Note

Precision War and Responsibility: Transformational Military Technology and the Duty of Care Under the Laws of War*

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I. INTRODUCTION

On January 3, 2006, an American military aircraft dropped a precision-guided munition (PGM) on a house near Baiji, Iraq, 150 miles north of

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Baghdad. The house was thought to be an insurgent redoubt, but media reports indicated the strike was in error; an Iraqi family of twelve was killed, including women and children.\(^1\) Although a military spokesman emphasized the great care with which targets are selected, American military reconnaissance and precision strike capabilities are so advanced that efforts to explain such tragic events as mechanical or human errors have sometimes been met with skepticism.

Some have gone as far as to allege intentionality—claiming that the U.S. military technology that has performed so brilliantly in wars in Iraq, Afghanistan, and the former Yugoslavia is just too good to permit good-faith mistakes. During the Kosovo war, for example, Chinese officials claimed that the May 7, 1999, destruction of Beijing’s embassy in Belgrade by a B-2 stealth bomber armed with global positioning system (GPS)-guided bombs could not have been the “tragic mistake” that then-CIA Director George Tenet attributed to “basic failures . . . of systems and procedures that are used to identify and verify potential targets.”\(^2\)

More credible and significant, however, have been accusations that the American military has, in essence, used its advanced capabilities negligently. In response to civilian deaths in recent wars, Human Rights Watch has said that U.S. efforts to verify targets for precision strikes “have not been sufficiently rigorous, to date, to avoid substantial harm to civilians. The standard of care should be higher.”\(^3\)

Obeying the law of war has long been official U.S. policy,\(^4\) and on balance the U.S. military has an exemplary record regarding the care with which it employs force.\(^5\) Precisely because of its impressive equipment,

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4. Last year the Department of Defense (DoD) re-issued its core LOAC training order. See DEP’T OF DEF., DIRECTIVE 2311.01E, LAW OF WAR PROGRAM § 4.1 (May 9, 2006). The Department’s LOAC training guidance was first issued in 1974 after the My Lai massacre in Vietnam. See Colin H. Kahl, How We Fight, FOREIGN AFF., Nov.-Dec. 2006, at 83, 85.
5. This impression is not widely shared among the global public. A June 2003 Pew Global Attitudes survey found that the view that the United States “didn’t try hard enough” to avoid civilian casualties during the invasion of Iraq in 2003 was widely shared—including by more than 90 percent of Jordanians, Moroccans, and Palestinians. PEW RESEARCH CENTER FOR THE PEOPLE & THE PRESS, VIEWS OF A CHANGING WORLD 24-25 (June 2003), available at http://pewglobal.org/reports/pdf/185.pdf. It is unlikely that attitudes apparent in 2003 would have improved over the course of four more years of a war that has claimed tens of thousands of lives. For discussion of Iraqi casualty figures, see Kahl, supra note 4, at 86-87.

In contrast, one scholar who recently studied U.S. LOAC compliance in Iraq concludes that “despite some dark spots on its record, the U.S. military has done a better job of respecting noncombatant immunity in Iraq than is commonly believed . . . [and] has been improving.” Id. at 84. “All told, the number of civilian deaths per ton of air-delivered munitions during major combat in Iraq” was a small fraction of what it was in World War II, reflecting advances in technology but produced primarily by abandonment of World War II-era “intentional efforts to destroy enemy morale” by
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It is conceivable that future apologies for "collateral damage" will not only be met with skepticism but also with calls for those responsible to be prosecuted for war crimes. The aggrieved may argue: Under the laws of war, it was criminally negligent for a military with such revolutionary technology—and thus unprecedented ability to adhere to legal requirements of necessity, discrimination, proportionality, and humanity in the use of force—to have caused collateral damage, even unintentionally.

From the post-World War II war crimes trials, to the ad hoc international criminal tribunals for the former Yugoslavia and Rwanda, to the trial of Saddam Hussein, the past six decades have witnessed repeated efforts to hold commanders accountable (directly and via command responsibility) for deliberate attacks on non-combatants. To date, however, no international war crimes litigation has focused on purely accidental violations of the laws of war attributed to negligent use of the advanced technology that has brought about the American "Revolution in Military Affairs" (RMA), now often referred to by the shorthand appellation "Transformation."

The criticisms offered by Human Rights Watch and others makes exploration of technology's impact on jus in bellum warranted, with an eye toward the theoretical possibility that litigation might one day be initiated on

bombing population centers. Id. at 88. For discussion of changes in targeting philosophy, see SAHR CONWAY-LANZ, COLLATERAL DAMAGE: AMERICANS, NONCOMBATANT IMMUNITY, AND ATROCITY AFTER WORLD WAR II (2006).


Accordingly, this Note will ask: Is technological transformation also transforming legal responsibilities regarding accidents in war?

My answer proceeds in Part II by describing the law of armed conflict (LOAC) as including proscriptive and prescriptive zones, in the latter of which combatants bear a duty of care. Part III reviews the jurisprudential basis of this duty, while Part IV examines treaty sources and state practice. Combatants are strictly subject to this duty of care, but I argue that performance carries what lawyers would recognize as a negligence standard—albeit an uncertain one.

Part V explores the idea of a "reasonable combatant" and explains that under LOAC's duty of care, as in negligence law under tort and agency, responsibility for effects generally varies with control. Advanced military technology on a prima facie level increases the potential ability of combatants to control the application of force. However, this obligation to exert as much control as is reasonably possible over effects cannot equal a duty of perfect effects. A standard regarding unintended harm to noncombatants akin to strict liability is not compatible with the nature of war, and could have perverse consequences. As I explain in Section V.D, the availability of better military technology does not demand abandonment of a negligence standard. Rather, to stimulate further exploration of the negligence standard, I suggest understanding LOAC's duty of care in fiduciary terms. Although the analogy is far from perfect, combatants are in an important respect analogous to trustees: even in the wartime service of the nations that are their principals, they remain obligated to act reasonably in the interests of LOAC's beneficiaries—noncombatants, their property, and prisoners.

Finally, Part VI offers several brief thoughts on potential adjudicatory challenges for, and implications of, any war crimes prosecutions related to negligence in the use of RMA systems. Although criminal negligence as a LOAC doctrine may be too undefined to be a basis for prosecutions in its own right, duty of care analysis could inform courts-martial proceedings for more common infractions such as dereliction of duty or "conduct unbecoming." And not for noncombatant harm alone; duty of care analysis might inform national-level prosecutions for friendly fire incidents, as well. This Part further argues that incorporation of the LOAC duty of care into prosecutions at the national level is broadly consistent with the transnational norm diffusion process identified by the New Haven School of International Law. This Note concludes by emphasizing a basic principle of human civilization: with great power comes great responsibility.

II. ARCHITECTURAL OVERVIEW: LOAC

Reference to the "law of war" and "war crimes" generally brings to mind what I believe it helpful to think of as LOAC's proscriptive core of
banned intentional uses of force. Building on the 1907 Fourth Hague Convention’s foundational stipulation that the “right of belligerents to adopt means of injuring the enemy is not unlimited,” a variety of means and methods of war among combatants have been banned. Additionally, a body of law built on the Geneva Conventions prohibits—and customary international law and the statutes of the international criminal tribunals for the former Yugoslavia and Rwanda and the Rome Statute of the International Criminal Court criminalize—deliberately subjecting the helpless to violence: troops hors d’combat due to wounds, shipwreck, or capture; noncombatants, and noncombatant property not used for military purposes by the enemy, from homes to hospitals to cultural sites. The LOAC regime also designates some uses of force as “grave breaches” of the law of war, such as torture, biological experiments, taking hostages, and genocide. The post-World War II prosecutions of those responsible for the war crimes of Nazi Germany and Imperial Japan stand collectively for the Nuremberg principle: Individuals are responsible for war crimes, even if they were “just following orders” or if they merely ordered others to do illegal things.

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20. See, e.g., Geneva Convention III, supra note 17, art. 3(1)(a).


Yet LOAC’s reach is broader. Beyond this core of proscribed intentional uses of force lies a prescriptive zone in which LOAC is binding and limits the use of force against legitimate military targets where harm to protected persons and property is unintended but possible. Here, LOAC governs operations via the four core principles of military necessity (use force only where necessary and legal),

discrimination (target military objectives, not protected persons and property), proportionality (prevent noncombatant harm that is excessive in relation to the military benefit),

and humanity (avoid unnecessary suffering). Unfortunately, precise understandings of what these principles mean for forces operating in good faith can be elusive.

Against the backdrop of such uncertainty, I argue that the application of these four principles beyond proscribed intentional illegal uses of force can be understood in terms of LOAC imposing a duty of care on combatants, one that prohibits the negligent infliction of unintentional harm. In the prescriptive zone, the legal regime’s mandate is more than a simple list of dos and don’ts. Instead, combatants owe a duty to those protected by the laws of war—those on the receiving end of fire—analogous, at the least, to the duty individuals in municipal society owe to one another outside the intentional harm proscriptions of the criminal code: to take reasonable precautions under the circumstances not to cause unintentional harm.

