FORDHAM INTERNATIONAL LAW JOURNAL

VOLUME 45

May 2022

SPECIAL EDITION

PROCEEDINGS OF CONFERENCE

NUCLEAR WEAPONS AND INTERNATIONAL LAW 2020

NOVEMBER 12, 2020

EVENT CO-CHAIRS

Charles J. Moxley, Jr. Jonathan Granoff John Burroughs Edward K. Lenci

Sponsor

International Section of the New York State Bar Association

COSPONSORS

Fordham Law School, Center on National Security Georgetown University, Berkley Center for Religion, Ethics and World Affairs American Bar Association, International Law Section New York City Bar Association, Committees on International Law, Military and Veteran Affairs, the United Nations, and Cyrus R. Vance Center for International Justice New York County Lawyers Association, Committee on Foreign & International Law Lawyers Committee on Nuclear Policy Global Security Institute

MAY 2022

SPECIAL EDITION

FORDHAM INTERNATIONAL LAW JOURNAL

BOARD OF EDITORS

MAGDALEN SULLIVAN Editor-in-Chief

SYDNEY WOLOFSKY Managing Editor

ALEKSANDRA RYSHINA Senior Articles Editor **ROXANNE SALAS Business & Articles Editor**

Volume XLV

FRANCESCA BOSCHETTO Notes & Articles Editor KATE MAIREAD BURNS Notes & Articles Editor ZOE BUZINKAI Notes & Articles Editor

DAVID BILLET MARIA CHRYSANTHEM VIDUSHI DYALL ISABELLA GREER CLEO JINGHANG HU GESA JUNGE JACK KLEIN BHARATH LAKSHMINARAYAN

ESAT ACAR **AZADEH AMIR-ASLANI GREGORY ASCHER** ABRAHIM ASSAILY DOUGLAS BALLANCO JACQUELINE BARTHA DEV BASUMALLIK SAMANA BHATTA ANNIE BRODSKY LAUREN BURGESS DANIELLE CEPELEWICZ DOMINIC CONOSHENTI VENTURA DE LA ROSA HOPE DEVITO HANNAH DITCHIK ALEX DOLLOWAY SEAN DUFFY GRANT ENGEL ADAM FINK MICHAELA GAWLEY

GRACE LEE Senior Notes Editor JULIA TEDESCO **Online** Content Editor

DEANE CIAMPA Notes & Articles Editor FLORA DONOVAN Notes & Articles Editor MADISON PRACHT Notes & Articles Editor EVAN RICHARDSON Notes & Articles Editor

ASSOCIATE EDITORS

EMILY LOWE MEGAN LUNDIN ANNALISA MARTINI TIMOTHY MCALISTER ANNA MCENROE ESTHER NESS SIMON PANITZ KATIE ROSEN

STAFF

SYDNEY GLAZER JONATHAN GOLD MICAELA GOLD JACQUELINE HAYES LIZ HEIT ANNMARIE HENEGHAN HALLEY HERBST CAROLINE HYMES SHANA IDEN SIBEL ISKENDER **ROSS JABLON** TROY JACKSON FRANCISCA JOHANEK JAY JUNG ROSA KIM JESSICA LAGNADO JONATHAN LEVENTHAL MINDY LIU ELISE LOUGHRAN **EVA LUONG** ALANA MCANDREWS

FACULTY ADVISORS

JOSEPH C. SWEENEY Emeritus

GRACE CARNEY Executive Notes & Articles Editor

> **DEVIN ROUTIE** Senior Notes Editor ELYSSA DIAMOND Symposium Editor

CHRISTOPHER SOLIS Notes & Articles Editor KATHERINE SZABO Notes & Articles Editor KIMYA ZAHEDI Notes & Articles Editor

> **EMILY RUBINO DEANNA SCHREIBER** STEPHEN SELF FRANK TAMBERINO DANIELA TANICO ZOE WILLIAMS JENNY YAKIR PERRY ZIRPOLI

MAURA MCKEON CAITLIN MCNEIL ANGELICA MEHTA SPENCER MOONEY PATRICK MURPHY **OMAR NESHEIWAT** MARC OSIAN LAUREN PARK SPENCER PARK MATTHEW SCHECTER HAROLD SCHEEREN NATHAN SHULTZ JOY SU RIKA TANAKA VIRA TARNAVSKA DHRUTI TUMMALAPALLI **BENJAMIN WEISBROT** CELESTE WILLIAMS LEILA WITCHER ANTHONY WONG

Professor of Law

2021-2022

FORDHAM INTERNATIONAL LAW JOURNAL

VOLUME 45

May 2022

SPECIAL EDITION

SPECIAL ONLINE EDITION

NUCLEAR WEAPONS AND INTERNATIONAL LAW 2020

PROCEEDINGS OF CONFERENCE

INTRODUCTORY MATERIALS

| NOTE FROM THE SENIOR ARTICLES EDITOR: ALEX RYSHINA | 1 |
|--|-----|
| CONFERENCE SPONSORS & COSPONSORS | 2 |
| Agenda | 3 |
| INTRODUCTION: DEAN JOHN FEERICK | 9 |
| INTRODUCTION: PROFESSOR CHARLES MOXLEY | .11 |
| INTRODUCTION: FR. DREW CHRISTIANSEN | .18 |
| In Memoriam: Fr. Drew Christiansen | .25 |

CONFERENCE PROCEEDINGS

| CONFERENCE TRANSCRIPT | 26 |
|--|----|
| INTRODUCTION | 27 |
| PANEL ONE: OVERVIEW: NUCLEAR WEAPONS RISKS, CONSEQUENCES AND RESPONSES | 39 |
| Keynote Address: Izumi Nakamitsu | 70 |

| PANEL TWO: THE ROLE OF THE UNITED NATIONS | 77 |
|---|-----|
| A Special Conversation on Responding to the Greatest Threats to Humanity: Hon. Jerry Brown & Jonathan Granoff | 99 |
| | |
| PANEL THREE: THE INTERNATIONAL TREATY REGIME APPLICABLE TO NUCLEAR WEAPONS AND FURTHER TREATIES THAT HAVE BEEN | |
| PROPOSED | |
| REMARKS: PATRICIA LEE REFO | |
| PANEL FOUR: INTERNATIONAL LAW AND THREAT AND USE OF | |
| NUCLEAR WEAPONS | |
| PANEL FIVE: APPROACHES FOR ADVANCING THE RULE OF LAW AND Morality as Concerns Nuclear weapons | 172 |
| | - |
| BIBLIOGRAPHY | |

NOTE FROM THE SENIOR ARTICLES EDITOR

When we learned of the November 12, 2020 program on Nuclear Weapons and International Law, sponsored by the International Section of the New York State Bar Association and cosponsored by the Fordham Center on National Security and other leading groups, and reviewed the depth and scope of the conference, we immediately saw the imperative for this Special Online Edition.

The *Fordham International Law Journal* did not extensively edit the proceedings of the conference produced below, and there are no citations within it. Our goal was to reflect as accurately as possible the compelling discussions and presentations from this conference. Please refer to the Relevant Resources page below for more information on nuclear weapons and the law, as well as the speakers and organizations involved with this conference.

With thanks to Professor John D. Feerick, Dean Emeritus, Fordham Law School, and Professor Charles J. Moxley, Jr., we present this Special Edition, with the hope that it will contribute to critical thinking and action in this crucial legal area.

Alex Ryshina Fordham University School of Law, Class of 2022 Senior Articles Editor Fordham International Law Journal **CONFERENCE SPONSORS AND CO-SPONSORS**

SPONSORS

INTERNATIONAL SECTION

COSPONSORS



AGENDA

The International Section of the New York State Bar Association is proud to sponsor

NUCLEAR WEAPONS AND INTERNATIONAL LAW

IN THE CONTEMPORARY ERA

Thursday, November 12, 2020

9:00 a.m. - 6:00 p.m. via Zoom

COSPONSORS

Fordham Law School, Center on National Security Georgetown University, Berkley Center for Religion, Ethics and World Affairs American Bar Association, International Law Section New York City Bar Association, Committees on International Law, Military and Veteran Affairs, the United Nations, and Cyrus R. Vance Center for International Justice New York County Lawyers Association, Committee on Foreign & International Law Lawyers Committee on Nuclear Policy Global Security Institute

AGENDA

9:00 a.m. – 9:30 a.m. Introduction Prof. Charles J. Moxley, Jr., Professor (Adj.), Fordham Law School; Chair, Moxley ADR LLC

Prof. John D. Feerick, Professor and Dean Emeritus, Fordham Law School

Scott M. Karson, President, New York State Bar Association

Edward K. Lenci, Partner, Hinshaw & Culbertson LLP (NYC); Chair-Elect, International Section of the New York State Bar Association

Ariana N. Smith, Executive Director, Lawyers Committee on Nuclear Policy

Jonathan Granoff, President, Global Security Institute; Senior Advisor, Permanent Secretariat of the World Summits of Nobel Peace Laureates

9:30 a.m. - 10:50Panel 1: Overview: Nuclear Weapons Risks,
Consequences and Responsesa.m.Addresses the facts, policies, and history as to

nuclear weapons and the consequent risks.

<u>MODERATOR</u>: **Prof. Charles J. Moxley, Jr.**

SPEAKERS:

Prof. Osamu Arakaki, Professor of Law, International Christian University, Japan

Hans M. Kristensen, Director, Nuclear Information Project, Federation of American Scientists

Prof. Scott Sagan, Caroline S.G. Munro Professor of Political Science, Stanford University, and Senior Fellow, Freeman Spogli Institute for International Studies

11:00 a.m. - 11:30Keynote Addressa.m.Izumi Nakamitsu, UN Under-Secretary-General
and High Representative for Disarmament Affairs

2022] CONFERENCE AGENDA

Introduction by Ariana N. Smith

11:30 a.m. - 12:20 Panel 2: The Role of the United Nations

Addresses the multi-faceted role of the United Nations in relation to nuclear weapons, including the Secretary-General's 2018 disarmament agenda, Securing Our Common Future; International Court of Justice cases; the 2017 adoption of the Treaty on the Prohibition of Nuclear Weapons; a 2018 comment of the UN Human Rights Committee; and functions of the UN General Assembly and the Conference on Disarmament.

MODERATOR: Ariana N. Smith

<u>PANEL</u>: **Hon. Izumi Nakamitsu**

Dr. John Burroughs, Senior Analyst, Lawyers Committee on Nuclear Policy

Allison Pytlak, Programme Manager, Reaching Critical Will, Women's International League for Peace and Freedom

AFTERNOON PROGRAM

p.m.

Remarks

Patricia Lee Refo, President, American Bar Association

A Special Conversation on Responding to the Greatest Threats to Humanity

Hon. Jerry Brown, Former Governor, State of California; Executive Chairman, Bulletin of the Atomic Scientists, and Jonathan Granoff

1:20 p.m. – 2:40 p.m. Panel 3: The International Treaty Regime Applicable to Nuclear Weapons and Further Treaties That Have Been Proposed Addresses treaties, norms, policies, and practices

Addresses treaties, norms, policies, and practices concerning nuclear weapons.

MODERATOR:

Jonathan Granoff

SPEAKERS:

Hon. Dr. Christopher Ashley Ford, U.S. Ambassador, Assistant Secretary for International Security and Nonproliferation, U.S. Department of State

Hon. Thomas Graham, Jr., Former Special Representative for Arms Control, Nonproliferation and Disarmament; Former General Counsel, Arms Control and Disarmament Agency

Dr. Gloria C. Duffy, President and CEO, The Commonwealth Club of California; former Deputy Assistant Secretary of Defense

2:50 p.m. – 4:10 p.m. Panel 4: International Law and Threat and Use of Nuclear Weapons

Addresses the legal status of use and threat of use of nuclear weapons under the international law of armed conflict (international humanitarian law) and the UN Charter, with reference to law of war manuals of the U.S. armed services, commentaries of the International Committee of the Red Cross, and other sources.

MODERATOR: Dr. John Burroughs

PANEL:

Prof. David A. Koplow, Professor, Georgetown University Law Center; Former Special Counsel for Arms Control to the General Counsel of the U.S. Department of Defense

Kathleen Lawand, Strategic Adviser to Director of International Law and Policy, International Committee of the Red Cross (ICRC); Former Head of Arms Unit, ICRC

Prof. Charles J. Moxley, Jr.

4:10 p.m. – 6:00 p.m. Panel 5: Approaches for Advancing the Rule of Law and Morality as Concerns Nuclear Weapons Addresses approaches for advancing the rule of law and morality as concerns nuclear weapons, including considerations as to litigation, defense of protesters, shareholders litigation, shareholders resolutions, FOIA requests, civic advocacy, universal jurisdiction, election of proactive prosecutors, civil engagement, the work of major faith groups, and other approaches.

MODERATOR:

Prof. Charles J. Moxley, Jr.

PANEL:

Laurie Ashton, Of Counsel, Keller Rohrback; Member of Legal Team for the Marshall Islands in Its Nuclear Disarmament Cases in the International Court of Justice; Counsel for Marshall Islands in Its Nuclear Disarmament Case in the Ninth Circuit Court of Appeals

Jacqueline Cabasso, Executive Director, Western States Legal Foundation; North American Coordinator, Mayors for Peace **Rev. Drew Christiansen, S.J., Ph. D.**, Distinguished Professor of Ethics and Human Development, Walsh School of Foreign Service, and Senior Fellow, Berkley Center for Religion, Peace and World Affairs, Georgetown University

Tom Z. Collina, Director of Policy, Ploughshares Fund, and Co-author, with William J. Perry, The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump (BenBella Books, 2020)

Audrey Kitagawa, Chair of the Board of Trustees of the Parliament of the World's Religions

INTRODUCTION

John D. Feerick

The Fordham International Law Journal has long enjoyed publishing articles about global peace. This Special Online Edition of the *Journal* will rank among its most important given the rising threat of nuclear weapons. This edition of the *Journal* is a transcript of the conference held by the International Section of the New York State Bar Association on November 12, 2020, titled "Nuclear Weapons and International Law 2020." Charles Moxley, a lawyer who has taught a course on nuclear weapons at Fordham Law School since 2003 and authored a leading treatise on the subject, now in its second edition, played a major role in assembling the faculty and speakers for the Conference. The keynote speaker was Izumi Nakamitsu, UN Under-Secretary-General and High Representative for Disarmament Affairs. Jerry Brown, former Governor of California and Executive Chairman of the Bulletin of the Atomic Scientists, and Jonathan Granoff, President of the Global Security Institute, also engaged in a conversation on responding to this profound threat to humanity: nuclear weapons.

The importance of this subject matter has led Fordham University to commit itself to a working group of universities seeking nuclear arms control and abolition. Additionally, Fordham Law School has established a National Security Center under the leadership of Karen Greenberg.

The emphasis on the rule of law as an essential link in securing freedom resonates throughout the transcript, as do the potential threats that nuclear weapons pose to our existence as a civilization. The rising costs associated with nuclear weapons modernization diminishes the availability of funds to address the alarming poverty within nations and society at large. It also challenges nations to build safety nets in anticipation of having to respond to a nuclear attack. The Twenty Fifth Amendment of the US Constitution, a subject of my own background, was greatly influenced by such weaponry. On January 28, 1965, President Lyndon Johnson sent a message to Congress supporting such an amendment, stating: "It is not necessary to conjure the nightmare of nuclear holocaust or other national catastrophe to identify these omissions as chasms of chaos into which normal human frailties might plunge us at any time." Former Senator Birch Bayh and Representative Emanuel Celler, key framers of the Amendment, spoke often of the nuclear threat. Indeed, some members of Congress wanted to see more detail concerning a nuclear war. Thanks to the *Fordham International Law Journal*, this publication provides an indispensable resource for considering the vital issues involved with the threat and use of nuclear weapons.

John D. Feerick

Professor and Dean Emeritus Fordham Law School

INTRODUCTION

Charles J. Moxley, Jr.

On behalf of Jonathan Granoff, John Burroughs, Ed Lenci, and myself, as the organizers of the conference on Nuclear Weapons and International Law that is the subject of this Special Online Edition, I am delighted to offer this Introduction.

Nuclear weapons pose an existential threat to human survival. The United States and Russia alone have over 11,000 nuclear weapons, thousands of which are deployed, many on hair-trigger alert. This is enough to destroy the world many times over. Given the destructiveness of such weapons and the potential for nuclear winter, whereby huge volumes of smoke, dirt, and debris from nuclear detonations blot out the sun, destroying agriculture over wide expanses of the earth, even a limited nuclear war between India and Pakistan could cause *billions* of casualties.

Strategic policies for the use of nuclear weapons—deterrence, mutual assured destruction, extended deterrence, preemptive use, and all the rest—embody plans by the nine nuclear weapons states potentially to use nuclear weapons in the volatile circumstances of war where rationality and restraint would likely have been left behind.

Examples abound of circumstances in which the United States and the Soviet Union/Russia and other nuclear weapons states have come close to actually using nuclear weapons, either intentionally or based on human or equipment failure. As I write this, Ukraine is defending itself against Russia, and NATO forces are on alert. The ever-present risk of conflicts among states are immeasurably heightened when the states have nuclear weapons.

Nuclear weapons, like so many other things in contemporary life, are subject to computer controls. We are reminded daily of challenges to cyber security—the inevitable vulnerability of electronic systems to hacking, with the scope of such vulnerability only increasing as artificial intelligence, including autonomous weapons systems, are integrated into military planning. Yet, the nuclear weapons regime is managed, maintained, and affirmatively espoused by many thoughtful and responsible civilian and military leaders, scientists, policy-makers, and others in the United States and throughout the world. How can all of this be? How can so many intelligent, knowledgeable, and, in many instances, well-intentioned leaders, not to mention huge numbers of people through whom they act, permit this self-inflicted existential threat to human life and civilization to continue?

And where is the public? Unlike during the Cold War, when public awareness and concern about the risks posed by nuclear weapons was acute, how have we come to the contemporary lack of focus or concern about these risks, even as the risks have greatly increased in today's multi-polar world without the controls the United States and the Soviet Union largely wielded on their aligned nations during the Cold War?

Other pressing issues—global warming, the pandemic, challenges to democracy, poverty, hunger, income inequality— proliferate, yet none of these challenges threatens the instantaneous destruction of human life. Nuclear weapons could instantly end civilization at any moment, whether by human intention or error or equipment failure.

Again, how can this be? Are we, given our inherent limitations as humans—vulnerability to tribalism, shortsightedness, aggressiveness, greed, irrationality, and all the rest—are we unable to address and overcome the risks posed by nuclear weapons?

Such questions were the focus of the extraordinary convocation of international, government, technical, policy, and legal experts on the subject of Nuclear Weapons and International Law that is the focus of this Special Edition of the *Fordham International Law Journal* (the "FILJ").

Books, articles, blogs, and conferences addressing technical and policy issues as to nuclear weapons abound. Some say that the policy of nuclear deterrence is a good thing and prevented a hot war between the United States and the Soviet Union during the Cold War, and continues to protect the world from large scale war. Others believe deterrence is a disaster waiting to happen—that it has been largely luck, so far, that has prevented nuclear war. This Special Edition and the underlying conference address these issues as to perceived risks and, in the view of some, net advantages of nuclear weapons.

We start first with a systematic review of the facts as to nuclear weapons and the policies of nuclear weapons states concerning the possible use of such weapons. In this opening part of the discussion, we are examining the facts that are the basis for the legal analysis. Through presentations by leading experts in the field, we examine what nuclear weapons are and the likely consequences of their use.

Hans M. Kristensen, Director of the National Information Project, Federation of American Scientists, describes the basic facts and policies concerning nuclear weapons across the nine nuclear weapons states, describing how the weapons and related policies have evolved over the years. Stanford University Professor Scott Sagen describes the United States' nuclear weapons policies, strategies, and planning, and the heightened speed and accuracy of contemporary nuclear weapons. Professor Sagan describes the US military's focus, through JAG officers, on compliance with the law of armed conflict and addresses issues as to the compliance of nuclear weapons with that body of law. Professor Osamu Arakaki of the International Christian University in Japan describes the effects of the United States' nuclear bombings of Hiroshima and Nagasaki, describing those effects as they continue in the population even to contemporary times.

Hon. Izumi Nakamitsu, United Nations Under-Secretary-General and High Representative for Disarmament Affairs next provides the Keynote Address, describing initiatives by the United Nations to address nuclear weapons risks. High Representative Nakamitsu describes policy and legal imperatives that require the world and individual states to take steps to address such risks. Ms. Nakamitsu particularly emphasizes the importance of law in addressing risks posed by nuclear weapons.

Dr. John Burroughs, Senior Analyst for the Lawyers Committee on Nuclear Policy ("LCNP"), and Allison Pytlak, Programme Manager of Reaching Critical Will, Women's International League for Peace and Freedom, in a discussion moderated by LCNP Executive Director Ariana M. Smith, discuss with High Representative Nakamitsu efforts by the United Nations and various states and non-governmental organizations (NGOs) to address risks posed by nuclear weapons.

Hon. Jerry Brown, Former California Governor and now Executive Chairman of the Bulletin of the Atomic Scientists, in dialogue with Jonathan Granoff, President, Global Security Institute, describes the human imperative that we address the risks posed by nuclear weapons and suggests ways in which we can do so. Governor Brown and Jonathan Granoff provide a sense of hope that we are capable of addressing—and overcoming these risks.

We next look at efforts by the international community over the years to enter into international treaties to address nuclear weapons risks, including through a wide range of arms control treaties and related initiatives, and at the approach of the United States as to such matters. Dr. Christopher Ashley Ford, U.S. Ambassador, Assistant Secretary of State for International Security and Non-Proliferation, describes what he sees as a wide range of challenges to our security that we face in the world, including particularly from Russia and China, and expresses skepticism that talk of banning nuclear weapons is the solution. Dr. Ford provides his perspective that a world in which nuclear weapons had been banned would not necessarily be safer than the contemporary nuclear weapons world. He further describes ways in which he believes the current situation as to nuclear weapons, particularly as concerns Russia, could be improved.

Dr. Gloria C. Duffy, former U.S. Deputy Assistant Secretary of Defense, elaborates on efforts by the United States to address concerns and risks as to nuclear weapons. Dr. Duffy describes numerous extraordinary efforts the United States engaged in with great success with the successors to the Soviet Union, dismantling thousands of nuclear weapons and other weapons of mass destruction from the former Soviet Union. Dr. Duffy further describes fascinating success the United States has had with dispute resolution approaches built into arms control agreements to address concerns as to compliance.

Hon. Thomas Graham, Jr., former U.S. Special Representative for Arms Control, Non-Proliferation and Disarmament; former General Counsel, Arms Control and Disarmament Agency, describes a wide range of arms control and other treaties to which the United States is party and their role in addressing nuclear weapons risks, with particular emphasis on the importance of the Nuclear Nonproliferation Treaty ("NPT"). Ambassador describes numerous additional steps that, in his view, would be helpful in this area and areas in which we have been backtracking and need reengagement.

Having examined facts and policies concerning nuclear weapons, the UN perspective, and the international treaty regime applicable to nuclear weapons, we now turn to the second overall focus of this Special Edition and of the conference: Does there exist a body of international law that governs the threat and use of nuclear weapons? If so, what is that law? Where does it come from? Is it recognized by the United States and other nuclear weapons states? Does it really constitute law?

Georgetown Law Professor David A. Koplow, Former Special Counsel for Arms Control to the General Counsel of the U.S. Department of Defense, describes the current state of this body of law from the perspective of the ICJ's 1996 *Nuclear Weapons Advisory Opinion*. He elaborates on the ICJ's finding that nuclear weapons are scarcely reconcilable with the fundamental principles of international humanitarian law, but criticizes the court for failing to come to grips with the application of such law to low-yield nuclear weapons and to potential uses of nuclear weapons by a state in extreme circumstances of self-defense.

Kathleen Lawand, Strategic Adviser to Director of International Law and Policy of the International Committee of the Red Cross (ICRC), describes the extensive protection international humanitarian law provides to civilians, combatants, and the environment, grounding her discussion in ICRC's numerous studies and analyses of the matter. Ms. Lawand describes the continuing work the ICRC is doing now, even some seventy-five years after the bombings of Hiroshima and Nagasaki, caring for survivors of those attacks still suffering from their effects. Ms. Lawand further provides her view as to the significance of the 2017 Treaty on the Prohibition of Nuclear Weapons.

As a member of this panel, I provide a broad description of international humanitarian law applicable to the threat and use of nuclear weapons, focusing on such rules as those of distinction, proportionality, and necessity, and the corollary requirement of controllability and the rule of precaution. The discussion also extends to the area of risk analysis—rules and principles of international law that set limits on the lawfulness of the imposition of risk on others through the threat and use of nuclear weapons. I point out that for the restraints set by international law on nuclear weapons to be meaningful, they need to be imposed in advance, before such weapons are used—and hence need to be imposed in light of the risk that any particular threat or use of nuclear weapons would potentially cause unlawful effects.

The discussion then turns to the question: What is the potential legal jeopardy to nuclear weapons states and individuals through whom they act, if they fail to maintain adequate security over their nuclear weapons, potentially causing unintended consequences, whether because of human or equipment error or terrorists or other bad actors getting access to the weapons? This issue is seen as a significant one, in light of the many known instances in which the United States, the Soviet Union/Russia, and other nuclear weapons states have come close to actually using nuclear weapons based upon mistakes as to what appear to be incoming nuclear strikes or upon other human or equipment error.

Dr. John Burroughs moderates this panel, further providing his own perspectives on requirements of international law that apply to the threat and use of nuclear weapons.

Having seen that there is, indeed, a robust body of international law that governs the lawfulness of the threat and use of nuclear weapons and that this body of law is recognized by the United States and other nuclear weapons states, we now come to the inevitable "so what" point. What difference does it make? Is there any way to obtain the enforcement of international law in this regard? Does the law in this area make any difference?

This is the focus of the next and last panel of the day, a panel made up of individuals who have made considerable efforts over many years to address nuclear weapons risks through litigation, politics, lobbying, civil disobedience, writing, lecturing, and preaching.

California-based attorney Laurie Ashton describes a wide range of potential cases that can be brought in domestic courts around the world and in international courts. Ms. Ashton recently served as one of the attorneys for the Marshall Islands in cases it brought in US federal court and in the International Court of Justice, alleging non-compliance by the United States and other nuclear weapons states under the NPT, and other requirements of international law to negotiate nuclear disarmament.

Jacqueline Cabasso, Executive Director of the Western States Legal Foundation, describes her decades of experience raising nuclear weapons issues in the courts, through public interest groups, and in the streets, and the effectiveness of such approaches.

Georgetown Professor Rev. Drew Christianen, S.J., describes his extensive experience addressing nuclear weapons and related issues domestically and internationally. He describes efforts by religious groups, including the Catholic Church, and leading universities, to raise public consciousness in the area.

Tom Z. Collina, Director of Policy at the Ploughshares Fund and co-author of a leading book in the field, addresses prospects of advancing concerns as to nuclear weapons through political initiatives and governmental action, including within the Biden Administration.

Audrey Kitagawa, Chair of the Board of Trustees of the Parliament of the World's Religions, describes efforts by various religious groups throughout the world to address concerns as to nuclear weapons and the human imperative that such efforts continue and build.

There ensues a broad discussion among members of the panel and other participants as to whether, and the extent to which, international law has the potential to enable the world to effectively address and curtail risks posed by nuclear weapons.

This question is the central focus of this *FILJ* Special Edition: What is the role of law in addressing the existential risks nuclear weapons pose to human life and civilization? Might law be the way out? This Special Edition provides all of us with a basis to evaluate these questions and consider steps forward.

Charles J. Moxley, Jr. Professor (Adj.) Fordham Law School

INTRODUCTION

Drew Christiansen, S.J., Ph.D.*

As I write, Russian Federation President Vladimir Putin has launched an aggressive war against Ukraine and threatened to use Russia's nuclear arsenal against any nation that ventures to help the Ukrainians defend their homeland. The threat is ominous, for it breaks the post-WWII nuclear taboo. Mr. Putin seems unhinged, deluded by his own lies about Russo-Ukrainian history and intent on the violent imposition of a revanchist Russian empire on his neighbors.

In the wake of the invasion and Mr. Putin's escalatory February 27 order placing his nuclear forces on alert, all bets are off on the renewal of nuclear arms control initiated last year with the extension of the New START Treaty Already, following Putin's nuclear saber rattling, President Joe Biden announced on February 25 the United States' withdrawal from strategic stability talks intended to build on the New START renewal. He has wisely chosen, however, not to escalate in response to the February 27 Russian nuclear alert by placing US forces on similar standing.

INTERNATIONAL LAW, CIVIC AND RELIGIOUS ACTIVISM:

The 2020 NYSB Conference

The special 2020 seminar of the New York State Bar on law, nuclear arms control, and disarmament explored the web of laws of armed conflict, international humanitarian law, and arms control treaties that already (attempt to) constrain the proliferation and use of nuclear weapons. It also explored the uses of law by the victims of nuclear explosions and anti-nuclear activists to seek redress and to promote the elimination of nuclear weapons.

^{*} Drew Christiansen, SJ is Distinguished Professor of Ethics and Human Development at Georgetown University and a senior fellow with the Berkley Center for Religion, Peace and World Affairs.

While earlier instruments like the Non-Proliferation Treaty was the work of diplomats and technical experts, in 2017 the collaboration of Nonnuclear Weapon States, International Humanitarian Lawyers, Civil Society and religious activists realized the most recent disarmament tool—the Treaty on Prohibition of Nuclear Weapons ("TPNW"). This collaboration was the fruit of a little-noticed advance in the functioning of UN diplomacy, whereby the UN General Assembly mandated a conference that, in turn, drafted and adopted the TPNW. In recent decades, "conference diplomacy" resulting in arms control treaties has contributed major advances in arms-control and human rights law, of which the TPNW is the latest and arguably the most significant.

Izumi Nakamitsu, the UN Under-Secretary-General and High Representative for Disarmament Affairs, explains in her remarks the roots of the nuclear disarmament regime in international law. She focused particularly on the NPT. She notes, however, the legal gap between the complete prohibition of other weapons of mass destruction, biological and chemical weapons, and the lagging movement toward total elimination of nuclear weapons. She observes, "There is still a considerable way to go."

My colleague from the Georgetown University Law Center, David Koplow, focuses on another significant legal text, the 1996 advisory opinion of the International Court of Justice ("ICJ"). Professor Koplow observes, "The International Court of Justice is entitled to great deference and respect for the work they've done in this matter. Secondly, this decision is maddeningly incomplete, incoherent, internally contradictory, and confounding for further analysis."

Particularly problematic for me as an ethicist is the ICJ's determination that "there might be some scenarios in which the threat or use of nuclear weapons could be lawful despite the unusual effects and power that the weapons might have." This exception is part of "the legal gap" the TPNW attempts to close. As Koplow concludes, rather than making exceptions for possible uses of nuclear weapons, "[w]e should seek to make the barriers against any use of any nuclear weapons as high as possible to preclude any possibility of any use of nuclear weapons."

One of the distinctive contributions of the 2020 New York State Bar conference was an exposition of the ways activists have utilized international law, including the ICJ opinion, in redressing the harms done by the use and development of nuclear weapons and in advancing the cause of disarmament. Laurie Ashton, a California attorney, and Jackie Cabasso of the Western States Legal Foundation provide a historical view of the effectiveness of legal remedies in anti-nuclear activism. While nuclear weapons states have not participated in multilateral nuclear disarmament negotiations since the 1990s, Ms. Ashton expresses the hope that "there will be a return to disarmament diplomacy. That's because there's no avoiding that nuclear weapons pose a threat to every nation and person on earth, and control and elimination of the weapons is necessary to ending that threat."

From a 35-year-long career of anti-nuclear activism, Jackie Cabasso explains, "law is integral and . . . litigation and other forms of legal work and legal advocacy are most effective when coupled with a vibrant social movement that can help amplify the messaging." Looking to the future, Cabasso urges folding nuclear disarmament into a multi-cause "multi-generational, multiracial, international moral fusion movement."

AFTER UKRAINE

In view of Russia's serial aggression against other former Soviet states, and what those attacks reveal about character of the anxious and aggressive tyrant who is waging a war of imperial conquest against Ukraine, two issues come to the forefront for legal consideration: (1) ending sole authority over the use of nuclear weapons, and (2) solidifying measures for nuclear abolition.

ENDING SOLE AUTHORITY

After Ukraine can we any longer have confidence at all that an autocrat who has attacked or supported separatist movements in four independent former Soviet states (Georgia, Azerbaijan, and Moldova as well as Ukraine) will restrain himself from initiating nuclear war? Can we any longer suppose that he is the "rational actor" conjured by game-theorists, who will be deterred by the threat of an overwhelming nuclear reprisal? The Russo-Ukraine War should force western arms controllers to abandon the notion of the "rational actor" as a dangerous academic fiction no longer applicable when faced with an isolated, irascible dictator. If it was necessary in the United States under President Trump to reconsider sole authority for launching nuclear weapons, as Secretary Perry and Tom Collina proposed in their book, *The Button: The New Nuclear Arms Race and Presidential Authority from Truman to Trump*, how much more necessary is it with warmongering autocrats like Mr. Putin or Kim Jong Un?

In the United States and other nuclear-armed electoral democracies, a first step will be eliminating sole authority along the lines Collina draws in his remarks. While even the Soviets seemed to have set up multiple key-turners in their nuclear command systems to prevent rogue launchings, we cannot reasonably expect that formal checks-and-balances in dictatorial regimes like Putin's Russia. During the Cold War, noncompliant Soviet launch officers like Stanislas Petrov and Vasili Arkhipov "saved the world" from nuclear annihilation. Russia's invasion of Ukraine, Putin's threat to employ nuclear weapons, and his distorted projection of Ukraine as a nuclear threat are all the more disturbing because Ukraine surrendered 1,400 warheads to Russia in 1994 in return for guarantees of Ukrainian sovereignty and territorial integrity.

It is worth noting that Ukraine is in this parlous situation, in part because in 2014, at the time of the seizure of Crimea, Luhansk, and Donetsk, the Obama administration in the United States and the Cameron government in the United Kingdom failed to vigorously pursue their countries' commitments under the 1994 Budapest Memorandum. That agreement committed the two countries, along with Russia, to stand by a nuclear-disarmed Ukraine if another state violated its sovereignty and integrity.

THE NECESSITY OF ABOLITION

After Ukraine, the cause of nuclear abolition has become an urgent priority for the international community. Under present conditions, abolition looks more necessary than ever. Following the judgments of George Schultz and his colleagues—William Perry, Henry Kissinger, and Sam Nunn—in favor of eliminating nuclear weapons, and more recently Pope Francis with his condemnation of the possession of nuclear weapons even for deterrence purposes, elimination of nuclear weapons makes more and more sense as a goal of international policy. Regrettably, the invasion of Ukraine, following the failure of the Budapest Memorandum, also demonstrates the inherent instability of the Non-Proliferation Treaty as a bargain between nuclear and nonnuclear states. It has dramatically exposed the vulnerability of nonnuclear states to those that are nuclear-armed; and it has exposed the heightened potential to raise incentives for nuclear proliferation by aspirant nonnuclear states who fear the power of nuclear powers in their neighborhoods.

Putin's nuclear threats also aggravate the disincentives for nuclear powers to advance their own disarmament. In addition, Mr. Putin's nuclear threats highlight how conflicts between a nuclear power and a nonnuclear one may lead to confrontation between nuclear-armed states and alliances. Furthermore, under Russian nuclear doctrine, which permits the use of tactical nuclear weapons in the face of a significant military setback, the risk of the use of so-called low-yield nukes in Ukraine or neighboring NATO states aiding Ukraine also seems more likely.

NPT AND TPNW

Following the invasion of Ukraine, the upcoming NPT Review Conference, now scheduled for August and already fraught with knotty problems, will be all the more unlikely to find consensus. In particular, chances for making progress on commitments to disarmament under Article VI, a top priority for disarmament advocates, appears to have been greatly reduced by the Ukraine invasion. More worrisome still is the prospect that dissension between nuclear and nonnuclear states may lead to the dissolution of the treaty as a grand bargain between weapons-possessing and non-possessing states. The same consolidation of international opinion the Ukrainian crisis has promoted in NATO and the United Nations may also take place among the NPT's nonnuclear state parties. If the NPT fails because of the inbuilt inequality of states and the proven vulnerability of nonnuclear states to nuclear powers, then reasonableness of abolition may grow more evident to many, and the TPNW may become the primary international instrument for disarmament. Under such conditions, the alliance between nonnuclear states, civil society, and religion that brought the TPNW into existence will become more relevant than ever. In the interim, their goal should be to accelerate ratification among state signatories.

Though arms control is unimaginable without a defeated or exhausted Russia, or a deposed Putin, restoration of the Intermediate-Range Nuclear Forces (INF) Treaty and Treaty on Conventional Armed Forces in Europe (CFE) would be necessary interim steps to restoring nuclear sanity in Europe, but only if there is firm, measurable determination to make progress toward abolition. These and other interim measures ought to be part of a long-term program of abolition.

RENEWED MOMENTUM

Reflecting back on Collina's hopes for the Biden Administration, the world is grateful for President Biden's renewal of New START and the promise to undertake strategic stability talks with Russia—a commitment from which he withdrew after the invasion of Ukraine. In the face of Mr. Putin's nuclear saber rattling, the US president has also demonstrated nuclear sanity, refusing to escalate the US nuclear stance in response to Putin's putting his nuclear forces on alert. At the same time, the future of US nuclear policy is unclear. The administration has yet to publish its Nuclear Posture Review, and the Ukraine crisis makes any shift toward disarmament much harder. Even low-hanging fruit, like eliminating the land-leg of the US triad, seems out of reach. Likewise, moving other nuclear powers and allies toward further disarmament has grown correspondingly more difficult. For those reasons, the kind of collaboration between non-nuclear states, civil society, and religion that resulted in the TPNW is all the more necessary.

TWO PRACTICAL INITIATIVES

In a practical fruit of the 2020 conference, thanks to Charlie Moxley and Dean John Feerick, Fordham University has joined the Catholic Peacebuilding Network's Project on Re-engaging the Catholic Community in Nuclear Disarmament, under the leadership of David Gibson and Fr. Tom Massaro, S. J., for which CPN is very grateful. A major part of that engagement is the training in online seminars of a new generation of arms controllers from across the world. Participants include students and faculty from East and Southeast Asia, Oceania and Africa as well as from Europe and North America. Under the pall the Ukraine invasion has placed on nuclear disarmament, the alliance between civil society, religion, and humanitarian law is key to propelling the world to nuclear abolition.

In January 2023, Georgetown University Press will publish Forbidden: Receiving and Implementing Pope Francis' Condemnation of Nuclear Weapons. Intended to make the papal teaching "church-wide and parish-deep," the book contains contributions by moral theologians, political scientists, professors of military science, veteran arms controllers, lawmakers, international lawyers and others. It documents the evolution of church teaching from conditioned acceptance of deterrence under Pope Saint John Paul II to condemnation of the possession and threat to use (deterrence) by Pope Francis.

More importantly, *Forbidden* provides multiple approaches to those in the nuclear establishment for responding conscientiously to Pope Francis' condemnation. It also presents resources for a range of pastoral workers, from bishops to catechists, to share today's church teaching and to assist their congregations and individual men and women of faith in discerning their duties toward nuclear disarmament. It also offers suggestions for Catholic lay movements to mobilize on behalf of nuclear abolition.

In his encyclical letter, *Fratelli Tutti* ("Brothers and Sisters All"), Pope Francis made the case for global governance in response to the multiple world-threatening problems we now face from climate change to the pandemic. Of nuclear weapons, he wrote:

International peace and stability cannot be based on a false sense of security, on the threat of mutual destruction or total annihilation, or on simply maintaining a balance of power ... In this context, the ultimate goal of the total elimination of nuclear weapons becomes both a challenge and a moral and humanitarian imperative

Forbidden is a contribution to the Catholic response to that challenge. It is an array of moral and pastoral strategies for meeting the imperative of abolition. My hope is that it will make the Catholic participation in the alliance between law, civil society, and religion a robust one in the years ahead.

