

Artificial intelligence and the need for an international legal framework in the race for killer robots in modern warfare

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Introduction

Artificial intelligence (AI) is now commonplace in all aspects of human life. McCarthy suggests that AI is 'the science and engineering of making intelligent machines' (McCarthy, 2007, p.2). Over the past decade there has been a progressive escalation of the use of AI which in turn has led to our dependency on intelligence data gathering devices and the intrusion on our privacy by the state. AI is used in 'face recognition tools, autonomous vehicles, search engines, translation tools and within the context of modern warfare' (Kriebitz, 2020, p.84).

The use of AI has had an impact on several wide-ranging legal and ethical concerns. However, there is a lack of a legal regulatory framework to address these concerns around the use of AI, particularly in the context of conflict. The only legal framework that exists in relation to AI is when it is linked to the right to privacy (International Covenant on Civil and Political Rights, 1966, Article 26).

The AI debate started to gain traction in 2012, with a series of documents on automated weapons. These documents included the policy directives by the US Department of Defense (DoD) on 'autonomy in weapons systems' (US Defense Directive, 2012) and a report from Human Rights Watch and the Harvard Law School's International Human Rights Clinic (HRW-IHRC Report, 2012) calling for an outright ban on automated weapons. The legal and ethical implications of the development and use of weapons that are capable of undertaking functions during conflict autonomously (without human intervention) is becoming increasingly focused on by governments and big tech companies. This issue was highlighted in 2017 with an open letter from the Future Life Institute to the United Nations (UN) signed by 126 CEOs and founders of 126 artificial intelligence and robotics companies who 'implored' states to prevent an arms race for autonomous weapons systems (AWS). The use of AI in conflict will shape modern warfare for years to come (West at al, 2019, p.145)

This chapter will focus on the use of AI technology in AWS and in particular the use of drones during conflict and the threat posed to human rights without a legal regulatory framework on usage.

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What are automated weapons?

Within this chapter, the discussion will be centered around AWS, and in particular the use of drones in conflict situations. The advancement in AI has brought the debate around the usage of AWS into sharp focus. Therefore, in line with academic analysis on the legal implications of AWS, this chapter will focus first on the discussion around what constitutes an autonomous weapon. This discussion is needed because at the international level there is not an agreed definition of an AWS.

There are competing definitions of what constitutes an AWS. The debate is dominated by the definitions from the UK Ministry of Defence (MoD) and the US Department of Defense (DoD). The UK MoD in 2011 issued the following definition of an AWS, as 'systems capable of understanding higher level intent and direction, namely of achieving the same level of situational understanding as a human and able to take appropriate action to bring about the desired state.' This UK stance is more in line with an AI enabled system replacing a human operator. The US DoD proposes a different approach and bases the term autonomous and an AWS as being capable of 'once activated, to select and engage targets without further intervention from a human operator.' The 2012 HRW-IHRC report used similar language to the US DoD definition, stating 'fully autonomous weapons that could select and engage targets without human intervention.' However, the NATO Joint Air Power Competence Centre (JAPCC) includes similar language to the UK MoD definition of AWS and includes words such as 'consciousness' and 'self-determination.' This NATO JAPCC and the UK MoD definitions suggest a strong AI enabled weapon system which is closely connected to human like intelligence. However, weapons with such a high-level functioning AI do not currently exist.

AWS that do exist, fit more neatly into the definition offered by the US DoD and the wording contained in the HRW-IHRC report. These automated weapons include the anti-material defensive systems like the Israeli Iron Dome and the German MANTIS and the active protective vehicles like the Swedish LEADS-150 (Amoroso, 2017, p.5). Such a definition would also include the robotic sentinels like the South Korean Super aEgis II which is used as a surveillance device along the South and North Korean border.

However, the real problem exists in a future proof definition of an AWS, one which encompasses the systems in place now, like for example in the South Korean Super aEgis which operates in a non-conflict environment and any AWS in the future that will be able to function autonomously without meaningful human control in the time of war. There must be an agreed definition within the international community which can encompass the AI human cognitive inputting algorithm which the Super aEgis possess and the future AWS which has human like capabilities.

This chapter presupposes that an agreed international definition of an AWS should not be a barrier to an international legal doctrine governing the usage of AWS. To solve this problem the broader US DoD definition should be adopted. With a broader adoption, the argument of what constitutes an AWS will include the weaponry that is available here and now and will also cover the more sentient AI intelligent machines the UK MoD definition is predicting.

