

1 Emily Chiang, WSBA No. 50517
2 echiang@aclu-wa.org
3 AMERICAN CIVIL LIBERTIES UNION
4 OF WASHINGTON FOUNDATION
5 901 Fifth Avenue, Suite 630
6 Seattle, WA 98164
7 Phone: 206-624-2184

8 Dror Ladin (admitted *pro hac vice*)
9 Steven M. Watt (admitted *pro hac vice*)
10 Hina Shamsi (admitted *pro hac vice*)
11 AMERICAN CIVIL LIBERTIES UNION FOUNDATION

12 Lawrence S. Lustberg (admitted *pro hac vice*)
13 Kate E. Janukowicz (admitted *pro hac vice*)
14 Daniel J. McGrady (admitted *pro hac vice*)
15 Avram D. Frey (admitted *pro hac vice*)
16 GIBBONS P.C.

17 *Attorneys for Plaintiffs*

18 UNITED STATES DISTRICT COURT
19 FOR THE EASTERN DISTRICT OF WASHINGTON

20 SULEIMAN ABDULLAH SALIM,
21 MOHAMED AHMED BEN SOUD,
22 OBAIDULLAH (AS PERSONAL
23 REPRESENTATIVE OF GUL RAHMAN),

24 Plaintiffs,

25 v.

26 JAMES ELMER MITCHELL and JOHN
"BRUCE" JESSEN

Defendants.

No. CV-15-0286 (JLQ)

DECLARATION OF KEVIN
JON HELLER IN SUPPORT
OF PLAINTIFFS' RESPONSE
TO DEFENDANTS' MOTION
FOR SUMMARY
JUDGMENT

Oral Argument Requested
NOTE ON MOTION
CALENDAR:

JULY 28, 2017,
9:30 A.M., AT SPOKANE,
WASHINGTON

1 I, Kevin Jon Heller, declare under penalty of perjury as follows:
2

3 1. I am over the age of 18, of sound mind, and have personal
4 knowledge of the facts contained within this declaration.

5 2. I am a Professor of Criminal Law at SOAS, University of London,
6 and an Associate Professor of Public International Law at the University of
7 Amsterdam. A true and correct copy of my curriculum vitae is attached hereto
8 as Exhibit A.
9

10 3. I have been hired by Plaintiffs in the above-captioned matter to
11 provide an expert opinion as to: whether customary international law prohibits
12 non-consensual human experimentation during armed conflict and/or in times of
13 peace; if so, what the elements of the prohibition are under customary and
14 international law; and whether Defendants' actions towards Plaintiffs violated
15 the customary prohibition against non-consensual human experimentation.
16

17 4. My conclusions as to these questions, reached to a reasonable
18 degree of professional certainty, are contained within an Expert Report and a
19 Rebuttal Report, both of which I authored and submitted to counsel for
20 Plaintiffs.

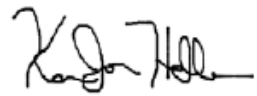
21 5. A true a correct copy of my Expert Report is attached hereto as
22 Exhibit B.
23

24 6. A true and correct copy of my Rebuttal Report is attached hereto as
25 Exhibit C.
26

* * *

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct.



Kevin Heller

Dated: June 6, 2017
Amsterdam , The Netherlands

EXHIBIT A

KEVIN JON HELLER

KH33@SOAS.AC.UK

ACADEMIC EMPLOYMENT

- 10.13– **Professor of Criminal Law, SOAS, University of London**
- 10.13– **Principal Fellow, Melbourne Law School**
- Teach intensive international criminal law seminar in the LLM program.
- 11.12–10.13 **Associate Professor & Reader, Melbourne Law School**
- Reader awarded for “exceptional international distinction in research.”
- 1.09–11.12 **Senior Lecturer, Melbourne Law School**
- 1.08–1.09 **Senior Lecturer, University of Auckland Faculty of Law**
- 6.06–1.08 **Lecturer, University of Auckland Faculty of Law**
- 6.04–6.06 **Assistant Professor, University of Georgia School of Law**

EDUCATION

- 6.11 **Leiden University, Leiden, the Netherlands**
Ph.D. in Law
- 5.96 **Stanford Law School, Palo Alto, California**
J.D., with distinction
Senior Note Editor, *Stanford Law Review*
Article Editor, *Stanford Law & Policy Review*
- 5.93 **Duke University, Durham, North Carolina**
M.A. in Literature, honors
Specialization in legal and literary theory
- 5.91 **New School for Social Research, New York City, New York**
M.A. in Sociology, highest honors
Specialization in political sociology, historical sociology, social theory
- 5.90 **New School for Social Research, New York City, New York**
B.A. in Social & Political Theory, highest honors

SOLE-AUTHORED BOOKS

A GENEALOGY OF INTERNATIONAL CRIMINAL LAW (Oxford University Press, 2017).

- Book is researched and outlined.

THE NUREMBERG MILITARY TRIBUNALS AND THE ORIGINS OF INTERNATIONAL CRIMINAL LAW (Oxford University Press, 2011). 509 pages. Paperback edition published September 2013.

- Favorably reviewed by David Fraser (Nottingham) in the *Oxford Journal of Legal Studies*, Roger L. Phillips (ECCC) in the *Journal of International Criminal Justice*, Cecily Rose (Cambridge) in the *British Yearbook of International Law*, Devin Pendas (Boston College) in *International & Comparative Law Quarterly*, Lawrence Douglas (Amherst) in *Holocaust & Genocide Studies*, Nicola Palmer (King's) in the *European Human Rights Law Review*, Sarah Kendall (Leiden) in the *Melbourne Journal of International Law*, and Rainer Huhle for the *Nürnberger Menschenrechtszentrum*.

EDITED BOOKS

THE OXFORD HANDBOOK OF INTERNATIONAL CRIMINAL LAW (Oxford University Press, 2017) (with Jens Ohlin, Sarah Nouwen, Fred Megret, and Darryl Robinson)

- Asked by press to serve as lead editor; selected other editors.

THE HIDDEN HISTORIES OF WAR CRIMES TRIALS (Oxford University Press, 2013) (with Gerry Simpson).

- Book contains 21 essays on lesser-known war crimes trials, from the trial of Peter von Hagenbach in 1474 to the present.
- Named by OUP one of the best international-law books of 2013.

THE HANDBOOK OF COMPARATIVE CRIMINAL LAW (Stanford University Press, 2011) (with Markus Dubber).

- Book contains 16 country-specific chapters on substantive criminal law.

DELEUZE AND GUATTARI: NEW MAPPINGS IN POLITICS, PHILOSOPHY, AND CULTURE (University of Minnesota Press, 1998) (with Eleanor Kaufman).

ARTICLES

1. "Radical Complementarity," 14 *Journal of International Criminal Justice* 637-665 (2016). 15,000 words.
 2. "Disguising a Military Object as a Civilian Object: Prohibited Perfidy or Permissible Ruse of War?," 91 *International Law Studies* 517 (2015). 8,500 words.
 3. "The Taylor Sentencing Judgment: A Critical Analysis," 11 *Journal of International Criminal Justice* 835-855 (2013). 9,000 words.
 4. "One Hell of a Killing Machine: Signature Strikes and International Law," 11 *Journal of International Criminal Justice* 89-119 (2013). 18,000 words.
 5. "A Sentence-Based Theory of Complementarity," 53 *Harvard International Law Journal* 85-133 (2012). 23,000 words.
- The *Journal* commissioned Carsten Stahn (Leiden) and Darryl Robinson (Queens) to write formal responses to the article.

6. "The Uncertain Legal Status of the Aggression Understandings" 9 *Journal of International Criminal Justice* 229-248 (2012). 9,000 words.
 - Article solicited for special anniversary issue of the Journal dedicated to the crime of aggression.
7. "The Law of Neutrality Does Not Apply to the Conflict with Al-Qaeda, and It's a Good Thing, Too," 47 *Texas International Law Journal* 115-141 (2012). 12,000 words.
8. "On a Differential Law of War: A Response to Blum," 52 *Harvard International Law Journal Online* (2011). 4,200 words.
9. "The Cognitive Psychology of Mens Rea," 99 *Journal of Criminal Law & Criminology* 317-379 (2009). 29,000 words.
10. "Mistake of Legal Element, the Common Law, and Article 32 of the Rome Statute: A Critical Analysis," 6 *Journal of International Criminal Justice* (2008) 419-445. 12,500 words.
11. "What Happens to the Acquitted?," 21 *Leiden Journal of International Law* (2008) 1-18. 10,100 words.
 - Cited as the basis for defense counsel proposals to amend the ICTR's Rules of Procedure and the Rome Statute.
12. Review Essay, "Deconstructing International Criminal Law" (reviewing MARK DRUMBL, ATROCITY, PUNISHMENT, AND INTERNATIONAL LAW, Cambridge University Press, 2007), 106 *Michigan Law Review* (2008) 975-1000. 12,000 words.
13. "The Limits of Article 8(2)(b)(iv) of the Rome Statute, the First Ecocentric Environmental War Crime," 20 *Georgetown Journal of International Environmental Law* (2008) 61-97 (with Jessica C. Lawrence). 16,000 words.
14. "Retreat from Nuremberg: The Leadership Requirement in the Crime of Aggression," 18 *European Journal of International Law* (2007) 477-497. 11,000 words.
 - Served as the basis for Germany's formal position on the leadership requirement during negotiations during the Kampala review conference.
15. "A Poisoned Chalice: Substantive and Procedural Defects of the Iraqi High Tribunal," 39 *Case-Western Reserve Journal of International Law* (2007) 261-302 (symposium essay). 19,000 words.
 - Cited by Saddam Hussein and his co-defendants in their appeals.
16. "Prosecutor v. Karemera et al. (ICTR-98-44-I)," 101 *American Journal of International Law* (2007) 157-163. 2,800 words.
 - Cited by defendants in their motion for reconsideration of the decision.
17. "The Cognitive Psychology of Circumstantial Evidence," 105 *Michigan Law Review* (2006) 241-306. 23,000 words.
18. "The Shadow Side of Complementarity: The Effect of Article 17 of the Rome Statute on National Due Process," 17 *Criminal Law Forum* (2006) 255-280. 10,000 words.
19. "The Rhetoric of Necessity (Or, Sanford Levinson's Pinteresque Conversation)," 40 *Georgia Law Review* (2006) 779-806 (symposium essay). 7,000 words.

20. "Beyond the Reasonable Man? A Sympathetic but Critical Assessment of the Use of Subjective Standards of Reasonableness in Self-Defense and Provocation Cases," 26 *American Journal of Criminal Law* (1998) 1-120. 48,000 words.
21. "Whatever Happened to Proof Beyond a Reasonable Doubt? Of Drug Conspiracies, Overt Acts, and *United States v. Shabani*," 49 *Stanford Law Review* (1996) 111-142. 18,500 words.
22. "Power, Subjectification, and Resistance in Foucault," 79 *SubStance* (1996) 78-110. 15,500 words.
23. "Rereading Theodor Adorno's Philosophy of History," 11 *Praxis International* (1991) 354-376. 8,800 words.

BOOK CHAPTERS

1. "The Use and Abuse of Analogy in IHL," in JENS OHLIN ET AL. (EDS.), *THEORETICAL BOUNDARIES OF ARMED CONFLICT AND HUMAN RIGHTS* (Cambridge University Press, 2016).
2. "A Stick to Hit the Accused with': The Legal Recharacterization of Facts Under Regulation 55," in CARSTEN STAHN ET AL. (EDS.), *THE LAW AND PRACTICE OF THE INTERNATIONAL CRIMINAL COURT* (Oxford University Press, 2015).
3. "The Role of the International Prosecutor," in CESARE ROMANO ET AL. (EDS.), *OXFORD HANDBOOK OF INTERNATIONAL ADJUDICATION* (Oxford University Press, 2014). 11,000 words.
4. "Complementarity," in WILLIAM A. SCHABAS ET AL. (EDS.), *ASHGATE RESEARCH COMPANION TO INTERNATIONAL CRIMINAL LAW: CRITICAL PERSPECTIVES* (Ashgate, 2013). 7,500 words.
5. "Completion Strategies," in LUC REYDAMS ET AL. (EDS.), *THE INTERNATIONAL PROSECUTOR* (Oxford University Press, 2012).
6. "Situational Gravity Under the Rome Statute," in CARSTEN STAHN & LARISSA VAN DEN HERIK, *FUTURE DIRECTIONS IN INTERNATIONAL CRIMINAL JUSTICE* (TMC Asser Press, 2010). 18,000 words.
 - Mark Osiel (Iowa) wrote a formal response for the book.
7. "The Rome Statute in Comparative Perspective," in Kevin Jon Heller & Markus Dubber, *THE HANDBOOK OF COMPARATIVE CRIMINAL LAW* (Stanford University Press, 2011). 18,500 words.

BOOK REVIEWS AND OTHER ACADEMIC WRITING

1. "The Nuremberg Trials," Oxford Bibliographies Online (2015). 3,500 words.
2. Book Review, DAVID BOSCO, *ROUGH JUSTICE: THE INTERNATIONAL CRIMINAL COURT'S BATTLE TO FIX THE WORLD, ONE PROSECUTION AT A TIME* (Oxford University Press, 2014), *H-Net* (2015). 3,000 words.
3. Book Review, LEILA SADAT (ED.), *FORGING A CONVENTION FOR CRIMES AGAINST HUMANITY* (Cambridge University Press, 2011), 33 *Human Rights Quarterly* 904-911 (2012). 4,500 words.
4. Debate, "Targeted Killing: The Case of Anwar al-Aulaqi," *Pennumbra* (February, 2011). 4,300 words.
 - Debate sponsored by the University of Pennsylvania Law Review. The other participant was John C. Dehn (United States Military Academy).

5. Book Review, THE OXFORD COMPANION TO INTERNATIONAL CRIMINAL JUSTICE, 104 *American Journal of International Law* 154-159 (2010). 4,000 words.
6. "The Situation in Darfur," ASIL INSIGHT, Volume 11, Issue 7 (2007). 2,000 words.
7. Michael P. Scharf & Gregory S. McNeal, SADDAM ON TRIAL: UNDERSTANDING AND DEBATING THE IRAQI HIGH TRIBUNAL (Carolina Academic Press, 2006). Essays on the various aspects of the trial.
8. ENCYCLOPEDIA OF AMERICAN CIVIL LIBERTIES (Routledge, 2007). Articles on "Proof Beyond a Reasonable Doubt," "Conspiracy," "Extradition," "Cultural Defense," and "Exemplars."

ARTICLES AND BOOK CHAPTERS IN PRESS

24. "What Is an International Crime? (A Revisionist History)", 58 *Harvard International Law Journal* __ (2017).
25. "Taking a Consenting Part: The Lost Mode of Participation," 38 *Loyola International and Comparative Law Review* __ (2017) (symposium contribution).
26. "The International Commission of Inquiry on Libya: A Critical Analysis," in JENS MEIERHENRICH (ED.), INTERNATIONAL COMMISSIONS: THE ROLE OF COMMISSIONS OF INQUIRY IN THE INVESTIGATION OF INTERNATIONAL CRIMES (Oxford University Press, 2016).
27. "International Criminalization," in JEAN D'ASPREMONT & SAHIB SING (EDS.), FUNDAMENTAL CONCEPTS FOR INTERNATIONAL LAW (Edward Elgar, 2017).
28. "Sheldon Glueck," in Immi Tallgren & Frédéric Mégret (eds.), THE DAWN OF A DISCIPLINE: INTERNATIONAL CRIMINAL JUSTICE AND ITS EARLY EXPONENTS (Oxford University Press, 2017).

LEGAL CONSULTING (CASES)

- 8.16– ***Salahi v. Mitchell*, U.S. District Court for the Eastern District of Washington**
- Serving as an expert witness for the ACLU in ATS lawsuit against two psychologists responsible for creating and administering the CIA's torture program. Responsible for drafting report concerning the existence of a customary norm prohibiting medical experimentation.
- 6.14–6.15 ***United States v. Kim Dotcom*, US Court of Appeals for the Second Circuit**
- Advised Los Angeles-based defence team on various aspects of extradition law.
- 2.14–11.15 **Serious Fraud Office, Government of the United Kingdom**
- Provided multiple expert reports concerning inchoate criminality in the Philippines and whether various acts qualify as bribery and/or corruption under the criminal law of Ghana, Kenya, Somaliland, Mauritania, Tunisia, and Nigeria.
- 1.14–8.14 ***Zimbabwe Torture Docket Case*, Constitutional Court of South Africa**
- On behalf of torture victims, co-authored amicus brief for highest court in South Africa concerning the right of states to conduct investigations in absentia for crimes subject to

universal jurisdiction. Constitutional Court held in favor of victims and adopted the reasoning of the amicus brief *in toto*.

