

Borderless Battlefield: The CIA, the U.S. Military, and Drones

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The Terminator is one of my all-time favorite movies—Arnold Schwarzenegger at his robotic best. In its odd way, of course, *The Terminator* and its sequels are about the need for peace. But they are also about people in the present confronting one possible future—a devastated planet with human beings battling robots and other autonomous war machines in that uncertain future. Many believe such a future is possible; few realize that it is already upon us.

“The U.S. military soon could be an army of fearless robots controlled, *if at all*, by humans far from the conflict.”¹ So said the line introducing an article on the topic in a 2008 military journal. Drones, probably the best-known unmanned weapons in the world today, already fit that description. But they are just the tip of the iceberg in the rapidly expanding world of automated and increasingly autonomous warfighting machines. Not all robots that are and might be used in armed conflict are of concern, but those with attack and kill capabilities—the drones—are already the focus of controversy on any number of levels. What then of the fully autonomous weapons already under development?

Otherwise known as unmanned aerial vehicles or UAVs, drones are pilotless aircraft that are remotely operated, either on the battlefield or from thousands of miles away; increasingly they operate autonomously following preprogrammed missions. Currently they are used both for surveillance and reconnaissance and to carry out attacks on ground targets, including people, vehicles, equipment, and infrastructure.

Development of surveillance-type drones started in the 1950s, but it was the Israelis in the 1980s in Lebanon who pioneered the operational use of drones on the battlefield.² That breakthrough capability, followed by U.S. use of drones in the first Gulf War, began to heat up U.S. military interest in obtaining more UAVs.

During Desert Storm, there was at least one UAV in the air at all times.³

Probably the most widely recognized names in drones are the Predator and the Reaper, both produced by General Atomics Aeronautical Systems. The Predator became operational in Bosnia in 1995 and was used in Operation Enduring Freedom in Afghanistan as well as in Operation Iraqi Freedom.⁴ But at that point, UAVs were still in their infancy. As described in a *New York Times* article, “The Predators were still undergoing basic testing when they were rushed into use in Bosnia and Kosovo in the 1990s and then hastily armed with missiles after the September 2001 terrorist attacks.”⁵ It was a General Atomics Predator armed with Hellfire missiles that was used in Yemen in 2002 in the first covert and—immediately controversial—drone attack by the CIA outside a declared conflict zone.⁶

The Reaper began its “precision” strikes in Afghanistan in October 2007 and its first operational mission in Iraq in July 2008. The first United States Air Force (USAF) Reaper squadron, the 42nd Attack Squadron, based at Creech Air Force Base in Nevada, was formed in March of 2007. That drone has “an operational ceiling of 50,000ft, a maximum internal payload of 800lb and external payload over 3,000lb. It can carry up to four Hellfire II anti-armour missiles and two laser-guided bombs (GBU-12 or EGBU-12) and 500lb GBU-38 JDAM (joint direct attack munition). In May 2008, a USAF Reaper successfully test dropped four Raytheon GBU-49 Enhanced Paveway II 500lb bombs, which have laser and GPS guidance.”⁷

While Predator and Reaper may be the most well known of the drones, by the time of the U.S. invasion of Iraq in 2003, the number and types of UAVs in use was already rapidly proliferating. Dyke Weatherington, deputy of the Defense Department’s UAV planning task force, noted at the time that more than ten types of drones “with a broad range of capabilities” were in use in Iraq, including “the Army’s Hunter, Pointer and Shadow; the Marine Corps’ Dragon Eye and Pioneer; and the Air Force’s Force Protection Surveillance System, Global Hawk and Predator,” in addition to “several other small systems . . . supporting specialized requirements.”⁸ This was already more than three times the number used in Afghanistan. Only the Global Hawk, Pointer, and Predator had been used there by that time, and just one, the Pioneer, was used in the first Gulf War.⁹

In May 2009, the air force stated that just the Predator program alone had “surged its combat air patrol count more than 520 percent since the beginning of the GWOT [Global War on Terror].”¹⁰

In December of that year, the U.S. aerospace industry noted that the U.S. military's demand had grown 600 percent since 2004 and projected that to double within five years.¹¹ These weapons are now hailed as the future of aerial warfare.

UAVs can be as small as the hand-launched Wasp III, which can fly at 1,000 feet at up to 40 miles an hour with a range of 3 miles, or as large as the Global Hawk, which can fly at 65,000 feet for 28 hours, surveilling the world. Currently there are twenty-six air force UAV programs and eight "future" programs alone.¹² Lockheed Martin received a contract of \$150 million for a "High Altitude Airship"—a robotic blimp twenty-five times larger than the Good-year Blimp, which among other things could serve as an "airstrip for other planes and drones."¹³ There are also visions of drones the size of insects—and others, "nano" drones, as small as dust mites, "which may invite troubling comparison with chemical and biological warfare."¹⁴ There is planning for unmanned combat aerial vehicles, which will have no need for operators at all.¹⁵ Already the United States has launched an unmanned robotic spacecraft.

On April 22, 2010, the X-37B OTV (Orbital Test Vehicle) was launched from Florida. Some space experts have described this new drone as representing the arrival of the "weaponization" or "militarization" of space. Other military experts explain that the X-37B is the first unmanned spacecraft capable of conducting combat missions in space.¹⁶

Although military officials were quick to deny the above characterizations, an air force news release cited some of the expectations from this first-of-its-kind "US unmanned re-entering space vehicle." Regarding new technologies to be tested on the X-37B, which can stay aloft for up to 270 days, according to Gary Payton, the air force deputy undersecretary for space programs, "If these technologies on the vehicle prove to be as good as we estimate, it will . . . push us in the vector toward being able to react to warfighter needs more quickly." Further, Colonel André Lovett, the 45th Space Wing vice commander, said, "This launch helps ensure that our warfighters will be provided the capabilities they need in the future."¹⁷

Drones have quickly become a multi-billion-dollar growth industry. Just between fiscal year 2006 and fiscal year 2010, the DoD annual budget for the development and procurement of these weapons systems has jumped from \$1.7 billion to \$4.5 billion, with an increased inventory of UAVs during the same period from less than 3,000 to more than 6,500. Those numbers are "projected to

grow significantly over the next five years.”¹⁸ Within the decade the money spent on UAVs will be in the tens of billions of dollars.¹⁹

The arms industry wants to expand those numbers even more with sales in the international weapons market. For that to happen, changes must be made in the Missile Technology Control Regime, an agreement among at least thirty-four countries to curb the spread of unmanned delivery systems that could be used for weapons of mass destruction. Not surprisingly, weapons makers are pressing for such changes.