The existing academic literature does not organize LOAC into proscriptive and prescriptive zones. Nor does it generally recognize the duty of care I identify under jus in belli. This Note is therefore an initial effort to bring the literature up to date with practice and suggest new areas for inquiry. As the next Part explains, a duty of care is evident in a line of command responsibility cases running from the post-World War II war crimes tribunals through the ad hoc international criminal tribunals of the present day. Part IV will discuss the treaty and practice bases of this duty.

24. These principles also apply in the proscriptive zone, which bans their intentional violation.

25. “Military necessity . . . consists in the necessity of those measures which are indispensable for securing the ends of war, and which are lawful according to the modern law and usages of war.” Francis Lieber, Instructions for the Government of Armies of the United States in the Field, U.S. War Dep’t General Orders No. 100 art. 14 (Apr. 24, 1863), available at http://www.yale.edu/lawweb/avalon/lieber.htm.

26. “[T]he Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.” Geneva Protocol I, supra note 19, art. 48.

27. “An attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated” is not proportional. Geneva Protocol I, supra note 19, art. 51(5)(b).

28. Combatants may not “employ arms, projectiles, or material calculated to cause unnecessary suffering.” Hague IV, supra note 11, art. 23(e).


30. Although some have come close, see, e.g., Michael N. Schmitt, Bellum Americanum: The U.S. View of Twenty-First Century War and Its Possible Implications for the Law of Armed Conflict, 19 MICH. J. INT’L L. 1051, 1081 (1998) (evaluating collateral damage incidents “will turn on exercise of ‘due care’ in analyzing the target and selecting the weapon and tactic to use”). As discussed in Part V, however, scholars have argued that under jus post bellum occupying states bear a duty of care to the citizens of the countries they govern.
III. DUTY OF CARE: JURISPRUDENTIAL BASIS

In a series of cases, the post-World War II and current tribunals handed down convictions of commanders for, inter alia, what amounts to criminal negligence in the supervision of subordinates. In so doing, these courts implicitly recognized within LOAC a duty of care that extends even to those who claim not to have intended to cause intentional harm to civilians. This endures despite the recent effort of the ICTR and ICTY to move command responsibility into LOAC’s proscriptive zone.

The term “negligence” is not found in the treaty law that preceded World War I. Nor is it explicit in the Nuremberg or Far East international military tribunal statutes, nor in the orders that established post-World War II U.S. military commissions (nor even in the much later statutes that established the ICTY or ICTR). Rather, the notion that soldiers could be criminally negligent was first clearly recognized at the international level by the post-World War II war crimes courts in decisions in which German and Japanese commanders were found liable for atrocities committed by their subordinates, over their protestations of ignorance about specific acts. These verdicts were informed legally by the notion of criminal negligence in state law, the statutes and regulations establishing the tribunals, a number of generally worded provisions in the 1907 Hague and 1929 Geneva Conventions regarding the binding nature of LOAC on commanders, and customary international law on command responsibility that was still very much emerging. Rather than applying settled law, “[i]t was during the war crimes trials themselves that the doctrine of command responsibility developed” and along with it criminal negligence in international law.

The most controversial and precedential prosecution was of General Tomoyuki Yamashita, commander of Japanese forces in the Philippines. Yamashita was tried by a U.S. military commission and sentenced to death for large-scale atrocities against Philippine noncombatants and Allied POWs carried out by his subordinates. The 1945 regulation under which the general was tried stated that “leaders . . . participating in the formulation or execution

31. Although breach of a duty of care is most often discussed in relation to civil suits for negligence under the domestic law of tort and agency, criminal negligence by definition requires existence and breach of a duty of care as well.
34. See ICTY Statute, supra note 13; ICTR Statute, supra note 13.
35. “Up until the post-World War II war crimes trials, the doctrine of command responsibility in international law was limited to the brief pronouncements in treaty law relating to the requirement that responsible commanders lead lawful belligerents,” Michael L. Smidt, Yamashita, Medina, and Beyond: Command Responsibility in Contemporary Military Operations, 164 MIL. L. REV. 155, 174 (2000), specifically Article 3 of the Hague Convention of 1907 and Article 26 of the 1929 Geneva Convention, see id. at 184. The doctrine at the international level was based primarily on customary international law. The first known command responsibility trial in the West was that of Peter of Hagenbach in 1474. See William H. Parks, Command Responsibility for War Crimes, 62 MIL. L. REV. 1, 4 (1973).
37. This commission, it should be noted, was composed of generals without legal backgrounds. Id. at 177.
of any . . . common plan or conspiracy will be held responsible for all acts performed by any person in execution of that plan or conspiracy," but Yamashita claimed no knowledge of the atrocities and his defense protested that he faced execution under an ex post facto law. Regardless, the military commission concluded that "where murder and rape and vicious, revengeful actions are widespread offenses, and there is no effective attempt by a commander to discover and control the criminal acts, such a commander may be held responsible, even criminally liable, for the lawless acts of his troops." 39

While *Yamashita* has come to be widely understood to stand for a "knew or should have known" standard, 40 a minority view holds that the commission found the general strictly liable for war crimes under his command. 41 Michal Stryszak takes a third position, arguing that in practice the commission employed an actual knowledge or "must have known" standard. That is, Stryszak contends that Yamashita was convicted not because knowledge of which he was ignorant was imputed to him, but because the commission "simply believed that Yamashita knew the facts." 42

Stryszak argues that decisions in the post-World War II prosecutions that followed *Yamashita* further muddied matters by providing indirect support for a "should have known" standard while often ruling in actuality on the basis of a narrower "must have known" standard. 43 Regardless, the more general proposition of criminal negligence in *LOAC* was affirmed. Key cases include *Toyoda* ("[I]f this accused knew, or should by the exercise of ordinary diligence have learned, of the commission by his subordinates . . . of the atrocities . . . and, by his failure to take any action to punish the perpetrators, permitted the atrocities to continue, he has failed in his performance of his

38. Id. at 175, 179, 176 n.87.

The U.S. Supreme Court upheld the authority of the commission to try Yamashita. See *In re* Yamashita, 327 U.S. 1 (1946). The Court responded to the defense's argument that the doctrine of command responsibility is tantamount to an ex post facto law by reasoning that unrestrained troops would "almost certainly" violate the law of war and defeat its purpose of protecting noncombatants and prisoners, and therefore even the general language of the Hague and 1929 Geneva Conventions imposed "an affirmative duty" on Yamashita "to take such measures as were within his power and appropriate in the circumstances" to ensure his subordinates complied with the law of war. Id. at 15-17. In other words, harm to civilians in violation of *LOAC* by subordinates is foreseeable and commanders are in breach of their duty to adhere to *LOAC as commanders* unless they take reasonable precautions within their capacity under the circumstances to prevent it. Justices Murphy and Rutledge filed eloquent dissents.
40. See, e.g., Smidt, supra note 35, at 181, 184.
41. This view was held by Yamashita's defense counsel and Telford Taylor, chief U.S. prosecutor at Nuremberg, and has some support in the legal academic literature. See Michal Stryszak, *Command Responsibility: How Much Should a Commander be Expected to Know?*, 11 U.S. AIR FORCE ACAD. J. LEGAL STUD. 27, 43, 73 n.93 (2002).
42. Id. at 43. Stryszak traces the development of a knowledge requirement in command responsibility and argues that "a pure 'should have known' standard" should be adopted, reflecting "the proper balance between humanitarian objectives and the practical limitations a commander faces." Id. at 28.
43. Id. at 44-57. Stryszak argues that the *High Command and Hostage Cases*, like *Yamashita*, generally have been read as consistent with the "knew or should have known" standard, but in reality German commanders were convicted under a "must have known" standard—the commissions did not believe they were ignorant. See generally id.
duty."), 44 Pohl (a defendant commander’s “assertions that he did not know what was happening in the labor camps and enterprises under his jurisdiction does not exonerate him. It was his duty to know”), 45 and Roechling (“[It] is his duty to know what occurs in his organization, and lack of knowledge, therefore, can only be the result of criminal negligence.”). 46 Of particular note is the High Command case, in which something akin to strict liability was rejected in favor of fault or negligence liability (although of a culpable negligence or recklessness variety):

Criminality does not attach to every individual in this chain of command . . . . There must be a personal dereliction. That can occur only where the act is directly traceable to him or where his failure to properly supervise his subordinates constitutes criminal negligence on his part. In the latter case it must be a personal neglect amounting to a wanton, immoral disregard of the action of his subordinates amounting to acquiescence. 47

With a foundation in the form of these post-World War II cases, Articles 86 and 87 of Additional Protocol I to the Geneva Conventions (adopted in 1977), 48 Article 7 of the ICTY Statute, and Article 6 of the ICTR Statute, the international war crimes tribunals currently in operation have also embraced command responsibility and with it the notion of criminal negligence. However, embrace of conflicting understandings of criminal negligence in trial court opinions prompted appellate chambers to decry it in their command responsibility cases, but not more generally negate the notion.

