

Ethics, Technology & War

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“All’s fair in love and war,” so the saying goes. But, of course, we know that it’s not true. For we commonly judge and sometimes punish individuals, in the arena of love, for infidelity, deceit, and crimes of passion; and we commonly judge and sometimes punish individuals, in the arena of combat, for acts of aggression, rape and pillage in war, and crimes against humanity. The intense pressure of competition, in both affairs of the heart and the crucible of war, can help explain why unfair, even inhumane, behavior is common, but it does not excuse it.

Several technological innovations and political developments are changing the nature of warfare today in ways that pose complex challenges to the traditional standards that we use, under the influence of international law and just war doctrine, to judge governments’ and individuals’ actions in war. New technologies – including the use of drones, precision-guided weapons, cyber weapons, and autonomous robots – have led both to optimism about the possibility of reducing collateral damage in war and to concerns about whether some states find it too easy to use force today. New technologies also have been developed, however, that can provide early warning of civil conflict and promote more effective peacekeeping operations. On the political front, the growth of terrorism by nonstate actors, the spread of weapons of mass destruction, and changing doctrines in the United Nations about the responsibility to protect civilians pose new questions about the appropriate legal rules and ethical norms governing decisions to use military force. Professional military lawyers play an increasingly important role in reviewing targeting policies and rules of engagement,

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at least in the United States, to ensure that military plans and operations are compliant with the laws of armed conflict. War crimes tribunals have grown in use, but raise new questions about whether they encourage ruthless leaders to fight to the finish rather than accept resignation and exile. New knowledge about post-conflict medical system failures raises questions about both the best practices to end wars and sustain peace accords and about whether political leaders systematically underestimate the costs of going to war before they make decisions about military interventions.

These are just a few of the emerging dilemmas that caused the American Academy of Arts and Sciences to create a new initiative on New Dilemmas in Ethics, Technology, and War in 2014. Intellectual inquiry on the relation between ethics and war is certainly not new. The seminal work of Michael Walzer, *Just and Unjust Wars* (1977), remains the classic investigation into just war doctrine applied within the context of interstate conflict during the Cold War, but it is striking that there is no volume that has successfully become the successor to Walzer's book.¹ This failure is certainly not due to lack of research and writing about ethics and war. Indeed, there are lively and ongoing debates concerning just war doctrine in a number of academic disciplines and also among policy-makers and policy analysts. But these groups rarely speak to each other and there is a growing gap between strong scholarship regarding ethics and war and policy-relevant work that can influence government decisions and public debates. Trends in universities prioritizing analytic philosophy in philosophy departments, formal models and game theory in political science departments, and social history over military history in history departments have all contributed to the relative neglect of the study of the evolution of just war doctrine, international law, and applications to real world security problems.

The Academy project therefore gathered together an interdisciplinary group of scholars and practitioners – including political scientists, philosophers, ethicists, lawyers, physicians, historians, soldiers, and statesmen – for a series of small workshops to discuss these issues and review commissioned essays. The result is both this Fall 2016 issue of *Dædalus*, “Ethics, Technology & War,” and a companion volume, the Winter 2017 issue of *Dædalus*, “The Changing Rules of War.” In both volumes, scholars move across the three traditional categories of just war doctrine issues. Contemporary scholars too often continue to approach ethical and legal questions arising from wars according to the categorization of *jus ad bellum* (rules governing when to go to war), *jus in bello* (rules governing behavior in combat), and *jus post bellum* (rules governing appropriate actions after war). Yet significant changes in both military postures and political developments require a reconsideration of such categories. Rather than understanding the linkage among these categories in a linear continuum – from prewar to conflict and then to postwar decisions – our authors explore the ways in which these categories should be seen in a circular relationship, wherein the conditions that influence and affect military decisions in one of them ultimately reflect and influence the others.