In a March 24 Senate hearing, Defense Secretary Robert Gates testified that it is in the “U.S. interest” to help friendly countries get drone technology, despite treaty limitations on the exports. He supports exporting the technology in spite of worries about “capabilities like this getting into the hands of non-state actors who could use them for terrorist purposes.”²⁰

While Israel and the United States dominate the drone race, well over forty other countries are now in varying stages of research and development, production, and/or acquisition. Some of these countries include Belarus, Brazil, Chile, China, Finland, France, Georgia, India, Indonesia, Iran, Italy, Mexico, Pakistan, Russia, South Korea, Thailand, Turkey, and the UK.²¹ In early November 2004, Hezbollah flew a surveillance drone over Israel for the first time.²²

Peter W. Singer, one of the preeminent authorities on robotic warfare, noted well over a year ago, “In the last six months alone, Iran has begun production on a pair of weapons-ready surveillance drones, while China has debuted the Pterodactyl and Sour Dragon, rivals to America’s Predator and Global Hawk. All told, two-thirds of worldwide investment in unmanned planes in 2010 will be spent by countries other than the United States.”²³

This rapid and rapidly expanding proliferation of drones is lauded by many, particularly, of course, by many in the U.S. military and by those involved in their extremely lucrative development and production.

Many attributes of UAVs are highly praised. Drones—at least so far and likely not including the X-37B—are much cheaper than manned aircraft. They don’t get bored, and their attention doesn’t stray. They don’t panic if attacked, nor do they need food, water, or sleep. They can carry out their tasks both day and night and in and over places where people cannot go on foot. They can operate unseen, unheard, and often unidentified.

UAVs can stay in the air for ever-increasing periods of time. For example, the Zephyr, a solar-electric-powered British drone under

development since 2003, broke the world record by flying for over eighty-two hours nonstop in tests at the U.S. military's Yuma Proving Ground in Arizona in August 2008—to say nothing of the 270-day capability of the X-37B OTV.²⁴ Additionally, drone strikes are described, by their proponents, as being extremely precise and thus greatly limiting the number of civilian casualties while at the same time avoiding putting the lives of U.S. flight crews directly at risk. Who can argue with that?

Clearly, drones can save American lives. But that line often is said not as a statement of the obvious but with the intention of stopping discussion about the myriad of concerns about drones and their use—and the future of robotic warfare—almost before it can even start.

U.S. Drone Programs

While there are many types of UAVs, with increasing numbers in development, the primary focus of discussion of their use by the United States centers on what has been described as two separate drone programs. One is run openly by the U.S. military in declared zones of armed conflict in Afghanistan and Iraq.

The military's drones, physically based in Iraq and Afghanistan where they are launched by ground crews, are then operated via satellite by "pilots" from more than 7,000 miles away. Apparently seven air force bases in the United States are involved, including Creech and Nellis outside Las Vegas, Nevada, as well as Davis-Monthan in Tucson, Arizona, and Beale Air Force Base in California.²⁵ In September, the United States also based three Global Hawks at Andersen Air Force Base in Guam for surveillance operations in the Asia-Pacific region; they might also be used to fight piracy and terrorism.²⁶

The other program is the increasingly not-so-clandestine "clandestine operation" run by the CIA and its military contractors. That program is covert, and the agency does not provide any public information about where it operates or how it selects its targets; neither the names of the targets it has successfully killed nor the number of civilians also killed has been divulged. No clear and comprehensive legal justification for the program has been offered, and it seems essentially free of having to account for its actions.

So far, the CIA has used drones in Yemen, Somalia, and Pakistan—countries where the United States is not at war, depending on how you define it. Its drone program in Pakistan began in 2004; as of January 24, 2011, reportedly some 222²⁷ drone strikes had been

carried out there, including 9 in 2011. The breakdown is as follows: 9 strikes between 2004 and 2007, 33 in 2008, 53 in 2009, 118 in 2010, and 9 so far in 2011.²⁸

During Obama's first year in office, drone strikes increased by 47 percent over Bush's last year as president; in 2009, Obama authorized more drone strikes in Pakistan than in all the years of the Bush administration combined.²⁹ The first two CIA drone strikes under President Obama occurred on his third day in office.³⁰

Such attacks in Yemen are also on the rise. Since December 2009, reportedly there have been at least four drone attacks against targets in that country.³¹ A November 2010 report in the *Washington Post* quoted U.S. officials who "described a major buildup of intelligence and lethal assets already underway, including the arrival of additional CIA teams and up to 100 Special Operations force trainers, and the deployment of sophisticated surveillance and electronic eavesdropping systems operated by spy services including the National Security Agency."³²

Unlike the drone program in Pakistan, the drones in Yemen are not part of the CIA operation there but are controlled by the U.S. Joint Special Operations Command (JSOC), a clandestine military force responsible for tracking suspected terrorists around the world. The Predators are likely operated out of Djibouti or Qatar.³³ Another report noted that U.S. forces in Seychelles could also operate the drones, which also operate from there to combat piracy off the Horn of Africa.³⁴ While drone use in Somalia has been quite limited in U.S. terms, there has been discussion about increased use there.

Today, in the CIA program in Pakistan, its drones operate out of Seychelles as well as from a remote base inside Pakistan named Shamsi, which it apparently has been using since 2006.³⁵ The basing inside Pakistan was noted by Senator Dianne Feinstein, chairwoman of the Senate Intelligence Committee, during a committee hearing in February 2009.³⁶ The CIA "pilots" their UAVs from Langley, Virginia.

While much of the furor, such as it is, has centered on the CIA drone program, it is increasingly clear that the military and CIA programs are much more extensively intertwined than has been previously thought—particularly since President Obama's significant upsurge in drone use over his nearly two years in office. On October 3, 2010, an article in the *Washington Post* described the situation as follows:

The CIA is using an arsenal of armed drones and other equipment provided by the U.S. military to secretly escalate its operations in Pakistan

by striking targets beyond the reach of American forces based in Afghanistan, U.S. officials said. . . .

The move represents a significant evolution of an already controversial targeted killing program run by the CIA. The agency's drone program began as a sporadic effort to kill members of the al-Qaeda terrorist network but in the past month it has been delivering what amounts to a cross-border bombing campaign in coordination with conventional military operations a few miles away. . . .

"It's moving from using [drones][sic] as a counterterrorism platform to an almost counterinsurgency platform," said [Bruce] Riedel, a counterterrorism expert at the Brookings Institution. "Instead of using it to take out top operatives planning attacks in the United States, you're now using it almost tactically to soften up the sanctuary safe haven [to aid][sic] our military."³⁷

Just as the number of drone attacks in Pakistan has increased dramatically, the administration also broadened the scope for authorized attacks inside Afghanistan. A Senate Foreign Relations Committee report in August 2009 revealed that the DoD's list of approved terrorist targets, the Joint Integrated Prioritized Target List, had been expanded to 367 individuals, including "roughly" 50 drug lords in the country believed to help finance the Taliban.

To be targeted, these "nexus" drug traffickers must have "proven links to the insurgency" demonstrated by two verifiable human sources plus additional evidence. The military can only kill these people "on the battlefield" and not "away from the battlefield,"³⁸ however that may be defined.