The race for killer robots

The advancement of AI in modern warfare will forever alter the relationships between the US, China, Russia, and the private technological industry. China committed \$150 billion dollars to becoming the AI technology world leader (Roberts, et al, 2021, p.59). In 2019, Chinese researchers published open-source code for AI missile systems which were ultimately controlled by deep reinforcement learning algorithms (Harvey, 2020, p.61).

AI militarisation is no longer a futuristic, science fiction lead fantasy. The development of AI weaponry is already creating an arms race between competing states and private corporations. The development and reliance on the use of AI in warfare has the potential to not only transform strategic advantage but also shift the balance of power, as it did during the arms race in the Cold War era.

Therefore, AI is already a military reality. AI impacts on military logistics, intelligence, and surveillance. AI weapons guidance systems make decisions that are free from human input and working independently. Governmental agencies can use algorithms to identify patterns that exist within datasets. Levine (2017) has suggested that more troubling advances are being developed. This includes AI systems that will allow autonomous decision making by networked computer agents. In a conflict situation, what is troubling is that autonomous decision making, will enable instantaneous reactionary actions by drones without human input. Therefore, a drone reaction will be based on retaliatory violence and not peaceful negotiation.

Drones traditionally have been remotely piloted craft and were first used in the 1990s by the US for military surveillance (Chamayou, 2014). Advances in technology and the relatively low cost of manufacturing drones, now means the cost is low enough for drones to be used for all kinds of purposes, from filming, monitoring conservation and delivering medicines or food supplies to remote areas.

Military technology in the use drones has also advanced. The evolution of military drone technology is based on the same technology used to identify hidden Serbian strategic positions during the Kosovo war in 1999 (Black, 2014). Weapons within drones were first used in the immediate aftermath of the September 11 terrorist

attacks in the US (Chamayou, 2014). Jane's (2019) analysts suggest that more than 80,000 surveillance drones and almost 2,000 attack drones will be purchased around the world in the next decade. Drones which are weaponised are, however, still expensive to purchase and expensive to train individuals to pilot them. This will inevitably lead to the more economically rich states to acquire drones and an increased economic disparity in modern warfare. The UK operates missile bearing drones and plans to spend £415m (€520m) on Protector drones by 2023 (Sabbagh, 2019). In 2020 Jane's (2021) suggested that the 10 biggest drone powers spent \$8bn on drone units. Sabbagh (2019) states that the 'the wide variety in types of unmanned aerial vehicles (UAV) makes them suitable for both surveillance and conflict missions, with the low-cost models able to conduct surveillance operations.'

The current use of drones within conflict is dominated by the US, UK, and Israel. The US and UK has used weaponised drones such as the Predator and the Reaper, both made by General Atomics, a US company based in California for over a decade. Israel has been developing its own weaponised drones. In the last five years, both Turkey and Pakistan have developed their own drone manufacturing programs (Bousquet, 2018). Since 2016, Turkey have used drones consistently against the separatist Kurdish PKK within its own territory, northern Iraq and in Syria (Bousquet, 2018). China, is currently supplying several states with its Wing Loong and CH series drones, including the UAE, Egypt, Saudi Arabia, Nigeria, and Iraq (Bowman et al, 2021). According to Drone Wars (2020) statistics, in four years of conflict in Syria from 2014-2018, Reaper drones were used more than 2,400 times during strategic missions, the equivalent of two a day. Drones account for 42% of all UK aerial missions against Isis and 23% of weapon-controlled strikes (Sabbagh, 2019).

There has been a change of perception of drones from merely being 'eyes' in the sky to being full realised offensive tools (Chamayou, 2014). At the start of the millennium the number of drones used by the US armed forces were only in the dozens, today these numbers add up to thousands. The Pentagon estimated that by 2035 remotely piloted aircraft will make up 70% of the United States Air Force. With the race for drones, analysts expect that at least 8,000 UAVs and 2,000 attack drones will be produced in the next decade (Sabbagh, 2019).

