
THE USE OF FORCE AND AUTONOMOUS WEAPONS: ALIGNING EMERGING TECHNOLOGIES WITH INTERNATIONAL LAW

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INTRODUCTION

International law, in particular the Charter of the United Nations, International Humanitarian Law and International Human Rights Law applies to the Autonomous Weapons System.[1] This chapter delves into the impact of AWS under *jus ad bellum*, Human Rights Law and how the AWS prompts an arms race.

AWS AND *JUS AD BELLUM*

Jus ad bellum can be translated to the concept of “right to war” in Latin. It refers to the legal and moral criteria that determines when a State can justifiably resort to the use of force against another. It is different from the concept of *Jus in bello* which primarily deals with the rules which governs the conduct during an armed conflict.

USE OF FORCE

In lay man’s terms the use of force is the act of using physical force, violence or superior strength to compel someone to do something. It may also refer to the use of a dangerous instrument. The use of force in the context of law enforcement, may be defined as, “the amount of effort required by police to compel compliance by an unwilling subject.[2]

The rules governing resort to force form a central element within international law and together with other principles such as territorial sovereignty and the independence and equality of States, provides the framework for international order.

For centuries, States have resorted to force in their international relations in order to achieve a particular, desired aims. The use of violence was considered as a successful method of resolving disputes by the States although it is tragic in its consequences. The use of force has

been a part of human history since ancient times. For instance, Code of Hammurabi (1754 BCE) had established rules for warfare and punishment.[3] Similarly the conquests of Sargon the Great (2334-2279 BCE) had unified city-states through military campaign. Sargon of Akkad had conquered most of Mesopotamia and parts of Syria, Anatolia and Elam around 2330 BCE.[4]

The doctrine of Just war arose as a consequence of the Christianization of the Roman empire and the ensuing abandonment by Christians of pacifism. Force could be used provided it complied with the divine will. The concept of just war embodied elements of Greek and Roman philosophy and was employed as the ultimate sanction for the maintenance of an ordered society.[5] Just War theory consists of two important principles, *jus ad bellum* and *jus in bello*.

St. Augustine (354-430 CE) developed the concept of “just war” which emphasized that war should only be waged for a just cause, with the right intention and with the proper authority. Thomas Aquinas (1225-1274) expanded on Augustine’s ideas adding that war should also be a last resort and that non-combatants should be protected.[6] Some of the prominent modes of warfare during this period can be attributed to the Feudal wars, crusades, siege warfare, tournament warfare.

Some of the notable conflicts include the Hundred Years’ war which was a series of conflicts between England and France, fought over issues of succession, territory and trade. A series of holy wars namely “the crusades” was fought between Christians and Muslims with the goal of reclaiming the holy land, the wars of the roses (1455-1485), a dynastic conflict which was fought between the houses of Lancaster and York, with the goal of controlling the English throne.

The medieval warfare often resulted in widespread destruction, displacement and loss of life. It also led to social and economic upheaval as the wars disrupted trade, led to famine and caused social unrest. The use of force drove innovation leading to the development of new military technologies such as the long bow and gun powder of that time. The use of force in medieval times was shaped by the social and cultural context of the period. With the rise of the European nation-states, the doctrine of just war began to change. It became linked with the sovereignty of States and faced the paradox of wars between Christian states, each side being convinced of the justice of its causes. The requirement that serious attempts at a

peaceful resolution of the dispute were necessary before turning to force began to appear. Thus, the emphasis in legal doctrine moved from the application of force to suppress wrongdoers to a concern to maintain the order by peaceful means.