IN MEMORIAM

Just days after Rev. Drew Christiansen wrote his Introduction to this Special Edition, he passed away, after a lifetime of inspiring and leading impactful efforts towards nuclear disarmament, nonviolence, and just peacemaking. Fr. Drew's particularized alarm about the seriousness of the challenges to human life and civilization we face today with the invasion of Ukraine are a wakeup call, if one is needed, as to the urgency of our making progress towards nuclear disarmament and abolition. His belief that we can build on the Treaty on the Prohibition of Nuclear Weapons (TPNW) and reinvigorate the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) inspires confidence that we can find ways forward to meet the existential challenges we face.

Fr. Christiansen, as a professor at Georgetown's School of Foreign Service and in other senior positions at Georgetown University and previously at Notre Dame and its Kroc Institute of International Peace Studies, as a founder of the Catholic Peacebuilding Network, as a consultant to the Vatican on nuclear weapons issues, and as a prolific author and editor will be long remembered by those who had the privilege of knowing and working with him. He personified commitment to the dignity of human life and values of international law and a responsible and nourishing international order. We can be inspired by Fr. Drew's memory as we try to contribute to the goals of nuclear disarmament, non-violence, and just peacemaking that inspired his life and work.

Charles J. Moxley, Jr. Prof. (Adj.), Fordham Law School

CONFERENCE PROCEEDINGS

NUCLEAR WEAPONS AND INTERNATIONAL LAW

IN THE CONTEMPORARY ERA

Thursday, November 12, 2020

| INTRODUCTION |
|--|
| PANEL ONE: OVERVIEW: NUCLEAR WEAPONS RISKS, CONSEQUENCES AND RESPONSES |
| Keynote Address: Izumi Nakamitsu 70 |
| PANEL TWO: THE ROLE OF THE UNITED NATIONS77 |
| A Special Conversation on Responding to the Greatest Threats to Humanity: Hon. Jerry Brown & Jonathan Granoff |
| PANEL THREE: THE INTERNATIONAL TREATY REGIME APPLICABLE TO NUCLEAR WEAPONS AND FURTHER TREATIES THAT HAVE BEEN PROPOSED |
| REMARKS: PATRICIA LEE REFO |
| PANEL FOUR: INTERNATIONAL LAW AND THREAT AND USE OF NUCLEAR WEAPONS145 |
| PANEL FIVE: APPROACHES FOR ADVANCING THE RULE OF LAW AND MORALITY AS CONCERNS NUCLEAR WEAPONS |

INTRODUCTION

Speakers:

Prof. Charles J. Moxley, Jr.*; Prof. John D. Feerick**; Scott M. Karson***; Edward K. Lenci+; Ariana N. Smith++; Jonathan Granoff+++

CHARLES MOXLEY:

Good morning. I'm Charlie Moxley. On behalf of Ed Lenci, John Burroughs, Jonathan Granoff, and myself, as organizers of this event, with wonderful help from the New York State Bar Association, welcome.

I'm delighted to open this conference. We've been gratified by the turnout. A substantial number of people have shown an interest in this subject. Our purpose in focusing on this area is that we've had a sense, since the Cold War, that the risks of nuclear weapons, the threats presented, and the ways of controlling nuclear weapons, have largely fallen out of the public consciousness. This is evident to us in the State Bar and the ABA, and to our major sponsors who we're very pleased to have working with us.

We are joined by Fordham Law School, Georgetown University, the ABA, the New York City Bar Association, the New York County Lawyers Association, the Lawyers Committee for Nuclear Policy, the Global Security Institute, various of their institutes and programs, and most centrally, this program's sponsor, the New York State Bar Association through its International Section. In a few moments, we'll hear from Scott Karson, the president of New York State Bar Association and Ed Lenci, Chair of the International Section of the State Bar.

^{*} Professor (Adj.), Fordham Law School; Chair, Moxley ADR LLC

^{**} Professor and Dean Emeritus, Fordham Law School

^{***} President, New York State Bar Association

⁺ Partner, Hinshaw & Culberton LLP (NYC); Chair-Elect, International Section of the New York State Bar Association

⁺⁺ Executive Director, Lawyers Committee on Nuclear Policy

⁺⁺⁺ President, Global Security Institute; Senior Advisor, Permanent Secretariat of the World Summits of Nobel Peace Laureates

In the many months that we've been working with all of these groups to organize this program, we've found an extraordinary amount of concern about the risks posed by nuclear weapons. I think there's widespread concern around this issue that hasn't been appreciated by the policy elites and the people who organize programs and make plans concerning these weapons. As a result, this issue has not been in the forefront of the public policy debates and planning. Nuclear weapons pose a serious problem, and a real threat to human survival, as we'll hear in today's program. Most interestingly for us, as a group made up of lawyers —and being sponsored by the State Bar, the ABA, and various institutions of legal education and other legal groups— is that rule of law, as a principle, seems to be an organizing sense for all of us. Crucially, law already exists that governs nuclear weapons.

As we will explore throughout the day, there is a robust body of law currently in existence. Let me take a few minutes and walk you through how we have structured the program so you can get a sense of how we hope these discussions will develop. The organizational premise we're aiming for is something very organic. We will start with the first panel of the day where we talk about the facts of nuclear weapons, and also about nuclear weapons policy, which is extremely important in terms of gauging how states may act in certain circumstances and what they will or will not do in the context of a conflict and the stress of war or potential war.

So, first we'll discuss the weapons themselves. Then we'll consider the possible strategies. Most importantly, we will explore the consequences of the various nuclear states maintaining these weapons. The burden of the first panel is to help us understand the unique nature of nuclear weapons and the risks concerning these weapons. The importance of this will become clear throughout the day, as we walk through the different rules of international law that govern the use of nuclear weapons. We will see that the legal standards largely turn upon the effects of the weapons.

The second topic of the day is the role of the United Nations in disarmament, arms control, and potentially (hopefully in the nottoo-distant future), the complete abolition of nuclear weapons. We will learn about a wide variety of actions and ongoing efforts the UN has made over the years and is continuing to make now. We are privileged to have UN Under-Secretary-General and High Representative for Disarmament Affairs Hon. Izumi Nakamitsu open this session with her Keynote on the Role of the United Nations.

We will then hear from the president of the American Bar Association about the ABA's focus on rule of law and international law in connection with controlling and addressing the issues surrounding nuclear weapons. We will also hear what I'm sure will be a wonderful conversation between Jonathan Granoff and former California Governor Jerry Brown, talking about the exigencies of the risks of nuclear weapons, which are existential risks. Governor Brown has become very interested in this area over the years, going back a long time. We look forward to hearing his thoughts on this.

Next is panel three, which Johnathan Granoff will lead. It will be a discussion of the international treaty regime. What treaties currently address nuclear weapons? What treaties have been proposed? Which treaties have worked, and which have failed? What's the attitude of the United States and other countries towards treaties, towards making conventions, and towards cooperation among nations, as these relate to risks of nuclear weapons?

The fourth panel will cover current applicable law: the law of armed conflict, also known as the law of war or international humanitarian law and international criminal law. This is the law that governs the threat and use of nuclear weapons. So, there is a relevant body of law. There are obviously issues about its application and its enforcement, but there is law in this area, and we'll have a panel devoted to exploring that.

Then, the final panel of the day will be what we call, the "so what" panel. By then we will have seen that there are severe risks associated with nuclear weapons. We'll have seen that there are genuine legal issues, that there are existing treaties that are applicable in this area, and that there's potential for action. But how do we make it happen? Is nuclear weapons law going to be enforced in the courts? What's the role of legislative action? What's the potential for public action, civic advocacy, leadership by civic, religious, or other groups? In this final panel, we are going to look at various ways to in effect operationalize this body of law. We call it the "so what" panel because its central question is: "So, what do we do with all of this? Does the law in this area matter?"

2022]

That's the general plan for the day. In the interest of saving time, we will keep speaker/panelist introductions brief, but we have included bios of everybody in the program materials available to you and invite you to look at these for more information on the participants. It's my privilege now, to introduce representatives of some of our sponsoring organizations who have been instrumental in making this program possible.

I will first introduce each group, and then representatives of various of the groups. We couldn't get everyone here today, but the representatives we do have here will each make a few comments on behalf of their organization and how they feel about this issue and its importance. First, is a person well known to anybody active in the New York legal community throughout the state and much beyond. It's Dean John Feerick, a professor and Dean for many years, and now Dean Emeritus of Fordham Law School. John is by anybody's account a towering figure. He is the go-to person when there's a problem involving the legal community and the rule of law in New York. His background, what he's done over the years, and what he's doing now is beyond compare.

Next, we're going to hear from Scott Karson, the president of the New York State Bar Association and longtime leader of the Bar who is very committed to the State Bar's work on the rule of law. We're going to hear a lot about the rule of law today, because, as far as the organizers for this event are concerned, this is a conference on the rule of law. This is about work that we do as lawyers. What are the facts and what is the law?

Next, we're going to hear from Edward Lenci. Ed is one of the organizers of this conference. He is chair-elect of the International Section of the New York State Bar Association, which is very active across public as well as private international law. Ed is the strongest advocate you will find in the State Bar, along with Scott Karson, for the rule of law.

Next, we'll hear from Ariana Smith, Executive Director of the Lawyers Committee on Nuclear Policy. You'll hear a lot about LCNP throughout the day. Each of the organizers of this program, Jonathan Granoff, John Burroughs, and myself, is very active in LCNP. Ariana worked with us as an intern before she graduated from law school. She caught the attention of LCNP with a very interesting paper, which I reread recently, on the legal status of threats of force under international law. This is a very important analysis in the nuclear weapons area because nuclear weapons have many risks, but the most routine risk that they pose is from the policy of the deterrence and the high alerts as to such weapons maintained by the United States, Russia and many other nuclear weapons states, whereby their nuclear weapons are kept ready to use within minutes.

Finally, last but definitely not least, we will hear opening comments from Jonathan Granoff, who is a towering figure in the area of nuclear weapons law and international security. He's known to everyone active in the area. He's president of the Global Security Institute. He's a senior advisor and the United States representative of the Permanent Secretariat of the World Summit of Nobel Peace Laureates, Chair of the ABA Task Force on Nuclear Non-proliferation, and advisor to the Committee of National Security of the international section of the ABA.

We will further meet John Burroughs, an equally towering figure. He was executive director of the LCNP until Ariana came into that position and John took over as a senior policy advisor to LCNP. John can be seen in the halls of the United Nations on any given day when there's something going on that has to do with international security and arms control. So, that's the basic lay of the land. We're now going to hear from each of these speakers, talking about their organizations. Dean Feerick.

JOHN FEERICK:

Thank you very much, Charlie. I am pleased to add my welcome today on behalf of Fordham Law School and its national security clinic, directed by Karen Greenberg. As a school, we have long had in our curriculum, of course, nuclear weapons and international law. And, that is because of you, Charlie. You received your BA from Fordham College, and an MA from Fordham and Russian area studies, and then attended Columbia Law School, where you concentrated on international law. You joined our faculty to teach a course on nuclear weapons, which started for us shortly after the turn of the century, when I had the honor to serve as the school's Dean. You have taught that course ever since and have also contributed more broadly to an understanding of nuclear weapons and international law through writings, speeches, lectures, reports, and as a participant in public forums and programs.

I can't think of anyone more invested than you, Charlie, in the subjects of this virtual conference today. You're a lawyer's lawyer, and you've been recognized as such in so many leadership positions you presently hold, and you have held, in the bar of this state. Your career over the past 40 years has been marked as well by a deep commitment, defining ways to resolve controversies and disputes as a litigator, arbitrator and mediator, both internationally and domestically. I'm honored each year to participate as a speaker in a program you organize with others for the New York State Bar Association that is held at Fordham Law School, on alternatives to litigation. The timeliness of today's program is reflective in the incredible registration, as I understand it, of close to 700 individuals, which is certainly a testament, Charlie, to your vision and reputation for excellence and the work of the co-chairs of this program.

Nineteen years ago, in the aftermath of 9/11, I was asked to speak about the tensions and balances between security and liberty, in a program organized by Dr. Kevin Cahill called, Traditions, Values, and Humanitarian Action, in which Dr. Cahill said, and I quote, "Life is never secure, and the strongest foundation so carefully constructed can crack under the pressure of fear or folly or evil. Acts that are in opposition to the foundations of society can cause devastation and destruction." Your discussions today of nuclear weapons and international law deal with fault lines that bear on our traditions and values, and that bind us together. I hope to listen to the discussions throughout the day as best I can. And I thank you, Charlie, for the opportunity to address them in this conference. Permit me in closing, to welcome former Governor Jerry Brown to this Fordham Law School sponsored program, whose sister was a student of mine at the law school and whose father proudly attended her graduation in 1985. Thank you.

CHARLES MOXLEY:

Thank you very much, Dean Feerick. Scott Karson.

SCOTT KARSON:

Good morning, everybody. My name is Scott Karson, and I am the President of the New York State Bar Association, the largest voluntary state bar association in our nation. It is my pleasure to be speaking with you this morning. I only wish that we could be meeting each other in person, as it is well known within the New York State Bar Association that our International Section hosts the very best meetings and events. The International Section has been very welcoming to me throughout my time as President Elect and President of the Association. This morning, the section is affording me a great honor and opportunity by inviting me to deliver welcoming remarks at this very important program before such a distinguished panel that features international and national experts in the field of nuclear weapons and the law.

The importance of today's program cannot be overstated. It is a topic which squarely implicates the rule of law that is so important to so many of us, and which belongs at the forefront of the public discourse. The current state of our political climate demonstrates how important it is to have conversations surrounding the development, proliferation, and use of these powerful and deadly weapons. I am personally pleased that the International Section has chosen this topic for discussion.

Having grown up during the height of the cold war, when atmospheric testing of nuclear weapons was commonplace, and the world seemed forever to be at the brink of nuclear conflict, I vividly remember the duck and cover air raid drills at school, which I have now come to believe were foolish and misguided. And I also remember my parents declining to serve milk to my sister and I out of concern that it contained chemical fallout from atmospheric testing. Now, some 60 years later, nuclear weapons remain a matter of great concern. As the global pandemic has shown, we are all interconnected within the global community, and therefore, the threat of nuclear weapons belongs as a prominent component of the national and international conversation. And so, I wish to thank Ed Lenci, the Chair Elect of the International Section, as well as the leadership and membership of the section, our many co-sponsors, our distinguished panel, and those of you who will be listening throughout the day, for your participation in this most important endeavor. Thank you, and good morning to all.

CHARLES MOXLEY:

Thank you, Scott. Ed Lenci.

EDWARD LENCI:

2022]

Thank you, Charlie. Good morning, good afternoon, or good evening, as the case may be. Here in the United States, we've been through, and unfortunately remain, in one of most partisan political periods in the history of our Republic. But nuclear weapons are neither a Republican issue nor a Democratic issue, nor even a bipartisan issue. Nuclear weapons transcend party politics. Given the present geopolitics of issues such as climate change and resource inequality, as well as the dangers of terrorists and rogue nations like North Korea, nuclear weapons pose a greater threat to our world now than they did at the peak of the Cold War in the last century. Today, you'll hear from the A-list of those involved in the control, reduction, and elimination of nuclear weapons. The International Section of the New York State Bar Association is committed to the rule of law, particularly international law, and so, it is proud to sponsor this necessary conference. Thank you for joining us today.

CHARLES MOXLEY:

Thank you, Ed. Ariana Smith.

ARIANA SMITH:

Good morning. As Charlie mentioned, my name is Ariana Smith, and I am the Executive Director of Lawyers Committee on Nuclear Policy, very newly. We are a proud cosponsor of today's event. We have spent some months now invested in pulling together this conference and are very glad to bring to you this full and dynamic slate of panel discussions on nuclear weapons and the law. A conference like this is relatively unique, but I hope that today represents a departure from that tradition and marks the beginning of a broader ongoing conversation about the legal regime, managing nuclear weapons, and related policies.

The essential relevance of rule of law, as you've heard, and in particular, international law to nuclear weapons and to guiding the way toward their disarmament and abolition cannot be overstated. Given the very destructive and permanent consequences of both use and testing of these weapons of mass destruction, understanding the effective application of law to the nuclear weapons regime is fundamental for lawyers, activists, and policy makers alike. While we're all gathered today virtually, as a result of an altogether different threat to our world, the COVID 19 pandemic, the existential threat of nuclear weapons still looms large. I hope that you take away from today both a deeper understanding of how international law constrains this threat and the renewed energy to shape the law and developing norms toward a more just and safe world for all. Thank you so much for being here, and I look forward to engaging throughout the day together.

CHARLES MOXLEY:

Thank you, Ariana. Jonathan Granoff.

JOHNATHAN GRANOFF:

I'd like to personally thank the international law section of the State Bar of New York and some of its staff that worked so hard to put this together. Simone Smith and Carra Forgea and especially my colleagues, Charlie Moxley and John Burroughs.

Good faith adherence to solemnly made and formally adopted international agreements, treaties, is necessary for global security. Confidence in such legal instruments is the foundation of the rule of law internationally. Without the rule of law, the quest for power results in systemic injustice, imbalance and insecurity. And by rule of law, we mean the orderly transparent accountable application of equity and justice in both domestic and international affairs. Advancing these principles is part of the DNA of the American Bar Association and part of the international advocacy agenda of one of today's sponsoring organizations, its international law section, as well as the Global Security Institute, which focuses specifically on the rule of law as applied to nuclear weapons.

I can also say that the World Summits of Nobel Peace Laureates consistently addresses this issue, declaring nuclear weapons both unacceptable morally and unacceptable legally. In that regard, let me remind the many lawyers here today of the most ancient of legal maxims, *pacta sunt servanda*; Latin for agreements must be kept. Without its good faith application, the social edifices upon which we depend collapse. International stability, good governance, development at every level, including addressing poverty and protecting financial systems, as well as the natural environment and security environment, depend on this principle. Words amongst nations are weighty and meaningful. When promises become empty, when words amongst nations and their promises become empty, bullets become verbs, and the bullets of nuclear weapons must never be permitted to fly.

That is why this conference is so important. Understanding the relationship between law and nuclear weapons may not be appreciated in our popular political culture as essential for a sustainable future, but it is essential for our sustainable future. How the most powerful behave is copied by others. And thus, American lawyers have a special responsibility to ensure that our nation exemplifies the conduct we want others to follow. We must make sure our nation leads in fulfilling promises made, particularly those with existential impact on the survival of humanity, particularly agreements regarding nuclear weapons. The alternative to ignoring the law is unacceptable. Today, we will gain tools necessary to be effective lawyers, effective advocates, for our most important clients, future generations. Thank you.

CHARLES MOXLEY:

Thank you very much, Jonathan. We have a question from Peter Davidse, which we'll be talking about later in the program in some detail, but I don't want to just ignore the question now. So, I'm going to pose it, and then, just give a two-minute response to it and also, invite John Burroughs if he wants to make a quick comment. But one of the things we are going to try to do, although we have a large number of people participating today, is to make this as interactive as possible. We also want to be as organized as possible, we'll deal with things as they come up, where it makes sense.

The question that Peter Davidse asked is about mutual assured destruction. He is asking "Is mutual assured destruction part of the policy of deterrence? And, is it a violation of the UN charter law that regulates the use of force?" I'll briefly address it now as an introductory comment and not in an effort to deal with it in depth, because we'll deal with this in the first panel where we talk about the facts as to nuclear weapons, and again in the fourth panel where we talk about the law as to nuclear weapons. So, just by way of an introduction, there are various bodies of law, and one of them is the *jus ad bellum*, which is the rule as to the legal basis for the use of force in the first instance under the UN Charter, which Peter refers to. Specifically, article 2.4 of the charter provides that

TRANSCRIPT

states shall refrain from the use of force, except as in an individual or collective self-defense. So, that's *jus ad bellum*.

Also, there's another the body of law that we'll talk about more today. It's the *jus in bello*. It's the law of armed conflict, the law of war, or international humanitarian law. Subject to obvious footnotes, these are basically synonymous names for a body of law that has to do with the regulation of the use of force within armed conflict. We will discuss this further, but suffice it to say, for present purposes, that mutual assured destruction is the concept that a state will use the threat of broadscale retaliation with nuclear weapons to deter any adverse action by an adversary, threatening that it will destroy the other state and its people if it takes the adverse action. It means what it sounds like. It was at the top of the public consciousness during the Cold War, where the U.S. and the Soviet Union were targeting cities, and the idea was that each side would be deterred because if it acted wrongly, the other side would wreak Armageddon on them.

We have come away from this stance a little, in that now we target military targets. But as we'll hear, the military targets are often co-located within the cities or near the cities. So, to some extent, it's a distinction without a difference. But, as we'll hear, one of the primary rules of the law of armed conflict is the protection of civilians, a rule against attacking civilians. Mutual assured destruction threatens civilians. So, that's a broad answer. It seems clear as a general matter that the policy of mutual assured destructions is part of the policy of deterrence and that it violates both *jus ad bellum* and *jus in bello*. Let me ask Dr. John Burroughs. John, if you want to add to that or subtract from it, please do so. After that, we'll move on to panel one.

JOHN BURROUGHS:

Well, thank you, Charlie. As Ariana said, Lawyers Committee on Nuclear Policy is delighted to be co-sponsoring this conference and also very happy to have worked, especially with Charlie, and Jonathan Granoff, and Ed Lenci on organizing it. In the summer of 1945, the United Nations Charter was adopted. Within weeks, the United States bombed, with nuclear weapons, two cities in Japan. And a few years later, the doctrine of mutually assured destruction came into effect. Essentially, deterrence is about a permanent threat of force and that does really run contrary to the UN Charter, which prohibits the threat of use of force except in self-defense or when the Security Council takes action. It is quite true that deterrence stands as an ongoing affront to the UN Charter.

One thing you could say about ending reliance on nuclear weapons is it would give new life to the United Nations and the UN Charter.

CHARLES MOXLEY:

Thank you, John. Also, thank you, Carra Forgea and Simone Smith from the State Bar, who are keeping us moving. We're finished with the introductions. Thank you, everybody. Let's assemble panel one.

We have another a question. "Will this conference address the treaty on the Prohibition of Nuclear Weapons and its upcoming entry into force?" Yes, that will be addressed in the second and third panels of today. More the second panel, I believe.

JONATHAN GRANOFF:

I don't think any of us appropriately thanked Ed Lenci because he stepped out in front and brought us to the opportunity to do this. I just think he needs a special recognition for that initiative. We wouldn't have this conference without him. He was the essential guy that brought the New York State Bar and the rest of us together. Thank you, Ed.

EDWARD LENCI:

Thank you. Thank you very much.

CHARLES MOXLEY:

Thank you, Jonathan. I join in that. Ed, as you know, is the incoming chair of the international section of the State Bar, our primary sponsor. We are very fortunate that they, along with our other wonderful sponsors, have taken a deep interest in the area of nuclear weapons. Ed has been with us since the beginning. Ed, John, Jonathan, and I have been working together in this area for many years now.

OVERVIEW: NUCLEAR WEAPONS RISKS, CONSEQUENCES AND RESPONSES

Moderator: Professor Charles J. Moxley, Jr.+

Speakers: Professor Osamu Arakaki;* Hans M. Kristensen;** Professor Scott Sagan***

CHARLES MOXLEY:

For panel one, we have Professor Arakaki, Scott Sagan and Hans M. Kristensen. Ambassador Jenkins will not be joining us today.

Carra, can you show us the first panel? Let me start by introducing Professor Osamu Arakaki. We're very fortunate to have Prof Arakaki joining us. He is Professor of Law at the International Christian University in Japan, sometimes referred to as ICU.

The ICU and the international section of the New York State Bar have worked together on many other programs. The international section of the State Bar is truly international and Ed will tell you more about it as the day goes on.

Ed was part of a program in Japan about a year ago and worked with Professor Arakaki then. Although there are many areas that Professor Arakaki could address, he has agreed to focus on, as an opening, the issue of understanding the risks and consequences of nuclear weapons and the painful subject of Hiroshima and Nagasaki.

An element of the harm caused by these weapons is not just the destruction that took place when they were used, but the fact that it continues in the health and genetic lines of people in Japan. To the present day, there are untold numbers of people still suffering from the effects of those atomic bombings.

⁺ Professor (Adj.), Fordham Law School; Chair, Moxley ADR LLC

^{*} Professor of Law, International Cristian University, Japan.

^{**} Director, Nuclear Information Project, Federation of American Scientists.

^{***} Caroline S. G. Munro Professor of Political Science, Stanford University, and Senior Fellow, Freeman Spogli Institute of International Studies.

Professor Arakaki, it's a somber note, but thank you, sir, for being here. We all need to hear what you're going to tell us.

OSAMU ARAKAKI:

Thank you very much for your kind introduction. Good morning, New York. I want to express my gratitude towards the New York State Bar Association, especially Professor Charlie Moxley, who is a moderator of this session and Mr. Edward Lenci, and organizers for giving me an invaluable opportunity to speak at this panel.

Firstly, I will describe some scenes from Hiroshima and Nagasaki when the atomic bombs were dropped. Secondly, I will draw an overview of Japan's attitude towards nuclear weapons. Lastly and briefly, I will touch upon the aspect of international law that is the key concept of this conference.

I'm impressed by this statement released by Joe Biden on the 75th anniversary of the dropping of the atomic bomb on Hiroshima. Biden said, "I will work to bring us closer to a world without nuclear weapons so that the horrors of Hiroshima and Nagasaki are never repeated." Indeed, two bombs over Japan brought horrors. The bomb dropped on the City of Hiroshima on the morning of 6th August 1945, killed presumably 140,000 civilians and nobody knows the accurate number. Another dropped on the City of Nagasaki three days later killed more than 70,000 people.

In Hiroshima, a girl named Mitsuko was 13 years old. Standing 1.3 kilometers from ground zero, she saw a picture of hell. A young woman held a baby in her arms, but the baby looked like charcoal. The woman madly screamed, "What happened to my baby? Wake up, wake up!" Mitsuko still cries when she remembers that she could do nothing for this woman and baby.

Tsukasa was a 15-year-old boy in Nagasaki. He worked in a factory located 1.3 kilometers from the ground zero. Tsukasa remembers the moment of the explosion. He saw flashes of light, silver, orange, blue, and purple across the sky and he felt the air vibrating. Then, the roof and windows were all blown out in one motion. He found a colleague who was seriously injured. His face, his body, had no trace of human form, and he looked like just a monster. Surprisingly, he did not lose consciousness immediately

and said to Tsukasa, "I got a slight injury, didn't I?" Tsukasa was not able to answer honestly.

Even after the rapid reconstruction of these cities, people who survived the immediate explosion kept suffering from serious illness for throughout their lifetime. These illnesses include keloid disease, leukemia, cancer, and so on. These people are known as *hibakusha*.

Despite the tragedy that civilians experienced, Japan has been in a step-by-step approach to nuclear weapons, which seems ambivalent in the eyes of outsiders, and even insiders. The first argument is directly related to security. On one hand, Japan as the only state to have suffered atomic bombing showed the positive attitude to promote the elimination of nuclear weapons. For example, the Japanese government keeps submitting drafts of antinuclear resolutions to the United Nations. This has been going on for more than a quarter of a century. On the other hand, it is often explained that Japan has been under the U.S. nuclear umbrella. That is the security assurance. Following the key security provider that is the U.S., which opposed the Treaty on the Prohibition of Nuclear Weapons, TPNW, Japan has not joined it. Japan has considered that the U.S. involvement in the region is significant due to the military growth of China and North Korea.

The second argument is about Japan's policy on nuclear energy. In the 1950s, Japan established the policy to depend on nuclear energy. Japan was keen to secure the energy resources. At the same time, the policy was framed in the context of the U.S. strategy of peaceful uses of nuclear energy that was envisioned by the U.S. President Eisenhower at the United Nations General Assembly in 1953 on Atoms for Peace.

Japanese policy on nuclear energy is inevitably linked to security. The core of the policy includes the "nuclear fuel cycle" that large amounts of plutonium extracted from the fuel of the nuclear power plants is recycled. Plutonium is strictly managed internationally because it can be used to produce nuclear weapons. But Japan has been treated exceptionally, because the motivation derived from the Cold War was based on concerns over the Eastern bloc. As a result, the record of this year shows that Japan's plutonium stockpile is 45.5 tons, which is presumably sufficient to make plutonium-oriented weapons. This situation has raised international concerns. The U.S. emphasized the risk of nuclear terrorism in the event other states copy Japan's approach in the way and use it as an excuse to process plutonium. Neighboring states like China would be suspicious about Japan when the specific group would like to show off an option that Japan is ready to arm itself with the nuclear weapons anytime if necessary. This group considers that the option would work as a deterrent.

Understanding some such threat, but I believe that any policies of any states including Japan should not be isolated from development in international law.

The ICJ's advisory opinion in 1996 on the legality of the threat or use of nuclear weapons was a breakthrough. TPNW was adopted in 2017, and last month, this treaty witnessed the historical moment when it satisfied the required 50 state parties for its entry into force.

Policymakers in any states should not ignore the development of international law which gradually curtails the scope of legality of nuclear weapons. It is prominent that civil societies play an important role in changing the international law. They have attempted to transform ideas towards nuclear weapons from security to humanitarian principles. Given their impact on and contribution to the change of international norms, in a sense, they are participants partially in the law-making process.

What Joe Biden called "horrors of Hiroshima and Nagasaki" is not simply the past event of 75 years ago. It is also a real chance of fear that the tragedy would be repeated in any parts or even the whole of this globe anytime in the future unless we are determined to move. Everyone knows it is not easy, because we have to deal with many complex political factors in reality. However, in terms of philosophical standpoint, I trust that viewpoint not dividing friends and enemies will be the key to pave the way for our common future. Without it, strategic policy would be defective.

Finally, unless there were such a philosophical viewpoint soon after Hiroshima and Nagasaki, I would not be here today. The establishment of International Christian University, ICU, where I belong, was triggered by the tragedy of Hiroshima and Nagasaki. Soon after the Second World War, John MacLean, a Reverend of a Presbyterian Church in Virginia preached a sermon on word "Love Thy Neighbor," and he expressed repentance for the atomic

TRANSCRIPT

bombing and called for the Japanese, "yesterday's enemy," to raise funds to establish a university in Japan. Immediately, the Federal Council of Churches in North America responded to his calling and started fund-raising. ICU was finally established four years after the atomic bombing. And now, this history brings me here.

I believe that this panel and this conference will be a part of the process to seek for our common future.

Thank you very much.

CHARLES MOXLEY:

Thank you very much, Dr. Arakaki. It's very sobering. I think what we're going to hear in this panel is that, while at the time of Hiroshima and Nagasaki, there were just several atomic bombs, we now have nuclear weapons that exist in much greater numbers. Their possession is spread through many more countries.

The risks are even much graver from potential multiple uses of these weapons. We're going to launch into this part of the discussion now.

Let me introduce Hans Kristensen. I can tell you, as somebody who's been writing in this area for a very long time, that, if one wants to know the facts about nuclear weapons and the policies that relate to them, there's no more authoritative source than Hans Kristensen. If you just Google nuclear weapons numbers, you will see what I mean.

As I'm working on the second edition of my book, which as Dean Feerick mentioned, came out initially in 2000, unfortunately I have to keep updating the numbers, just to keep up with Hans, frankly. He makes very frequent updates to the numbers and other information regarding the world's nuclear stockpiles, and nuclear policies.

Hans is director of the Nuclear Information Project, the Federation of American Scientists, and is going to advise us on the actual realities. How many weapons currently exist? What countries have them? What are the policies that appear to affect whether a state will or will not use these weapons in exigent circumstances?

Professor Scott Sagan, who is the Caroline S.G. Munro Professor of Political Science at Stanford University and a Senior Fellow at the Freeman Spogli Institute for International Studies, is

2022]

also a towering figure in this area. One need only to Google Professor Scott Sagan and see his extraordinary work.

We've had preparatory discussions and frankly, each of these speakers could speak all day about the subjects they will be talking to us about. I think Professor Sagan is particularly interested today in talking about the risks. We're going to learn about the weapons and the policies from Hans Kristensen. Then, I think Scott is going to tell us more about the questions "how does this play out?" and "what are the risks that have come up?"

I should mention that the risks associated with nuclear weapons are not limited to intentional uses of such weapons, should a country decide to use them. There's also a huge area of risk that arise from unintended uses of nuclear weapons, whether because of human error or equipment failure, or, increasingly, from cyber intrusion, not to mention potential use by terrorists.

There is a robust literature on the topic of risk. I invite the participants in this conference to look not only at the considerable number of interesting reading materials that the State Bar has gathered from the speakers and others and made available to you, but also to explore the literature that can be found online.

Interestingly, there is a lot of information out there about nuclear weapons and nuclear weapons policy, all of which affect the law. But there is much less discussion of what the law is, that affects these weapons. That has not been at the front of the public policy portfolio. Addressing that gap in the discussion is one of the purposes of this conference.

There is a view among many people taking an interest in this area that the risk of unintended nuclear weapons use – resulting from human or equipment failure, or cyber intrusion – may be as great as, or perhaps, greater than the risk of intentional use.

As we'll hear, there are many thousands of these weapons, and security over them isn't always as good as it needs to be. We all know about potential advantages of offensive strikes in overcoming defenses in so many circumstances. Offensive strikes can destroy nuclear weapons like other targets. There are huge risks of volatility and escalation.

I'm going to stop here and turn it over to you, Hans, and ask you, if you would please brief us, in the way you've done for so many years, on the facts and policies we need to know to get oriented as to nuclear weapons risks?

HANS KRISTENSEN:

Thanks very much for that introduction and for the invitation and opportunity to speak here. Like you said, I've been working on this for a long time and that's obviously the sad part of the story that it's still necessary to spend all this time on these issues, but here we are.

I'm going to share my screen

What I intend to do here is to give you a brief overview of the status of nuclear forces, the history. I'm not going to obviously dwell too much on it, but there's some important lessons learned looking at how far we've come.

I'm going to talk about national arsenals and the modernization programs that are underway. I do not have nearly enough time to dive into each nuclear weapon state. What I've done here is produced a lot of slides with all the details. Not that I'm going to use them all, but so that the conference can use it as a reference material after the fact.

Then, I'll of course share these slides. I'll skip through several of the slides and you'll have to bear with me on that to get to some of the major issues. I'll talk about the doctrines and strategies because they're in significant development right now. I'll touch on issues regarding the yields of weapons and how it relates to collateral damage, and perceptions of use and usability.

Then of course, I'll give you some snapshots of how the nuclear arm states are operating the nuclear forces under what's been termed a great power competition, which is significantly shaping not just the modernization programs, but also the way that the nuclear forces are operated in these years, and end on some conclusions, obviously.

As you can see from these graphs, we've made enormous progress compared to the Cold War in terms of reducing numbers of weapons. Total inventories peaked around 70,000 at some point in the mid late '80s. The way the countries modernized and built their forces varied significantly, depending on strategies, tradition, leadership, what have you.

Today, we estimate that there is an order of 13,000 plus nuclear weapons on the planet of which about 9,300 or so are in what you can call the military stockpiles. Those are inventories that the militaries have possession of that are intended to arm actually deployed warheads or launchers.

You also see from the graph to the right that countries go about nuclear deterrence and nuclear requirements in very different ways. The United States and Russia stand out as particular cases. There's no other country on the planet that thinks they need more than a few hundred nuclear weapons for deterrence, but because of histories, tradition, certainly the way that the Cold War shaped arsenals and strategies, the United States and Russia still have enormously larger nuclear weapons inventories than any other countries in the world. If you look at the trend, yes, we've made a lot of progress, but the pace of reductions has slowed. Everyone is modernizing.

This is not just a question of making the weapons last longer. They're also introducing new types and increasing the role and the rhetoric, and the reaffirmation about the importance of nuclear weapons. These modernization programs all have one thing in common, which is for these countries to be able to retain nuclear weapons indefinitely.

The trend is that the countries that until recently have been decreasing their inventories include the United States, Britain, and Russia. But they're now rumors or claims that Russia is growing its arsenal again. (Britain has recently announced its intention to increase again.) Countries we've known for a long time of doing so (increasing) is China, Pakistan, India, and of course, North Korea. Then you have countries that are somewhat steady like France and Israel.

There is a tendency to compare it with the Cold War, but that is a flawed comparison. In my view, there's no comparison between the arsenals of the 1950s and what we have today. Just a few details, in those days in the 1950s, there were overwhelmingly tactical nuclear weapons.

Today, they are overwhelmingly strategic. The arsenals in the '50s were inaccurate and generally had large yields. Today, you still have large yields around, but they're less so, and the weapons are much more accurate, and you have more emphasis on lower yield weapons operation and increasingly so in this new phase we're in now.

And of course, there were no arms treaties in those days. We had to go through all this crazy build up before that triggered an

interest in arms control or a necessity for arms control treaties. And at the lower end, you can see the last remaining nuclear limitation treaty. The New START is effectively curbing the strategic arsenals of the United States and Russia. And of course we are hoping that it'll be extended for five years, once Trump is out of the way.

So I think people should stop comparing it with the Cold War. And government officials when they say, "Oh, we've made a lot of progress because look, we have much less than we had during the Cold War." That's not the interesting part anymore. The interesting part is what is the role of nuclear weapons today? How do they plan for these force structures to evolve over the next 20, 30 years? That is the issue people should be comparing with, if you will.

I'll just briefly mention some U.S. and Russian, a little China headlines here, but otherwise move on to strategies and other issues. Basically the U.S. is down to about 3,800. An enormous drop from the Cold War. But the force structures are still structured in the traditional way, by a triad backed up by tactical fighter wings.

But it's also interesting that less than half of the stockpile is actually deployed; most weapons are in storage. But of the weapons that are out there, somewhere in the order of 900 or so are on alert. And that means the ICBMs are ready to fire on short notice. And about five of the ballistic missile submarines that are in sort of hard alert postures in deployment areas. But of course, submarines can be very quickly brought to alert status, the rest of the submarines. So this posture assumes a significant upload of nuclear weapons in a crisis. Most immediately on bombers, but of course, later on in submarines and eventually also on ICBMs.

Now we have a trend here with new low yield warheads that are in development. Sort of a rebirth to some extent of the idea of tactical nuclear weapons. Much less emphasis than during the Cold War and there are significant differences. But it's a significant departure from just a few years ago. And we also see a significant development in the operational plans. And you can see a snapshot of the modernization program. It is comprehensive. It is everything, including infrastructure. And we're talking about trillions of dollars over the next, the estimates vary, over the next three decades.

So the United States continues to reduce its arsenal, but it's increasing the types and capabilities of the weapons that are in the

arsenal. Russia has a larger arsenal, and it's also structured differently. Of course, strategic forces are very much structured like the United States, but it has a much larger inventory of nonstrategic nuclear weapons. That is not because of a new idea that Russia has, that these are suddenly important. It has had many more tactical nuclear weapons than the United States for the past 30 years. The U.S. military has been aware of that. That hasn't raised concern or particular concern. About a thousand of the Russian warheads are on alert mainly on ICBMs, but of course also subs.

Russia has less upload capacity (than the United States). It tends to load its deployed forces with more warheads under normal circumstances than does the United States. But it's changing and it's building more capacity. And the U.S. intelligence community projects that this stock-pile is going to increase significantly, as they say, over the next decade, mainly because of the way they count tactical nuclear weapons. We can get back to that in the discussion. And as you can see here, a significant modernization program as well. And of course, the most interesting part is probably the lower part of the tactical nuclear weapons; a significant modernization program across the board.

China, of course, is in the middle of a significant modernization, both in terms of launchers, but also in terms of the increase that is expected of the weapons they have in their stockpile. The U.S. intelligence community has predicted many increases of Chinese arsenal over the years that did not come true. So we'll see how it goes with this one. But it's pretty significant and also broadening now to a formal role of bombers in a nuclear strike mission.

