Targeted Killing at a Distance: Robotics and Self-Defense

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Targeted Killing at a Distance: Robotics and Self-Defense

Wayne McCormack*

Presented in March 2011 at the University of the Pacific, McGeorge School of Law Symposium on The Global Impact and Implementation of Human Rights Norms. The author and editors recognize that important events have transpired since this paper was presented—primarily the events in Libya, the targeting of Anwar al-Aulaqi, and ongoing attacks in Pakistan. Nevertheless, the analysis here remains timely and forward-looking.

The following two scenarios adequately frame the debate over the use of remote controlled weapons. In the first, the lead counsel for the Central Intelligence Agency ("CIA") observes as a civilian operator watches a suspected militant and his family park their car, waits for the target to leave the car, and then releases a missile that kills the "bad guy"—the CIA lawyer is proud of the precision that avoids damage to the family. In the second, a similarly guided missile destroys a house in a village and allegedly kills a dozen or more innocent civilians—Pakistan objects vigorously to United States ("U.S.") escalation of drone attacks within its borders.

The Obama Administration started out to subdue some of the rhetoric of war from the prior administration, but in fact has upped the ante by multiplying the number of targeted killings that are directed against suspected militants, primarily in Pakistan. Specifically, it is the use of unmanned aerial vehicles ("UAVs") to distribute Hellfire missiles at named individuals that is the focus of this panel. UAVs are being used not only in Pakistan, but in Libya as well, yet

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under slightly different circumstances. In Libya, UAVs have most often been
directed at general military targets rather than known individuals.5

There is a difference between general military targeting and targeting of
individuals, but the use of robotic weapons in both situations presents the same
concern: will humanity eventually take itself so far out of the line of fire that it
removes any natural limits on the use of force? Apocalyptic movies based on a
“machine v. machine” plotline have played with this theme for decades, so I will
try to stay away from the fanciful and instead focus on the current problem: the
use of distant weaponry against known individuals.

From a potentially bewildering array of objections and justifications, two
primary questions can be isolated: does the targeting of individuals who are away
from a traditional battlefield violate general norms of self-defense, and does the
use of robotic weapons violate international law? Both questions can be
answered in the negative, but still leave troubling implications for the future.

“[B]ecause operators are based thousands of miles away from the battlefield,
and undertake operations entirely through computer screens and remote
audiofeed, there is a risk of developing a ‘Playstation’ mentality to killing.”6 This
quote from Philip Alston’s report to the United Nations (“U.N.”) Human Rights
Council has come to symbolize the pressing concern over drone-launched
missiles.7 A sophisticated device may be able to isolate and target a specific
individual in such fashion as to limit collateral damage (injury to
noncombatants).8 But, the sense of virtual reality and the vast distance between a
desk in Arlington, Virginia and a house in Pakistan makes it easy to dehumanize
the target and thus heighten the level of violence in the world.

It is often relatively easy to agree on general principles, but “the devil is in
the details.” By this we mean that broad-based generalizations do not necessarily
produce consensus in application. For example, the tort panel at this symposium
demonstrated that the universal respect for privacy and reputation degenerates
quickly when confronted with norms of free expression. Some legal cultures will
emphasize the rights of the speaker while others will emphasize the rights of the

5. Targeting a head of state, such as Moammar Gadhafi, raises another set of international law issues.
The head of state is typically a protected person because the opponent needs to have a known figure with whom
to negotiate cessation of hostilities. But when the head of state assumes military functions or command, then
he/she becomes a legitimate target of lethal force. Kenneth Anderson, Targeted Killing in U.S.
Counterterrorism Strategy and Law 24-25 (Counterterrorism & Am. Statutory Law, Working Paper No. 9,
0511_counterterrorism_anderson.pdf.

6. Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Study on

7. Id.

8. Perhaps a better word in this context is “nonhostiles.” The full description would be “civilians taking
no active part in hostilities.” See infra note 34, at 6-8.
victim, and the application of general principles to various fact patterns is far from universal.

In a similar fashion, the general principles regarding lethal force are near universal, but the application of those principles to targeted killings is quite difficult. It becomes even more difficult to grasp the ramifications of war and military aggression with the emerging use of robotic weapons. With these thoughts in mind, I propose to set out some general principles and then move down into specifics with as much principle as I can muster. The progression will be from general principles on lethal force, to the rules of warfare, to the practical necessities of morality, and finally to the specific problem of targeted killing with robotic weapons.

I. GENERAL PRINCIPLES ON LETHAL FORCE

To start at the most general level, consider ordinary principles of self-defense that we normally follow in daily life. I am not allowed to use deadly force against another person unless that person represents a threat of great bodily harm to me or another, and even then I can only use so much force as necessary to remove the threat. Those principles are startlingly similar to the privilege of combat immunity embodied in the law of war (now known as the Law of Armed Conflict or “LOAC”). The chart below illustrates the similarity.