The great Spanish writer of the 16th century, Victoria emphasized that “not every kind and degree of wrong can suffice for commencing war.[7] Grotius in his systematizing fashion tried to exclude ideological considerations as the basis of a just war, in the light of the destructive 17th century religious conflicts and attempted to redefine the just war in terms of self-defense, the protection of property and the punishment for wrongs suffered by the citizens of the particular state. But with positivism and the definitive establishment of the European balance of power system after the Peace of Westphalia 1648, the concept of just war disappeared from international law. The doctrine of just war gained prominence with the increasing power of Christianity and declined with the outbreak of the inter-Christian religious wars and the establishment of an order of secular sovereign states. Though war became a legal state of affairs by which force was permitted to be employed respectively with the regulatory conditions, there existed various other methods of employing force that fell short of war with all the legal consequences as regards neutrals and conduct that entailed. Reprisals and pacific blockades were examples of the use of force as “hostile measures short of war.[8]

Prior to the first world war, international law condoned the resort to war by States. The position was explained by Brierly as follows: “the relation of war to the international system was stated by W.E. Hall in a well-known passage of his treatise in these words: International Law has no alternative but to accept war, independently of the justice of its origin, as a relation which the parties to it may set up if they choose and to busy itself only in regulating the effects of the relation.” This view which came to be more or less generally accepted by international lawyers in the course of the 19th century and thus marked the definite abandonment of the claim of the classical jurists to distinguish between *bellum justum* and *bellum injustum*.[9]

After the first world war, the league of nations covenant imposed some limitations upon “resort to war”. It was in the 1928 General treaty that a comprehensive prohibition of war as an instrument of national policy was achieved.[10] It was considered a constant challenge by the states during those inter war period as the covenant of league of nations only set up a procedure designed to restrict the war or use of force and did not prohibit it. The total

prohibition of war was accepted by the states in the 1928 General treaty for the renunciation of war in which the parties had condemned the recourse to war and agreed to remove it as an instrument of national policy in their relations with one another. This treaty though signed almost a century ago has not been terminated and is accepted widely. Now prohibition of the resort to war is a valid principle of international law. However, prohibition on the resort to war does not mean that the use of force in all circumstances is illegal. Reservations to the treaty by some states has made it apparent that the right to force in self-defense and other prescribed conditions are considered as valid principles in international law.[11]

The UN Charter, Article 2(4) declares that “All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State or in any other manner inconsistent with the purpose of the United Nations”. [12] This provision is now regarded as a principle of customary international law and is considered to be binding on all states irrespective of the membership. The reference to force rather than war is beneficial. It is because the term “force” also covers situations in which violence is employed which falls short of the technical requirements of the state of war.

Article 2(4) was elaborated as a principle of international law in the 1970 Declaration on principles of international law and was analyzed systematically. First, wars of aggression were considered to constitute a crime against peace for which there was responsibility under international law. Secondly, States should not threaten or use force to violate existing international frontiers. Thirdly, States are under duty to refrain from acts of reprisal involving use of force. Fourthly, States must not use force to deprive peoples of their right to self-determination and independence. Fifthly, States must refrain from organizing, instigating, assisting or participating in acts of civil strife or terrorist acts in another State and must not encourage the formation of armed bands for incursion into another States territory.[13]

The concept of *jus ad bellum* provides for the valid reasons for resorting to war. There are certain criteria to be met in order to substantiate this principle. The war should be : for a just cause, declared by a legitimate authority, principle of proportionality should be respected, war should be the last resort.[14]

Abney has noted that, “...new capabilities transform not only the conduct of war, but also the very understanding of what war is, and when and how it ought (not) to be waged.

Accordingly, such innovations require clarifications, if not wholesale revisions, to ethical concepts and theories.[15]

The Autonomous weapons system is primarily discussed in *jus in bello* concept. But under *jus ad bellum* there are certain areas which affect the justification of this principle. For instance, “just cause”. This term is based on the moral and political arena depending upon the respective contingency. AWS gives the technologically advanced States an upper hand due to the fact that they have sophisticated technologies. This advantage may dilute the concept of just cause. It is because instead of genuinely resorting for just cause, a State if it finds that the other State cannot withstand its technological advancements, it may employ its AWS thus may not respect the concept of “just cause”.