If the U.S. military can only kill these civilians "on the battlefield"—itself a possible violation of humanitarian law—it is likely that the CIA and its contractors are enlisted to go after the drug lords when they are "away from the battlefield." Calling in the CIA to carry out such operations "covertly" thereby absolves the U.S. military of direct legal entanglements. But with the increasingly ramped up "war on terror," where the military and CIA are cooperating more and more closely, legal "entanglements" can only become more complicated and more entangled.

A *New York Times* article of August 14, 2010, describes the further blurring of lines between covert operations by the CIA and the U.S. military:

Virtually none of the newly aggressive steps undertaken by the United States government have been publicly acknowledged. In contrast with

the troop buildup in Afghanistan, which came after months of robust debate, for example, the American military campaign in Yemen began without notice in December and has never been officially confirmed. Obama administration officials point to the benefits of bringing the fight against Al Qaeda and other militants into the shadows. . . .

Yet such wars come with many risks: the potential for botched operations that fuel anti-American rage; a blurring of the lines between soldiers and spies that could put troops at risk of being denied Geneva Convention protections; a weakening of the Congressional oversight system put in place to prevent abuses by America's secret operatives. . . .

The administration's demands have accelerated a transformation of the C.I.A. into a paramilitary organization as much as a spying agency, which some critics worry could lower the threshold for future quasi-military operations. In Pakistan's mountains, the agency had broadened its drone campaign beyond selective strikes against Qaeda leaders and now regularly obliterates suspected enemy compounds and logistics convoys, just as the military would grind down an enemy force.

For its part, the Pentagon is becoming more like the C.I.A. Across the Middle East and elsewhere, Special Operations troops under secret "Execute Orders" have conducted spying missions that were once the preserve of civilian intelligence agencies. With code names like Eager Pawn and Indigo Spade, such programs typically operate with even less transparency and Congressional oversight than traditional covert actions by the C.I.A.

And, as American counterterrorism operations spread beyond war zones into territory hostile to the military, private contractors have taken on a prominent role, raising concerns that the United States has outsourced some of its most important missions to a sometimes unaccountable private army.³⁹

While the primary focus of this article is on CIA and U.S. military use of UAVs, it is important to also note their increasing use domestically. Some of those uses, such as tracking forest fires or gathering weather data in hurricanes, are clearly valuable. Others—like domestic surveillance—will prove to be more controversial.

In an article on January 23, 2011, the *Washington Post* reported, "The police are likely to use drones in tactical operations and to view clearly public spaces." It further reported that as of December 1, there were over 270 "active authorizations" for the use of dozens of kinds of drones in U.S. airspace. Of these, the Department of Defense held 35 percent, NASA 11 percent, and the Department of Homeland Security 5 percent. The others were held by the FBI

and other law enforcement agencies, manufacturers, and academic institutions.⁴⁰

The potential for abuse abounds. In a 2001 case, Supreme Court Justice Antonin Scalia wrote, “The question we confront is what limits there are upon this power of technology to shrink the realm of guaranteed privacy.”⁴¹ Civil liberties since 9/11 have already been eroded; a future scenario of perpetual covert domestic surveillance by UAVs can only threaten further diminishment of democratic rights and freedoms in this country.

Drone Attacks and Civilian Casualties

Like pretty much everything related to drones, it is hard to get a clear answer to the question of drone strikes and resulting civilian casualties. But civilian victims of the strikes and the lack of any degree of accountability about them fuels harsh criticism of the CIA program. Its director, Leon Panetta, in talking about the strikes and civilian deaths, said, “These are covert, secret operations. So I can’t go into particulars. Suffice it to say that the operations have been very effective because they have been very precise in terms of hitting targets with a minimum of collateral damage.”⁴²

Those advocating the strikes and trying to underline the “precision” nature of the attacks tend to minimize the number of dead civilians—and also refer to these people as “collateral damage.” Al-Qaeda and others, on the other hand, wildly overstate the numbers.

In an op-ed on May 16, 2009, David Kilcullen and Andrew Exum, both former military, wrote, “Press reports suggest that over the last three years drone strikes have killed about 14 terrorist leaders. But, according to Pakistani sources, they have also killed some 700 civilians. This is 50 civilians for every militant killed, a hit rate of 2 percent—hardly ‘precision.’ American officials vehemently dispute these figures, and it is likely that more militants and fewer civilians have been killed than is reported by the press in Pakistan. Nevertheless, every one of these dead noncombatants 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.”⁴³

The New America Foundation’s “Year of the Drone” project has been tracking the number of strikes and casualties in Pakistan from 2004–2011. It notes that “on the other end of the spectrum” from the Pakistani figures for the number of civilians killed noted above,

an “anonymous U.S. official” had told the *New York Times* in early December 2009 that over the past two years “only 20 civilians had been killed” to “more than 400 fighters.”⁴⁴

In the project’s own tracking of the strikes and resulting casualties in reliable press accounts both in the United States and Pakistan, it has found that between 2004 and January 24, 2011, there were reported 222 drone strikes in northwest Pakistan; 118 of those occurred in 2010. In those strikes somewhere between 1,374 and 2,189 people were killed, and of that number between 1,097 to 1,754 were described as militants. They therefore calculate the “non-militant fatality rate” to be 21 percent.⁴⁵ These figures raise extremely serious questions about drone strikes violating proportionality and discrimination requirements of international humanitarian law. Accurately determining and then reporting on the civilians killed in these deadly strikes is also a moral question.

One of the most widely cited and most egregious cases of lack of proportionality and discrimination in drone strikes against one individual on the CIA’s target list is that of the killing of Baitullah Mehsud, who at the time was the head of the Taliban in Pakistan. After some sixteen strikes inside Pakistan trying to “take out” Mehsud and not accomplishing that goal, he was finally killed on August 5, 2009, in an attack authorized by President Obama. In that one attack on his father-in-law’s house, along with Mehsud, his uncle who was administering an IV drip on Mehsud for one of his medical conditions, Mehsud’s wife, mother, and father-in-law and eight others, including bodyguards, were killed. In all the strikes combined, between 207 and 321 additional people were killed, depending upon which news accounts you rely on.⁴⁶

The numbers of casualties cited above may conflict, but clearly the number of civilian casualties is extremely high. And with the CIA operating free of having to account for who is targeted, which “targets” are actually killed, and the number of civilians killed or injured in each strike, trying to determine the figures is harder still.

Finally, in reading some of the press accountings of deaths resulting from drone strikes, vague references to the dead as “mid-level militants” or “low-level terrorists” or variations thereof is anything but comforting. The terms bring back vivid memories of the “body count” figures that used to be given by the government during the war in Vietnam to inflate the number of enemies killed and decrease the numbers of dead civilians. Why should we expect something different now? The only way to dispel doubts in this regard

is for the government to reveal concrete data on people killed in drone strikes.

