

Pandora's Presumption: Drones and the Problematic Ethics of Techno-War

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Pandora's Presumption: Drones and the Problematic Ethics of Techno-War

Abstract

Present American policy proclaims the compatibility of drone usage with the traditional Rules of Engagement and the Laws of War. Largely absent in this is an examination of how enemy combatants are being defined *on both sides* of drone activity: not just the targets and operators but also the relevance of drone technology proliferation. This work engages the void to reveal inconsistent and contradictory ethical standards in American drone policy, based largely on an assumed continued technical preeminence that is by no means guaranteed. The argument is not a humanitarian lament against hegemony: it is a realist argument addressing how ethical inconsistencies in defining American technological warfare compromise the 'leadership high ground' for the United States in a manner that carries fairly significant national security blowback potential.

Introduction

Present American policy proclaims the compatibility of drone usage with traditional Rules of Engagement and the Laws of War. Some initial analytical criticism is beginning to challenge how drones are used empirically and to a lesser degree asking theoretical and ethical questions from such evidence. Largely absent in this debate is an examination of how enemy combatants are being defined *on both sides* of drone activity (not just the targets and operators but also the relevance of drone technology proliferation) and how the inexorable spread of technological innovation around the globe might impact these issues. Perhaps most important: could a forced application of the Laws of War to drone usage backfire against American interests as the rest of the world catches up in drone technology? By focusing on this aspect of the debate, the work reveals inconsistent, secret, and contradictory ethical standards in American drone engagement policy, based largely on a desired continued technical preeminence that can by no means be guaranteed. This argument is not a humanitarian lament against United States hegemony. Rather, it is a realist argument addressing how ethical inconsistencies in defining aspects of American technological warfare leave the U.S. potentially compromised in a manner that carries fairly significant national security blowback. In short, as the technical capability gap closes between the United States and its adversaries, the timeframe shortens for when America's "ethical chickens may come home to roost."

This article takes issue with the idea that ethics, transparency, and normalized standards cannot have an impact on the emerging drone environment. Some audiences in the United States believe that they should simply take advantage of the technical superiority for as long as it lasts and then, when such advantage no longer applies, fall back to the tried and true military methods of defense and deterrence to stave off challenges and threats. The only problem with this thought process is that the ethical double-standard inherent to early American drone dominance might be in fact *causing* the future problems that then have to be remedied by traditional military applications. This is unacceptable. It is not so much that ethical standards and transparent rules destroy threats: it is that a system of ethical consistency and norms standardization might prevent the emergence of such threats to begin with. To ignore or dismiss this idea is akin to blocking all of the potential impact of international norms on drones to the unfortunate detriment of American national security.

While the United States has an obligation to its people, and especially its military service members, to develop capabilities that increase the likelihood of mission success while decreasing American casualties, the somewhat fantastical success of drone strikes gave rise to some awkward but important considerations: if the United States becomes so skilled at waging war from a distance, then has a vital

brake on militarism and war-waging been lost?¹ With drones, being used by both the military and intelligence community, is there a unified code of behavior, use, and standards? Who is ultimately responsible if secret missions go awry or mistakes are made? In general, the military has employed a fairly strict code of conduct and responsibility across traditional forms of warfare.² This has not always seemed to be the case with drone usage by the Intelligence Community, where the general nature of intelligence activity and Top Secret/Sensitive Compartmented Information classifications make operations shrouded in secrecy. While the President and Department of Defense clearly have defined roles in the process of targeting and establishing restrictions, the perception persists that American drone use is largely beyond *societal* review. The psychological aspect of extensive drone usage is also gaining momentum in scholarly and policy circles. Some consider drones to be the epitome of numbed technological violence, perhaps covering over the central truth of war being not just about killing but also about death and dying.³

More important to this research, however, is a lesser-emphasized discussion about how drone warfare has been awkwardly ‘force-fed’ into the general Laws of War/Rules of Engagement discussion. There seems to be a bit of American foreign policy hubris, where the objective of continued technological dominance is allowing for some rather problematic ethical interpretations. Let us consider the drone ‘pilot’: is s/he a combatant or non-combatant? At present, the official answer is ‘yes and no’: while sitting in the command chair and operating the joystick, regardless of location, the drone pilot is indeed a combatant. However, when the pilot clocks off and leaves his/her base, sits down in their Toyota Camry and drives to Taco Bell for a quick lunch, the pilot, depending on whom one asks, either becomes a traditional off-duty combatant like any other off-duty combatant in a forward area, or, miraculously transforms into a non-combatant civilian and cannot be targeted legally. The reason for this divergence may be largely because of the still vague and non-distinct classifications given to drone pilots working for the military versus ones working for the Intelligence Community. This lack of clarity, even while accepting the Intelligence Community’s need and desire for secrecy, can eventually cause blowback because of ethical inconsistency. The drone pilot status is based not on the Rules of Engagement, Laws of War, Geneva Conventions, or any other major international legal act or tradition. It is based solely on the fact that the United States at present has de facto *exclusive* advanced militarized drone technology and keeps

¹ Anonymous, “Leaders: Drones and the Man – The ethics of warfare,” *The Economist*, July 30, 2011.

² Ibid.

³ Robert Jay Lifton, “The dimensions of contemporary war and violence: How to reclaim humanity from a continuing revolution in the technology of killing,” *Bulletin of the Atomic Scientists* 69:4 (2013).

secret whatever ethical or legal frameworks it uses to govern such technology. The Obama administration claims the need for secrecy, and in certain intelligence/military operations, this can be justified. But there are definitely consequences to a system that uses secrecy as a denial of ethical transparency, especially when it concerns technology that is quickly being distributed and developed all over the world, amongst friend and foe alike.

It might behoove the United States to worry about creating universal ethical standards or operating under standardized and transparent ethical norms. The flexibility of drone pilot combatant status, for example, would have stark repercussions for the United States were it applied in other arenas: is a Taliban fighter a combatant as he drives and parks a car bomb next to an Afghan police station but then becomes a civilian when he returns home and has dinner with his family in Kabul? The question of course sounds ridiculous but is in fact an accurate application of American drone pilot 'secret ethics' if such ethics were universalized today. The repercussions become more problematic as countries—which use drone 'standards' set largely by the United States— become more aggressive in acquiring and developing their own drone capabilities.