Legitimate authority under the Just war concept can be attributed to a State or a political system which represents the citizens and is recognized by the international community. With the AWS, especially under the circumstances of human-out-of-the loop, under fully autonomous weapons system or LAWS, though the war may be initiated by the State, but once the action is initiated there is no further human intervention. It complicates the principle of accountability and also lacks moral agency which in turn violates both the *jus in bello* and *jus ad bellum* principles.

Principle of proportionality is a concept which finds relevance under *jus in bello* and *jus ad bellum*. Under *jus ad bellum* this concept can be related to the fact that a war is considered proportional if the potential benefits of war outweigh the expected harms. Under *jus ad bellum* the concept of proportionality is related to the prospective nature. The assessment made with respect to the anticipated or expected consequences of the action should be considered. The supporters of AWS argue upon the fact that by the deployment of AWS, the lives of military personnel are saved and also because of the precision with which these systems function civilian lives could also be saved in comparison with the deployment of conventional weapons. But the challenge lies on the fact that autonomous weapons violate the proportionality principle under *jus ad bellum* as they are unpredictable. Due to the increasing autonomy the actions of the AWS are increasingly becoming unpredictable because of the fact that once the task is initiated, the whole process then is decided and carried out by the system autonomously.

Another main implication of the AWS is upon the concept of war to be the “last resort”. War as a last resort means that initially actions should be taken in such a way that there could be peaceful and amicable solutions, diplomatic negotiations etc. Only when every other step or action fails war should be resorted to. Usually States would consider much before resorting to war as it affects that State in many ways. For instance, the State would be considering the potential casualties which may occur, the cost which may incur, duration etc. But with AWS, the threshold for resorting to war is being significantly reduced. It is because of the potential benefits which the AWS provide for. AWS, in which there is no human intervention reduces the cost or expenses, it reduces the human casualties, it also gives an upper hand to a State which is technologically advanced.

Abney writes, *“autonomous robots, with their promise of fewer casualties, will make war less terrible and therefore more tempting, plausibly enticing political leaders to wage war more readily.”*[16]

It was noted that the prohibition of the threat or use of force against the territorial integrity or political independence and other such related obligations in the UN Charter conferred upon the States also equally applies with respect to the lethal autonomous weapons system.

The important exceptions to Article 2(4) of the UN Charter exist in relation to collective measures taken by the United Nations and with regard to self-defense. Another exception recognized is humanitarian intervention.

RIGHT TO SELF DEFENSE

The traditional definition of the right of self-defense in customary international law arose out of the Caroline case.[17] In this the principle of self-defense as a concept of “imminent threat” in international law would have been established.[18]

Article 51 of the UN charter provides for this concept. It states that “Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security

Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.[19]

In the Nicaragua case the ICJ had ruled that the United States had engaged in unlawful acts of aggression against Nicaragua. Also the principle that States must not use force, except in self-defense or with the authorisation of the Security Council, has been established.[20]

In the Gulf war, the UN security council authorised the use of force to liberate Kuwait from Iraqi occupation. Also the role of UN security council in authorising the use of force for collective security purposes were demonstrated.

In the Case of NATO's intervention in Kosovo, it was controversial with some arguing it was humanitarian intervention and others claiming, it was an unlawful use of force. It raised questions about the legality of humanitarian intervention and the role of the UN Security Council in authorising the use of force.

In the Iraq War the US-led invasion of Iraq was widely criticised as an unlawful use of force. It also raised questions about the use of force in anticipation of a perceived threat (pre-emptive self defense) and the role of UN security council in authorising the use of force. The principles of the United Nations are specifically provided under Article 2 of the Charter. Article 2 could also be attributed to "just war theory".