<table>
<thead>
<tr>
<th>self-defense:</th>
<th>LOAC:</th>
</tr>
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<tbody>
<tr>
<td>reasonable belief in necessary level of force to prevent harm to self or others</td>
<td>privilege of necessary level of force proportional to threat</td>
</tr>
</tbody>
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The basic difference between ordinary principles of self-defense and the rules of LOAC is that in armed conflict the warrior is entitled to assume that anyone in the uniform of the enemy is a threat. Thus, unless the opponent is hors de combat or making visible signs of surrender, he or she can be killed.

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11. Article 41 of the Protocol I to the Geneva Conventions defines:

1. A person who is recognized or who, in the circumstances, should be recognized to be hors de combat shall not be made the object of attack.

2. A person is hors de combat if:
with impunity.\textsuperscript{12} The proportionality concept originally meant that destruction of life or property was justified only to the extent necessary to eliminate the threat. It has been difficult to apply in modern warfare when military-industrial facilities were intermixed with residential areas and vulnerable to heavy bombardment.\textsuperscript{13} This is why the fire-bombing of Dresden and the nuclear bombing of Japan remain controversial events.\textsuperscript{14}

Thus, it is important to distinguish armed conflict—in which an enemy can be killed based merely on his/her identity rather than behavior—from other actions, including “military operations other than war.” That will be done in the next section of this essay, but first I want to look at three principles that elaborate the sources and functions of limits on the use of force.

\textit{Principle I}: Human life has both intrinsic and pragmatic value.

\textit{Principle II}: “The object of war is peace.”\textsuperscript{15}

\textit{Principle III}: Use lethal force only if justified by necessity.

\textit{Principle I}: Human life is at least an important resource, if not sacred. This first principle is almost an \textit{a priori} statement, but it could be derived from other propositions about basic instincts such as survival, conditions of life, and propagation of the species. Humans are clearly social animals; the true hermit is so rare as to be virtually non-existent.\textsuperscript{16} Even practicing ascetics have tended to

\begin{itemize}
  \item i. He is in the power of an adverse Party;
  \item ii. He clearly expresses an intention to surrender; or
  \item iii. He has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself;
\end{itemize}

provided that in any of these cases he abstains from any hostile act and does not attempt to escape.


12. Using movies as images to make a point, “The Dirty Dozen” presents a genuine issue about the targeting of enemy soldiers while away from the battlefield. In particular, the targeting of commanding officers is seen as problematic because of their role in maintaining discipline (see, e.g., the British complaints in “The Patriot”). \textit{THE DIRTY DOZEN} (Metro-Goldwyn-Mayer (MGM) 1967); \textit{THE PATRIOT} (Columbia Pictures Co. 2000).


form communities to ensure access to at least minimal levels of water and food. A psychopath may kill for pleasure, but assuming that killing off all other members of the species would not lead to a particularly pleasant life, even mundane self-interest implies some limit on the taking of life.

Principle II: “The object of war is peace.” This apparent conundrum makes a critical point about the use of lethal force. Long before the advent of the nation-state, there were political entities that used the full power of the group against other groups. Tribes attacked members of other tribes to attain new hunting and fishing territory or to avenge an earlier assault. Tribes came together to form ethnic groups that sought to solidify a homeland, as was the case with the coalescing of Hebrew tribes to invade Canaan. Even larger collectives formed into empires a la Alexander, Persia, or Ottoman hegemony of the Middle East. Some nomadic groups formed into loose collectives, such as the Mongols of Genghis Khan.

In all of these settings, the objective of the aggressor was to secure territory or goods, and the objective of the defender was to protect existing realm. In both instances, the goal was to accomplish improved living conditions. This history shows us how war is a productive exercise only when used as a means to acquire a desired end. Although it may have the unintended side-effect of improving technology, it is not productive of any goods or services in itself. Although an individual warrior may benefit from a prolonged state of warfare, the group does not.

This principle is challenged by institutions such as armaments manufacturers. President-General Eisenhower warned against reliance on the “military-industrial complex,” and President-General Washington warned of the dangers of a standing army. The advantages accruing to those in the military-industrial complex will produce some political pressure for continual escalation of weaponry, an impetus to be resisted for the long-range survival of the species.

With those tensions in mind, the advent of robotic weapons could be a quantum

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18. Tzu, supra note 15.
23. Washington counseled his countrymen to “avoid the necessity of those overgrown military establishments which, under any form of government, are inauspicious to liberty, and which are to be regarded as particularly hostile to republican liberty.” George Washington, President of the U.S., Farewell Address (1796), available at http://avalon.law.yale.edu/18th_century/washing.asp.
24. See Eisenhower, supra note 22.
leap in the development of warfare if it means that “machine v. machine” propels
groups toward a perpetual state of conflict and away from the pursuit of peace. If
humans are led to believe that they can live their lives separate and apart from
what the machines are doing to each other, then this natural inclination to seek
life rather than death does not operate as a control on the violence of the
machines.25

If only one side has the machines, then there is still the question of what will
motivate the dominant group to cease the violence. Where is the end-game of
peace that Sun Tzu envisioned?