Incentives to improve national security and win conflicts have often led to the development and use of new and more destructive technologies of war. And yet, especially since World War II, very strong incentives have also existed to prohibit aggression and promote self-defense, to encourage legal and moral constraints on violence in war to protect noncombatants, and to punish soldiers and political leaders whose actions are judged to be war crimes. The United Nations Charter in 1945, the 1949 Geneva Conventions, and the Geneva Protocols of 1977 created legal

institutions to interpret and promote traditional just war principles such as non-aggression, protection of prisoners, proportionality, and noncombatant immunity. The collective set of such agreements, along with customary international law, form the laws of armed conflict and international humanitarian law. Like all laws, of course, the laws of war are not always followed. And like all ethical principles, just war principles are often violated. But the promotion of these principles and the development of the institutions to enforce them were strong enough that Walzer, in an important 2002 article, declared that there had been a “triumph of just war theory,” although he rightly also warned about “the dangers of success.”²

Among these dangers of success are overconfidence, complacency, and a failure to understand that new technologies can create new dilemmas regarding ethics and war. Each generation faces new challenges. This issue of *Dædalus* addresses how new technologies and political conditions create both challenges and opportunities in the prevention of war and constraint of violence within war.

The issue begins with three essays assessing how specific emerging military technologies are influencing current and potential operations in war. Michael Walzer examines targeted killing and the use of unmanned aerial vehicles (UAVs), more colloquially known as drones. Drones provide the opportunity for more discriminate use of military force against targets, but can also provide a temptation to use military force more often or in more places than would otherwise be the case. Walzer explores both the benefits and the dangers of drones from a just war theory perspective. Michael Horowitz then examines the ethical implications of a set of military technologies that are just beginning to enter into the arsenals of advanced states: autonomous weapons and the use of robots that

can replace human decision-making and soldiers in combat. Horowitz asks whether human accountability and responsibility will be possible with autonomous weapons and reviews the emerging debate about this potential revolution in military technology. David Fidler’s essay focuses on cyber warfare, cyber espionage, and cyber coercion. To what degree does the development of offensive and defensive cyber capabilities by many militaries and nonstate actors around the globe challenge the principles of just war doctrine and the laws of armed conflict?

Two essays focus on an older military technology that has produced what are still the most destructive weapons known to mankind: nuclear weapons. General C. Robert Kehler, former commander of U.S. Strategic Command, provides an insider’s look at nuclear targeting, the requirements of deterrence, and the ethical and legal considerations that can influence military planning and implementation. Jeffrey G. Lewis and I then examine the consequences of a potential change in the existing presidential guidance given to the U.S. military. To what degree would a U.S. commitment to a new war planning requirement – that U.S. nuclear weapons only be aimed against legitimate military targets that cannot be destroyed with reasonable prospect of success by conventional weapons – reduce civilian fatalities in a nuclear conflict, produce stronger adherence to the laws of armed conflict, and impact the credibility of deterrence?

Military technology is not developed in a political vacuum. And military technology development does not always lead to more destructive weaponry. One of the most important global political developments in recent years has been the rise of and the challenges to the responsibility to protect (R2P) doctrine. At the 2005 United Nations World Summit, the heads of states accepted a collec-

tive responsibility to respond effectively if any government failed to protect its own people from the horrors of genocide, ethnic cleansing, large-scale war crimes, or other crimes against humanity. Jennifer Welsh examines the current standing and future trajectory of the responsibility to protect doctrine, which has been severely challenged by such events as the collapse of the Libyan state into chaos after the 2011 NATO-led military intervention, on humanitarian grounds, against the Gaddafi government, and the Syrian civil war, which began soon thereafter. Lloyd Axworthy, the former foreign minister of Canada, and A. Walter Dorn then explore the potential positive effects of technological developments – such as improved algorithmic forensic data analysis and autonomous surveillance vehicles – on peacekeeping operations, humanitarian crisis prevention, and post-conflict reconstruction. What are the ethical and legal responsibilities for state leaders and civil society to develop and use such technologies to reduce the risk of conflict and to protect lives in civil wars? Jennifer Leaning provides a different perspective, as a medical doctor with many years of experience in war-torn societies, examining the degree to which new information technologies and analytic capabilities provide adequate early warning of mass atrocities against civilians appearing over the horizon. Leaning addresses how improved technology can impact the challenge of early warning and response, focusing on whether the just war principle of “last resort,” which requires restraint from military action until all reasonable means of peaceful settlement are exhausted, can be met with new warning mechanisms.