- 12.11 ***Kiobel v. Royal Dutch Petroleum, United States Supreme Court***
- Helped draft amicus brief concerning the criminal responsibility of corporations in the aftermath of World War II, submitted on behalf of more than 15 Nuremberg scholars.
- 10.08–3.11 ***Prosecutor v. Karadzic, ICTY***
- Was responsible for overseeing all aspects of the defense, including supervision of the team of interns and other academics working on the case. Wrote numerous motions, prepared Karadzic for court hearings, etc. Will co-author any appeal.
- 10.10–3.11 ***Al-Aulaqi v. Obama, U.S. District Court for the D.C Circuit***
- Advised ACLU and Center for Constitutional Rights on international-law aspects of targeted killing.
- 1.08–10.08 ***Prosecutor v. Milutinovic et al., ICTY***
- Working with defense team. Responsible for reviewing transcripts for legal error, helping draft closing briefs and interlocutory appeals.
- 1.08–5.10 ***Prosecutor v. Karemera et al., ICTR***
- Working with defense team. Responsible for reviewing transcripts for legal error, helping draft closing briefs and interlocutory appeals.

LEGAL CONSULTING (ORGANIZATIONS)

- 2.16– ***Diakonia, Jerusalem, Israel***
- Legal advisor to organisation. Assist with reports, analyses, etc.
- 2.15– ***Human Rights Watch, London, England***
- Working with organization on analysis of preliminary-examination procedures at the ICC.
- 11.11– ***United Nations Assistance Mission in Afghanistan, Kabul, Afghanistan***
- Advising UNAMA on various issues involving international human rights law, international humanitarian law, and international criminal law.
- 9.11–2.15 ***Human Rights First, New York, New York***
- Advised organization on various international law issues, including targeted killing and detention in non-international armed conflict.
- 2.11–6.14 ***Gisha: Legal Center for Freedom of Movement, Tel Aviv, Israel***
- Advised organization, an Israeli NGO that protects the freedom of movement of Palestinians in the West Bank and Gaza, on various international-law issues, including the legality of Israel's blockade.

- 11.10–4.14 **Office of Public Counsel for the Defence, International Criminal Court**
Advised office on substantive and procedural issues concerning the Court.
- 3.08–6.09 **New Zealand Ministry of Foreign Affairs and Trade**
Advised Ministry on ICC issues, including New Zealand’s position on the crime of aggression at the ICC’s Review Conference in 2010.
- 11.07 **New Zealand Law Commission**
Prepared report comparing the admissibility of prior convictions and prior bad acts in New Zealand and the United States in order to determine whether New Zealand should adopt – in whole or in part – the United States model.
- 12.06 **Special Working Group on the Crime of Aggression, International Criminal Court**
Prepared position paper at the request of Samoa arguing that the leadership clause in the Working Group’s definition of aggression represents a substantial retreat from the Nuremberg jurisprudence.
- 4.06–1.07 **Human Rights Watch, New York City, New York**
Researched legal issues and assisted with the organization’s final report on the trial of Saddam Hussein.

INTERNATIONAL LAW TEACHING AND TRAINING

- 8.15 **Melbourne Law School, Melbourne, Australia**
Taught intensive LLM course on international criminal law.
- 2.14 **KU Leuven, Leuven, Belgium**
Taught intensive LLM course on international criminal law as part of law school’s inaugural “Global Scholars” program. Will teach again in 2016.
- 6.13 **University of KwaZulu-Natal, Durban, South Africa**
Taught intensive LLM course on international criminal law. Will teach again in 2016.
- 11.12 **Australian Defence Force, Sydney, Australia**
Conducted training on international humanitarian law and international criminal law for Army officers. Will teach similar subjects each year.
- 11.11- **Professional Training on Humanitarian Law and Policy, Multiple Locations**
Teach multiple seminars on international human rights law, international humanitarian law, and international criminal law. Trainings are co-sponsored by the Harvard Program on Humanitarian Policy and Conflict Research and Professionals in Humanitarian Assistance and Protection. Students are primarily UN human-rights field officers. Have conducted trainings in Nairobi, Geneva, Jericho, Istanbul (lead instructor), London (co-

lead instructor), and Brussels (special training for ECHO). Will conduct trainings this year in Entebbe, Dubai, London, and Bangkok.

11.11 **Canadian Defence College, Toronto, Canada**

Conducted training on individual and command responsibility for 63 Majors from 12 countries.

10.11.9.12 **Department of Foreign Affairs and Trade, Canberra, Australia**

Taught multiple workshops and conducted simulations regarding international law.

PROFESSIONAL ACTIVITIES

1.14– **Academic Member, Doughty Street Chambers & Doughty Street International**

Involved in various cases involving international criminal law, international humanitarian law, international human-rights law.

1.15– **Steering Committee, Research Project, “Customary International Criminal Law”**

Five-year project organized by the University of Hamburg. Modeled on the ICRC’s study of customary international humanitarian law, the project will result in a multi-volume report on the basic rules of customary international criminal law and their supporting state practice. The six-person Steering Committee is responsible for organising the report and supervising its writing by the 50+ national researchers.

6.11–1.14 **Project Director, International Criminal Law, Asia Pacific Centre for Military Law**

Joint project of Melbourne Law School and the Australian Defence Force. Responsible for creating and coordinating all activities concerning international criminal law, training members of the Australian Defence Force in international criminal law.

9.10-1.12 **Research Project, “Islamic & International Law: Searching for Common Ground”**

Multi-year project sponsored by the International Bar Association and the Salzburg Global Seminar.

6.07–1.11 **Research Project, “The International Prosecutor from Nuremberg to the Hague”**

Four-year project that will culminate in a multi-volume work to be published by Oxford University Press, involving an historical examination of the role of the prosecutor in international criminal law. Responsible for the Nuremberg Military Tribunals (NMT), the 12 trials held in the American occupation zone following the IMT, and for a chapter on the completion strategies employed by past and present international tribunals.

JOURNAL AND BLOG POSITIONS

3.15– **Member of the Editorial Board, LONDON REVIEW OF INTERNATIONAL LAW**

- 6.06– **Associate Editor, NEW CRIMINAL LAW REVIEW**
- Responsible for reviewing and soliciting essays and book reviews. Guest-edited issue 12:5, a special double issue of short essays on specific provisions of the Rome Statute that should be amended at the ICC’s first review conference in 2010.
- 12.05– **Contributor, *Opinio Juris***
- Blog devoted to international law and politics sponsored by Oxford University Press. The most widely read international-law blog in the world and one of the world’s 15 most-widely read law blogs. In 2015, the blog received 590,000 individual visits. Contribute an average of 35% of the blog’s posts each year.
- 1.06–6.07 **Contributor, *The Grotian Moment: The Saddam Hussein Trial Blog***
- Member of expert panel that provided trial commentary.
- 12.05– **Peer Reviewer, Various Presses and Journals**
- Oxford University Press (10+); Cambridge University Press (5+); Yale University Press; Harvard University Press; Princeton University Press; NYU Press; California Press; Routledge; Berghahn Books; *Journal of International Criminal Justice*; *Criminal Law Forum*; *Leiden Journal of International Law*; *European Journal of International Law*; *European Journal of International Relations*; *Journal of African Law*; *Theory, Culture & Society*; *Human Rights Quarterly*; *Millenium: A Journal of International Relations*; *Melbourne Journal of International Law*; *Ethics and International Affairs*; *Security Dialogue*.

CONFERENCES ORGANIZED

- 17.12 **Annual Meeting of the American Society of International Law, Washington, DC**
- Member of organizing committee.
- 10.11 **“The Eichmann Trial at 50,” Melbourne Law School, Melbourne, Australia**
- Organized two-day conference on the trial.
- 10.10 **“Untold Stories: Hidden Histories of War Crimes Trials,” Melbourne Law School, Melbourne, Australia**
- Organized (with Gerry Simpson) three-day conference on lesser-known international and domestic war-crimes trials. 34 papers were presented involving scholars from 16 different countries. Oxford University Press will publish an edited collection of the papers in 2012.

CONFERENCE PRESENTATIONS, SEMINARS, AND PUBLIC LECTURES

- 10.16 Presentation, “Criminal Responsibility and the Wola Massacre,” Institute for Totalitarian Studies, University of Warsaw, Warsaw, Poland.
- 9.16 Seminar, “What Is an International Crime? (A Revisionist History),” Oxford University, Transitional Justice Research Seminar Series, Oxford, England.

- 4.16 Keynote, "Taking a Consenting Part: The Lost Mode of Participation in International Criminal Law," *The Nuremberg Legacy and Progressive Development of Criminal Law*, National Research University Higher School of Economics, Faculty of Law, Moscow, Russian Federation.
- 3.16 Seminar, "The Nuremberg Military Tribunals and the Development of Crimes Against Humanity," University of Ghent, Ghent, Belgium.
- 3.16 Presentation, "The Use and Abuse of Analogy in IHL," University of Nottingham, Nottingham, England.
- 2.16 Presentation, "The Use and Abuse of Analogy in IHL," University of Oslo, Oslo, Norway.
- 2.16 Roundtable, "The Legality of Providing Support to Rebels," International Bar Association, The Hague, Netherlands.
- 2.16 Presentation, "The Use and Abuse of Analogy in IHL," Lauterpacht Centre, Cambridge University, Cambridge, England.
- 11.15 Presentation, "Disguising Military Objects as Civilian Objects: Prohibited Act of Perfidy or Permissible Ruse of War?" National Defence Academy, Gori, Georgia.
- 11.15 Presentation, "Disguising Military Objects as Civilian Objects: Prohibited Act of Perfidy or Permissible Ruse of War?" Non-Commissioned Officer Training School, Kodjori, Georgia.
- 11.15 Presentation, "The ICC's Investigation into the Situation in Georgia: Legal and Evidentiary Issues," NDA Command and General Staff School, Tbilisi, Georgia.
- 11.15 Presentation, "The ICC's Investigation into the Situation in Georgia: Legal and Evidentiary Issues," National Defence Academy Captain Career School, Tbilisi, Georgia.
- 11.15 Presentation, "The ICC's Investigation into the Situation in Georgia: Legal and Evidentiary Issues," Free University, Tbilisi, Georgia.
- 11.15 Presentation, "The ICC's Investigation into the Situation in Georgia: Legal and Evidentiary Issues," Georgian Institute of Public Affairs, Tbilisi, Georgia.
- 11.15 Presentation, "The ICC's Investigation into the Situation in Georgia: Legal and Evidentiary Issues," International Black Sea University, Tbilisi, Georgia.
- 11.15 Presentation, "The ICC's Investigation into the Situation in Georgia: Legal and Evidentiary Issues," The Caucasus University, Tbilisi, Georgia.
- 10.15 Presentation, "Exit from Situations at the ICC," *The Peripheries of Justice Intervention: Preliminary Examination and Legacy/Sustainable Exit*, Grotius Centre for International Legal Studies, The Hague, Netherlands.
- 9.15 Roundtable, "The Future of International Criminal Law," King's College School of Law, London, England.
- 6.15 Senior Faculty, "Analysis of Varaki, 'Introducing a Fairness-Based Theory of Prosecutorial Legitimacy Before the International Criminal Court'," Fourth Annual Junior Faculty Forum, Florence, Italy.

- 6.15 Jean Monnet Lecture, "Palestine and the International Criminal Court: A Critical EU Perspective," University of Kent School of International Studies, Brussels, Belgium.
- 6.15 Presentation, "The Use and Abuse of Analogy in IHL," University of Kent School of International Studies, Brussels, Belgium.
- 5.15 Public Lecture, "Prosecuting the Powerful: Utopian or Attainable Goal?" *Ending Impunity – Domestic and International Prosecution of International and Transnational Organised Crimes*, Riara University, Nairobi, Kenya.
- 4.15 Presentation, "The Use and Abuse of Analogy in IHL," Free University Berlin, Berlin, Germany.
- 3.15 Presentation, "The ICC's Preliminary Examination in Iraq," UK Service Prosecuting Authority, London, England.
- 3.15 Roundtable, "The ICC and Palestine – Part 2," London School of Economics, London, England.
- 2.15 Seminar, "What Is an International Crime?" Free University Amsterdam, Amsterdam, Netherlands.
- 2.15 Seminar, "What Is an International Crime?" T.MC. Asser Institute, The Hague, Netherlands.
- 12.14 Keynote Address, "Criminal Prosecutions, TRCs, and Amnesties: A Critical Appraisal" *World Conflict Photography Conference*, Queens University Belfast, Belfast, Northern Ireland.
- 11.14 Presentation, "Critical Issues in Complementarity," *Roundtable Conference on Public International Law and the Rights of the Individual*, Chinese University of Political Science and Law, Beijing, China.
- 9.14 Roundtable, "The ICC and Palestine," London School of Economics, London, England.
- 7.14 Roundtable, "Libya and Complementarity," Chatham House, London, England.
- 5.14 Seminar, "Signature Strikes and International Law," University of Luxembourg, Luxembourg.
- 2.14 Seminar, "What Is an International Crime?" British Institute for International and Comparative Law, London, England.
- 1.14 Seminar, "What Is an International Crime?" Oxford University, Oxford, England.
- 8.13 Keynote Address, "What Is an International Crime?" *Young International Criminal Law Scholars Conference 2013*, Melbourne Law School, Melbourne, Australia.
- 5.13 Seminar, "Signature Strikes and International Law," University of KwaZulu-Natal School of Law, Durban, South Africa.
- 5.13 Seminar, "Signature Strikes and International Law," University of Cape Town, Cape Town, South Africa.
- 5.13 Public Lecture, "The ICC and Libya," Open Society Institute for Southern Africa, Johannesburg, South Africa.

- 3.13 Seminar, "Signature Strikes and International Law," UCLA School of Law, Los Angeles, California.
- 3.13 Seminar, "Signature Strikes and International Law," Washington & Lee School of Law, Lexington, Virginia.
- 8.12 Presentation, "The Use and Abuse of International Criminal Law for ATS Litigation," *Corporate Criminal Liability from Nuremberg to Kiobel*, Tel Aviv Law School, Tel Aviv, Israel.
- 12.12 Seminar, "Crimes Against Humanity in Historical Perspective," Hebrew University of Jerusalem, Jerusalem, Israel.
- 12.12 Seminar, "Prosecutorial Discretion at International Tribunals," Hebrew University of Jerusalem, Jerusalem, Israel.
- 10.12 Seminar, "The Commission of Inquiry for Libya and the Impossibility of Objective International Fact Finding," University of Colorado Law School, Boulder, Colorado.
- 10.12 Seminar, "The Commission of Inquiry for Libya and the Impossibility of Objective International Fact Finding," SMU Law School, Dallas, Texas.
- 8.12 Presentation, "The Figuration of the Holocaust in the Nuremberg Military Tribunals," *Lessons & Legacies XIII*, Northwestern Law School, Evanston, Illinois.
- 8.12 Presentation, "The Commission of Inquiry for Libya and the Impossibility of Objective International Fact Finding," *Moral Internationalism*, Melbourne Law School, Melbourne, Australia.
- 8.12 Presentation, "Boredom," *Passions of International Criminal Law*, Melbourne Law School, Melbourne, Australia.
- 6.12 Presentation, "How to Operationalize a Sentence-Based Theory of Complementarity," *Harmonization vs. Pluralization in the Domestic Prosecution of International Crimes*, Free University Amsterdam, the Netherlands.
- 6.12 Seminar, "The Nuremberg Military Tribunals and the Development of Crimes Against Humanity," Humboldt University, Berlin, Germany.
- 6.11 Public Lecture, "Can the United States Prosecute WikiLeaks for Espionage? Should It?" Griffith University, Brisbane, Australia.
- 6.11 Seminar, "The Nuremberg Military Tribunals and the Origins of Crimes Against Humanity," KU Leuven, Leuven, Belgium.
- 6.11 Seminar, "Can the United States Prosecute WikiLeaks for Espionage? Should It?" University of Helsinki, Helsinki, Finland.
- 11.10 Public Lecture, "Defending the Damned: Reflections on Representing Radovan Karadzic," Harvard University, Cambridge, Massachusetts.
- 11.10 Public Lecture, "Defending the Damned: Reflections on Representing Radovan Karadzic," University of Cologne, Cologne, Germany.
- 11.10 Seminar, "The Development of Forcible Transfer as a Crime Against Humanity," Leiden University, Leiden, the Netherlands.