Bombings of embassies or diplomats abroad raised a question as to whether such an armed attack legitimise action in self-defence. For instance: the US launched a series of cruise missile attacks upon installations in Afghanistan and Sudan in response to the August 7 1998 bombings. Self-Defense was claimed by US for its responses to the 9/11 attacks. States have employed even pre-emptive strikes in self-defence.[21] E.g. Israeli action in 1967, launching strike upon its Arab neighbours following a blockade and the military pact between Jordan and Egypt.

The US 2002 National Security Strategy also emphasised the role of pre-emption in national security strategy. Regarding the use of force in protecting nationals abroad since the adoption of the UN charter became rather more controversial due to the necessity of the territorial integrity and political independence. E.g. In 1964 Belgium and the US sent forces to the Congo to rescue the hostages. Historically, the right of States to take up arms to defend

themselves from external forces are well established as a rule of customary international law. Article 51 of the UN Charter also mentions about it. The instance could be the invasion of Kuwait by Iraq in 1990, attacks on Iraq by ISIL and the reporting of the UK to the UN Security Council on 2014, ISIL in Syria, Security Council resolution 2249 (2015) etc.[22]

Today, even the civil wars and use of force are being debated. International Law treats civil wars as essentially internal matters with the possible exception of self-determination conflicts. Chapter VII of the UN Charter could also be attributed to measures taken for collective security. It refers to the various actions taken to restore peace and security. Resolution 1373 (2001) reaffirmed the Resolution 1368 which specifically referred to the inherent right of individual or collective self-defense in accordance with the Charter and also under chapter VII, adopted a series of binding decisions, including a provision that all states shall take the necessary steps to prevent the commission of terrorist acts.

With respect to the collective security, the NATO alliance, the Inter-American treaty of Reciprocal assistance 1947 and such other agreements and treaties could also be quoted. Chapter VII Articles 39 to 51 refers to the action which could be taken to address threats to the peace, breaches of the peace and acts of aggression. The UN Charters Article 51 recognises the inherent right of self-defense. The use of force against non-state actors such as terrorist organizations are being carried out. For instance, the US-led drone strikes against terrorist targets in various countries especially post 9/11 attack.

The acts constituting self-defense should satisfy the relevant criteria to be legal. The necessity and proportionality should be established. Also for anticipatory self-defense the tests laid down in Caroline case.[23] should be satisfied.[24]

Today AWS deployment raises question as to its accurate early warning since it would be the result of programmed algorithms. If it constitutes any incorrect warning the repercussions may be massive. Even there are instances previously where there was incorrect display for warning systems. For instance, in the mid-1950s a US early warning system mistakenly believed a flock of geese to be a Soviet missile. Had the machine been trusted completely it would have started a war. Similarly, in 1983 there was a nuclear false alarm incident. It was due to the timely intervention and rational thinking of the then lieutenant colonel of Soviet Air Defence forces that this false alarm was identified. Thus it is clear that human engagement is a necessary even in the most sophisticated form of technology. These incidents

serve as a reminder of the dangers of completely trusting a computer in interpretation of a crisis.[25]

Similarly, the United States had employed “Patriot missile-defense system” during the 2003 invasion of Iraq. But at certain phases the Patriot system fired at Allies jets mistaking it to be for hostile targets. Thus sometimes these systems also risk of starting a new war.[26]

Such false positives can also be triggered by an adversary or a third party. For instance, *it is entirely conceivable that rather than firing rockets from a school, which may strengthen the legitimacy of self-defense claim by Israel, Hamas could instead place a targeting radar on top of the same school and ‘spoof’ a Harpy into firing the first shot.*[27] Also if there is an interaction between two adversarial AWS there is a risk of “flash crash”. The AWS may also be impacted by the command control actions. Also some AWS like DARPA’s CODE (Collaborative Operations in Denied Environments) illustrates how AWS might function when such systems are not capable of contacting their human operators. *For example, MK 60 CAPTOR (encapsulated torpedo) mines “detect and classify submarines and release a modified torpedo” to attack enemy targets.*⁸⁰ *If such an autonomous torpedo launcher, stationed in a crucial shipping lane during a conflict and cut off from C2 before the declaration of a ceasefire, picked up an adversary’s warship bearing down on it, such a weapon might—like Andrew Jackson’s forces at New Orleans—decide to attack under the mistaken assumption that hostilities were ongoing. Such an attack might well scuttle peace talks and erase the credibility of one party’s promise to hold its fire.*[28]