And here you can see some projections from the past about U.S. intelligence. This is the DIA, a defense intelligence agency that has made protections over the years about Chinese nuclear arsenal developments. And they've all proven to be wrong, at least these in the public domain. But now we're getting a new one. The last one you can see, and that would imply some kind of 400 to 500, even 600 depending on who you believe. Our estimate of China's nuclear stockpile is higher than that of the Department of Defense because as far as we can tell the Department of Defense only counted operational weapons. So we can get to back to that in discussion if we need to. Let me skip over all these other countries, there's just not enough time to do it, but you can see these overviews in the slides later if you want to. I'll move on to doctrines and strategies and how much is needed and how. And of course here, I just want to start by saying there's a significant difference in how the public talks about nuclear needs and requirements and how the military planners talk about it.

Generally speaking in the public, we say, "How much do you need to scare an adversary? How much do you need to deter from initiating nuclear use?" Of course, that's also the starting point for military planners, but the vast majority of the requirement for military planner comes from what happens when deterrence fails, in that phase after. That is where the war plans kick in. That is when you need to be able to hold at risk and take out different weapons categories and what have you. That leads to very different assessments about how much you need and for what purpose. For the United States, of course, it has issued declaratory policies of what its nuclear policy is and how it would respond. General terms, of course, what it would do and wouldn't do, over the years. And so that's a big help in trying to discuss and understand what it's up to and what would happen.

But of course, in terms of this particular briefing, for this particular meeting, it's also interesting that the United States has very strong legal requirements; the nuclear strike plans have to abide by international law. You can debate from now until whenever, whether that is possible or to what extent it's possible. But it's very clear that this is a requirement in the planning. And we can get back to the details of this and what it means, of course, but it's explicitly stated. It has explicitly stated that it does not target civilian populations or civilian objects. But as we all know, many civilians live around or nearby, targets that would potentially be targeted.

So this page of information overkill is to give you a snapshot of how U.S. strategic nuclear war planning evolves. What are the elements of it, how it has evolved. So you can see to the left you have White House guidance, you have OSD guidance, and you have Joint Chiefs of Staff guidance. You have the STRATCOM planning. You have the different plans, what they're called, you have features of the plans. And on the top bar, you can see the different versions of these plans that have been introduced over the years. We are now in the last plan there to the right. That's called operations plan 8010-12.

Originally it was put into effect in 2012, and it's been updated several times since then. I'll get back to what that is. But down below, you can see how the objective of the plan has changed over the years. In the Cold War, it used to be almost entirely focused on deterring the Soviet Union and winning World War III. With the end of the Cold War, they made it more flexible, broadened it to other categories, even other categories of threats and made it more flexible. And so, this is a never-ending evolution, but it's important to understand that this is not the Cold War strategic war plan. It is a much more flexible and broader plan that incorporates all elements of national power.

One of the important development or changes that happened was this broadening after the end of the Cold War of strategic planning to regional adversaries. That's not to say we haven't planned nuclear attacks against regional adversaries before, but STRATCOM adopted this and brought it in, in a different way. This is from a briefing slide from when they were beginning to build the type of plan we have today. This was an earlier version of it that was called OPLAN 8044. And of course, you can see all the names of the countries are deleted and the details, but the pictures were left in the slide and you can then identify the different countries from that. But that's to say that the plan has evolved into a much more dynamic and complex plan to take on a broader range of scenarios and adversaries.

Who are those adversaries? Well, Russia is still in there. And so is China. We also estimate that, of course, Iran is in there. And of course, North Korea. Syria used to be in there. It's a little unclear, it probably dropped off the list after what's happened in Syria, I would expect. And then there's some kind of a 9/11 type scenario. Not that they would nuke terrorists or anything like that, but this relates to the policy of holding those that supply weapons of mass destruction to terrorist organizations. Hold them accountable.

It's not just nuclear. It also includes conventional. You can see at the top nuclear force employment plans and then something else that they don't want to talk about, or at least didn't want at that time.

The objective of course is to deter, like I mentioned earlier on, deter so that nuclear weapons and WMD are not used. But once

that fails, if that fails, you have to kick in with this variety of strike plans to hold categories of targets at risk. Take them out in certain ways or influence the perception of the adversary leadership, how they're being threatened and what would happen next, et cetera, et cetera. So this OPLAN 8010-12 has really evolved into sort of a very broad effort to try to influence. And it includes not only nuclear, but also conventional. And we see that exercised again and again. And the guidance is what the military translates into Xs on the map: the cross hairs. Where they're going to apply nuclear effects.

You have heard a lot about complaints about Russia's "escalate to deescalate" strategy from U.S. officials. But of course, the U.S. also has an escalate to deescalate strategy. It may not look exactly the same, but it's very much built on the same principle that you turn up the heat in response to something. And then you compel the adversary to back down. And you deescalate the scenario and you restore deterrence, so to speak, on conditions that are favorable to the United States and its allies. And you can go into Russian doctrine and you can see pretty much the same kind of descriptions.

Now, like I said, Russia has been criticized heavily for having an "escalate to deescalate" strategy. The assumption is that they're more willing to use nuclear weapons today than they were, say, 10 years ago. This is being disputed by independent analysts. But we can get back to that. Here are just the main components of Russia's nuclear use strategy.

To the left is what it says in the military doctrine. Two scenarios. One, if Russia is attacked by weapons of mass destruction or that its allies are. And the other is in response to aggression against the Russian Federation with conventional weapons that is so successful that it threatens the existence of the state. Then they resort to nuclear weapons. That's not very different from what our nuclear strategy issue says.

To the right you see a couple of extra points that were raised by the last decree issued by Putin here in 2020. Which also relates to the possible use of nuclear weapons if there's detection of a launch of a ballistic missile attack against Russia or its allies. Detection of a launch. It's probably not something that changes very much in the Russian plans, but it's an explicit one they offered now. And then of course there's enemy influence of the critical infrastructures that would be needed for Russia to retaliate. So that's like undermining facilities through, for example, cyber-attacks against command-and-control facilities so they would not be able to respond. Or space assets, warning satellites, and communication satellites. So those are sort of new details about it, but probably not something that changes the actual objectives and the way things would happen.

And here we can see what the United States has said about the Russians and their strategy. Very focused in the nuclear posture review about this "escalate to deescalate" strategy. And the notion here is that Russia would somehow not be deterred from using nuclear weapons. When they look at the U.S. arsenal, they would say, "Aha, the Americans don't have very many low yield weapons or of certain types, and therefore we can get away with using nuclear weapons first, early on, so that the United States and NATO would not even bother getting into the fight or increasing the fight."

And you can see John Hyten, former STRATCOM commander to the top saying, "I've looked at it; it's actually not escalate to deescalate." He said, "It's escalate to win." God forbid. We also have escalate to win. All countries that have nuclear weapons don't want to lose. But they make a lot of fuss about this. And you saw Paul Selva, Vice Chairman of Joint Chiefs of Staff even said, "They believe they can get away with striking us with a low yield weapon." There's no evidence, of course, of that in the public domain, nor is there any evidence in the public domain that Russians' respond strategy or decision strategy has anything to do with what yield a U.S. nuclear weapon has. They see nuclear weapons as nuclear weapons, and it's about the size and where the attack is coming, et cetera, et cetera.

Yields are very important on the list because they relate to collateral damage and the perception of damage and the seriousness of the attack. Of course, a single nuclear weapon can destroy a city. A very limited attack could make large areas uninhabitable.

To the right top, you can see a simulation of the radioactive fallout from a nuclear weapons attack against ground burst attacks. And we're talking about a couple hundred kilotons against all the nuclear bases that have nuclear weapons or nuclear weapons facilities in the west, in Western Europe. And then a number of storage facilities in Russia. So you can get an impression of the spread of radioactive fallout, even from a very limited attack. Down to the right you have a simulation of the fallout from a Russian attack on all U.S. ICBMs in those three missile areas. Large parts of the Midwest would be uninhabitable.

Down to the left you have a scenario simulating a nuclear attack against the Russian missile defense system around Moscow, based on what the plan was in the late-1990s. And of course, this is not a target on Moscow. This is not an attack on Moscow. This is an attack on military facilities in and around Moscow. So this is not an attack against civilians, but as you can see, the civilians are right in there. So this is an example of how it's sort of an illusion to talk about that if you don't have counterforce strategy, then you necessarily have city busting, and the other way around. So of course, once you turn up the heat in a crisis, you can have significant climatic effects regionally and in a larger scenario, globally, that could lead also to nuclear winter scenarios.

Even in small scenarios here, you have an estimate of what the casualties would be if just Indian and Pakistan unleash their arsenals against each other. Again, depending on the number of targets, you can see the reason they're very different is because the Indian cities are bigger, and they tend to be in areas where there is more material that can burn and there's greater density. On the right, you have Pakistani casualties, but we're talking about tens of millions here just for these relatively small arsenals.

Here's the scenario, this is from a study a few years ago, this is the effect of a single U.S. ballistic missile submarine attack loaded to the maximum with high yield W88 warheads. That's not how they actually load them, but it illustrates the enormous capability of just a single nuclear weapons platform. We have 14 of these guys and every time a U.S. ballistic missile submarine deploys at sea, it is the world's sixth largest nuclear power. It carries more explosive power than all the weapons that were dropped during World War II, including the nuclear bombs. These are fast capabilities. Significant military overkill. But these are being justified today. There is an upswing in the justification for modernizing and retaining significant arsenals of nuclear weapons.

This also relates to tactical. Yield, of course, is very important. I just want to warn here that low yield doesn't necessarily mean tactical. Just like high yield doesn't necessarily mean strategic. There's a great overlap between the two. But military planners these days are very interested in accuracy and lower yield. And the

2022]

reason of course is that it reduces collateral damage. It makes it less damaging for troops that might have to operate in an area or allied countries. But this is a particular strategy to try to make weapons more usable: reduce the collateral damage of it. But as you can see here, there's a lot of overlap between the two. Many tactical bombs also have high yield. Many strategic bombs have low yield. So it's not one or the other and there is a tendency to sort of say, "Oh, something is tactical, therefore it has to be low yield," et cetera.

The United States right now is emphasizing, we're reemphasizing, the importance of new tactical nuclear weapons or tactical-like nuclear weapons with low yield warheads. And the first to be deployed is this W76-2 low yield Trident warhead. It is on a strategic platform, on a strategic missile, but it's being sold as a tactical weapon in response to an early and limited Russian use of tactical nuclear weapons. So this is an interesting new development to follow. How to use and what are the implications of using, fast, prompt, strategic nuclear weapons in an early phase sort of tactical nuclear attack scenario. Now, this doesn't mean that the United States doesn't have other low yield nuclear weapons. It has about a thousand other forms of weapons, cruise missiles and gravity bombs that have low yield options like we touched upon before.

Oh, and by the way, this weapon has just been deployed here in the late 2019. And, now, this new emphasis with this W76-2, the need for a low yield strategic war is kind of silly, because like I mentioned, we have lots of nuclear weapons with low yield and we've had them for decades. And so on the right, you can see sort of an attempt to show the entire stockpile, what portion of weapons with low yield make up that stockpile and what that tiny portion of the W76-2 makes up that inventory. So the total arsenal, nah, Russia wouldn't be deterred by that. The inventory of low yield nuclear weapons, nah, Russia wouldn't be deterred by that. But this little weapon over here on that right side, that makes the difference. It's really a very ridiculous and silly form of argument, but it's living well right now under these circumstances.

Of course, for the war fighter, it's real. Lower yield means less radioactive fallout. Here, you can see some simulations of fallout from a ground burst attack on a Russian nuclear weapon storage site in the Kaliningrad region. It's a significant difference. In the top one with the normal size W76 radioactive fallout would reach Kaliningrad, the city of Kaliningrad. With the little one, it wouldn't. There would still be significant local damage, et cetera, but the casualties are very different.

This makes it attractive as a new nuclear weapon. And this is not an accident. Military officials have spoken clearly that there's an emphasis on trying to introduce accuracy and low yield in the stockpile to make more usable options available to the President. Military officials have talked about this on the right: how that changes the perception of what a military advisor would advise to the President in a crisis. It's not inconceivable that this has an effect on how early you could hear a recommendation to cross the threshold.

I will end on some examples from great power competition effects. We're seeing some really dramatic developments these years, most obviously captured by this notion here that the Cold War thaw is over and that the United States and Russia and China now have what's been coined "Great Power Competition." The way the institutions and the military interpret that language is that we are now back to the real business. Everybody is translating this into action, whether it's in doctrine, programs, weapons systems, operations. This is a very dynamic development that is in full flux right now.

We have also seen how rhetoric about nuclear weapons is increasing. The salience of nuclear weapons, the importance they serve, et cetera. So here's some examples of how operations are changing. Bomber operations are very visible, and they have changed significantly over the last five years. We now see strategic bomber operations being integrated in the nuclear mission more directly in support of regional commands.

So for example, there's an entire new war plan, new strategic plan for Europe, not just nuclear, but conventional. But the strategic nuclear bomber mission is being incorporated more directly and with greater emphasis in support of that plan. So we are now seeing these bombers going, not just to Europe to show the flag once in a while, but in increasingly offensive forward operations. Two areas where we just didn't operate nuclear bombers just a few years ago. They go right up across the Northern Norwegian coast, deep into the Barents Sea, further into the waters north of Russia, to trigger Russian air defense systems and see how they respond, et cetera. We see it in the Pacific where they're now beginning to operate all the way into the Sea of Okhotsk, where they haven't gone for a long time. We see it with ballistic missile submarine visits to bases, whether they be in the Pacific or in the Atlantic to show the flag of the strategic submarine force.

Russia, of course, is doing its part of it. It has nuclear strike bomb operations that fly into the North Sea and the North Atlantic. We see the same kind of operations in the Pacific. Very aggressive operations with dual-capable fighter aircraft. For example, here's a picture of a couple years ago, a super low-level over-flight over a U.S. destroyer in the Baltic. A reckless operation, basically, but it's part of the language that's now being used. A couple of Backfires that conducted a simulated nuclear strike on Stockholm a few years ago. So this is happening all over the place. And I haven't even talked about ground-based operations and exercises these days.

We're also seeing changes in China. How they've started to operate their forces further away from China, closer to and around Japan, even out toward Guam. Clear messaging here. And of course we see a land grab or a sea grab in the South China Sea with illegal construction of islands in international waters. And they're of course building a force that is much more capable than they had two decades ago.

So in sum and conclusions, enormous reductions from the Cold War. That's the good news. But the reductions have slowed and we're now seeing an uptick in some places. We also see increasing nuclear weapons in some countries, like I mentioned, possibly Russia, but certainly China, India, Pakistan, North Korea. We are seeing a very broad and universal modernization of the arsenals with the intention to keep significant nuclear forces for the indefinite future.

So the sort of NPT Article VI notion here that things are moving toward deep cuts and eventual elimination. It's not happening. Not right now. And then of course, we had the revival of the strategic competition with all that means for rhetoric, policies, exercises, weapon systems, et cetera, et cetera. So it's really a return not to the Cold War, which was a different beast. It is a return to a new form of strategic rivalry that looks different, but it has some of the same components. We are luckily not yet in a nuclear arms race in terms of numbers. That's not what's going on. It's more of a technological arms race or competition between these countries.

And then we see, which worries me, an increased focus on non-strategic nuclear weapons. Both in terms of the numbers and types you have, how they work, what the role of nonstrategic is in military strategy, and the emphasis of rhetoric about scenarios that involve early use of nuclear weapons. So with this, I'll just complete and pass it on to Scott. Thank you.

CHARLES MOXLEY:

Thank you very much, Hans. This is certainly an alarming presentation. If you could please take another few minutes, before we move on and talk with Scott, I would like ask a few broad questions. Hans, part of my job here is to develop a foundation for the later panels that will focus on the law relevant to nuclear weapons. And the law turns largely on the consequences of the weapons used. To that end, let me just ask you several broad questions, and ask if you would take a quick stab at them, though I know they need much more time to be covered fully.

One is the issue of the effects of nuclear weapons. We all know, and you alluded to a number of these in your presentation, that the immediate effects of nuclear weapons are the direct explosion and the heat. There are these immediate effects, as well as "immediate" or "prompt" radiation, which occurs at the time of the explosion, but largely dissipates along with the explosion, as I understand it.

But there are a number of other effects that continue beyond the actual event of the explosion. There is, as you explained, the radioactive fallout effects, and the electromagnetic pulse effects in the case of a high-altitude explosions, which can affect electronic equipment across broad areas of the world. There is also the possibility of nuclear winter. Then, you have the potential for a nuclear response from the target of the initial attack and of resulting nuclear escalation. There are different policies also affecting any of these scenarios.

Just broadly, from your perspective as to all of this, to what extent, if at all, are these other effects – such as the radioactive fallout, the electromagnetic pulses, the potential for nuclear winter, nuclear retaliation, and escalation – controllable by a state using nuclear weapons?

HANS KRISTENSEN:

Well, so at the operational level, they're controllable from the user's perspective. The point is you can set your height of burst differently so that you reduce very significantly the amount of radioactive fallout from an attack. That's a means of doing that. You can do that. You can also develop your weapon so that they have lower yields. Some of that we see these days with a deliberate attempt to try to reduce the radioactive fallout. You can do that as a war fighter. The question is whether that matters once the show gets going - whether countries would constrain themself in any meaningful way that would have an impact.

As I mentioned in my slides, there is a legal requirement for those, at least in the United States, planning the nuclear strike plans that they cannot target civilians explicitly or civilian facilities explicitly. That's an intent to, I presume, limit those effects. It's a complete illusion to imagine that once a broader nuclear scenario unfolds, that you can control these things at all.

I haven't heard people make an interesting argument about that, but it is something that, at least in the planning outset in the United States, at least they're trying to do. We don't know anything about, or very little about, what they're doing in other countries; how does that affect their planning, if at all?

This is very much one of those, "We have some information. We can speculate about it." Really, I wouldn't put my trust in any redeeming circumstances if this were about to happen.

CHARLES MOXLEY:

One other big question that comes in this context is the respective role of conventional weapons. We hear a lot about the exponential revolution in conventional weapons. There's prompt strike, there's the very high yield conventional weapons, with yields of 30,000 tons or something in that range? They've been called "the mother of all bombs" and "the father of all bombs."

To what extent, if you can estimate, is it likely the U.S. could address potential objectives with conventional weapons? That is, goals other than trying to scare people as a deterrence strategy; goals like destroying military targets or targets that it would face in the unfortunate event of a war? To what extent can we the U.S. do that? I realize the answer may be different for other countries without our conventional weapons capabilities?

HANS KRISTENSEN:

Significantly so, and we are doing it and have been doing it for a long time. For example, the Navy started phasing out several categories of nonstrategic nuclear weapons all the way back in the '80s and replace them with conventional. Nuclear was no longer needed for the mission. You could do it with conventional.

Later on, the Army has been completely denuclearized. There are lots of missions where nuclear has just fallen away. I have heard a former U.S. STRATCOM commander suggest that perhaps 30% of the targets or aim points in the strategic war plan could be, if not necessarily taken care of, certainly held at risk with conventional.

I would also just mention that, I think it was 2012 and it has been repeated since, the Joint Chiefs of Staff concluded that the United States could actually do with up to one third less deployed nuclear weapons than it has under the New START Treaty and still meet its military objectives.

What we're seeing now, for example, is the Bomber Force is being equipped with a conventional long-range strike capability that is beyond anything we've had before. Yes, we've had some conventional long-range cruise missile that we called CALCM. They've been phased out.

It's now being replaced with the JASSM, a very advanced longrange system, very accurate, very efficient, going on all the bombers, going on a broad range of tactical fighters as well as being deployed on, introduced into the Navy as an anti-ship missile as well. Those missiles are now a standard part of STRATCOM strategic nuclear exercises.

We've just had a Global Thunder exercise last month. They released photos of those missiles being loaded into the bombers during that exercise. This is real. This is happening.

CHARLES MOXLEY:

Thank you, Hans. Professor Sagan?

SCOTT SAGAN:

It's appropriate that I'm following on Dr. Kristensen and Professor Arakaki because I'm going to try to touch on a number of themes that I hope will come up throughout the sessions today.

The lawyers and political scientists who write on these subjects and think about these subjects really have to take into account three revolutionary differences between the way we thought about this problem during the Cold War and the way we need to think about it today. I will be summarizing my article, coauthored with Allen Weiner from the Stanford Law School, which was published in the Spring 2021 issue of *International Security*.¹

The first has been alluded to already, which is that the threats the United States faces are quite different. We used to worry about whether we can have a no-first-use policy because the Soviet Union claimed it did. We were worried about our policy of using nuclear weapons first to potentially deter or to respond to a large scale Warsaw Pact invasion.

Today, we face adversaries who are worried about our conventional capabilities and have a first-use policy, escalate to deescalate, as Dr. Kristensen suggested. That means we have to think about how we respond to limited uses. Moreover, we face both an adversary that has an enormously large arsenal, Russia, and one that has a very small arsenal, North Korea. Our planning has to be different and our thinking about this has to be very different because we have different kinds of scenarios.

Second, there has been an accuracy revolution and a low-yield revolution. During the height of the Cold War in 1960, we deployed our first A1 summary launch ballistic missile. It had a circle error probable of 5,900 feet. It carried a 600-kiloton nuclear warhead. What that means is that half the time that massive thermonuclear weapon would've detonated over one point miles away from the intended target. Back then, American nuclear weapons were indiscriminate.

That didn't bother the U.S. because Admiral Arleigh Burke, for example, said the ability to destroy major cities was what we wanted to have. Contrast that to some of the low-yield weapons that Dr. Kristensen has talked about. The B61 Mod 12 reportedly

^{1.} Scott D. Sagan & Allen S. Weiner, *The Rule of Law and the Role of Strategy in U.S. Nuclear Doctrine*, 45 INT'L SEC. 126 (2021).

has reduced yield to 2% of the atomic bomb that destroyed Hiroshima.

It would generate far less radioactive fallout depending on how it's used and could fall with an estimated 30 meters of the intended target. What that means is that even though there's a debate about whether this is a good thing or a bad thing, whether this will lower the threshold or make deterrence more robust because it would enable us to respond with a more legal response, we have to take that those basic facts aren't in dispute.

Lastly, and I think this is so important for the lawyers to understand here, is that, as has been mentioned, the Laws of Armed Conflict now are robustly discussed in all war planning in the United States.

The JAG Corps, which had, I think 20 individuals in it at the end of the Civil War, is today the largest law firm in the country. It is very surprising, I must say, that you're having this meeting without a single JAG, as far as I can tell, explaining how they go about thinking about this. The plans that Dr. Kristensen has outlined have been vetted through a legal process.

I happen to think that part of that legal process is not very well done, but part of it I think is, and it behooves us as people on the outside to interact to the degree possible with people on the inside, including the lawyers, not just the STRATCOM commanders, but including the lawyers.

General Robert Kehler, the former commander of STRATCOM, has said that the guidance that was mentioned earlier led the command to develop nuclear, I'm quoting here, "Tactics and techniques to minimize collateral effects and to expand nonnuclear strike alternatives." What are those?

One thing that I've put on onto the syllabi, and I encourage people to take a look at it if you can, is an effort to try to think about what this would mean about a scenario that we know a lot about, which is the bombing of Hiroshima and Nagasaki. Would the Laws of Armed Conflict as properly understood make what we did in 1945 illegal today?

Allen Weiner and I have the lead article on the 75th Anniversary of the *Bulletin of the Atomic Scientists*² that argues that

2022]

^{2.} Katherine E. McKinney, Scott D. Sagan, & Allen S. Weiner, *Why the Atomic Bombing of Hiroshima Would Be Illegal Today*, 76 BULL. ATOMIC SCIENTISTS 157 (2020).

yes, it would be illegal today. This gets back to Professor Arakaki's talk. In 1945, we had two committees that looked at what to do about the bomb.

The targeting committee, mostly people from Los Alamos, and they said we should drop the bomb on Kyoto first and second in the center of Hiroshima. Third, we're going to drop the third one, which was going to be ready in mid-August, on the next city down. What the next higher level committee, the interim committee was headed by Secretary of War, Henry Stimson, who had been appalled by the incendiary bombing.

He had not been able to stop it but was a person who really believed in what today we would call the Laws of Armed Conflict. He thought that this was tragic what we were doing. Therefore, he brought together an interim committee to say, "Let's not drop the bomb on Kyoto." He asked President Truman not to do that and instead drop the bomb on military industrial targets in Hiroshima, and the surrounding workers' homes, instead. Truman agreed he wouldn't drop it on Kyoto.

I think even the interim committee, nevertheless, wanted to kill lots and lots of Japanese civilians. If you look at the principle of distinction, if you tried to think about that today, even in that kind of scenario, I believe a good JAG lawyer would say, "Sir, this is illegal. One, you may say you're trying to destroy just a military industrial target, but if you're actually going after the workers' homes and the workers nearby, that's a violation of the principle of distinction."

"Second, even though the military target, a factory might be a legitimate target today, in terms of the principle of proportionality, it was such a low importance target that killing lots of innocent people in order to destroy that target would be considered disproportionate today."

"Lastly, under this principle of precaution, the additional protocols, additional aspect of this, you must use the lowest yield weapon to destroy a target, to try to have all feasible precautions to protect civilians." Even if it's a legitimate target, even if it could justify under proportionality, which I don't think would be the case in that scenario.

Even if it could, you still have to take extra precautions, which means using a lower yield weapon or a conventional weapon, if it can't be done. I would think under the 1945 scenario, if this was the case, that a senior commander or a JAG lawyer would have to say, "Sir, this proposed attack is illegal."

I just wanted to conclude, since you mentioned the risk of accidents, by giving the audience a sense of what could go wrong here. Even if you had legal plans, I asked you to go back to the summer of 2017, and then the early winter of 2018, when we were threatening back and forth between the United States and North Korea.

We had this incident in early 2018 in Hawaii, where an operator called out that there was a warning, that there was an incoming missile coming into Hawaii, trying to hit Pearl Harbor. Many people panicked. Some people did the right thing, which is stay home, get into the basement if you have one.

Others went outside to see what was going on and were deeply worried. It turns out it was a false warning. We didn't panic in Omaha or at NORAD headquarters, or in the Pentagon for three reasons. One, we have redundant sensors that all said that, "No, there's no attack coming." Two, we had professional personnel who said, "We need to admit that we made a mistake."

They did quite very early on. Third, we really didn't think that North Korea was about to attack Hawaii in a first strike.

Imagine that incident occurring in North Korea instead of in the United States. First, they don't have redundant sensors and if one of their primitive radars reported that the United States attack was starting, they would have an incentive to try to preempt everything else, to try to launch as much as they could.

Second, they don't have professional military people often because you don't get fired or demoted if you make a mistake in North Korea; you can get killed. They have yes men and the people who would deny that they made a mistake. Third, Kim Jong-un did think the United States was about to attack North Korea. Why? Because President Trump kept threatening to attack North Korea.

That was part of our policy. I think that the nuclear weapons that we have built create an inherent danger and that the laws have both put extra constraints on but they've also encouraged the U.S. Military to build lower yield weapons, which are more lawful, but also create other kinds of risks. I think we're in a new era of thinking about this.

I strongly support the effort that you are making to bring law and political science and scientists and engineers together to think

2022]

through the implications of a world that we're walking into that is very dangerous. Not just despite some of the questions of the law, but also because the law has encouraged some of these activities that may have counterproductive effects.

CHARLES MOXLEY:

Scott, could I ask you a question about the nuclear strategies such as deterrence, which you and Hans Kristensen both talked about? I think Hans said 900 of the U.S. missiles are on high alert and some thousand of the Russian missiles are on high alert. Talking about risk, do you have a sense as to the likelihood of escalation in the event of a nuclear strike? Let's put aside the question of what happens when an event looks like an incoming strike that isn't one. If, God forbid we were to get in into an actual nuclear strike by either the U.S. or Russia against the other, how likely do you think it is that things will spiral further?

What do you think is the likelihood that there'll be a response of a nuclear nature and an escalation, just based on the reality of this world as you see it?

SCOTT SAGAN:

Anyone who tells you that they can put a percentage estimate on the likelihood I think is making things up. We don't know. It's a world that we've never entered. What we do know is that we occasionally in the United States Government have exercises and play war games to try to figure out how would humans react in these kinds of situations.

In Fred Kaplan's superb book, *The Bomb*, he reports on a series of war games done inside the Obama administration in 2016, the last year of the second term. The principles and the deputies both met and discussed the following scenario in a war game. What if there's a conventional conflict between Russian forces going into the Baltics and NATO forces?

The Russians, following this principle of escalate to deescalate, try to stop the war by having one nuclear weapon go off and launching it against a NATO base. According to Kaplan, when the deputies met, they actually said, "Let's not respond with a nuclear weapon. Let's respond conventionally, attacking the base from which the Russian nuclear strike had originated, and take the

high road, and tell the Russians we can fight this conventionally and not escalate with nuclear weapons."

When the principals met, however, they took a different position. They wanted to respond under the colloquial use of the term proportionality, not the legal sense of the term proportionality. They wanted to respond with nuclear weapons to remind the Russians that escalation will be met with a similar kind of weapon.

Yet it was pointed out to them that if you do that against a Russian military base, still following the Laws of Armed Conflict, the Russians would view that as an attack by the United States on Russia and their doctrine would require them to respond against the United States, not just against the NATO base.

Therefore, according to Kaplan, the principals decided to use three nuclear weapons on military targets inside Belarus, even though Belarus had not been involved in the initial attack. Now, that shows to me two things. One, it shows to me that you should have JAG lawyers in the room all the time to remind people about the Laws of Armed Conflict, even when high level people who are not trained in these issues discuss it.

They think in different ways than I believe they should have in that case. Second, this event suggests to me that, because of our conventional capabilities, we should follow the principles of precaution for legal reasons, but also for strategic, common sense reasons, emphasize conventional responses, even in retaliation to a nuclear use. That's a controversial position, but I think it's the right one.

CHARLES MOXLEY:

Let me ask you, Scott, and again, I ask this in order to get the information for the law panel later in the program, when we look at the landscape of facts and policies to which the law would apply. You are the experts on the facts and the policies whom we look to for this information. Let's consider low-yield nuclear weapons. We've heard that they are no longer the tactical weapons of the Cold War, that they are more complex and nuanced than that. What can you tell us about whether contemporary low-yield nuclear weapons emit radiation or do so in a controllable way? This may in part be a rhetorical question. Every nuclear explosion emits radiation and of course we know that radiation is in some ways related to yield.

Is my understanding correct that low-yield nuclear weapons will produce radiation and there'll be a potential for the radiation to spread? But my main question is, what are the risk factors associated with this type of weapons, with respect to spread of radiation?

SCOTT SAGAN:

Well, from a low-yield weapon, depending on whether it's a ground burst or an air burst, it could have significantly less collateral damage from radiation. The collateral damage would have to come from nearby sources. That depends on where the targets are. Against some Russian military bases, near cities, even a low-yield weapon would produce some collateral damage. But against other targets, the collateral damage might be significantly reduced.

Against North Korea, for example, Ankit Panda's book, *Kim Jong Un and the Bomb*, he reports on a U.S. war plan that he was told about, in which the plan was to use 20 D5 missiles against 20 suspected North Korean missile sites located in rural parts of North Korea. The idea was that if we have evidence that a North Korean attack is imminent and unavoidable, or that it has started, and the initial wave has come, we're going to go after those targets.

The debate within the STRATCOM, according to Panda's book, was twofold. One was whether the collateral damage would be disproportionate. My understanding is that people said no, because those high-yield or medium yield North Korean weapons are targeted against American cities and South Korean cities because they don't have an alternative because their missiles are so less accurate.

On proportionality grounds, this might be proportionate even if there was significant collateral damage. Second, the debate then was, well, if that's the case, shouldn't we still under the principle of precaution use conventional weapons again? This is where I think a hidden factor comes into play.

You saw in one of Hans Kristensen's slides, the NPR's comment about, "Well, we will do this consistent with military objectives." Military objectives include a damage expectancy estimate. "What is the requirement", I put in quotes around it "for

how confident you have to be that you can destroy that target?" The military is given a figure often.

You could have to have 95% probability or 80% probability, or 70% probability. Then, they calculate this out and this is where I think civilians need to get more deeply involved, and where our legal analysis needs to get involved. Lawyers are trained in this area, because of tort law, to think about how to think about probabilities and responsibilities in this area.

If you think you have to have 100% effectiveness, then I think a conservative JAG lawyer is going to say, "We're going to have to put big weapons on it." If you say you have to have an 80% or 70% probability of destruction, then actually you can relax a little bit and put a conventional weapon against it. That's a challenge for civilians to place on the military.

CHARLES MOXLEY:

Thank you, Scott. We're running out of time. There are a couple questions from the audience This is a question from Nicolas. He asks, "Is this talk of elimination, abolition, would it be possible? Could we even do it really?"

SCOTT SAGAN:

Yeah, physically we could. The question would be, if you did it without verification, I think that the probability of using nuclear weapons would go up if there was ever a war. I think if you did this appropriately with strong verification, then I think it is feasible and could be done. To me, I thought the Obama approach to say, "This is my goal," was the right approach.

That was after all following the law since Article VI is in a treaty that we signed and ratified, and we said that we would work in good faith. Work in good faith doesn't mean that you have to get there tomorrow, but it does mean that you have to take seriously your responsibilities. Part of that is to have a step-by-step approach to get fewer weapons.

Partly it's to reduce the role of nuclear weapons and partly it's to work on better verification schemes, and to develop that technology so that we could actually get to low numbers without what scholars sometimes call the instability of low numbers. I think it's possible, but we're not close yet.

[Vol. 45

CHARLES MOXLEY:

Thank you, Scott.

SCOTT SAGAN:

Thank you. I look forward to seeing sessions later on.

CHARLES MOXLEY:

Let me turn to you, Hans. Could you take this question from Peter Davidse, which I think you've sort of answered, but maybe pull it together in a brief summary. Peter asked, "Could you give us a rough relationship, a statement of the U.S.'s strategic versus its low yield nuclear weapons?" You've explained that the low-yield weapons are not really strictly tactical anymore, but just explain what the constellation of the numbers are in the U.S. arsenal, and what the breakup is, in terms of high-yield and low-yield weapons.

HANS KRISTENSEN:

Yes. Overwhelmingly, its strategic forces focused on the triad launchers. In terms of warheads, we estimate that the number of tactical warheads in the U.S. arsenal is down to less than 300. It's probably about 250, 230, something like that. And they're only earmarked for use by fighter jets. So some are in Europe, of course, a 100 to 150 warheads on Europe. And some are for use by allied forces as well. But the vast majority is strategic.

And getting back to this issue about conventional versus nuclear, that this is partly a consequence of this, you could call it revolution in military planning where nuclear requirements just fell away and conventional forces became good enough that you could achieve your military objectives without resorting to nuclear. So that's a good development. That's why it's double sad, if you will, that we are now seeing somewhat of a swing back into the muddy waters of trying to argue for non-strategic nuclear weapon types of capabilities. Certainly for weapons use scenarios in tactical nuclear weapons scenarios.

CHARLES MOXLEY:

Just one final question. If I understood correctly, I think you said it was the military view that, if they looked at the targets in the

68

U.S. plans, that they believed they could address about a third of the targets with conventional weapons. I just wanted to ask your view on this. I've seen estimates suggesting that the general view initially was that "we'd use low-yield for hardened and deeply buried targets," but that that approach proved unsuccessful, as I understand it, because you can't really penetrate the ground with the lower yields; you need to go to high yields.

And so, my sense has been that conventional weapons, because of the precise accuracy that you talked about, could be enough to destroy targets in a very high percent of cases, but I don't know if that perception is correct.

HANS KRISTENSEN:

Well, yeah, it comes back to what Dr. Sagan said about the requirements for how reliable your war plan should be in terms of your kill probability. And again, if that is a very high number, you might want to resort to nuclear. Certain targets, certainly underground in some set areas. Area targets are also important nuclear targets, just because you need to expend a lot more conventional weapons onto a base in order to take the entire base out. Or you can do it the smart way: you just take out one or two aim points, and that makes the base impossible to operate.

So there are ways to doing this with conventional, but I just want to, if you go with Google Earth today, go and look at some of the Russian ICBM silos that are being upgraded in the Kozelsk missile field southwest of Moscow. You will notice that these new sites, the structure now includes advanced air defense systems. It didn't use to have that before. Now, the reason they do now is because they're expecting non-nuclear systems would go in, whether they're cruise missiles or drones, and try to incapacitate the silo. So this is happening.

CHARLES MOXLEY:

Thank you Hans. We now turn to Ariana Smith from the Lawyers Committee for Nuclear Policy. Ariana is going to introduce the Honorable Izumi Nakamitsu, the UN Under-Secretary-General and High Representative for Disarmament Affairs, for the keynote address. I thank the members of this latest panel.

[Vol. 45

KEYNOTE ADDRESS

Izumi Nakamitsu*

Introduction by: Ariana N. Smith**

ARIANA SMITH:

Okay. I hope everybody's had a moment to take a quick break so that we can jump right back into things. For those who may have recently joined us, my name is Ariana Smith, and I'm the Executive Director of the Lawyers Committee on Nuclear Policy, a co-sponsor of the event today. On behalf of all of the sponsoring organizations of this conference, I'm honored to introduce our keynote speaker this morning.

Ms. Izumi Nakamitsu serves as the Under-Secretary-General and High Representative for Disarmament Affairs at the United Nations. Ms. Nakamitsu is well experienced both within and outside of the UN system, having previously worked among other notable roles with the UN Development Program, on the Foreign Exchange Council to Japan's foreign minister, and as a professor of international relations. I'm sure I do not speak only for myself when I say that I'm very much anticipating her informed insights as our keynote speaker here today. So without delay, I am very pleased to formally introduce and turn the floor over to Ms. Izumi Nakamitsu.

IZUMI NAKAMITSU:

Thank you. Thank you very much. Ladies and gentlemen, it is an honor for me to have been given this opportunity to address this video conference on nuclear weapons and international law. While there are many aspects of international law relevant to nuclear weapons, today, I would like to focus on the nuclear disarmament regime and its roots in international law.

In the 75 years since the creation of the United Nations, the international community has established an international regime

^{*} UN Under-Secretary General and High Representative for Disarmament Affairs.

^{**} Executive Director, Lawyers Committee on Nuclear Policy

composed of diverse instruments to advance its goal of a total elimination of nuclear weapons.

It is a mix of multilateral, plurilateral, and bilateral treaty law supported by enduring norms against nuclear weapons. Taken as a whole, the regime imposes a number of important obligations on states, many of which are domesticated into national laws. It also forms the foundation for and provides a forum to negotiate further nuclear disarmament measures.

Though this system has moved us closer to the goal of a world without nuclear weapons, we are not there yet. And indeed, comparing the situation of nuclear weapons to that of the other weapons of mass destruction, and they are chemical and biological weapons, there is still a considerable way to go.

The latter have been totally prohibited by multinational treaties that have been ratified by nearly all states, including many of those that possessed those weapons in the past. Today, I would like to provide an informal assessment of the nuclear disarmament regime as it stands now and make some suggestions for how it can be further strengthened.

Ladies and gentlemen, it has become axiomatic that the Treaty on the Non-Proliferation of Nuclear Weapons or NPT is the cornerstone of the global nuclear non-proliferation regime and an essential foundation for the pursuit of nuclear disarmament. Though not entirely successful in stopping the spread of nuclear weapons beyond the five countries that had acquired them by 1967, it has prevented the once predicted nightmare scenario of a world with dozens of nuclear-armed states.

From a historical perspective, the negotiation of this treaty came about as the disarmament negotiators were shifting to what has become known as the "step by step" or "building blocks" approach. Such steps included the Partial Test Ban Treaty and the Threshold Test Ban Treaty, the Outer Space Treaty, and the Seabed Treaty, and reductions in the nuclear arsenals of the Soviet Union and the United States under various agreements.

While the NPT has been by and large successful in fulfilling its non-proliferation mission and facilitating the peaceful uses of nuclear energy, its non-nuclear weapons state parties have long expressed concerns that their nuclear-weapon States counterparts are not living up to their obligations under Article VI of the Treaty in which "each of the parties to the Treaty undertakes to pursue

2022]

negotiations in good faith on effective measures relating to secession of nuclear arms race at an early date and to nuclear disarmament."