- 11.10 Presentation, "Rights of the Accused and Punishment in International Criminal Law and Islamic Criminal Law," *Islamic and International Law: Searching for Common Ground*, Salzburg Global Seminar, Salzburg, Austria.
- 11.10 Web Seminar, "The United States as *Bricoleur*: Targeted Killing and *Al-Aulaqi v. Obama*," Project on Humanitarian Policy, Harvard University, Cambridge, Massachusetts.
- 10.10 Presentation "Beyond the Nexus: The Role of the Nuremberg Military Tribunals in the Development of Crimes Against Humanity," *Untold Stories: Hidden Histories of War Crimes Trials*, Melbourne Law School, Melbourne, Australia.
- 10.10 Presentation, "The Relationship Between International Criminal Justice and Transitional Justice," Sydney Law School, Sydney, Australia.
- 9.10 Presentation, "Cooperation in International Criminal Justice, 2010 Annual Conference of the Centre for Excellence in Police Science, Australia National University, Canberra, Australia.
- 7.10 Public Lecture, "Lessons from *Milosevic* and *Karadzic*," The Australian Red Cross, Melbourne, Australia.
- 1.09 Seminar, "Situational Gravity Under the Rome Statute," International Criminal Court, The Hague, the Netherlands.
- 1.09 Seminar, "Situational Gravity Under the Rome Statute," Free University Amsterdam, Amsterdam, the Netherlands.
- 1.09 Seminar, "Situational Gravity Under the Rome Statute," Leiden University, Leiden, the Netherlands.
- 1.09 Seminar, "Situational Gravity Under the Rome Statute," National University of Ireland-Galway, Galway, Ireland.
- 12.08 Keynote Address, "The First 10 Years of the ICC: An Appraisal," Austrian Human Rights Film Festival.
- 5.08 Seminar, "The Structural and Procedural Defects of the Iraqi High Tribunal," Rutgers-Camden School of Law, Rutgers, New Jersey.
- 5.08 Seminar, "The Structural and Procedural Defects of the Iraqi High Tribunal," Temple School of Law, Philadelphia, Pennsylvania
- 5.08 Public Lecture, "The Cognitive Psychology of Mens Rea," New Zealand Medico-Legal Association, Auckland, New Zealand.
- 2.08 Seminar, "Equality of Arms at the International Tribunals," Washington & Lee University School of Law, Lexington, Virginia.
- 11.07 Public Lecture, "The Structural and Procedural Defects of the Iraqi High Tribunal," London School of Economics, London, England.
- 9.07 Presentation, "The Cognitive Psychology of Reasonable Doubt," *Beyond Reasonable Doubt: Conversations in Literature, Law, and Philosophy from the Reformation to the Present Day*, Fitzwilliam College, Cambridge University, England.

- 7.07 Presentation, “The Cognitive Psychology of the Criminal Defenses,” *Storytelling and the Law*, City University, London, England.
- 7.07 Presentation, “Retreat from Nuremberg: The Leadership Requirement in the Crime of Aggression,” *International Society for the Reform of Criminal Law 20th Anniversary Conference*, Vancouver Canada.
- 2.07 Public Lecture, “The Trial of Saddam Hussein,” United Nations University for Peace, San Jose, Costa Rica.
- 10.06 Seminar, “Circumstantial Evidence,” University of Auckland Department of Psychology, Auckland, New Zealand.
- 10.06 Debate, “Was Saddam’s Trial Fair?”, *Lessons from the Saddam Trial*, Case-Western University, Cleveland, Ohio.
- 9.06 Presentation, “The Shadow Side of Complementarity,” *Regionalizing International Criminal Law*, University of Canterbury, Christchurch, New Zealand.
- 4.05 Keynote Address, “What the Patriot Act Means for Artists,” *Artistic Freedom and the Patriot Act*, University at Buffalo, Buffalo, New York.

PHD DISSERTATIONS SUPERVISED

Marie Aronsson, Melbourne Law School (with Anne Orford) (will finish 2016)
 Prof. Chris Jenks, Melbourne Law School (with Bruce Oswald) (will finish 2017)
 Shari Labenski, SOAS, University of London (with Gina Heathcote) (will finish 2017)
 Michele Tedeschini, SOAS, University of London (TBD) (began 2016)
 Riccardo Labbianco, SOAS, University of London (TBD) (began 2016)

PHD DISSERTATIONS EXAMINED

Examined dissertations at, *inter alia*, Oxford, University of Amsterdam, Free University Amsterdam, University of Oslo, KU Leuven, University of East Anglia, National University Ireland – Galway, Melbourne Law School. Examined *Habilitation* at Humboldt University Berlin.

CLERKSHIP

7.96–7.97 **Judge William C. Canby, Jr., U.S. Court of Appeals for the Ninth Circuit**

LEGAL EMPLOYMENT

5.99–9.00 **Associate, Bird Marella Boxer, Los Angeles, California**

Wrote extensive memo discussing the constitutionality and application of Yugoslavian Assert Control Regulations on behalf of Milan Panic, the former Prime Minister of Serbia.

7.97–5.99

Associate, Law Offices of Barry Tarlow, Los Angeles, California

Wrote and argued motion to suppress in multimillion-dollar federal drug case. Wrote sections of Suge Knight's (founder of Death Row Records) state criminal appeal. Defended, *inter alia*, Christian Slater, Halle Berry, Christina Ricci, and Scott Weiland of the Stone Temple Pilots on various criminal charges.

AWARDS & FELLOWSHIPS

- Early Career Researcher Award, University of Melbourne. Eight awarded annually across university.
- Nancy and Charles King Fellowship, Stanford Law School. Full tuition.
- Program in Literature Fellowship, Duke University. Full tuition and monthly stipend during M.A.
- University Fellowship, New School for Social Research. Full tuition and monthly stipend during M.A.
- New School Fellowship, New School for Social Research. Full tuition during B.A.

REFERENCES

Harold Koh, Sterling Professor of Law, Yale Law School (harold.koh@yale.edu)

Samuel Moyn, Professor of Law and History, Harvard Law School (smoyn@law.harvard.edu)

Mark Drumbl, Class of 1975 Alumni Professor, Washington & Lee School of Law (drumblm@wlu.edu)

EXHIBIT B

INSTRUCTIONS

I have been asked by Plaintiffs Suleiman Abdullah Salim, Mohamed Ahmed Ben Soud, and Obaid Ullah (as personal representative of Gul Rahman) to provide an expert opinion addressing three issues:

1. Whether customary international law prohibits human experimentation during armed conflict and/or in times of peace;
2. If so, what the elements of the prohibition are under customary international law.
3. Whether Defendants' actions toward Plaintiffs violated the customary prohibition of human experimentation.

Plaintiffs' counsel has made available to me the following documents:

1. "Complaint and Demand for Jury Trial," dated October 13, 2015; and
2. "Plaintiffs' Memorandum in Opposition to Defendants' Motion to Dismiss," dated April 22, 2016.

I am being compensated for my time at an hourly rate of £200/hour, which applies to preparing this opinion and, if necessary, to being deposed or testifying at trial. £200 is my normal hourly rate for work of this kind, including the rate that I charge the UK government.

My opinions, as stated herein, are based on the experience and expertise I have acquired as a scholar who has been writing about, teaching, and practicing international law for 12 years. I affirm that, to the best of my knowledge, those opinions are an accurate interpretation of the current state of customary international law.

QUALIFICATIONS

My CV is annexed hereto as Exhibit A. It details my qualifications and contains a list of my publications going back more than 10 years.

I am currently Professor of Criminal Law at SOAS, University of London. As of June 2017, I will also be Associate Professor of Public International Law at the University of Amsterdam. Until 2014, I was Associate Professor & Reader at Melbourne Law School, where I also served as Project Director for International Criminal Law at the Asia Pacific Centre for Military Law, a joint project of Melbourne Law School and the Australian Defence Force. I hold a PhD in law from Leiden University and a JD with distinction from Stanford Law School.

To date, I have authored one book, co-edited two books, and published more than 30 articles and book chapters on international criminal law, international humanitarian law, public international law, and criminal law. My articles have

appeared in a variety of leading journals, including the *American Journal of International Law*, the *European Journal of International Law*, the *Journal of International Criminal Justice*, the *Harvard International Law Journal*, the *Michigan Law Review*, the *Leiden Journal of International Law*, the *Journal of Criminal Law & Criminology*, *Criminal Law Forum*, and the *Georgetown International Environmental Law Review*. Of particular relevance to the issues addressed in this report is my sole-authored book *THE NUREMBERG MILITARY TRIBUNALS AND THE ORIGINS OF INTERNATIONAL CRIMINAL LAW* (Oxford University Press, 2011), which addresses at length the *Medical* trial, in which Nazi physicians and medical officers were convicted of non-consensual human experimentation. My scholarship has been cited numerous times by the International Criminal Court and by federal and state courts in the United States.

I have maintained a significant involvement in the practice of international law throughout my academic career. Most notably, I was involved in the International Criminal Court (ICC) negotiations over the crime of aggression; I worked as Human Rights Watch's external legal advisor on the trial of Saddam Hussein; and I served as one of Radovan Karadzic's formally-appointed legal associates at the International Criminal Tribunal for the Former Yugoslavia (ICTY). I have consulted with the prosecution and defense at all the major international criminal tribunals, including the ICC, the International Criminal Tribunal for Rwanda (ICTR), and the Extraordinary Chambers in the Courts of Cambodia. I also regularly advise a variety of United Nations (UN) organisations on international-law issues, including the United Nations Assistance Missions in Afghanistan and Darfur. Since 2014, I have been an Academic Member of Doughty Street Chambers in London, one of the United Kingdom's leading barrister sets for international law.

I have served as an expert for the United Kingdom's Serious Fraud Office on a number of occasions, providing reports on a variety of transnational criminal law issues. To date, however, I have never been deposed or testified at trial as an expert in a case.

INTRODUCTION

On August 19, 1947, an American Military Tribunal convicted 16 defendants of war crimes and crimes against humanity for their role in Nazi experimentation on detained civilians and prisoners of war.¹ The type of human experimentation varied: slowly crushing subjects to death in high-pressure chambers to study the effects of altitude; freezing subjects to death in vats of ice-cold water to learn how to treat hypothermia; exposing subjects to a variety of poisons and infectious diseases – typhus, malaria, smallpox, jaundice – to test experimental vaccines or to simply study the effects of those diseases on the body. The Tribunal emphasized, however, that one constant unified all of the defendants' experiments: they were both horrifically brutal and conducted without their subjects' consent.

¹ KEVIN JON HELLER, *THE NUREMBERG MILITARY TRIBUNAL AND THE ORIGINS OF INTERNATIONAL CRIMINAL LAW* 87 (2011).

In every single instance appearing in the record, subjects were used who did not consent to the experiments; indeed, as to some of the experiments, it is not even contended by the defendants that the subjects occupied the status of volunteers. In no case was the experimental subject at liberty of his own free choice to withdraw from any experiment. In many cases experiments were performed by unqualified persons; were conducted at random for no adequate scientific reason, and under revolting physical conditions. All of the experiments were conducted with unnecessary suffering and injury and but very little, if any, precautions were taken to protect or safeguard the human subjects from the possibilities of injury, disability, or death. In every one of the experiments the subjects experienced extreme pain or torture, and in most of them they suffered permanent injury, mutilation, or death, either as a direct result of the experiments or because of lack of adequate follow-up care... Manifestly, human experiments under such conditions are contrary to "the principles of the law of nations as they result from the usages established among civilized peoples, from the laws of humanity, and from the dictates of public conscience."²

As part of its judgment, the Tribunal articulated what has come to be known as the "Nuremberg Code": a set of 10 principles designed to ensure that human experimentation is always conducted humanely, free of coercion, and – foremost of all – with the subject's free and informed consent.³

The Nuremberg Code was not itself legally binding. But it inspired states to begin to use international law to prohibit non-consensual and non-therapeutic human experimentation. That process initially focused on prohibiting human experimentation on prisoners of war and civilian detainees during armed conflict, most notably through the four Geneva Conventions adopted in 1949. But over time states prohibited peacetime human experimentation as well, inscribing that prohibition in binding international treaties like the International Covenant on Civil and Political Rights (ICCPR) and repeatedly denouncing human experimentation through international organizations like the UN.

In light of nearly 70 years of state practice, it is now established beyond doubt that customary international law prohibits human experimentation both during armed conflict and in peacetime. More specifically, as this opinion explains, such experimentation (1) violates international humanitarian law and qualifies as a war crime insofar as it not for a therapeutic purpose; and (2) violates fundamental human rights insofar as it is not consensual.

METHODOLOGY

In *Sosa v. Alvarez-Machain*, the Supreme Court held that a private cause of action under the Alien Tort Statute (ATS) requires plaintiffs to show that the defendants violated a "norm of customary international law so well defined as to

² *United States of America v Karl Brandt et al. (Medical case)*, II LAW REPORTS OF TRIALS OF WAR CRIMINALS 183 (1946).

³ *Id.* at 181-82.

support the creation of a federal remedy.”⁴ To determine whether a particular rule qualifies as customary, “it is necessary to ascertain whether there is a general practice that is accepted as law (*opinio juris*).”⁵ A rule of customary international law thus consists of two constituent elements: (1) state practice; and (2) *opinio juris*.

Both physical acts and verbal acts can qualify as state practice.⁶ State practice qualifies as “general” if it is “sufficiently widespread and representative, as well as consistent.”⁷ The generality requirement thus requires a significant number of States to have acted in a manner consistent with the existence of a particular customary rule.⁸ Complete unanimity, however, is not required: a universally-binding⁹ customary rule can exist even though it has not been endorsed by all states:

[W]hen one examines the emergence of such universally applicable customary rules and principles as those relating to diplomatic immunities, the prohibition of piracy and of privateering, and sovereign rights over the continental shelf, it is impossible to show that every State positively consented to the emergence of the rule in question. Yet it is virtually unanimously accepted that these rules have come to bind all States. It follows, therefore, that a practice does not need to be universal for all States to be bound by it: “general” practice suffices.¹⁰

In addition to being general, the State practice supporting the existence of a rule of customary international law “must be undertaken with a sense of legal right or

⁴ *Sosa v. Alvarez-Machain*, 542 U.S. 692, 738 (2004).

⁵ International Law Commission, Identification of Customary International Law,

Text of the Draft Conclu

Committee 1, 67th Session of the ILC, UN Doc. A/CN.4/L.872 (May 30, 2016).

⁶ ILC Draft Conclusions, *supra* note 5, at 2; *see also* International Law Association, Statement of Principles Applicable to the Formation of General Customary International Law 14, Report of the Sixty-Ninth Conference (2000) (“ILA Custom Report”). Material sources of state practice thus include “acts and correspondence; conduct in connection with resolutions adopted by an international organization or at an intergovernmental conference; conduct in connection with treaties; executive conduct, including operational conduct ‘on the ground’; legislative and administrative acts; and decisions of national courts.” *See* ILC Draft Conclusions, *supra* note 5, at 2.

⁷ ILC Draft Conclusions, *supra* note 5, at 3; *see also* ILA Custom Report, *supra* note 6, at 20.

⁸ ILA Custom Report, *supra* note 6, at 24.

⁹ *Id.* at 9. The only exception to the universality of customary international law is where a state persistently objects to a rule while it is crystallizing. *See id.* at 27 (“If whilst a practice is developing into a rule of general law, a State persistently and openly dissents from the rule, it will not be bound by it.”). No state, however, persistently objected to the prohibition on human experimentation discussed in this report.

¹⁰ *Id.* at 24.

obligation.”¹¹ In other words, States must be engaging in the practice not simply out of comity or goodwill, but because they believe that international law requires them to do so. The material sources of *opinio juris* are the same as the material sources of State practice.¹² In fact, there is no categorical distinction between state practice and *opinio juris*: as long as a physical or verbal act that is consistent with a customary rule expresses the necessary “sense of legal right or obligation,” it qualifies as *both* state practice and *opinio juris*.¹³

In determining custom, it is important not to confuse the legally-binding nature of customary international law itself with the bindingness of individual sources of state practice and *opinio juris*. Many material sources of customary international law are not themselves binding, such as resolutions of the General Assembly. But that does not mean they cannot help establish the existence of a universally binding rule of customary international law. On the contrary: as long as a material source manifests a belief that the norm it addresses is legally binding, that source counts as *opinio juris* in favor of the customary status of the norm.

EXPERIMENTATION DURING ARMED CONFLICT

Customary international law establishes that non-therapeutic human experimentation during armed conflict is both a violation of international humanitarian law (IHL) and a war crime. Three recognized material sources of customary international law establish the requisite widespread, consistent, and representative state practice accepted as law: (1) treaties; (2) national legislation and military manuals; and (3) statements by international organizations.

A. As a Violation of IHL

IHL prohibits all forms of experimentation on human subjects that are not strictly necessary for a detainee’s health. The prohibition applies equally in both international and non-international armed conflicts.

1. International Armed Conflict

All four Geneva Conventions of 1949 prohibit non-therapeutic human experimentation in international armed conflict. Article 12 of the First Geneva

¹¹ ILC Draft Conclusions, *supra* note 5, at 3.

¹² Such material sources include, but are not limited to, “public statements made on behalf of States; official publications; government legal opinions; diplomatic correspondence; decisions of national courts; treaty provisions; and conduct in connection with resolutions adopted by an international organization or at an intergovernmental conference.” *Id.*

¹³ See ILA Custom Report, *supra* note 6, at 30-31.