In Celebici I, a trial court tracked municipal law’s aversion to simple negligence as a basis for criminality. Here, “some ICTY judges were inclined to limit imputed responsibility to those cases where a superior ‘wantonly’

44. United States v. Toyoda, Judgment 4999, Official Transcript of Record of Trial, at 5006 (1949), cited in Prosecutor v. Blaškić, Case No. IT-95-14-T, Judgment, ¶ 316 (Mar. 3, 2000), available at http://www.un.org/icty/Blaškić/trial1/judgement/index.htm (emphasis added). This prosecution did not result in a conviction. Stryszak writes that Toyoda, “while also incorporating a reasonableness standard, slightly confused the issue by espousing both a ‘must have known’ and a ‘should have known’ standard, which are not the same.” Stryszak, supra note 41, at 56-57.

45. United States v. Pohl (1947), in 5 TRIALS OF WAR CRIMINALS BEFORE THE NUERNBERG MILITARY TRIBUNALS UNDER CONTROL COUNCIL LAW No. 10, at 195, 1055 (1997 ed.) [hereinafter TRIALS OF WAR CRIMINALS] (emphasis added). The in-text quote is from the part of the Pohl verdict concerning Karl Mummenthey, who “as an SS officer, wielded military power of command” in the forced labor division of the SS. Id. at 1052. He therefore “could not help knowing about concentration camp labor” and abuses, id. at 1053, and thus Mummenthey’s “criminality lies in culpable indifference to humanity,” id. at 1054.

46. Military Gov’t for the Fr. Zone of Occupation in Germany v. Roechling (1949), in 14 TRIALS OF WAR CRIMINALS 1061 app. B at 1106 (emphasis added). In this case, German industrialists and government officials were tried for their participation in Nazi Germany’s crimes of aggression, crimes against humanity, and war crimes, including inter alia the plundering of protected property and enslavement and ill-treatment of noncombatants and POWs. Although the “defense of lack of knowledge” was raised and rejected, the tribunal also found considerable evidence of direct violation of the law of war by the defendants. See id. at 1119, 1139-1140.

47. United States v. Von Leeb (High Command Case) (1948), in 10-11 TRIALS OF WAR CRIMINALS 1 (vol. 10), 543-44 (vol. 11) (emphasis added). Distinguishing Yamashita on the facts, the High Command judgment applies a similar but still somewhat narrower formulation than the Yamashita “knew or should have known” standard: “[T]he occupying commander must have knowledge of these offenses and acquiesce or participate or criminally neglect to interfere in their commission and . . . the offenses committed must be patently criminal.” Id. at 544-45.

48. Although Protocol I is generally accepted as customary international law, there is some skepticism about whether this particular provision has achieved that status. Mirjan Damask, The Shadow Side of Command Responsibility, 49 AM. J. COMP. L. 455, 486 n.60 (2001).
disregarded specific information available to him of a character that should have alerted him to the impending criminal activity of his troops. 49 However, in Blaskic I, another ICTY trial court hewed closer to the criminalization of simple negligence in some circumstances in national military codes, opining that a commander could be criminally liable for simply knowing he was obligated, but failing to establish, procedures that would have let him know of subordinate war crimes. 50 In Bagilishema I, in contrast, an ICTR trial court wrote that “ordinary principles of the law of negligence apply to ascertain whether an accused person was in breach of a duty of care towards his or her victim,” yet at other points gave mixed signals about what variety of negligence standard applied. 51

Certainly, “to call someone a ‘negligent war criminal’ sounds strange to lay ears.” 52 Confusion about negligence standards only made matters worse. In response, the ICTR Appeals Chamber held in Bagilishema II that criminal negligence “has not been clearly defined in international criminal law,” is “likely to lead to confusion of thought” regarding command responsibility, and therefore “[i]t is better . . . that Trial Chambers do not describe superior responsibility in terms of negligence at all.” 53 Bagilishema II also embraced the ICTY appellate court’s clarification in Celebici II of the “had reason to know” knowledge standard in the Tribunal statutes: command responsibility pertains “only if information was available to him which would have put him on notice of offences committed by subordinates” 54 and the commander failed to take “necessary and reasonable” remedial steps. Bagilishema II was endorsed by the ICTY appellate body in Blaskic II. 55

Within the last Part’s framework, these appellate decisions can be understood as an effort to move command responsibility into or closer to LOAC’s proscriptive zone. If the commander is “on notice” of potential subordinate crimes, failing to prevent or punish looks less inadvertent and more analogous to a soldier being suspicious that a magazine contains illegal exploding bullets but using it anyway.

However, the appellate decisions could not entirely dispose of negligence notions. Both tribunal statutes were written with Yamashita and criminal negligence prosecutions in mind 56 and, again, require commanders to take “necessary and reasonable measures” to prevent and punish. 57

49. Id. at 465, 463 n.18; Prosecutor v. Mucic (Celebici I), Case No. IT-96-21-T, Judgment, ¶ 393 (Nov. 16, 1998).
51. Prosecutor v. Bagilishema (Bagilishema I), Case No. ICTR 95-1 A-T, Judgment, ¶¶ 1010, 1011-12, 1021, 46 (June 7, 2001).
52. Damaška, supra note 48, at 466.
53. Prosecutor v. Bagilishema (Bagilishema II), Case No. ICTR 95-1 A-T, Judgment (Reasons), ¶¶ 34-36 (July 3, 2002).
54. Id. at ¶ 33; Prosecutor v. Mucic (Celebici II), Case No. IT-96-21-A, Judgment, ¶ 241 (Feb. 20, 2001).
55. Prosecutor v. Blaskic (Blaskic II), Case No. IT-95-14-A, ¶ 63 (July 29, 2004).
56. Smidt, supra note 35, at 200, 206.
57. ICTY Statute, supra note 13, art. 7(3); ICTR Statute, supra note 13, art. 6(3) (emphasis added).
Subsequent academic analyses\(^5^8\) suggest that a gross negligence or recklessness standard now operates and that simple negligence was rejected, of the kind found in the U.S. Uniform Code of Military Justice (UCMJ).\(^5^9\)

Ultimately, these opinions only proscribed negligence analysis in command responsibility cases. They did not overturn the post-World War II cases, much less eliminate criminal negligence generally from LOAC. The genie is out of the bottle. Enduring is the idea that combatants in LOAC's prescriptive zone generally have a duty of care in adhering to the laws of war, and that a negligence standard—of some kind—is appropriate where intent to violate LOAC cannot be established.

Setting the command responsibility context aside for the moment, combatants also directly bear an obligation not to be criminally negligent in their own acts. As the next Part explains, in the years between the war crimes tribunals of the mid-1940s and those of the 1990s and 2000s, LOAC evolved in precisely this way through treaty law and state practice.

IV. THE DUTY OF CARE: TREATY AND PRACTICE BASES

On March 26, 2007, retired General Barry R. McCaffrey filed a report with his West Point colleagues on his recent visit to Iraq. In an assessment alternately gloomy and inspiring, the general recounted watching

with fascination the attack video of an Apache [helicopter] whose pilots held fire at absolutely the last second—when what they suspected (correctly) was an innocent farmer appeared in the foreground of a pending Hellfire [missile] launch against 5-6 armed insurgents. The pilot painstakingly changed his attack angle—and sailed the Hellfire over the farmer's head and successfully nailed the insurgents.\(^6^0\)

Captured in digital form, the general was witnessing a pilot adhering to LOAC even though he had no intent to violate it, and even though he—personally engaged in combat—could not have been prosecuted under a command responsibility theory.

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58. See, e.g., Kai Ambos, Joint Criminal Enterprise and Command Responsibility, 5 J. INT’L CRIM. JUST. 159, 179 (2007) ("any form of negligence, including an unconscious one will suffice, contrary to the interpretation" in Bagilishema II and Blaskic II); David L. Nersessian, Whoops, I Committed Genocide! The Anomaly of Constructive Liability for Serious International Crimes, 30 FLETCHER F. WORLD AFF. 81, 95 (2006) (knowledge and “the reasonableness of [a commander's] response already are governed by principles of gross negligence”); Allison Marston Danner & Jenny S. Martinez, Guilty Associations: Joint Criminal Enterprise, Command Responsibility, and the Development of International Criminal Law, 93 CAL. L. REV. 75, 129 (2005) ("something greater than ordinary negligence is required to trigger liability").

