Center for Ethics and the Rule of Law

Annual Report 2014-2015







CONTENTS

4	About CERL	
7	Letter from the Director	
8	People	
9	Executive Board	
16	Advisory Council	
18	Staff	
19	Summer Interns	
22	Events 2014-2015	
24	The Ethics of Autonomous Weapons Systems	
30	Ethical Dilemmas in the Global Defense Industry	
38	The Future of Interrogation: National Security in 21st Century Conflict	
40	Perceptions of Risk: How We Manage Emergencies	
42	Events 2015-2016	
43	Iran's Nuclear Chess: After the Deal	
44	Preventing and Treating the Invisible Wounds of War: Combat Trauma and Psychological Injury	
45	The Ethics of Negotiation in Armed Conflict	
46	Publications	
47	Cyberwar: Law and Ethics for Virtual Conflicts	
48	CERL Benefactors	

About CERL

Mission Statement

CERL is a non-partisan interdisciplinary institute dedicated to the preservation and promotion of the rule of law in twentyfirst century warfare and national security. The only Center of its kind housed within a law school, CERL draws from the study of law, philosophy, and ethics to answer the difficult questions that arise in times of war and contemporary transnational conflicts. It represents the vision of its founder and director, Professor Claire Finkelstein, in uniting scholars and policymakers from various fields in a multi-disciplinary conversation on some of the most challenging issues of our time.

How CERL is Unique

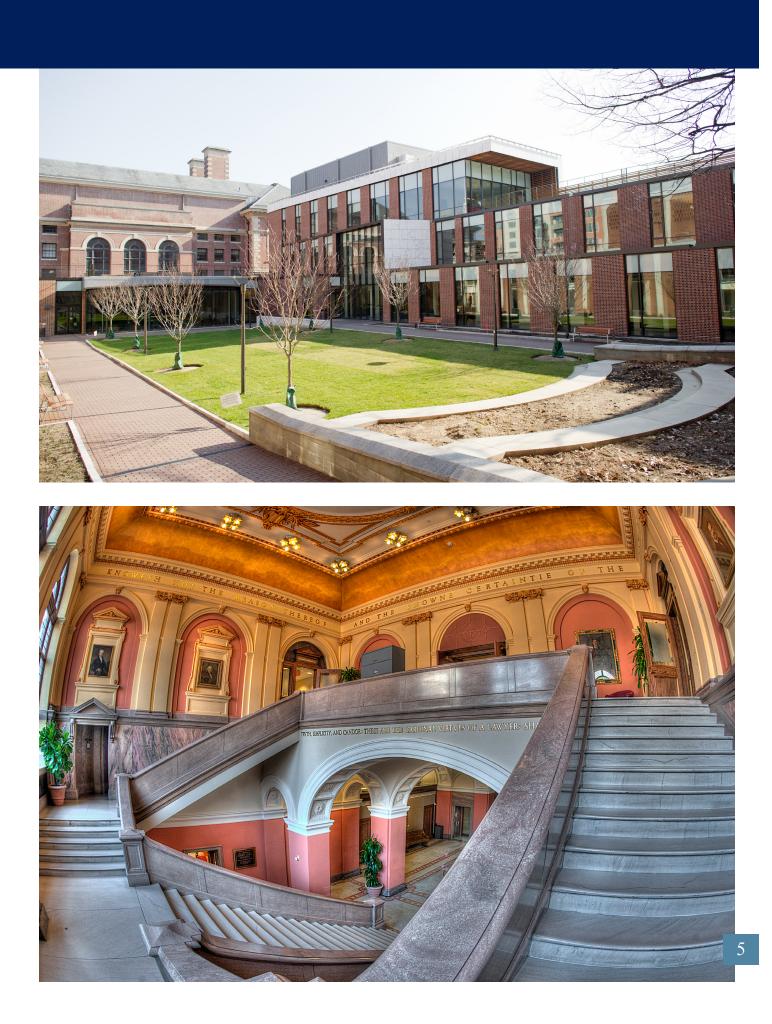
CERL stands out as a leader among academic centers by focusing on the ethical dimensions of pressing issues in national security and their relationship to the rule of law. Other centers that specialize in national security focus predominantly on policy, leaving ethical questions unexplored. CERL grapples with the ethics of our national security practices, as this is the context in which our ethical commitments come most under pressure. CERL is also unique in its interdisciplinary methodology, in that it brings together academics and practitioners from diverse fields for collaborative conversations.

In order to encourage interdisciplinary scholarship, the Center's approach to ethics and legal theory does not appeal to any particular doctrine or locate itself within any single field of study. Rather, CERL embraces diversity in thought and seeks the experience of professionals and scholars from a variety of backgrounds. More than a forum for legal scholars and theoreticians, CERL events create an open and pluralistic environment for intellectual exchange, policy exploration and professional development, at a time when keeping pace with current developments is more critical than ever before.

CERL's Impact

CERL is well positioned to have a positive impact on policy at the national level. With an Executive Board comprised of academics and practitioners at the highest echelons, CERL increasingly engages policy-makers involved in decisions in both government and the private sector. CERL events regularly attract military leaders, prominent practitioners from the intelligence community, as well as military and civilian lawyers who serve the country in a variety of roles.

Beyond maintaining relationships with active practitioners, CERL solicits the expertise of scholars in a variety of academic fields, such as philosophy, political science, psychology, medicine, and engineering. Additionally, CERL collaborates with actors in the private sector to understand the challenges faced by executives in the global defense industry. Establishing, maintaining, and expanding its network of relationships across many fields is crucial to CERL's success.





Dear Friends of CERL,

This fall marks the Center for Ethics and the Rule of Law's fourth year in operation. During the past three years CERL has experienced significant growth, measured both by the scope of our activities and the reception of our efforts. We have been fortunate to attract dedicated individuals to our Executive Board of Directors, as well as to continue to draw a wide array of interdisciplinary scholars and practitioners to our conferences and other events. With the enthusiastic backing of Penn Law's Interim Dean Wendell Pritchett, CERL was able to expand its programming and solidify its base of support. We are excited to work with Dean Ted Ruger as he assumes leadership of Penn Law. We are grateful for his vision as we work together to develop CERL institutionally. We are delighted that CERL's Council of Advisors Member Vijay Kumar was appointed as Dean of the Penn School of Engineering (SEAS) and look forward to working with him on projects of mutual interest. CERL has also strengthened its ties with SEAS by welcoming the Honorable Harold Berger to our Executive Board. We are excited to partner with him as we pursue our commitment to cross-disciplinary academic exploration.

During the 2014-15 academic year, CERL held four successful, well-attended events. Our conference last November on autonomous weapons systems, in which we discussed the nature of human and machine intelligence, brought roboticists, cognitive scientists, computer scientists and engineers to Penn Law. Last spring, we partnered with Lockheed Martin to bring business and military leaders together for a conference on ethical dilemmas in the global defense industry. We also held a panel discussion at the National Press Club in Washington, DC examining the Senate Intelligence Committee's report on CIA intelligence activities, as well as a panel discussion at Penn on perceptions of risk and community responses to emergencies. This year we also published our second volume with Oxford University Press, Cyberwar: Law and Ethics for Virtual Conflicts.

