

The Ethics of Drone Warfare

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The Unmanned Aerial Vehicle (UAV) or ‘drone’ is increasingly the weapon of choice in America’s military operations. Moral ambiguity about US drone policy arises from the gray area between law enforcement and warfare. The ‘law enforcement’ approach seeks to foresee threats and retaliate for attacks. It polices and reacts within the traditional model of defense and war. On the other hand, a ‘war against terror’ has no endpoint, and its theatre of operations can be anywhere on earth.

Drones are the equivalent of the robotic armies discussed in so many science fiction novels. While drones indeed do a great service and possible justice by protecting the lives of citizens and preventing unnecessary deaths of thousands of soldiers, the long-term impact of this approach is not yet well understood. Popular culture uses terms like “Convenient Killing”, “Death by Remote Control”, “PlayStation Mentality” and “Death Machine” to describe drone operations.

UAVs – both weaponised and non-weaponised – are used for multiple civilian and military purposes. The discussion in

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this paper refers only to weaponised UAVs used for military purposes. The military use of drones by the US has been attracting increasing attention and controversy mostly due to their use in the “War on Terror.” However, drones are in use across a number of industrialised and non-industrialised nations and their proliferation is likely to increase.

The use of drones in warfare has several obvious advantages. Being unmanned, they involve no direct risk to pilots compared to manned aerial vehicles. They also have operational advantages, such as being able to stay airborne in-theater for long periods of time without requiring refueling or inducing pilot fatigue. Also, unlike manned aircraft, decisions regarding the use of their weapons can involve multiple parties in the chain of command. However, the use of drones has also raised questions regarding their potential impact on both the operators and the targeted communities.

Drone operations require flexibility and reach, beyond the traditional parameters of war. And so, the strongest ethical argument in the favour of drone strikes boils down to efficiency. The virtues of US drone policy include precision targeting, limited collateral damage, and preventing troops from going into full combat mode and being killed. But each of these virtues has its limits. We know of targeting errors, tragic accounts of unintentional killing of innocent bystanders, and the fear that drones turn foreign public opinion against the United States. When the stakes are so high, is the efficiency argument good enough? Of particular ethical concern are the questions of due process and accountability. Who makes decisions about who the targets will be and whether to execute a strike? What is the procedure for those calls, and what is the degree of oversight? Again, we see blurred lines.

Early in J.J. Abrams film *Star Trek: Into Darkness* (Paramount 2013), Captain Kirk is faced with a moral dilemma. Should he follow orders and fire a missile into enemy territory from afar to kill a known terrorist, or should he risk sending his men into foreign territory to try to capture him? This choice is no accident. It is an allegory about the morality of the drone war, and the dilemmas it poses are those we face today. As in *Star Trek*, we have this amazing technology that can apparently be employed with little risk to our own forces, but its improper use poses an enormous risk to our way of life. How can we be certain of identifying an appropriate target? Is it enough to simply trust high government officials? What is the right way to use such weapons? In what follows, these questions are illuminated by ethics and the just war tradition, to clearly bring out what is missing in the US administration's approach to the use of drones.

For the US (and other states that have the capability) drones have become today's weapon of choice in counter-terrorism operations. Over the next 40 years or so, they are expected largely to replace piloted aircraft. In nine years, the Pentagon has increased its drone fleet 13-fold and the generals are spending at least roughly USD 5 billion a year adding to it. The frequency of drone strikes on al Qaeda and other terrorists that lurk in Pakistan's tribal areas of the north-west rose under former US President Barack Obama to one every four days, compared with one every 40 during George Bush's Presidency. In Libya, NATO commanders turned to drones when their fast jets failed to find and hit Muammar Qaddafi's mobile rocket launchers.¹

1 "Drones and the man", *The Economist*, June 30, 2011, <https://www.economist.com/leaders/2011/07/30/drones-and-the-man>.

IMPACT OF DRONES ON TARGETED SOCIETIES

Partly due to the classified nature of drone missions, the reluctance of civilian victims to talk for fear of retribution, and problems with access to affected areas, there are very few empirical studies on the impact of drone warfare on civilians, and most of the information is from reports by Non-Governmental Organisation and academic legal centers. Similarly, it is not always clear whether the emotional impact of drone strikes differs from the impact of manned aircraft. Increased anxiety and trauma are common responses for individuals living in warzones. Although speculations for and against the concern that drone attacks might result in greater trauma, may be reasonable. However, there is a dearth of sound, objective empirical research on this issue. This observation is not intended to minimise the emotional and physical impact on individuals living in areas under drone surveillance and attack, but to note the lack of evidence that drones have a unique impact.

COMPETING NARRATIVES

A key premise supporting the use of drones is that they are more precise than typical aerial bombings and thus, cause minimal collateral damage. Yet, there continues to be disagreement as to how accurate these pinpoint assaults are, and how many civilians are killed.² *Bureau of Investigative*

2 A. R. Deri, “Costless” war: American and Pakistani reactions to the U.S. Drone war”, *Intersect*, Volume 5, 2012, pp.1–16; James Cavallaro, et.al., “Living Under Drones: Death, Injury and Trauma to Civilians from US Drone Practices in Pakistan”, Stanford International Human Rights and Conflict Resolution Clinic, Stanford Law School; New York: NYU School of Law, Global Justice Clinic, September 25, 2012, <https://law.stanford.edu/publications/living-under-drones-death-injury-and-trauma-to-civilians-from-us-drone-practices-in-pakistan/>.

*Journalism*³ noted that 344 drone strikes have killed between 2562 and 3325 people in Pakistan between 2004 and 2012. Of these totals, 474 to 881 have been identified as civilians, including 176 children.⁴ U.N. Special Rapporteur, Ben Emmerson projected 450 civilian casualties in Pakistan, Yemen and Afghanistan.⁵ Data from the New American Foundation (2017) suggest that civilians make up approximately 10 per cent of the casualties in drone strikes in Pakistan and Yemen.⁶ The Long War Journal (2017) likewise finds relatively lower rates of civilian casualties due to drone strikes. However, lack of clear official delineation on whether drones or manned aircraft were used in several strikes makes comparisons difficult.⁷

One of the most salient psychological effects civilians describe is the pervasive sense of anticipatory apprehension of impending drone strikes.⁸ Drones can hover for hours over targeted areas as part of constant surveillance missions. Civilians describe feeling severely stressed, depressed, anxious, and being constantly reminded of deaths in prior