59. See, e.g., Uniform Code of Military Justice art. 134 (codified at 10 U.S.C. § 934) (2004) [hereinafter UCMJ]. Article 134 is a General Article allowing criminal prosecution for "all disorders and neglects to the prejudice of good order and discipline in the armed forces, all conduct of a nature to bring discredit upon the armed forces, and crimes and offenses not capital" not otherwise criminalized. This includes negligent homicide. See MANUAL FOR COURTS-MARTIAL, UNITED STATES, at IV-111, para. 85(c)(2) (2005 ed.) (citing Article 134’s definition of “simple negligence”), available at http://www.au.af.mil/au/awc/awcgate/awcm.pdf [hereinafter MCM]. "There is a special need in the military to make the killing of another as a result of simple negligence a criminal act," stemming from the military's highly lethal capabilities. United States v. Kick, 7 M.J. 82, 84 (1979).

The Apache sortie reminds us that the law of war is not limited in its sweep to its prescriptive core. LOAC does not merely forbid the murder of civilians ordered by Hitler, Milosevic, and their minions, but covers the field, also embracing negligence, although of an indefinite variety. It binds combatants who in good faith seek only to neutralize legitimate military targets but in the process endanger protected persons and property.

The definitions of negligence under U.S. military law are a helpful departure point. Simple negligence is defined as "the absence of due care, that is, an act or omission of a person who is under a duty to use due care which exhibits a lack of that degree of care of the safety of others which a reasonably careful person would have exercised under the same or similar circumstances." 61 "Culpable negligence" in the case of involuntary manslaughter is defined as "a degree of carelessness greater than simple negligence. . . . a negligent act or omission accompanied by a culpable disregard for the foreseeable consequences to others of that act or omission. . . . When there is no legal duty to act there can be no neglect." 62 Each of these elements of negligence in U.S. military law—a duty of care owed to victims of violence in war that requires reasonable steps in light of what is foreseeable under the circumstances—can be discerned in the key principles of LOAC as expressed in post-World War II treaties and state practice.

A. The Four Principles: Treaty and Customary Law

Although cognizable in the holdings of the World War II adjudications and the Geneva Conventions that followed—all of which make frequent allusions to "duty"—the 1977 Additional Protocol I to the Geneva Conventions provides the clearest treaty basis for finding a duty of care inherent in application of the four principles. 63 Article 57 is particularly significant for our purposes. Instead of using the prohibitory language of the Geneva Conventions regarding targeting civilians and mistreating prisoners, it calls for "Precautions in Attack," steps which amount to taking the greatest care a combatant can reasonably take under circumstances where noncombatant harm is not intended but is a real risk. In planning and executing attacks, combatants must:

(i) Do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects . . . ;
(ii) Take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians, and damage to civilian objects;

61. MCM, supra note 50, at IV-111, para 85(c)(2).
62. Id. at IV-65, para. 44(c)(2)(a)(i)-(ii).
63. See supra notes 15-18 and accompanying text (listing the treaty-based definitions of the four principles themselves).
(iii) Refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life . . . excessive in relation to the concrete and direct military advantage anticipated . . . .

Couched in terms of what is feasible and foreseeable for combatants in the circumstances of combat, these precautions embody the principles of discrimination, humanity, and proportionality, and do so in terms familiar to scholars and practitioners of negligence law. Article 57(4) of Geneva Protocol I requires combatants to “take all reasonable precautions” to avoid harming noncombatants. Most nations have ratified Geneva Protocol I, and the United States—which has signed but not ratified—regards most provisions of the Protocol as customary international law.

B. The Four Principles: Practice

That a duty of care has become, in essence, a customary principle of international law is evident from a brief survey of the practice of nations. The United States military has given specific force to Article 57 by quoting it verbatim in, inter alia, Air Force Pamphlet 110-31, International Law—The Conduct of Armed Conflict and Air Operations. In this manual, the U.S. Air Force also expresses military necessity in the following terms: “the principle which justifies measures of regulated force not forbidden by international law which are indispensable for securing the prompt submission of the enemy, with the least possible expenditures of economic and human resources.” That is, even outside of acts expressly proscribed by the law of war, care must still be taken to regulate force. Similarly, the Commander’s Handbook of Naval Operations issued by the U.S. Navy expresses the principles of necessity, discrimination, and proportionality thus:

- The right of belligerents to adopt means of injuring the enemy is not unlimited.
- It is prohibited to launch attacks against the civilian population as such.
- Distinctions must be made between combatants and noncombatants, to the effect that noncombatants be spared as much as possible.

Note that this is not a legal duty to inflict no harm. Reflecting a similar understanding, the Chief of the Royal Australian Air Force instructs commanders that “constant care must be taken to spare the civilian population and civilian objects to the maximum extent possible.” As the United

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64. Geneva Protocol I, supra note 19, art. 57(2)(a).
65. Id. (emphasis added).
69. RAAF, supra note 7, at 4 (emphasis added).
Kingdom’s Manual of the Law of Armed Conflict states, “civilian immunity does not make unlawful the unavoidable incidental civilian casualties and damage which may result from legitimate attacks upon military objectives,” provided that the former are warranted by the latter.70

Identifying protected persons and property, estimating and minimizing potential unintended harm, and weighing that risk against the military objective are often discussed in terms recognizable to lawyers as those of negligence law. As Matthew Waxman’s RAND Project Air Force study noted, “[f]rom a planning standpoint, the[] principles [of discrimination and proportionality] contain a foreseeability element: planners must consider collateral damage and likely injury to noncombatants or civilian property and must take reasonable actions to avoid or minimize these potential effects.”71

A report for the Canadian government on technology and the laws of war puts it plainly: “[f]rom the principle of distinction flows a duty of care . . . everything feasible must be done to verify that the objective to be attacked is neither civilians nor a civilian object but is in fact a legitimate military objective. This is an obligation of means and not an obligation of results.”72 Similarly, in response to reports of involvement of U.N. peacekeeping forces in prostitution rings and abuse of civilians, the United Nations issued a “Peacekeeper’s Duty of Care” stating that it is “the duty of each peacekeeper to protect the vulnerable . . . .”73 The Army National Guard of the state of Maine—which like every other U.S. state has deployed troops during the War on Terror—instucts its soldiers to “[t]ake all reasonable steps to shield civilians [and other protected categories] from unnecessary harm.”74

The United Kingdom makes clear that LOAC’s duty of care extends to all involved in military operations, and similarly couches it in the terminology of negligence. The Manual of the Law of Armed Conflict stipulates that those who “merely carry out orders for an attack also have a responsibility: to cancel or suspend the attack” if it appears to them that “the proportionality rule would be breached.”75 One is “normally only guilty of a war crime if he commits it with intent and knowledge,”76 yet “a failure to take reasonable steps to verify information [regarding an attack] might give rise to criminal responsibility.”77 In such a circumstance of criminal negligence, “the responsibility of the officer . . . would be assessed in the light of the facts as

71. WAXMAN, supra note 66, at 18 (emphasis added).
75. U.K. MINISTRY OF DEF., supra note 70, ¶ 5.32.9.
76. Id. ¶ 16.39.
77. Id. ¶ 16.45.2 (emphasis added).
he believed them to be, on the information reasonably available to him from all sources."  

V. THE REASONABLE COMBATANT: PRECISION BUT NOT PERFECTION

A. The Reasonable Combatant

As in the case of the negligence-based duty of care operative in LOAC's prescriptive zone, what we can term the municipal "law of responsibility"—tort and agency—focuses on the obligations of actors to those they harm unintentionally. With the exception of strict liability and intentional torts, this obligation, under tort law, generally takes the form of a duty not to harm another negligently by failing to exercise the care one would expect from a reasonably prudent person under similar circumstances. Well established defenses to tort liability, which are also operative in the municipal criminal negligence context, are perfect analogues to the fundamental reasons why it is not illegal to kill in war and why war, writ large, can be legal: necessity, self-defense, defense of others, and defense of property. Under the law of agency, an agent owes duties of care and loyalty to a principal to make reasonable decisions in the principal's interest. Principals, for their part, are responsible to third parties for the actions of their agents (usually contracts and torts) when those agents are acting within the scope of their employment.

We can therefore conceive of a "reasonable combatant," as one who has obligations to third parties—that is, unintended recipients of fire—for accidental harm inflicted directly and by agents. This reasonable combatant is protected by a general presumption of employing violence in good faith for reasons of military necessity. This combatant is likewise expected to exercise the care regarding foreseeable risks that a soldier of that individual's rank, training, and knowledge would under similar combat circumstances.

An additional principle common to both tort and agency law is central to this Part's analysis: As one executes one's duty of care, one's responsibility for harmful effects generally varies with one's capacity to exercise control. Generally, the greater a principal's control over an agent, the greater the principal's responsibility for the effects of an agent's actions on third parties. In the business world, principals are commonly employers, agents are hires, third parties can be customers or bystanders, and principals are sued for contract breaches and torts resulting from agent-third party interactions.

