

New Technology and the Law of War
Spring 2015 Reading Group
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New, high-tech weapons are celebrated for their ability to limit troop and civilian casualties, vilified for making war easier, and constantly compared favorably and unfavorably with human beings. They also raise a host of new legal questions, such as when a cyber-attack justifies commencing a war, or who should be held accountable for a war crime committed by a robot. In this reading group, we will discuss these and other novel legal, policy, and ethical issues presented by emerging weapons technologies.

The course is divided into three parts: (1) an introduction to the law of armed conflict, including *jus ad bellum*, *jus in bello*, the distinction between international and non-international armed conflicts, and the U.S. law of war; (2) a review of how new weapons technology has historically been regulated, including discussion of the legal review required for new weapons and when bans have and have not been effective; and (3) case studies of how specific new technologies—like drones, cyberwarfare, and autonomous weapon systems—challenge traditional understandings of the law of armed conflict. Short readings will be required for each week's discussion; additional suggested readings are provided for those interested in exploring an issue at greater depth. Familiarity with international law generally is beneficial but not required. Participants are expected to complete all assigned readings in preparation for discussion. Additionally, per the Registrar's requirements, all participants must attend at least fourteen hours of group meetings for credit.

Given the nascent character of much of this area, there is not only great need, but great opportunity to develop influential, publishable scholarship that can influence the field. Accordingly, should there be sufficient interest, we may devote the last two meetings to providing members of the group with feedback on ideas or drafts in a writing workshop style. Participants are not required to submit abstracts or papers, but the field is so fruitful that it is unlikely that anyone will consider the readings and not have an idea worth exploring and publishing.

Finally, those interested in this reading group are likely to also be interested in the two Foreign Affairs in the Internet Age (FAIA) panel discussions on Monday, February 16, 2015. There will be a panel on unresolved issues in the law of cyberwarfare and one on how to best regulate autonomous weapon systems.

Week 1: Emerging Technology and the Law of Armed Conflict

1. Darren M. Stewart, *New Technology and the Law of Armed Conflict*, 87 INT'L L. STUD. 271 (DATE).
2. INT'L COMM. RED CROSS, INTERNATIONAL HUMANITARIAN LAW AND THE CHALLENGES OF CONTEMPORARY ARMED CONFLICTS 36-40 (2011) (Means and Methods of Warfare: New Technologies of Warfare).
3. Eric Talbot Jensen, *The Future of the Law of Armed Conflict: Ostriches, Butterflies, and Nanobots*, 35 MICH. J. INT'L L. 253 (2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2237509.
4. Timothy R. Coughlin, *The Future of Robotic Weaponry and the Law of Armed Conflict: Irreconcilable Differences?* (17 UCL Juris. Rev. 67, 2011).

Part I: Introduction to International Humanitarian Law

These class periods will review basic interlocking concepts of international humanitarian law. This background will help clarify why aspects of different new technologies challenge both specific legal principles and the law of war as a whole.

Week 2: Jus ad Bellum – The Law Governing the Commencement of Hostilities

1. UN Charter, art. 2 & Chap. 7.
2. *What are jus ad bellum and jus in bello?*, ICRC Resource Centre, <https://www.icrc.org/eng/resources/documents/misc/5kzjjd.htm>.
3. Jeff McMahan, *Just War Theory*, in A COMPANION TO CONTEMPORARY POLITICAL PHILOSOPHY (2d ed. 2007), available at www.fas.rutgers.edu/cms/phil/dmdocuments/JustWar.pdf.

Further Readings

1. *The Corfu Channel Case (Merits) (United Kingdom v. Albania)*, 1949 ICJ Rep. 4.
4. *Case Concerning Military and Paramilitary Activities in and Against Nicaragua (Merits) (Nicaragua v. United States)*, 1986 ICJ Rep. 14.
5. *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 ICJ Rep. 226.
6. *Case Concerning Oil Platforms (Iran v. U.S.)*, 2003 ICHJ Rep. 161 (2003).

