth is that autonomous robots or precision weapons can only operate within the capabilities programmed into them by algorithms. No system is truly independent of humans. At some point, humans must be involved in making the decision-making algorithm. Precision weapons are not autonomous in the true and full sense of the term.

According to the US Department of Defense, a precision weapon is one that can identify and engage targets without additional human intervention(1).

According to the UN Special Rapporteur on extrajudicial, summary or arbitrary executions, precision weapons refer to automated weapon systems that, once activated, can identify and engage targets without additional human intervention. The important element is that the weapon has an independent choice regarding target selection and the use of lethal force.(2).

The International Committee of the Red Cross (ICRC) has proposed that precision weapons are an umbrella term that would encompass any type of weapon, whether operating in the air, on land, or at sea, that can be autonomous. This means a weapon that can select (i.e., search, detect, identify, and track) and attack (i.e., use force against the enemy or damage or destroy) targets without human intervention (i.e., after initial activation, the weapon system itself, using sensors and programming, carries out targeting and operations that would normally be controlled by humans.)[3].

Among the definitions that have been mentioned, we tend towards the definition of the International Committee of the Red Cross, and we see it as the closest to the truth, because it defined the mechanism of its work and the meaning of accuracy therein.

Section Two: Applications of Precision Weapons

The end of the nineteenth century witnessed the first efforts to develop what were known as unmanned systems (UMS), the first step towards precision weapons. Inventor Nikola Tesla first developed the system by creating a remotely operated boat, but his invention never entered service. Then, developments included the creation of the so-called "kattering bug," an unmanned aircraft capable of carrying explosives. This aircraft was developed following World War II.

Half a century later, the invention of the Global Positioning System (GPS), which played a role in advancing the field of communications and the development of remotely operated devices, brought about a qualitative leap in the world of precision weapons. The first modern drone was used in 1982 during the Bekaa Valley operations in Lebanon. The Israeli army deployed it for intelligence and deception purposes.

Then the pace of manufacturing drones accelerated, and countries raced to spend to obtain the largest number of them..

It should be noted here that there is relatively little publicly available information to assess the degree of autonomy these weapons possess in selecting their targets. Therefore, we will discuss the most prominent types of precision weapons used, as follows:

1. Fixed weapon systems: This type has the highest level of autonomy. These systems include ship defensive weapons and fixed gun systems (commonly called sentry guns). Many countries currently use precision weapons to defend ships or land installations against missiles, mortars, aircraft, and high-speed boats. These weapons select a target and then attack automatically.[4]. According to the US Department of Defense, this type cannot target humans, but it can attack manned vehicles, such as counter-missiles.
2. Ground-based weapons systems: This type is often used to reach areas that are difficult to access, or extremely dangerous to humans, and is usually used to dispose of bombs, but this type of weapon has very little relative independence, as scientists believe that navigation systems are necessary in the complex terrain of this type before it becomes a fully independent weapon, and there are those who believe that the rapid technological progress will make this type the future of future wars ‘[5] .Examples of this type include Athena, a small tank that operates on land and underwater, and the humanoid robot Atlas.
3. -Air Weapon Systems: Over the past few years, drone weapons have been used to carry out some attacks. There are now a large number of drones that have been armed or are still under development. It is estimated that about 20 countries have developed or acquired this capability, although only a few of them have used it in armed conflicts. Although this type is largely autonomous in terms of takeoff and landing, navigation, and target acquisition, the decision to attack is still made by a human operator. This type was initially developed for reconnaissance and intelligence purposes and was later adapted to carry weapons and carry out attacks. A new generation of these weapons is now being developed that is more autonomous and is used in combat, such as the MQ9 Reaperز
4. -Naval Weapons Systems: Precision naval weapons of various sizes and functions are also being developed. There are two main types: the first is unmanned surface vehicles (USVs), which carry out surface warfare attacks, and the second is unmanned underwater vehicles (UAVs), which are used in anti-submarine warfare and mine-laying operations. This type is

particularly important as it can operate underwater for extended periods without human interaction due to the difficulty of underwater communications.[6].

Section Three: The Effects of Precision Weapons:

First: Advantages of Precision Weapons:

We will begin by discussing the advantages of precision weapons. Advocates of precision weapons systems present their arguments from both a military and ethical perspective.