Drones are becoming an increasingly important and fascinating subject of investigation, whether it is in the fields of foreign policy, intelligence studies, military affairs, science and technology or ethics. This article takes a holistic approach, looking at aspects of current drone use and application, legal acts and international law customs as they apply to drone technology, the increasingly large body of scholarly voices coming out against drones that are then countered by highly-respected organizations seeking ways to responsibly govern drones in conflict situations, and finally the proliferation of drone technology and how countries around the world are developing new capabilities. When taken in concert it becomes more readily apparent how this Pandora's presumption—a possibly foolhardy assumption of American technological dominance in perpetuity—is not only dangerous but also unlikely. Letting American drone technology be 'governed' by loose and internally contradictory ethical rules could signal a new kind of tech-war in the near future, leaving all of the United States, its interests, and its population at risk, as other adversarial countries and intelligence communities acquire the technology.

Reviewing the Field: Formal Law and Blurred Lines with Drones

There are two major forces working in contradistinction to each other when it comes to U.S. policy on drone development. First, the U.S. Air Force has a clear and explicit objective to have the leanest, most adaptable, most powerful

Unmanned Aerial Vehicle (UAV) systems in the world.⁴ Second, most of the pertinent legal questions that could constrain this objective are still openly debated. For example, much of the original foundation for U.S. drone development came from Israel. In December 2006, the Israeli Supreme Court (ISC) arrived at four main conclusions about drones and their place in conflict:

- The laws of war are applicable to the armed conflict between Israel and terrorist organizations operating in the region. The ISC qualified the conflict as an international armed conflict, even though no other states were involved.
- Targeted killing (the preventative elimination of terrorists) cannot always be deemed legal nor can these actions always be deemed illegal.
- The legality of targeted killings is contingent upon the fact that civilians are not protected from attacks for such time as they take a direct part in hostilities.
- The principle of proportionality always applies, irrespective of the nature of the conflict and the qualification of the adversary.⁵

While the United States does not necessarily protest the Israeli legal positions, it also does not wholeheartedly agree with them, capitalizing on what it sees as rather prominent blurred legal and ethical lines. While most international organizations and foreign states have made attempts to explicitly fuse drones to already established norms, ethics, and rules of war, the United States has focused more on drones being something of a semi-covert tool of political means. In other words, drone war is not necessarily the exact same thing as conventional war. Once you blur the line on this basic fundamental categorization then nearly everything else becomes open to interpretation, including civilian versus military, target classifications, proportionality, and necessity. At the moment, these blurred lines do not carry significant contemporary consequences because no other country has the level of drone development and capability as the United States.⁶

The point being made here is that this ethical ‘standard’, purposely blurred and contextual, is potentially dangerous as the rest of the world inevitably begins to catch up with the United States in drone technology. Even if the overall strategy of the U.S. Air Force is maintained, and America remains dominant in terms of drone evolution and innovation, it will not resolve the possible dilemmas when adversarial countries have drone technology capable of being weaponized at

⁴ Geert-Jan Alexander Kooops, “Legal, Political, and Ethical Dimensions of Drone Warfare under International Law: A Preliminary Survey,” *International Criminal Law Review* 12 (2012).

⁵ *Ibid.*, 780.

⁶ After the United States, the following countries have the most pronounced drone fleets with the potential at least of fully-weaponized robotic technology: China; Israel; India; Russia; Pakistan; Iran.

American targets. When that development comes to pass, the United States may be facing difficult situations if such countries *apply the same kinds of blurred lines* to their own internal drone strategies. Consider International Human Rights Law:

“Under international human rights law two important principles govern all use of force: necessity and proportionality...A state killing is legal only if it is required to protect life (making lethal force proportionate) and there is no other means, such as capture or nonlethal incapacitation, of preventing that threat to life (making lethal force necessary). A further requirement is that the threat to life which the use of lethal force is seeking to forestall must be imminent.”⁷

The United States has often justified its drone attacks under the above legal reasoning: the inaccessibility of the targets and degree of difficulty for human capture operations justify drone warfare. The *exact same reasoning above*, however, could easily be applied to justify drone attacks against America in the future. The only reason this has not been widely debated is because the United States seems to over-rely on the fact that such technological thresholds seem far off in the future. This is not exactly a compelling ethical or legal argument as to why the United States should not expect in its near future to be attacked by foreign drones. As a recent Brookings Institute report mentioned:

“To believe that drones will remain the exclusive province of responsible nations is to disregard a long history of weapons technology. It is only a matter of time before rogue groups or nations hostile to the United States are able to build or acquire their own drones to use them to launch attacks on our soil or on our soldiers abroad.”⁸

While the above is quite prescient, it too contributes to the framing dilemma by automatically granting the United States the title of ‘responsible nation’. This dilemma, however, is not about whether America is or is not a responsible nation with drone technology. The larger point is that it is clearly perceived to be ‘irresponsible’ in the eyes of those states that have fallen victim to American attacks.

The biggest blurred line to date is targeted killing. Initially, most felt targeted killing to be extrajudicial and akin to summary execution or assassination. Israel was the biggest proponent of the practice and even the United States took a fairly

⁷ Stuart Casey-Maslen, Pandora’s Box? “Drone strikes under jus ad bellum, jus in bello, and human right law,” *International Review of the Red Cross* 94:886 (Summer, 2012): 617.

⁸ *Ibid*, 625.

critical stance to Israeli strategy.⁹ Interestingly, after 9/11, the American position became more liberal on targeted killing as a tactic in fighting terrorism. States like America and Israel were adamant about the pervasiveness, ambiguity, and lethality of terrorism. Consequently, international law needed to accommodate targeted killing as the best modern solution to this new threat had become so powerful, unforeseeable, and undefined.¹⁰ The legal evolution on this issue is incredibly subtle and supremely advantageous to a technically dominant state:

“Targeted killing is inscribed into the law in so far as a temporal criterion (imminence) is converted into a qualitative one (gravity). The target, as the one who may be lawfully killed, thus at the same time sees itself *included in and excluded from* the law. If targeted killing was thought to be unlegalizable—not in the face of a superior norm...but rather given the principle of use of force as a last resort is indeterminable in advance precisely because it is always bound to a singular situation requiring an individual decision—here, the reverse has been proved...When framed within the theater of war, targeted killing categorically seems to be justifiable under the legal principles of necessity, proportionality, discrimination, and the avoidance of unnecessary suffering.”¹¹

Again, most remarkable about the above legal reasoning is how important the continued exclusive technological dominance of the United States is in drone technology. The United States has a diplomatic habit of positioning its interests as something higher than pure foreign policy and national security priorities. In so doing, it creates a *de facto* expectation whereby it has exclusive rights to exceptional behavior on the global stage. The obvious risk with such diplomatic calisthenics is that most other countries do not grant such exclusivity or exceptionality to the United States and American actions are therefore seen as potentially precedent-setting and norm-establishing, let alone resentment-generating.