Convention (GC I)¹⁴ prohibits subjecting wounded or sick soldiers on land to “biological experiments.” Article 12 of the Second Geneva Convention (GC II)¹⁵ similarly prohibits “biological experiments” on wounded, sick, and shipwrecked soldiers at sea. Article 13 of the Third Geneva Convention (GC III)¹⁶ is even more specific, providing that “no prisoner of war may be subjected to physical mutilation or to medical or scientific experiments of any kind which are not justified by the medical, dental or hospital treatment of the prisoner concerned and carried out in his interest.” And Article 32 of the Fourth Geneva Convention (GC IV)¹⁷ prohibits both “civilian and military agents” from engaging in “medical or scientific experiments not necessitated by the medical treatment of a protected person.”¹⁸ As the ICRC’s 1952 commentary¹⁹ on GC I indicates, all four prohibitions reflect a common goal: “to put an end for all time to criminal practices of which certain prisoners have been the victims, and also to prevent wounded or sick in captivity from being used as ‘guinea-pigs’ for medical experiments.”²⁰

There is no question that the four Geneva Conventions, including their prohibition of human experimentation, reflect customary international law. A treaty contributes to the formation of a customary rule as long as it is widely ratified and intended to have a law-making effect:

Law-making treaties are those agreements whereby states elaborate their perception of international law upon any given topic or establish new rules which are to guide them for the future in their international conduct. Such lawmaking treaties, of necessity, require the

¹⁴ Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (Geneva Convention I), 6 UST 3114, 75 UNTS 31 (Aug. 12, 1949).

¹⁵ Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Geneva Convention II), 6 UST 3217, 75 UNTS 85 (Aug. 12, 1949).

¹⁶ Geneva Convention Relative to the Treatment of Prisoners of War (Geneva Convention III), 6 UST 3316, 75 UNTS 135 (Aug. 12, 1949).

¹⁷ Convention Relative to the Protection of Civilian Persons in Time of War (Geneva Convention IV), Art. 32, 6 UST 3516, 75 UNTS 287 (Aug. 12, 1949).

¹⁸ “Persons protected by the Convention are those who, at a given moment and in any manner whatsoever, find themselves, in case of a conflict or occupation, in the hands of a Party to the conflict or Occupying Power of which they are not nationals.” *Id.*, Art. 4.

¹⁹ Both the US government and the Supreme Court have relied on the ICRC’s commentaries when interpreting the Geneva Conventions. *See* DEPARTMENT OF DEFENSE LAW OF WAR MANUAL 569 (2015); *Hamdan v. Rumsfeld*, 548 US 557, 631 (2006).

²⁰ COMMENTARY ON THE GENEVA CONVENTIONS OF 12 AUGUST 1949: GENEVA CONVENTION FOR THE AMELIORATION OF THE CONDITION OF THE WOUNDED AND SICK IN ARMED FORCES IN THE FIELD 139 (J. Pictet ed., 1952); *see also* JEAN DE PREUX, GENEVA CONVENTION RELATIVE TO THE TREATMENT OF PRISONERS OF WAR: COMMENTARY 141 (A.P. de Henry trans., 1960) (“The intention was to abolish for ever the criminal practices inflicted on thousands of persons during the Second World War.”).

participation of a large number of states to emphasize this effect, and may produce rules that will bind all. They constitute normative treaties, agreements that prescribe rules of conduct to be followed.²¹

Indeed, the International Court of Justice (ICJ) suggested in the *North Sea Continental Shelf* case that a law-making treaty with “very widespread and representative participation,” particularly by specially-affected states, might be sufficient by itself to create customary international law.²² No treaty could enjoy more widespread and representative participation than the Geneva Conventions, because the Conventions have been universally ratified²³ – the only treaties to have ever achieved that status. It is not surprising, therefore, that the ICJ,²⁴ the United Nations,²⁵ and the ICRC²⁶ all agree that the Geneva Conventions reflect customary international law *in toto*.

The First Additional Protocol to the Geneva Conventions (AP I)²⁷ also prohibits non-therapeutic human experimentation in international armed conflict. The relevant provision is Article 11, which provides, in relevant part:

1. The physical or mental health and integrity of persons who are in the power of the adverse Party or who are interned, detained or otherwise deprived of liberty as a result of a situation referred to in Article 1 shall not be endangered by any unjustified act or omission. Accordingly, it is prohibited to subject the persons described in this Article to any medical procedure which is not indicated by the state of health of the person concerned and which is not consistent with generally accepted medical standards which would be applied under similar medical circumstances to persons who are nationals of the

²¹ MALCOLM N. SHAW, *INTERNATIONAL LAW* 95 (6th ed. 2008); *see also* BROWNLIE’S *PUBLIC INTERNATIONAL LAW*, 31 (“Although treaties are as such binding only on the parties, the number of parties, the explicit acceptance of these rules by states generally and, in some cases, the declaratory character of the provisions combine to produce a powerful law-creating effect.”); R.R. Baxter, *Multilateral Treaties as Evidence of Customary International Law*, 41 *BRIT. Y.B. INT’L L.* 275, 278 (1965-1966) (“Having regard to the limited amount of State practice which is generally regarded as sufficient to establish the existence of a rule in customary international law, a treaty to which a substantial number of States are parties must be counted as extremely powerful evidence of the law.”).

²² *See North Sea Continental Shelf Case*, Judgment of 20 February 1969 [1969] ICJ 43.

²³ *See* ICRC Database, available at <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/INTRO/365?OpenDocument>.

²⁴ *Advisory Opinion on the the Legality of the Threat or Use of Nuclear Weapons*, ¶ 81, 1996 ICJ 226 (July 8).

²⁵ Report of the Secretary-General Pursuant to Paragraph 2 of Security Council Resolution 808, ¶ 35, UN Doc. S/25704 (May 3, 1993).

²⁶ *See, e.g.*, *I CUSTOMARY INTERNATIONAL HUMANITARIAN LAW: RULES xxxvi* (Jean-Marie Henckaerts & Louise Doswald-Beck eds., 2005).

²⁷ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, 1125 UNTS 3 (June 8, 1977).

Party conducting the procedure and who are in no way deprived of liberty.

2. It is, in particular, prohibited to carry out on such persons, even with their consent... b) medical or scientific experiments.

According to the ICRC's official 1987 commentary, "the foremost aim" of Article 11, which was adopted by consensus, "was to clarify and develop the protection of persons protected by the Conventions and the Protocol against medical procedures not indicated by their state of health, and particularly against unlawful medical experiments."²⁸

Unlike the Geneva Conventions, AP I has not been universally ratified. The prohibition on non-therapeutic human experimentation in Art. 11 nevertheless reflects customary international law. AP I is clearly a law-making treaty, because it articulates international rules designed to regulate how states behave during armed conflict. And it enjoys "very widespread and representative participation," with 174 State parties – 89% of the world's 196 states – representing every inhabited continent and including all of the world's major legal systems.

It is not necessary, however, to rely solely on ratifications to establish the customary status of AP I's prohibition on non-therapeutic human experimentation, because at least 76 states specifically prohibit such experimentation either legislatively or through regulations issued to their armed forces.²⁹ National legislation and military manuals are recognized sources of state practice and *opinio juris*.³⁰ Moreover, 10 of those 76 states have not yet ratified AP I.³¹ The fact that non-party states act consistently with a norm articulated in a treaty is persuasive evidence that the norm reflects customary

²⁸ COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, 150 (Yves Sandoz et al. eds., 1987).

²⁹ Armenia, Argentina, Australia, Azerbaijan, Bangladesh, Barbados, Belarus, Belgium, Bosnia, Botswana, Bulgaria, Burkina Faso, Burundi, Cambodia, Canada, Colombia, Congo, Cook Islands, Cote d'Ivoire, Croatia, Cyprus, DRC, Ecuador, Ethiopia, Finland, France, Germany, Georgia, India, Iraq, Ireland, Israel, Italy, Jordan, Kenya, Lithuania, Luxembourg, Malawi, Malaysia, Mali, Mauritius, Mexico, Morocco, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Papua New Guinea, Paraguay, Peru, Poland, Republic of Korea, Republic of Moldova, Romania, Russia, Senegal, Serbia, Seychelles, Singapore, Slovenia, Somalia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tajikistan, Thailand, Uganda, UK, Uruguay, Vanuatu, Yemen, US, Zimbabwe. ICRC, II CUSTOMARY INTERNATIONAL HUMANITARIAN LAW: PRACTICE 2171-85 (Jean-Marie Henckaerts & Louise Doswald-Beck eds., 2005).

³⁰ See, e.g., AMERICAN LAW INSTITUTE, RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 701 n. 2 (1988) (legislation); ILA Custom Report, *supra* note 6, at 14 (military manuals).

³¹ Azerbaijan, India, Israel, Malaysia, Papua New Guinea, Singapore, Somalia, Sri Lanka, Thailand, and the United States. See https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=470.

international law.³² Indeed, the State Department accepted the customary status of Article 11's prohibition on human experimentation as early as 1987.³³

2. Non-International Armed Conflict

The Geneva Conventions also prohibit non-therapeutic human experimentation in non-international armed conflict. The relevant provision is Common Article 3 (CA3) – common because it is included in all four Conventions. The Article, which applies “[i]n the case of armed conflict not of an international character,” begins by generally declaring that “[p]ersons taking no active part in the hostilities, including members of armed forces who have laid down their arms and those placed ‘hors de combat’ by sickness, wounds, detention, or any other cause, shall in all circumstances be treated humanely.” It then provides specific examples of humane treatment, stating that “the following acts are and shall remain prohibited at any time and in any place whatsoever with respect to the above-mentioned persons... (a) violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture.”

Although CA3 does not specifically mention human experimentation, the *travaux préparatoires* of the Conventions make clear that the drafters intended CA3 to prohibit it. As the 1952 ICRC Commentary on GC I explains:

At one stage of the discussions, additions were considered – with particular reference to the biological “experiments” of evil memory, practised on inmates of concentration camps. The idea was rightly abandoned, since biological experiments are among the acts covered by (a). Besides, it is always dangerous to try to go into too much detail – especially in this domain. However much care were taken in establishing a list of all the various forms of infliction, one would never be able to catch up with the imagination of future torturers who wished to satisfy their bestial instincts; and the more specific and complete a list tries to be, the more restrictive it becomes. The form of wording adopted is flexible and, at the same time, precise.³⁴

As part of the universally-ratified Geneva Conventions, CA3 reflects customary international law. That is the position of the United States Department of Defense,³⁵ the ICJ,³⁶ the ICTY,³⁷ and the ICTR.³⁸

³² See, e.g., ILA Custom Report, *supra* note 6, at 46 (noting that state practice counts toward the creation of a customary rule when “non-parties in relation to parties or between themselves adopt a practice in line with that prescribed (or authorized) by the treaty”).

³³ See Remarks of Michael J. Matheson, 2 AM. UNIV. J. INT’L L. & POL. 419, 423 (1987). The ICRC takes the same position. See I CUSTOM STUDY, *supra* note 26, at 320.

³⁴ 1952 ICRC COMMENTARY ON GC I, *supra* note 20, at 54.

³⁵ LAW OF WAR MANUAL, *supra* note 19, at 72.

³⁶ ICJ, Case concerning Military and Paramilitary Activities in and against Nicaragua (*Nicaragua v. United States of America*), 27 June 1986, Judgment, ¶¶ 218.

Unlike CA3, the Second Additional Protocol to the Geneva Conventions (APII)³⁹ does specifically prohibit non-therapeutic human experimentation in non-international armed conflict. The relevant provision is Article 5(2)(e), adopted by consensus, which applies to all persons “deprived of their liberty for reasons related to the armed conflict, whether they are interned or detained”:

[T]heir physical or mental health and integrity shall not be endangered by any unjustified act or omission. Accordingly, it is prohibited to subject the persons described in this Article to any medical procedure which is not indicated by the state of health of the person concerned, and which is not consistent with the generally accepted medical standards applied to free persons under similar medical circumstances.

Although AP II is not universally ratified, both the ICRC⁴⁰ and the United States⁴¹ believe that the prohibition on human experimentation in Article 5(2)(e) reflects customary international law. That conclusion is sound, because AP II is a law-making treaty that is both widely and representatively ratified – 168 state parties (86%) from every continent and every legal system. Moreover, at least 47 states specifically prohibit human experimentation in non-international armed conflict either legislatively or through regulations issued to their armed forces,⁴² and four of those states have not yet ratified AP II – including the US.⁴³

³⁷ *Prosecutor v. Tadic*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, Case No. IT-94-1-A, 2 October 1995, ¶ 98.

³⁸ *Prosecutor v. Akayesu*, Case No. ICTR-96-4-T, September 2, 1998, ¶¶ 608–609.

³⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 1125 UNTS 609 (June 8, 1977).

⁴⁰ I CUSTOM STUDY, *supra* note 26, at 320 (Rule 92).

⁴¹ Matheson, *supra* note 33, at 430-31 (1987) (“[T]he basic core of Protocol II is, of course, reflected in common article 3 of the 1949 Geneva Conventions and therefore is, and should be, a part of generally accepted customary law. This specifically includes its prohibitions on violence towards persons taking no active part in hostilities.”).

⁴² Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Belgium, Bosnia, Bulgaria, Burundi, Cambodia, Canada, Colombia, Congo, Cote d’Ivoire, Croatia, DRC, Ethiopia, Finland, France, Georgia, Germany, Iraq, Ireland, Jordan, Lithuania, Mali, Moldova, Netherlands, New Zealand, Nigeria, Norway, Paraguay, Peru, Poland, Republic of Korea, Romania, Senegal, Serbia, Slovenia, South Africa, Spain, Tajikistan, Thailand, UK, Uruguay, US, Yemen. *See* II CUSTOM STUDY, *supra* note 29, at 2171-85.

⁴³ Azerbaijan, Iraq, Thailand, and the US. *See* https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=475.

B. As a War Crime

A war crime is a violation of IHL that entails individual criminal responsibility under international law.⁴⁴ Only some violations of IHL, therefore, qualify as war crimes. There is no question, however, that non-therapeutic human experimentation is a war crime in both international and non-international armed conflict.

1. International Armed Conflict

Engaging in non-therapeutic human experimentation is a grave breach of all four Geneva Conventions.⁴⁵ Article 147 of GC IV, for example, provides that “[g]rave breaches to which the preceding Article relates shall be those involving any of the following acts, if committed against persons or property protected by the present Convention... torture or inhuman treatment, including biological experiments.”

A grave breach is a particularly serious violation of IHL that rises to the level of a war crime.⁴⁶ Indeed, the Geneva Conventions are so concerned with repressing grave breaches that States assume three interrelated legal obligations when they ratify the Conventions: (1) “to enact any legislation necessary to provide effective penal sanctions for persons committing, or ordering to be committed, any of the grave breaches”; (2) “to search for persons alleged to have committed, or to have ordered to be committed, such grave breaches”; and (3) to “bring such persons, regardless of their nationality, before its own courts... [or] if it prefers, and in accordance with the provisions of its own legislation, hand such persons over for trial to another High Contracting Party.”⁴⁷

AP I also deems non-therapeutic human experimentation a grave breach. Article 11(4) provides that “[a]ny wilful act or omission which seriously endangers the physical or mental health or integrity of any person who is in the power of a Party other than the one on which he depends and which either violates any of the prohibitions in paragraphs 1 and 2 or fails to comply with the requirements of

⁴⁴ ROBERT CRYER ET AL., INTRODUCTION TO INTERNATIONAL CRIMINAL LAW AND PROCEDURE 267 (2nd ed. 2010).

⁴⁵ GC I, *supra* note 14, Art. 50; GC II, *supra* note 15, Art. 51; GC III, *supra* note 16, Art. 130; GC IV, *supra* note 17, Art. 147.

⁴⁶ *See* AP I, *supra* note 27, Art. 85(1) (“[G]rave breaches of these instruments shall be regarded as war crimes.”); ICRC COMMENTARY ON THE ADDITIONAL PROTOCOLS, *supra* note 28, at 158-59 (noting that “to understand the paragraph under examination here, it is important to recall the main distinction made in the Conventions and the Protocol between *breaches* and *grave breaches* of these instruments. Although the Parties to the conflict are under the obligation to take measures necessary for the suppression of all acts contrary to the provisions of the Conventions and Protocol I, they are only bound to bring to court persons having committed grave breaches of these treaties, which are in any case considered to be war crimes.”)

⁴⁷ *See, e.g.*, GC IV, *supra* note 17, Art. 146.

paragraph 3 shall be a grave breach of this Protocol.” Article 11(2) specifically prohibits “medical or scientific experiments.” Such experiments thus qualify as grave breaches of AP I that rise to the level of war crimes.⁴⁸

As discussed above, although AP I is not universally ratified, the prohibition on human experimentation in Article 11 reflects customary international law. Because Article 11(4) specifically considers the violation of that prohibition a grave breach, there is no question that customary international law deems “medical or scientific experiments” a grave breach – and thus a war crime – as well.