From a military perspective, advocates see them as a tool for multiplying military force. They can also reduce human casualties in battle, as their use can remove a large number of soldiers from the dangerous battlefield. The US Department of Defense also offers other reasons to defend these weapons. They are better suited for dangerous or dirty tasks, citing the example of dangerous tasks such as disposing of explosive mines, and dirty tasks such as those that require human exposure to harmful radioactive materials. In addition, the US Department of Defense has demonstrated the importance of these weapons by reducing military expenditures. It stated that each soldier in Afghanistan costs the Pentagon approximately $850,000 annually. In contrast, the Talon robot (Figure 2), a small vehicle that can be equipped with weapons, costs only $230,000. Furthermore, these weapons are invulnerable to physical stress, fatigue, or exhaustion, unlike humans. From an ethical standpoint, advocates believe that such weapons will remove humans from intense combat zones, thus reducing human casualties. They also add that these weapons will prevent the crimes that soldiers might commit, such as sexual assaults and other crimes.[7].

Second - The Disadvantages of Precision Weapons:

As for the disadvantages of these weapons, the 2012 Human Rights Watch report provides a detailed account of the harms that precision weapons can cause. The report presents the following arguments:

1. The introduction of such machines into warfare and their replacement by human presence would eliminate any opportunity for mercy during battle, which could be a means of reducing the death toll.
2. The presence of such weapons could facilitate those in power to wage conflicts without risking their homelands or human soldiers.
3. There are those who believe that these artificially intelligent weapons cannot be held accountable. Neither the weapon nor the robot can be held responsible for its actions. If unnecessary civilian deaths or injuries occur, it is unclear who can be held accountable or punished.
4. Scientists believe that such weapons may not comply with the rules of international humanitarian law. The principle of distinction between combatants and non-combatants may not be present in these weapons. Although these machines will be able to detect humans, their sensory systems will be incapable of distinguishing between combatants and non-combatants, or identifying wounded or surrendered combatants.
5. In addition to the above, these weapons would be inconsistent with human dignity. Such inanimate machines cannot understand or respect the value of life, yet they can easily eliminate it.[8] .

The second requirement: Precision weapons within the framework of the principles of international humanitarian law:

In the debate on the issues before the UN Convention on Conventional Weapons (CCW) expert meeting, experts argued that precision weapons can violate international humanitarian law and human rights and lead to the dehumanization of war.

Section One: Precision Weapons and the Extent of Compliance with the Principle of Distinction:

One of the most important principles of contemporary international humanitarian law is the principle of distinction, which means the necessity of distinguishing between military objectives and civilian objects, and between military personnel and civilians ‘[9].Parties to the conflict must at all times distinguish between military objectives and civilian objects. Attacks may only be directed against military objectives and may not be directed against civilian objects. States have practiced this

rule as one of the rules of customary international law applicable in international and non-international armed conflicts ‘[10].The principle of distinction is therefore the cornerstone of the provisions of the Additional Protocols to the Geneva Conventions of 1977. Article 48 of the First Additional Protocol stipulates that the parties to the conflict shall endeavor to distinguish between the civilian population and combatants, and between civilian objects and military objectives, and shall therefore direct their operations against military objectives only.[11].

Therefore, the viewpoints of countries differed in determining the civilian objects that enjoy international protection and that have no relation to the war effort. Some countries considered all targets to be civilian, regardless of their nature, in the service of the war effort, which led to harm to civilians who benefit from this protection‘[12].This prompted the international community to develop several projects to distinguish between civilian targets. It was then concluded that the rule of distinction between combatants and non-combatants on the one hand, and military targets and civilian objects on the other hand, requires that civilians, those who are no longer capable of fighting, including the sick, wounded, drowned, prisoners of war, and anyone who has parachuted after their aircraft has been hit, should not be targeted in military operations. Medical and religious personnel, civil defense personnel, and authorized international and local relief organization personnel should not be targeted ‘[13] .As for civilian objects, international humanitarian law requires refraining from targeting anything that does not constitute a military objective, specifically dams, nuclear power plants, property necessary for the survival of the population, safe, neutral and demilitarized zones, locations not protected by military force, and cultural objects.[14].

International humanitarian law gives priority to granting civilian status to persons, and in the event of doubt being raised about the truth of its formulation (civilian or military), it must be acted upon that the target whose status is doubted is civilian and may not be targeted. This is what was confirmed by paragraph 1 of Article 50 of the First Additional Protocol of 1977, in its text: If doubt arises about whether a person is a civilian or not, then that person is considered a civilian.[15].