**Principle III:** Use lethal force only if justified by necessity. The third
principle follows nicely from the first two. If violence is intended to lead to
peace, and if human life is important, then the taking of life is justified only by
necessity. In LOAC terms, this is expressed as military necessity and
proportionality. There are a number of corollaries that are subsumed under this
heading:

- protect noncombatants – sometimes expressed as limiting collateral
damage;
- protect the means of survival – do not poison wells, attack medical
facilities or personnel, cut trees (although annual crops may be
destroyed), etc.;
- protect heads of state – the need for leadership comes into play
because someone must be available to surrender on behalf of a group
before total annihilation.

The limitations on lethal force are both pragmatic and ethical. The paramount
ethical norm, the Golden Rule, influenced every culture that has a written history:
“do unto others as you would have them do unto you.”26 But even this ethical
norm has its pragmatic side, in that the speaker is hoping for mutuality of
treatment. Beyond that hope, a pragmatic approach ultimately emphasizes the
importance of limiting lethal force. To repeat the point made above, human life is
its own end game.27 To conquer an uninhabitable territory is a futile exercise, so
there is no point in poisoning the wells or killing the trees. As for the inhabitants,
in more primitive times the invader wanted to have living people to work and pay
taxes.28 In today’s world, it is apparent that a depopulated territory would be of

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26. Versions of this fundamental norm can be found in the sayings of Jesus, Confucius, Aristotle, and


little use to a foreign invader because groups generally are not trying to move into territories other than what they already occupy. This last statement needs a great deal of clarification and limitation. I don’t mean to imply that there have not been examples in recent times of the unnecessary or immoral use of lethal force.

The Twentieth Century brought us *lebensraum* and genocide. The genocidal episodes arose from situations in which two or more ethno-cultural groups shared the same territory and one sought to eliminate the other, as in the Holocaust, Rwanda, and the breakup of the former Yugoslavia. In that scenario, the genocidal group is seeking dominance for a host of social-psychological reasons that are (one hopes) aberrational. But that group is still not seeking to eliminate all human life, just the existence of the “other.”

With regard to *lebensraum*, Nazi Germany reached out to conquer other territories primarily to find warm-water ports and maybe to increase access to agricultural land, but it would not be in a rational person’s self-interest to annihilate all the inhabitants of another region and leave nobody to do the manual labor of the area.

And finally, I have to temper all of this by addressing the experience of the Europeans in settling the New World. Displacement of Native Americans to allow for European domination of the land seems to run counter to everything said here about the use of lethal force. As Jared Diamond has described well, whenever more-industrialized groups have encountered less-industrialized groups, the former have dominated and virtually destroyed the latter. Whether through intent or inadvertence, that pattern has repeated throughout history.

It is precisely because of the tendency for violence to destroy the less-industrialized communities that the norm of “use lethal force only when necessary” needs constant attention and development. The threat presented by robotic weaponry exacerbates this need. The greater the technological gap, the more likely the tragic outcome.

II. “ARMED CONFLICT” AND TARGETED KILLINGS IN INTERNATIONAL LAW

To describe the privilege of using lethal force in military operations, it is essential to define “armed conflict” because that is what gives rise to the privilege of lethal force—based on the identity rather than behavior of the enemy. “Armed conflict” is the sustained use of deadly force against an
organized entity which is also using deadly force. Short of that, "military operations other than war" may still trigger the privilege of deadly force when the target presents an imminent threat.

The only extant judicial ruling on these issues is that of the Israeli Supreme Court. President (Chief Justice) A. Barak laid out four criteria that make sense if one is willing to consider the idea of killing anyone who is not at that very moment pointing a loaded gun at you. If your idea of self-defense is limited to the situation in which a gun is being pointed at you, then there are no other criteria that would be applicable. But if you consider that some people who represent a palpable threat might be the subject of lethal force (killed if not captured), then Barak's criteria are a reasonable attempt at imposing limitations. These criteria, however, are still highly controversial.

International law generally outlaws "extrajudicial killing" but withdraws the immunity of civilians who take an active part in hostilities. From that perspective, President A. Barak concluded that a person who is part of an ongoing state of hostilities and who represents an imminent threat is a legitimate target. Justice Rivlin commented that this approach creates a new category of "unlawful combatant" apart from the traditional categories of combatants and civilians. The idea of the "unlawful combatant" has a number of unfortunate connotations and consequences, but that is a subject for another day.