The Road to Impunity

If the agency is somehow externally and meaningfully “accountable” for these programs, which it has asserted in spite of neither affirming nor denying that its drone programs exist, the measures of that accountability are unknown. Not only are the names on its target list secret but also so is the process for determining who gets assassinated. With the target list classified, there is also no way to know the “success rate” of the drone strikes. Further, who is held accountable for the hundreds of noncombatants killed by drones? And how?

As Singer asked in his March 2010 congressional testimony, “[I]f this area is the future of the force, is it proper that presently 75% of the maintenance and weapons loading of systems like the Predator have been outsourced to private contractors, including to controversial firms like Blackwater, while other Army systems operating in Iraq have been described as ‘government-owned-contractor operated?’”⁴⁷ Civilian for-profit organizations should not be hired to operate outside the law in CIA extrajudicial execution operations.

While the CIA’s terms of engagement are secret, occasionally there are very tiny windows into bits of the drone killings. For example, the agency is not even required to identify its targets by name in a particular strike but can make decisions on who to kill based on surveillance and “pattern of life” assessments alone.⁴⁸ What kind of accountability could we possibly be talking about here if civilian agents of the government and/or civilians of for-profit companies that work for them do not have to clearly identify a named target before firing the Hellfire missiles of a drone at it? Fallible human beings from thousands of miles away can—by “pattern of life” assessments through surveillance—decide that someone (or someones) are legitimate targets for extrajudicial execution?

As reported in an October 12 article in Spiegel Online, John Rad-san, a former CIA legal adviser, said: “What is unique about targeted killings is that former President Bush seems to have delegated his trigger authority, his ability to order a killing, to the head of the CIA, who then delegated it to the head of the Counterterrorist Center. That means that someone who has not been elected, not been confirmed by the Senate, is able to determine if someone lives or dies.”⁴⁹

President Obama has aggressively followed in Bush's footsteps, and in spite of his many proclamations of a new "transparency" in government under his administration, his actions have often belied those words.

Early in this year, his administration announced that Anwar al-Awlaki, an American citizen who preaches jihad and is presumed to be hiding in Yemen, is on the target list. "The notion that the government can, in effect, execute one of its own citizens far from a combat zone, with no judicial process and based on secret intelligence, makes some legal authorities deeply uneasy. To eavesdrop on the terrorism suspect . . . intelligence agencies would have to get a court warrant. But designating him for death, as C.I.A. officials did early this year with the National Security Council's approval, required no judicial review."⁵⁰

President Obama himself chose to circumvent accountability, calling the decision "top secret" when asked about it. Further, the ACLU, on behalf of Awlaki's father, is suing the government in a challenge of its authority to assassinate U.S. citizens abroad. In attempting to win dismissal of the case, the administration invoked its "state secrets" privilege.

As one commentator wrote, "Both the Bush and Obama administrations have repeatedly insisted that their secret conduct is legal but nonetheless urge courts not to even rule on its legality. In other words, not only does the President have the right to sentence Americans to death with no due process or charges of any kind, but his decisions as to who will be killed and why he wants them dead are 'state secrets,' and thus no court may adjudicate their legality."⁵¹ If most other heads of state acted with such impunity, the United States would be rightly outraged.

Further, what would the reaction be here if a U.S. official related to the war on terror were assassinated here or in Europe, for example? As Jeffrey Smith, a former CIA general counsel, said the drone attacks could "suggest that it's acceptable behavior to assassinate people. . . . Assassination as a norm of international conduct exposes American leaders and Americans overseas."⁵²

Philip Alston, a law professor at New York University and the UN special rapporteur on extrajudicial, summary and arbitrary execution, expressed concern about the United States' "strongly asserted but ill-defined license to kill without accountability," noting that its "ever-expanding entitlement for itself to target individuals across the globe" is a "challenge to the international rule of law" and its drones

“are increasingly used in circumstances which violate the relevant rules of international law.”⁵³

The CIA and Drones: Breaking the Law

The right to kill without warning outside of an armed conflict is not recognized under international law. For many if not most lawyers and legal scholars, the use of attack drones by the CIA for targeted killings is a clear violation of the laws of war. Moreover, members of the CIA—and the military contractors who work for them—are not lawful combatants under the Geneva Conventions. The Obama administration’s refusal to discuss the CIA drone program does not change any of that. Even if the administration were inclined to talk about drone operations, the increased blurring of lines between military and CIA programs and operations would make attempts at legal justifications of drones and extrajudicial executions more difficult.

As Dr. Mary Ellen O’Connell, a law professor at Notre Dame University, explains, “Persons with a right to take direct part in hostilities are lawful combatants; those without a right to do so are unlawful combatants. Lawful combatants may not be charged with a crime for using force. Incidentally, C.I.A. operatives, like the militants challenging authority in Pakistan, have no right to participate in hostilities and are unlawful combatants. C.I.A. operatives do not wear uniforms, are not subject to the military chain of command and may be charged with a crime for killing with drones.”⁵⁴

Further, in congressional testimony in April 2010, Loyola Law School professor David Glazier, a former navy surface warfare officer, said drone pilots, in theory, could be taken to court in the countries where the attacks occur. “Under this view,” he said, “CIA drone pilots are liable to prosecution under the law of any jurisdiction where attacks occur for any injuries, deaths or property damage they cause,” Glazier said. “But under the legal theories adopted by our government in prosecuting Guantánamo detainees, these CIA officers as well as any higher-level government officials who have authorized or directed their attacks are committing war crimes.”⁵⁵

Even as it continues to assert by action its right to perform covert targeted killings whenever and wherever it deems necessary, the United States recognizes the legal status of CIA operatives killing with drones is shaky at best—as shown by the case of Omar Khadr. Khadr was captured in Afghanistan in July of 2002 at the age of fifteen for allegedly throwing a hand grenade that killed a U.S. soldier.

In military commission proceedings against him in Guantanamo, Khadr was charged with “homicide in violation of the law of war.” The original rules of the military commission, in contrast to law of war rules, included as “murder in violation of the laws of war” the use of lethal force by a person who does not meet the “requirements for lawful combatancy.”

Apparently, upon reflecting about the legal implications of that definition vis-à-vis U.S. civilians operating drones, the rules changed. As Alston explained, “It has been reported that these rules were changed because the State Department recognized that this approach—predicated on the status of a person, not their conduct—would, if applied to CIA agents in the drone killing program, have created the risk that they could be prosecuted for ‘war crimes.’”⁵⁶ The issues of civilian casualties, accountability, and who is or is not a lawful combatant are not the only controversial legal issues related to the drone programs.