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- 3 Sarah Leo, "A Picture of War: The CIA's Drone Strikes in Pakistan", *Bureau of Investigative Journalism*, 2012, <http://www.thebureauinvestigates.com/stories/2012-09-10/a-picture-of-war-the-cias-drone-strikes-in-pakistan>.
 - 4 Speaker's Briefing, "Psychological terror? Lessons from Pakistan and Yemen", Washington D.C., 2013, <https://appgondrones.files.wordpress.com/2013/03/speakers-briefings-05-03-2013.pdf>.
 - 5 "U.N. expert urges U.S. to reveal civilian drone deaths", *The Japan Times*, October 19, 2013, <https://www.japantimes.co.jp/news/2013/10/19/world/u-n-expert-urges-u-s-to-reveal-civilian-drone-deaths/#.XSLzjugzY2w>.
 - 6 New American Foundation, "International Security Data Site", 2017, <http://securitydata.newamerica.net/>.
 - 7 "Pakistan Strikes", *Long War Journal*, 2017, <http://www.longwarjournal.org/pakistan-strikes/>.
 - 8 "Will I be next? US drone strikes in Pakistan", *Amnesty International*, October 21, 2013, <https://www.amnestyusa.org/reports/will-i-be-next-us-drone-strikes-in-pakistan/>.

strikes.⁹ Interviewees also describe reactions reminiscent of post-traumatic stress such as emotional breakdowns, anger outbursts, exaggerated startle responses, fleeing indoors and hiding when seeing or hearing drones, fainting, poor appetite, psychosomatic symptoms, insomnia, and startled awakening at night with hallucinations about drones. Patients -particularly those who are later found to have been victims or had relatives who were victims of drone strikes- exhibit high rates of post-traumatic stress symptoms and various psychosomatic complaints associated with actual strikes and apprehension of future attacks.

These fears cripple their daily activities, such as leaving their homes, going for work, attending social functions, and sending children to school. Dr. Peter Schaapveld, a clinical and forensic psychologist, reported from Yemen that most of the people he surveyed manifested clinical levels of Post-Traumatic Stress Disorder (PTSD) symptoms. Children were particularly affected, and reported nightmares of dead people, fear of going to sleep, and fears they will be harmed by drones, he added.¹⁰

Unable to predict when, why and where the next strike will come, they describe helplessness, significant lack of control, and powerlessness to escape, avoid, or protect themselves from drone strikes.¹¹ Civilians in targeted areas are poor, experience travel restrictions by local militias or militaries,

9 Ibid; "The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions", Center for Civilians in Conflict and Human Rights Clinic, Columbia Law School, September 11, 2012, http://civiliansinconflict.org/uploads/files/publications/The_Civilian_Impact_of_Drones_w_cover.pdf.

10 "Drones in Yemen causing a 'psychological emergency', psychologist tells MPs", *Reprieve*, March 5, 2013, http://www.reprieve.org.uk/press/2013_03_05_drones_in_yemen_psychological_emergency/.

11 "The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions", op.cit.

live under curfews, or are subjected to a range of other factors that limit their mobility and ability to flee to safer locations.¹² Two aspects that may exacerbate psychological problems are the US's reported policy of conducting signature strikes and double taps. A signature strike, rather than targeting an individual, is based on analysis of signature behaviour associated with suspicious or militant activities.¹³ That these strikes are not based on a specific militant's identity serves to heighten their unpredictability.

Although the definition of who is a combatant and therefore a legitimate target of strikes is often discussed in the context of policy and legality, it is also important in understanding the impact of drone strikes on targeted communities.

In Pakistan, many fighters live among their families or in joint family compounds. Although they may technically qualify as combatants, the networks of civilians within which they are embedded are similarly affected by drone strikes. Many of the affected communities also have strong cultural customs regarding hospitality like not denying guests refuge and food regardless of their background.¹⁴ Civilians also describe feelings of helplessness at being wedged between US drones and the militants amidst them.¹⁵

12 Metin Basoglu, "Drone strikes or mass torture? – A learning theory analysis", November 25, 2012, <http://metinbasoglu.wordpress.com/2012/11/25/drone-warfare-or-mass-torture-a-learning-theory-analysis/>.

13 "Will I be next? US drone strikes in Pakistan", op.cit.

14 Palwasha L. Kakar, "Tribal Law of Pashtunwali and Women's Legislative Authority", Afghan Legal History Project Papers Series, Harvard Law School, Islamic Legal Studies, 2003, <http://www.law.harvard.edu/programs/ilsp/research/kakar.pdf>.

15 "Between drones and Al-Qaeda: The civilian cost of US targeted killings in Yemen", *Human Rights Watch*, October, 2013, http://www.hrw.org/sites/default/files/reports/yemen1013_ForUpload_1.pdf.

Warfare theorists believe constant drone surveillance sows distrust and paranoia amongst terrorist groups¹⁶, though it appears this paranoia affects larger communities as well. Civilians may seek to cope with the ambiguous yet constant possibility of death by trying to create a system of understanding, such as explanations for how and why strikes happen. For example, some communities in Waziristan area of Pakistan believe the US identifies drone strike targets through chips (small electronic tracking devices). Many Waziris believe the Pakistani government and/or the CIA enlists help from local informants who plant these chips in targets' homes and cars. Consequently, community members either fear being marked by a chip, or fear the Taliban will suspect them of being informants and execute them. These beliefs appear to fuel suspicion between neighbours who suspect each other of being informants or see drone strikes as extracting revenge over a local dispute. Even in absence of this narrative about chips, when civilians are mistakenly struck, the fabled precision of drones may lead others to stigmatise them and suspect them of being related to militants. The victims then bear the dual burden of being victimised by the drones and the stigma and pressure to exonerate their name.¹⁷

Children are particularly vulnerable to disruptions and losses caused by war, including loss of homes, injuries from strikes and subsequent difficulty accessing medical care, PTSD and other psychological symptoms, and being deprived of the opportunity to play with friends for fear of assembling in large groups.¹⁸ The loss of a male head of household or a

16 Andrew Callam, "Drone Wars: Armed Unmanned Aerial Vehicles", *International Affairs Review*, Volume 18, Number 3, 2010.

17 "The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions", op.cit.