The US is not alone in believing that drones are the future of modern warfare. In 2005 about 40 states possessed drone capabilities, by 2012 that number had multiplied to about 76 states. By 2019, it was estimated that more than 90 states have drone capabilities and 63 also manufacture their own (Sabbagh, 2019). States as diverse as Syria to Pakistan, from Iran to North Korea as well as nearly every NATO member state now has the capability to use drones in conflict (Bergen and Rowland, 2014). Also, it is not just states which possess weaponised drone capabilities. For example, Hezbollah has used Iranian built reconnaissance drones which have violated Israeli airspace (Grossman, 2018). Teheran has supplied Hamas with the needed technology to operate UAVs and Hamas has also been able to

exploit Israeli drones captured in Gaza after they have been recovered from the ground (Rossiter, 2018). Also, ISIS has demonstrated the use of offensive drones which have been modified from models readily available on the civilian market (Schulte, 2019). The Houthi Movement has been able to carry out drone attacks in the Arabian Peninsula in 2020 by using both refitted commercial models and aircraft supplied by Iran (Muhsin, 2019). The Houthi Movement have also deployed drones for long range actions, striking targets beyond Yemeni borders. In 2019, several Saudi Arabian airport infrastructures were targeted by drone attacks (Muhsin, 2019) and the heavy damage sustained in the Saudi Aramco Khurais oil installation in 2019 caused significant widespread concern amongst the international community (Hubbard et al, 2019).

The significance of Saudi Arabia as a newer entrant onto the drone marketplace cannot be underestimated because Saudi Arabia is a massive investor in military technology and hardware and invests nearly 9% of its GDP in military spending (Hubbard et al, 2019).

In 2017, the Stockholm International Peace Research Institute estimated that there were 381 different models of automated weaponry for military use, and approximately 175 of those has the capabilities of using lethal weaponry (Boulanin et al, 2017). There are several different types of drones, some which are the size of a backpack and are portable to the larger aircraft drones which are capable of remaining airborne for over 25 hours. The next step in technological advancement will be intelligent AWS capable of selecting targets and deciding autonomously whether to carry out an attack (United Nations Institute for Disarmament Research, 2017).

This rise of AI has also impacted state behaviour during the time of conflict (Krahenmann, 2020). There has been an increased use of armed drones in warfare because of AI, particularly by the US in Afghanistan (Sharkey, 2015). AI has seen the rise in so called 'killer robots' which raises ethical and legal questions (Docherty, 2012). Kallenborn (2020), also makes the case that, the use of automated drones in warfare comes with the risk that a drone may not be able to distinguish the difference between combatants and civilians.

The ethical concerns of the use of automated weaponry

Many AI technologies are still in the developmental stages, leading to skepticism of whether conflict will be dominated by AI military advantage in the future. Unmanned aircraft can operate autonomously but are not at the stage of being able to undertake difficult missions in the same way human operators can. Simon (2018) suggests that AI functions well when it is used in a narrow-predetermined set of circumstances. We may, however, be on the brink AI automated machines being

able to develop cognitive recognition to solve problems and make decisions much closer to those of humans.

There is an ethical concern of conflict being decided without or limited human intervention or meaningful human control. The new normal of conflict and war may be a post human one, and the landscape of conflict and the rules which regulate them will need to be reconfigured (Mangiameli, 2012). This reconfiguring will be based around the notion of a more brutal, nihilistic AWS which will have less input by human operators. The basis of power within a conflict situation will be set by the instinct of a machine incapable of moral or ethical decisions and the ambiguity of victory. How the law will keep up or even stop such technological advances is impossible to predict. Chamayou (2015) expressed the conflict paradigm is no longer to oversee and punish but to oversee and annihilate.

Chamayou (2015) has expressed conflict by using the idea of war by Gentilis (1598) as two warring parties as duelists, formerly equal, bearing the same obligations and parallel objectives. Chamayou (2015) states that this fundamental expression of war is now changing and being shaped by the onset of the use of drones in conflict. The very basis of international law is based on war and conflict being based on some sort of parallel use of power and force. Grotius (1625) noted that the prohibition of the use of poison and assassination was to safeguard the need in war time to keep safe the balance of duality, that each actor or combatant have the same means before them in the face of their opposing aggressor. These parallel objectives, and balance of duality within conflict, if not lost already, will be further eroded if one aggressor state has the capabilities of a more advanced automated drone weaponry, over another.

There is also the debate around the ethical justification of war and the arguments around *jus ad bellum* and *jus in bello* in relation to autonomy in weapons (Amoroso, 2017). The central issue here is around the initiation of hostilities. An AI controlled weapon which is automated to make fast split-second decisions may by its very nature initiate hostilities quicker or even escalate conflict further without the built-in human response of contemplation and compromise. This very speed of judgement from AI decision making, threatens the foundations of *jus ad bellum* and *jus in bello* and the human ability to control strategic or tactical advantage.