In early June 2010, Alston released his report on targeted killings to the UN Human Rights Council.⁵⁷ It looked extensively at the U.S. use of drones, particularly in Afghanistan and Pakistan. The report described targeted killing as “the intentional, premeditated, and deliberate use of lethal force, by States or their agents acting under the color of law, or by an organized armed group in armed conflict, against a specific individual not in the physical custody of the perpetrator.”⁵⁸

Another scholar, in analyzing Israeli policy on targeted killing, which he supports, has defined it as “the intentional slaying of a specific individual or group of individuals undertaken with explicit governmental approval.”⁵⁹

Targeted killing, which is not a term defined under international law, is often used synonymously with “extrajudicial execution,” “summary execution,” and “assassination,” which are illegal by definition under international law.⁶⁰ The United States has used the four terms interchangeably. But since the first CIA drone strike in Yemen in 2002, which killed six people, targeted killings by the CIA have been regarded by much of the international community as extrajudicial executions.⁶¹

While the United States obviously and energetically embraces targeted assassinations, that has not always been the case. In fact, in July of 2001, just two months before the 9/11 attacks, the U.S. ambassador to Israel, Martin Indyk, in talking about Israel’s program, said, “The United States government is very clearly on record

as against targeted assassinations. . . . They are extrajudicial killings, and we do not support that.”⁶² Around that time George Tenet, then head of the CIA, said it would be “a terrible mistake [for] the Director of Central Intelligence to fire a weapon like this.”⁶³ But by 2002, the United States was waffling on this once seemingly clear and publicly stated position.

As the BBC reported on November 6, 2002, “The United States has said it still opposes Israel’s policy of targeted assassinations, despite its apparent use of the same tactic to kill six al-Qaeda suspects in Yemen on Sunday. ‘Our policy on targeted killings in the Israeli-Palestinian context has not changed,’ U.S. State Department spokesman Richard Boucher said. Mr. Boucher refused to talk about the Yemen attack, but said that Washington’s reasons for opposing the targeted killings of Palestinians might not apply in other circumstances.”⁶⁴

The other circumstance post-9/11 is the “global war on terror,” in today’s world of so-called asymmetric warfare. As O’Connell writes, “The U.S. use of drones in Pakistan and elsewhere raises serious questions under the international law governing both the resort to armed force as well as the law governing the conduct of armed force.”⁶⁵ In order to understand legal use of drones (and other weapons and tactics in war, for that matter), it is necessary to understand the definition of “armed conflict” in international law.

Traditionally the laws of war recognize two types of armed conflict: international, which takes place between two states, and internal, a civil war taking place within the territory of a single state. Since the U.S. worldwide campaign against Al-Qaeda and associated terrorist groups does not fall into either category, according to many legal scholars dealing with terrorists should be viewed as a law-enforcement matter. It is not armed conflict, nor is it a “war,” properly understood, despite calling it a “global war on terror” or any other variation of that labeling.

After five years of study, on August 19, 2010, the International Law Association adopted a report on the definition of “armed conflict.” During that period a committee of eighteen experts from fifteen countries researched hundreds of violent situations since 1945 to clarify minimum factors that distinguish armed conflict from law enforcement situations. In researching significant state practice and *opinio juris*, experts found that under customary international law two essential minimum criteria must be met for there to be a situation of armed conflict. These criteria are (1) the existence of organized armed groups that are (2) engaged in fighting of some intensity.⁶⁶

Thus, according to O'Connell, "Armed conflicts are determined not by declarations but by organized armed fighting, intense enough to justify killing under a lower standard of necessity than is permitted to police."⁶⁷

But both the Bush and Obama administrations have dismissed a law-enforcement approach and have taken much more expansive views of what is required in tackling the very real threat of terrorism. Both presidents have preferred "war"—overt and covert—to take on terrorist individuals and organizations.

Bush gave the military and the CIA broad authority to act in a variety of circumstances to protect the United States. President Obama has been even more forceful in asserting in word and deed that the war against terrorism will be carried out against certain individuals and groups no matter where they might be in the world. Increasingly since the attacks of 9/11 and particularly under Obama, the United States has aggressively widened the war's global reach, making it one with a borderless battlefield.

While purposefully vague on the legal justifications for this so-called war, Howard Koh, legal advisor to the Department of State, said that the government's policy of targeted killings is based on the right to self-defense as well as on international humanitarian law. In an interview on NPR, Koh said, "Some have argued that the use of lethal force against specific individuals fails to provide adequate process and thus constitutes unlawful extrajudicial killing. But a state that is engaged in armed conflict or in legitimate self-defense is not required to provide targets or legal process before the state may use lethal force. Our procedures and practices for identifying lawful targets are extremely robust, and advanced technologies have helped to make our targeting even more precise."⁶⁸ This assertion is forcefully challenged by many and indeed is out of sync with Koh's own statements about Bush's war on terror while dean of Yale Law School.⁶⁹

Contesting the self-defense argument, O'Donnell wrote, "The International Court of Justice (ICJ) in the 1986 *Nicaragua Case* made clear that acts triggering the right to use armed force in self-defense must themselves amount to armed attacks."⁷⁰ Further, referring to Article 51 of the UN Charter that permits the use of force in self-defense if an armed attack does occur, she explained that "... significant force may only be used on the territory of a state that is responsible for an armed attack on the defending state. Even then, the defending state may only resort to military force if it is necessary to achieve a defense purpose without a disproportionate loss

of civilian life and property. There simply is no right to use military force against a terrorist suspect far from any battlefield. . . . Pakistan is in no respect responsible for the 9/11 attacks. The United States has no basis, therefore, for attacking in self-defense on Pakistani territory.”⁷¹ Nor does it for its attacks in Yemen or Somalia, for that matter.

Violating the limits to invoking the right to self-defense, according to Alston, “results in State and individual criminal responsibility for aggression.” He also noted that if unlawful killing violates international humanitarian law, it may be a war crime. “The Articles on State Responsibility,” he said, “make abundantly clear that States may not invoke self-defence as justification for their violations of IHL [International Humanitarian Law].”⁷²

Even some who defend the U.S. drone programs using the self-defense argument recognize that under the current circumstances the programs are on shaky legal ground, which in their view, needs to be shored up quickly before shrinking irreparably. Rather than abandon flawed and/or illegal programs and policies, they argue that the laws to justify assassinations by U.S. civilian agents and private contractors anywhere in the world should be tailored to meet the need.