This past summer saw the expansion of CERL's internship program. As part of CERL's commitment to introducing rule of law values into educational programing, we welcomed students from a number of universities to Penn Law. Students assisted with CERL's upcoming publications and conferences and gained valuable exposure to a variety of ethical challenges in national security. We are grateful to Board Member Jules Zacher for his endowment of the Zacher Summer Interns. We look forward to working with Jules on this program in future years.

I would like to thank Executive Board Chair William Craven and Executive Board Member Paul G. Haaga, Jr., for their leadership and generous support of the Center. I am also grateful to Captain Robert Fuller, whose family foundation, the Windover Foundation, endowed our upcoming conference on combat trauma and psychological injury. We are excited to be partnering with the Windover Foundation and deeply thankful for their support.

As the Founder and Director of CERL, I am pleased that CERL is now a respected voice in both academic and policy circles on ethical matters that arise in the context of national security law and practice and honored that so many of you have been willing to join us in the effort to protect and enhance the rule of law. We are looking forward to a productive fourth year and hope you will find the following report detailing our activities for the 2014-15 academic year both informative and encouraging.

Sincerely, O. trubelsten

Claire Finkelstein

PEOPLE

The foundation of CERL's success lies in its people. From Executive Board Members, to CERL interns as well as staff, partners on Penn's campus, and conference participants, the Center relies on the expertise of many individuals to further its mission. Cultivating relationships across sectors and academic disciplines is central to CERL's commitment to creating diversified discourse on some of the most difficult issues of our time. The Center has become a facilitator of conversation and a bridge connecting the academic, private, and public communities. We owe this success to the energy and dedication of CERL's affiliates.



Pictured from left are Executive Board Members: Duncan MacIntosh, Jens David Ohlin, Jules Zacher, Connie Rosati, Paul G. Haaga, Jr., Claire Finkelstein, Christopher Morris, Stephen Xenakis, and Kevin Govern. Executive Board Members not pictured are: Harold Berger, William Craven, and Harvey Rubin.

EXECUTIVE BOARD



Professor Claire Finkelstein CERL Founder and Director, Algernon Biddle Professor of Law and Professor of Philosophy, Penn Law, Faculty Senate Chair 2014-2015

Professor Finkelstein has moderated and organized numerous conferences, public lectures and other events focusing on the challenges to and value of maintaining the rule of law in a post 9/11 world. Her interests lie at the intersection of moral and political philosophy and the law. She has published extensively in criminal law, both domestic and international, moral and political philosophy as applied to legal questions, jurisprudence, rational choice theory, and more recently the law and ethics of war. One of her distinctive contributions is bringing philosophical rational choice theory to bear on legal theory. In addition, she is an editor of two volumes stemming from CERL's past conferences: Targeted Killings: Law & Mortality in an Asymmetrical World (with Jens Ohlin and Andrew Altman, Oxford University Press, 2012), and Cyberwar: Law and Ethics for Virtual Conflicts (with Jens Ohlin and Kevin Govern, Oxford University Press, 2015). Professor Finkelstein received a J.D. from Yale Law School and a Ph.D. from the University of Pittsburgh Department of Philosophy.



Mr. William Craven CERL Board Chair, Chairman, Federal Systems

Bill Craven was the founder/CEO of Overwatch Systems, a software company serving the Intelligence segment of the Defense industry. Overwatch was built through a series of six acquisitions which were integrated to provide the US intelligence community with a single, collaborative set of intelligence analysis tools. The company was sold to Textron (TXT:NYSE) in December of 2006. Prior to forming Overwatch, Craven had been the CEO of Paravant, a public company (PVAT:NASDAQ) serving the defense community with rugged and high speed computing solutions for Battlefield and Intelligence applications. Bill together with Rick McNeight had taken the company public in 1996. Paravant then successfully acquired and integrated four defense companies serving both the tactical and intelligence segments. Prior to Paravant, Craven had been President of the Seiko Mead Company, a joint venture between the Mead Corp. of Dayton, Ohio and the Seiko Group of Japan. He served Mead in a variety of technical Product Development and Marketing roles.



Hon. Harold Berger Senior Partner and Managing Principal, Berger & Montague P.C.

Harold Berger is a Senior Partner and Managing Principal of the firm and serves on its Executive Committee. Harold Berger has participated in many complex litigation matters, including the Exxon Valdez Oil Spill Litigation, C.A. No. A89-095, in which he served on the case management committee and as Co-Chair of the national discovery team. He also participated in the Three Mile Island Litigation, C.A. No. 79-0432 (M.D. Pa.), where he acted as liaison counsel, and in the nationwide school asbestos property damage class action, In re: Asbestos School Litigation, Master File No. 83-0268 (E.D. Pa.), where the firm served as co-lead counsel. A former Judge of the Court of Common Pleas of Philadelphia, he has long given his service to the legal community and the judiciary. He is also active in law and engineering alumni affairs at the University of Pennsylvania and in other philanthropic endeavors. He serves as a member of Penn's Board of Overseers and as Chair of the Friends of Penn's Biddle Law Library, having graduated from both the engineering and law schools at Penn.



Professor Kevin Govern Associate Professor of Law, Ave Maria School of Law

Kevin Govern is an Associate Professor of Law at Ave Maria School of Law. He has also served as an Assistant Professor of Law at the United States Military Academy and has taught at California University of Pennsylvania and at John Jay College. Professor Govern began his legal career as an Army Judge Advocate, serving 20 years at every echelon during peacetime and war in worldwide assignments involving every legal discipline. He has published widely and spoken frequently on international and comparative law, national security and homeland security law, military operations, and professional ethics. His honors include: Institute for National Security Studies (INSS) Research Grant Award (for research into Islamic attitudes toward legitimacy of international law and international agreements) (2007); Phi Kappa Phi International Honor's Society; Legion of Merit (twice awarded for exceptionally meritorious conduct in the performance of outstanding services and achievements); and Most Outstanding Legal Professional in United States Special **Operations Command.**



Mr. Paul G. Haaga, Jr. Retired, former Chairman of the Board, Capital Research and Management Company

Paul Haaga is the retired chairman of the board of Capital Research and Management Company. He was the Vice Chairman of the fixed-income funds in the American Funds Group and Chairman of Capital International Fund (Luxembourg SICAV marketed in Europe). In 2014, he became a Charter Trustee of Princeton University. Mr. Haaga also served on NPR's Board of Directors. He first joined NPR's Board in 2011 and has served as Vice Chair of the Board and Chair of its Finance Committee. He left the board to serve as NPR's Acting President and CEO from September 2013 - July 2014 and returned to the board in November 2014. Prior to joining Capital in 1985, Haaga was a partner in the law firm of Dechert Price & Rhoads (now known as Dechert) in Washington, D.C. From 1974 to 1977, he was a senior attorney for the Division of Investment Management of the U.S. Securities and Exchange Commission. Haaga earned a bachelor's degree in economics from Princeton University, an M.B.A. from the Wharton School and a J.D. from the University of Pennsylvania Law School.