Week 3: Jus in Bello – The Law Governing the Conduct of Hostilities

1. INT'L COMM. RED CROSS CUSTOMARY IHL DATABASE, https://www.icrc.org/customary-ihl/eng/docs/v1_rul (scan Table of Contents; read Rules 1-24).
2. Jasmine Moussa, *Can Jus ad Bellum Override Jus in Bello? Reaffirming the Separation of the Two Bodies of Law*, 90 INT'L REV. RED CROSS 963 (2008), available at <https://www.icrc.org/eng/assets/files/other/irrc-872-moussa.pdf>.
3. Laurie Blank, Geoffrey S. Corn & Eric Jensen, *Surveying Proportionality: Whither the Reasonable Commander?*, JUST SECURITY (Mar. 25, 2015, 3:18 PM), <http://justsecurity.org/21474/surveying-proportionality-reasonable-commander/>.

Further Readings

1. The Hague Conventions of 1864 and 1907.
2. The Four Geneva Conventions of August 12, 1949.
3. John B. Bellinger III & William J. Haynes II, *A US Government Response to the International Committee of the Red Cross Study Customary International Humanitarian Law*, 89 INT'L REV. RED CROSS 443 (2007).

Week 4: International and Non-International Armed Conflicts

1. Common Article 3 to the 1949 Geneva Conventions.
2. INT'L COMM. RED CROSS, INTERNATIONAL HUMANITARIAN LAW AND THE CHALLENGES OF CONTEMPORARY ARMED CONFLICTS 7-13, 42-45 (2011) (The Notion and Typology of Armed Conflicts, Direct Participation in Hostilities).
3. François Bugnion, Jus ad Bellum, Jus in Bello *and Non-International Armed Conflicts*, 6 Y.B. INT'L L. 167 (2003), *available at* https://www.icrc.org/eng/assets/files/other/jus_ad_bellum,_jus_in_bello_and_non-international_armed_conflictsang.pdf.

Further Readings

1. First and Second Protocols Additional to the Geneva Conventions of August 12, 1949.
2. *Prosecutor v. Tadic*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, Case No. IT-94-1AR72 (2 Oct. 1995).
3. *Prosecutor v. Tadic*, Appeals Chamber Judgment, Case No. IT-94-1AR72 (15 July 1999).
4. Sylvain Vit , *Typology of Armed Conflicts in International Humanitarian Law*, 91 INT'L REV. RED CROSS 69 (2009).

Week 5: U.S. Foreign Affairs Law and National Security Issues

1. U.S. Constitution Arts. I & II
2. Rebecca Crootof, *War, Responsibility, and Killer Robots*, 40 N.C. J. INT'L L. & COM. REG. (forthcoming 2015) (invited symposium contribution).
3. Bruce Ackerman, Op.-Ed., *Obama's Betrayal of the Constitution*, N.Y. TIMES, Sept. 11, 2014, http://www.nytimes.com/2014/09/12/opinion/obamas-betrayal-of-the-constitution.html?_r=0.
4. Harold Hongju Koh, *Obama's ISIL Legal Rollout: Bungled, Clearly. But Illegal? Really?*, JUST SEC. (Sept. 29, 2014, 8:03 AM), <http://justsecurity.org/15692/obamas-isil-legal-rollout-bungled-clearly-illegal-really/>.

Further Readings

1. JOHN HART ELY, WAR AND RESPONSIBILITY: CONSTITUTIONAL LESSONS OF VIETNAM AND ITS AFTERMATH (1993).
2. HAROLD HONGJU KOH, THE NATIONAL SECURITY CONSTITUTION: SHARING POWER AFTER THE IRAN-CONTRA AFFAIR (1990).

Part II: Regulating New Technology

In this part, we will discuss how the law of war permits states to research and develop new technologies while also attempting to ensure that new innovations do not disrupt the legal regime as a whole.