18 "Drones: No safe place for children", *Reprieve*, March, 2013, http://www.reprieve.org.uk/media/downloads/2013_04_04_PUB_drones_no_safe_place_for_children.pdf.

female caregiver often means older children are removed from school prematurely to assume those roles.¹⁹ Some parents have also stopped sending their children to school for fear over their safety. As for women, mothers report feeling helpless at the prospect of their children being recruited by the Taliban, especially since they have limited ability to leave the house and thus monitor their children. Because larger decisions are made by men, they often have no choice if their older male children or other male relatives bring home Taliban members as guests, which leaves them caught between concern for family and fear they will be struck by drones because of guests they did not invite. Traditionally, women in targeted communities have limited control over financial resources and difficulty accessing government resources or income-generating activities. Customs dictating that widowed women live with other male family members may leave them especially vulnerable and prone to harm and exploitation.²⁰ That these issues, however, may be common to war theaters, not necessarily unique or more prevalent in areas targeted by drone strikes.

ETHICAL ASPECTS

Not everyone feels comfortable with all this. The increasing deployment of military drones raises a wide variety of important ethical questions, concerns, and challenges. Critics say the legal and ethical issues surrounding the use of drones have been neglected. Some of those concerns may be exaggerated, but others need to be taken seriously, particularly if, as seems certain, armies will increasingly fight with machines, not men.

19 Ibid.

20 “Civilian harm and conflict in Northwestern Pakistan”, Center for Civilians in Conflict, October 20, 2010, <https://civiliansinconflict.org/publications/research/civilian-harm-conflict-northwest-pakistan/>.

What are the moral implications of such asymmetry on armies that employ drones and the broader questions for war and a hope for peace in the world? How does this technology impact counter-insurgency operations or humanitarian interventions? Does such weaponry run the risk of making war too easy to wage, tempting policy makers into killing without exploring other more difficult means to end hostilities?

There are certainly good reasons for using more drones. Cruise missiles and jet fighters work against fixed targets, concentrations of forces or heavy weapons on open ground. They are not as useful, however, in today's "wars among the people" fought against insurgents and terrorists. Drones such as the Predator and the Reaper can loiter, maintaining what one former CIA Director described as an "unblinking stare" over a chosen area for up to 18 hours.²¹ With the drone's ability to watch and wait, its "pilot", often thousands of miles away, can patiently choose the best moment to fire its missiles, both increasing the chances of success and minimising the harm to civilians.

From the start just war theorists have been occupied with two central questions: when it was appropriate to go to war (*jus ad bellum*) and how the war should be fought (*jus in bello*). There is already an emphasis on both these questions in Cicero's *On The Commonwealth*, and the theory of *jus ad bellum* was already well developed early in the just war tradition.²²

The four just war principles (Necessity, Distinction, Proportionality and Humanity) cited by the US Justice

21 "Drones and the man", op.cit.

22 Cicero, *On the Commonwealth in: Cicero's Tusculan Disputations Also, Treatises on the Nature of the Gods, And On the Commonwealth*, 2005 and Cicero, 1913, *De Officiis*, tr. By Walter Miller, Loeb edn., Harvard University Press, Cambridge, I, xi, 33-36.

Department's "white paper"²³, echo those cited by President Obama in his acceptance speech for the Nobel Peace Prize in 2009. "A war can only be considered just if it is waged as a last resort, in self-defense, if the force used is proportional, and pains are made to spare civilians from violence wherever possible," he said.²⁴

That makes the drone the ideal weapon for tracking down and killing terrorists, particularly in places like the (erstwhile) FATA in Pakistan where other options, such as sending in special forces, are not politically feasible. Claims in Pakistan that American drone attacks have killed thousands of civilians are undermined by research carried out by the New America Foundation, a think-tank, (as reported in July, 2011) suggesting that in the seven years since 2004, 80 per cent of the fatalities have been militants. The increasing accuracy of these attacks and the evidence that they have helped to weaken al Qaeda encourage some to believe (not least in the White House) that counter-terrorist campaigns in the future can be waged without the sacrifice of blood and treasure, that goes with putting thousands of boots on the ground.

There is also considerable controversy, much of it ethical, about the use of drones for the "targeted killings" of individuals outside the context of a conventional war, or an armed conflict that at least starts as a struggle between two states. Pakistan is one such example. Drones are ethically interesting, in part, because the case for drones is often made in moral terms.

23 The memo, or "White Paper", http://msnbcmedia.msn.com/i/msnbc/sections/news/020413_DOJ_White_Paper.pdf.

24 Barack Obama's Nobel Peace Prize Acceptance Speech, December 10, 2009, http://www.nobelprize.org/nobel_prizes/peace/laureates/2009/obama-lecture_en.html.

The development of military technology often poses new and difficult moral problems, and drones are no exception. In investigating the ethics of new military technology, it is helpful to distinguish between two sorts of moral problems it may create. The first sort, ordinary problems, may be addressed or resolved by a modification in the way in which the technology is configured or the military activities involving it are conducted. The second sort, extraordinary problems, are problems so severe that they may require that the technology not be used at all. This is obviously a rough distinction, given that there is no sharp line between engaging in an activity in a modified way and not engaging in it at all. Some of the moral problems raised by drones are ordinary, but some are extraordinary.

USE OF DRONES IN THE WAR ON TERROR

The United States, and the West in general, is in a global struggle with Islamic insurgents, a struggle often referred to in the US as the Global War on Terror (GWOT). Conventional wars, such as those in Iraq and Afghanistan, are part of the GWOT, but much of the GWOT, the more controversial parts, takes place outside of conventional war. I will use the term GWOT idiosyncratically to refer to those parts of this struggle that are outside of a conventional war. One question we need to consider is whether the GWOT, understood in this way, is a war at all. The GWOT is an asymmetric conflict. Asymmetric conflicts, in general, are those in which one of the sides has great relative advantage over the other. There are many forms of asymmetry, but the kind I am concerned with is one in which one side has a great military advantage in terms of its technology and/or the size of its military forces.²⁵

25 The term asymmetric war is sometimes used in a more limited way, for example, to refer to the tactical asymmetry of insurgent groups fighting an established military power in the light of their ability to employ

This form of asymmetry characterises most of the wars fought by the US and other Western powers in the past few decades. This is even more the case with the GWOT, where the asymmetry is extreme. Drones are, in fact, especially useful in fighting such asymmetric wars. Because of their surveillance capabilities, they are good at tracking and attacking individuals. Other advanced technologies, such as cruise missiles, are good at attacking and hitting fixed targets, mainly infrastructure, but insurgent groups often have little in the way of infrastructure. Their ability to inflict harm resides in their person, which is what drones are good at targeting. As the technology of drones matured during the GWOT, the US has come to rely increasingly on them to fight its asymmetric battles, and an increasing portion of US military aviation is devoted to them. The cruise missile is a paradigmatic weapon of the Cold War, while the drone is a paradigmatic weapon of the post Cold War world.