Payne (2018) suggests ambiguity and error is inevitable and how would an automated machine make difficult philosophical and ethical choices that deal with the intrinsic value of life? Whose ultimate perspective would this be from? Would this perspective come from the leader in chief or the *de facto* leader of the state or some form of international standard of use? Making ethical considerations of the value of life made in a moment, relies on a human value system, and this ethical concern can often be retrospectively alerted to justify a judgement. Such notions

could not be successfully part of an algorithm used in an automated weapon, as you could not successfully foresee every outcome that might occur during conflict.

The central ethical concern is when conflict is being driven by algorithms and machines without human intervention. Can this ever be solved? Ethical concerns within warfare are historically hard to solve. Drones, however, and their usage do pose some new ethical and consequently legal dilemmas. Their use, does not fundamentally undermine the international legal standard imbedded in conflict. Drones are, however, the logical progression of weaponry in warfare that has seen in the last hundred years a move from hand combat to nuclear weapons to inter-continental ballistic missiles (ICBM).

There are, however, assumptions that there is a moral and ethical distance between the drone's operator and the target. Finn (2011) has rightly suggested that fully automated drones would bring with them ethical and legal dilemmas, but it's clear that the operation of drones is still, however, logistically controlled by a member of the military or intelligence agency of a state. Drone usage is still under the command responsibility and their usage must adhere to accountability measures, in the same way that other conflict missions are accountable. Aston (2010) suggested a decade ago, that the so called 'PlayStation mentality' of targeted killings is unproven. However, in the study by O'Connell (2010), it was suggested that there was evidence that a drone operator was much more likely to dehumanise their targets.

The international legal accountability, responsibility, and the usage of drones

A discussion of AWS and in AI enabled drones' centers around the compliance with International Humanitarian Law (IHL). The problem area within IHL is how drone usage fits with the main principles of the laws of war and IHL, namely, distinction and proportionality within conflict. As Van den Boogaard (2015) suggested, an automated weapon should uphold the same principles of distinction at least as well as a competent and conscientious human soldier.

However, in practice the distinction between a combatant and non-combatant is not easily attained, an automated drone would have to have complex cognitive abilities to be able to be compliant with IHL. These such capabilities are, for the moment some way off in the future. There is a fundamental concern that an automated drone will never be able to comply with the principles of distinction within the context of IHL. As Sparrow (2015) has suggested, the recognition of this IHL principle imbedded within the behaviour of an automated weapon will pose no less insurmountable challenges for AWS programmers and developers.

There is also the concern of proportionality or as Solis (2016, p.293) has suggested the 'terrible and impossible problem of proportionality.' The complex nature of the proportionality principle which concerns striking a balance between military gain from a specific action and the harm the action may produce to civilians. The use of autonomous drones will always have the unintended consequence of harm or death to civilians which are not taking part in the conflict. However, if this responsibility for the civilian is an unintentional consequence of using weapons which are imbued with AI, a state must seek to minimise the risk of a non-combatant victim. A state, therefore, has a legal and ethical imperative to anticipate this accidental harm when using drones. Byman (2013) suggests that the use of drones should be intertwined with the ethical responsibility that comes with the need to adhere to proportionality and suggests that it may not be enough for the state to anticipate accidental civilian harm but also to proactively minimise it. This principle cannot be preset into an AI algorithm before a conflict is underway, such a principle is linked to a specific circumstance and the balancing of the action to be undertaken by the commanders involved in the plan and execution of attack. Therefore, elements such as the 'reasonable military commander,' as suggested by Sharkey (2012, p787) is simply an impossible algorithm to code.

The protection of human rights within in the context of the use of drones during conflict and the wider general rules within the laws of war are complex. IHL is based on land combat and the control and possession of territory. These fundamental principles are seen within the regulations of the Hague Convention 1907 and the Geneva Convention 1949 and their additional protocols. Both these conventions set out a range of rules that govern armed conflict within state occupation and impose rules on the occupiers of that seized territorial land. The difficulty is in trying to adapt these rules on occupation and territory to fit with the use of drones. The usage of drones is primarily the battle for the airspace rather than land. Chamayou (2015) stated that the very understanding of the occupying territory is redundant and meaningless and the use of drones during warfare is based more on who control the skies above.

This chapter asserts that for the control of AWS there needs to be a strict international legal regulatory framework for compliance of usage or a ban of weapons which have no meaningful human control or intervention.