The volume ends with two essays that focus our attention on broader trends in violence, both inside states and between states. Keith Krause notes that most discussions of just war doctrine and interna-

tional law focus primarily on interstate war (and to a lesser extent on civil wars), but that much of the violence in the world today takes place outside of conflict zones and inside states that are not engaged in organized war. Krause challenges us to focus on how the erosion of the state’s practical monopoly over the use of violence and the proliferation of more powerful and sophisticated weapons into the hands of nonstate armed actors requires new thinking about how to prevent not only war, but also violence against noncombatants outside of warzones. Finally, Benjamin Valentino examines the shifts over time in American public opinion regarding the use of military force, especially regarding military operations that kill civilians directly as deliberate targets, or indirectly as collateral damage from an attack on a military target. Are the historical trends in both the conduct of war and public attitudes about killing civilians best explained as the result of changing ethical norms, changing ideas about how best to win wars, or changing strategic conditions in the wars the United States has fought?

Let me conclude with a brief explanation of the choice of photographs that appear on the inside front and back covers of this *Dædalus* issue. The front inside cover is a picture of Prime Minister Shinzō Abe with President Barak Obama during his historic visit to Hiroshima on May 27, 2016. In his speech, Obama declared: “Hiroshima teaches this truth. Technological progress without an equivalent progress in human institutions can doom us. The scientific revolution that led to the splitting of an atom requires a moral revolution as well.”³ The laws of armed conflict and international humanitarian law are imperfect, but still evolving, human institutions. Obama’s speech reminds us that modern technological innovation has put such destructive power into the hands of mankind that our very existence as a species is

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at risk; and he called for a “moral awakening” to strengthen the constraints we place on warfare in the future.

The photograph on the back inside cover is of nine-year-old Nabila Rehman, testifying to Congress in October 2013 and showing her drawing of the U.S. drone strike that killed her grandmother the year before.⁴ In May 2013, President Obama signed a new Presidential Policy Guidance to set rules on when and where the U.S. military and intelligence agencies would conduct drone strikes. Obama then announced that “America does not take strikes to punish individuals; we act against terrorists who pose a continuing and imminent threat to the American people, and when there are no other governments capable of effectively addressing the threat. And before any

strike is taken, there must be near-certainty that no civilians will be killed or injured.”⁵ Still, according to 2016 official U.S. government estimates (estimates that have been challenged by many as being too low), U.S. drone attacks have killed about 2,500 members of terrorist organizations, but also caused between sixty-four and one hundred civilian fatalities through accidental targeting or collateral damage between 2009 and 2015.⁶ This photograph of the granddaughter of one of those civilian victims should remind us that even when weaponry is developed that provides a greater ability for discrimination, permitting direct attacks on military targets with lower yield explosives, noncombatant collateral deaths cannot be entirely eliminated.

ENDNOTES

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¹ Michael Walzer, *Just and Unjust Wars*, 5th ed. (New York: Basic Books, 2015).

² See Michael Walzer, *Arguing about War* (New Haven & London: Yale University Press, 2008), 3–22. On the development and influence of the laws of armed conflict on the U.S. military, see John Fabian Witt, *Lincoln’s Code: The Laws of War in American History* (New York: Free Press, 2012).

³ “Text of President Obama’s Speech in Hiroshima, Japan,” *The New York Times*, May 27, 2016, http://www.nytimes.com/2016/05/28/world/asia/text-of-president-obamas-speech-in-hiroshima-japan.html?_r=0.

- ⁴ Amnesty International, "Will I Be Next? U.S. Drone Strikes in Pakistan," October 22, 2013, <http://www.amnestyusa.org/sites/default/files/asa330132013en.pdf>; and Karen McVeigh, "Drone Strikes: Tears in Congress as Pakistani Family Tells of Mother's Death," *The Guardian*, October 29, 2013, <https://www.theguardian.com/world/2013/oct/29/pakistan-family-drone-victim-testimony-congress>. Scott D. Sagan
- ⁵ The White House Office of the Press Secretary, "Remarks by the President at the National Defense University," May 23, 2013, <https://www.whitehouse.gov/the-press-office/2013/05/23/remarks-president-national-defense-university>.
- ⁶ Charlie Savage and Scott Shane, "U.S. Reveals Death Toll from Airstrikes Outside War Zones," *The New York Times*, July 1, 2016, http://www.nytimes.com/2016/07/02/world/us-reveals-death-toll-from-airstrikes-outside-of-war-zones.html?ref=todayspaper&_r=1.