32. JOINT CHIEFS OF STAFF, supra note 9.
33. Id. at III-9.
35. Id. at 28-30.
38. Civilians lose the protection against military attack, granted to them by customary international law dealing with international armed conflict (as adopted in The First Protocol, §51(3)), if "they take a direct part in hostilities."). That provision differentiates between civilians taking a direct part in hostilities (from whom the protection from attack is removed) and civilians taking an indirect part in hostilities (who continue to enjoy protection from attack). Public Committee Against Torture v. Government of Israel, at 23. Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol 1), June 8, 1977, 1125 U.N.T.S. 3, available at ttp://treaties.un.org/doc/Publication/UNTS/Volume%201125/volume-1125-1-17512-English.pdf.
39. "The interpretation proposed by my colleague President A. Barak in fact creates a new group, and rightly so. It can be derived from the combatant group ("unlawful combatants") and it can be derived from the civilian group. My colleague President A. Barak takes the second path. If we go his way, we should derive a group of international-law-breaking civilians, whom I would call 'uncivilized civilians.' In any case, there is no difference between the two paths in terms of the result, since the interpretation of the provisions of international law proposed by my colleague President A. Barak adapts the rules to the new reality." HCI 769/02 Public Committee Against Torture in Israel v. State of Israel, 46 I.L.M. 375 [2005] (Isr.), available at
What neither Justice seems to have contemplated is that the same conclusions could be reached without resort to the law of armed conflict at all. A law enforcement official attempting to deal with a known threat could conclude that a particular person at a particular time represented a sufficient ongoing threat to justify the use of lethal force. For example, the drug cartels in northern Mexico have been responsible for the deaths of thousands of civilians as well as numerous judges and police. Could anyone blame officials for killing the leader of a cartel if it were not feasible to arrest him? Of course, one might argue that the drug wars in Mexico are a sort of “armed conflict,” but that just spins us right back into the same arena—the point is that in a state of ongoing hostilities, a person taking a direct role has forfeited his/her immunity from violence.

Let me emphasize that this is a purely legal exercise in which we are trying to determine whether there are sanctions to be imposed on one who uses lethal force against another. It does not address the ethical and moral questions of whether it is appropriate for one human to use lethal force against another. With that in mind, here are the criteria outlined by President A. Barak:

1. mechanisms to assure accuracy of information that the particular person is an imminent threat;  
2. no feasible prospects of capture (arrest is always preferred if possible);  
3. mechanisms to minimize harm to innocent persons;  

http://elyon1.court.gov.il/files_eng/02/690/007/a34/02007690.a34.pdf.

40. Chief Justice A. Barak noted that the labeling of a person as an “unlawful combatant” would have to occur after some judicial process based on that person’s behavior constituting a violation of the rules of war. Failure to recognize this need for judicial process has led to U.S. violations of law in dealing with terrorism suspects: e.g., torture, extraordinary rendition, executive detentions, and warrantless surveillance. Id. at 23-30.


43. See, e.g., Guiora, supra note 42.

4. post-action review to ensure that all persons involved applied the criteria and mechanisms properly.\textsuperscript{45}

One obvious difficulty in this analysis is answering the question of who is an “imminent” threat. For example, say the Israelis are now struggling with not only a suicide bomber, but also a trainer, a planner, an explosives supplier, a financier, a propagandist, and so forth.\textsuperscript{46} A great deal hinges on the issue of “taking a direct part in hostilities.”\textsuperscript{47} How active is the trainer or the planner after the training and planning have occurred? If he might do it again, but at the moment is at home with family, is he an imminent threat?\textsuperscript{48}

In the personal self-defense regime, a jury would be told that an imminent threat is one that cannot be averted without the use of lethal force. In other words, if I have the time and ability to use other means, then I should not use lethal force. More concretely, if I am confronted by someone with a weapon, I am not under imminent threat until the weapon is pointed at me or the holder of the weapon makes a threatening move.

In military terms, these concepts are expressed in Rules of Engagement (“ROE”). ROE attempt to elaborate in a given situation whether an unidentified person represents an imminent threat.\textsuperscript{49} The most critical element under ROE is determining whether that person displays “hostile intent.”\textsuperscript{50} In asymmetric military operations, there is the further complication of trying to assess limits on collateral damage. In today’s world, the worst offenders do not wear uniforms—and either do not carry arms openly, or blend into a society in which everyone is carrying arms openly. Thus, the paradigm in which 19th Century LOAC rules were built very rarely prevails today. We have a very significant problem in