The Israeli Iron Dome system is a short-range, mobile air defense system which is designed to intercept short-range rockets, artillery shells and mortars. The system uses radar to identify incoming projectiles and employs advanced algorithms to determine if interception is necessary. It has been a successful system and had intercepted many missiles. But its failure to intercept was for the first time witnessed in the October 7 attacks in 2023. This raises concern regarding the fact that completely trusting the technology can sometimes be fatal.

Although Article 51 of the UN Charter does not explicitly mention the principles of *necessity* and *proportionality*, they are recognized as customary international law and are closely linked. Both aim to ensure that self-defensive actions are limited to repelling or preventing attacks. *Necessity* assesses whether a measure is required to achieve a legitimate defensive goal, while *proportionality* evaluates the extent of force that may be used. In the context of

autonomous weapons, applying these principles is complex and requires detailed analysis. Force must be used only if absolutely necessary to repel or prevent an armed attack.[29]

When considering the concept of necessity, AWS may have certain impact. They lack human judgment due to which AWS may not fully assess whether non-violent or less forceful alternatives exist before engaging. AWS are based on pre-programmed decisions. They operate based on algorithms, which may not adapt well to evolving or ambiguous real-world scenarios.[30] Similarly in situations where an AWS acts independently, it may strike when human commanders would have judged force unnecessary. The example of the 1980s nuclear crisis which was averted due to the timely intervention and rational thinking of human beings could be quoted.[31]

Regarding the principle of proportionality AWS may not effectively weigh civilian harm versus military gain in real time. AWS might be unable to scale down force or abort missions if conditions change as it is based on preprogrammed algorithms. The unpredictable nature of AWS also affects the concept of proportionality and it may also lead to disproportionate harm. Also there are accountability and compliance challenges which contribute to its challenges.[32]

While Autonomous Weapons Systems pose significant challenges to the principles of self-defense, they can also *enhance compliance* with those principles if they are designed, deployed, and used carefully. Due to its enhanced precision and accuracy AWS can reduce collateral damage. AWS can be programmed to strike with extreme precision, potentially lowering civilian casualties compared to human-operated systems. With advanced sensors and machine learning, AWS may identify and engage only legitimate military targets more reliably than humans in high-stress environments. Thus by minimizing unintended harm, AWS can support proportional use of force. AWS can help in faster decision making in critical situations. It can react faster than humans, it can calculate trajectories and respond within milliseconds. With AWS there is no emotional or cognitive bias. With pre-programmed legal compliance AWS can more effectively comply with international norms. Though the use of AWS complicates the application of self-defense principles by removing or reducing human judgment and flexibility, with efficient and rigorous legal and ethical design and with meaningful human oversight AWS can contribute to adhering these principles. Thus in order to ensure AWS can lawfully and ethically operate within the

bounds of necessity and proportionality requires strict legal frameworks, real-time human oversight, and technological safeguards.[33]

RESPONSIBILITY TO PROTECT

The tragedies in Rwanda[34] and the Balkans[35] in the 1990s opened the forum for debate to the international community regarding the protection of human rights from gross and systematic violations. A question arose as to whether the intervention by the International community for humanitarian purposes affects the concept of sovereignty of that respective State. The concept of Responsibility to Protect was first presented in the report of the International Commission on Intervention and State Sovereignty (ICISS) which was set up by the Canadian Government in December 2001. The Commission had been formed in response to the then Secretary-General of the UN, Kofi Annan's question as to when the international community must intervene for humanitarian purposes. The report regarding Responsibility to Protect had interpreted the concept of sovereignty as which not only gave the State the right to control its affairs but also conferred on the State the primary responsibility for protecting the people within its borders. Intervention may be necessary under three main circumstances. First, when the State fails to protect its people due to its lack of abilities. Second, when the State fails to protect its people due its lack of willingness and third, when the State itself is the perpetrator.