The reformulation of targeted killing so that it is both legal and vague, having targets both *included in and excluded from* the law simultaneously, is not much of a danger as long as the United States maintains drone technology domination. Cracks in that dominance, however, carry stark consequences. Perhaps most perplexing is how the United States does not seem to consider the impact if the above legal formulation about targeted killing was applied by an adversarial state on American targets. It is politically thin ice if American confidence is based on presumed continued technical dominance and a self-declared ethical normalcy.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid. 678-79.

This perceived ethical strength is based on a rather tenuous sense of what constitutes 'legal self-defense' on the global stage. In the war against terrorism first begun in earnest under Bush, the United States portrayed itself as an innocent victim, not deserving of justified blowback, hostility, or animosity. There has been much written about how American foreign-policy decisions have heavily influenced the rise of radical groups. It is unnecessary for this article to summarize the massive literature on this issue. What is relevant is how blurring the line of legal self-defense to ethically justify drone attacks carries dangerous potential consequences for America: little emphasized is whether or not such loose interpretations of 'self-defense' sets problematic precedents for future drone holders, especially ones that were previously attacked by the United States. Is it truly implausible for a previously attacked state to launch an attack against the United States? The only reason this question is not addressed in scholarly and diplomatic circles today is because of two failures: first, they fail to imagine the day when adversarial states that have already been attacked with American drones will have their own drone technology capable of reaching and targeting American objectives and second, they believe there is great operational and reputational distinction across the globe between Bush and Obama. Data on these two factors, however, refutes this idea: Obama's global reputation is not what it was in 2008 and his use of drones has been overwhelming compared to Bush.

Thus, an incredibly slippery ethical slope has been created. For example, it has already been discussed in this paper how different states have wildly different assessments for what is proportionate or not proportionate, what is a legitimate target or not legitimate, and what constitutes imminent necessity as opposed to being not imminent. Even close military allies like the United States and United Kingdom have often come to different conclusions on these issues.¹² It is a dangerous Pandora's box one opens by establishing blurred ethical lines and ambiguous legal precedents as any change in the previous technological world order could unleash a drone era that is decidedly less friendly, less open, and likely more violent.

As one astute observer recently noted, "too often, targeted killings by states look rather like crossing names off a Mafia hit list...In the final analysis, measured by the moral standards common to most societies, even targeted killings carried out within the framework of the present legal order often have traits that are more readily associated with criminal behavior than with acceptable government policy."¹³ Again, perception matters: the United States clearly does not want the rest of the world to think of its drone technology use as a highly technical Mafia

¹² Stuart Casey-Maslen, Pandora's Box? "Drone strikes under jus ad bellum, jus in bello, and human right law," *International Review of the Red Cross* 94:886 (Summer, 2012).

¹³ *Ibid.*

assassin. But if asked, what would states such as Pakistan, Afghanistan, Yemen, and the like consider it? What ethical standards will these states employ if they one day obtain highly capable, weaponized drone technology? What general worldwide drone trends might emerge after an era epitomized by the United States being a bit too subjective and lacking in transparency? The literature that has begun to emerge, looking critically at drones, is more focused on technical aspects of the discussion and thereby missing these ominous ethical consequences.

Contrarian Voices Against Drones: Important but Incomplete

The arguments highlighting drone complexity are diverse and compelling. The spectrum covers everything from power politics to legal form to covert action. Each piece cogently adds to the vibrancy of the debate. Interestingly, the fundamental point is still being missed. McDonnell, for example, focused on international law and whether or not a hegemonic power like the United States had the right to act against organizations or states that operate against American interests. His main concern was the overall damage that could be inflicted upon international norms that have been long accepted as governing armed aggression, namely Article 51 of the United Nations Charter or the Geneva Conventions and its protocols. A hegemonically powerful state with high technology, he worried, would be sorely tempted to use it when and where it wished regardless of how well it fit with accepted international norms and ethics.¹⁴ McDonnell's point is utterly logical and well reasoned. It simply does not go far enough: what are the likely political and military consequences when the world perceives a hegemonic power basing its ethical norms on technical superiority alone? More importantly, how does the decision-making calculus of all concerned alter and change as that initial technical superiority becomes less pronounced and new actors gain the same weaponry and consider targeted killing themselves?

Kels analyzed actual empirical policy under the Obama administration, looking at how official White House considerations were often cloaked in legal authorization that was basically layering discrete legal doctrines atop one another haphazardly.¹⁵ He showed how this approach buttressed the Obama administration's claim that drone strikes were legal, ethical, and wise, but rightly pointed out that such terms were not automatically synonymous and that given policy very often could be one without being all three. Kels saw that such conflation offered an 'unduly restrictive conception of targeting in war, coupled with an under-inclusive treatment of due process that appeared to devalue its

¹⁴ Thomas Michael McDonnell, "Sow What you Reap? Using Predator and Reaper Drones to Carry Out Assassinations or Targeted Killings of Suspected Islamic Terrorists," *George Washington International Law Review* 44 (2012).

¹⁵ Charles G. Kels, "Law, Policy, and Drone Warfare: Mixing Legal Doctrines on Targeted Killing is a Dangerous Recipe for Confusion," *National Law Journal* 35:26 (2013).

meaning'.¹⁶ Consequently, American drone policy ends up assailed by defense hawks, human rights advocates, and libertarians simultaneously. Again, as with McDonnell, the issue is not with the validity or importance of these analytical claims but rather that they do not extend far enough out: in this case, the author worries more about domestic critics while ignoring the much more potentially violent criticism that could come from outside the United States.

Kennedy dissects discussions over drone policy and whether or not there was a need for change. His ultimate conclusion supported the idea that without a new doctrine understandable to allies and adversaries alike, the United States risked achieving near-term tactical benefits while potentially causing its own significant longer-term damage to alliances, global public opinion, the war on terrorism, and international stability.¹⁷ A common error seen running throughout the literature is that the potential danger facing the United States because of its drone policy is self-contained and largely internal. This argument holds water only by accepting the continued technological dominance of the United States. If the possibility of weaponized drone technology proliferation is allowed (and it should be), then the dangers facing the United States in the future could very well be external and adversarial.