\begin{itemize}
\item \textsuperscript{45} HCJ 769/02 Public Committee Against Torture in Israel v. State of Israel, 46 I.L.M. 375 [2005] (Isr.), available at http://elyon1.court.gov.il/files_eng/02/690/007/a34/02007690.a34.pdf.
\item \textsuperscript{46} Amos N. Guiora, License to Kill, FOREIGN POL’Y (July 13, 2009), http://www.foreignpolicy.com/articles/2009/07/13/licence_to_kill.
\item \textsuperscript{47} HCJ 769/02 Pub. Comm. Against Torture, 46 I.L.M. at 375.
\item \textsuperscript{48} See Guiora, supra note 42.
\item \textsuperscript{49} Directives issued by competent military authority that delineate the circumstances and limitations under which U.S. forces will initiate and/or continue combat engagement with other forces encountered. JOINT CHIEFS OF STAFF, DEPARTMENT OF DEFENSE DICTIONARY OF MILITARY AND ASSOCIATED TERMS, JOINT PUB. 1-02, 298, 317 (2010), available at http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.
\item \textsuperscript{50} Hostile intent - The threat of imminent use of force by a foreign force, terrorist(s), or organization against the United States and U.S. national interests . . . When hostile intent is present, the right exists to use proportional force, including armed force, in self-defense by all necessary means available to deter or neutralize the potential attacker or, if necessary, to destroy the threat. A determination that hostile intent exists and requires the use of proportional force in self-defense must be based on evidence that an attack is imminent. Evidence necessary to determine hostile intent will vary depending on the state of international and regional political tension, military preparations, intelligence, and indications and warning information.
\end{itemize}

\textit{Id.} at 157, 166.
determining who is a civilian and who is a combatant in the villages of western Pakistan’s tribal regions.\footnote{51}

The basic test, however, is still the reasonableness of the actor’s belief in the necessity of force.\footnote{52} The bad guys may violate the rules by blending into civilian populations, or even going so far as to use others as human shields. Their violations of the rules are no excuse for excessive force, but hiding among civilians does not insulate them entirely. The challenge for the technologically advanced nation fighting a primitive opponent is to manage the use of force in such fashion as to maintain the moral high ground on which society ultimately depends.

### III. SELF-DEFENSE AS MORAL HIGH GROUND

To repeat, most of the LOAC rules can be extrapolated from the same principles that govern self-defense in a civilian criminal justice system. Once there is universal agreement on a human’s inherent right to bodily integrity, the privilege of self-defense follows quite readily. Consider two people, V (victim) and P (perpetrator). Ordinarily, V has no right to invade P’s integrity. But when P poses a threat (usually expressed as placing V in reasonable apprehension of imminent harmful or offensive contact), then V obtains a privilege to use reasonable force to prevent the harm. In executing her privilege of self-defense, however, V can go no further than necessary to repel the attack of P or she would be unjustifiably invading P’s realm of integrity. Thus, V cannot use deadly force unless in reasonable apprehension of great bodily harm.

International law “roughly equates the nation-state with the individual in the self-defense scenario,” discussed by philosophers under the heading of “just war theory.”\footnote{53} If V is a nation-state rather than an individual, it has the same privilege to use force in response to a threat that an individual would have. Most observers recognize a difference between preemptive and preventive use of force, the former being permissible and the latter not. A classic example of permissible

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preemptive force is the incident of the SS Caroline, sunk by the British in 1837. The British justified the attack on the basis that the ship had been used in the past to support anti-crown forces in Canada and the likelihood of its future use for similar endeavors. In an exchange of correspondence with the British Foreign Minister, Secretary of State Daniel Webster asserted that self-defense is justified only by an imminent threat “leaving no choice of means, and no moment for deliberation.” Webster further emphasized the necessity of action in a number of ways: “most urgent and extreme necessity,” “pressing or overruling necessity,” “clear and absolute necessity,” and “a necessity, present and inevitable, for attacking.”

The Caroline exchange is often said to reflect two principal conditions for the preemptive use of force: imminence of threat and necessity of action. The latter condition is both temporal and spatial—V can use no more force than is necessary to eliminate P’s threat at that time. These conditions delineate the difference between preemptive and preventive use of force. Prevention is not a justification for the use of lethal force, but only for the application of nonlethal measures, such as economic sanctions, diplomacy, and the like. The difference is similar to the difference between a homeowner’s locking her door (prevention) and using a weapon against someone battering at the door (preemption).

The U.N. Charter imposes an outright ban on unilateral use of force, but also embraces the principle of self-defense. Article 2 states that member nations shall refrain “from the threat or use of force against the territorial integrity or political independence of any state.” Article 42 then gives the Security Council the power to use armed force “to maintain or restore international peace and security.” Article 51 goes on to preserve “the inherent right of individual or collective self-defense if an armed attack occurs . . . until the Security Council has taken the measures necessary to maintain international peace and security.”