State practice has established this rule as a rule of customary international law applicable in both international and non-international armed conflicts. The International Court of Justice stated in its advisory opinion on nuclear weapons that:

"The principle of distinction is one of the fundamental principles of international humanitarian law and one of the inviolable principles of customary international law."

Many problems have emerged with the development of weapons, although the principle of distinction is very clear in its definition of legitimate and illegitimate targets, particularly with the emergence of weapons of mass destruction. Although most civilians suffered during these attacks, the crimes committed in the 1991 Gulf War and the 1999 Kosovo War are no longer considered war crimes.[16].

In parallel, since current technology cannot decode military and civilian targets, the principle of discrimination is the most problematic for precision weapons, as they do not have the ability to distinguish between civilians and soldiers, because they consist of sensors, and the information acquired from the sensors cannot accurately determine the difference between combatants and non-combatants ‘[17]. Noel Sharkey, an AI scientist and founding member of the Stop Killer Robots campaign, said:

These systems lack the basic elements to comply with the principle of discrimination. He gave an example in this regard regarding a mother escaping with her son who was carrying a fake gun to play with. The human soldier has the ability to interpret the situation as not posing a danger, while it is unreasonable for a machine to have that ability.[18].

There are then two trends regarding the ability of precision weapons to distinguish:

The first trend: It believes that precision weapons are unable to comply with the principle of distinction and lead to many problems in this regard, such as their inability to cancel an attack on a combatant who has been wounded or who has given a clear and explicit signal of his intention to surrender.[19]**.**

The second trend: It believes that precision weapons can be able to comply with the principle of discrimination, even if only to a simple extent, as is the case in large battles in which armies are

highly visible, or in battles that take place in remote environments, such as in deserts or underwater.[20].

Section Two: Compliance with the principle of proportionality when launching an attack using precision weapons Given the importance of this principle, we will explain it at the international and domestic levels as follows:

First: The principle of proportionality within the international framework:

This principle was stated in a rule mentioned in the St. Petersburg Declaration of 1868 regarding the prohibition of the use of certain shells in time of war, and this rule states that:

"The only legitimate aim which States should pursue during war is to weaken the enemy's military forces. Accordingly, 'the elimination of the greatest possible number of forces is sufficient to achieve this aim, and it may be exceeded if weapons are employed which unjustifiably increase the suffering of persons hors de combat or render their death inevitable.[21]"'.

The principle of proportionality was codified in Article 51 of Additional Protocol I and reiterated in Article 57. The Israeli Supreme Court stated in the case of Beit Sourik Council v. Government of Israel that the principle of proportionality is based on three conditions:

1. The selection of the least harmful means.
2. The compatibility of the means with the objective.
3. The harm caused to the animal by the means used must be proportional to the military advantage gained.

In other words, the principle prohibits attacks on military targets if the foreseeable civilian harm resulting from the attack exceeds the anticipated military advantage.[22].

The International Court of Justice has adopted this principle in many rulings, including the case of military and paramilitary activities between Nicaragua and the United States of America, in which the International Court of Justice rejected the United States' claim that what it did was collective self-defense in accordance with the United Nations Charter. During its discussion of the various factors that justify cases of self-defense, the Court recognized the principle of proportionality as a well-established principle of customary international law.[23].

International humanitarian law, in accordance with the principle of proportionality, requires warring parties to take the necessary precautions to avoid harming the civilian population and civilian objects, by refraining from carrying out any attack that could be expected to cause civilian casualties or damage to civilian objects that is disproportionate to the military advantage sought to be achieved.[24].

The principle of proportionality requires the military commander to continue to monitor whether the attack remains within the constraints of the rule of proportionality. If it becomes clear to the commander that the attack does not respect the principle of proportionality, he is obligated to cancel it if possible. In addition, there are many issues that need to be evaluated in the attack, such as the military advantage and civilian objects, in addition to the availability of necessary intelligence information, as well as the expected collateral damage from the attack, or even the issue of weather, which may be an important factor in the attack.[25] .

Second: The principle of proportionality within the domestic framework

We note that many countries attempt to comply with the principle of proportionality by issuing laws regulating the use of weapons. For example, the use of firearms is not permitted unless it is absolutely necessary to protect human life. On the other hand, there are countries that do not attempt to comply with this principle. For example, the police may use weapons when public order or public security is at risk, without regard to the harm caused to civilians.[26].