The conclusion that customary international law deems non-therapeutic human experimentation a war crime in international armed conflict is supported by considerable non-AP I state practice and *opinio juris*. At least 71 states, including the United States, consider human experimentation a war crime.⁴⁹ Moreover, 124 states have ratified the Rome Statute of the ICC, which specifically criminalizes non-therapeutic human experimentation in international armed conflict: Article 8(2)(a)(ii) provides that war crimes are “[g]rave breaches of the Geneva Conventions,” including “[t]orture or inhuman treatment, including biological experiments”; and Article 8(2)(b)(x) criminalizes “[s]ubjecting persons who are in the power of an adverse party to physical mutilation or to medical or scientific experiments of any kind which are neither justified by the medical, dental or hospital treatment of the person concerned nor carried out in his or her interest, and which cause death to or seriously endanger the health of such person or persons.” Scholars uniformly agree that the definitions of crimes in the Rome Statute – unlike the modes of liability and defenses – were intended to reflect custom.⁵⁰ The Rome Statute’s 124 ratifications⁵¹ thus provide

⁴⁸ *Id.*

⁴⁹ Armenia, Australia, Azerbaijan, Bangladesh, Barbados, Belarus, Belgium, Bosnia, Botswana, Bulgaria, Burundi, Cambodia, Canada, Colombia, Congo, Cook Islands, Cote d’Ivoire, Croatia, Cyprus, DRC, Ethiopia, Finland, France, Germany, Georgia, India, Iraq, Ireland, Israel, Italy, Jordan, Kenya, Lithuania, Luxembourg, Malawi, Malaysia, Mali, Mauritius, Mexico, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Papua New Guinea, Paraguay, Peru, Poland, Republic of Korea, Republic of Moldova, Romania, Russia, Senegal, Serbia, Seychelles, Singapore, Slovenia, Somalia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tajikistan, Thailand, Uganda, UK, Uruguay, Vanuatu, Yemen, US, Zimbabwe. *See* II CUSTOM STUDY, *supra* note 29, at 2171-85.

⁵⁰ *See, e.g.*, Philip Kirsch, *Foreword*, in KNUT DORMANN, ELEMENTS OF WAR CRIMES UNDER THE ROME STATUTE OF THE INTERNATIONAL CRIMINAL COURT xiii (2003) (noting that there was “general agreement that the definitions of crimes in the ICC Statute were to reflect existing customary international law, and not to create new law”); *see also* Darryl Robinson & Herman von Hebel, *War Crimes in Internal Conflicts: Art. 8 of the ICC Statute*, 2 Y.B. OF INT’L HUMAN. L. 193, 194 (1999) (same).

⁵¹ *See* [https://asp.icc-](https://asp.icc-cpi.int/en_menus/asp/states%20parties/Pages/the%20states%20parties%20to%20the%20rome%20statute.aspx)

[cpi.int/en_menus/asp/states%20parties/Pages/the%20states%20parties%20to%20the%20rome%20statute.aspx](https://asp.icc-cpi.int/en_menus/asp/states%20parties/Pages/the%20states%20parties%20to%20the%20rome%20statute.aspx).

significant evidence that the war crime of human experimentation is part of customary international law.⁵²

2. Non-International Armed Conflict

Considerable state practice and *opinio juris* also supports the idea that non-therapeutic human experimentation is a war crime in non-international armed conflict. First, Article 8(2)(e)(xi) of the Rome Statute, which applies in such conflict, specifically criminalizes “subjecting persons who are in the power of another party to the conflict to physical mutilation or to medical or scientific experiments of any kind which are neither justified by the medical, dental or hospital treatment of the person concerned nor carried out in his or her interest, and which cause death to or seriously endanger the health of such person or persons.” As noted above, the crimes in the Rome Statute were drafted to reflect customary international law.

Second, nearly 50 states deem human experimentation a war crime in non-international armed conflict.⁵³ That list includes the United States: 18 U.S.C. § 2441 specifically defines the term “war crime” to include “any conduct... which constitutes a grave breach of common Article 3... when committed in the context of and in association with an armed conflict not of an international character.”

Third, and finally, the UN General Assembly unanimously adopted Res. 50/200 in 1996, which recalled and reaffirmed, in the context of the non-international armed conflict that accompanied the Rwandan genocide, “the obligations of all states to punish all persons who commit... grave violations of international humanitarian law”⁵⁴ – a category that, as we have seen, unquestionably includes human experimentation in non-international armed conflict. As the American Law Institute’s *Restatement (Third) of the Foreign Relations Law of the United States* recognizes, “general support by states for United Nations resolutions declaring, recognizing, invoking, and applying international human rights

⁵² See, e.g., Baxter, *supra* note 21, at 277-78 (“If fifty States are parties to a treaty that represents itself as reflecting customary international law, the treaty has the same persuasive force as would evidence of the State practice of fifty individual States.”).

⁵³ Armenia, Australia, Azerbaijan, Bangladesh, Belarus, Belgium, Bosnia, Bulgaria, Burundi, Cambodia, Canada, Colombia, Congo, Cote d’Ivoire, Croatia, DRC, Ethiopia, Finland, France, Georgia, Germany, Iraq, Ireland, Jordan, Lithuania, Mali, Moldova, Netherlands, New Zealand, Niger, Nigeria, Norway, Paraguay, Peru, Poland, Republic of Korea, Romania, Senegal, Serbia, Slovenia, South Africa, Spain, Tajikistan, Thailand, UK, Uruguay, US, Yemen. See II CUSTOM STUDY, *supra* note 29, at 2171-85. The ICRC takes the same position. ICRC I CUSTOM STUDY, *supra* note 26, at 592.

⁵⁴ See Situation of Human Rights in Rwanda, GA Res. 50/200, Preambular ¶ 6, UN Doc. A/RES/50/200 (Mar. 11, 1996). The UN Commission on Human Rights took a similar position in the context of the conflict in Sierra Leone. See Situation of Human Rights in Sierra Leone, Res. 1999/1, ¶ 2, UN Doc. E/CN.4/RES/1999/1 (April 6, 1999).

principles as international law” are an important source of state practice and *opinio juris* in the human-rights context.⁵⁵ The U.S. Supreme Court and lower federal courts have consistently relied on the *Restatement (Third)* when determining the content of customary international law for purposes of the ATS.⁵⁶

PEACETIME EXPERIMENTATION

Customary international law also prohibits non-consensual human experimentation during peacetime. Four recognized sources of customary international law establish the requisite widespread, consistent, and representative state practice accepted as law: (1) universal human-rights treaties; (2) regional-human rights treaties; (3) statements by international organizations; (4) national practice.

A. Universal Treaties

A number of human-rights treaties open to all states prohibit non-consensual human experimentation during peacetime.

1. ICCPR

Article 7 of the International Covenant on Civil and Political Rights (ICCPR)⁵⁷ provides that “[n]o one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his free consent to medical or scientific experimentation.” As the wording of Article 7 indicates, non-consensual human experimentation is capable of rising to the level of torture. The two prohibitions, however, are formally separate: Article 7 prohibits *both* torture and human experimentation. Indeed, the drafters of the ICCPR included language prohibiting human experimentation in Article 7 precisely to make clear that it was an impermissible form of cruel, inhuman or degrading treatment, not torture – something that the drafters of the UDHR had neglected to do:

The only specific example of “cruel, inhuman, or degrading treatment” clearly agreed upon by those who framed the Universal Declaration of Human Rights was involuntary human experimentation. Indeed, it was probably because of their concern to equate such practices with torture that they added the second limb to the [UDHR’s] prohibition against torture. Once the time came to draft a treaty on human rights that

⁵⁵ RESTATEMENT (THIRD), *supra* note 30, § 701 n. 2; *see also* ILA Custom Report, *supra* note 6, at 59 (“Resolutions of the General Assembly can in appropriate cases themselves constitute part of the process of formation of new rules of customary international law.”).

⁵⁶ *See, e.g., Sosa*, 542 U.S. at 737; *Doe I v. Nestle USA, Inc.*, 766 F.3d 1013, 1019 (2014). The US military also relies on the sources of customary international law identified in the Restatement. *See, e.g., LAW OF WAR MANUAL, supra* note 19, at 29.

⁵⁷ International Covenant on Civil and Political Rights, GA Res. 2200A (XXI), UN Doc. A/6316 (1966).

would contain provisions of greater specificity than was appropriate for the Declaration, there was an opportunity to include specific reference to human experimentation.⁵⁸

The US government has described the prohibitions in Article 7 as reflecting “fundamental human rights” protected by customary international law,⁵⁹ and the Second Circuit took a similar position in *Pfizer*.⁶⁰ That conclusion is sound: the ICCPR has been ratified by 168 states (86%), and the *Restatement (Third)* notes that “virtually universal participation of states in the preparation and adoption of international agreements recognizing human rights principles generally” is persuasive evidence of the existence of a customary norm.⁶¹

2. Disabilities Convention

Although limited to one category of individuals, it is worth noting that 168 states (86%) have ratified or acceded to the UN Convention on the Rights of People with Disabilities.⁶² Echoing the ICCPR, Article 15(1) of the Disabilities Convention provides that “[n]o one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his or her free consent to medical or scientific experimentation.” Like the other treaties discussed above, the Disabilities Convention is clearly a law-making treaty that expresses the view of the overwhelming majority of states that customary international law prohibits human experimentation. Moreover, the International Law Commission has specifically noted that “[t]he fact that a rule is set forth in a number of treaties” may provide evidence that the rule reflects customary international law.⁶³

B. Regional Treaties

1. Arab Charter

Article 9 of the Arab Charter on Human Rights⁶⁴ provides that “[n]o one shall be subjected to medical or scientific experimentation or to the use of his organs without his free consent and full awareness of the consequences and provided that ethical, humanitarian and professional rules are followed and medical procedures are observed to ensure his personal safety pursuant to the relevant domestic laws in force in each State party.” The Arab Charter has been ratified by

⁵⁸ See, e.g., NIGEL RODLEY & MATT POLLARD, *THE TREATMENT OF PRISONERS UNDER INTERNATIONAL LAW* 413 (3rd ed. 2009). Sir Nigel is a former Chairperson of the UN Human Rights Committee and a former UN Special Rapporteur on Torture.

⁵⁹ Memorial of the United States (*US v. Iran*), 1980 ICJ Pleadings (*Case Concerning United States Diplomatic and Consular Staff in Tehran*) 182 (Jan. 12, 1980).

⁶⁰ *Abdullahi v. Pfizer, Inc.*, 562 F.3d 163, 180 (2d. Cir., 2009).

⁶¹ RESTATEMENT (THIRD), *supra* note 30, § 701 n. 2.

⁶² Convention on the Rights of Persons with Disabilities, GA Res. 61/106, UN Doc. A/RES/61/106 (Dec. 13, 2006).

⁶³ ILC Draft Conclusions, *supra* note 5, at 3.

⁶⁴ Arab Charter on Human Rights, adopted Sept. 15, 1994, *reprinted in* 18 HUM. RTS. L.J. 151 (1997).

14 states: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Palestine, Qatar, Saudi Arabia, Syria, the UAE, and Yemen. As the *Restatement (Third)* indicates, “the adoption of human rights principles by states in regional organizations” qualifies as state practice and *opinio juris* toward the customary status of a human-rights norm.⁶⁵ Indeed, Article 9 of the Arab Charter is particularly important in that regard, because states in the Middle East and North Africa have traditionally been less willing to participate in the major universal human-rights treaties than states in other regions.

2. Convention on Human Rights and Biomedicine

The Convention on Human Rights and Biomedicine is a treaty drafted by the Council of Europe to “protect the dignity and identity of all human beings and guarantee everyone, without discrimination, respect for their integrity and other rights and fundamental freedoms with regard to the application of biology and medicine.”⁶⁶ Article 16 of the Convention provides that “[r]esearch on a person may only be undertaken if... the necessary consent... has been given expressly, specifically and is documented.” 29 Council of Europe states have ratified the Convention.⁶⁷

C. Statements by International Organizations

International organizations have routinely insisted that the prohibition of non-consensual human experimentation violates fundamental human rights. Resolutions of international organizations normally contribute to the development of customary international law,⁶⁸ but they are particularly important in the context of human rights, as the *Restatement (Third)* recognizes.⁶⁹

1. General Assembly Resolutions

Three General Assembly resolutions contribute to the customary prohibition of non-consensual human experimentation in peacetime. The first is the UDHR,⁷⁰ which provides in Article 5 that “[n]o one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.” As noted above, “[t]he only specific example of ‘cruel, inhuman, or degrading treatment’ clearly agreed upon by those who framed the Universal Declaration of Human Rights was

⁶⁵ RESTATEMENT (THIRD), *supra* note 30, § 701 n. 2.

⁶⁶ Convention on Human Rights and Biomedicine, Art. 1, CETS No. 164 (1997).

⁶⁷ See https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/164/signatures?p_auth=TIfA0zMZ.

⁶⁸ See, e.g., ILC Custom Report, *supra* note 6, at 19, 55-56; ILC Draft Conclusions, *supra* note 5, at 2, 3.

⁶⁹ RESTATEMENT (THIRD), *supra* note 30, § 701 n. 2 (noting that “invocation of human rights principles... in international organization activities and actions” support the existence of a customary norm).

⁷⁰ Universal Declaration of Human Rights, GA Res. 217A(III), UN Doc. A/810 (1948).

involuntary human experimentation.”⁷¹ There was actually considerable support during the drafting of the UDHR for adding a provision to Article 5 that would have singled out such experimentation as an example of cruel, inhuman, or degrading treatment – as is the case with Article 7 of the ICCPR. The drafters ultimately decided that such an additional provision was not necessary because the prohibition on human experimentation was necessarily encompassed by the broader provision.⁷²

Although the UDHR is not legally binding, its unanimous adoption by the General Assembly provides significant support for a customary rule prohibiting non-consensual human experimentation during peacetime. That is the position taken by the *Restatement (Third)*, which specifically cites the “virtually universal and frequently reiterated acceptance of the Universal Declaration of Human Rights even if only in principle” as an acknowledged source of customary human-rights law.⁷³ Moreover, both the US government⁷⁴ and the Second Circuit⁷⁵ have relied on the UDHR when identifying customary norms, with the latter noting in *Filartiga* that the UDHR “no longer fits into the dichotomy of ‘binding treaty’ against ‘non-binding pronouncement,’ but is rather an authoritative statement of the international community.”⁷⁶

The second important General Assembly resolution is Res. 43/173, which approved the UN Sixth Committee’s “Body of Principles for the Protection of All Persons Under Any Form of Detention or Imprisonment.”⁷⁷ According to Principle 22, “[n]o detained or imprisoned person shall, even with his consent, be subjected to any medical or scientific experimentation which may be detrimental to his health.” The General Assembly adopted Res. 43/173 without a vote.

⁷¹ RODLEY & POLLARD, *supra* note 58, at 413; *see also* JOHANNES MORSINK, THE UNIVERSAL DECLARATION OF HUMAN RIGHTS: ORIGINS, DRAFTING, AND INTENT 42 (1999) (noting that the drafters of the UDHR “gave clear-cut negative answers” to the questions “Do some human beings have the right to expose others to medical experiments and do any have the right to inflict suffering upon others without their consent, even for ends that may appear good?”).

⁷² THE UNIVERSAL DECLARATION OF HUMAN RIGHTS: A COMMON STANDARD OF ACHIEVEMENT 123 (Guðmundur S. Alfreðsson & Asbjørn Eide eds., 1999).

⁷³ RESTATEMENT (THIRD), *supra* note 30, § 701 n. 2.

⁷⁴ Memorial of the United States, *supra* note 59, at 182.

⁷⁵ *Filartiga*, 630 F.2d at 883.

⁷⁶ *Id.*, quoting EGON SCHWELB, HUMAN RIGHTS AND THE INTERNATIONAL COMMUNITY 70 (1964). *Sosa* is not to the contrary. In *Sosa*, the Supreme Court concluded that the UDHR and the ICCPR did not “themselves create a establish the relevant and applicable rule of international law.” *Sosa*, 542 US at 735. The Court did not deny that the UDHR represented the *opinio juris* of the States that voted in favour of the resolution.

⁷⁷ Body of Principles for the Protection of All Persons Under Any Form of Detention or Imprisonment, GA Res. 43/173, UN Doc. A/RES/43/173 (Dec. 9, 1988).

The third important General Assembly resolution is Res. 70/175 – the Nelson Mandela Rules.⁷⁸ Rule 32(1)(d) imposes an “absolute prohibition on engaging, actively or passively, in acts that may constitute torture or other cruel, inhuman or degrading treatment or punishment, including medical or scientific experimentation that may be detrimental to a prisoner’s health.” As with its predecessor, the General Assembly adopted Res. 70/175 without a vote.