There is, currently, only one international treaty which is focused on the control of and the acquisition of drones in conflict. In 2016, 45 states issued a Joint Declaration for the Export and Subsequent Use of Armed or Strike-Enabled Unmanned Aerial Vehicles (UAVs). The declarations focus was aimed at the use of drones based on the ethical and legal protection of human rights in the increased use of unmanned weapons during conflict. The declaration contains questions of legality of usage, and responsibility within the context of IHL and international human rights law.

The Joint Declaration was conceived as a basis for a common international community approach to the use of armed drones. The agreement contains the following main principles; 'the applicability of international law, including both the law of armed conflict and international human rights law, as applicable, to the use of armed or strike enabled UAVs' and 'in light of the rapid development of UAV technology and the benefit of setting international standards for the export and subsequent use of such systems, we (the signatory states) are resolved to continue discussions on how these capabilities are transferred and used responsibly by all states.'

There has, however, been criticism of the Joint Declaration. The criticism has centered on the US leading the agenda setting of the Joint Declaration. The US is a state who use of drones and the acquisition of drones has been seen as the greatest concern for the international community regarding the use of drones during conflict. The US is expanding its use of drones within conflict and therefore, its 'responsible' use of drones (Stohl, 2018). Stohl (2018) also suggests, the US is increasing the speed of drone strikes, expanding the geographic scope of where strikes can happen and delegating decision-making authority away from the President to military commanders.

The Joint Declaration's language itself has been criticised as being vague. The vagueness is centered around the use of the term 'responsible use', without explanation of what responsible use means. The United Nations Institute for Disarmament Research (2017) highlighted the problematic nature of the meaning of responsible use and suggested that the term needed a succinct meaning. There is, however, no agreed approach of the understanding of responsible use, within the Joint Declaration, or the wider international community. Therefore, this limits the effectiveness of a declaration which pertains to set out rules on the control, and usage of an armed drone without a succinct definition on how to responsibly use an armed drone.

A state signing up to the Joint Declaration, might be under the impression, that by committing to the principles within the declaration (that armed drones must be used 'responsibly'), could legitimately claim to have adhered to an international standard for drone use. Without explicit details on what responsible use entails this 'responsible use' principle within the declaration is meaningless. The declaration itself, without succinct definitions on usage and responsibility, is therefore, merely a justification for the use of drones, rather than an international agreed set of principles restricting how drones are used. There is a call for states to sign up to the declaration but there doesn't seem to be much urgency to do so.

It's this chapter's assertion that a definition on responsible use must be narrow. A broader definition would see states use the wider or ambiguous element of a

definition in much the same way as states do in the definition of self defence. The narrow definition must be in line with the UN Charter and *jus as bello* principles. This would allow a solution to how drones are used if there is a clear criterion on how and when they can be deployed.

However, in this moment in time, there seems to be very little international recourse to punishment or limiting actions of the use or misuse of drones during warfare. Birdsall (2018) has suggested, that the US government has set out to blur the lines between the war or conflict and the enforcement of international rules. The US does this by suggesting that the use of drones during conflict involving terrorism must be seen as a domestic issue and therefore is outside the ordinary boundary of international law. This blurring of the lines could be used by any state to justify the use of drones in an aggressive manner and attach their usage to a domestic issue. The breaking of international legal norms or the normative effect of the laws of war are clear, the state can give its own justification for conflict use and drones because of this blurring of the narrative between the justification of war (especially on terrorist grounds) and the use of drones. Therefore, international law needs to have a clear set out paradigm of when killing via drones is permissible and when it is not.

There is a more general international discussion on AWS (which includes drones) which has come within the international legal framework of the UN Convention on Conventional Weapons (CCW). The CCW informal meeting in 2013 of the High Contracting Parties gave the Group of Governmental Experts (GGE) an open-ended mandate to formulate an operative and normative framework for the usage of emerging technologies in the area of lethal autonomous weapons (LAWS). These meetings have culminated in the recommendation in 2019 by the GGE on LAWS that 11 guiding principles be adopted by the High Contracting Parties to the CCW. These guiding principles are:

- (a) International humanitarian law continues to apply fully to all weapons systems, including the potential development and use of lethal autonomous weapons systems.
- (b) Human responsibility for decisions on the use of weapons systems must be retained since accountability cannot be transferred to machines. This should be considered across the entire life cycle of the weapons system.
- (c) Human-machine interaction, which may take various forms and be implemented at various stages of the life cycle of a weapon, should ensure that the potential use of weapons systems based on emerging technologies in lethal autonomous weapons systems is in compliance with applicable international law, in particular IHL. In determining the quality and extent of human-machine interaction, a range of factors should be considered

including the operational context, and the characteristics and capabilities of the weapons system as a whole.