The weapons used in launching an attack play a major role in the issue of proportionality. The great development that has occurred in the arms industry in recent years has given the military the advantage of hitting targets precisely, but such development costs countries huge sums of money, so we find some countries refusing to oblige them to use such weapons in all wars. For example, the United States goes on to say that:

The rule of proportionality does not require developed countries like the United States of America to use high-cost, advanced weapons to comply with the principle of proportionality.[27].

State practice has indicated that the effects of indiscriminate weapons cannot be controlled in terms of duration and scope, as is the case with biological weapons. Although they can be directed at a military target, the possibility of them getting out of control and harming civilians is a possibility. Similarly, Scud missiles are not indiscriminate weapons in origin, but the use of this weapon in populated areas leads to the possibility of harming civilians more than harming legitimate targets. Any violation of the principle of proportionality constitutes a war crime under international criminal law. This principle applies at any time when civilians may be harmed by direct attacks and as long as these civilians do not directly participate in the hostilities. In other words, civilians and military personnel who directly participate in the hostilities do not enjoy the benefits of this principle when they carry out these acts.[28].

As for precision weapons, their introduction into the battlefield has frightening implications for the laws of war, particularly proportionality. In his 2013 report, Special Rapporteur Christof Heyns stated that these weapons could have far-reaching effects on societal values, including, primarily, the protection and value of life, because they are unlikely to possess the qualities necessary for compliance with international humanitarian law, such as human judgment, common sense, an understanding of the intentions behind people's actions, and an understanding of human values.[29].

Section Three: Compliance with the principle of military necessity when launching an attack using precision weapons

International humanitarian law is based on balancing the requirements of military necessity and humanitarian considerations. Military necessity requires the use of force to the extent necessary to achieve a military advantage, while humanitarian considerations require achieving this advantage with the least loss of life and equipment ‘[30].In the absence of an explicit regulation that specifies the type and degree of force permitted to be used in direct attacks directed against legitimate military targets, the type and degree of force must be determined based on the principles of military necessity and the principle of humanity.[31].

The principle of necessity plays a role within the framework of an idea whose foundation is that the use of methods of violence, cruelty and deception in war stops at the point of subduing the enemy and achieving the goal of war, which is defeating him and achieving victory .[32]If the goal of the war is achieved in this way, it is impossible to continue directing hostile operations against the other party, and we can reach the following conclusions by relying on the idea of necessity.

- The force used can be controlled by the person using it.
- The force used must be directly and rapidly used to subdue the enemy, whether partially or completely.
- The means used must not be internationally prohibited.

Today, it is generally recognized that the principle of military necessity permits only the use of this type and degree of force, not prohibited in any way by the law of armed conflict, and necessary to achieve the legitimate objective of the conflict, namely, the total or partial subjugation of the enemy as quickly as possible, with the least possible sacrifice of lives and resources .[33]

Military necessity occupies a prominent position in international humanitarian law covenants, as it is mentioned in the preamble to the St. Petersburg Declaration, which stipulates that the necessities of war must be replaced by the requirements of humanity‘[34] .

Paragraph 5 of the preamble to the Fourth Hague Convention of 1907 concerning the Laws and Customs of War on Land stipulates that it is the limitation of the sufferings of war as permitted by military necessity, in addition to the reference to it in the Geneva Conventions and their First Additional Protocol in various articles, and in the Second Additional Protocol in one article, Article 17. International jurisprudence and judiciary have agreed that military necessity is governed and beneficial by a number of conditions, which are:

1. The occurrence of this condition is linked to the course of military operations during the stages of combat.
2. The temporary nature of military necessity, which begins with the beginning of the act and ends with its cessation.

3. The procedures used to implement them are not prohibited under international humanitarian law.
4. The belligerent forces shall not have any choice in determining the nature and type of means used during military necessity.(35) .

In the context of precision weapons and their ability to achieve the principle of military necessity, some argue that the ability of precision weapons to meet the requirements of this principle depends on meeting the requirements of another principle, namely the principle of distinction. If precision weapons cannot identify a target, whether military or civilian, they cannot determine whether its destruction is a military necessity. Compliance with the principle of military necessity requires that the force exerted by these weapons be limited to the amount of force necessary to achieve the legitimate objective of the conflict. Therefore, allowing precision weapons to use unlimited force violates this principle. Opponents of these systems believe that they will find it difficult, and perhaps impossible, to assess military necessity, since the principle is linked to human beings and thought. However, supporters of these systems argue the opposite, saying that their use is only for military necessity.(36).