Week 6: Legal Review of New Weaponry

1. Art. 36 to the First Protocol Additional to the Geneva Conventions of August 12, 1949.
2. Int'l Comm. Red Cross, *A Guide to the Legal Review of New Weapons, Means and Methods of Warfare: Measures to Implement Article 36 of Additional Protocol I of 1977*, 88 INT'L REV. RED CROSS 931 (2006) (focus on the Introduction, scan remainder).
3. John Reed, *Beyond Drones: The Next-Generation of Autonomous Weapons Cannot be Developed in Secrecy*, JUST SECURITY (Mar. 9, 2015, 11:26 AM), <http://justsecurity.org/20825/autonomous-weapons-developed-secrecy/>.

Week 7: Bans v. Regulation

1. Rebecca Crootof, *The Killer Robots are Here: Legal and Policy Implications*, 36 CARDOZO L. REV. (forthcoming 2015) (Appendix, Part III).
2. Eric Messinger, *Is it Possible to Ban Autonomous Weapons in Cyberwar?*, JUST SECURITY (Jan. 15, 2015, 9:27 AM), <http://justsecurity.org/19119/ban-autonomous-weapons-cyberwar/>.
3. Charles J. Dunlap, Jr., *Guest Post: To Ban New Weapons or Regulate Their Use?*, JUST SECURITY (Apr. 3, 2015, 12:24 PM), <http://justsecurity.org/21766/guest-post-ban-weapons-regulate-use/>.

Week 8: The “Obligation” to Use the “Best” Weapon

1. Christopher B. Pucket, *In This Era of “Smart Weapons,” Is a State Under an International Legal Obligation to Use Precision-Guided Technology in Armed Conflict?*, 18 EMORY INT'L L. REV. 645 (2004).
2. Oren Gross, *The New Way of War: Is There a Duty to Use Drones?*, 67 FLA. L. REV. 1 (2015).

Part III: Case Studies

The law of war's built-in mechanisms for regulating new weapons technology are hardly comprehensive: many new weapons do risk undermining the entire legal regime. In this part, we will discuss three recent new types of weaponry and how they did (or continue to) pose a threat to fundamental law of war principles.

Week 9: Guest Lecturer – Eyal Benvenisti

1. Eliav Lieblich & Eyal Benvenisti, *The Obligation to Exercise Discretion in Warfare: Why Autonomous Weapon Systems Are Unlawful*

Week 10: Cyberwarfare – What Constitutes a “Use of Force”?

1. Remarks by Harold Hongju Koh, International Law in Cyberspace, USCYBERCOM Inter-Agency Legal Conference, Ft. Meade, MD (September 18, 2012), *available at* <http://www.state.gov/s/l/releases/remarks/197924.htm>.
2. Michael Schmitt, *The State of Humanitarian Law in Cyber Conflict*, JUST SECURITY (Jan. 6, 2015, 2:50 PM), <http://justsecurity.org/18891/state-humanitarian-law-cyber-conflict/>.
3. Michael Schmitt, *Preparing for Cyber War: A Clarion Call*, JUST SECURITY (Mar. 23, 2015, 8:58 AM), <http://justsecurity.org/21361/preparing-cyber-war-clarion-call/>.
4. Duncan B. Hollis, *Re-Thinking the Boundaries of Law in Cyberspace: A Duty to Hack?*, in *CYBERWAR: LAW & ETHICS FOR VIRTUAL CONFLICTS* (J. Ohlin et al., eds., 2014) (questioning the role of boundaries and law-by-analogy in determining international law in cyber).
5. Sara Sorcher, *The Pentagon is Building an App Store for Cyberoperations*, CHRISTIAN SCIENCE MONITOR, <http://passcode.csmonitor.com/planx>.