The then Secretary-General Kofi Annan had set up a High-level Panel on Threats, Challenges and Change in 2004 which endorsed the norm of R2P. It was mentioned in that, that, there was a collective international responsibility which was exercisable by the Security Council to authorize military intervention as a last resort, in the event of genocide and other large-scale killings, ethnic cleansing and other serious violations of International Humanitarian Law which the Sovereign Governments have proved powerless or unwilling to prevent.[36] In the then Secretary-General Kofi Annan's report, "In larger freedom" a list of criteria was proposed for the authorization of the use of force in general, such as seriousness of the threat, proportionality, chance of success, etc. The concept of R2P also includes the Responsibility to Prevent, Responsibility to React and the Responsibility to Rebuild. Autonomous weapon systems (AWS) raises significant concerns about the "responsibility to protect" (R2P) principle, as the lack of human judgment and control in their operation could create accountability gaps and potentially lead to violations of international humanitarian law, making it difficult to determine who is responsible for actions taken by these systems.

Article 2(6) of the UN Charter provides that the United Nations shall ensure that states which are not members of the United Nations should act in accordance with these principles so far as may be necessary for the maintenance of international peace and security. It is noted that many of the resolutions adopted by the United Nations are addressed simply to “all states”. For example, Security Council resolution 757(1992) adopted under Chapter VII of the Charter imposed comprehensive sanctions upon the federal republic of Yugoslavia. However the invocation in that decision was to “all states” and not member States.[37]

The term force in Article 2(4) includes not only armed force but also economic force. The 1970 declaration on principles of International law recalled the “duty of States to refrain from military, political, economic or any other form of coercion aimed against the political independence or territorial integrity of any State and also the International Covenants on Human Rights adopted in 1966 emphasised the right of all peoples freely to pursue their economic, social and cultural development. This approach was highlighted in the charter of economic rights and duties of states, approved by the general assembly in 1974 which particularly specified that “no state may use or encourage the use of economic, political or any other type of measures to coerce another State in order to obtain from it the subordination of the exercise of its sovereign rights.[38] It is to be noted that Article 2(4) covers threats of force as well as use of force. This issue was addressed by the International Court in its advisory opinion to the General Assembly on the Legality of threat or use of nuclear weapons.[39] The court stated that a signaled intention to use force if certain events occur could constitute a threat under Article 2(4) where the envisaged use of force would itself be unlawful.[40]

As discussed earlier with advancements in the means and methods of warfare the repercussions too are increased. It becomes a compelling event to displace the people from the sites which have been affected due to any of such use of force or due to the prediction that a particular place may be damaged during the course of a conflict. The States first have to undertake the preventive measures in ensuring no such devastating incidents take place. In the event of such incident happening then the States have to react in the most appropriate way.

Normally once a conflict gets over, the next step to be taken is to ensure that the people who were displaced during the course of such events have to be resettled to their original places. But due to the heavy destruction caused using technology, it may be difficult to make

resettlement as done in the traditional way. Here the States have to keep in mind that component of R2P which is the Right to Rebuild. They have the responsibility to ensure that not only it has tried to prevent and reacted with the aim of mitigating the harmful effects but they should also ensure that sustainable reconstruction and rehabilitation have been made.

The Post intervention obligations include Peace building, security and protection, justice and reconciliation and development. These obligations are important to ensure that the people who were affected are able to go back again to their normal routine.