2. UNESCO

In October 2005, the General Conference of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) – whose membership consists of 195 states – unanimously adopted the Universal Declaration on Bioethics and Human Rights⁷⁹ in order to “provide a universal framework of principles and procedures to guide States in the formulation of their legislation, policies or other instruments in the field of bioethics.”⁸⁰ Article 6(2) of the Bioethics Declaration specifically prohibits non-consensual human experimentation in peacetime:

Scientific research should only be carried out with the prior, free, express and informed consent of the person concerned. The information should be adequate, provided in a comprehensible form and should include modalities for withdrawal of consent. Consent may be withdrawn by the person concerned at any time and for any reason without any disadvantage or prejudice. Exceptions to this principle should be made only in accordance with ethical and legal standards adopted by States, consistent with the principles and provisions set out in this Declaration, in particular in Article 27, and international human rights law.

3. Council of Europe

In January 1973, the Council of Europe unanimously adopted a Declaration entitled “Standard Minimum Rules for the Treatment of Prisoners.”⁸¹ Article 22 of the Declaration provides that “prisoners may not be submitted to medical or scientific experiments which may result in physical or moral injury to their person.” Those rules were revised by the Council in 1987 and again adopted unanimously. Like Article 22, Article 27 of the revised European Prison Rules – as they were renamed – categorically prohibits exposing prisoners “to any experiments which may result in physical or moral injury.”⁸²

⁷⁸ United Nations Standard Minimum Rules for the Treatment of Prisoners, GA Res. 70/175, UN Doc. A/RES/70/175 (Jan. 8, 2016).

⁷⁹ Universal Declaration on Bioethics and Human Rights, UNESCO General Conference (Oct. 19, 2005), available at <http://unesdoc.unesco.org/images/0014/001428/142825e.pdf#page=80>.

⁸⁰ *Id.*, Art. 2(a).

⁸¹ Standard Minimum Rules for the Treatment of Prisoners, Council of Europe Committee of Ministers, No. R (73) 5 (1973).

⁸² Recommendation (2006) 2 of the Committee of Ministers to Member States on the European Prison Rules (Jan. 11, 2006).

D. National Practice

As the *Restatement (Third)* notes, “the incorporation of human rights provisions, directly or by reference, in national constitutions and law” provides state practice and *opinio juris* in support of a human-right norm’s customary status.⁸³ According to the US Department of Health and Human Services, more than 90 states currently prohibit or criminalize peacetime human experimentation⁸⁴ – significant evidence that the prohibition is part of customary international law. Moreover, five of those states have not ratified any international treaty that requires domestic prevention or criminalization of human experimentation: China, Malaysia, Saudi Arabia, Singapore, and the UAE. As noted earlier, conforming practice of non-party states provides very strong evidence that a particular treaty norm reflects custom.

ELEMENTS OF THE PROHIBITION ON HUMAN EXPERIMENTATION

The previous section demonstrated that customary international law prohibits human experimentation both during armed conflict and in times of peace. This section demonstrates that in both contexts the customary rule prohibiting human experimentation is “well defined” within the meaning of *Sosa*.

A. As a Violation of IHL

Customary IHL, as reflected in treaties and other international instruments, prohibits all kinds of non-therapeutic human experimentation in international armed conflict: biological (GC I and GC II), medical (GC III, GC IV, AP I) and scientific (GC III, GC IV, AP I).⁸⁵ The prohibition applies to both military and civilian personnel (GC IV), reflecting the fact that the defendants convicted in the *Medical* case included both.⁸⁶

Neither the Geneva Conventions nor AP I defines the term “experimentation.” In the context of human subjects, M. Cherif Bassiouni, a leading international

⁸³ RESTATEMENT (THIRD), *supra* note 30, § 701 n. 2; *see also* ILA Custom Report, *supra* note 6, at 18.

⁸⁴ *See generally* US DEPARTMENT OF HEALTH AND HUMAN SERVICES, INTERNATIONAL COMPILATION OF HUMAN RESEARCH GUIDELINES 1-157 (2016) (collecting legislation).

⁸⁵ Because the prohibition on human experimentation is substantively equivalent for each kind of experimentation, there is no legal relevance to whether a particular experiment is categorized as biological, medical, or scientific. *See* CHRISTINE BYRON, WAR CRIMES AND CRIMES AGAINST HUMANITY IN THE ROME STATUTE OF THE INTERNATIONAL CRIMINAL COURT 112 (2009). Notably, the *Medical* tribunal applied the same legal standards to all of the defendants’ experiments, whether biological, medical, or scientific.

⁸⁶ Sigfried Handloser, who was sentenced to life imprisonment for war crimes and crimes against humanity, was Chief of the Medical Services of the Armed Forces. Herta Oberheuser, who was sentenced to 20 years imprisonment for war crimes and crimes against humanity, was a civilian physician at the Ravensbrueck Concentration Camp. *See* HELLER, *supra* note 1, at 405, 407.

criminal law scholar and one of the architects of the ICC, has defined it simply as “anything done to an individual to learn how it will affect him.”⁸⁷ That definition accords with the judgment in the *Medical* case, which considered all of the horrors to which the Nazis subjected their innocent victims to be experiments – from freezing them to death in ice-cold water⁸⁸ to exposing them to smallpox and watching them die.⁸⁹

Nothing in customary IHL, however, requires human experimentation to actually cause the subject physical or mental harm. The Geneva Conventions do not impose such a requirement, and AP I specifically prohibits experiments that “endanger” physical or mental health.⁹⁰ There is also no requirement that the experimentation be non-consensual. AP I makes clear that medical and scientific experiments are generally prohibited even with the subject’s consent.⁹¹ That said, it is important to acknowledge that IHL does not ban *all* human experimentation in international armed conflict. On the contrary, it permits experimentation that is genuinely intended to improve the subject’s physical or mental health. What the ICRC says with regard to Article 12 of GC I applies to all of the Conventions, as well as to AP I:

But the provision refers only to ‘biological experiments’. Its effect is not to prevent the doctors in charge of wounded and sick from trying new therapeutic methods which are justified on medical grounds and are dictated solely by a desire to improve the patient’s condition. Doctors must be free to resort to the new remedies which science offers, provided always that such remedies have first been satisfactorily proved to be innocuous and that they are administered for purely therapeutic purposes. This interpretation is in complete accordance with the corresponding provisions of the three other Geneva Conventions – in particular Article 13 of the Third Convention, which is the most explicit and lays down specifically that ‘no prisoner of war may be subjected to... medical or scientific experiments of any kind which are not justified by the medical treatment of the prisoner concerned and carried out in his interest’.”⁹²

⁸⁷ M. Cherif Bassiouni et al., *An Appraisal of Human Experimentation in International Law and Practice: The Need for International Regulation of Human Experimentation*, 72 J. CRIM. L. & CRIMINOLOGY 1597, 1597 (1981).

⁸⁸ *Medical* case, *supra* note 2, at 200.

⁸⁹ *Id.* at 178.

⁹⁰ The ICRC notes that the drafters of GC I specifically rejected an actual-harm requirement. *See* ICRC COMMENTARY ON THE ADDITIONAL PROTOCOLS, *supra* note 28, at 152 (“The original draft referred to acts and omissions ‘harmful to the health or to the physical or mental well-being’. The article, as it is now, goes further when it states that health and integrity shall not be endangered.”).

⁹¹ AP I, *supra* note 27, Art. 11(2).

⁹² 1952 ICRC COMMENTARY ON GC I, *supra* note 20, at 139.

Indeed, insofar as the experimentation is for a genuinely therapeutic purpose, the subject's consent to the experiment is not required. The ICRC notes, however, that legal non-consensual experimentation will be exceptionally rare.⁹³

The IHL prohibition on non-therapeutic human experimentation of any kind is equally applicable in non-international armed conflict. As discussed above, CA3's prohibition of "violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture" was designed to prohibit the same kind of experimentation as the Geneva Conventions' international armed conflict provisions. AP II, in turn, adopts verbatim AP I's language concerning human experimentation.

In short, the rule of customary IHL that prohibits human experimentation in all armed conflicts has three essential elements:

1. A military or civilian actor subjected a protected person to a biological, medical, or scientific, experiment.
2. That experiment endangered the protected person's physical or mental health.
3. The experiment was not conducted for a therapeutic purpose.

B. As a War Crime

1. Actus Reus

The definition of human experimentation as a grave breach closely tracks the IHL prohibition. The most specific definition of the *actus reus* of human experimentation is provided by Article 11(4) of AP I, which considers a grave breach a medical or scientific experiment that "seriously endangers the physical or mental health or integrity of any person who is in the power of a Party other than the one on which he depends." That *actus reus* consists of three elements:

1. The perpetrator subjected one or more protected persons to a particular experiment.
2. The experiment seriously endangered the physical or mental health or integrity of such persons.

⁹³ ICRC COMMENTARY ON THE ADDITIONAL PROTOCOLS, *supra* note 28, at 157 ("On the other hand, it is far less common for medical or scientific experiments to conform with the criteria of paragraph 1. Experiments carried out purely for scientific purposes are in any case categorically excluded. The only case in which such an experiment might be allowed if it could be considered as a medical experiment might be if a doctor tried out a new cure on a person who definitely could not be cured through the known methods.").

3. The experiment was neither justified by the medical, dental or hospital treatment of, nor carried out in, such person's or persons' interest.⁹⁴

The only material difference between non-therapeutic human experimentation as a violation of IHL and as a grave breach concerns Element 2, the risk requirement: whereas an experiment that merely "endangers" a subject's physical or mental health violates IHL, that experiment qualifies as a grave breach only if it "seriously endangers" the subject's physical or mental health. According to the ICRC, this means that the experiment must pose a risk of death or serious physical or mental harm.⁹⁵

The *actus reus* of the war crime of human experimentation under the Rome Statute is the same. Article 8(2)(a)(ii) provides that, "[f]or the purpose of this Statute, 'war crimes' means: (a) Grave breaches of the Geneva Conventions of 12 August 1949, namely... Torture or inhuman treatment, including biological experiments." Similarly, Article 8(2)(b)(x) deems it a war crime in international armed conflict to subject "persons who are in the power of an adverse party... to medical or scientific experiments of any kind which are neither justified by the medical, dental or hospital treatment of the person concerned nor carried out in his or her interest, and which cause death to or seriously endanger the health of such person or persons."

Unlike the grave breach regime of the Geneva Conventions and AP I, the Rome Statute criminalizes human experimentation in non-international armed conflict. Article 8(2)(e)(xi) prohibits "[s]ubjecting persons who are in the power of another party to the conflict to physical mutilation or to medical or scientific experiments of any kind which are neither justified by the medical, dental or hospital treatment of the person concerned nor carried out in his or her interest, and which cause death to or seriously endanger the health of such person or persons." That war crime, according to the Rome Statute's Elements of Crimes, has five *actus reus* elements:

1. The perpetrator subjected one or more persons to a medical or scientific experiment.
2. The experiment caused the death or seriously endangered the physical or mental health or integrity of such person or persons.
3. The conduct was neither justified by the medical, dental or hospital treatment of such person or persons concerned nor carried out in such person's or persons' interest.

⁹⁴ COMMENTARY ON THE FIRST GENEVA CONVENTION: CONVENTION (I) FOR THE AMELIORATION OF THE CONDITION OF THE WOUNDED AND SICK IN ARMED FORCES IN THE FIELD ¶¶ 2991-96 (2nd ed. 2016).

⁹⁵ See ICRC COMMENTARY ON THE ADDITIONAL PROTOCOLS, *supra* note 28, at 493.

4. Such person or persons were in the power of another party to the conflict.
5. The conduct took place in the context of and was associated with an armed conflict not of an international character.

The war crime applies to any qualifying experiment, even one that is conducted with the subject's consent.⁹⁶

2. Mens Rea

As a grave breach, non-therapeutic human experimentation requires the perpetrator to intentionally subject the protected person to an experiment while being aware of the possibility that the experiment will seriously endanger the person's physical or mental health.⁹⁷ Although mere negligence concerning serious endangerment will not suffice,⁹⁸ there is no requirement that the perpetrator intend to seriously endanger the protected person.

As a war crime under the Rome Statute, the perpetrator must mean to subject the person to an experiment⁹⁹ while either meaning to seriously endanger the person or being aware that the person will be seriously endangered "in the ordinary course of events."¹⁰⁰ Like the grave breach, therefore, the Rome Statute does not require the perpetrator to intend to seriously endanger the experimental subject.

C. As a Violation of Human Rights

Unlike IHL and the law of war crimes, international human-rights law's peacetime prohibition on human experimentation does not expressly prohibit experiments that are harmful to the subject. Instead, that prohibition focuses specifically on consent: *any* experiment that is conducted on a person without his consent violates his human rights, even one that improves his physical or mental health. That consent requirement is the one constant element in the treaties and declarations discussed above: Article 7 of the ICCPR provides that "no one shall be subjected without his free consent to medical or scientific experimentation"; Article 9 of the Arab Charter provides that "[n]o one shall be subjected to medical or scientific experimentation... without his free consent and full awareness of the consequences"; Article 16 of the Convention on Human Rights and Biomedicine provides that "[r]esearch on a person may only be undertaken if... the necessary consent... has been given expressly, specifically and is documented"; and Article 6(2) of the UNESCO Declaration provides that

⁹⁶ International Criminal Court, Elements of Crimes, 23 n. 46, UN Doc. PCNICC/2000/1/Add.2 (2000).

⁹⁷ 2016 ICRC COMMENTARY ON GC I, *supra* note 94, ¶ 2937.

⁹⁸ *Id.*

⁹⁹ Rome Statute of the International Criminal Court, Art. 30(2)(a), UN Doc. A/CONF.183/9 (July 17, 1998).

¹⁰⁰ *Id.*, Art. 30(2)(b).

“[s]cientific research should only be carried out with the prior, free, express and informed consent of the person concerned.”

CONCLUSION: DEFENDANTS’ EXPERIMENTATION

As noted above, I have relied on the Complaint and Plaintiffs’ Memorandum in Opposition to Defendants’ Motion to Dismiss while preparing my report. Based on the facts alleged in the Complaint, the Defendants’ actions clearly violated all three aspects of the customary international law prohibition concerning human experimentation: (1) under IHL; (2) under the law of war crimes; and (3) under international human-rights law.¹⁰¹

As noted above, human experimentation is best defined as “anything done to an individual to learn how it will affect him.” The facts alleged in the Complaint indicate that at least one of the purposes of the Defendants’ actions was to learn how various techniques of coercive interrogation affected the ability of the Plaintiffs to resist demands for information. Paragraphs 26 and 30 are particularly important in that regard:

26. Defendants hypothesized that they could “counter” any resistance to interrogation on the part of detainees by inducing the same state of “learned helplessness” in humans that Seligman had induced in dogs. They proposed that interrogators induce “learned helplessness” in people suspected of withholding information by confining them under physically and psychologically abusive conditions and further abusing them using coercive techniques. Defendants theorized that detainees would become passive, compliant, and unable to resist their interrogators’ demands for information.

30. Defendants’ hypothesis became the basis for the experimental tortures that they and the CIA inflicted on prisoners. In a memorandum dated December 30, 2004, the CIA confirmed to the Department of Justice Office of Legal Counsel (“OLC”) that “[t]he goal of interrogation is to create a sense of learned helplessness and dependence conducive to the collection of intelligence in a predictable, reliable, and sustainable manner. . . . it is important to demonstrate to the [detainee] that he has no control over basic human needs.” Defendants’ experimental “learned helplessness” model remained a key feature of the CIA’s

torture program from its

inception to its end in 2009.

Paragraph 65 is also important, because it indicates that the Defendants quite consciously saw the interrogation of the Plaintiffs as an opportunity to test out

¹⁰¹ The following analysis will simply apply the facts alleged in the Complaint to the three legal standards discussed in this report. It will not attempt to analyze purely legal questions, such as whether the acts in question were connected to an armed conflict or, if so, whether any particular armed conflict was international or non-international. The analysis will also assume that the plaintiffs were protected persons when they were interrogated, because there is no dispute that they were being held in detention by the United States at the time.

their experimental hypotheses concerning the relationship between a state of learned helplessness and the ability to resist interrogation:

65. On May 31, 2015, Defendant Mitchell confirmed in an email to the law firm Sidley Austin that he and Defendant Jessen were never fully able to assess the effectiveness of their theory and coercive methods. Their contract was terminated, he stated, before they were able “to find and pay an independent researcher, not involved with the program,” to make a final assessment.

There is little question, therefore, that the Defendants engaged in human experimentation as that concept is defined by international law.