Further Readings

1. TALLINN MANUAL ON THE INTERNATIONAL LAW APPLICABLE TO CYBERWARFARE (2013).
2. P.W. SINGER & ALLAN FRIEDMAN, *CYBERSECURITY AND CYBERWAR: WHAT EVERYONE NEEDS TO KNOW* (2014).
3. Oona A. Hathaway, Rebecca Crootof, Philip Levitz, Haley Nix, Aileen Nowlan, William Perdue, and Julia Spiegel, *The Law of Cyber-Attack*, 100 CALIF. L. REV. 817 (2012).

Week 11: Autonomous Weapons Systems – How Should Scary Technology Be Regulated?

1. HUMAN RIGHTS WATCH & INT’L HUMAN RIGHTS CLINIC, HARVARD LAW SCH., *ADVANCING THE DEBATE ON KILLER ROBOTS: 12 KEY ARGUMENTS FOR A PREEMPTIVE BAN ON FULLY AUTONOMOUS WEAPONS* (2014), *available at* http://www.hrw.org/sites/default/files/related_material/Advancing%20the%20Debate_8_May2014_Final.pdf.
2. Michael C. Horowitz & Paul Scharre, *Meaningful Human Control in Weapon Systems: A Primer*, CNAS Working Paper, *available at* http://www.cnas.org/sites/default/files/publications-pdf/Ethical_Autonomy_Working_Paper_031315.pdf.

Further Readings

1. *Editor’s Picks: Autonomous Weapons Systems*, JUST SECURITY, <http://justsecurity.org/editors-picks/autonomous-weapons-systems/>.
2. P.W. Singer, *Robots at War: The New Battlefield*, 2008 WILSON Q. 30.
3. Michael Schmitt, *Autonomous Weapon Systems and International Humanitarian Law: A Reply to the Critics*, 2013 HARV. NAT’L SEC. J. FEATURES 11.

Week 12: Workshopping Papers

Week 13: Drones, Non-state Actors, and Issues of Distinction

1. *Direct Participation in Hostilities: Questions & Answers*, ICRC RESOURCE CENTRE, <https://www.icrc.org/eng/resources/documents/faq/direct-participation-ihl-faq-020609.htm> .
2. Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, *Report of the Special Rapporteur on the Promotion and Protection of Human Rights and Fundamental Freedoms While Countering Terrorism*, General Assembly, U.N. Doc. A/68/389 (Sept. 18, 2013) (by Ben Emerson) (pages 19-22), available at <http://justsecurity.org/wp-content/uploads/2014/02/Special-Rapporteur-Rapporteur-Emmerson-Drones-2014.pdf>.
3. Scott Shane, *Election Spurred a Move to Codify U.S. Drone Policy*, N.Y. TIMES, Nov. 24, 2012, at A1, available at <http://www.nytimes.com/2012/11/25/world/white-house-presses-for-drone-rule-book.html>.
4. Arianna Huffington, *'Signature Strikes' and the President's Empty Rhetoric on Drones*, HUFFINGTON POST (Jul. 10, 2013, 5:56 PM EDT), http://www.huffingtonpost.com/arianna-huffington/signature-strikes-and-the_b_3575351.html .

Further Readings

1. ICRC, INTERPRETIVE GUIDANCE ON THE NOTION OF DIRECT PARTICIPATION IN HOSTILITIES UNDER INTERNATIONAL HUMANITARIAN LAW, available at <https://www.icrc.org/eng/assets/files/other/icrc-002-0990.pdf> (Nils Melzer, ed.).
2. Cody Poplin, *Look Who Else Has Drones: ISIS and Al Nusra*, LAWFARE (Oct. 24, 2014, 10:11 AM), <http://www.lawfareblog.com/2014/10/look-who-else-has-drones-isis-and-al-nusra/> .

Week 14: Stepping Back

1. Colin B. Picker, *A View from 40,000 Feet: International Law and the Invisible Hand of Technology*, 23 CARDOZO L. REV. 149 (2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=987524