It is clear in domestic law, both civil and criminal, that a person has a duty to retreat if doing so will avoid the use of deadly force, unless they are in their home or place of business. This principle is under attack in the United States by

56. Letter of April 24, 1841 from Daniel Webster to Lord Ashburton, AVALON PROJECT, http://avalon.law.yale.edu/19th_century/br-1842d.asp (last visited Mar. 6, 2012) (including an excerpt of a note from Daniel Webster to Ambassador Fox regarding the U.S. view on the right to self defense); see Taft IV, supra note 55.
57. See Taft IV, supra note 55.
58. Id.
61. Id. at art. 42.
62. Id. at art. 51.
those who believe that the use of guns should be more readily available. Proposed legislation in a number of states would eliminate the duty to retreat.63

The duty to retreat and its inapplicability in the home express something important that has corollaries in the law of nations. Just as I need not flee my home when faced with a threat of bodily harm, neither must a nation attempt to flee from harm. Indeed, a nation cannot flee. The national territory is the home. Thus, there is a similarity in personal and national self-defense that leads to a significant difference between them: a nation is privileged to use deadly force whenever faced with a deadly threat without any requirement of attempting to retreat from the threat, whatever the circumstances may be. This has enormous implications for the necessity and proportionality of force that can be used.64

Rules of engagement in past tense situations often started with the basic proposition “don’t fire unless fired upon.” This admonition made some sense in days when the first shot was not likely to be fatal. A tense situation does not technically escalate into a state of armed conflict until one side starts shooting. So the first side to shoot may be considered an aggressor and in violation of international law. That scenario was marginally acceptable so long as the first shot was not likely to kill. But advances in technology over the last fifty years make “waiting until fired upon” highly problematic. If the other side has long-range weapons with advanced guidance and targeting systems, the side that waits will not have the opportunity to respond. A rocket-propelled grenade can kill from a distance, even if the shooter is only minimally competent. For a fighter pilot to wait until a heat-seeking missile is fired at her would be suicidal.65

Thus, “don’t fire unless fired upon” can be a very dangerous rule in today’s world; it is hardly likely to be followed, and really cannot be the touchstone of self-defense. Therefore, there must be an element of preemption included in the modern conception of self-defense. That element can be found in Webster’s definition of preemptive force, which requires that preemptive force be employed when “necessary.”66 Because necessity is a part of the statement of the rule, the


64. Harold Hongju Koh, Legal Adviser, U.S. Dept’ of State, Annual Meeting of the American Society of International Law (Mar. 25, 2010), available at http://www.state.gov/s/l/releases/remarks/139119.htm (“[S]ome 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 an armed conflict or in legitimate self-defense is not required to provide targets with legal process before the state may use lethal force.”).

65. See generally Moseley, supra note 54 (presenting traditions of rules of combat); see also generally Brook & Epstein, supra note 53 (discussing Just War theory as a basis for retuning violence with violence as the methods and means of war change).

idea of preemption is not really separate from the basis of self-defense at the outset. In other words, preemption is not a subset of self-defense—it is self-defense. Hence, if the use of deadly force is reasonably necessary to prevent great bodily harm to myself, then I am allowed to use it.

This proposition focuses on necessity as perceived from V's point of view. It is only when we look at the rule from the point of view of P that we get an image of preemption as a separate concept. That is because we are now looking at what P has done to create the apparent imminent threat of great bodily harm. If P has created only an apparent threat and not an actual threat, then preemption is not in fact necessary to prevent harm to V, but P is responsible for the appearance of necessity and thus at risk.

In other words, self-defense is a two-person event, or a two-entity event in the case of nations. Neither V nor P can be viewed in isolation. The issue of self-defense depends upon the relationship between them, not on the behavior of either acting alone. Substitute a criminal organization for one side of the formula and it should be obvious that the nature of the entity does not significantly alter the calculus of reasonable apprehension of great bodily harm on the other side of the formula.

If we wanted to do so, we could abandon the language of preemptive force altogether and argue any given situation merely with the language of self-defense as a necessary use of force. That rubric works in both civilian criminal law and in the law of nations.

IV. INDIVIDUAL TARGETING WITH ROBOTIC WEAPONS

In general, the principles regarding self-defense are the same whether we are talking about a bar fight or a war. The use of lethal force requires a reasonable belief in the necessity of avoiding an imminent threat of great bodily harm. In the context of jus ad bellum, armed attack is not legal for an aggressor but only for self-defense. But in the context of jus in bello, the imminence of threat is satisfied merely by armed belligerency, although the accuracy of information is critical to the necessity and proportionality of lethal force (i.e., avoidance of collateral damage). These general principles are universal even though they are difficult to apply in practice and frequently violated.67

Robotic weapons cause concerns about the propriety of lethal force for several reasons:

1. There is disagreement regarding their accuracy. Guidance systems may provide for more precise deployment of force, but they are also prone to mistakes. This is either because the operator is at a distance

67. See O'Connell, supra note 59, at 6-8.
from the target or because (in truly robotic weaponry) there is no human operator.\footnote{68}

2. They are impersonal. Their distancing and the resulting dehumanization of violence arguably make it much easier to inflict death without remorse. The greater the distance between the killer and the victim, the less emotional restraint that will be shown on the part of the former.\footnote{69}

3. The scope of the other guy’s lethal potential makes waiting for an imminent threat very problematic; waiting until fired upon may mean not living to respond. Thus, as weapons become increasingly sophisticated and powerful, the inclination to adopt a “shoot first and ask questions later” policy becomes more powerful.\footnote{70}

4. There are concerns about the nature of the operators, some of whom will be civilian, rather than uniformed personnel subject to a visible chain of command. In futuristic scenarios, “machine v. machine” means that human infrastructure will be the target and we could literally bomb ourselves back to the Stone Age.\footnote{71}

A. Question One: Is Remote Killing Illegal?

Not necessarily, but it raises concerns that need to be carefully watched.