78. Id. (emphasis added).
79. Smidt writes of a "reasonable commander" in discussing Article 86(2) of Geneva Protocol I, but I use the broader term combatant to embrace subordinates also bound by LOAC's duty of care. See Smidt, supra note 35, at 202.
81. For a discussion of tort law on the subject, see id. at 28-60.
83. This agency responsibility idea has resonance in Geneva Protocol I: "A Party to the conflict which violates the provisions of the Conventions or of this Protocol shall, if the case demands, be liable to pay compensation. It shall be responsible for all acts committed by persons forming part of its armed forces." Geneva Protocol I, supra note 19, art. 91.
84. See, e.g., Restatement (Second) of the Law of Agency, supra note 82, § 219.
Analogized to war, principals are our reasonable combatants, agents are their means of attack (from programmable PGMs to subordinate soldiers—who in turn bear a duty of care), and third parties are the unhappy recipients of attack. Alternatively, depending on the situation, nations are principals and combatants are agents. Logically, then, greater ability to control the means of attack—which RMA systems offer—dictates a narrower margin before accidental harm to noncombatants begins to shade into negligence.

The prima facie tort case involves an act that is voluntary or the omission of one that is expected. Generally, the less voluntary one’s actions (or inactions in some situations), the less one’s liability, and vice versa. Capacity reasons underscore why very young children are not held liable, and why in the case of a common carrier or a professional, avoiding negligence generally means inflicting fewer harms than in the baseline case of a reasonably prudent non-professional under similar circumstances. Analogized to war, the more a reasonable combatant can control a legal use of force, the more he or she is responsible for unintended harms. This Note focuses on unintended harm to noncombatants and their property, but accidentally killing one’s fellow troops, or those of a multinational coalition partner, could equally raise questions about a combatant’s negligent performance of their duty of care, perhaps in connection with charges of manslaughter stemming from the use of RMA systems.

As Section V.B infra explains, the advanced systems of the RMA offer unprecedented capacity to control the effects of weapons. Accordingly, those who voice concern about noncombatant casualties inflicted by America’s high-technology military are, in principle, correct that this technology can bring heightened responsibility. As a general theoretical proposition, it would be negligent (at the least) for a military with greater ability to control violence in war to practice discrimination and proportionality no better than one with crude, unguided weapons, all else being equal.

Although tort law generally accords strict liability for harms caused by explosives and other ultra-hazardous materials, it would be wrong to decide that PGMs and other RMA systems now make it feasible to attach strict

85. A “military commander . . . is subject both to the orders of his military superiors and the state itself. . . . He is their agent and instrument for certain purposes in a position from which they can remove him at will.” United States v. Von Leeb (High Command Case) (1948), in 10-11 TRIALS OF WAR CRIMINALS 1 (vol. 10), 543 (vol. 11) (emphasis added).

RTGAM.20070316.wfriendlyfire0316/EmailBNStory/International/home. The coroner does not frame the allegation in terms of violation of a duty of care under LOAC, and he claims there is “no evidence the pilots were acting in self-defense.” Id. Assuming that the pilots did not target the British troops, this incident involves alleged criminality stemming from accidental harm to persons legally immune from direct attack. RMA technologies were all but certainly involved; media reports indicate that the pilots relied on datalinks with a forward controller on the ground and took video imagery. See id.
liability in the LOAC context to accidental harms caused by high explosives. As explained in Section V.C, due to the nature of war, the RMA itself, and adversary adaptation, the technologies of Transformation cannot transform the negligence-based duty of care into a duty of perfection. Unintended harm to protected persons and property in war is inevitable, and anything akin to a strict negligence standard would be unrealistic. In response to persistent uncertainty in LOAC about exactly what kind of negligence standard should pertain, and in view of LOAC's protection of individuals, in Section V.D I suggest drawing on another municipal law notion—fiduciary duty—to inform LOAC's duty of care.

B. "Effects-Based Targeting" and Responsibility for Effects

Although the facts when evaluating RMA systems involve strike and reconnaissance technology rather than an individual's position on a military organizational chart and the paperwork they receive, the principles are the same as those animating the command responsibility cases: control, knowledge, and responsibility for effects. As the ICTR wrote in Bagilishema I, "the essential element is not whether a superior had authority over a certain geographical area, but whether he or she had effective control over the individuals who committed the crimes, and whether he or she knew or had reason to know that the subordinates were committing or had committed a crime under the Statutes."88 These factors determined whether the harms that subordinates had caused would be attributed to the superior's negligence. Control and knowledge are likewise at the core of the RMA, which—all else being equal—can narrow the limits of acceptable effects.

The RMA is driven by synergetic advances that improve capacity to see, talk, and strike.89 Advanced intelligence, surveillance, and reconnaissance (ISR) systems hold out the possibility of providing commanders "dominant battlespace awareness"90: "the ability to see a 'battlefield' as large as Iraq or Korea—an area 200 miles on a side—with unprecedented fidelity, comprehension, and timeliness; by night or day, in any kind of weather, all the time."91 The second element is known in military shorthand as C4I: command, control, communications, computers, and intelligence. Through broadband datalinks and real-time virtual conferencing, increasing numbers of participants in military operations have a commonly accessible sense of the battlespace. Third, these targets can then be struck with remarkably precise weapons.92 The air "warfighter's weapon of choice," used more than 15,000

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88. Bagilishema I, Case No. ICTR 95-1A-T, Judgment, ¶ 45 (June 7, 2001).
89. For a description of the RMA in terms of information, weapon, and space systems and increasing military dependence on civilians and their infrastructure, see Schmitt, supra note 30, at 1059-69.
90. JOINT VISION 2010, supra note 9, at 13.
91. OWENS, LIFTING THE FOG OF WAR, supra note 8, at 14.
92. See id. at 15-16.
times since its introduction during the Kosovo air war,\textsuperscript{93} has been the Joint Direct Attack Munition (JDAM), accurate to less than ten meters.\textsuperscript{94}

Together, the RMA's "system of systems" has allowed "effects-based targeting," under which commanders choose and attack targets to produce certain \textit{results} rather than the target's \textit{destruction}.\textsuperscript{95} For example, an enemy's (dis)information ministry might be effectively neutralized with a precision strike on its transmitter, rather than destruction of the facility. As one would expect, "[t]he enhanced precision of air power . . . has strengthened international obligations to discriminate among targets. The legal regime's demands for civilian-military target distinction have further hardened as greater precision spurred the replacement of strategic theories emphasizing massive area bombardment with those emphasizing more economical uses of firepower."\textsuperscript{96} Expressed in terms of the duty of care, it would be negligent to inflict the same harms even though one's capacity for control has improved, assuming all else is equal.

A useful example is one of the areas of revolutionary advance in military technology most often cited by champions of the RMA: strategic air power. In World War II it could take hundreds of bombers and thousands of unguided bombs to attack a single target successfully (with the vast majority of bombs missing the target), while today, a single B-2 bomber with sixteen JDAMs can destroy sixteen targets nearly all the time. Today, use of conventional weapons\textsuperscript{97} to inflict anything approaching the level of harm frequently


\textsuperscript{96} WAXMAN, \textit{supra} note 66, at 11-12.

\textsuperscript{97} Any use of nuclear weapons would carry considerable risk of noncombatant harm due to the difficulty of confining radiation and other effects to military targets. Under the principle of proportionality, however, such unintended yet foreseeable harm would be balanced against military necessity. Although the significant risk of such harm would set the necessity bar high, it is far from theoretically insurmountable. Indeed, the United States developed and fielded (and against Japan in 1945 used) nuclear weapons for the stated reason that their use could be justified on national security grounds. Analysts can reasonably ask whether this stated reason still drives policy for states that possess or desire nuclear weapons, \textit{see}, \textit{e.g.}, \textit{THE NUCLEAR TIPPING POINT: WHY STATES RECONSIDER THEIR NUCLEAR CHOICES} (Kurt M. Campbell et al. eds., 2004); Dakota S. Rudesill, \textit{India's Nuclear Capability: Explanations, Implications, and Outlook}, Presentation at Project on Nuclear Issues Summer Conference, U.K. Ministry of Defence (June 16, 2005), but such states inevitably offer a military necessity rationale that suggests that use is more than a theoretical possibility.

Duty of care analysis might be quite relevant to limited nuclear use—for example, employment of a single warhead against a rogue state facility thought to contain weapons of mass destruction on the verge of launch. Collateral damage could lead to accusations of war crimes, prompting inquiry into the decisionmaking of the commanders focusing on what steps they took to inform themselves of the threat and the non-combatant risk, how seriously they weighed those considerations, whether they evaluated alternative means of neutralizing the threat (could multiple conventional "bunker-buster" PGMs have done the trick?), and ultimately what they knew (or believed they knew) and when they knew it. In other words, did they fulfill their duty of care or were they negligent in pulling the nuclear trigger?