OBJECTIONS TO USE OF DRONES

Two of the most commonly heard objections to drones are more strategic than moral. They are primarily prudential because they concern not what drones do to their victims, but what they do to the interests of their users. The fundamental argument appears to be that the use of drones is counterproductive.

The first objection is that the use of drones by the US against Islamic insurgents is counterproductive because, as it is crudely put, drones produce more terrorists than they kill, due to the animosity they generate in local populations.²⁶ Concerning

unconventional tactics such as guerrilla warfare or terrorism. See Rodin, David, "The Ethics of Asymmetric War," in Richard Sorabji and David Rodin eds., *The Ethics of War*, Ashgate, Hants, 2006, p. 154.

26 There is some empirical evidence that drone use does increase the number of insurgents. See Zenko, Micah, "Reforming U.S. Drone Strike Policies," Council on Foreign Relations Special Report #65, January 2013, <https://www.cfr.org/report/reforming-us-drone-strike-policies>.

the civilians killed by drones, “every one of these dead non-combatants represents an alienated family, a new desire for revenge, and more recruits for a militant movement that has grown exponentially even as drone strikes have increased.”²⁷ If defeat of the insurgents in Pakistan and elsewhere requires that their numbers be reduced and that the local population be turned against them, drone attacks will not succeed.

The second strategic objection is that the development and use of drones by the US is counterproductive because it encourages the development of military capabilities and attitudes among other states that are, in the long run, inimical to US interests. First, it will lead to the development and deployment of drones by other states, some of whom will be opponents of the US. As two journalists note: “With Russia and China watching, the United States has set an international precedent for sending drones over borders to kill enemies.”²⁸

Moreover, it is argued that the deployment of drones by other states, whether friendly to US interests or not, will lead to a harmful climate of military instability. In addition, the use of drones by the US for target killings is widely perceived in the rest of the world as a flouting of international law.²⁹ The role of international law in the criticism of drone use shall be discussed later in the article, but the point here is, respect for international law depends on a sense of reciprocity among states, and the perception by the rest of the world that the greatest military power is ignoring international law leading other states to do

27 David Kilcullen and Andrew McDonald Exum, “Death From Above, Outrage Down Below”, *The New York Times*, May 17, 2009.

28 Jo Becker and Scott Shane, “Secret ‘Kill List’ Proves a Test of Obama’s Principles and Will,” *The New York Times*, May 29, 2012.

29 Steven Ratner, “Predator and Prey: Seizing and Killing Suspected Terrorists Abroad,” *Journal of Political Philosophy*, Volume 15, Number 3, 2007, pp. 251-275.

so as well, resulting in a sort of international lawlessness that harms the interests of everyone. The use of drones may make everyone worse off. We have seen this dynamics before in the development of nuclear weapons technology during the Cold War.

To put it briefly, the use of drones creates “blowback” that does more harm than good to US security. These objections do have some moral import because, if the use of drones is counterproductive, it will be a great waste of lives and resources. Were the GWOT a war in the morally relevant sense, the moral objections to this waste would be represented by its failure to satisfy the *jus ad bellum* principle that a war is just only if it has a reasonable chance of success.³⁰

Supporters claim that drones are a morally valuable military technology, and three virtues of drones are often cited. First, drones have a greater capacity for precision, thus potentially reducing “collateral damage” and better adhering, when used in war, to the important *in bello* principles of discrimination and proportionality. Bradley Strawser claims that “UAV technology actually increases a pilot’s ability to discriminate.”³¹ Drone operators can observe a potential target for hours before deciding whether to attack, making them better able to avoid civilian casualties. Kenneth Anderson makes a similar point, claiming that drone use allows us to avoid the “proportionality trap,” a trade-off characteristic of military actions where attacks that provide greater military

30 David Luban, “What Would Augustine Do?”, *Boston Review*, July 6, 2012, http://www.bostonreview.net/BR37.3/david_luban_obama_drones_just_war_theory.php.

31 Bradley Jay Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles,” *Journal of Military Ethics*, Volume 9, Number 4, 2010, pp. 342-368.

advantage also put civilians increasingly at risk and attacks providing more protection to civilians achieve less military advantage.³² Drones break this linkage, achieving increased military advantage while also providing greater protection for civilians. They are a win-win.

Second, the use of drones poses no risk to the pilots, allowing military operations to better realise the principle of force protection. Force protection is not generally recognised as an *in bello* principle, but, other things being equal, it certainly is morally preferable to reduce one's own combatant casualties. Strawser also argues that drones have this virtue. He casts it in terms of what he calls the "principle of unnecessary risk", according to which military leaders have a moral obligation when pursuing a legitimate military goal to choose a means, if available and just, that does not pose a risk to their combatants.³³

Third, the use of drones may avoid the need to wage a full-scale war.³⁴ This is related to the first virtue. Just as it would be preferable to use drones instead of troops for a particular mission in a conventional war, so it would be preferable to use drones instead of fighting a full-scale war involving boots on the ground, assuming these are exhaustive alternatives. Speaking of "force-short-of-war," a category of military force in which he would presumably include drone use outside of a full-scale war, Michael Walzer notes that the use of such force avoids the

32 Anderson, Kenneth, "Efficiency in *Bello* and *ad Bellum*: Targeted Killings Through Drone Warfare", in Claire Finkelstein, et.al., eds., *Targeted Killings: Law and Morality in an Asymmetrical World*, Oxford University Press, 2012, pp. 374-399.

33 Bradley Jay Strawser, op.cit.

34 Daniel Brunstetter and Megan Braun, "The Implication of Drones on the Just War Tradition," *Ethics and International Affairs*, Volume 25, Number 3, 2011, pp. 337-358.

“unpredictable and often catastrophic consequences” of war.³⁵ If a state can avoid a need to go to war by using drones to obviate the threat it faces, it certainly is a moral benefit to have drone technology available for that purpose.