Killmister looked at the ethical implications of remote weaponry. Rather uniquely, she analyzed what options were available for retaliation when the state comes under attack. Her focus was on three options: surrender, target enemy civilians, or target civilian combatants within the aggressor state. This missed a very important fourth choice: the purposeful and aggressive acquisition of remote weaponry technology. Time and again, no matter how powerful and relevant the analyses tend to be, scholars are missing the most logical strategic plan for those targeted by drones: acquire your own drones. More disconcertingly, this logic remains true whether discussing state or non-state actors. Killmister's conclusions about the ethical implications were equally important but also missing a significant subtlety:

“[Remote weaponry] places great strain on just war theory. We are left having to claim either that superior military technology engenders a superior moral claim, such that anyone targeted by remote weaponry is morally obliged to submit and/or surrender. Or we must claim that in situations of remote warfare, the principle of civilian immunity cannot hold. In such situations, remote weaponry has the consequence of rendering just

¹⁶ Ibid.

¹⁷ Greg Kennedy, "Drones: Legitimacy and Anti-Americanism," *Parameters* 42:4/43:1 (Winter-Spring, 2013).

war theory either an ally of the powerful or obsolete. This internal tension is an aspect of remote weaponry that as yet remains undertheorized.”¹⁸

This astute commentary is the closest to recognizing the long-term battlefield consequences of current drone warfare thinking. Though formally denied by the United States government, there can be no question that victim states of drones feel quite strongly that the United States can ‘claim’ the moral high ground simply because it has exclusive ownership of superior military technology. More damaging, such states inevitably feel that just war theory is no longer equally applied to all states but has become something of a tool to be utilized and manipulated only by the most powerful. The above quote showed how the scholarly world had yet to engage this internal conflict. This article would rather emphasize how much this internal tension ends up impacting external conflict in coming drone wars and how ‘inappropriately’ drone technology may be used in retaliation. Again, the precedents set by the United States based on its technical dominance become problematic and dangerous when the technological playing field becomes more level. Most importantly, too many in this debate are drawing too sharp a dichotomy between state vs. non-state targets. Since American counter-terrorist drone operations emphasize the targeting and killing of non-state actors, many believe there are no real consequences to worry about from state actors. This belies the reality of drone strikes, which inevitably kill dozens if not hundreds of civilians in collateral damage, in addition to the financial devastation inflicted to infrastructure. Inside of America, there is an inaccurate mythology about the pristine neatness of drone strikes that is not shared or sympathized with by states in which drone attacks occur. Therefore, this article might be the first to make a connection between the political/military consequences in *state actors’* thinking because of drone strikes against *non-state actors* within their territory.

Johansson examined the moral right to use UAVs in war. Her chief concern dealt with the military advantages of UAVs and how they might lead to secret wars with the commensurate lack of transparency.¹⁹ As has been discussed earlier in this article, she considered that the employment of intelligence agencies to be involved in targeted killing with very few clear rules of engagement was ethically compromised. Though this argument is somewhat tautological given the nature of intelligence operations writ large, she considered how questions about civilian intelligence agencies using UAVs could be less relevant in less democratic societies since such societies tended to have very little transparency in their

¹⁸ Suzy Killmister, "Remote Weaponry: The Ethical Implications," *Journal of Applied Psychology* 25:2 (2008): 122.

¹⁹ Linda Johansson, "Is it Morally Right to Use Unmanned Aerial Vehicles (UAVs) in War?" *Philosophy of Technology Journal* (June, 2011).

governments and military organs as well.²⁰ Though Johansson doesn't appear to recognize it, her argument further builds the foundation for retaliatory irresponsible behavior on the part of states most often attacked by drones. If the technological playing field is made more equitable, then there is no reason to expect rational behavior or considerate action on the part of nondemocratic states that have acquired weaponized drone technology. At least, such things should not be expected with the American precedent of perfunctory ethical norms justifying drone warfare.

While it is by no means scholarly and comes from a more emotional perspective, the growing literature out of Pakistan on drone targeting and attacks is impactful. Khalid Iqbal has emerged as the most eloquent voice in this din of protest:

“Drones are terrorizing an entire civilian population; they live under the constant threat of annihilation. People hear them day and night. Parents are afraid to send their children to school. Women are afraid to go to markets. Families are afraid to gather at funerals for people wrongly killed in earlier strikes. Drivers are afraid to deliver food from other parts of the country. The routines of daily life have been ripped to shreds. Indisputably innocent people cower in their homes, afraid to assemble on the streets. Double taps, or secondary strikes on the same target, have stopped residents from aiding those who need immediate medical attention.”²¹

What powerful commentaries like this attest to is the unfortunate probability that current policy on American drones does not intimidate targeted nations but may actually incite a passion for vengeance and retaliation *even when American drone action is exclusively focused on non-state actors*. This flies directly in the face of American military and intelligence branding, which emphasizes how drones are capable of killing the enemy faster than they can grow them back.²²

The chief relevance is not in the technical efficiency of drones or their powerful capability to eliminate targets. What the literature tends to miss is the building up of a massive amount of legal, diplomatic, political, ethical, and military resentment brought about by an American belief in ethical justification maintained flimsily by technical prowess and an expectation of not being challenged on internal contradictions and inconsistencies. This is not a liberal plea to eliminate drones or handcuff U.S. power. It is, however, a warning to these missed dangers emergent from technological arrogance and ethical self-indulgence.

²⁰ Ibid.

²¹ Khalid Iqbal, “Futility of Drone Attacks,” *Defence Journal* (2013).

²² Joseph Pugliese, “Prosthetics of Law and the Atomic Violence of Drones,” *Griffith Law Review* 20:4 (2011).