This is a somewhat more definite view than taken by the International Court of Justice, which in 1996 held that there is no "conventional rule of a general scope, nor a customary rule specifically proscribing the threat or use of nuclear weapons \textit{per se}" and could not conclude whether threat or use
suffered by noncombatants in World War II would likely be characterized by many in the international community as a war crime.

This is a useful but obviously extreme example. The range of acceptable noncombatant suffering has clearly narrowed thanks to the RMA, but how much? Was one military scholar writing in the wake of Operation Allied Force correct that America can no longer afford to miss?98

C. A Duty of Care, Not of Perfection

After all, the RMA was explicitly sold to the Pentagon and the public not only on the basis of its promise of enhanced military capabilities against the enemy, but also on its promise to reduce casualties of all kinds—friendly,99 noncombatant, and even enemy.100 Accordingly, would it be so unreasonable for advocates for the victims of war to hold the United States to a legally heightened standard of care under which significant noncombatant casualties bring a presumption of criminal negligence?

For all of the RMA’s promise, it would not be appropriate to respond to the RMA by imposing on militarily advanced nations a duty of perfection. A sort of strict liability standard would be incompatible with the nature of war and could have perverse consequences.

1. The Nature of War

RMA advocates endeavored to lift the fog of war—or at least mitigate its impact101—through technological, organizational, and operational changes that have produced remarkable results. However, the “fog and friction” of which Carl Von Clausewitz wrote will always be a reality of war.102 There are limits to how much information about the “battlespace” humans can process, and decisionmaking will inevitably be shaped and judgment clouded by the uncertainty, fear, and anger that has always characterized war. Soldiers are reasonable people under the unreasonable conditions of war; a strict standard

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99. Pre-9/11 public and military expectations about casualties were a driving factor behind the RMA. For contemporary discussions, see, for example, Wesley K. Clark, Waging Modern War: Bosnia, Kosovo, and the Future of Combat 419 (2001) (noting that Operation Allied Force, which General Clark commanded as NATO’s Supreme Allied Commander, Europe, was characterized by “the exclusive reliance on [hi-tech] airpower, the reluctance to accept friendly casualties, the horror of civilian casualties on any side . . . and the impact of the media”). In the late 1990s, “it wasn’t just the politicians who were pushing the military to avoid casualties. We [senior military commanders] were feeling the impact of deeply rooted organizational forces from within the military itself’ that discouraged casualties in war. Id. at 437; see also Owens, Lifting the Fog of War, supra note 8, at 154-56.
100. Many military operations practitioners and scholars saw the RMA’s potential already being realized after the Kosovo war. See, e.g., Meilinger, supra note 98, at 13. As high casualties among U.S. forces, insurgents, and civilians during U.S. operations in Iraq and Afghanistan have subsequently demonstrated, however, ground combat has not been as “humanized” as high-technology air war.
101. “While the friction and fog of war can never be eliminated, new technology promises to mitigate their impact.” JOINT VISION 2010, supra note 9, at 16.
is asking too much. It also asks too much of technology—of any age. "Perfect accuracy is not guaranteed—failure of the guidance system or aircraft equipment, as well as aircrew error, means that accidents still happen . . ."\textsuperscript{103}

Aspects of twenty-first century warfare, in particular, militate against anything more than a negligence-based duty of care regarding non-intentional harms in war. Although on a net basis RMA technologies are reducing the fog of war generally, advances in seeing, talking, and striking can be offset significantly by other consequences of the RMA itself and by enemy adaptation.

First, information overload is a problem in a way it never was before. Clausewitz bemoaned seeing too little through the fog. Today, an unexpected byproduct of seeing through the fog of war can be seeing too much.\textsuperscript{104} The torrent of data before commanders can crowd out the refined actionable intelligence that is the basis for not just reasonable decisions but right decisions.

A second factor is compressed decision time. Contractors talk approvingly of "sensor-to-shooter loops"\textsuperscript{106} reduced from hours to minutes between the 1991 and 2003 Iraq wars. Yet in the context of information overload, this can be a curse. "Targets of opportunity" may be fleeting, generating terrific pressure for on-the-spot decisions. A large number of the civilian casualties caused during recent wars occurred during attacks on moving or otherwise fleeting targets that forced the hand of commanders.\textsuperscript{107}

A third factor stressing decisionmaking by high-technology militaries is the heightened stakes of individual strikes. The tactical can become strategic because the world can now be aware of the outcome of individual engagements via satellite TV and the internet even before the commanders who ordered them—and such relatively minor events can have a significant impact on the politics of military operations. This is the "CNN factor."\textsuperscript{108} Today, "every bomb, missile, or bullet fired by an American airman, soldier, or sailor is a political act. When a bomb goes astray and hits a residential area, when a Tomahawk missile crashes into a hotel lobby . . . US foreign policy—not just military policy—suffers a setback."\textsuperscript{109}

The locus of war is also complicating discrimination and proportionality. Every major U.S. operation of the past two decades has involved combat in urban areas with intermingled civilian and military populations and

\textsuperscript{103}. Meilinger, \textit{supra} note 98, at 13. These accidents may become even harder to reconcile with a stricter liability standard under the laws of war as autonomous munitions—such as unmanned aerial vehicles (UAVs) with offensive capability—are developed and deployed. For discussion of autonomous munitions, see \textit{Michael O'Hanlon, Technological Change and the Future of Warfare} 109 (2000).

\textsuperscript{104}. See Schmitt, \textit{supra} note 30, at 1063.


\textsuperscript{107}. \textit{See} HRW, \textit{supra} note 3, at 26 (describing the Carr Ctr. for Human Rights Policy’s Project on the Means of Intervention).

\textsuperscript{108}. Meilinger, \textit{supra} note 98, at 15 (bracketed material omitted).

\textsuperscript{109}. \textit{Id}.
property—a trend that will become a rule as more infrastructure becomes dual-use. Consequently, “[w]hen American aircraft struck Serbian targets in Bosnia in 1995 and Serbia/Kosovo in 1999, they used PGMs almost exclusively in populated areas,” a practice generally continued in Afghanistan and Iraq. Transportation arteries have been another loci of war featuring both military and nonmilitary targets. Not surprisingly, “[d]uring the air war in Yugoslavia, Human Rights Watch found that five of the ten worst incidents involving civilian deaths were air attacks on presumed Yugoslav military convoys or transportation routes that turned out to include large numbers of civilians.”

Most frustratingly, however, our adversaries know about all of the above and are “asymmetrically” trying to neutralize U.S. technological advances by violating the law of war—by intermingling their combatants with civilians in urban areas, hoping that a U.S. strike will kill innocents before the eyes of the world. Although Article 51 of Protocol I bans the use of civilians as human shields, insurgents in Iraq have repeatedly used mosques and even civilian crowds as fighting positions and cover, giving Coalition forces the awful choice of either refraining from attack and thereby rewarding enemy violation of LOAC with a refuge, or attacking and harming the innocent Iraqis whose favor they seek. In other words, technology and the risk to noncombatants are evolving in tandem, rather than the former automatically offsetting the latter. This is a compelling argument for not raising the bar too high.

2. Perverse Results

Another argument for not requiring perfection is the perverse results which a strict liability standard could produce. Consider a legal double standard reflecting what Michael Schmitt terms our age’s “normative relativism,” under which a strict standard is assigned to high-technology nations, while lower-technology nations remain under a negligence standard. The less advanced military would have greater license to inflict noncombatant casualties during war, and, if prosecution is a real danger, would have a perverse incentive not to acquire more precise weaponry.
Alternatively, imposing something akin to a strict standard for all would also be unworkable and perverse. Because poorer nations may not be able to afford advanced technology, a strict standard for all would tell most nations that they could not defend themselves. More generally, as a practical matter, under a strict standard war would become increasingly difficult to wage legally, to the point that the regime would be increasingly violated.

D. Combatant as Fiduciary?

To date, there has not been a groundswell for imposition of a strict standard per se. The command responsibility cases confronted and rejected such a categorical approach but have left unclear what kind of negligence standard applies generally in LOAC’s prescriptive zone. Human Rights Watch and other advocates for the victims of war have called for a higher standard of care by the United States in light of RMA’s promise of precision force. Scholars such as Schmitt have sensibly written that belligerents will be “held to the standards to which they are capable of reasonably rising,” a negligence-framed notion warranting further elaboration.

There is not space in this short Note to explore this question fully, analytically and normatively. It suffices here to direct attention to recent, promising jus post bellum scholarship and suggest that it could help flesh out the jus in bellum duty of care I have identified.