A. As a Violation of IHL

IHL categorically prohibits human experimentation that is not conducted for a therapeutic purpose. The coercive interrogation techniques applied by the Defendants to the Plaintiffs were not therapeutic. On the contrary, as the paragraphs quoted above indicate, their goal was to force the Plaintiffs to reveal information by reducing them to a state of learned helplessness. Moreover, the various coercive techniques, alone and in combination, clearly endangered the Plaintiffs’ physical and mental health. For example: Plaintiff Salim was repeatedly doused in freezing-cold water while naked¹⁰² and threatened with waterboarding,¹⁰³ actions that, *inter alia*, led him to “become so hopeless and despondent that he decided to kill himself by taking the painkillers he had stockpiled in his cell”¹⁰⁴; Plaintiff Ben Soud was “subjected to food deprivation” that caused him to lose more than 25% of his body weight¹⁰⁵ and was regularly submerged in freezing water¹⁰⁶— an interrogation technique that is just as dangerous as waterboarding¹⁰⁷; and Plaintiff Rahman was subjected to such “prolonged nudity and water dousing”¹⁰⁸ that he likely died of hypothermia.¹⁰⁹

B. As a War Crime

The defendants’ actions also qualify as the war crime of human experimentation under both the grave-breach regime of the Geneva Conventions and the Rome Statute. As discussed above, human experimentation as a war crime – grave breach or violation of the Rome Statute – has three basic elements:

¹⁰² Complaint, ¶ 100.

¹⁰³ *Id.*, ¶ 86.

¹⁰⁴ *Id.*, ¶ 107.

¹⁰⁵ *Id.*, ¶ 129.

¹⁰⁶ *Id.*, ¶ 138.

¹⁰⁷ *See, e.g.,* Stephen N. Xenaxis, *Neuropsychiatric Evidence of Waterboarding and Other Abusive Treatments*, 22 J. REHABILITATION OF TORTURE VICTIMS & PREVENTION OF TORTURE 21, 22 (2012) (noting that “death could result from lengthy exposure to cold water”).

¹⁰⁸ Complaint, ¶ 159.

¹⁰⁹ *Id.*, ¶ 164.

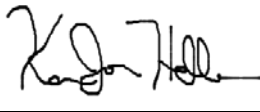
1. The perpetrator subjected one or more protected persons to a particular experiment.
2. The experiment seriously endangered the physical or mental health or integrity of such persons.
3. The experiment was neither justified by the medical, dental or hospital treatment of, nor carried out in, such person's or persons' interest.

Two of those elements have already been addressed: the defendants subjected the Plaintiffs to experiments (Element 1) and those experiments were neither "treatment" nor in the Plaintiffs' interest (Element 3). Given the various coercive interrogation techniques discussed above and in the Complaint – especially the repeated water dousing to which all three Plaintiffs were subjected, which is disturbingly reminiscent of the freezing experiments condemned in the *Medical* case – there is no question that the defendants' experiments not only endangered but "seriously endangered" the Plaintiffs' physical or mental health (Element 2).

C. As a Violation of Human Rights

International human-rights law categorically prohibits non-consensual human experimentation. Given the facts alleged in the Complaint, it is evident that that the Plaintiffs did not consent to being coercively interrogated. The Defendants' human experimentation on the plaintiffs thus violated the Plaintiffs' fundamental human rights.

Dated: November 21, 2016



Prof. Kevin Jon Heller
Professor of Criminal Law, SOAS, University of London
Principal Fellow, Melbourne Law School
Academic Member, [Doughty Street Chambers](#)

EXHIBIT C

INTRODUCTION

In my Expert Opinion, I explain why state practice and *opinio juris* since Nuremberg establish beyond doubt that customary international law prohibits human experimentation both during armed conflict and in peacetime.¹ During armed conflict, such experimentation violates international humanitarian law (IHL) and qualifies as a war crime if it is not for a therapeutic purpose. In peacetime, even therapeutic human experimentation violates fundamental human rights if it is not consensual.

I have reviewed the Expert Opinion of Professor Julian Ku (“Ku Opinion”). That Opinion makes three central claims. The first is that customary international law does not prohibit non-therapeutic human experimentation in non-international armed conflict (NIAC).² The second is that, even if non-therapeutic human experimentation is prohibited in NIAC, customary international law does not define “experimentation” with sufficient specificity to satisfy *Sosa v. Alvarez-Machain*.³ The third is that Defendants’ actions cannot be considered non-therapeutic human experimentation.

As this Rebuttal Opinion demonstrates, all three claims are mistaken. I begin by explaining why, contrary to the Ku Opinion, both Common Article 3 (CA3) and the Second Additional Protocol (AP II) prohibit non-therapeutic human experimentation in NIAC and thus contribute to the customary prohibition of such experimentation. I then explain why, also contrary to the Ku Opinion, the concept of “experimentation” is defined with sufficient precision for *Sosa*. Finally, I explain why Defendants’ actions clearly violate customary international law’s prohibition on non-therapeutic human experimentation.

NON-THERAPEUTIC HUMAN EXPERIMENTATION IN NIAC

The Ku Opinion claims that there “is no evidence of a clear, universal, and specific customary international law norm against human experimentation” in the “law governing non-international armed conflicts.”⁴ That claim is based on the assertion that such experimentation is not prohibited either by CA3 or by AP II. Contrary to

¹ It is well-established that federal courts ascertain customary international law “by consulting the works of jurists, writing professedly on public law.” *United States v. Smith*, 18 U.S. (5 Wheat.) 153, 160–61, 5 L.Ed. 57 (1820) (Story, J.).

² Ku Opinion, 6.

³ *Id.* at 8 (“This paucity of legal material offering a specific definition of experimentation, when combined with the admission of key scholars like Bassiouni that a treaty defining the term is needed, weighs heavily against a conclusion that the prohibition against human experimentation is a specific, universal, and obligatory norm sufficient to support a cause of action under the ATS.”).

⁴ *Id.* at 6.

the Ku Opinion, however, both CA3 and AP II prohibit non-therapeutic human experimentation.

A. Common Article 3

With regard to CA3, the Ku Opinion argues as follows:

But as the Heller Opinion concedes, none of the explicit prohibitions on experimentation in the four Geneva Conventions apply to non-international armed conflicts.... The Heller Opinion attempts to fill in the non-existent textual prohibition with commentary from the International Committee of the Red Cross stating that the drafters of Common Article 3, the provision governing non-international armed conflicts, intended to (but did not explicitly) prohibit “biological experiments.”⁵

This narrow interpretation of CA3 is critical to the Ku Opinion’s claim that customary international law does not prohibit non-therapeutic human experimentation in NIAC. As I note in my Expert Opinion, it is uncontroversial that CA3 itself reflects customary international law. That is the position of the United States government,⁶ the International Court of Justice,⁷ the United Nations,⁸ the International Criminal Tribunal for the Former Yugoslavia,⁹ the International Criminal Tribunal for Rwanda,¹⁰ and the International Committee of the Red Cross (ICRC).¹¹ As a result, if CA3 prohibits non-therapeutic human experimentation, there is no question that customary international law does likewise.

Although the text of CA3 does not explicitly prohibit non-therapeutic human experimentation in NIAC, the general rules of treaty interpretation in the Vienna Convention on the Law of Treaties (VCLT)¹² make clear that CA3 nevertheless

⁵ *Id.* at 5.

⁶ DEPARTMENT OF DEFENSE LAW OF WAR MANUAL 72 (2015).

⁷ ICJ, Case concerning Military and Paramilitary Activities in and against Nicaragua (*Nicaragua v. United States of America*), 27 June 1986, Judgment, ¶ 218.

⁸ Report of the Secretary-General Pursuant to Paragraph 2 of Security Council Resolution 808, ¶ 35, UN Doc. S/25704 (May 3, 1993).

⁹ *Prosecutor v. Tadic*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, Case No. IT-94-1-A, ¶ 98 (Oct. 2, 1995).

¹⁰ *Prosecutor v. Akayesu*, Case No. ICTR-96-4-T, ¶¶ 608–609 (Sept. 2, 1998).

¹¹ *See, e.g.*, I CUSTOMARY INTERNATIONAL HUMANITARIAN LAW: RULES xxxvi (Jean-Marie Henckaerts & Louise Doswald-Beck eds., 2005).

¹² Vienna Convention on the Law of Treaties, Art. 31(1), 1155 U.N.T.S. 331 (1969). “Although the United States has not ratified the Vienna Convention on the Law of Treaties, our Court relies upon it as an authoritative guide to the customary international law of treaties, insofar as it reflects actual state practices. The Department of State considers the Vienna Convention on the Law of Treaties an authoritative guide to current treaty law and practice.” *Mora v. New York*, 524 F.3d

prohibits it. In particular, Art. 31 of the VCLT provides that “[a] treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” The context of CA3 – its inclusion in each of the four Geneva Conventions – demonstrates that CA3’s insistence that persons “taking no active part in the hostilities... shall in all circumstances be treated humanely” includes a prohibition on non-therapeutic human experimentation. All four Geneva Conventions also require individuals detained in international armed conflict (IAC) to be treated humanely – and all four specifically single out non-therapeutic human experimentation as an example of inhumane treatment.¹³ Ordinary principles of treaty interpretation thus make clear that the guarantee of humane treatment in CA3 prohibits non-therapeutic human experimentation, as well.¹⁴

The Ku Opinion implies that the textual absence of a prohibition on non-therapeutic human experimentation indicates that the drafters of CA3 did not intend to prohibit non-therapeutic human experimentation in NIAC. That suggestion, however, is specifically contradicted by the drafting history of CA3:

183, 196 n.19 (2d Cir.) (internal quotation and citation omitted), cert. denied, 555 U.S. 943 (2008)

¹³ See Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (Geneva Convention I), Art. 12, 6 UST 3114, 75 UNTS 31 (Aug. 12, 1949) (“They shall be treated humanely... in particular, they shall not be murdered or exterminated, subjected to torture or to biological experiments.”); Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Geneva Convention II), Art. 12, 6 UST 3217, 75 UNTS 85 (Aug. 12, 1949) (“Such persons shall be treated humanely... in particular, they shall not be murdered or exterminated, subjected to torture or to biological experiments.”); Geneva Convention Relative to the Treatment of Prisoners of War (Geneva Convention III), Art. 13, 6 UST 3316, 75 UNTS 135 (Aug. 12, 1949) (“Prisoners of war must at all times be humanely treated.... In particular, no prisoner of war may be subjected to physical mutilation or to medical or scientific experiments of any kind which are not justified by the medical, dental or hospital treatment of the prisoner concerned and carried out in his interest.”); Convention Relative to the Protection of Civilian Persons in Time of War (Geneva Convention IV), Art. 32, 6 UST 3516, 75 UNTS 287 (Aug. 12, 1949) (“The High Contracting Parties specifically agree that each of them is prohibited from taking any measure of such a character as to cause the physical suffering or extermination of protected persons in their hands. This prohibition applies not only to murder, torture, corporal punishments, mutilation and medical or scientific experiments not necessitated by the medical treatment of a protected person, but also to any other measures of brutality whether applied by civilian or military agents.”).

¹⁴ See also *Ratzlaf v. United States*, 510 US 135, 143 (1994) (“A term appearing in several places in a statutory text is generally read the same way each time it appears.”).

At one stage of the discussions, additions were considered – with particular reference to the biological “experiments” of evil memory, practised on inmates of concentration camps. The idea was rightly abandoned, since biological experiments are among the acts covered by (a). Besides, it is always dangerous to try to go into too much detail – especially in this domain. However much care were taken in establishing a list of all the various forms of infliction, one would never be able to catch up with the imagination of future torturers who wished to satisfy their bestial instincts; and the more specific and complete a list tries to be, the more restrictive it becomes. The form of wording adopted is flexible and, at the same time, precise.¹⁵

Art. 32 of the VCLT provides that “[r]ecourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31... leaves the meaning ambiguous or obscure.” Either way, ordinary principles of treaty interpretation dictate interpreting CA3 to prohibit non-therapeutic human experimentation in NIAC. The best interpretation of CA3 is that its guarantee of “humane treatment” prohibits non-therapeutic human experimentation. The drafting history simply confirms that interpretation. In other words, even if the proper interpretation of “humane treatment” was somehow ambiguous – which is not the case – the drafting history resolves any ambiguity in favour of interpreting humane treatment to prohibit non-therapeutic human experimentation.

The Ku Opinion does not challenge the relevance of CA3’s drafting history to the interpretation of the Article. Instead, it appears to suggest that the ICRC Commentary explaining that history cannot be trusted. The Ku Opinion nevertheless provides no evidence that the Commentary’s explanation of the drafting history of CA3 is incorrect. In the absence of such evidence, there is no reason why the Court should not rely on the Commentary. As noted in in my Expert Opinion, both the US government and the Supreme Court have relied on the ICRC’s commentaries when interpreting the Geneva Conventions.¹⁶

Finally, it is worth noting that the United States government not only unequivocally considers CA3 to prohibit non-therapeutic human experimentation in NIAC, it specifically deems it a *grave breach* of the Geneva Conventions – the kind of serious

¹⁵ COMMENTARY ON THE GENEVA CONVENTIONS OF 12 AUGUST 1949: GENEVA CONVENTION FOR THE AMELIORATION OF THE CONDITION OF THE WOUNDED AND SICK IN ARMED FORCES IN THE FIELD 54 (J. Pictet ed., 1952).

¹⁶ See LAW OF WAR MANUAL, *supra* note 6, at 569; *Hamdan v. Rumsfeld*, 548 US 557, 631 (2006).

violation of international humanitarian law (IHL) that gives rise to individual criminal responsibility.¹⁷ Here is the relevant text of 18 USC §2441(d):

(d) Common Article 3 Violations.—

(1) Prohibited conduct.—In subsection (c)(3), the term “grave breach of common Article 3” means any conduct (such conduct constituting a grave breach of common Article 3 of the international conventions done at Geneva August 12, 1949), as follows...

(C) Performing biological experiments.—

The act of a person who subjects, or conspires or attempts to subject, one or more persons within his custody or physical control to biological experiments without a legitimate medical or dental purpose and in so doing endangers the body or health of such person or persons.¹⁸

In short: CA3 categorically prohibits non-therapeutic human experimentation. As a result, because the customary status of CA3 is beyond question, customary international law prohibits such experimentation in NIAC.

B. Second Additional Protocol

The Ku Opinion also argues that AP II does not prohibit non-therapeutic human experimentation – and thus does not contribute to non-therapeutic human experimentation’s prohibition under customary international law:

The Heller Opinion then tries to buttress this less than conclusive evidence by citing Article 5(2) to the Second Additional Protocol to the Geneva Conventions. But Article 5(2) merely prohibits “medical procedure[s] which [are] not indicated by the state of health of the persons concerned.” This language is notably less explicit than the prohibitions on “biological experiments” in the other Geneva Conventions’ provisions on international armed conflicts.¹⁹

¹⁷ See, e.g., GC IV, Art. 146 (“The High Contracting Parties undertake to enact any legislation necessary to provide effective penal sanctions for persons committing, or ordering to be committed, any of the grave breaches of the present Convention.”).

¹⁸ §2441 was adopted in 1996, reflecting the United States government’s longstanding view that the Geneva Conventions’ grave-breach regime applies to CA3. See, e.g., D. Stephen Mathias, Legal Counselor, Embassy of the United States, The Hague, The Netherlands, Submission of the Government of the United States of America Concerning Certain Arguments Made by Counsel for the Accused in the Case of *Prosecutor v. Dusan Tadic*, 35-36 (July 17, 1995) (“For example, Article 130 of the 1949 Geneva Convention Relative to the Treatment of Prisoners of War defines ‘grave breaches’ as any of a series of specified acts ‘if committed against persons or property protected by the Convention’... Insofar as Common Article 3 prohibits certain acts with respect to ‘[p]ersons taking no active part in hostilities’ in cases of armed conflict not of an international character, it is consistent with the ordinary meaning of the Geneva Conventions to treat such persons as persons protected by the Conventions.”)

¹⁹ Ku Opinion, 5.

AP II is “less explicit” about non-therapeutic human experimentation than the Geneva Conventions. As with CA3’s guarantee of humane treatment, however, any ambiguity about whether AP II’s prohibition of non-therapeutic “medical procedures” includes non-therapeutic human experimentation is removed by the drafting history of Art. 5(2)(e):

The aim of this sentence is to prohibit medical experiments. The term “medical procedure” means “any procedure which has the purpose of influencing the state of health of the person undergoing it.” The reason for carrying out such a procedure must be, medically and morally, based on the expectation that it will be for the patient’s benefit. The reference to generally recognized medical standards, i.e., medical ethics, is the essential element in making this judgment.²⁰

Indeed, the ICRC Commentary on the Additional Protocol points out that because the text of Art. 5(2)(e) of AP II “reiterates” the text of Art. 11(1) of the First Additional Protocol (AP I), “[t]he interpretation of these two purely humanitarian provisions is identical.”²¹ As noted in my Expert Opinion,²² Art. 11(2)(b) of AP I singles out non-therapeutic “medical or scientific experiments” as the kind of procedures that are categorically prohibited by Art. 11(1), even with a detainee’s consent. As a result, there is no question that Art. 5(2)(e) of AP II prohibits non-therapeutic human experimentation in NIAC.