These dangers do not disappear even when examining academic and diplomatic projects aimed at bringing drone technology under more universally standardized ethical norms. One such impressive project is highlighted below to show the difficulty that exists in trying to overcome drone ambiguity and opacity. The *Center for Civilians in Conflict Report*, produced by the Columbia University Law School, released a comprehensive, multi-tiered analysis on the unexamined costs and questions related to the civilian impact of drones. Logically divided into four main sub-headings, giving advice to the Obama administration, the CIA, the Department of Defense, and Congress, the Center's recommendations seem to overwhelmingly imply not only a lack of transparency and accountability in American drone warfare, but there is a surprisingly large need for greater inter-agency and inter-branch coordination and communication:²³

To the Obama administration:

- Establish a special interagency task force to evaluate covert drone operations and make recommendations to the president on the following issues:
 - *The extent of civilian casualties and the larger impact on civilian communities*
 - The sufficiency of civilian protection mechanisms, including civilian casualty mitigation processes
 - The adequacy of civilian protection standards for the identification of targets, especially where there is limited to U.S. ground presence
 - Capabilities and limitations of drone technology for reducing and accurately assessing civilian harm
 - *The existence and sufficiency of post-strike assessments and investigations of who was killed*
 - The existence and sufficiency of processes for recognizing harm in making amends to civilian victims of drone strikes, their families, and communities
 - The strategic value and humanitarian impact of covert drone strikes compared to other counterterrorism approaches

To the CIA:

- Publicly describe the agency's civilian protection mechanisms, including civilian casualty mitigation processes and post-strike investigatory procedures

²³ Shah, Naurren et al., *The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions*, Center for Civilians in Conflict Report (New York: Columbia University Law School, 2012).

- Engage with civil society regarding legal standards for targeting operations; *confirm whether the agency regards itself as bound by international law* and publicly describe CIA's legal standards or who may be targeted
- Disclose the steps the agency takes to train personnel involved in drone operations, including lawyers, on applicable laws and related civilian protection and harm response tactics and procedures

To the Department of Defense, Special Operations Command, and Joint Special Operations Command:

- Acknowledge that JSOC has a role in drone strikes outside of Afghanistan; declassify information on drone targeting operations once they are completed; and efficiently provide information on the impact of operations on civilians as is done by the military in traditional combat theaters
- Publicly describe the civilian protection mechanisms, including civilian casualty mitigation processes and post-strike investigatory procedures
- *Clarify whether directions, rules, and manuals in relation to civilian protection and use of force compliance that are a matter of Department of Defense-wide policy also apply to JSOC operations, including operations conducted under the CIA statutory authority*

To Congress:

- Exercise oversight powers to the fullest extent possible in reviewing and evaluating the following issues:
 - The extent of civilian casualties from covert drone strikes in the larger impact on civilian communities, including destruction of homes and displacement, and retaliatory violence by local groups
 - The sufficiency of civilian protection mechanisms employed by the CIA and JSOC, including civilian casualty mitigation processes
 - The adequacy of standards for the identification of targets, including the reliability of signatures, and the sufficiency of intelligence sources and analysis with limited U.S. ground presence
 - The capabilities and limitations of drone technology for reducing civilian harm, and the adequacy of current technology testing and personnel training
 - *The existence and sufficiency of post-strike assessments and investigations that determine who was killed, including the characterization of military-age males as presumptively non-civilian*
 - The existence and sufficiency of processes for recognizing harm in making amends to civilian victims of covert drone strikes, their families, and communities

- *The strategic value and humanitarian impact of covert drone strikes compared to alternative approaches to counterterrorism*
- For joint CIA-JSOC operations, the adequacy of oversight mechanisms; the delineation of responsibilities between the organizations, and the adequacy of agency accountability for civilian protection and harm response²⁴
-

The italicized sections belong to this author and highlight more emphatically what seems to be the absence of rudimentary and fundamental oversight, assessment, evaluation, and efficiency testing for technology that has arguably become the most heavily relied upon counterterrorist tool in the American arsenal. The report implies, for example, that it is not necessarily known if there are any accurate reporting tools for civilian casualties, whether any post-operational success programs are in place, how often alternative resolutions are sought or utilized as opposed to drone strikes, whether JSOC respects the standard DoD compliance rules that have been in place for decades, or even if the Central Intelligence Agency, when using drones, considers itself beholden to international law. Most public debates about drones tend to focus on the President or the CIA. What the Columbia review clearly establishes is an absence of clarity and definition across all four major deliberative bodies that are the main stakeholders governing drone activity and how American drone policy should develop and evolve.

Just as with the literature review, the above policy review testifies to how much current American drone utilization is predicated upon the exclusive and exceptional ability of the United States to dictate terms to all other countries and to strive to maintain such technical dominance on in perpetuity, thereby eliminating the need to be concerned about the lack of uniformity, transparency, and logical consistency in its ethical frameworks. It is true that drones are not solely utilized for counter-terrorist operations and activities. They operate in conventional military operations, border security, peacekeeping, even anti-poaching. This article is not trying to conflate drone usage exclusively with counter-terrorism. But it is important to note the distinction that drone operations in these other arenas seem to not suffer from the same inconsistent application of ethics and norms. Instead, the focus is on the area that specifically illustrates the potential of creating more serious future problems for the United States. A cursory investigation reveals just how dangerous these problems could be: 2013 seemed to be a stellar year for drone achievement around the world with pronounced possible military/counter-terrorist applications.

²⁴ Ibid.

Drone Life: Gadgets and Government with Unmanned Aerial Vehicles (UAVs)

The Obama strategy in terms of using drones is focused primarily on counterterrorism. This strategy deals with hindering non-state groups like al-Qaida, Boko Haram, al-Shabaab, and now the Islamic State, in countries where there has not been an official American declaration of war against the state. Drone warfare has not been so much under the military's sole purview, but placed under the authority of Joint Special Operations Command (JSOC) and the CIA.²⁵ Efficiency and speed seem to dictate authority and responsibility controls. Robotic warfare is clearly the next great step in the evolution of military force action. Up to now, the United States clearly favors the argument of drones seamlessly fitting into current American rules of engagement. While official policy emphasizes this position, there can be no doubt of the dramatic strategic impact drone warfare has had on U.S. thinking.²⁶ To that end there has been great focus on the training of UAV operators and how they must take constant care to spare civilians and civilian objects, to fit drone technology into status quo rules of engagement.²⁷

“He must do everything practicable or practically possible to verify that the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection but are military objectives; he must take all practicable or practically possible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians, and damage to civilian objects; he must refrain from deciding to launch any attack which may be expected to cause disproportionate incidental civilian injury and/or damage; he must cancel or suspend the attack if it becomes clear that its objective is not a military objective, that its objective is subject to special protection or that the attack may be expected to cause disproportionate incidental civilian injury or damage.”²⁸

All of this sounds rational and considerate. The United States focuses on the increasingly subtle and comprehensive data collection techniques available to UAV planners and operational decision-makers. In essence, questions that were once considered dependent on field observation are now considered manageable from any distance and location thanks to the advanced capabilities of technology.