In the wake of the U.S. occupation of Iraq, several scholars have argued that under jus post bellum occupying states bear a duty of care to the citizens of the countries they govern. In language now familiar to us regarding jus in bellum and the obligations of individual combatants, Bartram S. Brown wrote that “elementary considerations of humanity... justify imposing a duty of care on the intervening and occupying states in Iraq. They should take all reasonable efforts not to leave Iraq in worse shape than before the intervention.” Noah Feldman did not use the precise terminology “duty of care” but depicted the relationship of the Coalition and the people of Iraq as one of trusteeship informed by the principles of agency law. Although also subject to the law of negligence and therefore the responsibility to act reasonably under the circumstances, trustees are subject to a fiduciary duty of care that additionally carries the obligation to act affirmatively in the interests of beneficiaries.

The rationale for analogizing this fiduciary duty of care from jus post bellum back to jus in bellum is evident in General MacArthur’s statement upon affirming General Yamashita’s sentence to hang: “The soldier, be he friend or foe, is charged with the protection of the weak and unarmed. It is the very essence and reason of his being. When he violates this sacred trust, he not only profanes his entire cult but threatens the fabric of international society.” General MacArthur’s formulation suggests how this trusteeship

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116. Id.
118. NOAH FELDMAN, WHAT WE OWE IRAQ 61-91 (2004).
and its fiduciary duty of care\textsuperscript{120} would operate: our reasonable combatant is an agent invested with the authority to act and the honor of the profession of arms by their principal, their nation, and entrusted with the lives (the ultimate interests) of noncombatants and soldiers hors d’combat, the third party beneficiaries that LOAC largely exists to protect. The notion that combatants owe duties to those near and even at whom they fire is consistent with international law’s increasing recognition of the rights of individuals—and, more broadly, with our civilization’s moral architecture, which recognizes that with power comes responsibility, and that individuals have moral value regardless of whether or not they are powerful.

The content of a camouflage-wearing trustee’s duty would be similar to that of his or her pinstripe-wearing counterpart: not to cause \textit{no harm} to the beneficiary interests held in trust, but rather not to do so negligently or intentionally. Toward the end of making decisions in the best interest of their beneficiaries, combatant trustees would have to meet their duty to inform themselves to the best of their ability under the circumstances, to inquire where further investigation is reasonable, and to have in place processes for making good decisions—in other words, to be reasonably positioned to meet the \textit{Yamashita} standard of knowing, or expecting to know of ongoing or potential LOAC violations.\textsuperscript{121} In the context of the enhanced capacity for knowledge and control of the effects of military violence offered by RMA systems, judging whether a combatant’s decisionmaking was reasonable logically becomes a question of whether the combatant made use of the available technology to the extent that an individual with their authority, rank, training, and experience would use under similar circumstances.

RMA age commanders—seated at CENTCOM or PACOM conference tables in air-conditioned Tampa or Honolulu office buildings, with time to plan operations days or months in advance, with highly advanced analytical structures, and with hundreds of thousands of subordinates—bear more than a passing resemblance to their civilian executive colleagues. Where war is waged entirely from the desktop and involves both civilian and military infrastructure—as in the case of “cyberwar” involving attacks on and defense of computer systems via viruses and other programs, sent over information technology infrastructure used primarily by civilians and on which information age societies depend—applying the fiduciary notions of the corporate and financial worlds may be especially valuable analytically.

As stimulating as the fiduciary duty analogy may be, however, it is far from perfect. As explained \textit{supra}, the fog-piercing RMA carries its own re-

\textsuperscript{120} Another fiduciary duty of care concept from the related but distinct area of business organizations law is the business judgment rule (BJR), an abstention doctrine under which courts will not review business decisions made by executives subject to fiduciary duties except inter alia in cases of self-dealing or wanton negligence. There is theoretical space for suggestion of an analogous “military judgment rule,” albeit one calibrated for LOAC’s requirements, the realities of warfare, and notions of negligence under national codes such as the UCMJ.

\textsuperscript{121} The \textit{Yamashita} standard for commanders is generally akin to the standard for reasonable combatants: “A commander would be responsible only for facts that would have been uncovered if the commander had fairly pursued an inquiry reasonable under the circumstances.” Stryszak, \textit{supra} note 41, at 62.
fogging risks, “recomplicating” operational and moral decisions for RMA commanders. Furthermore, the closer one gets to the literal “tip of the spear,” the less performing a fiduciary duty of care can be held to anything like the genteel standards of the boardroom. For our reasonable combatants—from CENTCOM conference rooms to Marine fire teams securing a site under fire after a nighttime improvised explosive device (IED) attack—circumstances within the Armed Forces can be quite dissimilar; this is the capacity point restated. Furthermore, the pressures competing against one’s fiduciary duty of loyalty are many orders of magnitude stronger in the dust, heat, and blood of a combat zone. An erosion in fire discipline that through our lawyerly trusteeship/agency lens might look like self-dealing at the expense of one’s obligation to act in the interest of third parties, might in the heat of battle at the tactical level look like loyalty to one’s brothers in arms or simple self-preservation. At the strategic level of war, we see a similar disconnect of stakes: Nations generally go to war and thereby take on the trust of those protected by LOAC because they perceive their national security or existence is threatened, while trustees in the private sector are retained in the expectation of payment. Finally, while importing fiduciary notions into LOAC’s duty of care might promise a potential means of fleshing out our understanding of the criminal negligence in LOAC’s prescriptive zone and responding to public calls for a higher standard of care in the use of force, it would do so by combining bodies of law—LOAC and fiduciary—which at least facially have remained separate.

The effect of introducing fiduciary notions into LOAC may be to reinforce emerging customary norms regarding the use of RMA systems, for example requiring the exclusive use PGMs in urban air operations by nations that possess them. Schmitt reasons from the discrimination and proportionality principles that “if guided munitions would lessen the expected loss and damage [to noncombatants] without increasing the risk to the aircrew or decreasing the expected damage to the target, and guided munitions are reasonably available, then the attacking force should employ them.”


123. There exist important distinctions among simple agency and trustee fiduciary concepts. For example, in the former, one bears a duty of care to act in the interest of one’s principle while taking care not to harm third parties, but under trusteeship an agent trustee receives instructions from a principal but acts in the interest of the third party beneficiary. Additional analysis of application of trusteeship notions to jus in bello is warranted.

124. Such tendencies reflect a deeper contradiction regarding war itself: for a war to be just it must be about the interest of civilians generally and the peace to follow, but for it to be successful at the tactical level it must be about individual soldiers and violence.

125. Although the legal academic literature does not analyze LOAC in terms of imposing a duty of care, several scholars do argue that other areas of law can helpfully inform our understanding of LOAC. See, e.g., Stryzszak, supra note 41, at 64-67 (finding analogues to the Yamashita “should have known” knowledge standard in domestic criminal, corporate, agency, and real property law); Martin, supra note 29 (drawing on human rights law to inform understandings of proportionality and discrimination under LOAC).

126. Michael N. Schmitt, The Principle of Discrimination in 21st Century Warfare, 2 YALE HUM. RTS. & DEV. L.J. 143, 152 (1999). The United States has, to date, resisted the establishment of any customary rule requiring the use of PGMs on principle, while adhering to the practice in operations. See WAXMAN, supra note 66, at 13. However, Schmitt’s stipulation that the norm would only apply where
and U.K. combatants are currently required to perform discrimination and proportionality analyses similar in many respects to the fiduciary duty of inquiry borne by civilian executives and trustees, and explicit recognition of an affirmative legal obligation to act in the interest of LOAC's third party noncombatants could be expected to lead RMA combatants to a conclusion similar to Schmitt's.

As the U.K. Ministry of Defence observes, "[m]odern, smart weaponry has increased the options available to the military planner." However, application of the proportionality principle is not always straightforward. Sometimes a method of attack that would minimize the risk to civilians may involve increased risk to the attacking forces. The law is not clear as to the degree of risk that the attacker must accept. The proportionality principle does not itself require the attacker to accept increased risk. Rather, it requires him to refrain from attacks that may be expected to cause excessive collateral damage. It will be a question of fact whether alternative, practically possible methods of attack would reduce the collateral risks. If they would, the attacker may have to accept the increased risk as being the only way of pursuing an attack in a proportionate way.

In other words, a reasonable judgment is required, one in which the risk of good faith error and unfortunate noncombatant harm is inherent, due to the inescapable realities of war. Yet under the negligence standard discernable in the law of war regarding non-intentional harm—including one informed by fiduciary notions—acting on "reasonable beliefs about the danger to itself and taking precautions to avoid inflicting disproportionate damage, [one is generally] absolved of war crime or other legal charges," even if the unintended harm inflicted in fact is disproportionate to the anticipated or realized military benefit. Such a "reasonable person approach" shares the virtue of flexibility with the "knew or should have known" command responsibility-based duty of care associated with Yamashita that informed the ICTY and ICTR statutes.

VI. ADJUDICATORY PREDICTIONS AND IMPLICATIONS

It remains to comment briefly on the outlook for, and theoretical implications of, adjudication in light of the duty of care.