These three moral claims about drones represent the idea that the use of drones is morally preferable to other methods, such as traditional air strikes or the use of combatants, whether in special operations or a full-scale war. First, air strikes are less precise and the use of combatants on the ground generally leads to a greater number of civilian casualties. “Many military experts support the government’s claim that using conventional airstrikes or troops on the ground to attack terrorist compounds would be likely to kill far more civilians than drones have.”³⁶ Second, of course, boots on the ground, and to a lesser extent traditional airstrike, puts one’s combatants at risk.

Considering that drone use for targeted killings occurs outside the context of conventional war, which is morally unacceptable, this is a claim about the paradigm under which drone use should be considered, that it should be considered as policing rather than a war. The GWOT is not a war.

Of course, the response to this theory is that the GWOT is in fact a war, a “war on terror,” fought on a global battlefield, so that any drone strike against combatants in this war is permissible.³⁷ The government asserts that the GWOT is a war: “The United States is in an armed conflict with al Qaeda and its associated forces.”³⁸

35 Michael Walzer, *Just and Unjust Wars*, (fourth edition), Basic Books, New York, 2006, p. xiv.

36 Scott Shane, “Report Cites High Civilian Toll in Pakistan Drone Strikes,” *The New York Times (blog)*, September 25, 2012.

37 Kenneth Anderson, op. cit.

38 Department of Justice White Paper: Lawfulness of a Lethal Operation Directed Against a U.S. Citizen Who Is a Senior Operational Leader of

But the question is whether the GWOT is a war at all. The question of the justice of the war is a different and secondary question. The GWOT departs from the standard case of war to such an extent that it is implausible to claim that it is anything other than war in an analogical sense (as in the “war on crime”). Crime is not an organisation, and it is without spatial or temporal bounds, as it occurs everywhere and presumably will never come to an end.

A number of points support this. First, it is a self-proclaimed fight not primarily against an organisation, as in the standard case of war, but against a tactic, that is, terror.³⁹ Perhaps in response to this concern, the Obama Administration has replaced “GWOT” with the phrase “armed conflict with al Qaeda, the Taliban, and associated forces.”⁴⁰ But the new phrase makes the point that the US sees itself as battling not a single organisation or even a set of organisations, but, given the elasticity in the term “associated,” an open-ended list of organisations, effectively, all alleged practitioners of terror. Second, the GWOT, unlike a standard case of war, has no temporal and spatial bounds, as terror will never be completely eliminated and the struggle against it has no spatial boundaries, no fixed geographical location.

One other difference between the GWOT and the standard case of war is that each relates differently to the notion of state sovereignty. The standard case of war is conceptualised in terms

Al-Qa’ida or an Associated Force, http://msnbcmedia.msn.com/i/msnbc/sections/news/020413_DOJ_White_Paper.pdf.

39 Alex Bellamy, “Is the War on Terror Just?” *International Relations*, Volume 19, Number 3, 2005, pp. 275-296.

40 O’Connell, Mary Ellen, “Lawful Use of Combat Drones,” testimony before the House of Representatives subcommittee on National Security and Foreign Affairs, April 28, 2010, http://www.fas.org/irp/congress/2010_hr/042810oconnell.pdf.

of sovereignty—it is fought to attack sovereignty or to defend sovereignty. But the GWOT, conceived as a global struggle, considers sovereignty only from a practical perspective. It sees itself as attacking terrorists wherever they are, which is always in some sovereign state, but the sovereignty of that state is immaterial to the justification for the strike.⁴¹ The US may seek permission from a state for a strike, but it does so merely as a practical matter to facilitate its activities, not because it has an obligation to do so.

Drone strikes have occurred in conventional war zones, for example, in Afghanistan, Iraq, and Libya. But many drone strikes for targeted killings, over three hundred in the past years, have occurred elsewhere, in Pakistan, Yemen, and Somalia, where the US is not a belligerent in a conventional war.⁴² This difference in US policy is marked by the fact that, while drone strikes in recognised war zones are conducted by the Air Force, strikes outside recognised war zones are conducted by the Central Intelligence Agency- CIA, a civilian organisation.⁴³ A commentator notes, “just how radical it is [that] for the first time in history, a civilian intelligence agency is using robots to carry out a military mission, selecting people for killing in a country where the United States is not officially at war.”⁴⁴ It is

41 William Saletan, “Editors for Predators,” *Slate*, February 8, 2013, <https://slate.com/news-and-politics/2013/02/drones-law-and-imminent-attacks-how-the-u-s-redefines-legal-terms-to-justify-targeted-killing.html>.

42 Olivia Ward, “‘Earthlings, there is no place to hide’-drone strikes blur the laws of war”, *The Star*, February 2, 2013, https://www.thestar.com/news/world/2013/02/03/earthlings_there_is_no_place_to_hide_drone_strikes_blur_the_laws_of_war.html.

43 Jane Mayer, “The Predator War,” *The New Yorker*, October 26, 2009, <https://www.newyorker.com/magazine/2009/10/26/the-predator-war>.

44 Scott Shane, “C.I.A. To Expand Use of Drones in Pakistan”, *The New York Times*, December 3, 2009, <https://www.nytimes.com/2009/12/04/world/asia/04drones.html?mtrref=www.google.com&gwh=2BBB0590F9B67917F109223CA91CF4DD&gwt=pay>.

odd that, while the US claims that the GWOT is a war, it assigns the operations of that war to a civilian organisation. As Mary Ellen O'Connell notes: "Only members of the United States armed forces have the combatant's privilege to use lethal force without facing prosecution. CIA operatives are not trained in the law of armed conflict."⁴⁵ Indeed, in this regard, the US policy faces a dilemma. Either a targeted killing by drone in Pakistan, say, is an act of war (as the US claims) or it is not. If it is an act of war, it is not morally acceptable because the rules of war require that acts of war be undertaken by military rather than civilian personnel. If it is not an act of war, then it is morally unacceptable because it falls under the policing rather than the warring paradigm and does not show the proper respect for human rights.

In addition to these conceptual and moral objections to the claim that GWOT is a war in the proper sense, there are also objections from International Law. These are developed by Philip Alston.⁴⁶ He argues that according to International Humanitarian Law (IHL), there are two conditions that must be satisfied for hostilities to constitute an armed conflict (that is, a war). One is that an armed conflict is a struggle between sufficiently organised and structured "parties." But "al Qaeda and other alleged 'associated' groups are often only

45 Mary Ellen O'Connell, "Lawful Use." In dissent, however, Philip Alston, United Nations Special Rapporteur concerned with targeted killings, avers that International Humanitarian Law does not prohibit non-military personnel from engaging in conflict. "Report of the Special Rapporteur on Extrajudicial, Summary, or Arbitrary Execution: Study on Targeted Killings," United Nations Human Rights Council, <http://www2.ohchr.org/english/bodies/hrcouncil/docs/14session/A.HRC.14.24.Add6.pdf>, paragraphs 70-71.