Professor Duncan MacIntosh Professor of Philosophy, Dalhousie University

Duncan MacIntosh BA (Queen's '79), MA (Waterloo '81), PhD (Toronto, '86) is Professor and Chair, Philosophy Department, Dalhousie University, Halifax, Nova Scotia, Canada. His work has appeared in The Journal of Philosophy, Australasian Journal of Philosophy, Philosophical Studies, Analysis, The British Journal for the Philosophy of Science and elsewhere on such topics as intransitive preferences and procrastination, needs as bases of moral entitlements, self-ownership in Libertarianism, the reasons of rational persons, the structure of ideal moral codes, scientific realism, the rational evaluation of preferences and the relationship between rationality and morality. Most recently, he has been studying the implications of practical and moral paradoxes like the Prisoner's Dilemma and the Deterrence Paradox for the structure of agency, commitment and value.



Professor Christopher Morris Professor of Philosophy and Chair of the Department of Philosphy, University of Maryland

Christopher W. Morris is Professor of Philosophy at the University of Maryland, College Park. His interests are in moral, political, and legal philosophy, and the theory of practical rationality. Some of his current research develops the implications of his book An Essay on the Modern State for international affairs and world order and, in particular, legitimacy. Other topics include justice and reasons for action and a number of questions about moral standing. Before joining the University of Maryland in the spring of 2002, Morris was Professor of Philosophy at Bowling Green State University and Senior Research Fellow at the Social Philosophy and Policy Center.



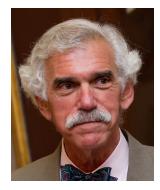
Professor Jens David Ohlin Associate Dean for Academic Affairs and Professor of Law, Cornell Law School

Professor Ohlin specializes in international law and all aspects of criminal law, including domestic, comparative, and international criminal law. His latest book, The Assault on International Law, from Oxford University Press, challenges the prevailing American hostility towards international law, and offers a novel theory of rationality to explain why nations should comply with international law. Ohlin's research also focuses on the laws of war, in particular the impact of new technology on the regulation of warfare, including remotely piloted drones and the strategy of targeted killings, cyberwarfare, and the role of non-state actors in armed conflicts. His books in this area include Targeted Killings: Law and Morality in an Asymmetrical World (Oxford University Press 2012, with A. Altman & C. Finkelstein); Cyberwar: Law & Ethics for Virtual Conflicts (Oxford University Press, with C. Finkelstein & K. Govern); and Defending Humanity: When Force is Justified and Why (Oxford University Press 2008, with George Fletcher).



Professor Connie Rosati Associate Professor of Philosophy, University of Arizona

Connie Rosati is Associate Professor of Philosophy at the University of Arizona. Professor Rosati received a Ph.D. in Philosophy from the University of Michigan and a J.D. from Harvard Law School. She is currently a member of the faculty at the University of Arizona in Tucson, but has previously taught at Rutgers, Northwestern, the University of Michigan, the University of California, Davis, the University of Pennsylvania Law School, and the University of San Diego Law School. Over the years, she has taught a variety of courses in ethics, political philosophy, law, and the philosophy of law. Her research interests lie principally in the foundations of ethics and in jurisprudential questions about constitutional interpretation and the objectivity of law.



Harvey Rubin Director of Penn's ISTAR, Associate Dean for Student Affairs, Perelman School of Medicine, University of Pennsylvania

Harvey Rubin received his PhD in Molecular Biology from the University of Pennsylvania in 1974 and his MD from Columbia University in 1976. He was a House Officer in Medicine at The Peter Bent Brigham Hospital in Boston and did his fellowship in infectious diseases at Harvard and the Brigham. Dr. Rubin joined the faculty at the University of Pennsylvania in 1983 and became Professor of Medicine in 1998. Dr. Rubin holds secondary appointments as Professor in the Department of Microbiology, School of Medicine and as Professor of Computer and Information Sciences at the University of Pennsylvania School of Engineering and Applied Sciences. At the present time Dr. Rubin serves as a member of the School of Medicine Curriculum Committee. He won the Donald B Martin, MD Teaching Service Award in 1996. He also serves as the course director for the Wilderness Medicine elective. He is the Director of the Institute for Strategic Threat Analysis and Response (ISTAR) at the University of Pennsylvania.



Stephen Xenakis Brigadier General (Ret.), U.S. Army, Erik Erikson Scholar, The Austen Riggs Center

Stephen Xenakis is a retired brigadier general and Army medical corps officer with 28 years of active service. He has been a senior adviser to the Department of Defense on neurobehavioral conditions and medical management. Having spent cumulatively nearly three months at Guantanamo Naval Base, Dr. Xenakis has interviewed multiple detainees at Guantanamo and advised attorneys on their respective cases. He currently provides consultation and expert testimony as needed on approximately seven current or former detainees. Dr. Xenakis has reviewed medical, intelligence, and military files of nearly 50 detainees and accused terrorists as a consultant to attorneys, government authorities, and human rights organizations. The individuals have included high-value detainees, convicted belligerents, and others awaiting release and return to their homes.



Jules Zacher Attorney-at-Law, Board Member Council For a Livable World

Jules Zacher has practiced law since 1974 representing persons who have contracted Legionnaire's disease. He received his law degree in 1974 and his Master of Arts degree in 1970 from Temple University. He received his undergraduate training at the University of Pittsburgh. Mr. Zacher is a member of the board of the Council for Livable World, an arms control group based in Cambridge and Washington DC. He has represented the Council in litigation involving the Federal Advisory Committee Act against the Robb-Silverman Commission (WMD Commission), and the Freedom of Information Act against the Missile Defense Agency and the National Nuclear Security Administration. He is an avid court tennis player.



CERL Board Members and participants at The Weighing of Lives in War: Combatants and Civilians in the Jus in Bello conference, listening to a keynote speech.

Advisory Council



Anita Allen Henry R. Silverman Professor of Law and Professor of Philosophy, Penn Law



Dell L. Dailey President Dell Dailey and Family Former Ambassador-at-Large for Combating Terrorism, Department of State



David Gauthier Professor Emeritus, Philosophy Department, University of Pittsburgh



Vijay Kumar Nemirovsky Family Dean of Penn Engineering, University of Pennsylvania



Martin Lederman Associate Professor of Law, Georgetown University



Sharon Lloyd Professor of Philosophy, Law, and Political Science University of Southern California



Larry May W. Alton Jones Professor of Philosophy, Professor of Law, Professor of Political Science, Vanderbilt University



Jeff McMahan White's Professor of Moral Philosophy, University of Oxford



Paul E. Menoher, Jr. Lieutenant General (Ret.), US Army



Mary Ellen O'Connell Robert and Marion Short Professor of Law and Research Professor of International Dispute Resolution, University of Notre Dame Law School



Rogers Smith Christopher H. Browne Distinguished Professor of Political Science, University of Pennsylvania



William Burke-White Richard Perry Professor and Inaugural Director, Perry World House, Deputy Dean and Professor of Law, Penn Law

STAFF



Ilya Rudyak Director of Research

Ilya Rudyak is the Director of Research and CERL's inaugural Fellow in National Security and Ethics. Prior to joining the Center, he practiced law as a litigation attorney, worked as an educator at Yad Vashem, the World Center for Holocaust Research, and served aboard the Israeli Navy Dolphin Class submarines as the Head of Weapons Department. Ilya holds a joint LL.B. degree in law and psychology from the Hebrew University of Jerusalem, an LL.M. with distinction (valedictorian) from the University of Pennsylvania Law School, and is currently the 2013-2015 Fox Fellow and a doctoral candidate at the University of Pennsylvania Law School S.J.D. program.