A. Predictions

First, the nature of the technology revolution cuts both ways. Some elements of the RMA could make prosecuting negligent acts easier; these include not only email (which creates splendid electronic "paper trails"), but also audio intercepts and imagery. With more and better documented

PGMs are "reasonably available" allows commanders substantial latitude to make cost-benefit decisions regarding competing needs for military resources.

127. U.K. MINISTRY OF DEFENCE, supra note 70, ¶ 2.7.
128. Id. ¶ 2.71. Another view is that increasing risk to military personnel can alter the calculation of military value and therefore can change the result of the proportionality balancing test.
129. WAXMAN, supra note 66, at 61.
130. See Stryszak, supra note 41, at 63.
131. Other, less official, sources of electronic information about what military personnel did and when are also available from the reports and photographs of "embedded" media reporters, and the
evidence, it would seem to become easier to assemble a case about who made bad decisions, with what information available, after what efforts to inform themselves, and when. How easily might one go about prosecuting a negligent decision made by individuals within a “system of systems,” however? Consider all of the moving parts in just one air strike during Operation Allied Force:

Over Kosovo . . . a U-2 flying over a suspected target took video and relayed it via satellite back to the United States. There, analysts determined that the objects captured on film were Serb military vehicles, fused this information with three-dimensional terrain data and satellite imagery taken earlier, and generated precise geographic coordinates. They relayed these coordinates via satellite to orbiting command and control aircraft, which directed an airborne F-15E strike aircraft to attack. The F-15E then used GPS-assisted PGMs to knock out the targets. The entire process took place in minutes.132

In a war in which tens of thousands of such sorties are flown, unraveling the dense organizational process that went into a decision and identifying negligent actors is certain to be a daunting task. An additional complication is that the records of allegedly negligent sorties would be in the possession of the nation whose personnel are presumably being prosecuted. Nations with advanced military hardware (and software) also happen to be those with the most power in the international system generally.133

A second general prediction is that any prosecutions for negligence are likely to be handled at the national level or via courts-martial. This is because of the practical matter of limited international forum availability, U.S. policy against subjecting its personnel to prosecution in international fora,134 and the precedent of its rejection regarding command responsibility by the ICTY and ICTR. This suggests a further—and, I believe, quite safe—prediction: though a duty of care is evident in the law of war, and extends beyond LOAC’s proscriptive core of intentional war crimes, internationally prosecutable negligence would assuredly have to occur on a systematic or widespread basis, as occurred in World War II, Yugoslavia, or Rwanda, to be prosecuted internationally. Far more likely is duty of care analysis informing prosecutions in courts-martial arising from collateral damage incidents and friendly fire incidents.

In an influential article before the ICTR and ICTY appellate decisions, Michael Smidt advocated the Yamashita “should have known” standard of command responsibility, rather than the more lenient actual knowledge standard employed in the prosecution of Captain Ernest Medina, commander of the company carried out the My Lai massacre in Vietnam. Smidt suggested command responsibility prosecution of U.S. personnel under Article 18 of the UCMJ, which provides U.S. courts-martial jurisdiction to try war crimes
under customary international law.\textsuperscript{135} This is a change from U.S. military policy not to charge American service members with crimes under international LOAC but rather under the UCMJ's punitive articles.\textsuperscript{136} Although international criminal negligence doctrine is arguably too undefined at present to support courts-martial under that authority alone, here again, duty of care analysis might inform prosecutions for negligence in the use of RMA systems under the UCMJ's punitive or general articles.

\subsection*{B. Implications: Transnational Norm Diffusion}

Rather than evidence of weakness in the LOAC regime, domestic court-martial proceedings being informed by an international legal norm is broadly consistent with the transnational legal process of norm diffusion identified by scholars of the New Haven School of International Law.

While scholars of international law have noted for some time the horizontal diffusion of legal norms among nations, transnational legal process theory's distinct improvement is the addition of a vertical element, one that recognizes the interaction of national and transnational actors and bodies of law in "a process of norm-internalization."\textsuperscript{137} Although one of Harold Hongju Koh's most notable explications of the theory focuses on how this norm-internalization process can lead nations to comply with international law,\textsuperscript{138} an earlier seminal piece makes clear that the idea has broad utility.\textsuperscript{139} Indeed, one can conceive of transnational law's central process more generally as one of "up, across, down" norm diffusion. Legal norms that emerge at the national level reach the international level through interaction among national and transnational actors, at which point the norm is recognized through a transnational actor's interpretation and "enunciation of the global norm,"\textsuperscript{140} one which is brought back down to the national level as nations act to internalize the global norm.\textsuperscript{141}

This process is readily apparent regarding the duty of care. Negligence was a facet of municipal and national military law before being recognized by the post-World War II national and international war crimes tribunals, which employed the theory to hold German and Japanese commanders responsible for atrocities. Again, negligence was nowhere mentioned in the statutes which set up the post-World War II tribunals; judges imported the norm in its

\begin{itemize}
\item \textsuperscript{135} UCMJ, art. 18 (codified at 10 U.S.C. § 818); see also Smidt, supra note 35, at 194-97, 219-33.
\item \textsuperscript{136} Smidt, supra note 35, at 215. Usually, regarding "members of one's own forces, there is no need to charge war crimes; every army is subject to its own system of law and normally has a penal code based on ordinary municipal law." LESLIE C. GREEN, ESSAYS ON THE MODERN LAW OF WAR 245 (1999). The UCMJ's punitive articles are Articles 77-134 (codified at 10 U.S.C. §§ 77-134).
\item \textsuperscript{137} OONA A. HATHAWAY & HAROLD HONGJU KOH, FOUNDATIONS OF INTERNATIONAL LAW AND POLITICS 191 (2005).
\item \textsuperscript{139} "Transnational legal process describes the theory and practice of how public and private actors . . . interact in a variety of public and private, domestic and international fora, to make, interpret, enforce, and ultimately internalize rules of transnational law." Harold Hongju Koh, Transnational Legal Process, 75 NEB. L. REV. 181, 183-84 (1996).
\item \textsuperscript{140} Koh, supra note 138, at 2646.
\item \textsuperscript{141} Id.
entirety from the national level. In recent years, ad hoc international criminal tribunals again have grappled with the notion in holding commanders responsible for the actions of their underlings, demonstrating the ability of the negligence norm to move laterally at the international level. Notions of negligence logically require the existence of a duty of care, one that can be seen in Protocol I and is apparent in the way in which, through their military guidelines, numerous nations have given expression to LOAC’s stipulations of necessity, discrimination, proportionality, and humanity. Here, we see both additional lateral movement of the norm at the international level, and incorporation of it at the national level, respectively. The “up, across, down” transnational legal process thus has already run a full cycle.

VII. CONCLUSION

In the years since the terrorist attacks of September 11, 2001, some have questioned or even bemoaned the future of jus in bello. Although certainly challenged by the Bush Administration’s efforts to circumvent the Geneva Conventions regarding detainees, LOAC in general has, if anything, become more important. Just a few years ago, in the wake of the Kosovo war, one scholar reasonably observed that political pressures due to concern about collateral damage “may reduce operational flexibility more severely than does adherence to international law.”

For at least the first several years after 9/11, however, the politics of war in the United States arguably were less restrictive than the laws of war. In light of this circumstantial salience, LOAC’s alignment with our national security interest in avoiding collateral damage, LOAC’s deeper significance as a reflection of the moral values and commitments of civilized nations even in the desperate hour of war, and therefore the ultimate “link between the conduct of the forces . . . and the perceived continued legitimacy of the action itself,” it is worth considering carefully calls for the United States and other nations with advanced militaries to adhere to a higher standard in complying with LOAC.

As I have explained, there is a duty of care inherent in the law of war, one discernable even in contentious international command responsibility jurisprudence. The roots of this negligence-based duty in treaty sources and national practice are clear. Responsibility for the effects of attacks logically varies with control over them, and consequently the scope of unintended effects a reasonable combatant may legally inflict on those whom the law of war protects varies with technological capacity and other circumstances. Although the fiduciary duties of trustees may help flesh out scholastic and practitioner understanding of LOAC’s duty of care, the notion that great

142. Waxman, supra note 66, at xi.
143. Every collateral damage incident—such as the accidental killing of a family of twelve in an air strike in Baiji mentioned at the outset of this Note—makes it easier for anti-U.S. forces to argue that it is the United States, not them, who are the cause of the suffering of Iraqis.
145. Smidt, supra note 35, at 163.
power demands great responsibility ought not be read to require a duty of perfection. Strict liability in the use of legal weapons against legitimate targets is unrealistic and would undermine the LOAC regime. Such a form of liability would ultimately endanger LOAC’s purpose: “the minimization of violence, the maintenance of minimum order, and as approximate an achievement of the policies of human dignity as each situation allows.”146

146. Reisman, supra note 10, at 83.