Section Four: Compliance with the principle of necessary precautions when launching an attack using precision weapons

After the obligation to take precautions in attack as a basic principle of international humanitarian law, it was stipulated in Article 57 of Additional Protocol I of 1977 that "1. Constant care shall be taken in the conduct of military operations to spare the civilian population, civilians and civilian objects." The requirement of this text is that the adversaries must take constant care to spare the civilian population and civilian objects when launching an attack. The following paragraphs of this article oblige those who plan or decide upon an attack, i.e. those who take command of military operations, to take all feasible precautions in the choice of methods and means of attack to avoid and damage civilians as well as civilian objects.

The term "feasible precautions" is not defined in the text of the aforementioned article, but it is clarified in the 1980 Conventional Weapons Convention II as those precautions which are practically possible, taking into account all circumstances at the time, including humanitarian and military considerations'(37) .Among the feasible precautions that the warring parties must take, as stated in Article 57 of Additional Protocol I, is to do everything feasible to verify that the intended targets are military objectives, to take all feasible precautions in the choice of methods and means of attack to avoid or minimize collateral damage to civilians and civilian objects, and to refrain from launching attacks that are expected to be in violation of the principle of proportionality.(38).

The question that arises in this regard in the context of precision weapons systems is at what stage of the system's integration into combat operations are these measures taken? Are they taken when the autonomous weapon system is activated, when the system is about to engage in military operations, or throughout the duration of participation in targeting? The optimal answer to this is that the commitment is continuous in nature, starting from the programming of the weapon and throughout the duration of participation in combat operations. However, these precautions are not taken in an attack unless they are possible. That is, the extent to which a certain precautionary amplification can be taken must be measured in comparison with the alternatives available to those planning or deciding to take a certain attack, and not in comparison with the ability of a particular machine to take a particular measure '(39) .Since this measure addresses those who plan and order the attack, it means that it addresses humans, and therefore does not address the autonomous weapon, because it is merely a machine. However, there is nothing to prevent taking such precautions, because humans are the ones who throw these machines into the attack, spatially and temporally. This means that this principle implicitly leads to the duty to keep the human soldier in the loop for the purpose of control and supervision to enable it to respond to new situations during the conflict.

Section Five: Precision Weapons in Light of the Martens Clause:

The principle of humanity and the dictate of public conscience, or what is called the Martens Clause, is both the end and the means of international humanitarian law. This principle aims to

protect human dignity in all circumstances, including times of war. It is not possible to talk about international humanitarian law without referring to this principle ‘[40].War is a real, human-made situation. If you cannot prevent it, you can limit its effects and work to prevent the violation of the inherent humanity of all human beings.[41] .This clause was originally included in the preamble to the Fourth Hague Convention of 1899 and 1907. The Martens Clause means that in the absence of a specific rule of treaty law, combatants and civilians remain protected and subject to the authority of customary law, the principles of humanity, and the dictates of the public conscience. In other words, the absence of a written law does not justify attacks on persons, whether civilians or combatants. The same applies to civilian and military objects, as opposed to persons. Everyone remains protected by the principles of humanity and the public conscience.The Martens Clause is linked to the principle of humane treatment, which prohibits the infliction of pain, injury or destruction that is not actually necessary to achieve legitimate military objectives. This principle is complementary to and in solidarity with the principle of military necessity ‘[42].This principle is stated in the Holy Qur’an in the Almighty’s saying: “And We have certainly honored the children of Adam and carried them on the land and sea and provided for them of the good things and preferred them over much of what We have created, with [definite] preference‘ [43]”.This noble verse requires that a person be honored and treated humanely, i.e., that his honor, blood, and property be respected. This principle is also stated in Article 22 of the Hague Convention of 1907, which states that belligerents do not have an absolute right to choose the means of inflicting harm on the enemy, in addition to the text of paragraph (e) of Article 23 of the same convention, which prohibits the use of weapons, projectiles, and materials of a nature to cause unnecessary injury and unnecessary suffering.Today, the Martens Clause can be found in paragraph 2 of Article 1 of the 1977 Additional Protocol I to the four Geneva Conventions of 1949, which states that “civilians and combatants, in cases not provided for in this Protocol or in any other international agreement, shall remain under the protection and authority of the principles of international law as established by custom, the principles of humanity and the dictates of the public conscience.” Thus, this principle summarizes the other principles of international humanitarian law and is the essence of the just war theory, which means that war must not cause more suffering than is necessary to achieve its purpose.The Martens Clause is also called the Substitute Principle, as it applies when there is no text protecting the person or persons concerned, or regarding a matter or situation for which there is no explicit text. Thus, the Nuremberg Tribunal applied this principle when trying major criminals of World War II. There has been debate as to whether the principles of humanity and the dictates of public conscience are legally binding and independent standards by which any weapon or a particular type of behavior can be legally measured, or whether they are moral principles.The International Court of Justice upheld the legality of the Martens Clause in its advisory opinion on the legality of the threat and use of nuclear weapons, stating that its continued existence and applicability could not be doubted, and that it had proven to be an effective means of countering the rapid development of military technology.[44] .When analyzing whether autonomous weapons are compatible with the principle of humanity, some argue that they should be compared to drones. Drones offer many humanitarian advantages that may be applicable to weapons with high levels of autonomy. Moreover, precision weapons are not designed to cause unnecessary suffering, as such suffering can occur with conventional weapons themselves, as it depends not on the type of weapon but on the way it is used. Since assessing the compatibility of precision weapons with the principle of humanity depends on comparing them to drones, some respond by saying that drones themselves violate the principle of humanity, since the vast majority of strikes are carried out without prior warning, which contradicts the text of Article 37 of the Manual on International Law Applicable to Air and Missile Warfare. Others believe that precision weapons are incapable of meeting the requirements of humanity because they lack human emotions, such as empathy and fear. Precision weapons also cannot recognize the physical and psychological suffering that humans feel, and therefore precision weapons will face difficulties in making their actions humane and consistent with the principle of humanity. They cite the survey conducted by Arkin in his research on the