At CERL, Ilya works closely with Professor Finkelstein in designing the Center's short and long term strategies, policies and programming. He also develops the research agenda for conferences and position papers, as well as provides analytical support for the fundraising, website design and communication functions of the Center. In addition, Ilya oversees the Center's daily operations and supervises the work of CERL's fellows and interns.



Ashling Gallagher Research Fellow

Since joining the Center in 2013, Ashling Gallagher's work at the Center has focused on war and national security, with particular attention paid to the psychology of combatants, intelligence practices, and ethics. As a Fellow, Ashling is tasked with conducting academic and institutional research, tracking developments in areas of national security law and policy, engaging donors, drafting project proposals and grant applications, and increasing public awareness to CERL's mission and programming.

Ashling graduated *cum laude* from the University of Pennsylvania in 2012 with a Bachelor of Arts degree in political science. She will begin a MSc degree in International Relations at the London School of Economics and Political Science in the fall of 2015.

The CERL Summer Internship Program

The CERL Summer Internship Program embodies the center's commitment to the development of the next generation of ethical and legal scholars. It aims to increase students' theoretical and practical understanding of the complex nature of preserving rule of law values in the face of the changing nature of warfare. Interns in the program work as a team under the supervision of Professor Finkelstein and Mr. Rudyak, and participate in CERL activities to the greatest extent possible. They, *inter alia*, research issues of national security law and policy, attend meetings to discuss developments in war and national security, and assist in planning and organization of CERL conferences.

The 2015 Summer Interns are representative of the diversity of opinion and background typical of CERL associates. The Center hosted interns from Penn Law, The Fletcher School of Law and Diplomacy at Tufts University, Cornell Law, St. Joseph's University, and Penn's School of Arts and Sciences.

The Jules Zacher Summer Internship

Thanks to support from Executive Board Member Jules Zacher, CERL was able to award two interns stipends this past summer. The recipient's names were Kelsey Bomar, Penn Law 2017, and Mark Conway, Fletcher School of Law and Diplomacy. The interns explored the potential of using Freedom of Information Act (FOIA) litigation to further transparency and the rule of law. The interns conducted extensive research and received training and feedback from Mr. Zacher, who is knowledgeable about FOIA litigation and a non-proliferation activist, on crafting a FOIA request pertaining to the diplomatic negotiations on the nuclear program of the Iranian government.



Pictured from Left: CERL Executive Board Chair William Craven, Edward McNelis, Mark Conway, Jennifer Joseph, Brian O'Keffe, Kelsey Bomar, Tim Shinn, Ashling Gallagher, Suzanne Webb, and Claire Finkelstein

Events 2014-2015

To further CERL's mission of promoting and preserving rule of law values in national security, the Center holds two comprehensive conferences per academic year in addition to smaller one day panel discussions. In the 2014/2015 academic year, CERL hosted conference participants at Penn Law to discuss the ethics of autonomous weapons systems and the ethical issues that arise in the global defense industry. In addition to these two-day conferences, CERL organized panel discussions to scrutinize enhanced interrogation techniques and the perceptions of risk.

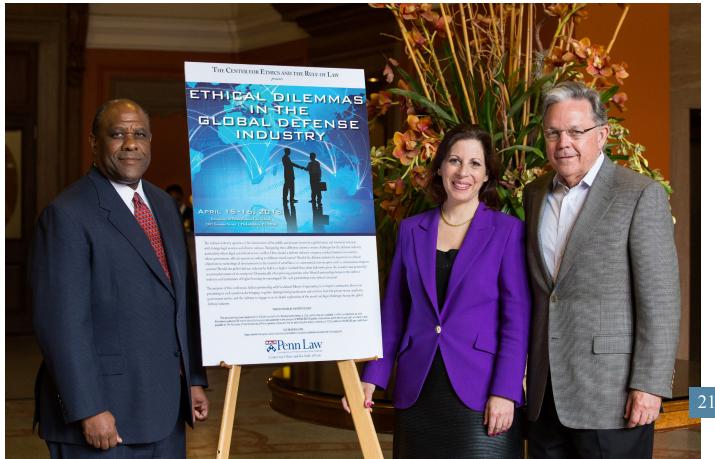


Left: Interim Dean Wendell Pritchett chatting with Professor Claire Finkelstein and Ms. Sarah Chayes after the Keynote "Counterproductive Coalitions"

Opposite Above: Vice-President for Public Safety Maureen S. Rush, Dr. P.J. Brennan, Professor Claire Finkelstein, Professor Dan Kahan, and Lt. Gen. (Ret.) Russel Honoré following the panel discussion of Perceptions of Risk: How We Manage Emergencies.

Opposite Below: Dr. Leo Mackay, VP of Ethics and Sustainability, Lockheed Martin Corporation, with Professor Claire Finkelstein and board chair William Craven.





THE CENTER FOR ETHICS AND THE RULE OF LAW



Autonomous Weapons Systems (AWS), as defined by the U.S. Department of Defense, are weapon systems that can select and engage targets "without further intervention by a human operator." Many have voiced ethical concerns about developing weapons that "take humans out of the loop," on the grounds that machines will never be able to replicate human moral reasoning. But do we know what human beings are really doing when they engage in moral reasoning? What, for example, is the relationship of human moral reasoning to human rationality generally? On the view that rationality is just the ability to select ends and reason instrumentally towards those ends, it should be possible for AWS technology to replace human reasoning on the battlefield. On another view, moral decision-making by human beings involves an intuitive, non-algorithmic capacity that is not likely to be captured by even the most sophisticated of computers. If this is true, the development of AWS would be ethically problematic, since those systems would lack the crucial ability to identify morally salient factors in which human beings display such expertise. Accordingly there is a growing insistence that so-called "killer robots" should be banned. But what if human moral reasoning is itself fundamentally flawed? Could sophisticated machines do better? The purpose of this conference is to address these and related questions by bringing together distinguished scholars and practitioners from a variety of fields to engage in constructive discussion of the moral and legal challenges posed by Autonomous Weapons Systems.

For more information please contact *fssevents@law.upenn.edu* or (215) 573-9931 www.law.upenn.edu/institutes/cerl/

PARTICIPATION BY INVITATION ONLY





The Ethics of Autonomous Weapons Systems

November 21-22, 2014

Day 1 - November 21

Session 1	Human Morality and the Problem of Intelligent Machines Moderator: Claire Finkelstein, University of Pennsylvania	
Session 2	The Law and Ethics of Autonomous Weapons Systems Moderator: Jens David Ohlin, Cornell Law School	
Lunch Address	<i>Keeping Weapons Control in Human Hands</i> Noel Sharkey, University of Sheffield	
Session 3	<i>The Rationality and Morality of Automaticity</i> Moderator: Duncan MacIntosh, Dalhousie University	
Keynote Panel	Should "Killer Robots" be Banned? Moderator: William Burke-White, Director, Perry World House, University of Pennsylvania	
Panelists	Charles A. Blanchard, Arnold & Porter, LLP; former General Counsel and Chief Ethics Officer for the U.S. Air Force	
	Bonnie Docherty, Human Rights Watch; Harvard Law School	
	Major General (ret.) Robert Latiff, University of Notre Dame	
	Wendell Wallach, Yale University	
Day 2 - November 22		
Session 4	Uniquely Human? On Intuition, Mercy and Moral Decision Making Moderator: Sharon Lloyd, University of Southen California	
Session 5	<i>On the Concept of Meaningful Human Control</i> Moderator: Michael Horowitz, University of Pennsylvania	
Session 6	<i>Responsibility for Acts of Intelligent Machines</i> Moderator: Kenneth Anderson, American University	