After the indefinite extension of the NPT in 1995, its review conferences became de facto nuclear disarmament negotiating forums. Unfortunately, implementation of agreements on further steps in disarmament has been either slow or absent, as some consider them to be no longer reflective of the international security environment.

The Comprehensive Nuclear-Test-Ban-Treaty or CTBT, the next major step in the step-by-step process, was adopted in 1996 and has been widely ratified, but due to its onerous requirements, it has yet to enter into force. The Conference on Disarmament has since been unable to agree to begin negotiations on a fissile material cut-off treaty or on any other instrument for that matter. Indeed, what is referred to as the "UN disarmament machinery" is by and large paralyzed when it comes to nuclear disarmament.

Ladies and gentlemen, the multilateral global nuclear disarmament regime has always evolved in parallel with and has been complemented by regional, plurilateral and bilateral efforts.

At the regional level, several regions have declared themselves to be nuclear weapon free zones and adopted treatybased obligations to this effect. These include Latin America and the Caribbean, the South Pacific, Southeast Asia, Africa, and Central Asia. While each of these treaties was separately negotiated, they all contain a legally binding renunciation of nuclear weapons by all states of the region. Today, approximately 39% of the world's population lives in nuclear-weapon-free zones.

At the bilateral level, the most successful examples are the series of treaties between the United States and the Soviet Union, and later, of course, the Russian Federation, on the reduction of the size of their deployed nuclear arsenals. As many of you will know, the final arms control treaty remaining in force between the United States and the Russian Federation, New START, is set to expire in February 2021 unless extended. Between them, these two countries still possess more than 90% of the world's nuclear weapons. A return to unconstrained strategic competition between them is a dangerous proposition. For this reason, UN Secretary-General António Guterres has called for the immediate extension of New START by the maximum five-year period to buy time for negotiations on future agreements.

A key to a successful implementation of these arrangements has been the inclusion of strict verification mechanisms that build confidence in mutual compliance with treaty provisions. Despite its often rarified status, the nuclear disarmament regime does not exist in a vacuum. The trend towards so-called humanitarian disarmament based on the disproportionate harm that certain weapons would cause started to affect the nuclear weapons discourse by the end of the 20th century.

The International Court of Justice, in rendering its 1996 advisory opinion on the legality of the threat or use of nuclear weapons, grappled with the tremendous humanitarian and also environmental impacts of nuclear weapons. Among other things, the Court unanimously determined that nuclear weapons were subject to international law, including international humanitarian law.

In 2010, the NPT review conference expressed deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons. These potentially dire consequences were more fully explored in a subsequent series of conferences, which prompted many states to conclude that the only appropriate cause of action was to stigmatize, prohibit, and eliminate nuclear weapons.

The result of the ensuing process was the Treaty on the Prohibition of Nuclear Weapons or TPNW. When it enters into force on 22 January next year, 2021, it will, for its States parties, make the possession of nuclear weapons completely illegal in all circumstances. Many TPNW proponents argue that by prohibiting nuclear weapons in the same way as the other weapons of mass destruction the TPNW would contribute to the stigmatization of the possession of nuclear weapons. The treaty, therefore, is not an end unto itself, but rather one more tool in the global regime that seeks the total elimination of nuclear weapons.

Ladies and gentlemen, in his disarmament agenda, *Securing Our Common Future*, Secretary-General Guterres noted that safeguarding the existing norms against nuclear weapons and their proliferation was an essential prerequisite for further progress towards the total elimination of nuclear weapons. Adherence to such norms reinforces the disarmament regime's legal instruments.

Since they were first used against Hiroshima and Nagasaki 75 years ago, the norm against the use of nuclear weapons has been respected by all states. The logic for this was captured by President Reagan and General Secretary Gorbachev when they jointly stated that a nuclear war cannot be won and must never be fought. As a result of the further study of the humanitarian consequences of nuclear weapons, over 127 states affirmed that "it is in the interest of the very survival of humanity that nuclear weapons are never used again under any circumstances."

The norm against nuclear testing is one of the most important successes of the Cold War. Nuclear weapons have had devastating and long term environmental and health effects on the regions in which they were tested and have historically disproportionately affected indigenous populations. Since 1998, with one exception, all states possessing nuclear weapons have abided by a moratorium on explosive tests.

As essential as continued existence of these norms is, states have long sought the certainty brought by codification into treaty law the norm against the use of nuclear weapons. For example, it is enshrined in the nuclear weapon free zone treaties, and the TPNW. The norm against any testing of nuclear weapons is likewise enshrined in the nuclear weapons free zone treaties, the TPNW, and of course the CTBT. Unilateral moratoria on the testing of nuclear weapons are valuable, but no substitute for a verifiable legally binding obligation. The verification regime managed by the CTBT continues to demonstrate its effectiveness, yet it will only be fully operational, and therefore able to provide even greater confidence, with the treaty's entry into force.

Now, ladies and gentlemen, the nuclear disarmament regime is a patchwork of overlapping treaties, instruments, agreements and also norms. While factors such as the current international security context have, unfortunately, impeded its further development, there are, I believe, a number of steps states can take to laying the foundation for strengthened regime.

First, long overdue goals such as the entry into force of the CTBT, and the negotiation of a fissile material cut-off treaty should be pursued as a matter of priority and as integral elements of a world free of nuclear weapons. Second, with the TPNW about to

enter into force, its state parties will have to operationalize and develop a treaty regime, including by completing the tasks related to the total elimination of nuclear weapons left to them by the treaties' drafters.

Third, I encourage the inhabitants of other regions to pursue further nuclear-weapon-free zones as effective measures in pursuit of a world free of nuclear weapons. In this context, the beginning of long overdue negotiations between states of the region on a Middle East zone free of nuclear weapons and other weapons of mass destruction are welcome.

Fourth, treaty based nuclear disarmament will require effective nuclear disarmament verification. Achieving the total elimination of nuclear weapons will require all states to have confidence in compliance through verification. Trust but verify, as the saying goes. Though the exact nature of a nuclear disarmament verification regime will depend on the specificities of the treaty it is meant to verify, important technical work can already begin. Discussion on principles by UN groups of governmental experts and practical exercises to explore the necessary procedures and technologies by groups of states are already ongoing.

Fifth, increased attention is also being paid to ways of reducing nuclear risk, including risks for accidental or unintended use of nuclear weapons. Nuclear risk reduction is no substitute for nuclear disarmament, but it can reinforce the norm against the use of nuclear weapons.

Six, states, including the Nuclear-weapon States, have already made a number of detailed commitments related to nuclear disarmament, most notably in the context of previous NPT review conferences. The reaffirmation and expedited implementation of these previous commitments is the logical next step.

The commitments and obligations that make up the nuclear disarmament regime are mutually reinforcing. Failure to honor these commitments or fulfill those obligations weakens the regime, and therefore, the framework we use to prevent the use of, and to bring about the elimination of, nuclear weapons. Given the implications of nuclear weapons for human, national and international security, this is in no one's interest. Conversely, prioritizing the fulfillment of nuclear disarmament commitments and obligations improves the security of all, and is in the interest of all. Ladies and gentlemen, I would like to conclude my remarks with the hope that whatever positions you take on the legality of the threat, use, or possession of nuclear weapons, we can all agree that over time, laws and norms evolve and develop. We, humankind, have witnessed this over our history. Through the United Nations, we continue to pursue the progressive development of international law. With good reason, nuclear disarmament remains the United Nation's highest disarmament priority, and supporting dialogue to return to a common path towards the total elimination of nuclear weapons remains the first task towards its achievement.

The Secretary-General and I remain committed to facilitating this dialogue and will continue to work with all states and civil society actors towards this end. I thank you very much for your attention.

ARIANA SMITH:

Thank you so much, Ms. Nakamitsu, for your incisive comments, which lead wonderfully into our next panel of the day.

THE ROLE OF THE UNITED NATIONS

Moderator: Ariana N. Smith+

Panelists: Hon. Izumi Nakamitsu*; Dr. John Burroughs**; Allison Pytlak***

ARIANA SMITH:

This panel will dig more deeply into the role of the United Nations as well as civil society engagement in the UN system related to nuclear disarmament. In addition to Ms. Nakamitsu, I'm pleased to welcome to the conversation, Dr. John Burroughs, Senior Analyst at Lawyers Committee on Nuclear Policy, and Ms. Allison Pytlak, Program Manager of Reaching Critical Will, the disarmament program of the Women's International League for Peace and Freedom.

After we hear from our panelists, I look forward to opening the floor to the audience. So please use the Q&A function to submit your questions to any or all of our panelists at any time during the program, and we'll aim to get to as many as we can. And with that, I'll turn the floor over now to Ms. Allison Pytlak.

ALLISON PYTLAK:

Thank you, Ariana, and hello to everybody in our virtual audience today. Thank you very much to the event organizers for including the Women's International League for Peace and Freedom on this panel and in your event. So in my remarks, I'm going to build a bit on what we've just heard from the high representative about the different treaties, instruments and various fora that together make up the legal regime relating to nuclear weapons.

⁺ Executive Director, Lawyers Committee on Nuclear Policy

^{*} UN Under-Secretary-General and High Representative for Disarmament Affairs

^{**} Senior Analyst, Lawyers Committee on Nuclear Policy

^{***} Programme Manager, Reaching Critical Will, Women's International League for Peace and Freedom

I will also highlight and describe the role of civil society in advancing international law on nuclear weapons at the UN, as well as beyond. We know that the UN is a house made up of its member states who are the ultimate decision makers and responsibility holders. But that being said, there is a lot of scope for other actors to contribute and engage, which sometimes may not be as obvious from the outside.

So we've now just heard about the legal architecture in which different nuclear weapons treaties were negotiated, or the architecture that they create. And in case you're feeling as though this is a bit of an alphabet soup of acronyms and abbreviations, or you're wondering how all of these bodies and fora are connected to one another, but are separate, but still under the UN umbrella, I'm going to do a quick, but also non-exhaustive mapping.

There are six main organs of the UN: the UN General Assembly, the UN Security Council, and the International Court of Justice are three of these six. And we've heard some of them referenced in the high representative's remarks just now. And I think that John will speak to some of the others in his presentation.

They all have distinct mandates and responsibilities as well as ways of working and modalities for non-governmental participation. And these delineations can be helpful for practical reasons to get things done. But at the same time, I would say that there is a strong and probably growing argument against being cautious about artificial siloing. This comes through a little bit later on what I'm going to say on human rights.

The General Assembly is the main deliberative organ of the UN. It is composed of representatives from all of its member states, each of which has a vote. And within the General Assembly, there are six different committees. The First Committee is the one that relates to international security and disarmament. It meets once a year for about four to five weeks. In fact, the 2020 session just wrapped up two days ago. And it is where resolutions on disarmament matters are negotiated and adopted.

Nuclear weapons are a very significant part of the First Committee's work each year. To give an example, I did a quick tally before this presentation, and I believe that around one third, maybe 22 of the just over 60 resolutions that were adopted during the 2020 session were within the nuclear weapons cluster. And the way in which states talk about nuclear weapons within their statements, and then the nature of the resolutions include the full range of issues: testing, use, disarmament, nonproliferation, and specific regional issues.

And the First Committee's resolutions have been able to give rise to other initiatives. So very recently, the Treaty on the Prohibition of Nuclear Weapons, or TPNW that we just heard about, it began in the First Committee where a resolution adopted in 2016 gave member states the mandate to negotiate the treaty. And it is now a standalone instrument and will enter into force as binding international law in January, but it has origins in the GA (in the First Committee) and will always have a close relationship with the UN and the secretariat, including because of certain provisions within the agreement.

If we look a bit further back in time, we see that the 1996 ICJ advisory opinion, that John will talk more about, also has its roots in a decision taken by the GA, and the initial discussions that led to the development and negotiation of the nuclear NPT were also had in the General Assembly. Now while the first committee of the GA is focused on international security and disarmament, the Security Council has primary responsibility for the maintenance of international peace and security, which means that there is sometimes the potential for overlap between the topics that the bodies discuss. Although member states try to be very clear about maintaining the delineation, once in a while what I would call "turf issues" come up. And we're seeing that a little bit right now with respect to chemical weapons. The Security Council has 15 members and each one has one vote. It's important to note that under the Charter, however, all member states are obligated to comply with what the Security Council decides on. Relevant debates and resolutions within the Security Council relating to nuclear weapons have tended to focus more on non-proliferation than on disarmament, which might not come as a surprise, considering that the five permanent members of the council are nuclear-armed states.

Turning away from New York and to Geneva, I'd like to talk a little bit about the Human Rights Council and the human rights mechanisms. The Human Rights Council also came out of the General Assembly in 2006. It is an intergovernmental body within the UN system composed of 47 states, and it is responsible for strengthening the promotion and protection of human rights, for addressing human rights violations, and making recommendations on them. It meets in Geneva and has, over time, set up different mechanisms and institutions by which it does its work. This includes things like the universal periodic reviews (UPRs), which is a peer review system among states in the area of human rights. In addition, a lot of major human rights treaties also have treaty bodies by which they evaluate and monitor the performance and implementation of their requirements by their states parties. So for example, the Convention to End All Forms of Discrimination Against Women (CEDAW), has the CEDAW committee.

The Human Rights Committee is the body of independent experts that monitors implementation of the International Covenant on Civil and Political Rights. You may be wondering, why is she talking about the human rights parts of the United Nations? This is a meeting about nuclear weapons, we should be talking about its security bodies and security frameworks. But international human rights law is extremely relevant, and some would argue that it is an underused or overlooked part of international law for addressing the illegality of nuclear weapons, particularly in contexts where IHL does not apply. The use of nuclear weapons is a violation of the right to life, as the Human Rights Committee concluded in its General Comment 36 of 2018, which John will talk more about. There have been more than 10 recommendations made to states in the context of their UPRs to sign the Treaty on the Prohibition of Nuclear Weapons.

And actually, just moments before I logged into this conference today, I had an email from a colleague in Geneva who said that there were, I think, 10 more additional recommendations made in this last round of the Committee's session. The Human Rights community and its peer review mechanisms have also been a good place for civil society to engage in this work. WILPF has raised concerns about nuclear weapons or urged states to join different nuclear weapons treaties in our submissions to the UPR and to CEDAW committee reviews, as well as statements that we've made in the Council. John can correct me if I'm wrong, but I believe that LCNP has also made submissions to the Human Rights Committee and to the Human Rights Council. So, I wanted to share this, because while it might be a bit less obvious or not an immediate go-to place, the human rights mechanisms are also a very important part of the landscape.

So turning now to civil society and what we do and how we fit in, I want to make a few broad points. First, it's important always to remember that civil society, that that term sounds a bit monolithic, but we're not. We're incredibly diverse in what we do and where we come from and the motivations that bring us to this work. And because of that diversity, we can offer a lot of different information, perspectives, and support across a very wide range of nuclear weapons issues and their related subtopics, as well as bring along support from diverse bases and constituencies. Second point is that I think it's helpful to be mindful that when we talk about civil society advancing international law at the UN, there are the activities that we can do when we're physically there and in the room and at the meetings. And these are things like organizing side events. launching reports, bilateral advocacy, delivering statements.

But also, those things that we do elsewhere but that are related to UN decision-making and processes. And I'm thinking about the national advocacy and the national movement building that really feeds into and can influence the meetings that are happening in the UN setting. Maybe a general thought about the value-add of civil society: I feel very much that working in global networks or alliances, like the International Campaign to Abolish Nuclear Weapons (ICAN), for example, we're really able to talk to each other and have a good picture of what's happening in other countries. Maybe more than those who are based exclusively in one location are able to. And that kind of global network and being able to deploy the information that we're hearing and insights on the ground, it gives us connections to what's happening in different places to tell stories and build narratives and spot trends.

Finally, I really feel that the role of civil society is evolving constantly. And this is probably, in general, moving in a good direction where there are more opportunities and ways to engage than there were in the past. Although during the COVID-19 pandemic, the landscape has changed a lot for us in terms of access, but at the same time, every forum has its own rules and the ability of civil society to access, participate, support, or influence, it varies a lot across all of these different forums and bodies. There's not an easy way to generalize or standardize this, or a one size fits all description. So, with my few minutes remaining, if I still have them, I just want to end off by sharing a little bit about the role of civil society in shaping narrative and discourse and from their compelling action towards the creation of nuclear weapons law. And the most straightforward way to do that would be to give a little case study or look more closely at the TPNW.

To appreciate this, we need to time travel a little bit. We need to take a step back and remember that for many, many decades, international talks about nuclear weapons, whether in the context of bilateral arms control agreements, or the NPT, were very much divorced from any consideration of the impact of the weapon itself. And that's because the weapon was viewed as acceptable and even as necessary to security or for stability. For me personally, this has always felt very hard to imagine. In part it might be because I began my career with the International Campaign to Ban Landmines (ICBL) and have worked subsequently in other humanitarian disarmament groups where this has always been the central motivation for pursuing disarmament or arms control.

And it was, in part, those campaigns, in particular the successes of the ICBL and the Cluster Munition Coalition, that were able to inspire anti-nuclear activists to see that the way forward for nuclear disarmament and abolition at the UN had to start with changing the discourse. Doing that requires changing the belief that these weapons are necessary for security and for stability and looking at them for what they are and for what they do to people and to the planet. The path to making that shift is what is referred to as the "humanitarian initiative" within nuclear disarmament. We've heard about it already from the high representative, so I won't outline all the different steps and statements along that path. But it was this discourse change that really paved the way for the TPNW, as well as discontent among non-nuclear arm states, with the status quo and the lack of progress on the disarmament commitments contained in NPT Article VI. But it's also why the TPNW is the kind of treaty that it is. It's a treaty with concern about preventing humanitarian suffering at its core.

It's a treaty with an acknowledgement of *hibakusha*, with provisions relating to victim assistance and environmental remediation, to women's participation, and the disproportionate impact of nuclear weapons on women. And it was for this work that ICAN was awarded the Nobel Peace Prize, quite literally for our work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons. So I wanted to share this as a way to give a little glimpse into what goes into making international law on nuclear weapons or what can be possible. I've been very lucky to have participated in and attended negotiations of the Convention on Cluster Munitions, the Arms Trade Treaty, and the TPNW. And while the TPNW may be unusual amongst other nuclear weapons agreements for having the scale of civil society involvement and momentum, it is very much in keeping and expands on the body of humanitarian disarmament treaties more broadly, which I really hope can be a model for the future. Thank you.

ARIANA SMITH:

Thank you so much, Allison. I find particularly valuable your highlighting the interrelated nature of the human rights, security, and disarmament frameworks. That was very helpful, so thank you again. Dr. John Burroughs, John, we'll turn it over to you now.

JOHN BURROUGHS:

Thank you, Ariana. I appreciate Allison's remarks and the remarks of Ms. Nakamitsu. I also want to underline that UN Secretary-General António Guterres has been vocal on the subject of nuclear disarmament. His predecessors, Ban Ki-Moon and Kofi Annan, were similarly outspoken.

I'll take as my starting point the 1996 nuclear weapons advisory opinion of the judicial branch of the United Nations - the International Court of Justice, the highest court in the world on general questions of international law. Now, Allison has talked about civil society; this was an instance of significant civil society involvement. The opinion resulted from a major collaborative effort between states, mostly from the Non-Aligned Movement, a very large group of mostly Global South states, and civil society in the form of the World Court Project, a coalition of over 700 groups. I'll address two strands of the Court's opinion, the first regarding use of nuclear arms, and the second regarding the disarmament obligation.

The legality of use of nuclear weapons has been considered by the United Nations General Assembly since 1961, when the body adopted Resolution 1653 by a divided vote. The resolution declared that such use "is contrary to the rules of international law and to the laws of humanity." You can see that this theme has a very long history in the context of United Nations. But the General Assembly's 1994 resolution requesting the International Court of Justice (ICJ) to render an advisory opinion on the matter set in motion an entirely different and extraordinary process. The General Assembly asked the Court to opine on the following question: "Is the threat or use of nuclear weapons in any circumstance permitted under international law?" Over two weeks of dramatic hearings in November 1995, 22 states made oral arguments, and another 23 made written submissions only. All together 45 states participated, the largest number to do so in ICJ proceedings to that date.

In its opinion released in July 1996, early on the Court acknowledged "the unique characteristics of nuclear weapons, and in particular, their destructive capacity, their capacity to cause untold human suffering, and their ability to cause damage to generations to come." In a key passage, the Court observes that the "overriding consideration of humanity is at the heart of the law of armed conflict." It goes on to state that under that law: "Methods and means of warfare, which would preclude any distinction between civilian and military targets, or which would result in unnecessary suffering to combatants, are prohibited. In view of the unique characteristics of nuclear weapons, the use of such weapons, in fact, seems scarcely reconcilable with respect for such requirements."

The Court accordingly found that the threat or use of nuclear arms is "generally" contrary to international humanitarian law. However, the Court declined to assess the legality of low- yield nuclear weapons in remote areas, and we've already been hearing about that this morning, and of use of nuclear arms in reprisal against a nuclear attack or when a state's survival is endangered. So the Court's opinion was not definitive, but it is also fair to say that the thrust of its reasoning was toward illegality in all circumstances.

This strand of the Court's opinion has reemerged in developments since then. Notably, in a provision of the outcome document of the 2010 NPT Review, the Conference "expresses its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons and reaffirms the need for all states at all times to comply with applicable international law, including international humanitarian law." This was a document agreed by TRANSCRIPT

all states, including the five nuclear weapons states. The provision did not say that use is illegal, but the implication is fairly obvious.

The 2017 Treaty on the Prohibition of Nuclear Weapons, the TPNW, as we've already heard, was animated by a recognition of the unacceptable consequences of use of nuclear weapons. An operative provision prohibits any threat or use of nuclear weapons by a state party. The preamble deserves attention also, because it is the negotiating states' view of the principles, including legal principles, applicable to all states, not just states that join the treaty. In the preamble, it is stated that the negotiating states consider that any use of nuclear weapons violates the law. There is an excellent recitation of rules and principles of international humanitarian law in the preamble to the treaty, which was contributed by the International Committee of the Red Cross.

So the view taken in the TPNW goes beyond the ICJ's finding of general illegality and rules out use in all circumstances. We do not know what the impact of the TPNW is going to be over coming years or decades. But there is something I can say for sure right now, and that is that the TPNW is an important contribution to the ongoing process of delegitimizing nuclear weapons.

Then in 2018 the UN Human Rights Committee adopted General Comment 36, which addresses a wide range of issues relating to the right to life set out in Article 6 of the International Covenant on Civil and Political Rights. The Committee's finding regarding nuclear weapons is powerful and unambiguous: "The threat or use of weapons of mass destruction, in particular nuclear weapons, which are indiscriminate in effect and are of a nature to cause destruction of human life on a catastrophic scale, is incompatible with respect for the right to life and may amount to a crime under international law."

Despite these developments, in the two-plus decades since the ICJ rendered its opinion, nuclear-armed states have done little to reduce the role of nuclear weapons in their security postures, let alone acknowledge that their use is incompatible with the law of armed conflict. On the positive side, nuclear weapons have not been detonated in war and the contradiction between reliance on nuclear arms and what the Court called "elementary considerations of humanity" is being exposed with renewed energy.

2022]

There is a second strand to the Court's opinion, just as important, or possibly more important, than the first strand. It concerns a question which the Court was not asked: the nature of the disarmament obligation set forth in Article VI of the NPT and other international law. Article VI requires the pursuit of negotiations in good faith on effective measures relating to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control. The Court unanimously concluded: "There exists an obligation to pursue in good faith, and bring to a conclusion, negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."

The Court's construction of Article VI clarifies that negotiation of an instrument or instruments eliminating nuclear arms would advance the objective of general complete disarmament in the same way that conventions on biological and chemical weapons advance that objective. The Court also explained that the obligation is one of result, nuclear disarmament, as well as conduct, goodfaith negotiations. Essentially the same approach to interpretation of Article VI was taken by the 2000 NPT Review Conference when it adopted an "unequivocal undertaking by the nuclear weapon states to accomplish the total elimination of their nuclear arsenals."

Also important is, that while the Court did not explicitly say so, its reasoning strongly implies that the obligation is universal, extending to those nuclear-armed states not party to the NPT, namely India, Israel, North Korea and Pakistan.

In an annual resolution following up on the ICJ opinion first adopted in 1996, the General Assembly called for all states to negotiate a comprehensive convention providing for elimination of nuclear weapons. The Chemical Weapons Convention would have provided a starting point for such negotiations. The US, UK, France, and Russia showed no interest and opposed the resolution. The TPNW, championed by non-nuclear weapon states, was a response to this stalemate. It provides a framework but not detailed provisions for an elimination process. Another initiative was the nuclear disarmament cases brought in the International Court of Justice by the Marshall Islands in 2014. Those cases were dismissed on procedural grounds. The International Court of Justice's advisory opinion came at a high point of multilateral disarmament diplomacy. The Chemical Weapons Convention had been negotiated, the NPT had been indefinitely extended, and negotiation of a Comprehensive Nuclear-Test-Ban Treaty was nearly complete. Since then, efforts toward consolidating a multilateral disarmament regime have been stymied. The test ban treaty has not been brought into force, due in part to US failure to ratify. And there have been no multilateral negotiations relating to control and elimination of nuclear weapons with the participation of nuclear-armed states; they did not participation in the TPNW negotiations. Despite all this, I believe there will be a return to disarmament diplomacy. That's because there is no avoiding that nuclear weapons pose a threat to every nation and person on earth, and control and elimination of the weapons is necessary to ending that threat.

ARIANA SMITH:

Thank you so much to John and to Allison and Ms. Nakamitsu. There's so much to discuss in what the three of you have brought to today's panel. And we do have a handful of questions coming in already, and I'll just remind our audience to feel free to put those into the 0 & A box. We have about 15 minutes, 20 minutes, to go through questions. And I would love to be able to bring yours to our panelists. I'm going to start with a question that came in just a few moments ago, directed toward you, John. This is from Ted Daley with Citizens for Global Solutions in Los Angeles. And Ted referenced that, John, you were one of the framers of the Model Nuclear Weapons Convention, which contained elaborate provisions on verification, adjudication, enforcement, phases of disarmament, even involving intrusions on national sovereignty. He notes that most of these are absent from the TPNW and asks if you would like to comment on how both of these came to pass and what the eventual consequences might be for the impact of the TPNW.

JOHN BURROUGHS:

I actually was just a minor contributor to the Model Nuclear Weapons Convention. It was drafted by people from my organization, Lawyers Committee on Nuclear Policy, International Physicians for the Prevention of Nuclear War, International Network of Engineers and Scientists Against Proliferation, and others. And it was circulated in the United Nations by Costa Rica, and then later Costa Rica and Malaysia. I think it was a significant contribution and was based on the surge of multilateralism in the 1990s. As I mentioned, you had the Chemical Weapons Convention, the most far-reaching disarmament treaty ever negotiated, which has provisions on verification and enforcement. The test ban treaty similarly has very extensive provisions. But the Western nuclear weapons states and Russia were not interested in pursuing a nuclear weapons convention. The idea of a convention led quite directly to the Treaty on the Prohibition of Nuclear Weapons.

On the civil society side, groups in the International Campaign Against Nuclear Weapons (ICAN), which had been supporting the idea of a comprehensive convention, eventually changed to a simpler approach, what became the Treaty on Prohibition of Nuclear Weapons. It does not include extensive provisions relating to verification and enforcement, but rather provides a framework for setting up such mechanisms, leaving that to a later date, if and when nuclear-armed states either together or individually want to join the treaty. Generally, it is conceivable that an individual nuclear-armed state would join the TPNW at some point. But what seems much more likely is that there would be a process of multilateral or plurilateral negotiation, which would address issues relating to verification and enforcement, and that could lead to those states joining the TPNW, or to the construction of a complementary instrument to the TPNW.

ARIANA SMITH:

Thank you, John, I think that's very helpful. And the next question we have coming in, I believe, is directed toward Ms. Nakamitsu from Duke and Han from Radio Free Asia, Korean Service, who would like to know your thoughts on how international society can best go about engaging with North Korea to denuclearize, particularly in looking toward a new U.S. administration coming in.

IZUMI NAKAMITSU:

Thank you. The issues related to the denuclearization of the Korean Peninsula and the Democratic People's Republic of Korea (a.k.a. North Korea) is, I believe, one of the most difficult, specific TRANSCRIPT

cases that the international community has been grappling with for many, many years. And I think the UN's position will remain unchanged, which is that no matter how difficult the actual realization of the denuclearization objective, the only way to actually achieve it is, number one, through a resumption of regular dialogue and negotiations. Without that, we cannot even take the first step. And the fact that, under the Trump Administration, it had started, and now is suspended, for the time being, is what concerns us. You know, the fact that it is not taking place at the moment. We hope that the new Administration, when it comes in, will have a renewed energy towards resuming such a dialogue on a regular basis. And I think we all agree at the international level that we have to actually look at those issues very comprehensively. We cannot just simply look at the denuclearization aspect of it, but there will have to be accompanying political dialogues about making sure that the sustainable solutions to the region will also be part of the broader discussions.

And then of course, those discussions will have to be coupled with what kind of verification measures need to accompany the denuclearization part of it. It's very complex, it's been there for a long time. I would actually personally say that it is one of the most difficult, specific cases. I have my personal views, which I would not bore you with for this conference. But I think the first step really is to resume on a regular sustained basis, diplomatic efforts, which I believe we cannot postpone any further.

ARIANA SMITH:

Thank you so much. John or Allison, if you have additional comments, feel free to jump in. Otherwise, we have got a couple other questions I can throw at you.

So going back to the TPNW, Jean Krasno, professor at City College of New York - and I'll just mention one of the people who first drew me into this field, so thank you - has posed the question, what is the role of the UN in hosting the conference of parties for the TPNW? How will that look going into the new year? Whoever wants to take this can, or I can pick one of you. Allison, I think that you, from the civil society engagement side, might have some thoughts as to how this might look, and I'll let John and Ms. Nakamitsu chime in as well.

ALLISON PYTLAK:

Yeah, absolutely. I won't speak to the role of the UN as I'm not the UN. And I also just want to say hi to Jean who was my Thesis Advisor in grad school, so I'm quite happy to have your question and see you on the event today.

First, meetings of states parties, they're very big deals. They're often where important decisions are taken that will govern how decisions are made in future meetings. It will set the tone. So I think these are things that we're now finally, in a phase where we're able to start thinking about in really tangible ways, now that the timeline is a little more clear since we achieved the 50th ratification. Certainly, from the civil society side, we're going to want to maximize this moment. I think we're hoping for a robust civil society participation in the conference following on from models of other treaties as well.

But I think that while there is sort of the public facing aspect of it, we're also thinking closely about the decisions that will be made there and what the implications will be for the future operation of the treaty. So there is both the substantive planning for it as well as the sort of more external facing moment of celebration in a lot of ways.

ARIANA SMITH:

Wonderful. Okay. If there are no more thoughts on that, I think that it'll be really interesting to see how this opportunity plays out, and very exciting to see the first time states parties come together and how the treaty regime develops after entry into force.

IZUMI NAKAMITSU:

As the secretariat, of course we are ready to support the first meeting of state parties, which is going to be convened within one year of entry into force. Austria has already offered to host such a meeting and we are now starting to think about organizational aspects. Of course, next year is a very heavy calendar of events when it comes to disarmament with the NPT, Biological Weapons Convention, and CCW; they all have review conferences. So it will be very busy next year, but we are definitely ready. Just one thing that I want to say, of course, is that it is important, this first meeting in terms of symbolic meaning. But also, I think the states parties to the TPNW have a very important opportunity to make sure that the vision of this treaty is not to replace the NPT, but indeed it is going to complement and reinforce the obligations contained in Article VI of the NPT.

And I hope that there will be at least a handful of non-ratifying states that will attend as observers, and I am informed that a number of countries are reflecting on that possibility as well. So those are some of the issues that are on our mind as of now. And of course, we look forward to working with the States parties to this treaty.

ARIANA SMITH:

Thank you so much.

JOHN BURROUGHS:

Just one note, is that not everybody listening in may know that the five-year NPT Review Conference is currently scheduled for August of 2021 at the UN in New York. It was originally supposed to take place in May of 2020. So that's another important meeting. As Ms. Nakamitsu said, it's going to be quite a full schedule if, for example, the TPNW meeting takes place in late 2021 and then there's also the Review Conference in August. We'll see if the conference actually can be held depending on the state of the pandemic, and also the conditions under which it's held may be somewhat restrictive.

ARIANA SMITH:

Absolutely. I think that that is a really good point. And it's really interesting that we're heading into a year with so many landmark conferences to be had and there's a lot of opportunity. I don't want us to go too over time, so I have one or two more questions here I'll raise. So this is for you John, how do you evaluate, and others can also please chime in, if you have thoughts, how do you evaluate the role and effectiveness of customary law in relation to the advisory opinion and the TPNW in terms of arriving at the total prohibition of nuclear weapons.

JOHN BURROUGHS:

I'm supposed to give a short answer to this Ariana?

ARIANA SMITH:

As well as you can manage.

JOHN BURROUGHS:

The advisory opinion applied customary international law because it applied rules and principles of international humanitarian law, which are based in treaties, but which are also considered to be customary law that is applying to all states universal law. If the question is directed toward how the TPNW will contribute to the development of customary international law, I'll just briefly say this: It certainly reinforces the principles of IHL that it basically is applying in prohibiting threat and use of nuclear weapons and that are cited in the preamble. And it's a very useful reference point for that. Beyond that, as to other norms in the treaty, most importantly, the norm or the prohibition of the possession of nuclear weapons, will that someday become a customary rule of international law? The question of when a customary international law rule comes into effect is a question over which international lawyers hold long and learned discussions.

But let me just give an example. The NPT has almost every state in the world as a party. There're just four parties with nuclear weapons outside the NPT: North Korea, India, Pakistan, and Israel. As I mentioned, when the Court addressed the question of the disarmament obligation, its reasoning strongly implied that that obligation is universal. First of all, the Court cited the fact that early on there were unanimous resolutions adopted in the UN General Assembly calling for the global elimination of nuclear weapons. Secondly, there is just the sheer number of states that are party to the NPT. So at least from a sort of shall I say conservative point of view, there would have to be a lot of parties, many more than 50, to the TPNW before international lawyers would start talking about the establishment of customary international law. On the other hand, there are norms that are not legal norms. There are norms that are moral and political in character, and clearly the TPNW is already contributing to a norm against nuclear weapons in their possession and development and testing, as well as their threaten and use.

CHARLES MOXLEY:

92

Before we end this panel, Ariana, may I draw your attention to the question from Hans Corell, a venerable figure in this field. He was the Under-Secretary-General for Legal Affairs and the Legal Counsel of the UN for many years. He has a question for the High Representative that perhaps you might want to attend to.

ARIANA SMITH:

Yes, I see this question here. And Mr. Corell's question is, what is your view about the role of the United Nations Security Council with respect to nuclear disarmament? And he notes that in his view, the Council must lead by example.

IZUMI NAKAMITSU:

Yes, indeed. I would very much like the Council to lead in this very important international peace and security issue. And I mean, likewise, I very much hope that they will start to, or they will return to leadership and unity on other weapons of mass destruction issues, most notably the chemical weapons issues as well. I think it's important to highlight that historically, the Security Council has spoken to issues related to nuclear weapons and nuclear disarmament. Of course, going back to a long time ago, 2009 I think, they did actually address the issue of threats caused by nuclear weapons. But successively in connection to the importance of the NPT as a cornerstone of international security, they have been in fact speaking to these issues. Recently, it's been difficult on those thematic important issues, of course. And this is a reflection of the division between, most notably of course the P5, the permanent members that are also nuclear-weapons States as well.

So I think no one would disagree. In fact, everyone will agree that the Security Council has to lead by example and speak to the importance of making progress in nuclear disarmament. And of course, on a case-by-case basis, Iran, nuclear issues, the DPRK – these have been regular agenda items for the Security Council. So both on the general importance of nuclear disarmament and also nonproliferation in a case-by-case context, I think the importance of the Security Council actions and decisions, and I would say unity and leadership, really cannot be overstated. It is critical.

ARIANA SMITH:

2022]

Excellent. So we are running out of time, but I would really love to end this panel on a forward looking note. So I recognize that this question is one that we can discuss for a very long time, and I regret that we don't have that time, but I'll just ask for a few parting words if you have them to the question of, given how we've discussed the ebb and flow of multilateral diplomacy and how that has been effective in the past and how it's hit some roadblocks more recently, how might you envision some of the more effective strategies to advance disarmament now and moving into the future? And again, it's a big question, but the highlights of your thoughts we would so appreciate.

IZUMI NAKAMITSU:

Did you want me to start?

ARIANA SMITH:

Sure. That would be great. Thank you.

IZUMI NAKAMITSU:

Thank you for that question. I think it's very important. I mean, one thing is of course, to protect and maintain the existing norms and legal frameworks, but also to strengthen what we have. But for the past two years or so, from the United Nations, including from the Secretary-General, we have started a collective reflection on a new vision or new approaches on nuclear disarmament. Actually, not just on nuclear disarmament. The world is a very different place today, even compared to just a decade ago, with huge advancements of science and technology, an evolution of the context from bipolar to multipolar, the regional powers and regional tensions with nuclear overtones in at least three regions of the world. All of these things actually do impact the nuclear disarmament discourse as well.

So we believe that now is the time for starting a collective reflection on a new vision going forward. It's no longer simply a technical discussion or political discussions in silos, but we need to have an overview of how the world actually has to look at nuclear issues together with science and technology, missiles, and outer space. All these things now have to be given a fresh look. And perhaps after the NPT Review Conference next year, it will be an important step forward for all of us to take.

JOHN BURROUGHS:

One thing that's been encouraging recently is that the U.S. government started talking about the need to broaden negotiations beyond just the U.S. and Russia. In particular, they were referring to bringing China in. Then Russia said, we should also bring in the UK and France. For a long time, it's been assumed that the arms control discussions were between the U.S. and Russia. So this is a bit of an opening. Finally, perhaps we can look forward to a time when negotiations on arms control or disarmament, in terms of reductions, verification, et cetera, are not just between U.S. and Russia. I think that's an opening we should take advantage of.

Let me just address one thing to the U.S. participants in this conference. There's an allergy to multilateralism and multilateral treaties in the U.S., and it's not just the Trump administration. It goes back about two decades to when ratification of the Comprehensive Nuclear-Test-Ban Treaty was rejected by the U.S. Senate. It's not just in the nuclear sphere. One example, and there are many, but one example: The U.S. Navy supports ratification of the Law of the Sea Treaty. Nonetheless, the forces opposing multilateralism as an infringement on US sovereignty, that's the way they frame this, are so strong in Washington that the Law of the Sea Treaty cannot be ratified. This needs to be overcome, and we have a high procedural hurdle in terms of treaties because two thirds of the Senate must approve ratification of a treaty. But ways need to be found to change the discussion about multilateral treaties in the United States and probably to build bridges to those who oppose the U.S. joining such treaties. I think this is important to the future of disarmament.

ARIANA SMITH:

Excellent. Thank you. Allison, I'll turn it over to you for the last word of this panel.

ALLISON PYTLAK:

Thank you. I'm going to actually borrow from something that several of us came together and published when the NPT 2020 Review Conference was postponed. More than 90 NGOs came together on a joint statement to NPT states parties, John worked a lot on that, others in the audience, I see your names as well. And one of the messages in that was that the tools exist, but implementation is lacking. And I think that if we want to take a forward-looking view on this, that message it says a lot and it holds a lot. But we also need to ask why, why is it lacking? And from there, we get to the point of political will. I've just spent about five weeks listening to UN First Committee meetings, which I've been going to probably since around 2010 or 2011.