Kenneth Anderson, a law professor at American University, has been particularly forceful in calling upon the United States to publicly declare and defend before the international community the legal rationale for its covert assassination program. In his March congressional testimony, he said the administration’s legal rationale should be based on “the customary international law doctrine of self defense, rather than the narrower law of armed conflict.” He counseled that the administration’s justification of targeted killings must “protect against its legal erosion by acquiescing or agreeing to interpretations of international law that would accept, even by implication, that targeted killing by the civilian CIA using drones is per se an unlawful act of extrajudicial execution.”⁷³

Anderson stated that the legal justification “must also be broad enough to encompass the use of drones (under the statutory arrangements long set forth in U.S. domestic law) by covert civilian agents of the CIA, in operations in the future, involving future presidents, future conflicts, and future reasons for using force that have no relationship to the current situation.”⁷⁴

Further, he wants to see the CIA taken out of the closet of secrecy regarding a right to use force, which he says the agency has had since its founding. Anderson stated, “Congress has never seen fit overtly to name the use of force as such in the statutory language, preferring

to use softer euphemisms and generalities. My view is that the time has come for Congress explicitly to revise the CIA statute to declare the so-called 'Fifth Function' explicitly."⁷⁵

The above argument and others like it run counter to the view of Alston and many others. Alston said that ". . . the U.S. government has put forward legal rationales, such as the doctrine of self-defense, which are self-serving and unsupported by international law. . . . [T]he administration has put forward a 'law of 9/11' self-defense justification, which would permit it to use force in the territory of other countries on the basis that it is in an armed conflict with al-Qaeda, the Taliban, and 'associated forces.' The latter group, of course, is undefined and open-ended. This interpretation of the right to self-defence is so malleable and expansive that it threatens to destroy the prohibition on the use of armed force contained in the United Nations Charter. If other states were to use this justification for the killing of those they deemed to be terrorists, the result would be chaos."⁷⁶

Former CIA agent Robert Baer has spoken out with a similar view. He said, "Targeted killings provide what seems like a clean and easy solution to a problem. But where does it stop? If we can perform targeting killings in Pakistan, a nominal ally, why can't we do it within the borders of allies like the UK or Germany? Should we be able to perform them to clean up our cities? When does it stop? . . . Targeted killings are easier for the CIA or for the military to deal with than taking someone prisoner. No one really ever questions a killing, but when you take someone prisoner, then you are responsible for the person and then the headaches come. We have a logic which leads to more and more targeted killings."⁷⁷

By expanding and contorting the limits of the laws of war, laws dealing with the use of interstate force and human rights law, the United States is threatening the very underpinnings of the international legal frameworks that it has played a major role in developing. Additionally, in refusing to elaborate the legal rationale for its policies and refusing to outline mechanisms of accountability when there are violations, the United States is setting precedents that most likely will come back to haunt it.

Ethics and Morality of Drone Programs

The morality of the CIA drone program is increasingly being challenged, and ethicists, religious leaders, and others are arguing that it

not only violates international law but also key precepts of Just War Theory. Activists and nongovernmental organizations concerned with human rights and IHL are speaking out more regularly and more forcefully in opposition to U.S. extrajudicial executions as well as the military and arms industry's frenzied race to "more and better" robotic weapons and fully autonomous war machines. Perhaps in anticipation of criticism, there is already research under way to try to create an "ethical" military robot that can make independent decisions about who and when to kill.

In a May 18, 2010, editorial, the *Christian Century*, echoing the concerns of others, said that while the drone attacks undoubtedly have killed terrorists and leaders of Al-Qaeda, "they raise troubling questions to those committed to the just war principle that civilians should never be targeted." Further, it said, "According to the just war principles, it is better to risk the lives of one's own combatants than the lives of enemy noncombatants."⁷⁸

In his March 2010 testimony before the House Subcommittee on National Security and Foreign Affairs, Dr. Edward Barrett, professor of ethics at the U.S. Naval Academy, outlined ethical challenges of drone programs. He noted that Just War criteria specify both "pre-war and in-war requirements." A Just War must be the last resort of a state intending to pursue a just cause, with reasonable chances of succeeding and in a proportionate manner. During war, harm caused must be necessary and proportionate. "Vis-à-vis uninvolved civilians who maintain their rights *not* to be harmed, soldiers incur additional risk to avoid, and assign greater weight to, foreseeable harm to innocents."⁷⁹

"In this ethical context," Barrett said, "they [unmanned systems] could encourage unjust wars. Cost reductions, of course, allow states to more readily pursue just causes. But favorable alterations to pre-war proportionality calculations could also reduce the rigor with which non-violent alternatives are pursued, and thus encourage unnecessary—and therefore unjust—wars. Additionally, and echoing concerns about private security firms and cyberattack capabilities, these less visible weapons could facilitate the circumvention of legitimate authority and pursuit of unjust causes. While these moral hazards obviously do not require us to maximize war costs and minimize unmanned systems, they do require efforts to better inform and *monitor* national security decisionmakers" (emphasis added).⁸⁰

As discussed in the previous section, there also looms large the morality of a program of killing people with the "shooters" located far

from battlefields, operating with a complete lack of public accountability. The lack of accountability stretches from the employees of for-profit corporations to the CIA agents they work for through to the president of the United States himself, who has declared that his decisions related to extrajudicial executions are “top secret.”

In a February article for *Foreign Policy*, Marc Thiessen wrote, “The president has claimed the moral high ground in eliminating the CIA’s enhanced interrogation program, saying that he rejects ‘the false choice between our security and our ideals.’ Yet when Obama orders a Predator or Reaper strike, he is often signing the death warrant for the women and children who will be killed alongside the target—individuals whose only sin is that they are married to, or the children of, a terrorist. Is this not a choice between security and ideals? And why is it a morally superior choice?”⁸¹

The drone program has resulted in the United States being seen by many around the world as the preeminent perpetrator of extrajudicial executions. This view does not sit well with most Americans, who still maintain a perception that the United States is not a militarily aggressive country but instead is the preeminent upholder of human rights and international law. However, it becomes increasingly difficult in the face of the brazen willingness of both Republican and Democratic administrations to kill individuals wherever they wish without explanation, legal justification, or due process to argue against the view that the United States is not only aggressive but has also lost its moral compass.

The attempts at legal legerdemain in the covert drone program are also highly questionable. While it may be seen as expedient, what is the moral and ethical basis of the U.S. military calling upon the CIA and its civilian contractors to carry out extrajudicial executions in order to avoid legal entanglements for itself? Killing that brings “legal entanglements” for the one cannot somehow be acceptable for the other—especially and particularly when the other is an unlawful combatant carrying out extrajudicial executions.

Further refashioning the law in an attempt to transform an illegal act into one suddenly legal does not make it so. Where are the ethical boundaries in rewriting laws as a cover for actions that are clear and long-standing violations of international law? Not only is it ethically suspect to speak out strongly against extrajudicial executions by foreign governments, only to order the CIA to begin carrying out its own covert assassination program, but also such action underscores the perception in much of the world of American “exceptionalism.”

And it is exceptionalism not in the sense of high-minded values of a unique democracy but in the sense that everyone in the world should be bound by international law *except for* the United States.

The United States has traditionally cast aspersions on states that flaunt international or human rights laws or rework “laws” to justify actions and policies contrary to international norms or generally accepted state practices. When their actions go beyond the pale, the United States has sometimes considered such governments as “pariah nations” in an attempt to isolate them in part so that they do not “infect” other states that might then similarly violate international law. The U.S. government and its agencies act as if immune somehow from similar criticisms.

Also, many following the development of unmanned systems—and in particular how they are being used in the programs of covert extrajudicial executions since 2002—are concerned about the (questionable) process of the continued dehumanization of war. There have been numerous descriptions of drone pilots driving peacefully to work—whether it be a soldier in Nevada or a CIA agent at Langley—then taking their places in front of computer screens to begin watching potential targets in Afghanistan or in Yemen or Pakistan or Somalia.