Consider the following argument which proceeds from common practice to moral acceptability: “To military professionals, the emphasis placed on the ‘remoteness’ from violence of drone weapons operators is misplaced. Navy personnel firing missiles are typically just as remote from the fighting, and yet one does not hear complaints about their indifference to violence and their ‘Playstation,’ push-button approach to war.”\footnote{72}

It is not true that there have been no complaints about the distance of bomb throwers from their targets. The Hague Convention of 1899 contained a set of provisions “Prohibiting Launching of Projectiles and Explosives from Balloons.”\footnote{73} The Hague Convention of 1907 placed severe restrictions on “bombardment” from any position.\footnote{74} There have been numerous objections to

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\item \footnote{69. See id. at 3, 9, 16.}
\item \footnote{70. See id. at 6.}
\item \footnote{71. See id. at 5, 9.}
\item \footnote{72. Id. at 3.}
\item \footnote{73. Laws of War: Prohibiting Launch of Projectiles and Explosives from Balloons (Hague IV), July 29, 1899, 32 Stat. 1839, T.S. No. 393.}
\item \footnote{74. Section II Hostilities, Chapter I Means of Injuring the Enemy, Sieges, and Bombardments, of the}
\end{itemize}
high-altitude bombing of populated areas or the areas nearby, even when legitimate targets are the putative focus.\textsuperscript{75}

The NATO bombing of Grdelica Bridge in Serbia killed fourteen civilians in a passenger train that was hit by missiles launched from an F-15 Eagle aircraft. General Wesley Clark, Commander of NATO forces at the time, asserted that the pilot was unable to make visual contact with the train. Some opponents have argued that the pilot should have been able to see the passenger train, and certainly would have if he had been at a lower altitude. Indeed, the entire NATO campaign against Serbia during the Kosovo War was questioned by the International Court of Justice as a “concern” because of the lack of U.N. Security Council authorization.\textsuperscript{76} The extent of civilian casualties from the bombing of populated areas has been a major factor in arguments that the campaign violated the rule of proportionality.\textsuperscript{77}

Does the objection to high-level bombing make it necessary that a warrior place himself in harm’s way? Framing the question this way implies that there is something immoral or unfair about the inequality of technological advantage inhering in modern weaponry. One counter to that proposition is that military technology fuels civilian advances. Another counter is that there is nothing unfair

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\item Convention (IV) Respecting the Laws and Customs of War on Land provides:
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\item Art. 25. The attack or bombardment, by whatever means, of towns, villages, dwellings, or buildings which are undefended is prohibited.
\item Art. 26. The officer in command of an attacking force must, before commencing a bombardment, except in cases of assault, do all in his power to warn the authorities.
\item Art. 27. In sieges and bombardments all necessary steps must be taken to spare, as far as possible, buildings dedicated to religion, art, science, or charitable purposes, historic monuments, hospitals, and places where the sick and wounded are collected, provided they are not being used at the time for military purposes.
\item It is the duty of the besieged to indicate the presence of such buildings or places by distinctive and visible signs, which shall be notified to the enemy beforehand.
\end{itemize}
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\textsuperscript{75} The bombing of Dresden on February 13-15, 1945 has been widely criticized and even labeled by some analysts as a “war crime” for its intense destruction of civilian life and residences. The principal justification for Dresden, that it harbored factories, is disputed. The justification for Hiroshima and Nagasaki has been based on “necessity” on the grounds that continuation of the war would have cost more lives than the bombing of the cities, a highly debatable proposition. See generally Michael Elliot, Europe: Then and Now, TIME, (Aug. 10, 2003), http://www.time.com/time/specials/packages/article/0,28804,2024035_2024464_2024440,00.html (German Novelist Gunter Grass: Dresden was a war crime); JOHN W. DOWER, EMBRACING DEFEAT: JAPAN IN THE WAKE OF WORLD WAR II 473 (1999) (A member of the Tokyo tribunal wrote: “If a means is justified by an end, the use of the atomic bomb was justified . . . for it brought Japan to her knees and ended the horrible war. If the war had gone longer, without the use of the atomic bomb, how many more thousands and thousands of helpless men, women and children would have needlessly died and suffered . . . ?”).


in one side advancing its cause by superior industry. The story of David and Goliath is about the longer reach of superior technology as well as about one side’s view of divine intervention. Indeed, asserting that the warrior should place himself in harm’s way for fairness reasons implies that warfare is a game in which the rules are designed to level the playing field, almost as if we were talking about scoring runs in a cricket match rather than killing human beings.