And I really... It's hard to not feel pessimistic. Over the last couple of years, I think the back and forth and the tit-for-tat between certain countries, a small group of countries, but powerful countries, it's getting louder and more vitriolic, and it's worrying to listen to that. So it's hard to not be pessimistic. But at the same time, I think I also see a lot of good commitment in the other direction and a wanting to turn this around. So I think that what we need to do is continue down this discourse change that I was speaking about earlier in my presentation. And that as long as nuclear weapons continue to be seen as a sign of protection or a means of protection, then they're going to continue to be clung to and held onto and used in that way and seen as necessary for security. So what we really need to do is to shift that thinking. We've started, and we've made some good dents, but we need to continue down that road because the arguments about "creating conditions" or waiting for the security environment to be rightwell, I don't see the efforts to make it right at the moment.

ARIANA SMITH:

Excellent. Thank you so much to Allison, John, and Ms. Nakamitsu. This was, I think, a very illuminating panel for all of us and a really engaging discussion. I will turn it back over to our master of ceremonies here as we head into our lunchtime session. Thank you again to our panelists.

CHARLES MOXLEY:

Okay. Thank you all very much. As you can all see, we have tried to fit so much into the day that perhaps we owe an apology to

our audience, because any one of these panels, frankly, could go all day. We do intend to have follow-up programs on these topics, but we are up against the clock now. We have Governor Brown ready to come on. So I think, with consent from the ABA, we'll proceed to Governor Brown and the panel that follows him, and after that, we will hear the statement from the President of the ABA, which we all look forward to. So I apologize to our audience for the over-packed nature of what we're doing, but we're trying to cover a lot. I suggest, instead of a whole lunch break, we just take five and then maybe bring our lunches here and continue with the program.

So, in five minutes, I will introduce and turn the discussion over to Jonathan Granoff, who will have a dialogue with Governor Brown, which is going to be fascinating. We all know who Governor Brown is, of course. But not everyone knows about his deep interest/involvement in nuclear weapons issues. This is going to be truly fascinating for all of us.

2022]

[Vol. 45

REMARKS

A SPECIAL CONVERSATION ON RESPONDING TO THE GREATEST THREATS TO HUMANITY

Hon. Jerry Brown* & Jonathan Granoff**

CHARLES MOXLEY:

Welcome Governor Brown. Thank you. Everyone, please meet Jonathan Granoff. Jonathan is President of the Global Security Institute and Senior Advisor and U.S. Representative of the Permanent Secretariat at the World Summit of Nobel Peace Laureates and Chair of the ABA Task Force on Nuclear Non-Proliferation and advisor to the Committee on National Security of the International Section of the ABA. Jonathan is going to have a dialogue now with Governor Brown, after first introducing Governor Brown. Thank you. Jonathan, take it away.

JONATHAN GRANOFF:

Well, this is a real honor because, a little full disclosure, I'm a bona fide fan of Governor Jerry Brown. Three times governor of California and not only a terrific administrator who helped turn the economy around and made California, I think the sixth largest economy in the world, but he's been a visionary and he's been a thought leader and yeah, I didn't realize he even had a deep background in law. He actually clerked for the Supreme Court of California.

So Governor Brown, Jerry, I want to start out and ask you, how did you come to be seized of the issue of the threat of nuclear weapons? I know that now that you're no longer governor, you're chairman of the Bulletin of Atomic Scientists, you're on the Board of the Nuclear Threat Initiative, and you're a passionate advocate along with the rest of us. So how did that come about?

98

^{*} Former Governor, State of California; Executive Chairman, Bulletin of the Atomic Scientists

^{**} President, Global Security Institute; Senior Advisor, Permanent Secretariat of the World Summits of Nobel Peace Laureates

2022]

JERRY BROWN:

I just have to correct one little factoid. You said that I did something to make the California economy better. Well, I certainly didn't hurt it, but governors don't really affect the economy. And even presidents, in the short term, don't affect the economy, even though everybody thinks they do. And they get mad at politicians when the economy goes sour, but it's one of those widely shared misbeliefs that is rampant. I had to correct that.

Now, how I got interested? Well, it goes back to law. I was at Yale Law School during the Cuban Missile Crisis, and it scared the hell out of me. I thought this guy, Kennedy, we're going to blow the damn world up; where the hell can I go? And I was thinking of going to some remote place in Vermont, but then, I had to go to class, so I never got around to it. But that was quite frightening to live through those days from Senator Smathers releasing pictures about the missile in placements in Cuba, then going forward.

Then fast forward to my time in California, the Nuclear Freeze Initiative was put on the ballot when I was governor. It passed, barely, I might say, by about one point and as governor, I was to write a letter to President Reagan and President Gorbachev to freeze nuclear weapons. But as we all know, the freeze was stigmatized very effectively by the powerful people to say that would create a great disadvantage for America as distinguished from Russia. And here we are, with the same kind of dangerous mythologies, corrupting our understanding of the true danger of a nuclear weaponry.

JONATHAN GRANOFF:

The Cuban Missile Crisis also got me involved. I was interning for Congressman Henry Helstoski of New Jersey in the late 1960s, and then Senator Kennedy, Robert Kennedy from New York, took a small group of interns out for lunch and told us very literally how close we came to ending civilization. And I will never forget his closing remarks were two things. One is if we get every other issue right, and don't get this right, it won't matter. And two, that he considered how we deal with nuclear weapons the moral and practical litmus test of our time. But since then, we have another threat that's hit us on the horizon, that you've been a thought leader and a practical leader in as well: the climate. You convened a summit in California before you left office to address slow burn. Do you see a relationship between slow burn and fast burn?

JERRY BROWN:

What about slow burn? Is that how you describe global warming?

JONATHAN GRANOFF:

Yeah. That's slow burn. Slow burn is climate change.

JERRY BROWN:

Okay. There are so many new terms that as I live my long life, I marvel at how the language is constantly transmogrified with all new shiny phrases and terms. But I get your point. Yeah, climate is different, but it has devastating impacts and has irreversible impacts. I don't want to get off into the climate because we want to talk about nuclear. But it is something that is of great concern.

California led the Western hemisphere in taking real action. That's big. And hopefully, maybe if we can wrap this aspect up, we're in a world where nationalism continues to run amok. Nationalism is burning very brightly in the heart of Joe Biden and the Congress and the New York Times and all these other people. So I think we got to deal with the fact that there are threats – nuclear climate, pandemic – that are of common threat, of common interest, and of common vulnerability.

And that's why, my vision is one that I call "planetary realism." The realism of Hans Morgenthau and Reinhold Niebuhr and Henry Kissinger, but the planetary aspect that we're all in it together and it isn't just balance of power, but it is understanding that we're mutually vulnerable. And therefore, we have a profound reason to collaborate together, despite our differences on human rights, on separation of powers and all the other issues that separate China, Russia, America, North Korea, Iran, and all the rest. So, that consciousness that I call "planetary realism" is still marginal. It is still deviant to the dominant culture in Washington, DC., and I would assume in Moscow and Beijing. So you folks at the American Bar Association, New York Bar, you have your work cut out for you because as far as I'm concerned, we are still in the Dark Ages.

JONATHAN GRANOFF:

You're addressing the paradigm of nationalism and militarism as the pursuit of security as a flawed paradigm of security. Your thinking on this goes back many years. I read an article of yours, a brilliant article called *Nuclear Addiction: A Response* from 1984, and you ended it so prophetically. "The shared threat to our common existence may yet provide a new foundation and old paradigms may be transcended in a world that can destroy itself. Morality at a minimum requires truth." I would say realism too. "The truth is, in this case, that Russia and the U.S. are embedded in a neurotic relationship that progressively grows less stable. Soon, we shall either use our new weapons and die or rejecting the outworn logic of war, find change in some form of mutual trust."

I would say that vision—a moral, spiritual vision—is embodied in the law of the Nuclear Non-Proliferation Treaty and implicit in the Charter of the UN. Heeding that vision is also a practical necessity now. If we don't cooperate and see the shared realism of protecting the phytoplankton so we can breathe and the climate so we can live and cooperatively address pandemics and persist in these excessive expenditures for nuclear weapons, we won't survive. You wrote in that essay, way back in the 1980s, that nukes are a kind of addiction. What do you mean by that? I mean, that's a different framework from what is usually used to address nuclear weapons.

JERRY BROWN:

Sure. That's based on the anthropologist Gregory Bateson who really developed the thought, the addictive character. And he said, "Addiction in the nuclear arms race is like an addiction in that, as the heroin addict takes the first jolt, shoots it into his arm, he gets a certain sense of wellbeing."

He analogized that to building our weapons systems. We built a nice MX missile or whatever the case may be and then Russia does the same thing. But after we take that injection, we need another one, and then another one, because we're addicted. And the key to addiction is that you become tolerant to the dosage and you have to increase the dosage. So the dosage increases. The analogy to nuclear arms race is the lethality has to increase, lethality by the precision of the weapons, by the magnitude of the impact, by the numbers of places from which they're deployed. All of this increases the horror, when it finally occurs a very important part in this race, is this addictive competition that is deterrence. The fundamental doctrine of the modern nuclear world is that we will stop you from hitting us by threatening to destroy you. And it's all based on creating fear and threatening.

Now, the trouble with that threat is when you create that threat, the reaction is not confidence or trust, but it's fear.

So the other side, Russia, builds more weapons. And then when it builds a new weapons system or a variation on their old system, then America says, "Oh my God, we have to do something different." And then we do something more, but we do something a little different than the Russians. And so the Russians say, "Oh, they've got something a little different. We'd better copy that, but it'll be a little different and therefore we have to respond."

It's a constant escalation in nuclear innovation, in differentiation and a constant increase in lethality, all held together by human minds – not one, but hundreds across the nuclear regimes of Russia and the U.S. – and held together with software that can fail. And in fact, it has failed in the past when we've gotten false alerts. This is what a former Secretary of Defense Bill Perry calls the danger of nuclear blunder: not that deterrence fails, but rather we get an accident, we get a false alert and the president, having only 20 minutes to decide, decides wrongly and fires one of these weapons, ICBM's that are on hair-trigger alert. It's false.

And then Russia fires back and we're off to the races, and maybe human civilization is gone. Now that idea is not accepted. It is marginal to the Washington Establishment – Democrats, Republicans. All the big people feel very comfortable in the world we now live. I do not feel comfortable. Bill Perry doesn't feel comfortable. We're in an extremely dangerous position that all we have is this big threat that progressively becomes less stable.

JONATHAN GRANOFF:

We should not ignore how many near misses, near devastations we've had, based on human and mechanical error. We humans make mistakes. Even the Cuban Missile Crisis was based on the false premise that the weapons in Cuba were not operational.

JERRY BROWN:

Right. And the key point here is not that we've had mistakes. We all know that. That's been published. We know the names of the people, the Russians, and the Americans who saved us. Bill Perry, by the way, was told in the middle of the night, when he was Secretary of Defense, that the Russians had launched a missile attack. And he didn't wake the president up because he just intuitively thought, based on his experience, that it wasn't right. It turned out to be correct. So did Petrov, over in Russia. He did the same thing. They fired him.

Look, the accident, the dangers are there. The big problem is, why doesn't the president say something about it? Where is the leader who's going to tell us? Did Ash Carter ever say anything about this? Does Pompeo ever talk about it? Does the New York Times want to write about it? The Washington Post? No. This is like a secret. The danger through accident is minimized and marginalized. I've talked to key generals; they're not worried. Some are, but a lot of them aren't. So, that's our biggest problem: getting general consensus that we've got a problem. And remember the astronauts, they said, "Houston, we've got a problem."

Well, I'd say to Washington: "Washington, we've got a problem, wake up." And I think that is our challenge. How do we as non-members of the priesthood in Washington and Moscow get people saying, "Oh my God, we've got to take care of this, we've to do something about it. Reduce the damn threat now"? And yet the main problem now is what more sanctions can we lay on Russia? What new misdeed can we identify and vilify on the part of Putin? Stipulate. Putin's got a list of a hundred faults. By the way, the U.S. has a nice list of its own.

That's not the point. The point is, like in World War II, we've got a threat, certainly as great as the threat of the Nazis. And what do we do? We didn't go point out the human rights violations of Joseph Stalin. We said, "Let's join together and beat the Nazis." We did. Well, we have to join together to beat this threat of a nuclear blunder by accident, by miscalculation, by software failure. That's the way I see it.

The number one question is, getting through to people that we can handle and reduce this nuclear danger without compromising all these other things, which they now call, "core values." I remember when they used to just talk about "values." Now they put

"core" in front of it and that almost becomes like, well, we better go to war over that. This reminds me of 17th century Germany, when the Lutherans and the Catholics killed one-third of their country over the difference between transubstantiation and consubstantiation and, of course, the authority of the Pope.

So we are in a highly pseudo religious fervor, and we've got to knock it off and get back to some realism, and I would say, planetary realism – recognizing the common interest to common vulnerability that the Russians and the Americans and the Chinese and the whole planet shares together. And that is, don't say nationalism is going to go away. No. But we have to go transnationalism, planetary realism, or we're going to extinguish humanity. It's just that simple.

JONATHAN GRANOFF:

I'm involved in a project to advance the principles of Human Security, which is exactly the same as your planetary realism. It's an initiative of the World Academy of Arts and Sciences and the United Nations to try and mainstream Human Security as the paradigm to address the global threats we are discussing.

JERRY BROWN:

Jonathan, I've got an objection here. Security – they all talk about security. What's wrong with a good old world "peace"? That's too soft. It's too wimpy. But security implies a military. It implies weaponry. It implies war. And then they always put the word, "national," in front of it. We're always talking about "national security." I think we have to talk about realism and truth and shared interests. Remember Eisenhower? He said, "If all that Americans want is security, they can go to prison." I listened to Eisenhower. He said some very important things with his final address to the nation, and elsewhere.

So I do have to, at least, hang a red lantern on the word, "security." I want to say, how do we get some trust? Not naive trust, but just trust that the other side is not stupid, that they can calculate these risks, realize the consequences and adopt measures that will reduce, as close to zero as we can, the nuclear risk that we're now exacerbating. Everybody's talking about the number one problem is what new sanctions can we put on the Russians? That's not the number one problem. The number one problem is, how can we and Russia together recognize the mutual suicide pack that we've implicitly committed ourselves to.

JONATHAN GRANOFF:

I really like your emphasis on realism and juxtapose it with two major myths that are leading us over a cliff. One myth is the myth of the Roman maxim, prepare for war, receive peace-peace through absolute strength, which has proven to be absurd. It didn't do anything in Vietnam or Afghanistan, and it just leads to arms racing and it's not realistic. Where the other is-

JERRY BROWN:

Oh, wait. I think, I don't want to say we want to be strong through weakness. We can be strong, but what is strong? The Chinese have 300 to 400 nuclear missiles; they feel pretty strong, and they're not scared of us when we got 7,000 nuclear warheads. How much do you need? The question is not strength versus weakness, but a clear definition of in what does strength consist. That's what we're missing because it's the arms industry, the propaganda, the nationalist ideology, the fear, all combined to have this Congress totally head-over-heels in trying to buy more and more weaponry.

In fact, the Armed Services Committee run by the Democrats at a 14 hour-hearing two months ago on the \$740 billion budget. There was no coverage to speak of anywhere in major press, and there was not much dissent. And they voted out the budget, including a new nuclear weapon system, including the modernization program that's going forward. There still is a lack of insight, understanding, honest confrontation with the facts, the technology and the world we now find ourselves in.

JONATHAN GRANOFF:

They are completely ignoring the science, which has discovered that, if less than 1% of the arsenal were to go off, it would throw approximately five million tons of soot into the stratosphere and render the agricultural base of the planet dysfunctional.

JERRY BROWN:

All right. I want to underscore that point. So we get into a little nuclear exchange – we do 50 bombs, the Russians, or Pakistan or India, do 50 – and now you got the nuclear winter, which Carl Sagan talked about 20 years ago. Now, there's been more research, more validation that we're not 100% sure this would happen, but 10% sure would be good enough for me to do everything to avoid it.

The whole concept of deterrence is: if you hit us, we're going to hit you back. Yet our defense system – a \$300 billion defense program that we've developed – can't stop missiles. It can barely hit one, if they know where the missile is going to be in practice. So here we are, our only threat is: if you hit us, we'll hit you. Therefore, you won't do anything. But what if they send missiles? Are we going to then send missiles back and then ensure this nuclear winter effect?

The whole concept of nuclear deterrence needs to be really looked into because it has some fundamental flaws at its very essence. Now, I'm not saying we're going to get rid of deterrence tomorrow, but we all ought to understand, are we really saying, "Russia, if you do this, we're going to hit you back with nuclear warheads?" And if we do, does that lead to nuclear winter? If we do, does that lead to mass starvation? Is that our program? Or shall we take some other risk, far less, to work something out with the Russians, just like we did with Stalin, what we've done with other people. I won't get into all the other unholy alliances that we've been part of, but we certainly ought to be able to form an unholy alliance, to make the world less prone to a nuclear accident.

JONATHAN GRANOFF:

It's also a legal requirement that both Russia and the United States have, pursuant to the Nuclear Non-Proliferation Treaty, where a set of steps to lead us to that more secure world has been promised in the review processes of the Treaty.

JERRY BROWN:

Yeah, Jonathan, the trouble is, if you read Article Six of the Nuclear Non-Proliferation Treaty carefully, it talks about negotiating in good faith *on* the steps that lead to disarm it. It's got some weasel words that allow a lot of backsliding or a lot of shillyshally. The current nonmovement towards nuclear disarmament is so gross, and even the weak words of Article Six are in fact being violated. I'd agree with you, but it's a pretty weak read on which to bottom our nuclear disarmament talk.

JONATHAN GRANOFF:

Well, in the review processes pursuant to the agreement for the indefinite extension, they agreed to an entry into force of the Test Ban Treaty, on a fissile material cutoff treaty, lowering the salience of nuclear weapons in policies, strengthening safeguards, and other security enhancing steps. These are the kind of things that you put in your article recently in Politico. These are the framework that they've agreed to and they're reneging on it. And when the big players renege on treaties, how can we possibly gain the confidence of the rest of the world?

JERRY BROWN:

The big question – you have a lot of smart people looking in here, so I raised the question – how come? Does Joe Biden or his advisors or the New York Times, do they not get this? Why is there a virtual silence with respect to this issue? And I spent a lot of time looking at the media. I've been around, my first political office I took over on July 1, 1969. Okay, that was a long time ago. I've been reading the press ever since. And I don't see much on nuclear danger, whatsoever. And when I talk to people – and I talk to a lot of the biggies, I can get through to these people, I've run into them at the various Zoom conferences – there seems to be such confidence in the status quo. There seems to be a child-like belief that all this complexity can be managed to avoid one of these catastrophic risks.

I don't see it that way. I have a darker view, maybe from my Catholic seminary training on original sin. We used to have this doctrine of eternal damnation. Well, if you think that's even a plausible possibility, certainly nuclear annihilation is not that far afield. So I'm worried, but I don't see the group of powerful people very worried. They're more worried about getting tough, getting more sanctions, more this, more that. That to me says, we have a lot of consciousness raising and we have a lot of educational work to do. And we need to have a lot of blunt conversation because we're not teeing up even the first step or idea in moving us toward a safer world.

JONATHAN GRANOFF:

Absolutely. And there's a total lack of recognition of the hazard of the tension between India and Pakistan, where if there is a computer error, like the one you described, they don't have five minutes or 10 minutes; they have 300 seconds. And there's a danger of somebody creating the perception of a launch, a computer hacker, not to mention madness or other miscalculations. We now know scientifically, we're all downwind. And yet, this obsession with power of the national state, has taken I think, mythic proportions. It's almost like a religious doctrine that has to be addressed. But during the Cold War, the United States and the Soviet Union behind the scenes, cooperated with science, addressing polio and smallpox, and actually we've eliminated them, but they never told the public of that cooperation.

It's very odd that our political class commerce in fear rather than in success stories. How do you think we can change this? How do you think we can break the spell? It's almost like it's a spell. How can we bring some realism to the discussion, to bring some sense of proportionality to our military budget, to bring some sense of the possibility of recognizing our shared interests to the international political class? What do you think we need to do next?

JERRY BROWN:

I have no idea.

JONATHAN GRANOFF:

Well, I'm very much in the same-

JERRY BROWN:

That's why I'm on this program, I figured all you smart lawyers, all of you New York lawyers would have some answers that haven't filtered out to California, other than the obvious. But just from the presidential campaign, there wasn't much talk about this.

JONATHAN GRANOFF: None.

JERRY BROWN:

TRANSCRIPT

The approach has been that we'll call one of these leaders, thugs – and they may well be thugs – and then they can call us thugs. Fine. But I remember, back in the battle days of detente, Henry Kissinger and Dick Nixon went – and Nixon brought his wife, Pat – and they stayed overnight at the Kremlin. Can you imagine the American president taking his wife and spending the evening over there in the Kremlin talking about, what do we do? And is Putin worse than Brezhnev?

JONATHAN GRANOFF:

No.

JERRY BROWN:

I don't know. That takes scholars. It's more complicated than I can take time to figure out. But we are in a very bizarre, unprecedented period. I think, to be more serious about your question, I think we have to shock people, wake them up with the bizarre quality of our current focus. I'm not saying what we're focused on doesn't have importance, but it is marginalizing these more fundamental issues – profound threats to the world's wellbeing. But they don't fit into the nationalist paradigm, the nationalist meme that we've got to thump our chest here and say, "We're tough." We're back into that kind of thing.

C. Wright Mills coined the phrase, appropriate for our time: "crackpot realism." We've got to get off of that and go from *crackpot* to *planetary* realism. Not utopianism, not liberal interventionism, not the ideal that we're all going to be Boy Scouts, because we're not. If you look at the kind of narrative going on in America about systematic, structural racism. Now that itself needs to be put in proper context, but if you take that at the very least, it means we are deeply flawed. And we have so many things that we have to get right, and we've gotten wrong in the past, that we should be really focusing on ourselves. "Physician, cure thyself." Don't look at the little dot in the other guy's eye and not see the beam in our own.

We have to have much greater self-awareness, and if more intelligent, prominent people started talking about that, maybe we could make some progress, but I can tell you it's not easy. The big people are not interested in nuclear. On nuclear issues, it's basically "shut up." Now they'll talk about climate change. Five

years ago, that was verboten to talk about. Well, we've got to get this issue in the mainstream.

It's got to be in the Congressional hearings in the mainstream media. That's what I think is missing. If any of you New York people who know anybody at The Times, keep pushing. I've gone to the editorial board, pounding on the table, talking about the Bulletin of the Atomic Scientists' Doomsday Clock and how we're 100 seconds from annihilation, but it's very hard to get a response.

You must be in the club. And the club is not really thinking about nuclear accident right now. And that's where if you want to make any progress, knock on the door of the club and wake them up. Get the foreign relations organizations talking about this. Get the transition team talking. That's what I think we've got to do. I think we can do that.

Joe Biden's a decent guy. He's been around forever. He got into politics in '73 – four years after I did, I might say – and he knows a lot. He's got bright people. I think people on the outside, have to make inroads with the people on the inside. Wake up, and I think there's a way without compromising our beliefs, or even our myths, that we can make the world a lot safer than it currently is.

JONATHAN GRANOFF:

I can tell you, Jerry, that the Global Security Institute, where I'm the president, the World Summit of the Nobel Peace Laureates, where I represent the group at the UN, and the Task Force on Nuclear Nonproliferation of the International Law Section of the ABA- we want to work very closely with you to make this reality of the wake-up call heard because I think that the myths that we're living under are actually the myth of Thanatos. It's a death myth.

And it's absolutely horrendous that we could be pledging trillions of dollars on a venture wherein the more we perfect the weapons, the less security we obtain. It's exactly the wrong direction. So it's a venture that's as morally corrupt as slavery was. You can't fix slavery by having better housing for slaves. The venture of putting the entire future of the planet at risk is fundamentally morally flawed.

Now, as we look at the pandemic and we look at climate, and we look at the oceans, we're compelled to find a new paradigm. And I think this idea of planetary realism has to include, and I'll let you get the final word here, has to include the tool of the rule of law. It is a sort of the guard rail necessary to bring us to the application of that realism. Because if we continue shredding treaties and generally working on an ad hoc basis, there's no possibility of having the stability and trust needed to get to where we need to get to. So the rule of law has got to be an element of this.

JERRY BROWN:

It does. And the rule of law is based on underlying shared beliefs – on a consensus. That's why law pertains to a jurisdiction and a jurisdiction has common values, common beliefs, common sense about things. I do want to say one more thing, though, of what we're up against that is implicated in the common law in the Western legal tradition. And that is this concept of the individual. It's me against you. It's us against them.

It's we against the environment. That perspective, which is deeply embedded into the paradigm of Occidental thinking, has to be transcended because we're in a world of interaction. It's not just that I am an autonomous being. I am in response to everything I encounter in my past and in my present. And so is everyone else. And so is every nature. And so are all species. There's a web of life. There's a mysterious interconnectivity. And that means that there isn't autonomy on the part of the individual. There's some autonomy, yes, but the autonomy is deeply shaped and affected by the surrounding forces, beings and ideas.

We're in this web, or this ocean, of interacting parts and ideas and feelings. We have to find a way that we get over, it's me against them. It's us within the natural order of things. And right now, we're fighting nature, attempting to dominate it. And we're learning that we have to get on the side of nature instead of trying to conquer it. That's a deeply mistaken belief. Well, just like we can't conquer nature, we have to work with it, we have to work with other human beings, and those other human beings are acting like us out of a fear.

And we have to find some way, which I guess to date throughout all human history, we haven't found. We've never had before the capacity to extinguish not only human civilization, but a good part of the rest of the species. We are at an inflection point or a time in our history when the power that has created all this modernity – all the wonderful things that allow us to even be on the Zoom call – also has a corollary, or as an entailment has this dark power of destruction.

So power is neither good nor bad. It can be used for good or bad. And that can be in the context of Russia, America and China, seeing the commonality – or not. And I would say the virus is a very bad indicator. We should have united to deal with the virus because there's going to be another virus and another one. All of a sudden, it's a big race.

Who's going to get the patent? Who's going to make the big bucks, and who are we going to blame? Is it China for the virus? The Russians are cheating on their vaccine. Whatever the hell it is, it's not going to work. And I think we need to use and understand through the virus, through climate change – which affects everyone on the planet and all the other species – and the threat of nuclear weaponry, that there is a new order.

It isn't just yesterday, but increasingly in recent decades, in the last century at least, that we are at a totally new stage. And it's going to be a stage where we either shift to some basic trust based on our understanding of what we have to do, or we're going to make the mistake, and we can blow ourselves up. A good part of us. It may sound a little bit cataclysmic, but there it is. This is where we are, and we better wake up to it.

And I think that's our job as lawyers, as people in public life. Let's see if we can't open our eyes and open the eyes of others to the kind of existence that we have, which is, yes, individualism, but embedded at the very level of our structure, in a collective, in a common web of life. And if we do that, I think we open the door to more intelligent, wiser use of weaponry. And hopefully, its reduction to make the world continue as it has for tens of thousands of years.

JONATHAN GRANOFF:

That is a visionary note and the proper compass for us. Every other breath is given to us from the phytoplankton. Our very breathing depends on the health of the oceans. And I want to quote you, Governor Brown, in which you said, so presciently, "I believe that with humility and grace ... " Maybe that's the key to what we got to get to get the answer, you said it then, " ... we can discern right from wrong and discover what peace requires." This idea of a sense of humility in the face of the majesty of nature, a sense of humility that we are one human family, a sense of limitation, and a sense of grace that it is graceful to live. That it's not just surviving, but that we can have something a little bit better than simply being consumers and that we can call ourselves to a higher purpose.

JERRY BROWN:

When I ran for president in 1992, I had something called the humility agenda.

JONATHAN GRANOFF:

Oh God, you're so good.

JERRY BROWN:

I had the humility agenda, and now here we are all these years. I think we're going backwards. I've not perceived humility as being much of an issue among my colleagues. Maybe even myself. I like to get a lot of attention to myself. So, I haven't even mastered the rudiments of humility, but there is a truth there. And the truth is to get an accurate portrayal, understanding, insights into who we are – who we are as individuals, who we are as a nation, who we are as humanity. And I think that humility is closely aligned with truth, and that's what's going to make us free. If we can just pursue the truth, that will lead us to humility. And if we do that, we'll get off the excessive chauvinism that is leading us right over the brink as we talk.

JONATHAN GRANOFF:

God bless you. Thank you so much, Governor Brown. The absolute note to tune the orchestra to. Thank you.

JERRY BROWN:

Call upon me anytime. We've got a lot of work to do.

JONATHAN GRANOFF: Charlie?

CHARLES MOXLEY:

113

Jonathan, Governor Brown, thank you, a wonderful discussion. Jonathan, you're up again.

JONATHAN GRANOFF:

It was really more than wonderful. It was absolutely visionary and outstanding.

TRANSCRIPT

PANEL THREE

THE INTERNATIONAL TREATY REGIME APPLICABLE TO NUCLEAR WEAPONS AND FURTHER TREATIES THAT HAVE BEEN PROPOSED

Moderator: Jonathan Granoff⁺

Panelists: Hon. Dr. Christopher Ashley Ford*; Hon. Thomas Graham, Jr.**; Dr. Gloria C. Duffy***

JONATHAN GRANOFF:

Well, we're going to shift gears and get into the tools that are needed to get us to a safer and saner world. And this next panel addresses the tools that lawyers use in bringing nations together. And this session will be on the international treaty regimes, and we have three extraordinary panelists to address this issue. I'll just give a little introduction to them nowand I want to apologize in advance. Gloria Duffy is going to have to leave us at two minutes to two on the dot. But I want to go first with Dr. Christopher Ford, who is the Assistant Secretary of State in the Bureau of International Security and Nonproliferation and is also presently performing the duties of the Under Secretary of State for Arms Control and International Security. He served as Special Assistant to the president and Senior Director for Weapons of Mass Destruction and Counterproliferation at the National Security Council. He is, I think, the ranking person, the serious thought leader in our government presently on this issue. And it's my honor to give the floor to Ambassador Ford for the next 15 minutes. And then we'll have Ms. Duffy and then Ambassador Graham, and then some O&A. Ambassador Ford, please.

⁺ President, Global Security Institute; Senior Advisor, Permanent Secretariat of the World Summits of Nobel Peace Laureats

^{*} U.S. Ambassador, Assistant Secretary for International Security and Nonproliferation, U.S. Department of State

^{**} Former Special Representative for Arms Control, Nonproliferation and Disarmament; Former General Counsel, Arms Control and Disarmament Agency

^{***} President and CEO, The Commonwealth Club of California; former Deputy Assitant Secretary of Defense

CHRISTOPHER FORD:

Thanks Jonathan I'm grateful for the chance to be part of this. Thanks for the invitation, and also for your flexibility and letting me participate from my family holiday here in the mountains. So this is not, for the record, what the State Department looks like on the inside. So many of you listening may not know this or expect it, but actually, Jonathan and I are old friends.

And I think of him as being always willing to listen, to take ideas seriously, and to engage open-mindedly about them, even when – and perhaps, especially when – they are ideas that challenge one's preconceptions or preferences. And so, since that is something that is extremely rare in modern political discourse, it's a delight to be able to be part of this.

And in that spirit, I hope you all will forgive me for choosing, as my focus today, a bit of what you might call a sort of friendly moral and legal critique of some aspects of current disarmament discourse, with the aim of trying to get us all to a place where we can, in fact, more constructively address these challenges together.

So what I'd like to do is offer a few thoughts first on the Treaty on the Prohibition of Nuclear Weapons, the TPNW, or the Nuclear Weapons Ban Treaty as it's sometimes called. And then following up on that, on nuclear weapons from the perspective of international humanitarian law.

So starting on the ban, just for the record, although I've said these points many times before. I'll just say very quickly that for the many countries that rely directly or indirectly on nuclear weapons for their security, the Ban Treaty is a fairly straight forward issue. We were not going to join it. We already consider it to be a failed treaty, and upon its entry into force, it won't bind us. All of these many states who rely in one way or the other upon nuclear weapons for security have also made very clear their rejection of a potential ban at this time and their rejection of the idea that there is any hint of what lawyers will recognize as opinio juris in the non-use of such weapons since World War II. And these messages should make it pretty clear to all concerned that there is not even a scintilla of a customary international legal norm against nuclear weapons emerging. But these are not new points from a US government official, so I won't dwell on them here. But what I would like to do, in talking about the ban, is to stress a couple of further points. One is to point out what I think are the moral implications of the likely selectivity of the treaty's impact. And secondly, I'd like to talk a little bit about, or at least to point out, what I think may be the crisis instability problems that could be created in a world without nuclear weapons – and perhaps even the nuclear weapons use incentives that could be created thereby.

That may sound paradoxical, but I think it's actually a concern that we need to take very seriously. But on the first point, the selectivity, the Ban campaign is one of civil society activism and grassroots pressures that are directed, of course, at legislators and elected representatives, pushing them towards treaty accession or ratification. And civil society activism is a well-established way to seek social change, and an entirely legitimate one.

In this context on the global stage, however, the problem should also be pretty obvious. It is that nuclear weapons possessors that lack a free press and that use draconian tools of political oppression to suppress disfavored opinion and political activism in their civil societies – to the degree that they even have civil societies at all – are highly resistant and perhaps even immune to the kind of civil society pressures that the Ban has been driven by.

So, to the degree that this campaign actually succeeds in influencing the legislators and politicians that it targets, the Ban Treaty approach has the potential to bring about nuclear disarmament really only for those free democratic societies that actually listen to their citizenry and their citizens' concerns. I have to think that it can't really be the intended objective to bring about a world in which only dictators such as Vladimir Putin, Xi Jinping, and Kim Jong-un are the possessors of nuclear weapons, but that would seem to be the direction in which the Ban campaign is effectively pushing.

So that's a concern that I think people in the Ban Movement spend far too little time addressing, but I think there's also a further problem. For the sake of argument, let's assume that the Ban were, in fact, to persuade all of today's possessors to get rid of their weapons. Were that to occur, it's actually not entirely obvious to me that the world that this would create would necessarily be a world more desirable than today's world.

So imagine a world in which nuclear weapons have been dismantled, but in which countries still know how to build them,

and in which they still struggle with all the many conflicts and rivalries and challenges of a very problematic security environment. That world might, in fact, be one that is more unstable and more likely to see nuclear weapons use than today as well. I've talked about this in other fora in more detail, but I'll just make the point briefly here. In that imagined world, every technology holder would have an incentive to engage in what you might call a "reconstitution race" – to build nuclear weapons anew – anytime it was in a major military crisis with another such technology holder.

Yes, each would have that incentive to reconstitute, for fear that the other guy would himself do so; neither would want to be a non-nuclear-armed power in a fight with a nuclear-armed power. But it's even worse than just that. Whomever happens to "win" the reconstitution race would also have an incentive actually to use such nuclear weapons first. In other words, if you happen to reconstitute your arsenal before your adversary succeeds in reconstituting his arsenal, there's an incentive to strike first – to take advantage of your short-lived monopoly and use your new arsenal to prevent the enemy from getting one. So you almost create more incentives to use nuclear weapons preemptively in such a world than exist today, and to turn every single crisis, as Thomas Schelling has observed, into a nuclear crisis.

And that is without even factoring in what I think may also be a very dramatic problem of the fact that by dismantling the architecture of nuclear deterrence, you may, in fact, give great powers more incentives to engage in conflicts with each other in the first place, thus teeing up the likely dynamics of such reconstitution, perhaps with even more frequency than they have been in the last many decades of great power peace under the nuclear umbrella.

So I say this not to say that I know for sure what such a disarmed world would look like, but rather to make the point that these are enormously more complex issues and questions than one normally hears from disarmament advocates, particularly in the Ban Movement. And so if the objective is, in fact, to strengthen international peace and security and to prevent human suffering as effectively as possible, there needs to be a lot more done to think this stuff through. They clearly haven't yet.

Surely the point is not just to be able to say that you achieved disarmament, or to seek it at really any cost whatsoever. If real security and stability is, in fact, the objective, we have a lot more hard staring at these challenges, I think, than one usually hears in disarmament community debates. So let me put the Ban aside and talk quickly about international humanitarian law here, too, because I think this is also an area that rewards attention to detail – and in which we need to get beyond mere assertions and superficial certainties in order to look at the real complexity of the challenge. Because I think the detail really does matter.

And if we can put aside some of our uncritically received certainties and absolutisms, I think it would be really valuable to work these issues through. Indeed, we might be able to make some concrete progress in changing "facts on the ground" and making the world somewhat safer. We should, for example, put aside the categorical statements about the supposed per se impossibility of ever having or using nuclear weapons in any way consistent with international law and look more at the details of how countries actually approach these questions. Details here matter, too, and from an international humanitarian law perspective, I suspect, not all nuclear postures and doctrines are created equal.

If we can make distinctions amongst them and identify particular points of friction or challenge in ways that actually help us address ourselves to concrete policy proposals – as opposed to just waving one's hands in the usual sterile sorts of ways and saying the whole thing is just a misbegotten mess from the outset and all weapons should just go away – maybe some real security progress can be made. That's really, frankly, where there is more prospect for constructive change in the world. And from a U.S. perspective, I think our own approach to these things holds up pretty well from a legal perspective.

I fully grant that if your starting assumption is that there is absolutely no legal or moral case for nuclear weapons possession in the first place that there's no reconciling that position with our doctrine. Fair enough. But I don't think it's that simple, or that that starting assumption is correct in the first place. And I do think it is really important to remember how various doctrines and postures and approaches are, in fact, structured because some are most definitely better and more moral and more legal than others. From the U.S. perspective, we are a model of transparency and openness, and accountability in this. We are practically an open book with regard to doctrines and postures, and plans, and numbers, and systems, and all of the other things that you might want to know about how someone else approaches nuclear weapons. Even if you don't like what you see, at least we give information and opportunities and meaningful material for real, serious, engaged debate on this sort of thing – and the chance for any concerned person to evaluate our approach. I think we're a model of that, I wish others – and some in particular – were much better than they are in these ways, and more transparent, accountable, open, and honest in the ways that we are.

When it comes to issues of international humanitarian law, we should also remember that in the 1996 ICJ case on nuclear weapons use, of course, the Court did not rule out the possibility of nuclear weapons use in what it described as an extreme circumstance of self-defense in which the very survival of a State would be at stake.

In light of that very particular phrasing, it's worth noting, and I think it is probably no coincidence that U.S. nuclear doctrine has long stressed that the use of nuclear weapons might indeed make sense only in extreme circumstances. Our declaratory policy is rooted in collective defense, exclusively against the most dire threats and in connection with protecting the vital interests – not just of the United States, to be sure, but also of our many allies and partners.

That is to say, bearing in mind the ICJ's standard, remember that the numerous democracies of North America and the Pacific Rim rely upon our "extended deterrence" for their own safety, and perhaps even for their continued existence as independent sovereign states. That is important. And I'd also point out the degree to which we in the United States are very explicit in recognizing the applicability of international humanitarian law to any potential use of nuclear weapons.

U.S. doctrine in weapons policy guidance has made this clear for a very long time. We have routinized the involvement of military and DOD civilian lawyers in nuclear planning and operational matters in a very deep operational level. This is a commonplace in our system, at least, and such lawyers are an official part of formal and informal planning, targeting, and operational processes of all sorts, in policy reviews, in weapons evaluations, and so forth. Here, too, we are a model.

Precisely in order to ensure consistency with the law of war and relevant implementing guides, all members of the U.S. armed forces, of course, are also subject to the Uniform Code of Military Justice, which obliges them under criminal penalty to refuse to follow unlawful orders such as those that direct them to violate the laws of war. So there are some formidable, doctrinal, and procedural safeguards built into how we think about and approach these things, including review and advice by lawyers.

And this is true across our entire military spectrum, not simply with respect to nuclear weapons – though nuclear weapons is an area that is not an exception to this. In the broader context of the fundamental purpose of our deterrent force being to deter aggression, I think we in the United States thus stand in a strong position, particularly vis-a-vis some other nuclear powers, with regard to our approaches.

And if you're looking for points of departure on where to push for real concrete change in ways that can help make doctrines and policies more consistent with international humanitarian law, you might look to some of those other parties for focus of attention. For example, I think there are some real reasons to be concerned about Russian doctrine and policy.