46 Alston was the United Nations Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions. "Study on targeted killings", *United Nations*, May 28, 2010, <http://www2.ohchr.org/english/bodies/hrcouncil/docs/14session/A.HRC.14.24.Add6.pdf>.

loosely linked, if at all,” so they “cannot constitute a ‘party’ as required by IHL—although they can be criminals.”⁴⁷ The other condition is that there must be a minimum threshold of intensity and extent to the violence perpetrated by each party, and it is questionable whether the violence perpetrated by al Qaeda and associates rises to the level essential for an armed clash to exist. Alston thus concludes that taken cumulatively, these reasons make it challenging for the US to demonstrate that it is at war with the terrorists.

Furthermore, the victims of targeted killings are dispatched without any judicial determination of guilt for alleged harmful conduct. These strikes must be governed by international human rights law. If targeted killings by drone were considered under the warring paradigm, they might be justified by the status of the victims as combatants under *jus in bello* or IHL. But without war, just war theory can do no justificatory work. War may legitimate military violence, but outside the context of a war, military violence is simply violence, and lacking in moral justification. Terrorism is not warfare but crime, and its perpetrators should be treated as criminals, not combatants. This means that they cannot be subject to targeted killing. Under the human rights paradigm, these killings are extrajudicial and amount to assassination.

Describing himself as an ex-CIA official, Phillip Mudd writing in *Newsweek* acknowledges there are ethical issues arising from the use of drones but argues that in relation to war zones they are “misdirected”.⁴⁸ In war zones, he writes, drones

47 See also Craig Martin, “Going Medieval: Targeted Killing, Self-Defense and the *jus Ad Bellum* Regime,” in Claire Finkelstein, et.al., eds., *Targeted Killings: Law and Morality in an Asymmetrical World*, OUP, 2012, pp. 223-252.

48 “The Morality of Drone Warfare”, *Global Research*, August 19, 2012, <https://www.globalresearch.ca/the-morality-of-drone-warfare/32412>.

are just another “delivery tool” to apply lethal force, like a rifle or a piece of artillery. The point he clearly misses though is that unlike the rifleman or tank driver, the drone operator is sitting safely thousands of miles away, and it is this very distance—both physical and psychological – that is a key ethical issue.

Those who defend drone strikes outside conventional wars have an added argument to justify these strikes. They claim that the strikes are an exercise of a right of national self-defense. For example, the US claims: “Targeting a member of an enemy force who poses an imminent threat of violent attack to the United States is not unlawful. It is a lawful act of self-defense.”⁴⁹ This claim is interesting because it offers what is in effect a third way to justify drones strikes, an effort to deny that the paradigms of policing and warring are exhaustive. In this spirit, defenders of drones have appealed to a principle of national self-defense. This principle can be seen as a hybrid between the two paradigms. Like the warring paradigm, it permits the killing of individuals without judicial process, and like the policing paradigm, it is not inconsistent with human rights.

The national self-defense justification is based on a domestic analogy with individual self-defense, but the government’s understanding of it may be based on confusion between the just war categories of *jus ad bellum* and *jus in bello*.⁵⁰ The initiation of war under *jus ad bellum* can be justified on the

49 Department of Justice White Paper, “Lawfulness of a Lethal Operation Directed Against a U.S. Citizen Who Is a Senior Operational Leader of Al-Qa’ida or An Associated Force”, November 8, 2011, <https://fas.org/irp/eprint/doj-lethal.pdf>.

50 Gregory S. McNeal, “Six Key Points Regarding the DOJ Targeted Killing White Paper,” *Forbes*, February 5, 2013, <http://www.forbes.com/sites/gregorymneal/2013/02/05/six-key-points-regarding-the-doj-targeted-killing-white-paper/>.

basis of national self-defense. But once war is underway and *jus in bello* becomes relevant, the killing of enemy combatants is justified not on the grounds of self-defense (which would be a matter of conduct), but simply because they are combatants (a matter of status). This confusion can be seen when the government justifies targeted killings as based on the inherent right to national self-defense recognised in international law (for example, U.N. Charter Article 51). But Article 51 in a matter of *jus ad bellum* concerning the justification of going to war, not an *in bello* justification of killing individuals. If the national self-defense justification is to succeed, it must be seen as independent of an *in bello* justification, since the military's struggle with the insurgents is not a war. Were it not independent, it would not be a third way. But there is some indication that the government perceives the two justifications as independent, like when it speaks of a drone strike as “a lethal operation against an enemy leader undertaken in national self-defense or during an armed conflict.”⁵¹

In any case, the applicability of a principle of self-defense requires a showing of imminence and necessity. In domestic society, one can take the life of another in self-defense only if that person poses an immediate risk to one's own life (imminence) that cannot be avoided in other ways (necessity). So understood, national self-defense fails as a justification for the targeted killings. The claim would have to be that the victims of targeted killings pose an imminent risk of attack against the US, which is implausible. Indeed, the government claims that it is justified in killing “an operational leader” who presents “an ‘imminent’ threat of violent attack against the United States.” But how does it understand such attacks as

51 Taking the “or” as exclusive. Department of Justice White Paper; emphasis added. See also Carig Martin, *op. cit.*, pp. 225-26.

imminent? Defense against the insurgents “demands a broader concept of imminence” because the targets are “continually planning terror attacks” and there may be “only a limited window of opportunity” in which they can be attacked.⁵² But this is an unacceptable expansion of the notion of imminence, which completely strips it of its role in providing a self-defense justification. It is like the purported justification for preventive war at the *ad bellum* level that because we expect some state to attack us in the indefinite future, we are justified in striking it now. David Cole notes that “the administration has reportedly defined ‘imminent’ capaciously, reasoning that because al Qaeda and its affiliates want to strike us whenever they get the chance, they always pose an imminent threat,” but this “effectively eliminates the requirement altogether.”⁵³

If drones make war easier, then some wars that would be fought with drones, would not be fought otherwise. Call this category the drone-only wars. The claim that drones make war too easy thus underlines the argument that is overall not morally preferable that the drone-only wars be fought.