The whole thrust of human history with weapons has been to create more distance between oneself and the enemy—sticks led to swords and lances, catapults to cannons, guns to missiles, and now airborne bombers have wrought the UAV.

Placing the bomber in harm’s way arguably could be a factor in ensuring accuracy of targeting and in limiting noncombatant casualties, but these are debatable propositions. Is the UAV really more likely to lead to callous indifference to human life than is the high-altitude bomber? Arguably yes, as parents of teenagers addicted to World of Warcraft are likely to believe. The “Playstation” approach to life comes from the attraction of virtual reality. For some reason, fantasy games are more engaging to the imagination than mere intellectual puzzles such as chess or sudoku. In fact, the computerized versions of chess and sudoku are more engaging for many people than the chessboard or paper-pencil version of the same game.

Does this concern make the UAV or high-altitude bombing illegal per se? No, it means that there should be heightened attention to the prospect of collateral damage when the killer is remote from the killed.

B. Question two: Is remote targeting of an individual different from face-to-face targeting?

Yes, but the factors to be considered are still the same.

If we take President A. Barak’s formulation and apply it to the drone-launched attack on a suspected militant, we can see that the criteria for validity of the attack are not really modified by the choice of weapon, although the weighing of information may be affected. Let’s take the factors in order:

1. Accurate identification of the target. In theory, the drone should provide highly detailed identification of the individual. But monitoring the movements of a suspect from a distance when the

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78. See Anderson, supra note 68, at 16-17.
79. See id. at 6.
82. Id. at paras. 23, 24.
suspect is mingling with other persons may heighten the prospects of targeting noncombatants.

2. Feasibility of capture. The use of robotic technology should not affect the applicability of this factor. In theory, the availability of distance surveillance could increase the ease of capture by alerting ground forces of the precise location of the suspect, but obviously the ease of killing may reduce the incentive for capture.

3. Steps to minimize excess casualties. Likewise, this factor applies to targeted killing regardless of the mechanism for delivery of the weapon. Again, in theory, the precision of targeting should produce fewer innocent casualties, but the frequency of complaints from Pakistan implies that this may not always be the case.83

4. Post-action review. This is part of standard operating procedure for American troops in any situation of hostilities.84

Bottom line? There really is none. Bob Baer has made the important point that the Israelis have far better intelligence and operational ability to send a team on the ground into Hebron than the United States is going to have in Waziristan. This comment nicely demonstrates the combination of pragmatism and idealism that goes into the need for careful assessment of the target and consequences of using a large weapon. “The problem[] is in . . . the tribal areas of Pakistan, you are creating uncountable enemies by dropping bombs on them, and it will just prolong the war in Afghanistan and threaten to spread to the rest of Pakistan if we keep on doing this.”85

The most difficult aspect of all this is measuring the likelihood of imminent threat. It seems like a given that it is permissible during times of armed conflict to target command officers at home or while on R&R.86 During time of armed

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86. I have wondered whether the movie “Dirty Dozen” portrayed a war crime in operation. As I recall, the American team was sent to target German officers while in the company of “hostesses” at a luxury lodge far from the front lines and they blew up the whole place, women and servants included. There may have been excess collateral damage and the method of burning an occupied building may have been cruel, but military experts seem to agree that the basic proposition of targeting off-duty personnel is permissible. There is no such thing as “off-duty” in the case of combatants in armed conflict. THE DIRTY DOZEN (Metro-Goldwyn-Mayer (MGM) 1967).
conflict, there is really no such thing as “off duty,” and every person in uniform represents an imminent threat. The same is not true of civilians who may take an active part in hostilities at some times and not at others. Nor is it true of military personnel outside the context of armed conflict—it is a crime to kill a uniformed soldier in peacetime.

Of course, in asymmetric conflict there are no uniforms, no recognition of imminent threats, and many gradations of future participation in violence. The suicide bomber was trained by one person, equipped by another, funded by a third, and given strategic directive by yet another. Is each of those persons a legitimate target for killing? Some would argue yes because of their past behavior. Others would argue that the past is only a rough guide to future threat, and killing must be based on future threat. 87

The bottom line thus becomes a malleable concept. Targeted killing by UAVs is permissible if the information is accurate, the threat is imminent, and the damage can be confined. Is it smart to do so? Not if you are creating more enemies than you eliminate. And the final fuzzy point is that robotic weapons cannot be ruled illegal per se, but they could eventually lead to mechanized warfare in which the natural limitations of human survival become lost. Not a good idea.

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87. Guiora, supra note 46.