Now it's true, of course, that they say in Russia that their doctrine conforms with international law, and that Russia has nuclear weapons only for defense and deterrence and these would only be used in extremis. I hope that's the case, but there are some interestingly worrying signs. The Russians have, for example, suggested that they might respond with the all-out use of nuclear weapons if they see even a single incoming ballistic missile, apparently irrespective of whether or not that missile is likely to be armed with a conventional or nuclear warhead, or whether its target is a city or an empty stretch of taiga, for example. Especially coming from a country that itself has an enormous arsenal of missiles that are capable of carrying nuclear or conventional warheads rather interchangeably, it's not entirely obvious to me how such a threat of reflexive nuclear use in response to any missile attack would be consistent with the law of armed conflict.

So those are the things on which I think that the Russians should be pressed to answer questions and to display some real transparency and clarity in how they approach these matters. Another point of worry is their development of the so-called "Poseidon" system: nuclear-powered underwater drones that the Russians apparently intend to fit with massive multi-megaton, nuclear warheads and launch across the sea in wartime in order to inundate U.S. cities with radioactive tsunamis. I'm not making this up.

This operational concept raises, surely, some very serious questions about the extent to which it could possibly ever be used in compliance with applicable legal rules and principles. And then, of course, there is the rather infamous "Dead Hand", or "Perimeter" system, which has been described in media accounts – which the Russian strategic rocket forces commander, I think, confirmed back in 2011– as a system that would automatically launch all Russian nuclear forces in the event that its computer detected detonations in Russia and its computer brain lost contact with the General Staff.

Could Russia really defend such a system as being anything other than some kind of a barbarian's vindictive funhouse mirror model of retribution, taking place only after Russia has already lost a war and there is thus by definition no military necessity involved? I don't know, but goodness, we should be asking them these questions! This ought to be a focus of very considerable concern in the disarmament community.

Governor Brown made a point in the last panel, Jonathan, about how the rule of law rests upon a consensus of values and principles. And I think that's true, but it's also a little bit worrying in this context because it sounds like Russia is far outside the realm of defensible values and principles here. Moreover, in another area that I've worked on very closely, issues of cyberspace security and how the law of armed conflict applies in cyberspace, Russian officials have in recent months begun to try to walk away from prior affirmations that international humanitarian law applies where it is difficult to distinguish civilians from military combatants.

They've said that very explicitly in cyberspace now, which is deeply disturbing in itself, but if that is a principle that they think is somehow true as a matter of law, what on earth does that mean about their likely behavior in the event of a nuclear conflict? Especially from a country that possesses things like "Perimeter" and "Poseidon," what does this argument about the inapplicability of international humanitarian law mean? Could they really be contending that they feel in no way bound by law at all? So here's where we should be asking the hard questions, not of people who model transparency and engagement on these issues, but rather those who try to hide what they're up to and who suggest, when you do press them on these things, some very disturbing things. So that I think is something that I would suggest the disarmament community should be focusing on. If the Russians think any of this actually makes sense, and its legal and moral, make them defend it.

And then, of course, there's China. I don't think we should be sanguine about their policies either, notwithstanding all of their rhetoric about "no first use" and minimum deterrence. "No first use" is, of course, one of those things that one rather doubts would hold up if they were really in danger of losing a conventional war. I've always said that no first use policies are most credible and believable and trustworthy where they're least needed, and that where they would be most consequential and most needed, you simply can't rely upon them. But there's much more to it than that. It's not just that Beijing has raised questions about its own "no first use" policy. It's that for a country that has an alleged philosophy of "minimum deterrence" in the first place, China has been consistently building up the size of its arsenal for a generation now. even during a time in which the threats facing it in nuclear terms from the United States and Russia have essentially fallen through the floor. Since China joined the NPT in 1992, the U.S arsenal that arguably threatens China, and the Russian arsenal that arguably threatens China, have fallen by a collective total of something like 60,000 weapons.

So, over the last generation, the nuclear threat facing China has absolutely fallen off a cliff. And yet China continues to build and build. From a country that professes "no first use" and "minimum deterrence" as a policy, you would think that would be the obvious reason for them to cap or even reduce their arsenals. Nor do they face growing relative conventional threats, for their armed forces are bigger and more capable than ever relative to ours and the Russians. But they're still building up their nuclear weapons. Along with their obvious embrace of counter value targeting – which is to say, targeting civilian cities as such as opposed to military assets – this seems utterly indefensible, and not obviously consistent with China's legal obligations. So these are reasons to ask the Chinese some very hard questions too.

I make all these points about Russia and China, frankly, to problematize the discourse here, because there is a moralistic simplicity in so much of what one hears coming out of disarmament circles that misses so much critical detail about the real world. And I would urge that we pay a lot of really close attention to how the details of these things really do work. Because I think the road to resolving these problems, and to a disarmed future, must necessarily run through a really deep engagement with actual, concrete, real-world security challenges. It lies through thinking about and working to ameliorate those problems in ways, if I may be so bold, that the disarmament community has not traditionally been very good at doing, or even to have recognized the need to do. And I think we've got a lot of work to do also in shoring up institutions such as the NPT and the CWC and the BWC, which are under such enormous threat these days. There's a huge agenda out there, but it's an agenda that involves really embracing the challenges of security and not waiving one's hands and trying to wish them away. I'm sorry to speak so long, but you can tell, I feel very strongly about these things. Thanks, Jonathan.

JONATHAN GRANOFF:

And Dr. Ford, we'll be returning, you'll have more opportunity to speak before we close out. So, Ms. Gloria Duffy is presently the head of the Commonwealth Club. She's built it to be a formidable institution, but there was a period in which she served in government as the Deputy Assistant Secretary of Defense and Special Coordinator for cooperative threat reduction. What that means is that she was responsible for negotiating the dismantlement and destruction of the weapons of mass destruction of Russia, the Ukraine, Belarus, and Kazakhstan.

She completed over 50 agreements with these countries for dismantling and disposal of their weapons of mass destruction. She managed a budget in the hundreds of millions of dollars and her service in our government was an unequivocal success story. And my only possible debate with this amazing woman is the failure of the government to take victory laps for such successes and let more people know that we technically know how to get to a safer world. Gloria Duffy, please. And I'll apologize on your behalf that you're going to leave us at 2:00 sharp. But we're going to get you back somehow.

GLORIA DUFFY:

Thank you so much.... to Jonathan, Tom Graham and other friends and colleagues for inviting me to join you today. And I see some friends on the attendee list, hello to everybody. Obviously, today's session comes at a very pivotal time. We are in a period that former Secretary of State George Shultz has just called, in his new book, *A Hinge of History*, comparable to the immediate aftermath of World War II. The future of nuclear weapons is one of the areas in which we face some clear and divergent choices on which our future depends. We meet at a time when there are a number of concerning developments, including the removal of the Secretary of Defense, the resignation of the Director of the National Nuclear Security Organization and a number of other events. But I'd like to step back, as concerning as those recent developments are.

That's not the topic of my brief presentation. My expectation is that we will have a peaceful transition in our national leadership. So I'd like to describe how the U.S might better utilize some of the major tools we have available to us to safeguard our security. Some of which, as Jonathan referenced, we have used successfully in the past. Obviously, negotiated arms control agreements have been a major tool for the U.S to safeguard our security. Unfortunately, in recent years, the U.S has been withdrawing from our existing arms control treaties at a rapid pace based on concerns about other parties cheating on those agreements. In the past three years, the U.S has withdrawn from the 1987 Intermediate Range Nuclear Forces treaty with Russia, from the 2015 U.S Iran Nuclear Weapons Agreement, and most recently from the 1992 Open Skies treaty. So, in this context, I'm going to talk very briefly today about two aspects of arms control.

The first of these is arms control treaty compliance. I'm also going to review the approach to arms control that we practiced, and that Jonathan described, during the Clinton administration. That approach was used with great success, and it doesn't require formal government to government arms control treaties to accomplish mutual goals with other countries to reduce the threat of nuclear weapons. So, first of all, on arms control compliance, as you all know from other aspects of the law, as difficult and prolonged as it often is, the negotiation of agreements is only the first step in their efficacy. Any agreement negotiated must be supported by mechanisms for dispute resolution, and those mechanisms must be actively used for an agreement to be a living and effective document. Most arms control treaties over the years have been negotiated with compliance and dispute resolution mechanisms built in, ranging from onsite inspection rights to institutions like the Standing Consultative Commission, or the SCC, that was established to support the SALT or Strategic Arms Limitation Treaties process by providing a forum to raise and resolve compliance issues.

It's inevitable that disputes will arise about the terms of treaties and in some cases, such as major abrogations of treaty provisions, withdrawal from those treaties is certainly justified. But for some years now I don't think the dispute resolution provisions of arms control treaties have been effectively utilized. To do so is very hard. It can be done, and it's worked in the past. The past three years isn't the first time the U.S. has complained about other countries' non-compliance with arms control agreements, and, indeed, where we've experienced some difficulties with compliance. It's also not the first time we have not used all of the dispute resolution and compliance mechanisms at our disposal.

A similar scenario took place early in the Reagan administration when the new administration was concerned about Soviet non-compliance with arms control treaties and threatened to pull out of several of them. Together, with a group of colleagues based at Stanford in the mid-1980s, we reviewed all the then current disputes about arms control compliance. In a book titled, *Compliance and the Future of Arms Control*, we made some recommendations for better use of the dispute resolution mechanisms that existed to support them. There was a hearing on our report and the compliance issues by the House Foreign Affairs Committee in 1987. We testified about the status of the complaints about noncompliance with existing treaties and the opportunities to resolve the concerns through the existing dispute resolution mechanisms. We also made some recommendations about how to improve the process of resolving arms control disputes. In the end, not only did the Reagan administration work to resolve the existing disputes, but they decided to keep the existing arms control treaties in effect, and they negotiated and completed the INF treaty and began negotiations on a START agreement. Similarly, the process of arms control can continue now with efforts to resolve disputes concerning old treaties and possible negotiation of new arms control treaties, supported by dispute resolution mechanisms. The second comment I'd like to make is that formal arms control treaties are not always necessary for solving pressing international security problems, including those involving nuclear threat.

I'd like to take us back to the breakup of the Soviet Union in 1991. Sam Nunn, former Democratic Senator and chairman of the Senate Arm Services Committee visited the Soviet Union during the summer of '91. He found Mikhail Gorbachev on house arrest in the Crimea during a coup attempt. He wondered who had the nuclear command authority at that time with nuclear weapons spread all around the former Soviet Union. He came back and with his Republican colleague, Dick Lugar, chairman of the Senate Foreign Relations Committee, wrote the Cooperative Threat Reduction Act. Congress passed the act with bipartisan support in record time, and it became what was known as the Nunn-Lugar program. I was privileged to work on this at the defense department, as Jonathan mentioned, once the legislation existed and the program was up and running. This legislation gave the U.S the authority to use our defense department funds and other kinds of assistance to reduce the threat to ourselves from weapons of mass destruction in the former Soviet Union by directly working with the former Soviet countries that had weapons of mass destruction.

In the end, we were able to dismantle thousands of nuclear weapons in Ukraine, Kazakhstan, Belarus, and Russia. Ukraine, Belarus, and Russia became nuclear free. They joined the Nonproliferation Treaty. We disposed of other weapons of mass destruction, such as chemical weapons in Russia. We were able to re-employ weapons scientists on civilian projects. We did some things to close bioweapons capabilities in the former Soviet Union, and otherwise reorient defense production capabilities. I'm going to screen share for a second, a scorecard that was kept by the late and wonderful Senator Dick Lugar, as of I think 2013 on some of the accomplishments of this program. You can see 13,300 nuclear warheads deactivated; 1,473 ICBMs destroyed. These were in the four countries that had nuclear weapons in the former Soviet Union. It's sometimes said that a new area of international law was created by the Nunn-Lugar program.

There were no major international treaties involved. With each country, we concluded what was called an umbrella agreement that we negotiated with the leadership of the state department. For each project under the umbrella agreement, there was what was called an implementing agreement. That was negotiated with the leadership of the defense department, with the help of the state department, but the leadership of the defense department. I was the person who signed those agreements on behalf of the secretary of defense. We had individual implementing agreements on each task involved in the Nunn-Lugar program, removing warheads from Ukraine, cutting up long range bombers in Russia, removing weapons grade uranium from Kazakhstan and so forth. I was personally involved in over 50 of these agreements. Each implementing agreement had provisions for what were called audits and inspections. This legal framework was created by our general counsel at the defense department, the late Jack McNeil and by his deputy and my friend Jack Beard, who now teaches law at the University of Nebraska.

Jack Beard and I were joined at the hip, working very closely together, traveling back and forth to the former Soviet countries to negotiate these agreements. There was an intensive process involved in each of the agreements. We had technical teams which met with the analogous teams from the other countries. They had some amazing experiences with transparency. I will just say that some of our team members were astonished by the access they got in the process of creating these agreements and trying to look on the ground at what was necessary for dismantling weapons of mass destruction in the former Soviet countries. So, we worked with each country to identify their needs and then signed an agreement with them to implement that. I think this was remarkably successful. I think perhaps in part, because all these many agreements did not go before the Senate for ratification. We had a process where we notified each agreement that we were planning to sign to the U.S Congress.

And we notified where the funds were going to come from at the defense department before we signed the agreements. I had some amazing late-night calls back to Washington when I was about to sign agreements in Kazakhstan and elsewhere to make sure that we had notified and identified the funds before the pen was put to paper. Congress gave the defense department what was called transfer authority, where we could take funds from other programs to fund this effort, and then we got an annual appropriation from Congress. So, the process for the most part did not become a political football. The process required intensive, dedicated work by large numbers of people on the U.S side. Hundreds of people were involved in the teams and the negotiations, and it was a well-supported effort within the U.S Government, by all branches of government.

This process, I don't think has been utilized to its full potential. There are remaining tasks to do in the former Soviet Union and in other countries regarding the dismantlement of nuclear weapons. The process hasn't been utilized effectively for a number of years. Not surprisingly, there was a request for a cut in the funds for the Cooperative Threat Reduction program in the 2021 budget. There are a number of ideas around about how this program could be applied in other countries, besides the former Soviet Union. We need to return to creative thinking on this model. Again, other dangers of proliferation that could be addressed if this issue were given priority, concentration, dedication, funding, commitment, skill, and experience.

So, I hope that soon we are able to focus more on these approaches. And with that, I am afraid I have to leave the matter. I wish I had a chance to discuss with you, but I'm actually hosting a conference for another organization in just a few minutes in LA, not on arms control. So, thank you very much for your attention, Tom, Jonathan and Dr. Ford, all due respect for all the work that you've done in the past few years.

JONATHAN GRANOFF:

Gloria, thank you very much. And we'll miss you. And you'll miss Ambassador Graham. Ambassador Graham is really an exceptional figure of our time. There is a web of treaties, relationships between nations, that have arguably been essential to our survival. If you look at the counterfactual, if we didn't have these relationships, if we didn't have these treaties, God knows where we would be. He was in either a principle legal or diplomatic

capacity, a principal involved in the SALT Treaty, the START I Treaty, the START II Treaty, the INF Treaty, the Chemical Weapons Convention, the Biological Weapons Convention, the Anti-Ballistic Missile Treaty, the Indefinite Extension of the Nuclear Nonproliferation Treaty, and the creation and signing of United States of the Comprehensive Test Ban Treaty.

In addition, he has been a prolific author and written numerous books. The last one that really has impressed me was his book on advancing and strengthening the nuclear weapons free zones, the nuclear weapons free zones of Latin America, Africa, the South Pacific, central Asia, and Southeast Asia. He is a board member of the Global Security Institute, and I don't believe that he sleeps. Ambassador Graham, please.

THOMAS GRAHAM:

Thank you, Jonathan, for that introduction and mentioning all the books. And yes, of course I did give up sleeping years ago, I just wanted time to write. And thank you to the New York State Bar Association for the opportunity to come here and talk about the important subject of nuclear weapons and international treaties. And it's great to be on the panel with Chris and Gloria. My subject is the international treaty structure. I will speak more generally than specifically for the most part. I will begin by noting that we've been on this planet, as human beings, that is, for about 200,000 years. And in the last 10,000 years after many, many thousands of years, as hunter gatherers we began to live together in villages and towns and eventually cities, ultimately many cities. Civilization began probably five or 6,000 years ago.

What was discovered very early was that a system of laws to preserve peace and stability was essential, was at the very essence of civilization and then later on between cities, eventually between states. There is nothing without the rule of law. It's what permits civilization. And it must always be protected. And then in the course of the evolution of the international legal system, it became desirable to limit weapons. One of the early attempts was in the Middle Ages, when the Pope outlawed the cross bow. He said it was hateful to God. I don't think the ban lasted too long, but it was effective for a short time. And then later, much later, the Hague Convention of 1899 and 1907, I believe, took the first steps in controlling chemical and biological weapons along with other things.

Some years after that, the nuclear age arrived and humanity had developed a weapon that had the capability of destroying the world. But it also had the capability of saving the world, fueling the world, in the time of climate change. So it was important not only to limit weapons as much as possible, but also draw a clear line between the weapons and peaceful uses. In 1963, President Kennedy held a press conference. During the discussion nuclear disarmament progress in Geneva was addressed. He said, what keeps me up at night and what I worry about most is that by the 1970s, there'll be 10 nuclear weapons states in the world with weapons fully integrated into their arsenals

And by 1975, 15 or 20 such states. And this is an exact quote, "I would regard that as the greatest possible danger and hazard." Not long after that, the Nuclear Non-Proliferation Treaty, because many other people around the world shared President Kennedy's view, was negotiated in Geneva. It was signed in 1968, entered into force in 1970. The structure of the Treaty is to permit the five states that had nuclear weapons before 1967 to retain those weapons under certain conditions, and the rest of the world that signed up to this Treaty, eventually over 190 countries, would agree that they would never have such weapons. And this Treaty has been very, very successful. Only four countries, Israel, India, Pakistan, and North Korea are not party to this Treaty and have developed weapons outside of the Treaty.

The rest of the world is nuclear weapon free beyond the five permitted weapon states as they one by one joined the treaty as non-nuclear weapon states. However, the arrangement should not be thought of as a gift from the world to the nuclear weapon states in exchange for the good things that they do. It was a strategic bargain. And in exchange for giving up the most destructive weapon ever created, the Non-Nuclear Weapon States agreed with the five nuclear weapon states that they would end the nuclear arms race, and ultimately eliminate their arsenals as well. Also they would pursue interim steps as well as create a separate arrangement for the use of peaceful power. The interim steps included a number of things that people are familiar with, but the most important element, the most important part of that was the prospective negotiation of a comprehensive test ban treaty. The

thinking was at the time that eliminating nuclear weapons in the depth of the cold war would be difficult, but at least the nuclear weapon states could stop testing the weapons.

And that was the bargain. That was the underlying bargain that established the legal regime that I would submit is the centerpiece of international security, in the past, in the present, and hopefully in the future. The Treaty also was given a 25-year life at the end of which there would be a conference with a one-time opportunity to extend the treaty for a fixed period or permanently. The Review Conferences that took place every five years, four of them, before the Review Conference, all more or less ended in failure because of the inability of the nuclear weapon states to commit to a comprehensive test ban treaty. And then we come to the 25th anniversary 1995. It was agreed by the parties that the treaty would be extended permanently or indefinitely, giving us the security of the NPT forever, as long as it lasts, as long as civilization permits it. And the principal price for that was the commitment to a comprehensive test ban treaty, but within one year, was agreed in 1995. That was achieved in New York at the United Nations in 1995.

The test ban treaty was negotiated in one year, and about two months later it was signed at the United Nations by a number of countries, the United States being the first to sign, Bill Clinton, doing the signing for the U.S. However, because of opposition in the U.S. Senate in 1999, the United States has never ratified the Comprehensive Test Ban Treaty (CTBT), even though some 170 other countries, including France, Great Britain, Russia, Japan, and a number of others have ratified it.

And so, CTBT was one of the major commitments of the NPT and its extension but there is no prospect in the near future of its entry into force taking place. The nuclear weapon states did make an effort to live up to their disarmament obligations under the NPT that I just described, most importantly the effort on nuclear weapon testing. In 1993, the United States adopted a moratorium on nuclear weapon tests. That is an informal

Thomas Graham:policy that there would be no more tests. And gradually that concept has spread all over the world and the tests by India and Pakistan in 1998 were the last anywhere except for North Korea which was regarded as somewhat of an outlier. But in 2019, that country announced that it would do no more tests. TRANSCRIPT

Hopefully all will remain committed to Moratorium, but time will tell. But as of right now, no nuclear weapon tests are being conducted anywhere. The Strategic Arms Limitation process, SALT, START, those treaties, and ending up with the New START Treaty did end the arms race and created a huge reduction in the number of nuclear weapons that exist in the world. The United States at the beginning of the Cold War was producing nuclear weapons at what the French called an industrial rhythm. The U.S. built 72,000 over time and the Soviets built 55,000. We had 32,500 in our arsenal at the peak time and the Soviets had 45,000 in their arsenal for some years. Now there's only 13,000 nuclear weapons in the world, to a large degree because of this series of treaties which reduced the arsenals.

The Intermediate Range Nuclear Forces (INF) Treaty was also negotiated which alleviated the threat of medium range ballistic missiles, particularly the land mobile SS-20, which surrounded Europe and also threatened Japan. There were 1200 at the peak deployed in the Soviet Union. Short range ballistic missile systems and cruise missile systems were also regulated by the IMF Treaty. Pursuant to the Treaty, all these systems were eliminated as well as comparable systems possessed by United States. Regretfully, the U.S. recently withdrew from that INF Treaty. I thought it was a mistake because the principal benefits we were getting, that is no SS-20s on Europe's border, and we weren't really doing anything. But in any case, it happened. There's been an issue with nuclear weapon free zones. The Israeli nuclear arsenal has led the Arabs to insist on a weapons of mass destruction free zone in the Middle East and the NPT community thus far has been unable to effectively address that. Undoubtedly, it caused the last review conference to fail and it undoubtedly will come up again.

I'm nearing the end of my time now. So I would ask the question, can the NPT survive? Does it have a medium to long-range future? And without it, you can forget any further nuclear weapon disarmament if we were to lose the NPT. All this time the outcome is very much in doubt because the world community has not done what it should do with respect to climate change and the damage it causes is increasing. As climate change advances, many countries are going to lose much of their arable land. It will become desert and they'll lose water sources, fresh water sources. These two things human beings have been fighting about for over 3000

years. Small states that have some arable land or some fresh water sources left that aren't too far away from large states with big armies that are losing theirs are going, quite possibly, to look to nuclear weapons to protect themselves.

So unless climate change is effectively addressed, it's going to be very difficult to hold the NPT together long term. Shorter term, we should do all that we can to strengthen that Treaty as much as possible, so that is the NPT is better able to resist the climate change pressures. And that means ratifying the CTBT and bringing it into forced and solving the Middle East weapons of mass destruction free zone issue. Thank you.

JONATHAN GRANOFF:

Well, Ambassador Graham, thank you for the hard work you did in both the extension of the NPT in leading the delegation and in the work to getting the Test Ban Treaty. I think that the NPT is the third most important legal instrument of the 20th century. The first being the UN Charter, the second being the Universal Declaration of Human Rights, and of course, this treaty that stopped the massive proliferation that both the KGB and the CIA predicted. One of the things I wanted to just segue into this and bring Ambassador Ford in, is that the treaty, as I hope most of the audience knows and I'll just remind you, had within it a provision that after 25 years that it would be reviewed to be determined whether it would be extended indefinitely, terminated, or extended for a period of time.

The Treaty entered into force during the administration of Richard Nixon. And the reason that it had that provision is that a lot of countries didn't trust the nuclear weapon states, the P5, China, France, UK, U.S., and Russia, then the Soviet Union, to fulfill their disarmament obligations. And obviously during the Cold War that wasn't being done, and it only changed when, in Geneva of 1985, Gorbachev and President Reagan said a nuclear war can never be won and must never be fought. And in that commitment, the Geneva Summit of 1985 Statement, they said neither party would seek military advantage over the other. They were opening the door to a different framework, and that change was based on the human element of trust and verification. Trust and verification. And there's a movie that's linked in the program called "The Bomb: Yesterday, Today and Tomorrow" in which there's a big section of a dialogue between George Schultz, who was instrumental in that change, and President Gorbachev that I commend to everyone's attention.

In 1995, the states parties to the NPT came together and agreed to indefinitely extend the treaty but on conditions: one, progress in the Middle East nuclear weapons free zone; two, progress on a Test Ban Treaty; and, three, every five years the treaty would be reviewed to determine the progress on disarmament and nonproliferation. So in 2000, a set of commitments, all of them strengthening international law, diminishing no country's stability and moving toward the framework to obtain a nuclear weapons free world, and most importantly, the explicit commitment to obtain a world free of nuclear weapons was made. And in 2010 at the review conference even further commitments were made. Well, what are the kinds of commitments? Negotiating a Fissile Material Cut-Off Treaty, stopping the production of any more nuclear capable materials, strengthening the International Atomic Energy Agency's capacity. And these steps were political commitments. They are not hard law in the way the NPT is, but they are the evidence of the good faith compliance with the disarmament commitment under the Treaty. They have not been fulfilled. The nuclear weapon states are all remiss in actually fulfilling them. And they can argue, and I think that we'll probably hear from Dr. Ford that the circumstances have not allowed the fulfillment of these or other reasonable steps that civil society has put forward. Nations without the weapons. especially those in nuclear weapons free zones, are demanding negative security assurance that they will not be attacked by nuclear weapons, de-alerting the weapons, and commencing bona fide negotiations amongst the states with nuclear weapons.

The problem that I have, and then I'm going to hand this over to Dr. Ford, is that I see the NPT at risk because of the failure to live up to the commitments that nuclear weapons states have made. These promises in and of themselves are not an indication of a lack of good faith. However, failure to propose another route, another legal route, another way of advancing toward disarmament in the shadow of failing to live up to the promises, that puts at risk the very foundation of the Treaty because it does indicate a lack of good faith. This failure to find another route to advance nuclear disarmament is a serious matter. Moreover, the modernization program and the rhetoric that we've heard in the last few years from President Trump has not indicated any serious commitment to fulfilling that legal obligation. And so, I hand it over to you, Chris, to say how are we going to strengthen the NPT and vivify the disarmament commitment in the eyes of the rest of the world?

CHRISTOPHER FORD:

Thanks, Jonathan Just a couple of things, first of all. That is, a couple of points of clarification in light of Gloria's remarks. I would like to point out that we actually did extensively use the compliance, adjudication, contestation, and dispute resolution mechanisms of the treaties in question. Certainly, the Special Verification Commission of the INF Treaty was one in which we very clearly engaged the Russians, in addition to literally dozens and dozens of bilateral engagements and multilateral engagements with NATO partners to try to bring Russia's violation of that treaty under control. They refused to do that, of course, but let the record be clear that we spent an enormous amount of time under two different U.S. administrations using those very same mechanisms that she was describing. The problem wasn't that we didn't try to use them. The problem was that when we did, the Russians were repeatedly not interested. And to Tom's point about getting the principal benefit of the INF Treaty, that of thereafter being no SS-20s in Eastern Europe, well, that's certainly true today, since that's now an outmoded missile and Eastern Europe has thankfully thrown off its Soviet imperial Yoke. But we've got lots of new SSC-8s, battalion by battalion, being produced and deployed in Russia, in violation of the treaty.

So clearly the substantive benefit that we once got out of the INF Treaty eroded, and Russia expected us to continue to hold ourselves in the position of refraining from doing things that Moscow felt free to entirely comfortably do itself, in violation of its legal obligations. Also, just for the record here, we also used the compliance mechanisms within the Open Skies Treaty. There was quite a bit of engagement over this last summer, in fact, to try to resolve Russia's compliance problems with the Open Skies Treaty between us and many of our NATO and other Open Skies partners. But the Russians similarly were not interested in that; they kept right on track with their violations. On CTR, Gloria is quite right about the amazing things that CTR accomplished back in the day. And indeed, we still do a fair amount of CTR programming in other areas of the world. I've got an entire office in my bureau, for example, that-

JONATHAN GRANOFF:

CTR, Cooperative Threat Reduction?

CHRISTOPHER FORD:

Correct. Yes. Otherwise known as Nunn-Lugar. Quite correct. So she's quite correct to point out the really good work that has been done in that area. And indeed we certainly hope to do more of that. I've got an entire contingency fund standing ready to provide the seed money and the technical expertise for verifying and implementing denuclearization in North Korea should the North Koreans ever agree to such a thing. Those mechanisms are great mechanisms, but I guess the point that I really want to make is about the broader context.

And as much as I enjoy hearing stories of all the amazing progress that was done in treaty building as Thomas mentioned and in dismantling threat systems, that Gloria has told us about from the early post-Cold War period – I would urge everyone to remember that context, especially in light of what you were saying a moment ago, Jonathan, about the Reagan-Gorbachev statement. We didn't have the end of the Cold War and the reduction of all of those threats and the opening up of all those treaty possibilities because Reagan and Gorbachev made their statement. The Cold War didn't wane because of their statement. The statement came because the Cold War was waning and wouldn't have happened or meant anything otherwise. So you've got to avoid putting the cart in front of the horse here because the key point then was that the strategic context of geopolitical rivalry was ameliorated in ways that made possible those enormous, wonderful, world-historically important things.

But just to say that because we could and did do these in the 1990s, it is possible to do more now – and that we are therefore remiss for not doing so – entirely misses the geo strategic point. That point is that the world that we're in now is a very different one, unfortunately, from the security environment that made possible that progress then. I wish it were otherwise, but to point to post-Cold War circumstances and say that we need to do exactly

that tomorrow in today's world is just insane. This is not a world that makes that possible. And if there is a route to resolving these problems and moving towards the world of disarmament that we all very much want, that route has to go through engaging with all those real-world security challenges that this world faces. It's not simply to reminisce about how, "Gosh, it would be so great if we were back in 1994." We aren't there anymore. And getting us to a place that is analogous to that environment, in which we can make forward progress once again, that's the real agenda for the international security community. The mere fact that things happened before and were great then doesn't actually help us with the dilemmas we face today. If anything, it's a distraction.

And so offering an alternative route has to involve the disarmament community, as I like to say, learning to speak disarmament in the language of security. Actual solutions aren't just a question of signaling our moral commitment to moving forward. We all have that. The problem here is we are in a world in which major players, and China and Russia most particularly, are not in the place that we imagined them to be, and that we trusted that they would remain when we were making all of those treaties in the 1990s and reducing all of those systems.

There was a brief period when we thought that the world was going to be an enduringly benign place and that Russia and China would become, as the phrase went, "responsible stakeholders." There were even, I think, hubristic but earnestly felt expectations that both of those governments would continue to democratize, grow prosperous middle classes, and ultimately become "just like us" and we would thereafter live together in peace and harmony. The problem is that the ensuing years have shown us a China and a Russia that turned out to have had rather a different agenda. And what they have actually been busily doing is creating a new security environment of ruthless competitiveness and challenge that makes the recreation of that sort of mid-1990s disarmament zeitgeist impossible – or at least impossible without a lot of work on underlying security issues that

I see very few people in the disarmament community being willing to engage about.

And so that's really the crux of a problem here. If there's a way through this, it may be through the sort of thing that we have been trying to encourage through something called the Creating an Environment for Nuclear Disarmament Initiative (CEND): an engagement on precisely those underlying security issues. CEND is not a negotiating forum in the technical sense, because it's not even clear precisely what the problems that we have to overcome are. What we have been trying to do in this initiative is bring countries together from all around the world, and all sorts of different perspectives on nuclear weaponry, to think through what the most important challenges are that need to be addressed and to start to try to apply creative thinking to those challenges. That's something that hasn't really been done before, especially not multilaterally.

We have been stuck in a conceptual "go-to loop" in disarmament discourse for many, many years. In this unproductive loop, we look back at, say, Decision Two from the NPT review conference, the extension conference in 1995, or the 2000 Final Document or something, and we fixate upon what was said then in that context and imagine that by doubling down on asking for those same things now, in today's context, we are going to find ways to solve today's problems. But that just isn't the case. The 2000 Final Document calls for negotiating START III, implementing START II, and fulfilling START. It calls for the ABM Treaty. It calls for the Trilateral Initiative. But these are not instruments that even exist in the modern world! To fetishistically call for a focus upon fulfilling all those commitments from 2000 is just a fantasy world. It deliberately neglects trying to address the security challenges that we face today.

So what we think should happen is that countries should come together in things like the CEND Initiative to truly struggle with today's challenges and try to find creative ways to overcome them. The NPT Preamble itself talks about the importance of easing tension and strengthening trust between states "in order to facilitate" disarmament. That phrasing is not an accident. You need to ease tension and strengthen trust in order to make disarmament possible. And unless you're setting about trying to do that, and struggling with the real-life security challenges that decision makers face in the world and not just pulling out dust-covered copies of things that we agreed to 35 years ago, you're not going to address today's problems.

So we urgently think it's important for folks to come together and really try to wrestle with these problems and explore ways to get the world to a place where it becomes a real-world-feasible

choice for countries, and a sustainable one, to eliminate nuclear weapons and to find security relationships that don't engender reconstitution races between technology possessors, each in a crisis racing to build bombs again before their neighbor gets them. We can't just pretend that because the Cold War went away in 1991 we therefore in 2021 will be able to recreate that kind of tensionameliorating magic just because it felt good then. We've got to do a lot better than that. It's going to be a lot harder than that. And buckling down and putting our conceptual energy into finding those kinds of answers really is where the answer is going to come, if it's going to come at all. Just picking up yesterday's documents and saying that they necessarily provide tomorrow's answers just isn't going to do it. I'm sorry.

JONATHAN GRANOFF:

It is clear that part of those commitments need to be reevaluated because there are changed circumstances. What we've learned about the climate since then compels a new level of cooperation. What the pandemic is showing us is a need. Because as far as I can see, the pandemic doesn't carry passports and doesn't care about nations. And I don't want to live in a vaccine apartheid world with walled nation and walled communities and walled people. The fact of the matter is that when the United States makes commitments, we have to show a good faith attempt to live up to them and they're not dusty covered commitments. The FMC, a Fissile Material Cut-Off Treaty, hardly would diminish U.S. security if we entered into that and stop making pits. The point is-

CHRISTOPHER FORD:

Jonathan, we have worked very hard for quite a few years – across three administrations or four administrations now – to bring a Fissile Material Cutoff Treaty (FMCT) into existence. The problem is that Pakistan and China are blocking it. Why don't you talk to them? We are trying to do our bit.

JONATHAN GRANOFF:

Oh, the CD, the Conference on Disarmament . . . This is sort of arcane to most of the audience.

CHRISTOPHER FORD: Sorry.

JONATHAN GRANOFF:

We've been trying to negotiate it in a particular forum that operates by consensus and India and Pakistan, parties outside of the NPT and outside of that commitment, have been blocking that consensus. My overall issue is absent putting forward more timely framework issues that deal with the actual knowledge we have now, the increased knowledge of the consequences of a small number of nuclear weapons as well as the global threats that we now face, that is the problem that I'm squarely addressing to the administration. That we are neglecting to live up to the promises we've made. And by the way, it's not just this administration. The Obama administration did not move fast enough and fulfill the vision from Prague that President Obama put forward.

And I do think that this initiative you have in creating the environment has to be an ongoing evaluation of how do we create the holistic environment, not just isolating it in terms of a treaty but the relationships between states? How do we define security? What are our core security interests? But that endeavor has to include civil society organizations as well, Ambassador. It's been mainly diplomats only and they do not bring in a holistic approach. That environment would include addressing climate, addressing public health, addressing the sustainable development goals, all of the collective issues that would create a different set of relationships amongst nations. It's odd that the business community has done so much to create a more integrated world. And I see Charlie Moxley jumping in here because the gift of time is not ours. And Charlie, can we let Ambassador Graham have a final word before we hear from the president of the ABA?

CHARLES MOXLEY:

Yes, of course. That would be great.

JONATHAN GRANOFF:

And Chris, I apologize that you can't have a surrebuttal. And last but not least, yes, the World Court did say then they couldn't determine that in all instances International Humanitarian Law

141

would not be violated by the use of a nuclear weapon, but it did say that in any instances, even a state in exigent circumstances, International Humanitarian Law (IHL) and its constraints would apply. And God knows we need to have a real robust discussion of the relationship between nuclear weapons and IHL. Maybe we have to choose the law of power or the power of law. Let's do this again. Let's do some more.

THOMAS GRAHAM:

Am I supposed to talk now?

JONATHAN GRANOFF:

Yes, please do, Tom.

THOMAS GRAHAM:

My objective is to make the world as safe as possible and arguing over past commitments, what they might or might not have been, is not as much interest to me. I want to make the NPT as strong as possible. We have two existentialist threats facing us: climate change and nuclear weapons. To protect civilization from climate change is going to require cooperation among states at a level we've never known. If we can do that, we can eliminate nuclear weapon as well. But I want to keep the door open for nuclear weapons elimination by protecting the Non-Proliferation Treaty. And unless we deliver on the two points that I mentioned and probably some other related things, it won't be strong enough to last through the first wave of climate change destruction.

So I think the test ban is something that would be relatively easy to accomplish. The Middle East will be very difficult to solve. But we should focus on those issues and see what can be done to preserve the NPT to the era when maximum cooperation against climate change, if it happens, will exist. And then with that atmosphere, maybe we can go all the way to elimination of nuclear weapons. And that situation has to come if civilization is to be saved from climate change.

JONATHAN GRANOFF:

Thank you. We now have the privilege of hearing a prerecording from the President of the American Bar Association.

REMARKS

PATRICIA LEE REFO

PRESIDENT, AMERICAN BAR ASSOCIATION

CHARLES MOXLEY:

Let me introduce ABA President Trish Refo. But let me first say that it's very hard to move beyond this past panel. A wonderful discussion and very thought provoking and we'll carry it through the day and carry it into hopefully a follow-up program where we can take the dialogue to the next level. I think we can have no better sequel to this panel than to say that the ABA is the largest voluntary association of attorneys and legal professionals in the world. And its International Section is very active in the area of national security, including disarmament and addressing limits on nuclear weapons.

Trish Refo, President of the ABA, the floor is yours.

PATRICIA REFO:

Hello, I'm Trish Refo, President of the American Bar Association. Before we begin the rest of today's program, I'd like to thank the New York State Bar Association International Law Section for organizing this conference with support from cosponsors, including the American Bar Association Section of International Law. Meeting today, we advance a critical goal to ensure the very survival of our world. And that is to insist on the central role of the rule of law in the governance of nuclear weapons. The legal profession is strengthened by the ABA's dynamic relationship with the New York State Bar Association and other organizations that lead on the important issues of our day: issues where thoughtful and committed lawyers can and do make a difference.

Speaking before the UN general assembly in 1961, President John F. Kennedy famously said, "Every inhabitant of this planet must contemplate the day when this planet may no longer be habitable. Every man, woman, and child lives under a sword of Damocles hanging by the slenderest of threads, capable of being cut at any moment by accident or miscalculation or by madness. The weapons of war must be abolished before they abolish us."

After the Cuban missile crisis of 1962, the intelligence agencies of both the United States and the then Soviet Union concluded that without a legal constraint, a cascade of nuclear proliferation was likely, and thus, they committed to advancing a path to curb proliferation and advance disarmament. In 1970, under the presidency of Richard Nixon, the Nuclear Non-Proliferation Treaty entered into force. I am proud that the ABA House of Delegates resolved to support the indefinite extension of that treaty in 1995.

Among today's panelists is the distinguished U.S. diplomat who led the negotiations of that accomplishment, Ambassador Thomas Graham. Ambassador Graham is a member of the ABA International Law Section's task force on nuclear proliferation. The ABA also supports the comprehensive Nuclear Test Ban Treaty for which Ambassador Graham was also a central figure. The ABA's leadership in this area is part of our broader commitment to pursue international stability and order, based on the rule of law. We act on our commitment with the hard work of our task force on nuclear non-proliferation, and many other committees that focus on bringing about a safer and more secure world, not through the law of power, but through the power of law.