C. United States *Opinio Juris* Concerning AP II

Finally, the Ku Opinion challenges my assertion²³ that the United States believes the prohibition on non-therapeutic human experimentation in Art. 5(2)(e) reflects customary international law:

In fact, the U.S. government statement cited by the Heller Opinion merely states that the U.S. government believed some provisions of the Second Additional Protocol such as prohibiting violence against non-combatants and hostages reflected customary international law. But instead of embracing the whole Protocol as embodying customary international law or specifying that human experimentation is prohibited under customary international law, the U.S. government simply noted that the other parts of the Second Additional Protocol are “obviously new... although they... hopefully will in due course become part of customary law.” This is not, despite the Heller Opinion’s claims otherwise, a recognition that human experimentation is prohibited in non-international armed conflicts.²⁴

The Ku Opinion is mistaken. Here is the statement quoted in my Expert Opinion:

²⁰ COMMENTARY ON THE ADDITIONAL PROTOCOLS OF 8 JUNE 1977 TO THE GENEVA CONVENTIONS OF 12 AUGUST 1949, ¶4593 (Yves Sandoz et al. eds., 1987).

²¹ *Id.* at ¶4579.

²² Expert Opinion, 7-8.

²³ *Id.* at 10.

²⁴ Ku Opinion, 6.

The basic core of Protocol II is, of course, reflected in common article 3 of the 1949 Conventions and therefore is, and should be, a part of generally accepted customary law. This specifically includes its prohibitions on violence toward persons taking no active part in hostilities, hostagetaking, degrading treatment, and punishment without due process.²⁵

The Ku Opinion's argument depends on the idea that the United States government considers non-therapeutic human experimentation one of the "obviously new" aspects of AP II – not part of AP II's prohibition of "violence toward persons taking no active part in hostilities... or degrading treatment." But that is not the case: the Law of War Manual issued by the Department of Defense specifically classifies non-therapeutic human experimentation as a form of inhumane treatment in NIAC.²⁶ The only plausible interpretation of Michael Matheson's statement on behalf of the State Department, therefore, is that the United States government considers the prohibition on non-therapeutic human experimentation to fall within AP II's prohibition of violence and degrading treatment – the part of AP II that "is, and should be, a part of generally accepted customary law."

SPECIFICITY OF "EXPERIMENTATION"

The Ku Opinion's second key argument is that even if non-therapeutic human experimentation is prohibited in NIAC, "there is no definition of 'human experimentation' under customary international law that is sufficiently universal and well-accepted to establish an ATS cause of action based on Defendants' alleged conduct."²⁷ This argument, however, demands a specificity that *Sosa* itself does not require. Nothing in *Sosa* suggests that *each and every term* in a "norm of customary international law" must be "so well defined as to support the creation of a federal remedy."²⁸ *Sosa* simply requires the "norm of customary international law" *itself* be sufficiently well-defined.²⁹ And there is no question that the customary prohibition of non-therapeutic human experimentation is "defined with a specificity comparable to the features of the 18th-century paradigms" the Supreme Court has recognized,

²⁵ Remarks of Michael J. Matheson, 2 AM. UNIV. J. INT'L L. & POL. 419, 430-31 (1987).

²⁶ Section 17.17.3 in Chapter XVII of the Manual provides that "Chapter VIII addresses the baseline rules for the humane treatment of detainees that apply to all U.S. military operations, including those in non-international armed conflict." LAW OF WAR MANUAL, *supra* note 6, at 1047. Section 8.2.3 in Chapter VIII, in turn, specifically provides that "[m]edical or biological experiments on detainees are prohibited." *Id.* at 494.

²⁷ Ku Opinion, 10.

²⁸ *Sosa v. Alvarez-Machain*, 542 U.S. 692, 738 (2004).

²⁹ *Id.* at 725 ("[W]e think courts should require any claim based on the present-day law of nations to rest on a norm of international character accepted by the civilized world and defined with a specificity comparable to the features of the 18th-century paradigms we have recognized.").

such as “violations of safe conducts” and “infringements of the rights of ambassadors.”³⁰ As I note in my Expert Opinion, non-therapeutic human experimentation has been considered a war crime – a violation of IHL that entails individual criminal responsibility under international law³¹ – since World War II:

- In the *Medical* case, a number of Nazi medical officials were convicted – and some were executed – for participating in non-therapeutic human experimentation.³²
- The Rome Statute of the International Criminal Court, which has been ratified by 124 States, specifically criminalizes non-therapeutic human experimentation in international armed conflict (IAC).³³
- At least 71 states, including the United States, criminalize non-therapeutic human experimentation in IAC.³⁴
- Nearly 50 states, including the United States, criminalize non-therapeutic human experimentation in NIAC.³⁵

No state has ever claimed that the war crime of non-therapeutic human experimentation is too vague to be applied in the absence of a specific definition of “experimentation.” And that is not surprising, because international law specifically defines the war crime of non-therapeutic human experimentation in two different contexts: as a grave breach of the Geneva Conventions, and as a violation of the Rome Statute. As I explain in my Expert Opinion, for example, the Rome Statute and Elements of Crimes combine to provide a very specific definition of the war crime of non-therapeutic human experimentation when committed in NIAC:

1. The perpetrator subjected one or more persons to a medical or scientific experiment.
2. The perpetrator intentionally subjected one or more persons to an experiment.³⁶

³⁰ *Id.* at 724.

³¹ ROBERT CRYER ET AL., INTRODUCTION TO INTERNATIONAL CRIMINAL LAW AND PROCEDURE 267 (2nd ed. 2010).

³² Heller Opinion, 2.

³³ *Id.* at 12.

³⁴ *Id.*

³⁵ *Id.* at 13.

³⁶ Rome Statute, Art. 30(2)(a).

3. The experiment caused the death or seriously endangered the physical or mental health or integrity of such person or persons.
4. The perpetrator meant to cause the death of or seriously endanger the person or persons or was aware that the person or persons would be seriously endangered “in the ordinary course of events.”³⁷
5. The conduct was neither justified by the medical, dental or hospital treatment of such person or persons concerned nor carried out in such person’s or persons’ interest.
6. Such person or persons were in the power of another party to the conflict.
7. The conduct took place in the context of and was associated with an armed conflict not of an international character.

It is also important to note that the United States does not consider that the absence of an international definition of “experimentation”³⁸ renders the war crime of non-therapeutic human experimentation unconstitutionally vague. On the contrary, the United States not only criminalizes biological experimentation in both IAC and NIAC, it considers it a *capital* war crime when it results in the death of the victim. Here is 18 USC §2441:

(a)Offense.—

Whoever, whether inside or outside the United States, commits a war crime, in any of the circumstances described in subsection (b), shall be fined under this title or imprisoned for life or any term of years, or both, and if death results to the victim, shall also be subject to the penalty of death.

(c)Definition.—As used in this section the term “war crime” means any conduct—

(3) which constitutes a grave breach of common Article 3 (as defined in subsection (d)) when committed in the context of and in association with an armed conflict not of an international character.

If the United States government considers “biological experimentation” sufficiently well-defined to execute an individual – even an American – for engaging in it, it cannot be the case that non-therapeutic human experimentation is not defined specifically enough to justify a civil remedy under the ATS.

The Ku Opinion is silent concerning 18 USC § 2441, and it only acknowledges the war crime of non-therapeutic human experimentation when it claims that “the

³⁷ *Id.*, Art. 30(2)(b).

³⁸ Those terms are also not defined by 18 USC §2441 or by any other provision in the US Code.

Tribunal in the *Medical* case convicted the defendants of war crimes and crimes against humanity, and not of a separate independent crime of non-consensual human experimentation.”³⁹ That distinction, however, is irrelevant: the point is that the American judges in the *Medical* case believed the customary IHL prohibition of non-therapeutic human experimentation was sufficiently well-defined to sentence a number of defendants to death for violating it.⁴⁰

DEFENDANTS’ ACTIONS AS “EXPERIMENTATION”

Finally, the Ku Opinion claims that “there is surprisingly little evidence in the Complaint” supporting my expert opinion that Defendants’ actions qualify as non-therapeutic human experimentation.” That claim is also mistaken. As noted in my Expert Opinion, there was nothing “therapeutic” about Defendants’ efforts to refine the CIA’s interrogation techniques by using violence to reduce Plaintiffs to a state of learned helplessness. On the contrary, Defendants’ coercive methods caused the death of one Plaintiff and seriously endangered the physical and mental health of the other two – the hallmark of non-therapeutic human experimentation as a war crime. Plaintiff Rahman was subjected to such “prolonged nudity and water dousing”⁴¹ that he likely died of hypothermia.⁴² Plaintiff Salim was repeatedly doused in freezing-cold water while naked⁴³ and threatened with waterboarding,⁴⁴ actions that, *inter alia*, led him to “become so hopeless and despondent that he decided to kill himself by taking the painkillers he had stockpiled in his cell.”⁴⁵ And Plaintiff Ben Soud was “subjected to food deprivation” that caused him to lose more than 25% of his body weight⁴⁶ and was regularly submerged in freezing water⁴⁷ – an interrogation technique that is no less dangerous than waterboarding.⁴⁸

The Ku Opinion provides a number of reasons why Defendants’ systematic and carefully-controlled efforts to refine the CIA’s interrogation techniques by using

³⁹ Ku Opinion, 8 (“[T]he Tribunal in the Medical case convicted the defendants of war crimes and crimes against humanity, and not of a separate independent crime of non-consensual human experimentation.”).

⁴⁰ See, e.g., *United States of America v Karl Brandt et al. (Medical case)*, II LAW REPORTS OF TRIALS OF WAR CRIMINALS 189-98 (1946) (convicting Karl Brandt for participating in sulfanilamide, epidemic jaundice, and mustard gas experiments).

⁴¹ Complaint, ¶ 159.

⁴² *Id.*, ¶ 164.

⁴³ *Id.*, ¶ 100.

⁴⁴ *Id.*, ¶ 86.

⁴⁵ *Id.*, ¶ 107.

⁴⁶ *Id.*, ¶ 129.

⁴⁷ *Id.*, ¶ 138.

⁴⁸ See, e.g., Stephen N. Xenaxis, *Neuropsychiatric Evidence of Waterboarding and Other Abusive Treatments*, 22 J. REHABILITATION OF TORTURE VICTIMS & PREVENTION OF TORTURE 21, 22 (2012) (noting that “death could result from lengthy exposure to cold water”).

violence against Plaintiffs should not be considered non-therapeutic human experimentation. First, it tries to distinguish Defendants' actions from the actions of the Nazi doctors by arguing that "the principal purpose of the biological experiments punished in the *Medical* case was to gain information to confirm or support the goals of the Nazis' medical and scientific research teams," while "[i]n the case of the Defendants... the Complaint's allegations make clear that the Defendants' actions were wholly in service of 'enhancing the strategic interrogation' process."⁴⁹ This argument, however, simply reinforces the conclusion that Defendants engaged in non-therapeutic human experimentation: just as the Nazi doctors were willing to cause severe physical and mental harm to concentration-camp inmates in order to increase the efficacy of Nazi medical procedures, Defendants were willing to cause severe physical and mental harm to Plaintiffs in order to increase the efficacy of CIA interrogation techniques. In both cases, the persons experimented on were treated as means, not as ends – which is precisely what customary international law's categorical prohibition of non-therapeutic human experimentation is designed to prevent.

Second, the Ku Opinion argues that Defendants cannot be said to have participated in the coercive interrogation of Plaintiffs "to conduct a real human experiment of any kind," because "the Complaint charges that the Defendants spent time monitoring and assessing the interrogation methods in order to collect on a lucrative government contract."⁵⁰ Nothing in the customary prohibition of non-therapeutic human experimentation, however, requires a perpetrator be motivated solely by the desire for scientific knowledge. As explained in my Expert Opinion,⁵¹ the prohibition forbids any experiment that is not conducted for a therapeutic purpose and that endangers the subjects physical or mental health. If both elements are present, the perpetrator's primary motive for conducting the experiment is irrelevant.⁵²

Third, and finally, the Ku Opinion claims that "the type of analysis the Defendants allegedly conducted is commonly used to design and improve interrogation methods" and thus should not be considered non-therapeutic human experimentation.⁵³ The examples given by the Ku Opinion, however, simply support the conclusion that Defendants' coercive interrogation techniques were human

⁴⁹ Ku Opinion, 9.

⁵⁰ *Id.*

⁵¹ Heller Opinion, 21.

⁵² Indeed, a number of the defendants in the Medical case claimed that they participated in the prohibited experiments for reasons other than advancing Nazi medical science. For example, Rudolf Brandt, who was sentenced to death for his role in the high-altitude, freezing, mustard gas, and typhus experiments, argued that he participated in the experiments because it was his duty as an SS officer and because he feared retribution if he did not. See II LAW REPORTS OF TRIALS OF WAR CRIMINALS, *supra* note 40, at 154-55 (Final Statement of Rudolf Brandt).

⁵³ Ku Opinion, 9.

experimentation. The “Reid Technique” relies on verbal confrontation and does not pose the kind of threat to a detainee’s physical or mental health that prolonged nudity, forced starvation, and repeated water-dousing do. Indeed, the Ku Opinion itself admits that the “Reid Technique was developed by Fred Inbau, a Northwestern University law professor during the 1950s to replace the aggressive ‘third degree’ interrogation methods of earlier decades.”⁵⁴ Similarly, the Army Field Manual for Human Intelligence Collection specifically provides that “[a]ll captured or detained personnel, regardless of status, shall be treated humanely”⁵⁵ and that “[a]cts of violence or intimidation, including physical or mental torture, or exposure to inhumane treatment as a means of or aid to interrogation are expressly prohibited.”⁵⁶ The Ku Opinion is thus mistaken when it claims that “[u]nder the Heller Opinion’s definition of experimentation, all of this activity would constitute a violation of customary international law.”⁵⁷ Because neither Reid Technique interrogation nor Army Field Manual interrogation is likely to endanger the physical or mental health of detainees, those methods do not qualify as prohibited non-therapeutic human experimentation. By contrast, Defendants experimentation, which manipulated levels of violence to find the ideal method for reducing detainees to a state of learned helplessness, most certainly does.

CONCLUSION

Contrary to the Ku Opinion, CA3 and AP II each categorically prohibit non-therapeutic human experimentation in NIAC. Both treaties thus contribute to the existence of an equivalent prohibition in customary international law. CA3 alone is sufficient to establish a “clear, universal, and specific customary international law norm” against non-therapeutic human experimentation in NIAC, given that the Geneva Conventions are universally ratified and CA3 is widely acknowledged – including by the United States government – to reflect customary international law. The widespread and representative ratification of AP II (168 ratifications, representing 86% of all States) simply reinforces the existence of that customary prohibition, which makes it irrelevant that the United States and a small number of other states have not ratified the Protocol.⁵⁸

The Ku Opinion also mistakenly asserts that the customary prohibition of non-therapeutic human experimentation in NIAC is not specific enough to satisfy the *Sosa* standard. Such experimentation has been recognized as a war crime since Nuremberg and has been precisely defined by the grave-breach regime of the Geneva Conventions and by the Rome Statute. If non-therapeutic human

⁵⁴ *Id.* at 10.

⁵⁵ Army Field Manual FM 2-22.3, Human Intelligence Collection Operations, 5-21 (2006).

⁵⁶ *Id.* at 5-74.

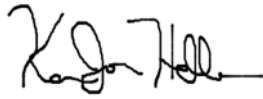
⁵⁷ Ku Opinion, 10.

⁵⁸ *Cf. id.* at 6 (noting that “the United States and numerous other countries have refused to ratify the Second Additional Protocol”).

experimentation is defined specifically enough to justify individual criminal responsibility – and the possibility of the death penalty in the United States – it is defined specifically enough for *Sosa*.

Finally, contrary to the *Ku* Opinion, Defendants' use of violence against Plaintiffs to improve the CIA's interrogation techniques is a quintessential example of the kind of non-therapeutic human experimentation that customary international law prohibits. Defendants' interrogation techniques were not for a therapeutic purpose and caused Plaintiffs serious physical and mental harm – actual death in Plaintiff Rahman's case. That is all the customary definition of non-therapeutic human experimentation requires.

Dated: December 28, 2016

A handwritten signature in black ink, appearing to read "Kevin Jon Heller", written over a horizontal line.

Prof. Kevin Jon Heller
Professor of Criminal Law, SOAS, University of London
Principal Fellow, Melbourne Law School
Academic Member, Doughty Street Chambers