The drone operator can see the target through cameras on the nose of the plane he is operating from thousands and thousands of miles away. When he reaches the decision to take out the target, from his computer he fires the two Hellfire missiles that the drone is carrying. He watches as the missiles pulverize “the bad guy” and often others in the vicinity. Finally, at the end of another successful day at the computer, he goes home to dinner and a normal evening with his wife and kids.

The comparison of this scenario to people playing violent video games is hard to avoid. The hostile response to the comparison from those involved in drone warfare is equally to be expected. But many scholars and analysts, as well as religious ethicists, activists, and others, share concerns about the short- and long-term implications of faceless and essentially risk-free war via computer.

Alston, with Hina Shamsi, has written, “Equally discomfiting is the ‘PlayStation mentality’ that surrounds drone killings. Young military personnel raised on a diet of video games now kill real people remotely using joysticks. Far removed from the human consequences of their actions, how will this generation of fighters value the right to life? How will commanders and policymakers keep themselves immune from the deceptively antiseptic nature of drone killings? Will

killing be a more attractive option than capture? Will the standards for intelligence-gathering to justify a killing slip? Will the number of acceptable ‘collateral’ civilian deaths increase?”⁸²

Many people are willing to take risks and act in bizarre and even violent ways in the virtual world that they would never consider doing in person. Lieutenant Colonel Dave Grossman, author of *On Killing*, has described factors that can make it easier to kill and for abuses and atrocities to occur. Distance from the victim—both physical distance and emotional distance—is a particularly important variable.⁸³ Targeting a person from thousands of miles away through the virtual world of the computer is about as disconnected from killing on the battlefield as you can get.

Singer writes about the impact that the psychological distance and disconnect of drone warfare also has on how the people involved in the attacks see themselves. He says that those factors make “it easy for the drone operators to forget that they were not gods from afar and that there are real humans on both ends.”⁸⁴

When There’s NO Man in the Loop

Even more physically, emotionally, and psychologically disconnected from killing will be fully autonomous weaponized robots—the day when there no longer is “the man in the loop” in some way actually operating the weapons. As two officials from defense contractor Booz Allen Hamilton describe, “As in a work of science fiction, a robotic, no-fear military will have no concern for self-preservation; no feelings about the enemy or toward fellow robotic soldiers; no impulse to turn and run; and no motivation other than a set of programmed instructions.”⁸⁵

The summary report of an Executive Session on unmanned and robotic weapons held at Harvard in June of 2008, with active duty and retired military leaders and civilian researchers participating, described the U.S. military as being “on the cusp of a revolution” in robotic warfare that will soon assume “a prominent, if not dominant, position in the doctrine, strategy and tactics of the United States military.”⁸⁶ But as one participant said, “Technology is pushing our doctrine.”

Using “supplemental” budgets in the billions of dollars, the military began rapid acquisition of robotic weapons. According to the Harvard report, “New firms entered the market, and new systems proliferated. Unfamiliar with and unconstrained by the formal acquisition

processes and restrictions of ‘programs of record’ in the defense or intelligence market space, they cobbled together off-the-shelf capabilities in newly valuable ways, moving innovative systems to the warfighter with astonishing speed. ‘Predator is the equivalent of a Wright Flyer.’ That statement sums both the position and the potential of unmanned warfare today.”⁸⁷

The companies involved in developing the new technologies have an outsized role in driving the robotics weapons race. According to Singer, “The undertaking has attracted not only the country’s top weapons makers but also dozens of small businesses . . . all pitching a science-fiction gallery of possible solutions.”⁸⁸

From a time not all that long ago when the number of people working on robotic weapons was a very small fraternity, today the Association for Unmanned Vehicle Systems International boasts 2,100 member organizations from 55 countries “[s]erving 6,000 members from government organizations, industry and academia.”⁸⁹

The companies involved in robotic weaponry development only give lip service—if even that—to the laws of war constraints in developing and producing new weapons. According to O’Connell and others, the military services themselves are less and less versed in IHL, so why could one expect companies running after the billions of dollars now available for robotic weapons to pay any attention to “esoteric” law?⁹⁰

Describing the “extraordinary insight” the United States has gained over the previous ten years in the “laboratories of extraordinary development” provided by the wars in Iraq and Afghanistan, the Harvard report also noted that other nations are now “ably replicating the American experience.”⁹¹ In other words, a fledgling arms race in these weapons is already under way.

As noted earlier, the U.S. aerospace industry is already anticipating continued massive increases in the demand of robotic weapons by the U.S. military. These corporations are also hoping to reap a harvest of buyers in an international market, where in 2010 two-thirds of all investment in drones has been spent by countries other than the United States and are now pushing Congress hard to change the Missile Technology Control Regime so they can enter into the fray. Defense Secretary Gates has spoken out in favor of increased exports.

This new and frenzied race to build all manner of roboticized weapons seems almost out of control and certainly proceeds without meaningful public oversight. The impact of this rush to acquire robotic weapons on politics, business, ethics, the laws of war—and

war itself can barely be imagined at this point, but it involves a frightening vision of a world of robotic war machines operating on their own.

But do we really want to strive for a world in which robots replace people in armed conflict—a U.S. military in which technology is not put in service of human soldiers, but the primary function of the human will be to service autonomous war machines? A military where the behaviors of thinking and fully autonomous robots will be impossible to fully anticipate? What international law would control that robot? Would a war-crime committing robot be hauled before a military tribunal?

In the previous section I quoted Dr. Edward Barrett's view that moral hazards related to unmanned systems required "efforts to better inform and monitor national security decisionmakers." In terms of fully autonomous warfighting machines, informing and monitoring decision makers does not go far enough. Such weapons should be banned outright.

Conclusion

I opened this article with reference to the movie *The Terminator*—as many do in thinking about weapons and war of the future. The most important theme of the movie and the series is that people in the present are confronting *one possible future*—that of people battling against unfeeling, fearless, and relentless robotic war machines operating completely autonomously of humans who had once developed them and then set them loose to wage war. Such a possible future is no longer the stuff of science fiction novels but is at the very beginning of a work in progress.

Within the space of a short decade, unmanned vehicles are already proliferating wildly and have become a multi-billion-dollar industry that is projected to grow as fast as the weapons can be produced. Not all robots that are and might be used in armed conflict are of concern, but those with attack and kill capabilities are. And even more so the fully autonomous attack and kill robotic weapons under research and development. But that possible future is not etched in stone. Such weapons can and must be banned before they appear in the global weapons market and fuel an entirely new and terrifying weapons race.

Currently the most famous and most controversial unmanned weapons are aircraft—the Predator and Reaper drones that have

become the weapons of choice in the United States' prosecution of its global war on terror—and operations in which they are used. The drones are used by the U.S. military and by the CIA and civilian contractors in armed conflicts and “in self-defense” to assassinate terrorists and suspected terrorists and their supporters, for example, drug lord financiers.