The American Bar Association, the world's largest, most prominent organization of legal professionals, stands firmly for advancing the power of law to control, constrain, and eliminate nuclear weapons. Thank you, all of you, for your contributions and your commitment to protecting all the world's inhabitants by advancing justice, security, and liberty for all. The American Bar Association stands with you.

CHARLES MOXLEY:

Thank you, Trish. That was a wonderful confirmation of the ABA's interest in this issue and recognition of its importance. John Burroughs is the moderator of our next panel, which he will tell you about.

PANEL FOUR

INTERNATIONAL LAW AND THREAT AND USE OF NUCLEAR WEAPONS

Moderator: Dr. John Burroughs+

Panelists: Prof. David A. Koplow^{*}; Kathleen Lawand^{**}; Prof. Charles Moxley Jr.^{***}

JOHN BURROUGHS:

This is panel four, International Law and Threat and Use of Nuclear Weapons. I'm John Burroughs, Senior Analyst, Lawyers Committee on Nuclear Policy. We have on this panel Charles Moxley, Kathleen Lawand, and David Koplow. I'll introduce them as they come up. And first it will be Charlie Moxley. Among other things, he has his own arbitration and mediation practice. He's an adjunct professor at Fordham Law School. He's a distinguished ADR practitioner in residence at Cardozo Law School. He is the author of the book, *Nuclear Weapons and International Law in the Post Cold War World*. And not least, he's a member of the Board of Directors of Lawyers Committee on Nuclear Policy, my organization, and he conceived of and co-organized this conference.

CHARLES MOXLEY:

Thank you. Thank you all, very much. This has been a fascinating day. Now, after a lot of introduction to the rule of law and the commitment of the State Bar and the ABA to the rule of law, we have come to the point when we actually focus on it front and center. The particular area of international law we're going to discuss now is the law of armed conflict (although, the topic is considerably broader than that, of course). As mentioned earlier,

⁺ Senior Analyst, Lawyers Committee on Nuclear Policy.

^{*} Professor, Geogetown University Law Center; Former Special Counsel for Arms Control to the General Counsel of the U.S. Department of Defense

^{**} Strategic Adviser to Director of International Law and Policy, International Committee of the Red Cross (ICRC); Former Head of Arms Unit, ICRC

^{***} Professor (Adj.), Fordham Law School; Chair, Moxley ADR LLC

the term "law of armed conflict" is essentially synonymous with "law of war" and "international humanitarian law" and the old Latin "*jus in bello*." It's essentially the regulation of the use of force within armed conflict.

The first point to note is that its content and applicability to nuclear weapons threat and use is largely not controversial. It is agreed by the United States and other nuclear weapons states that the law of armed conflict applies to nuclear as well as conventional weapons. We can question whether that is enough and whether we need another level of law that specifically addresses nuclear weapons. We will get to that question in today's discussions later today, if time permits, but for present purposes, we're going to look at the law of armed conflict, as it by all accounts, applies to all uses of force in armed conflict, including uses of nuclear weapons.

The approach I've taken in my book and in the article that John Burroughs, Jonathan Granoff, and I did together some years ago (which is in the program materials), in order to take the question of what the law is out of reasonable dispute, is that I have largely relied on statements of that law by the United States, including as set forth in U.S. military manuals. The point is that this part of the analysis does not appear to be controversial. The basic rules of that body of law that I'll talk about are the rules of distinction, proportionality, and necessity, and their corollary, the requirement of controllability, and the rule of precaution, all as defined by the United States. Again, the applicability of these rules is not controversial at all. Where the rub is, and where the proponents and the opponents of the lawfulness of the threat and use of nuclear weapons disagree, is on how you apply these rules to the use of nuclear weapons. That is a very major point.

Professor Scott Sagan – and Scott, I'm delighted you're still with us - made the point earlier that the JAG folks represent a huge law firm and have addressed this issue extensively. That is certainly my understanding, that there are broad statements from the U.S. military and the U.S. government as to the law applicable in this area and as to the commitment of the U.S. to follow the law of armed conflict as concerns nuclear weapons. The difficulty is in how they apply it. The premise, for our purposes, is that, if the U.S. is misapplying this law, if the application by the United States of the legal rules in this respect is misguided by the U.S. attorneys who are conducting the legal analysis in connection with these weapons, then the conclusions are misguided. The gravamen of my remarks here is that there is reason to consider more deeply the requirements of international law and recognize that they are more demanding than the U.S. legal community within the military generally recognizes when it comes to applying this body of law to nuclear weapons threat and use.

The first rule I would mention is the rule of distinction or discrimination. To understand how the U.S. views this rule, I will read from the Law of Armed Conflict Desk Book, a 2010 U.S. Army manual. It says that parties to a conflict "shall at all times distinguish between the civilian population and combatants, and between civilian objects and military objects." That's the rule of distinction. You need to be able to distinguish. So if we look at that in a straightforward way, it's a straightforward question as to whether, when we use a particular weapon, can we distinguish between lawful and unlawful targets?

A number of the speakers mentioned that the U.S. has, at times, moved towards what's called "war fighting," which means that we're not taking the approach of mutual assured destruction and we're not aiming at civilians; instead, we're aiming at military targets. But there is the issue of co-location. I believe it's broadly recognized and not controversial that the contemporary concept of the breadth of legitimate military targets is such that there are military targets near civilian centers, such as major cities, major urban centers, in the U.S., Russia, and other countries of the world. So in targeting such military targets, we still end up targeting civilians as a practical matter, even if the stated intent is to target the co-located military targets within the target area.

So the question is, when we use a nuclear weapon, even if directed at a military target, can it distinguish the non-military, the civilian persons and objects in the target area? This is a very important and serious question. I would submit that this would arise as a significant issue in most, if not all, situations where a nuclear weapon is used and certainly in the event of any use of large scale nuclear weapons (we'll talk about low-yield nuclear weapons separately). It's hard to imagine circumstances where there will be a real distinction between the military and civilian targets, unless you hypothesize really remote targets, such as, perhaps, a submarine at sea, or a remote missile field in the desert. But that's only the first level of analysis. As I understand it, the way the internal legal community in the U.S. military has approached this issue is to consider whether a weapon can actually hit the intended target. My thesis here is that that's not adequate. It is true that we're much better at hitting targets than in the past. Our accuracy is extraordinarily good on a statistical basis, although there will still be weapons that go awry. This is something Scott Sagan and I have discussed. It's fine to consider the CEP or area within which the weapon will hit, but what about the ones that don't hit within that area? Any failure of accuracy, which is inevitable, is obviously much more serious with a nuclear weapon.

But the real point, I suggest, is that when we ask, "can we distinguish," for purposes of the rule of distinction, reducing the question to "can we hit the military target" really misses the point of the rule. The rule asks, "can we distinguish between military and civilian targets? To consider this question, it is clear that we should consider *all* the effects of nuclear weapons, not just hitting the target and blowing it up and the heat and blast there and the prompt radiation, but also the other inevitable effects, such as radioactive fallout and electromagnetic pulses and nuclear winter.

Radiation is inevitable. It would be an oxymoron to speak of a nuclear weapon that didn't emit radiation. Using a nuclear weapon is going to inevitably produce radiation. Also, something we haven't talked about very much today, is that when an explosion occurs at a high enough altitude, it spreads electromagnetic pulses that can impair electronic equipment of all kinds on the ground over extended areas. There's also the possibility of nuclear winter, as a number of speakers have talked about. There are studies, as I think Governor Brown referred to, which suggest, if I recall correctly, were there to be a nuclear conflict involving even a relatively small number of weapons in a back and forth exchange between the U.S. and Russia or India and Pakistan, it could precipitate nuclear winter. Huge amounts of smoke and soot that would be thrown up in the air that would block out the sunlight, with devastating effects on agriculture and human life. This is one of the long-term reverberating effects of nuclear weapons.

In sum, on the principle of distinction, it's not enough to hit the target. The other inevitable, known, unavoidable aspects of the nuclear strike, including the radioactive fallout and the potential electromagnetic pulse and nuclear winter effects have to be considered in the legal analysis.

The other question in the rule of distinction analysis is, do we have to consider the potential for a nuclear responses and escalation? In a sense, it seems illogical that we would have to consider what's done by somebody else. But this is why we have spent so much time in this program on nuclear policy. We know, under the nuclear policies of nuclear weapons states, that there is a high potential for a nuclear response if a nuclear weapons state uses nuclear weapons. When this happens, you're going to have a nuclear response and likely escalation, and compounding effects, which would have to be considered.

The second of the three main rules of the law of armed conflict is the rule of necessity. I believe it was Scott Sagan who referred to this earlier and said that, if you can do a particular strike with a conventional weapon, you should do so, because it's not necessary to use a nuclear weapon. And if you can use a weapon with a lower level of destructive power, you should do so. You take it down to a lower and lower level. The principle of necessity requires us to go to the lowest level of destructiveness that can achieve the military objective. That's why, in our discussion about the effects of nuclear weapons, we focused on the revolution that has taken place in conventional weapons. They have become really very effective and highly accurate. As has been mentioned earlier, if you can hit a target right on the nose, as opposed to being only being able to hit it a half a mile out or the like, obviously you need much less firepower. And we're moving towards this prompt strike capability to hit any place in the world with high power conventional weapons within an hour, and it may soon be within a half an hour.

The point was made earlier that you may need to use several conventional weapons in situations where you might otherwise have considered nuclear weapons. Even multiple conventional weapons don't carry the same risks as nuclear weapons. They will carry huge risks of huge casualties, but not the tpes of ongoing injuries that Professor Arakaki told us about, which go on for generations. They don't pose risks of radiation, electromagnetic pulse, or nuclear winter.

In the context of the rule of necessity, we often hear the idea that there should be more of a focus on low-yield nuclear weapons. Those of us who have been working on this for years, know that this interest in low-yield recurs every 10 or 15 years, going back to the '60s and the '70s, I believe. The idea is, that strategic weapons based deterrence isn't credible, because the possibility that we'd actually use nuclear weapons in the range of hundreds of kilotons or even megatons is not credible. So we consider focusing on the low-yield weapons because they're more credible as weapons that we might actually use, the implicit idea also being that their use would be more lawful. But is that correct? Not really, I suggest, because if you can achieve your military objective using the conventional weapons or even multiple conventional weapons, then, then the use of low-yield nuclear weapon would be unlawful under the rule of necessity. There are going to be some targets that can't be destroyed with conventional weapons, particularly certain hardened and deeply buried targets, but, even as to such targets, there are ways of addressing them other than destroying them. For a significant percentage of potential targets the U.S. might need to address, it could potentially address them with conventional weapons.

Similar consideration apply to the rule of proportionality, the requirement that there be some reasonable proportionality between the military value of a target and the level of collateral effects that result from the attack. Again, whether nuclear weapons use could comply with proportionality seems questionable. If you're using a nuclear weapon against a military target that's colocated with civilians, it's near a city, it's near urban areas, or it's close enough that there is a a likelihood that you're going to hit civilians, it's going to be very hard to comply with proportionality.

Now, there are hypotheticals where you talk about hitting a remote target at sea or in the desert or a missile base under a mountain, someplace where maybe a nuclear strike could arguably fit within the requirements of proportionality. Maybe you're going to take out a lot of missiles, so maybe you could satisfy proportionality there. But can you satisfy necessity? Can you satisfy other requirements? Again, there is the reality that you need, in making the legal analysis, to take into consideration all of the potential effects of nuclear weapons, not just the blast, fire, and prompt radiation, but also such further effects as radioactive fallout and potential electromagnetic pulse and nuclear winter effects, not to mention the potential effects of the target's likely responsive and likely escalatory responses. My understanding is that the U.S. lawyers, in advising the military about the lawfulness of nuclear weapons uses, focus on the likelihood of hitting the target, without much, if any, focus or weight given to these other foreseeable effects of nuclear weapons uses. The U.S. military hasn't, to the best of my understanding, modeled and addressed potential radiation effects, electromagnetic pulse effects, nuclear winter effects, nuclear retaliation, and nuclear escalation effects. We're not adequately considering these effects.

This leads to a sense, that I'm projecting as a thesis, that it is very hard to see how a nuclear weapon strike by the U.S. could comply with any of these three rules of the law of armed conflict that I've mentioned. But there's a further point, that to me is a most central one. If one reads the U.S. military manuals and other statements of these rules, and considers how the rules are formulated, it is clear, in the U.S.'s own definition of such rules, that a weapon has to have effects that are subject to control by the user for the use to be lawful. This means a state contemplating using a nuclear weapon has to know that the weapon's effects can be controlled and has to assess whether the use of the weapon will comply with the law of armed conflict. I present as a thesis, that, if the effects of nuclear weapons are not controllable, then the use of such weapons cannot comply with the law of armed conflict.

I submit that the effects of radioactive fallout and potential electromagnetic pulse and nuclear winter effects, among others, have to be considered in the legal analysis because they're known, inevitable, foreseeable effects. These effects are simply not controllable. Even low-yield nuclear weapons produce radiation, and there are statements of the U.S. acknowledging this. The effects of nuclear weapons are also subject to weather conditions, climatic conditions, and many factors that can't be controlled.

Now, a fourth rule, and John you'll cut me off if I get at the point where I need to stop, but....

JOHN BURROUGHS:

You should stop in a couple of minutes, Charlie.

CHARLES MOXLEY:

Okay. A fourth rule of the law of armed conflict is the rule of precaution, which requires that states take all reasonable measures to train their people and control their equipment so as to be able to comply with the law of armed conflict. The U.S. maintains a high alert status that we've heard about today, wherein some 900 of our nuclear weapons are on instant alert, as I think Han Kristensen said. Russia and some other nuclear weapons states are doing the same. We have this high alert level, and we have this launch on warning policy that, in theory, we will respond to an incoming attack before it lands.

The experts tell us that the amount of time that the executive and the military would have to make a decision and act on it, is 10 to 30 minutes. So, because of this high alert status, we haven't given ourselves time to do a reasonable analysis. And this is unnecessary. Other countries, China, for instance, has a policy that's more conservative. To a large extent, they are separating out their weapons, not having them on high alert, and giving themselves time.

One final point I'll just make in two minutes, John, if that's okay, is in the area of risk analysis.

JOHN BURROUGHS:

Charlie, why don't you hold that for discussion?

CHARLES MOXLEY:

Okay. Fair enough.

JOHN BURROUGHS:

Because I think that's certainly worth talking about. So let me introduce Kathleen Lawand. She's currently Strategic Adviser to the Director of International Law and Policy, International Committee of the Red Cross. From 2012 to 2020, she was head of the Arms Unit in the Legal Division of the ICRC.

And there she oversaw the development and promotion of the ICRC's legal and policy positions on weapons of humanitarian concern. In that connection, I saw her in action at the 2017 negotiation of the Treaty on the Prohibition of Nuclear Weapons.

Can you speak, Kathleen? Well, we lost Kathleen for a moment. So Charlie, why don't you talk about risk analysis?

CHARLES MOXLEY:

Okay, I'll do it quickly because everybody's got a lot to say, and I want to hear the other speakers as much as everybody else does. The point about risk analysis is something everyone knows intuitively. It's that we need to evaluate the lawfulness of the use of weapons in military operations in advance. That's true in theory. That's why we have war rooms. In recent years, the U.S. has shown a demonstrated commitment to LOAC in its military engagements; it has the practice of getting JAG officers involved in process. But this practice of analyzing things in advance is particularly important if they're contemplating using nuclear weapons because the consequences are so extreme. That's obvious. So, the question is, how do we do this? How do we analyze potential risks?

I see Kathleen is here. So, I will wrap this up quickly. How do we do effective risk analysis? There are a lot of ways of analyzing risks, but the Joint Chiefs of Staff of the U.S. military have a manual on joint risk analysis. There are also a number of articles by military people who speak at West Point and who are very authoritative on the subject. The bottom line appears to be that the U.S. generally takes the position that we need to look at is all foreseeable risks of weapons. This is not specific to nuclear weapons, but a general policy that includes nuclear weapons. That's the theory, and part of the stated policy of the U.S. military. This means we need to look at the risks and assess them in terms of the operational desirability of a particular military strike and weapons use and also in terms of its compliance with LOAC/IHL. It means looking at the percentages and the values for each of the potential risks.

The final thought I'll leave you with on this: the most vexing question is, how should we, – and the legal community, including the JAG officials responsible for this, people who do this work evaluate a low probability risk of an extreme, potentially apocalyptic effect, such as an event affecting thousands or even millions of people? How do we evaluate that in an operation that looks like a potential risk, but it's a low probability (perhaps one or two percent, or a half a percent) risk of existential effects in terms of how the military strike under consideration would playout? So, I'll leave you with that question. Kathleen, I'm glad you're back.

KATHLEEN LAWAND:

2022]

Thank you so much for inviting me, and special thanks to the New York State Bar Association International Section for organizing this important event. I'm really delighted to be here. I will be providing the perspectives of the International Committee of the Red Cross on the compatibility of nuclear weapons with International Humanitarian Law, IHL, the law of armed conflict.

I agree with much of what Charles has said on this. I will bring a slightly different perspective. But perhaps I will start by way of introduction by explaining why it is the ICRC has been so engaged on this issue of nuclear weapons and has been calling for the prohibition of nuclear weapons. We first called for nuclear weapons to be eliminated in September 1945, after witnessing firsthand the horrific consequences of the atomic bombing of Hiroshima, where alongside the Japanese Red Cross, we attempted as best we could to assist the dying and wounded. So we were there 75 years ago, and this experience marked us profoundly. And in the next seven decades, the ICRC and the broader International Red Cross and Red Crescent movement, of which the ICRC is a part, has regularly repeated this call.

And in March 2010, so over 10 years ago, and this was shortly before the NPT Review Conference, the president of the ICRC issued a historic appeal to states, to urgently take measures to prevent the use of nuclear weapons and to negotiate a legally binding international agreement to prohibit and eliminate them in accordance with existing commitments and international obligations. And our movement echoed this appeal one year later in 2011, an again, historic resolution. And our appeal was based on three observations. First, the catastrophic humanitarian consequences of any use of nuclear weapons. And this was based, as I said, on our firsthand experience including what we observed of the long-term impacts of nuclear weapons on human health due to radiation exposure, which the Japanese Red Cross to this day continues to treat. There are very few in number today but it continues to treat persons who were exposed to nuclear radiation 75 years ago as children, for cancers and other diseases and has been doing so for the last 75 years. The second observation is the lack of any adequate humanitarian response capacity nationally or internationally in case of use of nuclear weapons. As a major global humanitarian assistance movement, this is very much of concern to us. Our studies show, we would be incapable of providing adequate humanitarian response in case of use of nuclear weapons.

And then the third observation, critically, was our conclusion that it is difficult to envisage any use of nuclear weapons that would be compatible with IHL, International Humanitarian Law. The ICRC was therefore heartened that in 2010, the NPT review conference expressed for the first time its deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons. And it reaffirmed the need for all states at all times to comply with international law, including IHL. Nuclear weapons states parties also committed to accelerating progress on the steps leading to nuclear disarmament and to undertake further efforts to reduce and ultimately eliminate all types of nuclear weapons. Yet, as we know, there has been little progress to implement the NPT's disarmament obligations and commitments. The ICRC and the entire Red Cross and Red Cross movement therefore welcome the 2017 Treaty on the Prohibition of Nuclear Weapons, the TPNW or nuclear ban treaty, which comprehensively prohibits nuclear weapons notably on the basis of IHL.

And the treaty's preamble is very clear about this. Indeed, the ninth preambular paragraph provides that states parties to the treaty are, and I quote, "basing themselves on the principles and rules of International Humanitarian Law, in particular, the principle that the right of parties to an armed conflict to choose methods or means of warfare is not unlimited, the rule of distinction, the prohibition against indiscriminate attacks, the rules on proportionality and precautions in attack, the prohibition on the use of weapons of a nature to cause superfluous injury or unnecessary suffering, and the rules for the protection of the natural environment."

In a few seconds, I will outline some of the issues raised by nuclear weapons under some of these rules, building on what Charles has just mentioned. I would just mention that all of these rules are of customary law, binding on all states, in addition to being codified in Additional Protocol I to the Geneva Conventions. I'd like to mention as well that preambular paragraph ten of the TPNW goes on to say that any use of nuclear weapons would be contrary to the rules of international law applicable in armed conflict, in particular IHL.

So there's this very categorical statement in the preamble of the TPNW that any use of nuclear weapons would be contrary to the rules of international law applicable in armed conflict. I should mention that at the time of the treaty's negotiation, some states, such as Sweden, expressed the view that this provision does not reflect current international law, preferring instead, the International Court of Justice's formula that nuclear weapons are generally contrary to IHL as the correct statement of the law. I will not pronounce on this debate. Instead, I will look at what we believe are the major challenges to demonstrating use of nuclear weapons that would be compatible with IHL. Today, the TPNW is the only treaty at global level to comprehensively ban nuclear weapons, but from a strictly legal standpoint, when the treaty enters into force, it will be legally binding only on those states that have formally adhered to it through ratification or accession. Therefore, the question of the compatibility of nuclear weapons with the general rules of IHL covering the choice of all means and methods of warfare remains relevant.

And it is important of course, to recall, and I think others have done so before me, that the ICJ confirmed in the nuclear weapons case that the lawfulness of any weapon can be assessed against these general rules, distinction, proportionality, precautions, et cetera, and that nuclear weapons are no exception in this respect. It should also be recalled, and this is critical, and I will come back on this- that IHL must be respected at all times, whether in offensive or in defensive operations. There's no exception in extreme cases of self-defense for the obligation to respect IHL. Now for legal practitioners, the starting point for assessing the compatibility of any weapon with IHL is of course, the facts: the evidence of the weapons' foreseeable short term and long-term effects on civilians, on human health, and on the natural environment.

Charles mentioned the rule of distinction, that is the requirement to direct attacks against a specific military objective. I will skip over this therefore and turn instead, also given the shortness of time, to the prohibition of indiscriminate attacks. So an attack is indiscriminate if it is of, and now I'm quoting from the rule as stated in Additional Protocol I and similarly under customary law, an attack is indiscriminate if it is "of a nature to strike military objectives and civilians or civilian objects without

distinction," either because it is carried out using a weapon that is incapable of being directed at a specific military objective, or the weapons' effects cannot be limited as required by IHL- that is the weapons' effects escape the control of the user in time or space. So even admitting that a nuclear weapon can be directed at a specific military objective, for example because it's fitted with precision guidance, a key issue remains whether the forces released by the nuclear detonation and the effects of those forces can be sufficiently limited to the target.

We know that a nuclear detonation releases a combination of powerful blast waves, intense heat in the form of thermal radiation, high amounts of ionized radiation, which in most cases will be dispersed over very wide areas. The heat generated by the explosion may trigger intense fires and firestorms, the effects of which are uncontrollable. We've talked also about the impact of radiation and residual radioactive particles, so-called nuclear fallout created by the blast likely to spread far beyond the target area, potentially over great distances and across borders. So it seems therefore clear that there would be inherent difficulties in controlling or limiting the effects of nuclear weapons in space and in time. And these uncontrollable effects would indicate an attack, striking military objectives and civilians and civilian objects without distinction. And this is especially the case if nuclear weapons are used in or near a populated area.

Arguably, this would mean that the use of a nuclear weapon in or near a populated area would in all cases constitute an indiscriminate attack. It can also reasonably be concluded that the use of a nuclear weapon in or near a populated area would violate the rule of proportionality and attack, as Charles indicated. This rule requires that for an attack against a military objective to proceed, the expected incidental or collateral civilian casualties and or damage to civilian objects must not be "excessive in relation to the concrete and direct military advantage anticipated." That's a direct quote. To be clear, the advantage must be military. It must be concrete and direct, meaning it cannot be remote, long term, or hypothetical. This means that the overall objective of winning the war or defending the nation is too broad for the purposes of this rule and does not qualify as a concrete and direct military advantage under the law of armed conflict.

2022]

It is therefore clear that any use of nuclear weapons in or near populated areas would have severe and extensive immediate and long term direct and indirect consequences for civilians, which are today entirely foreseeable, given what we know about the effects of these weapons. We have briefly looked at how IHL protects civilians from indiscriminate and disproportionate harm. Now, what about protection of combatants? Is it lawful to use a nuclear weapon against enemy combatants in a desert, for example? Well, we would see a major impediment to that under the prohibition of weapons of a nature to cause superfluous injury or unnecessary suffering. This rule refers to injury suffered that is in excess of what is required to achieve the legitimate military goal sought. It aims to protect combatants, and compliance with this rule is assessed by reference to the weapon's designed injury mechanism- that is its designed effects on human health. And clearly, as has been described, the horrific short- and long-term illnesses, permanent disability, and suffering caused by radiation exposure raises serious questions about the compatibility of nuclear weapons with this rule. And then finally, we can mention rules aimed at protecting the natural environment. And I will go over this quickly for want of time. Customary rules of IHL into protecting the natural environment require that all means and methods of warfare be employed with due regard to the protection and preservation of the natural environment. And there, again, given what we know about a potential impact of radiation and the destructive nature of nuclear weapons and the long-term impacts of radioactive particles, et cetera, on the natural environment, there are major questions to be asked whether this rule could be respected.

IHL also prohibits the use of means and methods of warfare which are intended or may be expected to cause widespread long term and severe damage to the natural environment. And this rule, which is codified in Additional Protocol I to the Geneva Conventions, has not become part of customary law with regard to nuclear weapons, because a number of states have consistently objected to its application to nuclear weapons (unsurprisingly, these are nuclear weapons states). Nonetheless, the potentially severe immediate and long-term effects on the environment, even in the case of even a limited nuclear exchange, raise significant questions under this rule, given what we know about the major long-term disruption to climate and the severe food insecurity that would be created for up to a billion people, even from a limited nuclear exchange involving just 100 nuclear weapons.

I will conclude my remarks on the notion of self-defense, by reference to the 1996 advisory opinion of the International Court of Justice, where the ICJ concluded that the use of nuclear weapons would generally be contrary to the principles and rules of IHL. However, the Court stated that it was unable to decide whether such use would be lawful or unlawful, and I quote, "In an extreme circumstance of self-defense in which the very survival of a state would be at stake." In this respect, the Court did not conclude that the use of nuclear weapons would be allowed in an extreme of selfdefense. Rather it indicated that the state of international law and the facts at its disposal at the time in 1996 did not allow it to reach a definitive conclusion. For our part, the ICRC considers that the exercise of the right of self-defense, even in an extreme situation where the very survival of the state is at stake, can on no account release that state from its obligations under IHL.

In other words, there is no suspension of International Humanitarian Law in cases of self-defense. If this were the case, this would amount to the ends justifying the means and spell the end of law. This is very much about the rule of law and the rule of universal humanitarian principles, which are a critical underpinning of the world order. Self-defense must be exercised in compliance with IHL, whatever the circumstances, and not in violation of the very rules intended to mitigate the suffering caused by armed conflict and these age-old rules aim to impose limits on what is permissible in warfare. So to conclude, it is indeed very difficult to reconcile nuclear weapons with IHL. Thank you very much and sorry, I think I spoke a bit longer than I was meant to. Thank you so much.

JOHN BURROUGHS:

Thank you, Kathleen. I'm really delighted you are able to join us. Not everybody may know that the International Committee of the Red Cross is a leading authority or perhaps the leading authority on international humanitarian law. And I've delved many times into their two-volume study of customary IHL. Our next speaker is going to be David Koplow, a professor at Georgetown Law. Among other governmental positions, he served from 2009 to 2011 as Special Counsel for Arms Control to the General Counsel of the U.S. Department of Defense. He has published five books and numerous law review articles regarding treaty negotiation, verification, and implementation and regarding the intersection between international legal standards and U.S. constitutional law.

DAVID KOPLOW:

Thank you, John. And let me extend my congratulations to you and Charlie and Jonathan, and to everybody else who's been involved in assembling and presenting this truly extraordinary day long program. It's a real treat to watch and to listen to extraordinary presentations by such a wide group of distinguished experts. I'm delighted to participate, and I'm delighted to see that the program has attracted a large audience and an audience, as you can see from the list of participants, with substantial expertise. So I look forward to the discussion that we'll be able to have at the end of this program and later in the day.

I thought that for my presentation, I would focus on one particular legal tool that I think has a lot to say about the international law applicable to the possession, threat, and use of nuclear weapons. That is the 1996 advisory opinion by the International Court of Justice. Although this decision is now almost 25 years old, it remains a primary source for study of the legality of nuclear weapons for two kinds of reasons. First, this is, I think, the most authoritative, thoughtful expert, widely acknowledged source. The International Court of Justice is entitled to great deference and respect for the work they've done in this matter. Secondly, this decision is maddeningly incomplete, incoherent, internally contradictory, and confounding for further analysis. So I'd like to pick at what the ICJ said in that decision.

I'll apologize in advance if some of my remarks have more the tone of a long-winded rant rather than a careful academic presentation because this could be the chance to get off my chest some points that I've had in mind for a long time. The ICJ began, I think appropriately, by determining that nuclear weapons are fundamentally weapons. They are unusual weapons, both in terms of the devastating power and the extraordinarily long-lasting effects, but they are weapons. And therefore, they are governed by the traditional law of armed conflict, international humanitarian law, that applies fully to all other weapons.

It takes some special analysis in handling, but fundamentally, the rules as articulated by both Charlie and Kathleen on proportionality and necessity and avoiding unnecessary suffering, apply to nuclear weapons as they do to all other circumstances. In evaluating the effects of nuclear weapons, the advisory opinion concluded that nuclear weapons are scarcely reconcilable with the fundamental principles of international humanitarian law. But the Court determined that it could not say categorically that in all circumstances any use of nuclear weapons must be a violation of international law. By the narrowest of margins, essentially an eight to seven decision, the Court decided that there might be some scenarios in which the threat or use of nuclear weapons could be lawful despite the unusual effects and power that the weapons might have. I'd like to zoom in on a couple of the circumstances under which the Court hypothesized that the use of nuclear weapons might nonetheless be legal.

Again, here you have to acknowledge that the Court is not completely clear in setting out its logic or the fact patterns they were concerned with. It requires some interpretation, some interpolation, but I think we can identify at least two categories of cases. The first concerns the possible use, as suggested by one of the states participating in the proceedings, of a small number of very low yield nuclear weapons against a military target that was located at a long distance from population centers. Here the scenario might be use of weapons against a naval fleet on the high seas, far from shore, or perhaps a use of nuclear weapons against a column of tanks on the desert someplace distant from population centers. The Court concluded that the use of a small number of very low yield weapons in those discrete circumstances might be such that the effects could be confined, could be controlled, could be limited in a way that would be compatible with international humanitarian law.

My reaction to that is, first, if this were a law school exam, I might have to give the ICJ a pretty good grade for having come up with a hypothetical scenario that meets some of the legal standards and that might dodge the applicable prohibitions and imagine a lawful use. But I think we should expect more than that from the World Court because the Court's decision here ignores the fundamental reality about how the United States and the other countries that possess nuclear weapons have built and designed their arsenals, the strategic doctrines that underpin their potential use, and the testing and training that accompanies the nuclear programs. In fact, the U.S. and the others do not have arsenals that are optimized for that small scale limited remote use. Instead, the United States has large nuclear weapons.

We've got some small ones too, and I'll return to that point in a moment, but fundamentally the arsenal in the United States and elsewhere includes large nuclear weapons that are an order of magnitude bigger than the weapons that were used with such devastating effect on Hiroshima and Nagasaki at the end of World War II, and the scenarios for use do not involve using only a very small number. They involve massive uses of nuclear weapons. They do not involve principally targets that are remote from population centers. Instead, the weapons, the arsenal, and the doctrines for use focus upon the possibility of using them against military targets that are located in or near population centers in Russia, China and elsewhere around the world. And the forces are trained with that sort of big uses in mind. So while it may be possible to construct scenarios where a nuclear weapons use might be legal, that's not the reality. That's not what the world of nuclear weapons today is all about. The ICJ could and should have done better.

To illustrate this, I'd like to offer an extended analogy. This does take a moment, so please bear with me, but I think I can connect it back up. The analogy is to the world of chemical weapons. Chemical weapons are another tremendously important and deadly device that the New York State Bar Association could well put on a day long program about at some other time. But for now, the point is just that there's a treaty that deals with chemical weapons, the Chemical Weapons Convention. It constitutes a comprehensive and nearly universal prohibition against the wide range of chemical weapons activities. It restricts countries from manufacturing and possessing and testing and selling and using chemical weapons categorically. But there's a problem because many chemicals are dual use or multi-use in their nature. The same sorts of precursor chemicals that can be combined to make chemical weapons, are also used across the entire of the civilian economy for all sorts of benevolent purposes, from plastics to paints, to fertilizers, to insecticides.

You just could not, as a practical matter, ban all of those toxic chemicals, even though if you combine them in one way, you get fertilizer and insecticides, but if you combine them in another way, vou get a nerve agent and mustard gas. So what the treaty does is to permit the possession of those toxic chemicals where they're used for purposes not prohibited by the treaty. Where they're used for peaceful, industrial, or agricultural, or pharmaceutical use, you can retain those chemicals. But the treaty says you can retain those chemicals only when they're in types and quantities that are consistent with the peaceful use. So you can't lawfully retain huge quantities of toxic chemicals and say, "Well, we're going to use these for insecticide" when they're not quite the right chemicals that we use for insecticide, and you're not holding them in quantities that would be appropriate for that use. You can use chlorine for swimming pool and for purifying drinking water, but you can't hold vast quantities of chlorine that would be incompatible with that use.

It seems to me that's the concept that the ICJ could and should have used in dealing with the legality of nuclear weapons in this remote possibility. What they could have said is that the possession and use of nuclear weapons might be lawful when you might use a small number of low yield weapons in a remote circumstance, but that's the only way that you can possess nuclear weapons. You can't possess large arsenals of large nuclear weapons and announce a strategic doctrine, and do the testing and training that would be appropriate for other kinds of uses. If only a small number of low yield weapons would be legal, that's the only kind of weapons you could possess.

The ICJ could have said that and did not. Now, I mentioned that the United States does possess a number of low yield nuclear weapons. And here it seems to me that the ICJ decision, the advisory opinion, has perversely led the world, reinforced the world's movement, in precisely the wrong direction. That is, many military authorities in the United States and elsewhere have sought to pursue low yield nuclear weapons, precisely because they would be more usable. The argument is that very large nuclear weapons are so powerful and so destructive that we would be self-deterred from using them in ordinary circumstances, but that as a war fighting technique or tool, it would be better to have low yield nuclear weapons. The ICJ decision seems to reinforce that instinct. To me, that's precisely wrong. The world should not be seeking low yield nuclear weapons. We should not be seeking nuclear weapons that are more usable. We should seek to make the barriers against any use of any nuclear weapons as high as possible to preclude any possibility of any use of nuclear weapons. The ICJ decision in seeming to endorse this one scenario, I think takes us in the wrong direction.

So that's one scenario where the ICJ decision endorsed the possible legality of the use of nuclear weapons. The other, as Kathleen highlighted at the end of her remarks, is in some ways the opposite scenario. The ICJ determined that nuclear weapons use might be legal in an extreme circumstance where a country's sheer national survival was at stake. Again, they weren't completely clear as to what they meant by that, but it appears that this was a nod in the direction of the doctrine of deterrence: a doctrine of mutual assured destruction that many people would say gets some of the credit for preserving the world against the possibility of a World War III, and for avoiding the use of nuclear weapons, since 1945.

I don't want to debate today the validity of the doctrine of deterrence and determine exactly how much credit should go to the doctrine of deterrence, but as a legal matter, it seems to me here that the ICJ has the analysis exactly wrong. Nuclear weapons are governed by the law of armed conflict as are all other weapons. The use of nuclear weapons, even in a circumstance of national survival, is part of the law of armed conflict. The law of armed conflict does not have exceptions that say the law does not apply when there's a lot at stake, does not apply when you might be in danger of losing the war. The law of armed conflict applies at all times during an armed conflict, including when the stakes are at their highest.

There are some things that are just categorically impermissible even if you think you might gain some military advantage from doing them. You can never torture prisoners of war. You can never deliberately aim at civilians. You're never allowed to undertake attacks that are disproportionate, even if you think your national survival is at stake. So again, it seems to me that the ICJ, attempting in some plausible way to acknowledge the importance of the doctrine of mutual assured destruction and to acknowledge in some ways, the continuing viability of the deterrence relationship as the centerpiece for nuclear security around the world today, has made a serious mistake. Well, I think that's probably where I should stop. There's more to be said, but I look forward to pursuing that in the discussion with the rest of the panel. Thanks.

JOHN BURROUGHS:

Thank you, David. I'm not sure that all the panelists heard the discussion earlier today, but we learned something from Scott Sagan in particular about how the U.S. military is approaching the application of IHL in the nuclear context. It's now declared policy, and has been for a number of years, that U.S. use of nuclear weapons will comply with IHL. Here's how I understand how the U.S. military lawyers approach this: a use of nuclear weapons has to comply in particular with requirements of necessity, proportionality, and distinction.

However, the requirement of distinction is interpreted rather narrowly to mean that the targeting must be against military targets. If you're not deliberately targeting civilians, then you're not violating the principle of distinction. It appears to me that in effect, they've read out of the picture the prohibition on indiscriminate attacks that Kathleen talked about. I believe there's a procedure within the U.S. government whereby weapons are inducted into the stockpile, and they're not inducted if they're considered to be inherently indiscriminate. Nuclear weapons have been inducted, so they weren't considered to be inherently indiscriminate.

And Charlie discussed quite clearly the requirement of necessity, but on proportionality, Kathleen, I think one can imagine circumstances where it could be argued that the requirement of proportionality is met. If you think that the enemy is about to launch an attack on your cities, you might think that collateral effects, killing or injuring tens of thousands, or even hundreds of thousands of civilians near the target might be proportional. I think that's the kind of grim calculus that comes into play here. So let me ask a question of our panelists, assuming that I've more or less correctly described how the U.S. military approaches the question of use of nuclear weapons. How would you assess that? How would you comment on it?

CHARLES MOXLEY:

John, I think I'd say that there's plenty of stuff in the U.S. military manuals against indiscriminate attacks and the U.S. manuals acknowledge the point that Kathleen made. They say expressly that you can't use a weapon if you can't control the effects of it. David, you may have a fix on this than I do, but it does seem to me that the flaw is in how the military is evaluating whether a weapon is indiscriminate. My sense is that the U.S. can say that these weapons are lawful by curtailing the analysis staying =very focused on a narrow view of the potential effects. They are making an assessment without considering radiation and nuclear winter and without considering the potential for a nuclear response and escalation, which would apply even to the remote use. The idea of the nuclear taboo has been around a while and I think people take it seriously. By crossing that line, wouldn't you precipitate the potential for broader use, even if you cross it with a remote use, that you referred to, David, where the weapon is used against a military fleet in the high seas or a remote troop of military targets?

DAVID KOPLOW:

It seems to me that there is very broadly, widely shared consensus on the legal standards. As John mentioned, the U.S. military has committed to the proposition that all military operations will comply with the law of armed conflict and all the rest of the applicable international law. Not just nuclear weapons or chemical weapons, but everything the U.S. military does will comply with applicable international and domestic law. And you're just right that there is a procedure requiring a legal review before any new weapon can be approved for purchase or entry into the arsenal. And that legal review applies exactly the kinds of standards that we've been talking about. The categories of legal analysis are, I think, not in dispute. The difficulty, I think, is how you apply those agreed criteria to close cases. Proportionality provides probably the best example of that. In a nutshell that says you can't do too much damage to civilians and civilian objects when you're pursuing an attack against military objectives, but how much is too much?

Depending on what you believe is at stake and what you believe our weapons would do, there's a wide margin of what might be considered to be "too much." The legal analysis done by not just the United States, but I think all the other countries that possess nuclear weapons adopts the point of view that harm that would be inflicted by our use of nuclear weapons is not too much. It's enormous, it's extensive, it's long lasting, but it's not categorically disproportionate to the value that would be realized, the military gain that would be accomplished by their use. As an abstract matter, I think you can't get behind that. You just have to do it on a case-by-case basis where, in good faith, I think it's harder to argue that the analysis can be sustained.