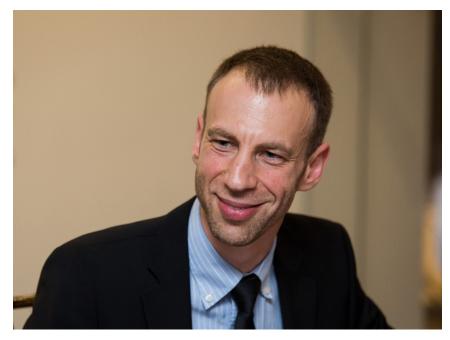


Clockwise from top left: William Burke-White, Professor and Deputy Dean at Penn Law and Inaugural Director of the Perry World House; Jules Zacher, Esq. and Ron Arkin, Associate Dean for Research and Space Planning, Regents' Professor, Georgia Tech; Ashling Gallagher, CERL Research Fellow; and Noel Sharkey, Professor of Artificial Intelligence and Robotics, Professor of Public Engagement, University of Sheffield.













Clockwise from top left: Ilya Rudyak, CERL Director of Research; Michael Horowitz, Associate Professor of International Relations, University of Pennsylvania; Panelists from left are William Burke-White, Charles Blanchard, Robert Latif, Bonnie Docherty, and Wendell Wallach; Participants and attendees mingle at the reception following the Autonomous Weapons Systems panel discussion.



CENTH KISLAK AF SPECIAL COLLECTIONS. RARE BOOKS and MANUSCRIPTS

THE ETHICS OF AUTONOMOUS WEAPONS SYSTEMS

Should "Killer Robots" be Banned?

Friday, November 21, 2014

4-5:30 p.m.

Keynote Panel OPEN TO THE PUBLIC

The Class of 78 Pavilion Van Pelt Library, 6th Floor

KEYNDTE PANELISTS

Mr. Charles A. Blanchard

Arnold & Porter, LLP former General Counsel and Chief Ethis Officer for the U.S. Air Force

Ms. Bonnie Docherty

Human Rights Watch Harvard Law School

Major General (ret.) Robert Latiff University of Notre Dame

Professor Wendell Wallach

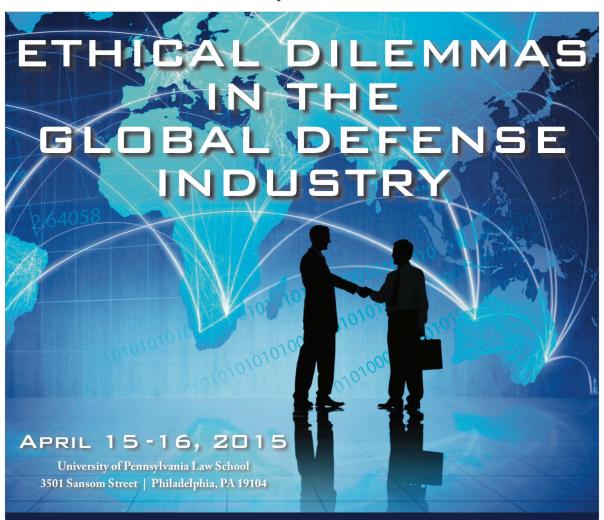
NOVEMBER 21-22, 2014

University of Pennsylvania Law School 3501 Sansom Street | Philadelphia, PA 19104

Autonomous We apons Systems (AWS), as defined by the U.S. Department of Defense,are weapon systems that can select and engage targets "without further intervention by a human operator." Many have voiced ethical concerns about developing weapons that "take humans out of the loop," on the grounds that machines will never be able to replicate human moral reasoning. But do we know what human beings are really doing when they engage in moral reasoning? What, for example, is the relationship of human moral reasoning to human rationality generally? On the view that rationality is just the ability to select ends and reason instrumentally towards those ends, it should be possible for AWS technology to replace human rease the battlefield. On another view, moral decision-making an intuitive, non-algorithmic o

THE CENTER FOR ETHICS AND THE RULE OF LAW

presents



The defense industry operates at the intersection of the public and private sectors in a global arena and routinely interacts with foreign legal systems and diverse cultures. Navigating these different contexts creates challenges for the defense industry, particularly where legal and ethical norms conflict. How should a defense industry company conduct business in countries where government officials operate according to different moral norms? Should the defense industry be responsive to ethical objections to technological developments in the context of surveillance or controversial new weapons such as autonomous weapons systems? Should the global defense industry be held to a higher standard than other industries given the sensitive and potentially controversial nature of its enterprise? Domestically other pressing questions arise. Should partnerships between the defense industry and institutions of higher learning be encouraged? Do such partnerships raise ethical concerns?

The purpose of this conference, held in partnership with Lockheed Martin Corporation, is to inspire constructive discussion pertaining to such questions, by bringing together distinguished practitioners and scholars from the private sector, academia, government service and the military to engage in an in-depth exploration of the moral and legal challenges facing the global defense industry.

PARTICIPATION BY INVITATION ONLY

This program has been approved for 5.0 ethics credits for Pennsylvania lawyers. CLE credits may be available in other jurisdictions as well. Attendees seeking CLE credit should bring separate payment in the amount of \$75.00 (\$37.50 public interest/non-profit attorneys) cash or check made payable to The Trustees of the University of Pennsylvania. If you will not be attending the entire conference, CLE credits will be \$15.00 per credit hour.

CLE READING LINK: https://www.law.upenn.edu/institutes/cerl/conferences/ethicaldilemmas/required-readings.php



Ethical Dilemmas in the Global Defense Industry

April 15-16, 2015

Day 1 - April 15			
Public Keynote	<i>"Counterproductive Coalitions"</i> Sarah Chayes, Senior Associate, Carnegie Endowment for International Peace		
Day 2 - April 16			
Session 1	Fiduciary Duties and Moral Obligations: Addressing Corruption in Multicultural Environments Moderator: William R. Craven, Chair of the Executive Board of CERL		
Session 2	Assessing Legal Standards in the Defense Industry from an Ethical Perspective Moderator: Mark Pyman, Transparency International UK		
Lunch Address	"Promoting Ethical Decision-Making in the Defense Industry" Patricia J. Harned, CEO, Ethics & Compliance Initiative		
Session 3	<i>Ethical Dilemmas in New Technologies</i> Moderator: George R. Lucas Jr., University of Notre Dame		
Session 4	Should Universities Partner with the Defense Industry? Moderator: Claire Finkelstein, University of Pennsylvania		

Facilitator of Conversation

CERL has become a facilitator of conversation on some of the most challenging contemporary dilemmas of national security. By hosting conferences in a round-table format, participants are encouraged to engage with one another on a level unique to CERL conferences. Further, the round-table portion of CERL conferences are closed to the public and off the record, enabling participants to have candid conversations and a free exchange of thoughts and ideas.



Opposite: Patricia Harned, CEO, Ethics & Compliance Initiative, delivers the lunch address during the Ethical Dilemmas in the Global Defense Industry conference.