The right to kill without warning outside of an armed conflict is not recognized under international law. Declaring that there is a “global war on terror” does not make it so. Nor does it then justify an essentially borderless battlefield in a “war” that does not exist under international law. For many if not most lawyers and legal scholars the use of attack drones by the CIA for targeted killings of people not directly engaged in combat and far from the battlefield is a clear violation of the laws of war.

The drone program operated by the U.S. military in Yemen could also fall into that category. Moreover, members of the CIA—and the military contractors who work for them—are not lawful combatants under the Geneva Conventions, which makes their involvement in drone killings a crime. Further, the high percentage of civilian victims of the strikes and the lack of any degree of accountability about them adds fuel to the increasing firestorm of harsh criticism of the drone programs.

Pressure in the United States to rewrite law to justify extrajudicial assassinations and/or legally recognize the CIA as a paramilitary force should be of extremely serious concern not only to U.S. citizens but also other nations as well. Just as the Bush administration sought to diminish the Geneva Conventions as “quaint” and “antiquated,” in putting forth its much scorned legal basis for its use of torture, the few words put forth by Obama administration officials to date on its use of drones in extrajudicial executions rest on equally shaky ground. Just as the Bush administration's legal analyses threatened international law, so do those of the Obama administration.

The United States has been called the primary perpetrator of extrajudicial killings in the world today. Despite that and the very real threat to the underpinnings of IHL and also to human rights law, there has been a shockingly tepid response by the international community against the global reach of U.S. targeted killings. If there is little outcry to these global acts of impunity, there will be little ground to stand on when other countries follow suit. The American public must become involved in discussions about these programs and not accept that these issues cannot be discussed because they

are “top secret” or in the name of “national security.” But debate cannot end there.

With the Predator and Reaper drones alone, the myriad of moral, ethical, and legal questions related to the weapons and their use abound. And these “unmanned aerial vehicles” are considered the “Model Ts” of unmanned weapons and weapons systems, many of which could be fully autonomous killing machines. With all of the controversy related to the drones growing rather than subsiding, the rapid move forward in research and development of fully autonomous weapons systems without public discussion of the consequences is unconscionable.

But as one defense contractor put it, “These considerations notwithstanding, the U.S. military has little choice but to continue its aggressive pursuit of robot technology—because of its potential to spare the lives of U.S. soldiers, because of the enormous advantages that will naturally accrue to the first-mover in robot technology, and because allowing any other military power to get there first would be unacceptable.”⁹²

But it is precisely *because of* “these considerations” and others that serious public discussion about current and future robotic war machines must be entered into with urgency before it is too late. The direct links between the military and the corporations that research, develop, and/or produce new weapons have worried many over the decades since General Dwight D. Eisenhower cautioned the American public in 1961 to “beware the military-industrial complex.”

Technology must not be allowed to drive policy. The multi-billion-dollar price tag of a possible future of autonomous weapons cannot be permitted to determine this new direction in weapons. There must be public debate about how decisions to develop which weapons are made and how great a role corporations have in pushing for weapons we never knew we needed in the first place. It is beyond time that decisions around weapons development and procurement be more open and transparent.

Some consider it unpatriotic to call for public debate about any weapons that could benefit the military in any way—regardless of concerns about the legal implications, morality, or the ethics of said weapons and their use. Others argue, and some of us very strongly, that it is not a feature of true democracy to block free discussion about any weapon built with our tax dollars and then used in our names and to defend national security under doctrines we are not encouraged to question either.

Fear—driven by the war on terror—should not determine our future. Eisenhower’s military-industrial complex—much, much more complex today than it was when he spoke that warning—must be openly accountable for the decisions made on weapons and that such decisions comply with the laws of war. The multiple aspects of what makes a people “secure” must carry significantly more weight in discussions about the security of a nation in the highly interconnected world of today. The answers to our security cannot rest on war and the continued development of new weapons systems that could lead us inexorably to a probable *Terminator* future.

Notes

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70. O'Connell, "Unlawful Killing with Combat Drones," 14.

71. *Ibid.*, 19.

72. Alston, "Report of the Special Rapporteur," 14.

73. U.S. House of Representatives Subcommittee on National Security and Foreign Affairs, Subcommittee Hearing: "Rise of the Drones: Unmanned Systems and the Future of War," Tuesday, 23 March 2010, Written Testimony Submitted by Kenneth Anderson, 18 March 2010, 2.

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83. Singer, "Military Robots and the Laws of War," 42; O'Connell, "Unlawful Killing with Combat Drones," 9–10. O'Connell quotes Grossman

from his 1996 book *On Killing*. He describes key elements of the emotional distance between the killer and the victim as (1) social distance—seeing a particular class as less than human, (2) cultural distance—racial and ethnic differences used to dehumanize the victim, (3) moral distance—the strong belief in moral superiority and “vengeful” actions, and (4) mechanical distance—“including the sterile ‘video game’ unreality of killing through a TV screen, a thermal sight, a sniper sight, or some other kind of mechanical buffer.”

84. Singer, “Military Robots and the Laws of War,” 42.

85. Herman and Fritzson, “War Machines.”

86. “Unmanned and Robotic Warfare: Issues, Options and Futures,” A Summary of the Harvard Executive Session of June 2008, 2. Thirty-three senior retired and active duty U.S. military leaders, together with senior civilian researchers, made up the session. Of ten retired military there, including for example, General John Abizaid, eight were employed by four different defense contractors and two were at the Kennedy School. The report is available at www.lnwprogram.org.

87. *Ibid.*, 2.

88. Singer, “Military Robots and the Laws of War,” 30.

89. Association for Unmanned Vehicle Systems International, <http://www.auvsi.org/AUVSI/AUVSI/Home/>.

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91. A Summary of the Harvard Executive Session.

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Jody Williams, the recipient of the Nobel Peace Prize in 1997, served as the founding coordinator of the International Campaign to Ban Landmines (ICBL) until February 1998. Since February 1998, she has served as a campaign ambassador for the ICBL, speaking on its behalf all over the world. From 1999–2004, she served as senior editor for the thousand-page annual Landmine Monitor Report, a groundbreaking initiative by civil society that monitors the implementation and compliance of the Mine Ban Treaty. Professor Williams led a high-level mission on Darfur for the UN’s Human Rights Council and continues to be actively involved in work related to stopping the war in Darfur. In 2003, Williams was named Distinguished Visiting Professor of Global Justice in the Graduate College of Social Work at the University of Houston. In 2007, she was appointed the Sam and Cele Keeper Endowed Professor in Peace and Social Justice. Her most recent book, *Banning Landmines: Disarmament, Citizen Diplomacy, and Human Security*, edited with Steve Goose and Mary Wareham, analyzes the Mine Ban Treaty and its impact on other human-security-related issues.