But what about humanitarian interventions? It is a good thing to fight a justified humanitarian intervention, but these wars are more likely to be drone-only wars because the state fighting them is less likely to see its fundamental interests at stake. (Think of the absence of humanitarian intervention in the case of Rwanda.) Christopher Kutz, in an apparent endorsement of Anderson’s point, argues that military actions of “other-defense,” that is, humanitarian interventions, does not require that the combatants in this war be exposed to

52 Department of Justice White Paper, op.cit.

53 David Cole, “Obama and Terror: the Hovering Questions,” *The New York Review of Books*, July 12, 2012, and David Cole, “How We Made Killing Easy,” NYR Blog, June 2, 2013, <http://www.nybooks.com/blogs/nyrblog/2013/feb/06/drones-killing-made-easy/>.

risk.⁵⁴ There are two responses to this view. First, not all wars claimed to be humanitarian are just wars. Some wars fought by powerful states are disingenuously given a humanitarian rationale or are overall unjust despite having a humanitarian rationale (as with the 2003 Iraq War). (A humanitarian intervention, like any war, is unjust in case it fails to satisfy the criteria of *jus ad bellum*.) Nor can a state's belief that its war is humanitarian guarantee that it is so. Second, justified humanitarian interventions fought exclusively by drones are less likely to succeed in their humanitarian purpose. Again, Kosovo is an example. It is generally acknowledged that more Kosovars would have been saved from Serb forces had NATO fought the war with troops on the ground. Overall, the value of restraining powerful states from fighting drone-only wars outweighs the risk that some of these would be just wars.

A stronger point may be made about riskless humanitarian intervention: it may be an incoherent notion. "Riskless war in pursuit of human rights is," Kahn argues, "a moral contradiction."⁵⁵ This is because the moral message of riskless humanitarian war is that the lives of combatants of the intervening state "are of greater value than the lives of those who might benefit from these interventions," which creates "an incompatibility between the morality of the ends, which are universal, and the morality of the means," which favor one group over another."⁵⁶

54 Christopher Kutz, "Drones, Democracy, and the Future of War," unpublished MS.

55 Paul W. Kahn, "War and Sacrifice in Kosovo", *Philosophy and Public Policy Quarterly*, Spring-Summer, Volume 19, Number 2/3, pp 1-6, 1999, http://www.puaf.umd.edu/IPPP/spring_summer99/kosovo.htm.

56 Ibid.

DRONES AND THE PARADOX OF MILITARY ETHICS

The paradox of military ethics is that ethics is the safest where risking life is part of taking military action. Putting one's own safety on the line for a cause inoculates the military from a large part of recklessness and corrupt manipulation in the use of deadly force that might otherwise plague its missions. This is especially the case with the most globally powerful military forces, which tend to be employed in interventionist missions across the world. The use of drones is arguably one of the most effective ways to reduce the risk to own soldiers, while at the same time providing substantially increased operational possibilities for clandestine attacks, assassinations, or selective strikes for which neither accountability, nor visibility or detectability (as with the use of substantial conventional forces) are a concern.

The dissident US former drone operator Brandon Bryant described how drones conducting strikes in the Middle East were operated from over 10,000 kilometres away in Las Vegas, Nevada.⁵⁷ He explained how civilians, as well as 'friendlies' were killed by drones with no investigation ever having been launched. In fact, Bryant stated, quite starkly, that the only situations in which investigations into drone operations took place were ones where the aircraft were 'crashed' and lost. He described how the drone he had helped operate had killed a child and then 'maintained target' with the pilot laconically dismissing his shock. The human cost, including the killing of civilians and third parties, is treated as an acceptable part of engaging in drone warfare.

On a practical level, descriptions like Bryant's illustrate why robotised violence conducted by the military, especially when it takes place outside the framework of full-fledged war,

57 Interview with Brandon Bryant, Drone Operator, on August 27, 2018.

undermines military morality. Soldiers engage in actions which are enormously disproportionate in various ways. They are not only disproportionate in the technological capabilities of the sides in conflict, or in their strategies or daily tactics; they are also disproportionate in the moral dimensions which define the side's identities in the conflict and their modes of engagement in the field. The conflict in the Middle East illustrates just how dramatic this moral and psychological disproportionality is. According to Bryant, tens of thousands of drone missions are flown every month in the Middle East, and civilian casualties rarely get reported by the military.⁵⁸ He claims that the only situations where civilian casualties are reported in the media are those where there is 'unquestionable evidence from third parties', and this is only a small fraction of the civilian deaths inflicted by drone strikes.

The moral disproportion between drone operators and soldiers who fought on the ground on the other side in the Middle East in 2015 and 2016 is stark.

Whatever their values and beliefs, those on the ground – , whether they fought for the legal government in Syria or for their renegade Islamic communities against the government – , engaged in conventional warfare where they put their existence on the line for their beliefs. This alone gave them a moral stance within the conflict. The reason why one of the parties in the conflict, the Islamic Caliphate, was stigmatised, not just by the world at large but also by the other parties in the same conflict, was that it drastically breached the conventional moral rules of conventional warfare by killing civilians, beheading hostages and instilling terror in civilian communities. It is this moral reason that primarily explains why the Islamic State has been targeted by the civilised countries, and these actions have been

58 Ibid.

accepted and supported by civilised populations, including those in Syria itself, as well as in Iraq and in Libya. Finally, these morally appalling crimes, which so drastically violate the conventional values of armed conflict, have caused global outrage against the very beliefs and ways of life of those who represent the Islamic State. It seems, on a different level but no less dramatically, that the use of drones in the Middle Eastern conflict has been as morally disproportionate to what the other parties have done on the ground as have been the actions of the Islamic State.

While drone operators did not personally decapitate anyone, they conducted aerial operations which left children and civilians torn into pieces without so much as blinking, by clicking a computer mouse. They engaged in what Bryant calls cowardly operations with no real sense of moral responsibility for the consequences and with no real personal identification with the values in the name of which such operations were launched. It is apparently possible for a socially problematic person, even for a child molester, to work as a drone operator, alongside with ‘proper’ air force personnel such as Bryant. However, a child molester would likely find it extremely difficult, if not impossible, much less desirable, to become a Marine or find themselves in a personnel carrier somewhere in the Middle East. There are multiple reasons for this which hardly require elaboration here. However, individuals with such personal credentials can, and have been, recruited as drone operators, and the reason is principled: the nature of the ‘cowardly’ strikes does not require morally integrated individuals to conduct them.