Mark Pyman, Transparency International, has a question for Dr. Harned.

Next Pages: The round table discussion of the Ethical Dilemmas in the Global Defense Industry *conference*.







"The mere fact of holding elections, Americans already knew, was not sufficient to guarantee people's rights. That truth—that an election per se is less important than the architecture within which it takes place—played out in the painful struggles that took place in Arab Spring countries after their revolutions."

Sarah Chayes, Thieves of State: Why Corruption Threatens Global Security



Pictured from left: Executive Board Members Paul G. Haaga, Jr., Sarah Chayes, Claire Finkelstein, and William Craven following Ms. Chayes' keynote speech.

THE CENTER FOR ETHICS AND THE RULE OF LAW INVITES YOU TO

Counterproductive Coalitions

SPEAKER:

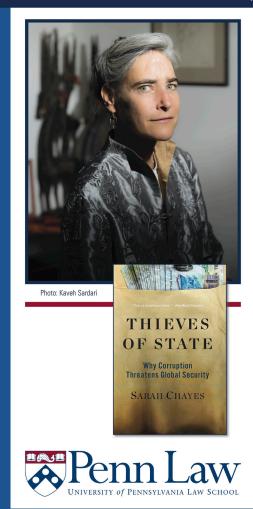
SARAH CHAYES

Senior Associate, Carnegie Endowment for International Peace

WEDNESDAY, APRIL 15, 2015

4:30 PM – 6:00 PM | Fitts Auditorium

Followed by a cocktail reception



Sarah Chayes, author of *Thieves of State: Why Corruption Threatens Global* Security, served as special assistant to the top U.S. military officer, Chairman of the Joint Chiefs of Staff Admiral Mike Mullen. She participated in Cabinetlevel decision-making on Afghanistan, Pakistan and the Arab Spring, traveling with Mullen frequently to the region. He tapped Chayes for the job after her work as special advisor to two commanders of the international troops in Afghanistan (ISAF), Generals David McKiernan and Stanley McChrystal. She contributed her unique knowledge of the Afghan south to the ISAF command.

It was a sense of historic opportunity that prompted Chayes to renounce her journalism career in early 2002, after covering the fall of the Taliban for National Public Radio, and to remain in Afghanistan to help rebuild the country. She chose to settle in the former Taliban heartland, Kandahar.

In 2005, Chayes founded Arghand, a start-up manufacturing cooperative, where men and women working together produce fine skin-care products for export. (*www.arghand.org*) The goal was to revive the region's historic role in exporting fruit and its derivatives, to promote sustainable development, and expand alternatives to the opium economy. Running Arghand in downtown Kandahar proved to an extraordinary vantage point for observing the unfolding war.

From 1996-2001, Chayes was NPR Paris correspondent. For her work during the Kosovo crisis, she shared the 1999 Foreign Press Club and Sigma Delta Chi awards.

She is now a senior associate at the Carnegie Endowment for International Peace, in the Democracy and Rule of Law and South Asia programs. Her work focuses on the security implications of acute corruption.

Along with *Thieves of State*, Chayes is is the author of *The Punishment of Virtue*: *Inside Afghanistan After the Taliban* (Penguin, 2006) and contributes to *The Los Angeles Times, The Washington Post, Foreign Policy*, and *Defense One* among other publications.

This program has been approved for 1.5 ethics credits for Pennsylvania lawyers. CLE credits may be available in other jurisdictions as well. Attendees seeking CLE credit should bring separate payment in the amount of \$30.00 cash or check made payable to The Trustees of the University of Pennsylvania.

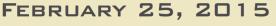
 $\label{eq:clear} CLE \ Readings: https://www.law.upenn.edu/live/files/4212-cleveland-et-al-trends-in-the-international-fight$

RSVP here: http://bit.ly/1CrODVP

The Center for Ethics and the Rule of Law *presents:*

THE FUTURE OF

NATIONAL SECURITY IN 21st Century Conflict



6:00 – 8:00 p.m., followed by a cocktail reception National Press Club | 529 14th St. NW, 13th Floor | Washington, DC 20045

The Senate Select Committee on Intelligence Study of the Central Intelligence Agency's Detention and Interrogation Program (SSCI Report) has reignited debate about the ethics and legality of Enhanced Interrogation Techniques. The Center for Ethics and the Rule of Law (CERL), of the University of Pennsylvania, in collaboration with the Perry World House, will host a public panel discussing the Report's findings. The panel will address the moral and legal status of harsh interrogation methods, the rights of detainees, as well as the role of international law in regulating interrogation practices.

In addition, the panel will discuss the role of professionals engaged with national security, many of whom are bound by professional codes of ethics. What are the duties of professionals when national security imperatives conflict with the standards of their professions? How should violation of such duties be handled?

Finally, the panel will address the controversy surrounding the SSCI Report itself. Some see the report as a long overdue exposure of a doleful chapter in our nation's recent history. Others see the report as an exercise in partisan politics.

The panel brings together illustrious speakers from different backgrounds to explore these topics in a respectful, thoughtprovoking and non-partisan manner. There will be a reception after the formal proceedings.

This program has been approved for 2.0 ethics credits for Pennsylvania and D.C. attorneys. CLE credits may be available in other jurisdictions as well. Attendees seeking CLE credit should bring separate payment in the amount of \$30.00 cash or check made payable to The Trustees of the University of Pennsylvania.



Perry World House

SPEAKERS

John D. Altenburg, Jr. Major General (Ret), USA Of Counsel, Greenberg Traurig, LLP

Juan E. Mendez UN Special Rapporteur on Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment

Alberto J. Mora Former General Counsel to the Department of the Navy Senior Fellow, Kennedy School of Government

> Stephen N. Xenakis Brigadier General (Ret), USA Physicians for Human Rights

MODERATOR

Claire Finkelstein Algernon Biddle Professor of Law and Professor of Philosophy, Founder and Director of CERL

PLEASE RSVP HERE <u>http://bit.ly/1DAY3hM</u> For more information please contact <u>cerl@law.upenn.edu</u> <u>www.law.upenn.edu/institutes/cerl/</u>



Pictured from left: Claire Finkelstein, Alberto Mora, John D. Altenburg, Juan E. Mendez, and Steven Xenakis.

"For the United States to turn its back on these legal mandates and this human rights legacy and then to adopt the discretionary use of the application of cruelty to individuals for any state reasons causes remarkable damage to who we are as a nation and what we seek to achieve internationally."

> -Alberto Mora, Former General Counsel to the United States Navy, Senior Fellow, Carr Center for Human Rights Policy, Harvard Kennedy School

"I think that torture can be effective. I think it makes no difference whether it's effective or not. The law's very clear; the convention's very clear. It doesn't make any difference what your national security interests are, what you believe the threat to be: it is always illegal!"

> -Major General (Ret.) John D. Altenburg, Jr., Greenberg Traurig, LLP

"Calling it something else is just playing with words and euphemisms."

-Juan E. Mendez, UN Special Rapporteur on Torture, on the use of the term "enhanced interrogation techniques"

"Many of these men who have been subjected to this treatment find that the only way that they can salvage some sense of personal dignity and decency is to engage in a hunger strike."