²⁵ Leila Hudson, and Colin S. Owens and David J. Callen, “Drone Warfare in Yemen: Fostering Emirates through Counterterrorism?” *Middle East Policy Council* XIX:3 (Fall, 2012).

²⁶ *Ibid.*

²⁷ William Boothby, “Some Legal Challenges by Remote Attack,” *International Review of the Red Cross* 94:886 (Summer, 2012).

²⁸ *Ibid.*

This does leave open a significant vulnerability. If the equipment functions properly and all information-gathering data is applied accurately, then any unnecessary damage and casualties are pilot error, making him culpable.²⁹ The United States disagrees, however:

“If for example the data feeds to the controller were adversely affected by a system fault, and if that fault can properly be said to have caused the erroneous decision to attack, then the system failure *is likely to exonerate the controller from responsibility* for the attack. Similarly, if the opposing party to the conflict, whether through ruses, perfidy, voluntary or involuntary human shielding or otherwise, materially impedes the platform operators task, that will also be affected to take into account when determining responsibility for the resulting events. It would *not seem to be reasonable to lay blame at the door of the operator for errors attributable to the supporting systems, enemy action* or other causes beyond his control.”³⁰ (Emphasis mine)

There are two pronounced logic flaws in the above argumentation. First, on the issue of system faults, the United States has basically crafted a technological version of having one’s cake and eating it too: America capitalizes on its technologically innovative war-making capacity, rightly declares greater success because of that innovation, but then says any mistakes are purely technical and therefore all human operators are absolved of responsibility. No axiom is more telling in the 21st century drone age than technology being both a blessing and a curse: a blessing because of the huge advantages and greater efficiencies it creates and a curse because every technological system ultimately breaks down, misfires, or becomes compromised. For the U.S. to grant human absolution on technical error, when its position is dependent upon technology that is inevitably prone to error is, to say the least, rather cavalier. Especially given in this context such cavalier attitude is in fact dismissing the damage, destruction, or devastation of foreign civilian property and life.

Second, drone operators can be absolved of responsibility *based on enemy action*. This logic is faulty as it basically states the only way a drone operator could be found culpable for error would be if the enemy stood completely still and waited to be hit by drone fire and instead nearby civilians were hit. It is incredulous to think current American policy, in terms of shielding drone operators from judgment, is based on the principle that the enemy *must not fight back*. If the enemy engages or attempts to counter the drone objective, then the

²⁹ Ibid.

³⁰ Boothby, “Some Legal Challenges by Remote Attack,” 590.

drone operator is no longer responsible for any consequential damage or loss of life.

In basic terms, there is nothing unique behind drone warfare. The idea of creating weapons that allow you to fight from a distance, thereby lessening your own risk, has existed since the beginning of time. In some ways the cannon, crossbow, artillery, and air bombardment were all Revolutions in Military Affairs (RMAs) that accomplished the same principle.³¹ UAVs function in the same way. Therefore, the fallacious contemporary criticism of drone technology is that it allows the United States to kill people from a much greater distance. The problem is in formulating *drone ethics* that are highly irregular, logically fallacious, and somewhat contradictory. Taking advantage of technical dominance is not an unwise strategy for any state. But it might be ultimately unwise to develop an ethical position with such technological domination that gives the United States *carte blanche* authority to utilize the technology without consequence.

This is more readily apparent with how the CIA has its own division operating drones. There are some unique aspects to the principle of distinction within international humanitarian law when it comes to CIA drone use. The principle of distinction requires participants in an armed conflict to differentiate themselves from civilians and demands that attackers distinguish between lawful targets and civilian targets. This basic principle is the core of international humanitarian law. The debate has raged within the scholarly community for some time now on what the status of CIA drone operators should be, whether lawful combatants or unprivileged belligerents. Gary Solis has argued most powerfully for the latter case:

“CIA agents are, unlike their military counterparts but like the fighters they target, unlawful combatants. No less than their insurgent targets, they are fighters without uniforms or insignia, directly participating in hostilities, employing armed forces contrary to the laws and customs of war. Even if they are sitting in Langley, the CIA pilots are civilians violating the requirement of distinction, a core concept of armed conflict, as they directly participate in hostilities. It makes no difference that CIA civilians are employed by, or in the service of, the U.S. Government or its Armed Forces. They are civilians...They directly participate in hostilities, which means they may be lawfully targeted.”³²

Michael Lewis and Emily Crawford astutely point out that wearing or not wearing military uniforms is a misguided focus. The legal purpose for wearing uniforms is

³¹ Ibid.

³² Michael Lewis and Emily Crawford, “Drones and Distinction: How IHL encouraged the rise of drones,” *Georgetown Journal of International Law* (Spring, 2013).

to ensure that during active hostilities the combatant is readily distinguishable from the civilian population.³³ The bigger issue for Lewis and Crawford is whether or not the CIA can and does in fact enforce laws of war through its own chain of command. If CIA drone operators are combatants, then they are entitled to combatants' privilege but also eligible to be targeted at all times. If they are unprivileged belligerents, then they could potentially face domestic criminal prosecution in those places where they operate.³⁴ This is a fascinating discussion in and of itself, as it follows on the traditions inherent to Article 4 of the Geneva Convention dealing with prisoners of war. While it is unfortunately beyond the scope of the present article, it is undoubtedly yet another angle for investigating problematic national security futures when it comes to American drone operations.

What accomplished scholars like Solis, Lewis, and Crawford fail to emphasize is how ultimately irrelevant the principle of distinction and international humanitarian law likely is when it comes to the CIA conducting its drone operations or how it views the rules for drone operators. The non-transparent nature of intelligence and the safely-assumed violation of state sovereignty for intelligence operations in the field means that the CIA is unlikely to support greater oversight and governance for a weapon that helps it accomplish its mission objectives efficiently. The U.S. military has extensive procedures and protocols to establish proper targeting and to assist in making decisions about legal calculations. The CIA, however, either does not have such explicit methodology or it simply refuses to reveal what its methodology actually is.³⁵ The CIA will likely want to utilize drones in whatever ways it sees fit. If that requires it to circumvent, violate, or operate outside of the general boundaries and norms of international humanitarian law (IHL), then one should expect the IHL to be circumvented, violated, and operated around. People should not dismiss how this is the basic essence of espionage. This article is not attempting to moralize on such positions. Rather, it is trying to show how such cavalier positions, based more so on American technical dominance today rather than any superior ethical or legal foundation for tomorrow, demand that researchers ask an awkward question: what happens when the drone playing field is not so heavily slanted toward the American side?