GRAVE CONSEQUENCES

The prospect of totally autonomous drones would radically alter the complex processes and decisions behind military killings. But legal and ethical responsibility does not somehow just disappear if you remove human oversight. Instead, responsibility will increasingly fall on other people, including artificial intelligence scientists.

The legal implications of these developments are already becoming evident. Under current international humanitarian law, “dual-use” facilities – those which develop products for both civilian and military application – can be attacked in the right circumstances. For example, in the 1999 Kosovo War, the Pancevo oil refinery was attacked because it could fuel Yugoslav tanks as well as fuel civilian cars.

With an autonomous drone weapon system, certain lines of computer code would almost certainly be classed as dual-use. Companies like Google, its employees or its systems, could become liable to attack from an enemy state. For example, if Google’s Project Maven image recognition AI software is incorporated into an American military autonomous drone, Google could find itself implicated in the drone “killing” business, as might every other civilian contributor to such lethal autonomous systems.

Ethically, there are even darker issues still. The whole point of the self-learning algorithms – programs that independently learn from whatever data they can collect – that the technology uses is that they become better at whatever task they are given. If a lethal autonomous drone is to get better at its job through self-learning, someone will need to decide on an acceptable stage of development – how much it still has to learn – at which it can be deployed. In militarised machine learning, that means

political, military and industry leaders will have to specify how many civilian deaths will count as acceptable as the technology is refined.

If machines are left to decide who dies, especially on a grand scale, then what we are witnessing is extermination. Any government or military that unleashed such forces would violate whatever values it claimed to be defending. In comparison, a drone pilot wrestling with a “kill or no kill” decision becomes the last vestige of humanity in the often-inhuman business of war.

POLICY RECOMMENDATIONS

Drones present, in terms of the difficulties they have in satisfying the principles of *jus in bello* and their tendency to make possible riskless war, what was referred to earlier as extraordinary moral problems. Ordinary moral problems can be resolved by tweaking the technology or altering how it is used, but extraordinary moral problems are difficult to resolve in this way. Their solution may require that the technology be abandoned. The first two objections reveal the ordinary moral problems that drone use gives rise to. These problems could be largely avoided by using drones in a different way. But the last three objections reveal that drone use has moral problems that are extraordinary, problems effectively inherent in the technology, problems that are not subject to easy correction by attempts to limit their use to acceptable forms.

What practical and feasible policy commendations follow from our conclusions about drone technology? First, any solution must be systemic. The problems cannot be corrected unilaterally, by requiring, say, that military commanders deliberately expose their combatants to unnecessary risk in order to avoid a situation of extreme asymmetry. Kahn notes:

“Military forces cannot be asked to assume unnecessary risks. . . . Indeed, it would be immoral for the military leadership not to try to minimise the risk of injury to its own forces.”⁵⁹ The imperative for force protection must be able to operate for each side within an overall scheme that attempts to deal with the moral problems that drones raise.

Consider a comparison between drones and other military technologies that pose extraordinary moral problems. The prime examples are weapons of mass destruction (WMD). Some have drawn comparisons between drone technology and nuclear weapons. David Remnick notes: “We are in the same position now, with drones that we were with nuclear weapons in 1945. For the moment we are the only ones with this technology that is going to change the morality, psychology, and strategic thinking of warfare for years to come.”⁶⁰ This brings out some similarities between the two technologies, especially the fact that both were initially in the possession of the US alone, as well as the resulting concern by the US to keep them out of the hands of other states. But in other ways, especially in their physical impact, the technologies could not be more different.⁶¹ The same holds for a comparison of drones and the other two forms of WMD, chemical and biological weapons.

But these comparisons allow us to explain more clearly what an extraordinary moral problem is. Such a problem exists for a technology not when it is impossible to use it in a morally acceptable way, but when, were it used, it is very

59 Paul Kahn, “Paradox of Riskless War,” *Philosophy and Public Policy Quarterly*, Volume 22, Number 3, 2002, p. 7.

60 Remnick, David, quoted in David Carr, “Debating Drones, in the Open,” *The New York Times*, February 10, 2013.

61 There is, of course, a certain irony in finding a comparison between the most indiscriminate technology and the technology claimed to be the most discriminate.

likely to end up being used in a morally unacceptable way. WMD can all be used in morally acceptable “counterforce” ways. Nuclear and chemical weapons could be used against isolated military targets with little or no civilian damage. This could presumably also be the case with biological weapons, if the pathogens in question were designed not to be infectious. The reason there are efforts to ban them, in the light of the *in bello* principles of discrimination and proportionality, is the recognition that if they existed, they would not be limited to the morally acceptable uses, either because these uses are less effective militarily or due to the likelihood of escalation to morally unacceptable uses.⁶² This is also the case with drones. While they can be used in morally acceptable ways (such as tactically in a larger conventional war), usage is unlikely to remain so limited. The tendency to use them for GWOT-style military violence or in wars of extreme asymmetry would be irresistible.

An effort to ban such weapons is morally more urgent for WMDs than for drones is because of the greater destructiveness of WMD, but the moral need for a ban is present for drones as well. A more apt comparison, in terms of destructive capabilities, would be between drone technology and the technologies of anti-personnel landmines and cluster munitions. Each of these technologies can be used in morally acceptable ways. Anti-personnel mines can be used in areas of combat where civilians are not present and can be configured to deactivate by the time that civilians are likely to repopulate those areas. Cluster munitions could be used when only combatants are present and could be configured so that all of the bomblets explode on impact. But the strong likelihood is that their use

62 Nuclear weapons have been only partially banned through the Nuclear Non-Proliferation Treaty, but they represent a special case.

would not be limited to these morally acceptable forms, and they thus pose extraordinary moral problems. In recognition of this, they have been banned under international law, by the 1997 Ottawa Treaty banning anti-personnel landmines and the 2008 Convention on Cluster Munitions.

But a similar convention on drones is quite unlikely. First, drones are such an integral part of US military capacity and planning that there is little chance the US would give them up. Second, several other powers are well on their way to having a full-fledged drone program of their own. Third, any convention would apply only to attack drones, leaving surveillance drones unaffected, but the line between the two would be difficult to police. The only way we are likely to resolve the extraordinary moral problems posed by drones is to hasten the future toward which they push us, a future in which warring has been replaced by policing and where anti-criminal force is exercised by a legitimate global authority. That such a future is unlikely, and indeed has serious moral problems of its own, will leave drones and other robotic military technology as a continuing moral problem.