(d) Accountability for developing, deploying, and using any emerging weapons system in the framework of the CCW must be ensured in accordance with applicable international law, including through the operation of such systems within a responsible chain of human command and control.

(e) In accordance with States' obligations under international law, in the study, development, acquisition, or adoption of a new weapon, means or method of warfare, determination must be made whether its employment would, in some or all circumstances, be prohibited by international law.

(f) When developing or acquiring new weapons systems based on emerging technologies in the area of lethal autonomous weapons systems, physical security, appropriate non-physical safeguards (including cyber-security against hacking or data spoofing), the risk of acquisition by terrorist groups and the risk of proliferation should be considered.

(g) Risk assessments and mitigation measures should be part of the design, development, testing and deployment cycle of emerging technologies in any weapons systems.

(h) Consideration should be given to the use of emerging technologies in the area of lethal autonomous weapons systems in upholding compliance with IHL and other applicable international legal obligations.

(i) In crafting potential policy measures, emerging technologies in the area of lethal autonomous weapons systems should not be anthropomorphized.

(j) Discussions and any potential policy measures taken within the context of the CCW should not hamper progress in or access to peaceful uses of intelligent autonomous technologies.

(k) The CCW offers an appropriate framework for dealing with the issue of emerging technologies in the area of lethal autonomous weapons systems within the context of the objectives and purposes of the Convention, which seeks to strike a balance between military necessity and humanitarian considerations.

There was a further GGE meeting in August 2021 in which the GGE expressed four areas for discussion including the application of IHL, human responsibility, human and machine interaction, and weapons reviews. The areas for discussion will be presented with a report on LAWS at the Sixth Review Conference on Certain

Conventional Weapons (CCW) to be held in December 2021. This is hoped by supporters of the restriction, usage or ban of AWS to be legal implemented within an agreed update of the CCW.

The 11 guiding principles adopted by the GGE are not a legally binding normative framework of AWS and are merely a reemphasis of the principles of IHL and do not contain anything substantially new for the protection or regulation of the usage of autonomous weaponry. However, the principles can inform discussions and shows that the majority of CCW state parties agree on the need for a legal binding document to address the ethical, legal, and technical concerns raised by AWS. To be certain of a new treaty the state parties should at the very least agree at the CCW's Sixth Review Conference to a mandate to negotiate and timeously adopt a new legally binding document on AWS. If the Review Conference fails to approve such a legal binding mandate, then an internationally legal binding document must be found at a forum outside of the CCW and there must be an immediate agreement to prohibit AWS that select and engage targets in conflict without meaningful human control.

Conclusions

There is a move towards an increase in the use of AWS and AI equipped drones in modern warfare. The use of drones and AWS brings with it problems which are both legal and ethical. It could be argued that the law on the usage and responsibility of drones is failing to keep up with technological advances. Drones have the effect of dehumanising conflict and have the capability to bring more lethal instantaneous force to a conflict situation. The distance between the operator and the drone could lead to a lack of ethical judgement between the operator and the combatant. With an AWS able to make decisions based on their AI programming without direct human input in the decision making, this problem becomes much more prevalent. These problems and concerns will only become greater as technological advances starts to enable AWS with cognitive human like decision making.

The usage of drones and drone strikes often violate the principles of IHL. There is an added legal complexity in dealing with accountability issues when an AI drone used as a weapon performs an undesired deviant action. The international community or the state cannot hold an autonomous object responsible for their actions with legal sanctions. It would seem impossible to hold a programmer for the algorithm (unless the action involved gross negligence) if the drone has acted in an autonomous manner. It would also be difficult to find high ranking officials liable for the actions of autonomous drones as to foresee all unpredictable actions would be remote at best.

There is beneficial usage of drones which does suggest a more trustworthy AI is being lost within the debate surrounding 'killer robots' and AWS. Whetham (2015) suggest that drones could play an important part in complex humanitarian emergencies as they are capable of surveillance in remote regions. Kennedy and Rodgers (2015) suggest that drone may be able to help the international community and the UN by replacing the need for peacekeepers in difficult conflict zones.

However, before the enlightened trustworthy use of AI drones can be fully embraced, international law must catch up with the advances in AI technology and regulate the usage of drones within conflict, non-conflict situations and the responsibility of using drones as killing machines. There must be a coherent, binding international legal framework on the usage of drones (and AWS) now and a framework which states that all AI enabled drones must contain meaningful human control.

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