Catching up in the International Drone Race

Italy

Late in 2013, Selex ES, in partnership with Piaggio Aero, conducted a successful test flight to confirm proper functioning of the Italian UAV Remote Vehicle

³³ *Ibid.*

³⁴ *Ibid.*

³⁵ Knoops, "Legal, Political, and Ethical Dimensions of Drone Warfare..."

Control/ Management System and the Ground Control Station.³⁶ This advancement was based upon already existing Italian software and is designed for control and surveillance missions. It has data fusion, data management, and video exploitation features that are capable of operating missions as diverse as border control, wide-area surveillance, environmental data collection, and disaster control.³⁷ Nicknamed the Hammerhead, it can carry a variety of payloads and seems to be mostly destined at the moment for maritime patrol, given Italian domestic security concerns with its massive coastline. The possibility of expanding capability and capacity remains likely as the respective CEOs of this joint venture boasted about opportunities in 2015 that could gain them primary position in the international surveillance and security industry.³⁸

Pakistan

Late in 2013, after years of preparation and strategic planning, the chief of Pakistan's military formally announced the successful launch of Pakistan's first domestically produced UAVs. The drones, called Burraq and Shahpar, are at present unarmed and to be used only for surveillance according to military officials.³⁹ Both Pakistani and Western analysts have confirmed how much the development of the drones represents a milestone for the country's military and science community. Pakistan is arguably the state with the most up-close-and-personal empirical experience when it comes to using drones on its territory. The issue for Pakistan was that this use was conducted only by the United States, beginning immediately after the 9/11 attacks under then President George W. Bush. At the time, President Musharraf asked Bush to supply drone technology to his country. The United States declined (not surprising, given the fact discussed in this article that the entire point of American drone policy is maintain dominance and superiority for as long as possible and deter drone technology proliferation as much as it can). This set off Pakistan's own homegrown effort to develop such technology. The present Pakistani drones have a range of about seventy-five miles, and do not carry weapons payloads. Experts, however, are quick to point out that the type of drone developed by Pakistan (surveillance models) a relatively easy to convert to an armed version, though they will not have the same precision as American models.⁴⁰

³⁶ Francis X. Govers III, "Hammerhead UAV takes to the skies over Italy," *Gizmag*, November 23, 2013, available at: <http://www.gizmag.com/hammerhead-uav-italy-flight/29889/#%21>.

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ Tim Craig, "Pakistan Unveils its Own Military Drones, as Protests Continue against US Attacks," *Washington Post*, Dec 2, 2013, available at: http://www.washingtonpost.com/world/asia_pacific/pakistan-unveils-its-own-military-drones-as-protests-continue-against-us-attacks/2013/11/25/fae691cc-5607-11e3-bdbf-097ab2a3dc2b_story.html.

⁴⁰ *Ibid.*

China

China is not new to the drone technology market. It has operated its own drones for many years. In 2013, however, China established a new level in the evolution of foreign drone technology when it unveiled the Lijian, claiming it to be the first successfully flown 'stealth drone' not originating from the United States.⁴¹ The fact that this Chinese drone has remarkably similar design contours to the Lockheed Martin RQ-170 Sentinel and the Northrop Grumman X-47B raises questions about the ability of the American military-industrial complex to keep secret technology secret. Unlike other countries pursuing their own drone technology, China offers no denial that this drone in particular is meant to be an unmanned ground attack aircraft, fully weaponized and employable at great distances.⁴² Designed by the Shengyeng Aircraft Design Institute and manufactured by the Hongdu Aviation Industry Group, political authorities boasted after the flight that this drone was proof that China had again narrowed the air-power disparity between itself and Western nations.⁴³ Interestingly, American officials admitted that the inaugural flight of a stealth drone in China was indeed a big step, but they denied this drone could carry the potential of being a balance-shifter since the long-term efficiency of the design remains unproven. Since increased proficiency and intensified efficiency is basically an irrefutable axiom when it comes to the development of technology across the globe, what immediately comes to mind is whether this opinion represents astute analysis or merely wishful political thinking.

South Africa

The Cape Town-based company KND Naval Design, participating in the Dubai air show for the first time in 2013, earned a \$30 million order for its newly produced UAVs. It also signed a letter of intent with a Russian company for a similar deal worth an additional \$20 million. Discussions are serious enough between KND and Russia that there are expectations it may establish a second production facility in Russian territory.⁴⁴ Just as with the Italian initiatives, South Africa focuses at the moment primarily on maritime operations, although executives are already developing marketing promotions for a variety of other applications including wildlife surveillance, geological mapping, aerial photography, news

⁴¹ Gerry Doyle, "Chinese Stealth Drone Makes First Flight," *Sinosphere – Dispatches from China*, Nov 22, 2013.

⁴² *Ibid.*

⁴³ *Ibid.*

⁴⁴ Guy Martin, "KND receives \$30 million UAV order," *Defenceweb.com*, November 23, 2013, available at:

http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=32782:knd-receives-30-million-in-orders-for-uavs&catid=35:Aerospace&Itemid=107#!.

coverage, traffic control, crowd surveillance, pipeline and power line monitoring, and other as yet undefined military applications.⁴⁵

South Africa is actually one of the leading industrial states pushing the technical boundaries of UAV performance, believing flights of over 4000 miles and heights of nearly 45,000 feet will become regular standards for the leading companies. It is important to note that at the present time the United States prides itself as being the only country capable of developing drones with such technical prowess. South Africa also seems to be paving the way for creating a legitimate transnational industrial market that will de facto proliferate drone technology to countries presently absent such capability. In other words, states do not need to depend on their own homegrown industries in order to be viable in the drone age. As ever more members join the drone club, the precedents established by the drone leader are going to be relevant.