The interface of environmental protection and R2P doctrine in a warfare where there is deployment of Autonomous Weapons System is an exigent issue. It is because such AWS employs AI to carry out its functions and operations. Warfare driven by AI can entail horrific environmental effects such as disruption of natural ecosystems, pollution, and climate wreaking havoc. Moreover, degradation of the environment simply exacerbates humanitarian crises with respect to displacement, famine, and disease. It is the responsibility of the States to protect the people from such devastating circumstances. Environmental degradation can have long-lasting and far-reaching consequences for human security, including the destruction of livelihoods, the displacement of communities, and the exacerbation of social and economic inequalities. By integrating environmental protection into R2P frameworks, a more sustainable and equitable approach to humanitarian protection, one that prioritizes the well-being of both people and the planet can be promoted.

The first is the protection of minorities. This operational challenge is particularly pertinent where there are ethnic majorities in the places where civilians ought to return. In post-conflict situations, revenge killings and also reverse ethnic cleansing are prominent. So efficient measures have to be taken to prevent such atrocities. The second major protection task is security sector reform. The third main task is disarmament, demobilization, and reintegration. The fourth task is with respect to mine action and the fifth related to the pursuit of war criminals.[41]

Under Right to prevent there exists the concept of early warning analysis. In AWS, early warning systems (EWS) face numerous challenges that can impact their effectiveness. One of the primary concerns is data overload, where the vast amounts of data generated by AI-powered sensors and systems can overwhelm EWS, making it difficult to identify and respond to potential threats. Additionally, AI algorithms can misinterpret data, leading to

false alarms or missed threats, which can have severe consequences in high-stakes military environments. Artificial Intelligence is loaded with a predetermined set of data derived from existing patterns. It may sometimes lead to a bias. Another significant challenge is cybersecurity risks, as EWS rely on complex software and connectivity, creating vulnerabilities to cyber-attacks.

Using AWS complicates the principle of Right to react by the speed and complexity of AI-powered decision-making. One major challenge is the speed of decision-making. It is because AI systems can process information and make decisions at a speed that far exceeds human capabilities. This can make it difficult to understand and respond to the AI-powered threats in a timely manner. The autonomy of AI systems also raises concerns, as AI systems may be able to operate independently, making decisions and taking actions without human oversight or control. Furthermore, cybersecurity risks and data integrity concerns can also impact the “Right to React”, as such AWS systems rely on data and connectivity to operate.

AWS in modern warfare creates substantial difficulties for the “Right to Rebuild” principle. The “Right to Rebuild” represents the fundamental principle allowing communities and individuals to restore their lives following a conflict. Such AWS introduces complexity to the “Right to Rebuild” because autonomous weapons and cyber-attacks alongside other advanced technologies create extensive destruction and disruption.

The major challenge lies in the extensive destruction and complex damage which AI-driven attacks can intensify. Autonomous weapons can create extensive damage to critical infrastructure, which makes community rebuilding efforts challenging. The disruption of essential services like healthcare and finance through cyber attacks creates significant recovery challenges for communities.

Despite the challenges in the era of AWS in Warfare with respect to the implementation of R2P, the advantages it could grant if the same technology is used effectively cannot be ignored. For the effective prevention of conflict three essential conditions are being recognized such as early warning and analysis, preventive tool box and political will.

CONCLUSION

The concept of “Use of Force” has underwent significant transformation in the contemporary times. It is an undeniable fact that Countries are moving towards increasing their military

technologies, given the increasing instable situations across the globe. With the inculcation of Artificial Intelligence into the military arena, the development of fully Autonomous Weapons System have garnered momentum. AWS poses challenges to the traditional principles of Use of Force. More focus is placed upon the *Jus in bello* concept when it comes to the Autonomous Weapons. Equal consideration should also be placed upon the *Jus ad bellum* principles too, as the Autonomous Weapons System also impacts the *Jus ad bellum* principles.

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39. *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, International Court of Justice, 8 July 1996, (1996) ICJ Rep 226.
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