> -Brigadier General (Ret.) Steven N. Xenakis, Physicians for Human Rights, on his experience as a psychiatrist interviewing detainees at Guantanamo Bay

University of Pennsylvania Faculty Senate Symposium Co-sponsored by the Center for Ethics and the Rule of Law

PERCEPTIONS OF RISK: HOW WE MANAGE EMERGENCIES



APRIL 1, 2015 3:00 - 5:00 p.m., reception to follow Fitts Auditorium | University of Pennsylvania Law School

The study of risk management across a variety of domains is an essential part of policymaking today. From public health to national security, market analysis, and natural disaster emergency response, the question of how to assess and to respond to risks is of the utmost importance.

Important questions pertaining to the public perception include:

- · Does the public perceive risks accurately or are public perceptions distorted by cognitive biases?
- Should public perceptions of risk be taken into account in risk management plans even if they seem "irrational"?
- Should preparedness for disasters follow the same template as management of more ordinary risks?
- Should the management of risk in the public sector differ from that in the private? .
- Should the risk of natural disasters, such as hurricanes, be handled in the same way as the risk of . human threats, such as terrorism or criminal activity?
- Does a serious threat that persists over a protracted period of time, such as a daily threat of terrorism, still count as a security emergency?
- When are restrictions of civil liberties, such as quarantines or preventive restraint, justified to pre-empt risk of harm to the general public?

The purpose of this Symposium is to foster multi-disciplinary and inter-professional conversation about risk perception and strategies of emergency management. The panelists will engage in a conversation about emergency preparedness and how our perceptions of risk factor into those efforts.





PANELISTS

Professor P.J. Brennan, M.D. Chief Medical Officer and Senior Vice President for the University of Pennsylvania Health System

Lieutenant General (Ret.) **Russel Honoré** Led the Department of Defense Task Force in response to Hurricane Katrina

Professor Dan Kahan

Elizabeth K. Dollard Professor of Law and Professor of Psychology at Yale Law School, specializing in risk perception

Vice President Maureen Rush, M.S., CPP Vice President for Public Safety, University of Pennsylvania

MODERATOR

Professor Claire Finkelstein Algernon Biddle Professor of Law and Professor of Philosophy, Founder and Director of the Center for Ethics and the Rule of Law

For more information please contact cerl@law.upenn.edu www.law.upenn.edu/institutes/cerl/





Above: Penn Provost Vincent Price introduces panelists Maureen Rush, P.J. Brennan, Dan Kahan, Russel Honoré, and Claire Finkelstein during the panel discussion of Perceptions of Risk: How We Manage Emergencies.

Below: Dwight Jaggard of Penn Engineering, Claire Finkelstein, and Reed Pyeritz of Penn's Perelman School of Medicine following the Penn Faculty Senate Symposium/CERL co-hosted panel discussion.

Cross-Campus Collaborations

The panel discussion, *Perceptions of Risk: How We Manage Emergencies* was co-sponsored by the Faculty Senate of the University of Pennsylvania. The partnership with the Faculty Senate, spearheaded by CERL's Director Claire Finkelstein in her simultaneous capacity as chair of the Faculty Senate, reflects CERL's commitment to fostering alliances across campus. Consequently, this passing year CERL has joined forces with Penn Global's Perry World House in bringing the panel discussion on *The Future of Interrogation* back to Penn's campus, and next year it will cooperate with Penn's Middle East Center for the conference *The Ethics of Negotiation in Armed Conflict*. These collaborations are a vital part of CERL's role in fostering interdisciplinary conversations on Penn's campus and beyond.













Opposite from left: P.J. Brennan and Russel Honoré

Clockwise from top right: Dan Kahan; Maureen Rush; Dan Kahan, Vincent Price, and Claire Finkelstein; Dwight Jaggard and Reed Pyeritz; and panelists and audience at the Perceptions of Risk panel discussion.



Events 2015-2016

CERL continues to expand its programming. For the 2015/16 academic year the Center has planned two conferences. The first conference, entitled: "Preventing and Treating the Invisible Wounds of War: Combat Trauma and Psychological Injury" will address the ethical issues relating to the prevention and treatment of post-traumatic stress disorder, traumatic brain injury, moral injury, and other combat-related mental health concerns. The second conference, entitled "The Ethics of Negotiation in Armed Conflict" will address ethical questions related to negotiation with non-democratic states, non-state armed groups, hostage negotiations and the tensions between transparency and secrecy in diplomatic relations. Additionally, CERL will co-host with Penn Law a panel discussion on the Iranian nuclear negotiations and subsequent deal.



Iran's Nuclear Chess: After the Deal

September 17, 2015

CERL's opening event for the 2015-2016 academic year aims to illuminate the moral aspects of the negotiation of the Joint Comprehensive Plan of Action with the Islamic Republic of Iran. Discussions will revolve around the ethical and strategic dilemmas that arise when democratic nations attempt to negotiate with states who reject democratic and rule of law values. In which circumstances is it ethically permissible to negotiate with such regimes? Is focusing on Iran's nuclear program while disregarding its connection with terrorism problematic from the standpoint of legitimizing and marginalizing such behavior? Is it strategically wise? How should lawmakers in a democracy respond to diplomatic efforts of this sort on the part of the executive branch? The wideranging experience and expertise of CERL's distinguished guests will enable them to present their unique perspectives on these and related questions, furthering CERL's aim to revitalize the often neglected moral dimension of international diplomacy.



PANELISTS

General (ret) James "Hoss" Cartwright

Harold Brown Chair in Defense Policy Studies at the Center for Strategic and International Studies (CSIS), and the former Vice Chairman of the Joint Chiefs of Staff

Dr. Haleh Esfandiari

Public Policy Fellow at the Woodrow Wilson Center, and the Founding Director of the Center's Middle East Program

Prof. David S. Jonas

Adjunct Professor at Georgetown University Law Center and George Washington University Law School, and the former General Counsel of the National Nuclear Security Administration (NNSA)

Dr. Robert Litwak

Vice President for Scholars and Director of International Security Studies at the Woodrow Wilson Center, and the Former Director for Nonproliferation at the National Security Council

MODERATOR

Professor Claire Finkelstein

Algernon Biddle Professor of Law and Professor of Philosophy, and Director of the Center for Ethics and the Rule of Law, University of Pennsylvania

Preventing and Treating the Invisible Wounds of War: Combat Trauma and Psychological Injury

December 3-5, 2015



Those suffering from post traumatic stress disorder (PTSD) and traumatic brain injury (TBI) often have difficulty finding gainful employment, are prone to violent outbursts and substance abuse, experience marital problems, and exhibit suicidal tendencies. These behaviors have a disruptive effect on veterans' spouses, extended families, and communities. In addition, recent research suggests that PTSD is heritable through multiple generations, further expanding the long-term effects and costs of the condition. Civilians too suffer the psychological harm of hostilities, particularly affecting women and children, increasing the collateral costs of war. Taking these and other consequences of combat trauma into account within traditional Just War Theory presents significant challenges for civilian and military leadership. Should mental health costs to service members and civilians in areas of conflict be included in the calculations of governments contemplating whether to engage in an armed conflict? Should battlefield commanders assess potential mental harms to civilians as part of the proportionality analysis of "collateral damage" conducted prior to each military engagement? Are mental harms commensurable with physical damage? By what metric should they be included in an assessment of the costs of war?