Islamic Crescent and American Drone 'Wishful Thinking'

Israel Defense Forces (IDF) actually succeeded in destroying a drone that it tracked flying over sensitive military installations and was approaching the Dimona nuclear reactor in 2013. The drone was unarmed but was operated by agents elsewhere and attempting to relay images back to a home base. Israelis have not disclosed whether or not that enemy objective was successful but they were certain that the drone was not American, Chinese, or Russian. IDF claimed it to be an Iranian drone that was assembled in Lebanon and flown by Hezbollah.⁴⁶ These are the new facts of life when it comes to global drone production: it is too easy to obtain, the barriers for entry on the production side are crumbling far too quickly, and more and more countries see UAV production as an incredibly lucrative business too tempting to pass up. More than seventy-five countries have some type of remote piloted aircraft, with unique drone types now numbering near 1000.⁴⁷

In some ways, the era that this article warns of may already be here. Consider: Iran, with the approval of Damascus, carries out a legal strike on anti-Syrian forces inside of Syria; Russia picks off militants that are getting uncomfortably close to oil and gas pipelines in Ukraine, Georgia, and southern Russia; Turkey utilizes a Predator drone, provided by the United States, to kill Kurdish militants in northern Iraq.⁴⁸ Having watched American military and intelligence operations in Pakistan, Yemen, and Afghanistan for the last decade, critically important global players like Iran, Russia, China and Turkey have come to

⁴⁵ Ibid.

⁴⁶ Kristin Roberts, "When the Whole World has Drones," *National Journal* (Mar 21, 2013).

⁴⁷ Ibid.

⁴⁸ Ibid.

understand that the justification to use drones is basically granted once you are able to label a target as terrorist.⁴⁹

In response to this proliferation of not only drone technology but drone capability, American officials have slowly and subtly altered their overall position. Whereas in the past the United States was secure in having an overwhelmingly dominant technical superiority over any and all potential rivals and allies alike, it now claims that technology distribution is not capable of undermining American dominance. What truly fuels American global drone power is the unparalleled intelligence-collection and data-analysis that underpins American capability.⁵⁰ On the one hand, this is very true: China doesn't intend to develop drones in order to attack Cameroon. Turkey has no desire to carry out lethal strikes against the citizens of Finland. As such, states that are now aggressively pushing the acquisition of drone technology are seeking drone capabilities of a decidedly more local and regional flavor. What seems dangerously myopic on the part of the United States is how it seems to be building its comfort level by telling itself adversarial national security interests are not ever going to be global or focused on America. An ethical system that justifies unethical behavior as long as it is locally contained is not a system capable of peaceful survival.

This is what the author finds akin to drone 'wishful thinking'. The United States sees what it wants to see and hopes no one else bothers to notice what it is purposely ignoring. To wit: the United States does not want other states to have drone technology, until they do. Then it is not about the technology but about the truly global technical strike capabilities. The United States does not want others to have truly global technical strike capabilities, until they do. Then it is not about such strike capacity, but about the intelligence and data-collection techniques. The United States does not want others to have highly sophisticated and adept intelligence and data-collection techniques, until they do. Then it is not about such information-collection talent, but about the fact that no one wants to use it to strike the United States.

This is where such wishful thinking falls apart. The United States has developed weaponized drone technology. It has made legal discussions about drone norms and ethics opaque and arbitrary. It has employed drone attacks in some cases outside the conventional rules of engagement and laws of war. To believe that no country would ever have a desire to use the same technology against America, American interests, or American allies seems to be founded upon nothing. This is not diplomatic idealism. It is political fantasy.

⁴⁹ Ibid.

⁵⁰ Ibid.

Such subtle fantasy is so pervasively cloaked in quasi-intellectual legitimacy that it can make such highly-respected and august bodies like the Council on Foreign Relations and the Brookings Institution fall victim to its charms: both have come out recently to emphasize how 'quickly the window of opportunity is closing' for the United States to establish stability-supporting precedent and clear universal norms on drone development and usage.⁵¹ This qualifies as the aforementioned wishful thinking because it presumes the rest of the global community won't be able to recognize this for what it is: the need for stable precedents and universal ethical norms became necessary to America *only* when America was no longer the only dominant possessor of the technology.

Hopefully, the United States will not be too blinded or surprised when such requests for stability fall on somewhat reluctant and unmotivated foreign ears. The United States will likely always be the best developer of drone technology and does indeed have the greatest support system for them. This does not, however, mean it will never be at risk to the 'lesser' drone achievements of adversaries in the field.

Conclusion

"Remote weaponry has illuminated a stress in just war theory that runs deep. Technological and military superiority seems to preclude the waging of a just war. It does not allow the opposition to engage warfare in accordance with the principle of *jus in bello* despite having a just cause. It does create a situation that is morally unacceptable."⁵²

The United States earned a technical dominance in the twenty-first century when it developed a massive fleet of UAVs unmatched by any other country in the world. The time to establish stability-inducing legal standards and universally accepted ethical norms would have been during the peak of that domination. Nothing would appear more powerful to the weak than when the strong voluntarily constrains itself for the betterment of all. There is no surprise that the United States did not pursue such magnanimity on the global stage. Drone technology is a remote weapon meant to increase lethality for targets and decrease risk for operators. It is a powerful technical drug.

What cannot be avoided with such decisions, however, are the blowback consequences when the technological playing field inevitably becomes more level. The ease-of-use for deploying drones and the decreased danger for attackers mean that drones will inevitably be pursued by the military and intelligence

⁵¹ Ibid.

⁵² Suzy Killmister, "Remote Weaponry: The Ethical Implications," *Journal of Applied Psychology* 25:2 (2008).

communities of other countries. Most would say this development signals the erosion of humanitarian and human rights law.⁵³ As such, the international community wants to see more critical questions that foster higher ethics and rigorous research to help decrease tension and minimize greater violence.⁵⁴

This is an admirable quest. Unfortunately, the military and intelligence communities of the United States, while being the clear leaders in this field technically, logistically, and operationally, have severely compromised the seat of moral leadership they assume should be exclusively theirs. Pandora's presumption is the premise that America is relying too heavily on its continued drone dominance and not thinking about the *empirical ethical lessons* it is setting for the rest of the world when it comes to technology, war, and the rules of engagement. America will likely remain the dominant player in drone capability, but not the *sole* player in the drone arena. That is an important difference. Not planning for that eventuality means America will likely have to seek novel strategies to counter countries that join the drone club with, quite frankly, an axe to grind. This is no small dilemma: the biggest concern behind Pandora's presumption is that the United States will have to cope with a future where it was responsible for bringing its own technological chickens home to ethically roost. If this happens, then it will only be to the detriment of American national security.

⁵³ Thomas Michael McDonnell, "Sow What you Reap? Using Predator and Reaper Drones to Carry Out Assassinations or Targeted Killings of Suspected Islamic Terrorists," *George Washington International Law Review*, 44 (2012).

⁵⁴ Jacqueline L. Hazelton, "Drones: What are They Good For?" *Parameters* 42:4/43:1 (Winter-Spring, 2012).