acceptability of the use of these systems among the general public, decision-makers, researchers, and military personnel. The result of the research was that the prevailing opinion is:
"The less human oversight there is of weapons, the less reliable they become.[45]".
The International Committee of the Red Cross (ICRC) acknowledges that this issue is not new to technology itself, but rather relates to the use of technology. Almost every weapon can be misused in some way, so the question in this regard is whether precision weapons will be used legally or not.[46].
Although it is not yet clear whether precision weapons can comply with the principles of distinction, proportionality, military necessity, and humanity, and the opposite has not been proven, even if autonomous weapons are able to comply with those principles, they must still adhere to the specific and applicable laws that define the rules and procedures of war and the restrictions imposed on them.

CONCLUSION

1. The International Committee of the Red Cross proposed that precision weapons be a comprehensive term that would encompass any type of weapon, whether operating automatically in the air, on land, or at sea.
2. The end of the nineteenth century saw the first efforts to develop what were known as unmanned systems (UMS), the first step towards precision weapons. Inventor Nikola Tesla first developed the system by constructing a remotely operated boat, but his invention never entered service.
3. There is relatively little publicly available information to assess the degree of autonomy these weapons have in selecting their targets.
4. Scholars believe that such weapons may not comply with the rules of international humanitarian law, as the principle of distinction between combatants and non-combatants may not be present in these weapons. Although these machines will be able to detect humans, their sensory systems are incapable of distinguishing between combatants and non-combatants, or identifying wounded or surrendering combatants.
5. There are some circumstances in which the use of precision weapons is important in achieving the objectives of Article 48. However, given the lack of advanced sensors and targeting programming technology, military targets are only potential targets for precision weapons, not precise targets. Therefore, appropriate supervision and precise operation of these weapons are required to ensure compliance with the principle of distinction.
6. Given the complexity and difficulty of the calculations that must be performed before deciding to attack, it seems quite clear that it is impossible to program a machine to perform these calculations, especially in a dynamic environment. Even if we assume that one day programmers are able to create machines capable of achieving this, and create systems that can apply the principle of proportionality even in densely populated areas, this seems impossible due to the large number of variables that precision weapons must simultaneously account for. Such a task requires a uniquely human mind.
7. The principle of proportionality is one of the principles that are difficult to achieve through the use of precision weapons, except by linking them to the human element via the internet. However, with the advancement of technology, it is possible to dispense with the human element, especially in areas where there are no civilians, thus fulfilling the requirements of the principle of proportionality.
8. It is not yet clear whether precision weapons can comply with the principles of distinction, proportionality, military necessity, and humanity, and the opposite has not been proven. However, even if autonomous weapons are capable of complying with these principles, they must still adhere to the specific and applicable laws that define the rules and procedures of war and the restrictions imposed on them.

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