Additionally, while PTSD continues to be perceived as the archetypical psychological combat-related syndrome, there are other less discussed combat-related psychological harms. When a service member witnesses or commits a transgression from deeply held moral beliefs and expectations, he or she may suffer from what has been termed "moral injury." Should moral injury be recognized as a mental health concern that is distinct from PTSD? Are soldiers particularly vulnerable to moral injury while confronting non-state actors embedded in civilian population? Is the conduct of senior leaders particularly significant in contributing to moral injury?

Further questions arise when considering possible measures to prevent combat trauma. Inoculating soldiers to the horrors of warfare through pre-deployment battle field simulations or pharmacological intervention may reduce the likelihood of trauma. But such prevention programs have been criticized as desensitizing soldiers to moral indignation and reducing their capacity for sound moral decision making in combat. Additional dilemmas arise in the therapeutic context. PTSD treatment in the proximity of the battlefield facilitates expedient return to active duty, but may also decrease the potential of full long-term recovery. Finally, there are important legal and ethical questions relating to criminal and civil liability of service members suffering from mental

harms. Should war-inflicted mental harms be taken into account in criminal trials? If so, should they constitute an affirmative defense, a basis for mitigation in sentencing, or as a consideration to be weighed in the exercise of prosecutorial

discretion?

The Ethics of Negotiation in Armed Conflict

April 14-16, 2016

When states conduct negotiations in the shadow of armed conflict, the exercise of diplomacy raises certain unique challenges. Conducting relations with "rogue states," namely sovereign states who disregard human rights or other international norms, for example, raises the concern that we are helping to legitimize governments and practices we otherwise strongly condemn. Nonetheless, as some have argued, there may be an obligation to negotiate with such a state when it comes to grave security issues like weapons of mass destruction. How do the alternatives to negotiation impact the moral considerations involved in dealing with such states?

Like "rogue states," non-state armed groups come in different forms, from political insurgents to criminal organizations to millenarian groups. Often these actors are designated collectively as "terrorists," a term for which there is no academic consensus – and which, it has been argued, hinders prospects for negotiation and fosters entrenched violence. Does negotiating with non-state actors, through official state channels or otherwise, undermine the international order by conferring a legitimacy and authority traditionally granted only to states? Or does legitimacy in some cases pertain to non-Westphalian groups? How should states balance the risks of attributing legitimacy to unsavory actors against the possibility of escalated violence stemming from a refusal to negotiate?

When confronted with non-state hostage takers, many governments take a policy that they will not negotiate, but in practice exceptions abound. Recently, the Obama administration indicated that lines of communication between the United States, hostage-takers, and the families of hostages are not *ipso facto* closed. Though paying a ransom remains illegal, with this change many wonder whether an unofficial policy change will emerge. This shift is welcome by former hostages and their family members. What, however, are the implications of this for deterring kidnapping?

In the case of some "rogue states" and non-state armed groups, it has been argued that their aims or values are so vile that negotiation would simply be immoral -a "bargain with the devil." Some parties have instead chosen to fight for a "just cause." Nonetheless, is there a point at which one's just cause becomes, or should become, negotiable? How do we cope with the fact that different groups have a varied understanding of morality and just war theory?

Finally, democracies face expectations of transparency and open public debate. In a democracy, what role should the public play in deciding whether to negotiate? Is secrecy necessary for diplomacy to be effective in certain cases – as with Kissinger's trips to China? How might the role of secrecy change with respect to not only other states, but non-state armed groups?



PUBLICATIONS

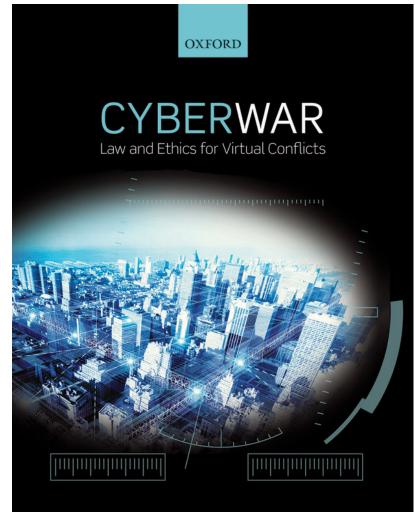
In order to create a lasting impact and a permanent academic resource, CERL publishes a volume of collected original essays following each of the Center's conferences. Conference participants are invited to submit an original paper for discussion during the conference, which will then be considered for publication in a CERL volume of collected essays. This year, CERL added to its growing library by publishing its volume dedicated to cyberwar. Each of CERL's volumes represent the thoughtful insight of past conference participants.



Claire Finkelstein and Kevin Govern with CERL's newest publication, Cyberwar: Law and Ethics of Virtual Conflicts, Oxford University Press, May 2015.

Cyberwar: Law and Ethics for Virtual Conflicts

Oxford University Press, May 2015 Edited by: Jens David Ohlin, Kevin Govern, and Claire Finkelstein



EDITED BY Jens David Ohlin, Kevin Govern, and Claire Finkelstein

Cyber warfare is fast becoming the greatest threat to national security advanced nations face. Cyberattacks can destroy economic, political, and military systems in a single act, making them dangerous across multiple dimensions. Yet, the law of armed conflict applies uneasily to this uncharted territory in the area of national security, supplying few answers to questions that are answered easily for traditional military conflict. Under what conditions does a cyberattack amount to an act of war? What is a proportional response to a cyberattack? Is it permissible to preempt a cyberattack with the use of kinetic force? If so, when would the use of pre-emptive force violate third party sovereignty?

This collection of essays, written by a group of interdisciplinary scholars and practitioners, addresses the ethical and legal issues that surround cyber warfare. It considers whether the Laws of Armed Conflict apply to cyberspace, as well as the ethical position of cyber warfare against the background of generally recognized moral traditions in armed conflict.

Cyberwar is essential reading for anyone interested in the impact of cyber warfare on international law and the laws of war.

BENEFACTORS

CERL is grateful to the following individuals and organizations for their generous support. Their contributions enable CERL to hold conferences and events, provide stipends for CERL Fellows and Interns, and help to advance CERL's mission.

Benefactors - \$50,000+

of talination of the state

and a state of the state of the

Torter Tratte

Pamela & William Craven Heather & Paul G. Haaga, Jr. The Windover Foundation

Sponsors - \$25,000 to \$49,999

Lockheed Martin Corporation Provost Interdisciplinary Seminar Fund, University of Pennsylvania

Members - \$5,000 to \$24,999

Barnes-Wall Foundation

Course Development Grant, Office of the Provost, University of Pennsylvania Middle East Center, University of Pennsylvania Perry World House, University of Pennsylvania Jules Zacher

Donors - Up to \$4,999

Mary & Dell Dailey Claire Finkelstein Kevin Govern Christopher Morris Duncan MacIntosh Jens David Ohlin Connie Rosati Harvey Rubin By bridging the divide between theory and practice, CERL aims to become a resource on matters of ethical actions in warfare and national security for policymakers at the highest levels as they make decisions that impact us all.

No. of the State o



Center for Ethics and the Rule of Law

3501 Sansom Street Philadelphia, PA 19104 www.law.upenn.edu/institutes/cerl/ cerl@law.upenn.edu