JOHN BURROUGHS:

Kathleen, did you have comments?

KATHLEEN LAWAND:

Yes, sure. I would have a lot to say here, but I'll try to be brief. First of all, I should say, as I alluded to in my presentation, I think certainly if a nuclear weapon is used very far away from populated areas, let's say against an object, so we set aside the prohibition to cause excessive suffering to combatants, and so human combatants are not in the picture, I think there, we could imagine, yes, scenarios using a low yield nuclear weapon where the eventual harm to civilian areas could be deemed to be proportionate, that is, not excessive in relation to the military advantage anticipated. But we must not forget that even in that scenario the natural environment is protected as a civilian object. So you also need to look at what will be the impact on the natural environment and how much damage will be caused to the natural environment for how long, et cetera.

And this needs to be factored in as well in the proportionality calculation in that scenario of a low yield nuclear weapon in a desert. But then we also need to look at whether radiation will be spread through winds and other means to civilian areas. We look at the different hypotheses to test the law, but we have to look at the reality of how nuclear weapons will be used. And the fact is they will be used in or near cities. Planning is being done to use them against military objectives located within or close to cities. And even if hypothetically nuclear weapon states were planning only to use them outside of populated areas, the reality is use of a low yield nuclear weapon in a desert will eventually lead to a reprisal and

2022]

counterstrike, and therefore escalation, which by the way, is something that the ICJ itself noted.

The ICJ raised the question and stated clearly that there was this major risk of escalation, of use of nuclear weapons, such that their use would eventually move into cities, even in the hypothetical scenario that the use would begin outside of populated areas. Coming back to the prohibition of disproportionate attacks- again, I'll just repeat what I said earlier. It is extremely difficult to imagine a concrete and direct military advantage that would be so important as to justify the colossal civilian harm that would be caused if a nuclear weapon is used in or near populated areas.

So if we're looking only at that scenario, use in or near populated areas, it's extremely difficult to find what would be that concrete and direct military advantage. Which by the way, those terms, concrete and direct, refer to a tactical advantage. It is not, as I said, the objective of winning the war, defending the nation, the political aim. It is rather what, in that particular attack, that particular military operation, will be the advantage gained by the attacking force by launching this strike. I think nuclear weapon states themselves have not shown any concrete scenarios where proportionality could indeed be respected.

JOHN BURROUGHS:

Kathleen if I may be permitted to say something as if I was a panelist. I think that your stronger argument is that even if an attack in or near a city is arguably proportional, it would still violate the prohibition on indiscriminate attacks. That the problem with proportionality...

KATHLEEN LAWAND:

I couldn't agree with you more.

JOHN BURROUGHS:

The problem with proportionality analysis is that it involves balancing. I have another question. If you have a certain view of the United States and the world, as Les Aspin, Secretary of Defense, recognized three decades ago, essentially, the U.S. would be better off if there weren't nuclear weapons. There are no other or few other sorts of major strategic systems capable of threatening the United States, and obviously the United States has a very strong military. But the U.S. is not the only player in the world.

There are other countries who may think, under current circumstances, nuclear weapons are really important to their defense and to anything ambitious they may want to do in the world. That leads in my mind to the following tough question for the United States: if the United States wants to limit or even essentially end its reliance on nuclear weapons, what does it do about the fact that other countries- I'm thinking in particular of Russia- seem almost to have doubled down on their reliance on nuclear weapons? That's the question.

CHARLES MOXLEY:

John, I think I'd say that's one of the strange ironies of the history of nuclear weapons is the following. During the Cold War, after the end of the Second World War, the U.S. made the decision to demobilize and not keep up its conventional military capabilities, and to just rely on nuclear weapons. And it let itself become inferior to the Soviet Union in the conventional weapons area to the point where, it was believed, that, if you had a Soviet incursion of a conventional nature into Western Europe, that would be a serious problem, and so, to counter this threat, the U.S. would rely on nuclear weapons. The irony is that, since the demise of the Soviet Union as a nation, the U.S., has built up its conventional weapons so much that now there is the argument that, for a lot of purposes, the U.S. could do without nuclear weapons, and is far more threatened by them being used by an adversary than there is a need for it to potentially use a nuclear weapon itself.

But I think your point is that, while we don't need nuclear weapons anymore, arguably, because conventional weapons could achieve most military objectives for us, other countries do need them because they're far weaker in conventional weapons, and so that just points to the challenge. Governor Brown was talking about the challenge, but this particular aspect of the challenge is even bigger than what he referred to at the time, because you probably can't control the nuclear weapons situation without getting some control over the conventional challenges that other countries have, namely that potential adversaries need a defense against us because we're so superior in our conventional capabilities.

So I'll just put this question out there. Aren't conventional disarmament and nuclear disarmament so interrelated that we have to address them together, and that we're not ever going to really achieve much on the nuclear issue without somehow achieving something on the conventional?

DAVID KOPLOW:

That's certainly where I come down. John, I'm exactly on your premise that if, magically, nuclear weapons disappeared around the world overnight, the biggest winner would be the United States because we have such a massive superiority in conventional weapons and because nuclear weapons are the only system that really threatens the national existence of the United States. We have the most to lose by the continuation of nuclear weapons and the most to gain by their abolition, and other countries realize that too. For me, that becomes a reason why the TPNW, for all its other possible benefits, is too simple. It's unrealistic to expect that the world will get rid of nuclear weapons without dealing at the same time with defensive systems and with conventional weapons and with regional disputes and with verification and enforcement. I think you need to package all of that into a longer-term package that would include conventional forces as well as nuclear.

JOHN BURROUGHS:

Kathleen. Did you want to comment?

KATHLEEN LAWAND:

John, I think, from the International Committee of the Red Cross' perspective these are questions of strategy and of politics of how to link up these different streams of disarmament. We're looking at it strictly from an IHL perspective. And there, again, the fact that under the law of armed conflict these nuclear weapons pose very serious concerns and are arguably unlawful in most of the scenarios in which they would be used, must in and of itself drive disarmament efforts. And I would just also note that my understanding and my reading of the ICJ's advisory opinion is that it found that... and again, I'm not disputing the realpolitik of disarmament which both Charlie and David have just mentioned and discussed. But from a legal standpoint the International Court of Justice found that there is an obligation to take effective measures towards nuclear disarmament, not general and complete disarmament, but nuclear disarmament. And what's more, it found that this is not just an obligation of means, it's an obligation of result.

Because these are legal commitments that have been made by states, yes, perhaps one could say this is the ideal of the law versus certain political realities of the world, but I think... Let's look at chemical disarmament, look at biological weapons disarmament, et cetera. There were times in history where all of weapons of mass destruction were lumped together in terms of states saying we need to deal with everything together. In certain regions of the world and the Middle East, notably, this is how it's also being approached. Let's deal with all WMD together. But the reality is, today, chemical weapons are comprehensively and universally prohibited.

They certainly are prohibited from a customary law standpoint, and the Chemical Weapons Convention is one of the most widely ratified instruments. So what I mean by that is that it is possible to silo- and this is a question of political will- nuclear weapons and get the job done just for nuclear weapons and then move on to other forms of disarmament. I do think it's possible, and it's a question of, yes, I realize there are political challenges today to doing this, but times change. This is what diplomacy is all about and goodwill and toning down rhetoric and reaching out. And this is where I believe the U.S. can play a very strong role there as well. It's about each nuclear weapon state looking at their own responsibilities and taking, dare I say it, the moral high ground and having the courage to take the first step and reach out.

JOHN BURROUGHS:

Kathleen, I hope it's okay with you if I consider those your closing comments. David and Charlie, would you like to make closing comments?

DAVID KOPLOW:

The closing comment I'll make would be the invitation to open up another kind of discussion. So far, we've been talking about the use or threat of use of nuclear weapons. An associated important problem would be the legality of the possession of nuclear weapons. The advisory opinion was not directed to that, but that too would be something that we could pursue in depth. The general rule is that, as the ICJ stated, it's illegal to threaten to do an act that would be illegal to carry out. Therefore, presumptively, possession of nuclear weapons could be challenged. But it seems to me that's something that would deserve at least another hour's worth of panel, and I would be delighted to have you chair that one too, John.

CHARLES MOXLEY:

I would suggest picking up off on David's point. One of the things that the ICJ advisory decision in 1996 said that we haven't focused on is what David just alluded to. The ICJ told us that it's unlawful for a state to threaten to use weapons that it will be unlawful for them to use. We saw today what the makeup of different nuclear arsenals are. We saw that the U.S. nuclear arsenal is very predominantly composed of the high-yield nuclear weapons. We saw the ICJ's language suggesting that, in extreme circumstances of self-defense, all bets might be off. Although the language of the court was not very clear, I don't think any serious international lawyer really thinks that's what the ICJ meant. Other parts of the ICJ decision concluded that, even the exercise of self-defense is subject to IHL. Kathleen addressed this point perfectly earlier on.

In reality, what we have is a U.S. nuclear arsenal that is primarily made up of high-yield nuclear weapons, whereas the U.S., in its arguments before the ICJ, basically defended the potential lawfulness of the potential use of low-yield nuclear weapons. As we've seen, however, the U.S. nuclear arsenal is dominated by highyield weapons and they are included in our policy of deterrence along with the relatively few low-yield nuclear weapons we have. And our policy of deterrence is postured not only against nuclear strikes but also against any threat we deem against our "vital interests."

So I think there's a serious question of the lawfulness of the policy of deterrence insofar as we're threatening the use of the higher yield nuclear weapons. I think it's almost a separate question, but we'll have to have a second day because we're just scratching the surface on some of these issues.

APPROACHES FOR ADVANCING THE RULE OF LAW AND MORALITY AS CONCERNS NUCLEAR WEAPONS

Moderator: Prof. Charles J. Moxley, Jr.+

Panelist: Laurie Ashton^{*}; Jacqueline Cabasso^{**}; Rev. Drew Christiansen, S.J., Ph. D.^{***}; Tom Z. Collina⁺⁺; Audrey Kitagawa⁺⁺⁺

CHARLES MOXLEY:

The next panel, as we've conceptualized it, is the "so what" panel. We've gone through the day, we understand that there is law that covers the nuclear weapons issue. There are UN instruments, treaties, conventions, and the law of armed conflict, which is a huge body of rules, along with a body of political commitments, as Jonathan said. But the fact is that there is a large body of restraints and recognized limitations on the potential use of nuclear weapons. The question is, how do we operationalize this? How do we get enforcement of this law, make it count? What are the options? This is focus of the next and last panel. It's a long panel. We've allowed for almost two hours. And then we'll have some closing comments. But this panel says, "Okay, what do we do with all of this?" I'm happy to introduce our wonderful group of speakers.

The way we divided this up is we've identified some topics which you can see in the agenda for today. The first category is built around court proceedings, civil and criminal, the potential for civil

⁺ Professor (Adj.), Fordham Law School; Chair, Moxley ADR LLC

^{*} Of Counsel, Keller Rohrback; Member of Legal Team for the Marshall Islands in Its Nuclear Disarmament Cases in the International Court of Justice; Counsel for Marshall Islands in Its Nuclear Disarmament Case in the Ninth Circuit Court of Appeals

^{**} Executive Director, Western States Legal Foundation; North American Coordinator, Mayors for Peace

^{***} Distinguished Professor of Ethics and Human Development, Walsh School of Foriegn Service, and Senior Fellow, Berkley Center for Religion, Peace and World Affairs, Geogretown University

⁺⁺ Director of Policy, Ploughshares Fund, and Co-author, with William J. Perry, *The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump* (BenBella Books, 2020).

⁺⁺⁺ Chair of the Board of Trustees of the Parliament of the World's Religions

litigation, defense of protestors, shareholder litigation, shareholder resolutions, FOIA requests, and the like. A whole range of potential legal approaches that might be taken civilly and criminally. There's a potential for universal jurisdiction which comes under the litigation/legal side of things. There are also areas of civic advocacy that can be explored. Political action. Election of legislators and prosecutors who are interested in enforcing this law and even judges. Civic engagement. And very importantly, something that was important during the Cold War, the engagement of major faith groups.

We're going to introduce these topics and the speakers are going to take the lead on this, and then we'll have a discussion on each topic. I invite everybody to look at the detailed speaker bios that are in the materials, but I'm going to quickly introduce them. We'll start with the legal side, and followed by the civic and the political engagement and so on, going through all the topics. The first speaker is Laurie Ashton, who is a litigator. Laurie is an attorney who has been very active in the international law space, including representing the Marshall Islands in cases we heard some about today involving NPT compliance. Laurie will tell us more about that and numerous other areas of engagement through law. And there's a lot to do there. We're going to try to be very practical and assess how we get around the various barriers to justiciability.

Next is Jackie Cabasso, who has been a leader in the protest movement for many causes for a long time. It's an extraordinarily admirable career and life, and a sort of an institutional memory of what's been done and what's possible. Jackie has some insights that I think we'll all find very inspiring in terms of how action can be taken hopefully going forward to do the kinds of thing that Governor Brown was talking about, to begin to raise consciousness of the issue, for example.

Reverend Drew Christiansen, a Jesuit priest and faculty member at Georgetown University, is a leading spokesperson within the Catholic Church in the areas of nuclear weapons and arms control and related questions of morality and civic responsibility. We'll hear about his work in this area. Father Christiansen has a PowerPoint which will illustrate the history of the extraordinary action by the Roman Curia and the Catholic Church during the Cold War and since then, making pronouncements about nuclear weapons. There's a real potential to try to address nuclear weapons issues that way.

Tom Collina is very well known in this field to everybody engaged in it. His recent book, written with William Perry, *The Button*, is one we've all either read or are in the process of reading or getting ahold of. The full title is: *The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump*. Tom is director of policy at the Ploughshares Fund and has been a thinker, writer and speaker on these topics for a long time. He will talk with us about potential approaches with the Biden administration. What can we do going forward? What can we hope for? How can we optimize the prospect—Governor Brown also talked about this—of getting that Administration fully engaged on these issues?

Audrey Kitagawa is going to be an extraordinary speaker this afternoon as the Chair of the Board of the Trustees of the Parliament of the World's Religions and many other positions, including at the UN and internationally—too many to list in this brief intro. Please look at Audrey Kitagawa's bio; it's absolutely extraordinary. For the kind of new thinking that Governor Brown was talking about, in terms of how we can change our mindset, I think Audrey is one of the real voices that we're going to learn from and she'll help a lot of us. It's hard to break out of our patterns of thinking at times, but that seems to be the challenge. So, I think, Laurie, you're going to lead off and talk about the legal side?

LAURIE ASHTON:

Okay, here we go. Thank you for that introduction and thank you for asking me to be part of this event. Given the timing, I'm going to try to do a top-line analysis of the litigation issues. I've been invited to speak not as a weapons expert or a policy expert but as a litigator who has brought cases against weapons manufacturers, against other nations in the International Court of Justice and domestically. I notice we've got three or four, maybe even five, members of the team that represented the Marshall Islands at the International Court of Justice online today so hello to all those folks. They'll see what a summary version I'm going to give of what we went through.

And I'd first like to say that in the field of the sticks and the carrots for trying to get humanity toward nuclear disarmament, litigation obviously falls on the sticks side. It has its advocates. It has its detractors. There are certainly folks who think that you should not bring cases unless you can win them. I'm not in that category. I think that every good case deserves to be brought. I think that whether you turn out to be *Plessy v. Ferguson* or *Korematsu*, both of which were decided horribly, or whether you get to be *Brown v. Board of Education*, just depends on your determination and the existing state of the judiciary. So I think that if there is a good case that meets Rule 11 and the legal standard, the corresponding standard at the International Court of Justice, that it ought to be brought and that folks ought to be fearless and thinking way outside the box on what cases can be brought.

Obviously, if we are all rowing in the same direction and the nuclear weapon states are all behaving in compliance with the '96 ICJ Advisory Opinion, then we don't need sticks, we don't need litigation, we don't need fines, we don't need injunctions, we don't need penalties, we don't need to stigmatize the states with nuclear weapons. And if appeals to the moral dimension and reducing spending and increasing national security were enough, we would not be where we are. Those are all very important and we're going to hear more about those. But they are not currently getting us where we need to be. And if you were on this seminar earlier, you were able to hear from Dr. Ford which was fascinating, who told us with a straight face that there is not even a scintilla of a hint of a customary international law obligation to disarm nuclear weapons. Needless to say, I don't think that's right under the '96 ICI Opinion and it just shows that there is a place for litigation and that we do need to find a way to bring folks like Dr. Ford and others that believe that way to the table to negotiate.

And speaking of bringing folks to the table, one benefit I will say right off the top that litigation has that some of the other fabulous work that everyone does does not offer, is that when you sue someone, they have to answer. It's a very basic thing, but we can write, and we can put out fantastic reasoning, and we can put out fantastic articles and books, and I try to read them all, but the United States of America, the current administration, does not have to read them and they don't have to answer them. But when you sue, a defendant, a weapons manufacturer, the United States, the United Kingdom, et cetera, they do have to answer. So that's an upside to litigation right there. So I'm going to go very quickly through four categories. First, I'm going to tell you what we did at the International Court of Justice for the Marshall Islands. Second, I'm going to tell you what we did in the domestic United States Courts on behalf of the Marshall Islands. Third, I'm going to summarize very briefly some things I think we can still do going forward, today, at the ICJ. And fourth, I'm going to summarize very briefly some things I think we can still do going forward domestically in the United States, which I think is relevant to this seminar given what Hans Kristensen reminded us all of, which is that the 900 pound gorilla in the room of the nine nuclear weapon states is the United States. So very briefly, I'll provide a summary of those four categories.

At the International Court of Justice, I was one of the first lawyers to put a team together to represent the Marshall Islands, and I'd like to give a nod to David Krieger here who was a long-time friend of the foreign minister of the Marshall Islands, Tony de Brum, and the organization he founded which is the Nuclear Age Peace Foundation. On behalf of the Marshall Islands, we brought proceedings against the United Kingdom for breach of the NPT, arguing that they were failing in their obligation under Article 6 as well as their obligation under customary international law as set forth in the '96 ICJ Advisory Opinion. And just a side note here that hasn't been mentioned so far, while the '96 Advisory Opinion is great in many respects and challenging in many respects, it is advisory, which is to say that the United States and the other nuclear weapon states can say, in some ways correctly, that the opinion is not binding on them as an advisory opinion. So that is what you hear, unfortunately. And of course, the parties to the UN Charter, all of them solemnly promise to enforce decisions of the ICJ that they're a party to, but they arguably don't solemnly promise to follow advisory opinions. That's a gap that we all should be aware of.

So at the ICJ, the Marshall Islands also filed proceedings against India and Pakistan for breach of their customary international legal obligation to negotiate nuclear disarmament in good faith. Now we also filed applications against the other nuclear weapon states and invited them under the ICJ rules to voluntarily appear and respond, but because they do not officially consent to the jurisdiction of the ICJ, they were not obligated to respond. They were invited to and allowed to respond, and so they could have showed up and responded, but they were not required to and we knew that going in. So the three states required to respond were the United Kingdom, India, and Pakistan.

Now again, just a summary, the respondent nuclear weapon states raised many arguments. They raised preliminary objections regarding whether there was even any dispute, whether the Marshall Islands had standing to bring the claims, whether they were time-barred, whether there were necessary absent third parties such as the other states with nuclear weapons, whether the obligation under Article 6 was *erga omnes partes*. Many objections. And these objections are all available for your review online in the briefing at the ICJ website, which is one of the best websites around, as an aside.

The Marshall Islands case against the UK was lost on the preliminary objections with eight judges in favor of our position and eight judges against our position. And of course, I would emphasize that there were therefore, eight justices out of sixteen that thought the case should go forward to the merits. The countries of the P5 each had a judge appointed to the ICI, so a total of five of the eight who did not think the cases should go forward. which only highlights the issue of whether the P5 should all have standing seats on the ICI. On that point, notably, since that decision in 2016, the UK has actually lost its seat on the ICI. So there are just judges from four of the countries of the P5 on that Court now. Tie votes on the ICI, which is an eight to eight vote like we had at the ICJ, are broken by whoever happens to be the president of the ICJ at the time of the vote, which was Judge Ronny Abraham from France in our case. The current president is from Somalia, and he was one of the eight who voted in our favor, so you can imagine how important that tie-breaking power is. Several of the judges wrote opinions, some very lengthy, objecting to the resolution of the case, all of which are likewise available on the ICI website. And in those opinions, they alluded to the fact that the case could be rebrought, either by the Marshall Islands or by another applicant state, and that the objections that the respondent nuclear states had could be cured going forward. And so that's a matter of public knowledge now-that those cases could be rebrought and the objections could be cured. The UK has since changed its consent to jurisdiction so there's an extremely high hurdle against re-bringing the case against the UK. But the other cases could be re-brought and that's something I think should be explored by the other states parties to the NPT.

The vote on the decision in the Marshall Islands cases against India and Pakistan was seven to nine. So seven judges thought those cases should go forward to the merits and again, the five sitting judges from the countries of the P5 were in the group of nine that did not think the cases should go forward. The reasoning in the majority opinions in all three proceedings — against the UK, against India, and against Pakistan — was the same: the judges did not think the Marshall Islands actually had any legal dispute with the respondent nuclear weapon states regarding compliance with the NPT, which seemed in my opinion, and there's really no other way to say this—it seemed ridiculous. But that is what they ruled.

So I'm going to slip over now really quickly to the case that we brought in the domestic courts of the United States. It was a similar case. It was the Marshall Islands versus the United States for breach of Article 6 of the NPT. That case took three and a half years. Similar objections were made. The lower court found that whether the treaty was self-executing was irrelevant because it was between treaty parties. So they agreed with the Marshall Islands on that, but found that whether the United States was in compliance with the NPT was a political question and therefore could not be decided by a court.

On our appeal, the Ninth Circuit took a slightly different tact. They misconstrued the meaning of the word "undertakes," in the NPT, which is in many treaties, including the most recent treaty and in Article 6 of the NPT. The Ninth Circuit found that word hortatory, which is to say aspirational, even though the international law is clear that when you use the word "undertake" in a treaty, it means solemnly promise, not merely an aspirational expression. But the United States courts thinks that it means you're aspiring to do something in the future. I think that it's welldocumented that the Marshall Islands had a change of leadership during this litigation and that's one of the challenges that folks have in representing microstates: the leadership in some situations changes frequently. And that can affect the direction of a litigation. The Marshall Islands did not seek Ninth Circuit en banc review, and so the proceedings ended there. Is there an opportunity for another case to be brought like that? Sure. But the challenge is you need countries that are willing to stand up to the military industrial complex. And it's very hard to find folks in top leadership positions in countries that are brave enough to do that because of what was said earlier about the financial stranglehold that the United States has on so many microstates.

So very quickly, Charlie, tell me if I'm running out of time. But very quickly, what else can we do in International Court? What can be done at the ICJ? I'll just run through some quick things. I don't think we'll be able to get into these in-depth but some quick things that can be done. Number one, this issue of whether the P5 should have ongoing permanent representation on the Court. That was eroded somewhat with the UK losing its seat on the Court, but we still have four of the P5 holding their seats from the beginning of the Court through the present. Is that fair? Should judges from other states be considered instead? What work can be done around that issue? Number two, more scholarship around the meaning of the word "undertakes" in treaties is needed, because it is so fundamentally misunderstood amongst the state parties, and by the domestic courts in the United States. Maybe that could be something in a future NPT review conference. Number three, what could be done to discourage use of the defense industry's language on whether the arms race has ended, and rather encourage people to speak to the fact that horizontal proliferation is, in fact, arms racing. Number four, obviously, what are the best ways to be working with the new treaty to ban nuclear weapons and moving that forward to the status of customary international law. That's probably going to take time. The United States is not going to join that treaty, which would require Executive assent and Senate consent, but there are examples of other treaties that have become the law in the United States without the United States joining them. For example, the Vienna Convention on the Law on Treaties is the law in this country – the United States—and we are not a party to that treaty. So it can happen – a treaty can gain the status of law in the United States without it becoming a party to it. Number five, there's much written about whether the weapons in Belgium and the Netherlands are legal under the NPT. No one has brought that case to the ICJ or any other court. Number six, as I alluded to earlier, the cases against Pakistan and India under the customary international law obligation to negotiate nuclear disarmament in good faith could be brought at the ICJ; at least some of the ICJ judges in the Marshall Islands case against India and Pakistan implied that TRANSCRIPT

they could be brought again. And then finally, number seven, there's currently a case pending against Myanmar brought by the Gambia in which one of the defenses is whether the Genocide Convention includes obligations that are *erga omnes partes*. That's the same jurisdictional objection that we encountered in the Marshall Islands NPT case. Countries can intervene in the Gambia v. Myanmar case and express their opinion that those obligations are indeed *erga omnes partes*, which is to say anybody can file an application to enforce them without a need to show any more specific harm to the country seeking to enforce the obligation. The harm doesn't have to be happening to you in real time. And then quickly Charlie, to your point of whether additional domestic cases could be brought in the United States, certainly they can. There have been at least three cases in the last year that have been successful in the domestic courts of the United States against nuclear weapons manufacturers.

One, the Oak Ridge, Tennessee case was an environmental case relating to the fact that they were modernizing weapons and their environmental impact statement was not current with their modernization and the plaintiffs won. That issue, I think, applies everywhere where weapons are being modernized. So that is a wide-open field with precedent in favor of the plaintiffs and in which additional cases could be brought. Two, the Hanford Litigation was this year, where the court applied a Washington law that presumptively linked nuclear weapons and waste exposure to a long list of diseases, and where the plaintiffs prevailed at the Ninth Circuit. So that type of statute presumptively linking exposure to illness could be replicated in each state that has workers exposed to those elements in the Ninth Circuit; and there is already binding precedent applying that kind of statute. Number three: shareholder derivative suits for illegal conduct by the board of directors and the officers. And number four, there is not precedent on this but certainly a wide-open arena for 10b-5 disclosure cases for the top weapons manufacturers and whether they are disclosing sufficiently what kind of weapons and wastes they're making and what the effects of them are. So I could go on at length but I'm going to stop there.

CHARLES MOXLEY:

2022]

There's a lot there. And let me just say, we still have 130 people here, and we hope not only to have future programs, but to enlist people in activity. So, anyone who'd like to work on litigations or would like to be part of some effort of investigating aspects of nuclear weapons issues or discussing them, send us an email and we'll try to get it around to people who can operationalize it.

We're now going to hear from Jackie Cabasso. I think it's fair to say there's really no one in the world who knows more about organizing. Just in our prep session we heard so much content from Jackie, it could have gone on for five hours. So, Jackie, give us your view of the history and your thoughts and comments, on what you see as avenues where we can address these issues going forward.

JACQUELINE CABASSO:

I'm not a lawyer, but I've worked at the intersection of law and anti-nuclear activism for more than 35 years. So for me, law is integral, and in my experience, what I have learned is that litigation and other forms of legal work and legal advocacy are most effective when coupled with a vibrant social movement that can help amplify the messaging and open space for lawyers. We had that kind of a movement in the 1980's and to some extent in the 1990's. We don't have that now. And so our action item, I believe, first of all, is to build the kind of social movement that we are going to need to prevail. Which means it cannot be a single-issue movement, and I'll come back to that.

But let me just give you a little bit of my history and experience. Let me also say that by definition, Western States Legal Foundation, which was founded in 1982 to defend non-violent anti-nuclear protestors, one of whom was me - that's how I got into this - has always seen itself as at the service of the social movement. And so, the social movement has risen and declined and risen and declined. And that has, to a large extent, shaped our activities over the years.

I had no legal experience previously, but my first recognition of the relationship between nuclear weapons and law began on June 21, 1982, when I was among more than 1300 people arrested, nonviolently blockading the gates to the Livermore Nuclear Weapons Lab in northern California. Some people on this call may remember that on June 12 of that year one million people filled New York City's Central Park during the United Nations Second Special Session on Disarmament. At Livermore we were charged with a traffic infraction for blocking traffic but spent three days jailed in an old military barracks before being arraigned. Though I had no background in law, I nearly choked on my no-contest plea, feeling that I had done nothing wrong and that the criminals were on the other side of the fence developing weapons of mass destruction.

On June 20, 1983, the following year, I was arrested again at the Livermore Lab - one of 1,066 arrestees who had come to the lab to nonviolently put a stop to business as usual, at least temporarily. This again, was one of dozens of international days of disarmament actions that took place around the world. I think the size, the number of arrestees - which is like a fifth of the number of participants - gives some idea as to the scale of the social mobilization at that time. This time we were jailed in actual circus tents erected on the local jail grounds because there were too many of us to put in jail. And while we had expected to be charged with the same infraction we'd received the year before, the stakes had been raised and the sentence being offered to those who would plead no-contest was two days in jail and a \$250 fine plus two years' probation, which we perceived as a direct attack on the peace movement as it would place serious limitations on our protest activities.

Knowing that we had strength in numbers, we agreed that as many of us as possible-which turned out to be more than a thousand-would refuse to go to arraignment until we were offered a sentence we felt was reasonable in relation to the charge. After 11 days, a much-reduced sentence was offered to those who would plead no-contest. But while we were in the tents, some of us had begun to talk about the possibility of pleading not guilty and going to trial because we recognized that the courtroom was another realm where we could work for peace and disarmament. Western States Legal Foundation, which was newly established, and which was part of the legal collective providing support to the protestors, agreed to represent those of us who wanted to participate in a mass trial. A novel representative trial was negotiated by our lawyers and the district attorney. Eleven "representative" defendants, chosen by the larger group, would stand trial and I was one of the eleven. The other 224 defendants

agreed to be bound by the verdict, even though they had been blocking gates and roadways miles apart in some cases, using different creative, nonviolent tactics. Not wanting to get sidetracked by the legal technicalities, we had agreed in pretrial negotiations to stipulate the defendants had been in the road. The group of representatives, lawyers, and actively participating defendants worked closely together making all decisions by consensus, which was our preferred method. Even our jury selection was done by consensus. The equal relationship between lawyers and defendants was an important aspect of the trial.

We were charged with willfully and maliciously obstructing the roads near the Livermore Lab - a California misdemeanor. We had planned for a trial lasting upward of two months, and we had prepared evidence about the Lab's leading role in the development of nuclear weapons, its violations of international law, and the imminent danger we were all facing because of these weapons. Our experts who were ready to testify included a former California Supreme Court Justice, a U.S. prosecutor from the Nuremberg Trials, prominent scientists and politicians, a Hiroshima survivor, and others. The trial took place in a makeshift courtroom at the county fairgrounds because there wasn't a large enough courtroom in Livermore to house all of the defendants and prospective jurors. Jury selection took two weeks.

I pause here for a moment to say, imagine this happening now. It can't... I can't imagine it happening now. But this is what was possible because of the social movement. I'm talking about the scale and so on. The DA presented his case, a half-day of testimony by several arresting officers. When our first expert witness was called to the stand, the DA immediately objected. Our attorneys made their offers of proof. Three defenses were presented, and the jury was dismissed for the day. This is directly relevant to today's conference. Our international law defense contended not only that nuclear weapons are illegal under numerous international treaties banning genocide, mass poisoning, and targeting civilian populations, but that the Nuremberg Charter, ratified by the U.S., mandates a right of resistance to international law violations. The defense of necessity, long-established in common law, allows a statute to be broken in order to prevent serious and imminent harm. And finally, our attorneys argued that we should be allowed to present evidence about our state of mind, as we were charged

with willfully and maliciously obstructing the free movement of persons. We contended that "maliciously" meant more than just intentionally, a meaning already covered by the word "willfully," and that our state of mind was not malicious.

The next day, the judge ruled out all three defenses and because of the stipulation that we had sat in the road, we were essentially denied the opportunity to present any of the concerns that had brought us to the courtroom. We decided that the most powerful statement we could make was to not testify at all. After three hours of deliberations, the jury found us guilty. About six months later we were sentenced, and the defendants made statements for the entire day. I'll just read you one sample short excerpt from a sentencing statement, to show you how relevant the international law piece was to the defendants.

This particular defendant said: "In 1946, I went to Germany to work for the war crimes commission as a stenographer. I followed the trials there. Our government and the governments of other countries of the world were trying German officials and German officers for what they called crimes against humanity. The people gave, as their defense, that they were obeying orders of their government. But the reply was that if you perform acts that are against international law, you are a criminal. And our government now and other governments in this world, are breaking international law. They are creating weapons which would kill many more than the millions of people that were killed in Germany. So it is, I believe, the duty, the patriotic duty of every person, to protest against that."

This trial and the sentencing and all of the developments around it got extensive media coverage and involved hundreds of people through the entire process. For me and the other defendants, the experience of the trial was life-transforming. The legal defenses we developed in partnership with our lawyers gave me a powerful new language to express my moral outrage, and a deeper understanding of the role of social movements that has stayed with me and grown for all of these years.

CHARLES MOXLEY:

How do you see what can be done going forward? How do we get people interested?

JACQUELINE CABASSO:

I want to mention two points about things that have been talked about. The 1996 International Court of Justice Opinion; I was there to help with the legal team, and it was very thrilling to me to see the same arguments that my lawyers had made on my behalf at Livermore being made on behalf of these countries in the International Court of Justice.

I think this is also very interesting and relevant regarding the role that international law can play. As the Malaysian representative told the ICI, "our recourse to the Court now is with the full support of civil society." Working with the non-aligned movement, a consortium of more than 700 groups around the world, formed the World Court Project. The World Court Project collected individual declarations of public conscious, condemning nuclear weapons as immoral and therefore, illegal, inspired by the Martens Clause in the Hague and Geneva Conventions, which provides that in the absence of a specific provision, the legality of a means of warfare is assessed in light of the dictates of the public conscious. More than one and a half million of those declarations were presented to the Court. Similarly, in connection with the 2014 Marshall Islands cases, there was the Nuclear Zero Campaign, which involved hundreds of organizations around the world and which collected five million signatures in support of the Marshall Islands.

These are three kinds of examples where law and social movements intersect. When we come back to it under civic engagement, I'd like to talk about Mayors For Peace and the Back From the Brink Campaign. But since you asked me to talk about where I think we need to go now, as I said, I think our challenge is to build a movement. And I don't think we can build a single-issue movement. I truly believe we cannot build a single-issue movement, especially in the face of the multiple existential crises as well as the multiple domestic crises that we're facing, which really are a matter of survival for a lot of our population. There is an emerging movement in the United States that I believe has the vision and potential to bring this kind of coalition together. It's called "The Poor People's Campaign: A National Call for Moral Revival," which is picking up the unfinished work of Dr. Martin Luther King, Jr. When he was assassinated, during the first poor people's campaign, Dr. King had identified the triple evils of racism,

TRANSCRIPT

poverty, and militarism, to which the Poor People's Campaign has added. Weaving together the interlocking injustices of systemic racism, systemic poverty, environmental devastation, militarism and the war economy, and a distorted moral narrative of Christian Nationalism, they're calling it a "moral fusion" campaign. Nuclear disarmament is in there, specifically in the Poor People's Moral Budget. It calls for cutting U.S. military spending by one half, \$350 billion, which is way more than any of the progressive U.S. peace groups are calling for, including by closing 60% of U.S. military bases, ending the wars in Iraq, Afghanistan, Syria, Yemen, and elsewhere, and dismantling and eliminating nuclear weapons. This campaign has active state-based organizations in 45 of the 50 United States. It's being supported by an extraordinary range of constituencies, including labor unions, faith organizations, racial justice, anti-poverty, environmental and peace groups and is building political power through its We Must do More campaign mobilizing organizing, registering voters and educating. On June 20th, when there was supposed to be a mass mobilization in Washington, DC, because of the pandemic it was done virally and attracted some three million participants.

This movement has a lot of potential. I personally was involved in text banking before the election, and we reached out to 2 million people. This is the last thing I'll say right now. As a nuclear disarmament movement it is our responsibility, I think, to share our knowledge of the ever present and growing dangers of nuclear war with other issue constituencies. We need to work together to understand the common causes of the multifaceted crises we are facing with the Poor People's Campaign and others, to build a massive multi-generational, multiracial, international moral fusion movement. We will need to overcome systemic state violence in order to build a peaceful, just, sustainable, and inclusive world. I'd like to talk a little bit about Mayors for Peace if I get a chance later.

CHARLES MOXLEY:

Thank you so much, Jackie. I have to say that your point, that the way to effectuate change through civic action is through groups that are motivated by multiple issues, is a wonderful insight. This radiates from your background and really is not something that would not have been obvious to those of us who haven't been

2022]

spending their lives the way you have. It's because your experience is so based in reality, so that's wonderful.

JACQUELINE CABASSO:

Thank you Charlie.

CHARLES MOXLEY:

Tom Collina, are you good to go? Tom is going to talk to us about the Biden administration. He will address what we can expect and how we can get the most that we can get towards our goals related to the issues that we all care about.

TOM COLLINA:

Well Charlie, thank you very much. Hi everybody, Jonathan. Thanks for inviting me to be here. It's a pleasure and I look forward to talking with everyone and then hopefully having some time for Q&A afterwards because I love that part of these events as well. As Charlie said, I want to talk a little bit about what we can expect from the Biden-Harris administration. And a little context: You know, Joe Biden will be the next president of the United States regardless of what the current president says or thinks. And that's tremendously good news for a more progressive nuclear policy, but the picture is not perfect, right? We are still going to have a split Congress most likely, depending on what happens in Georgia. As most people know, there'll be a special election for two Senate seats in Georgia in early January.

Democrats have to win both of those seats to take over control of the Senate. And I'm not going to predict, but it would seem unlikely for both of those seats to go Democrat. So I would predict that we will have a split Congress, Republican Senate, democratic House, and that's going to limit what the Biden administration can do on things that require bipartisan agreement in Congress, particularly things that would require two-thirds majority in the Senate, for example treaties. So with those limitations, let me just say that there's a lot that a president, a committed president, which I think president Biden will be on nuclear risk reduction measures. There's a lot that a committed president can do by executive authority that doesn't necessarily require congressional approval. And so I think that's where we have the most potential with a Biden Harris administration.

So what priorities might we see Biden-Harris administration pursuing on nuclear policy? Well, the first two I would put in the category of cleaning up the mess from the Trump administration. The Trump administration was handed a fabulously good deal on Iran, the Iran nuclear deal handed to it by the Obama administration and fumbled it and withdrew and things are much worse than they were before. So the Biden administration, Biden-Harris administration, needs to get back in to the Iran nuclear deal and work with Iran to come back into compliance. The administration, the president elect has said he would do that. So this is not an issue that we need to convince the new administration to do, but we need to watch and make sure that they do it expeditiously and do it right and make sure that it happens.

In the same theme of cleaning up the mess, the Biden administration needs to, within two weeks of inauguration, extend the New START Treaty, which is another thing that the Trump administration had plenty of time to do and failed to do. And so when Biden comes in, he will have 16 days to extend New START, hopefully without conditions and for the full allowed term of five years, which the Russians have said they're willing to do. Of course, this is the last remaining treaty that limits U.S.-Russian nuclear forces. And so it's essential that it get extended. And then to build on that, to go further, because we want to go further, if it's a treaty to go further, then that's going to have problems with the Senate that we expect to see. Now just those two things, New START and the Iran deal, getting those back on track would be tremendously important, but I hope you, and certainly not I, would be satisfied with just that.

We want to go beyond that. We want to move from sort of getting back to neutral to making forward progress. And so to me, what I'm looking at is things that would address the danger that Bill Perry and I wrote about in our new book, *The Button*, addressing the danger of blundering into nuclear war by mistake. And this is what we see, frankly, as the greatest threat facing the United States today. There could be a false alarm caused, for example, by cyber-attack, and the president would have just minutes to decide whether the attack is real or false. And if he makes the wrong decision, he could launch nuclear war by mistake

2022]

in response to a false alarm. This is certainly something that President Trump could have done, particularly given the fact that he and all presidents have and have had sole authority to launch nuclear weapons with no checks or balances from anybody else, not the administration and not in Congress.

And so, we want to make sure or push the incoming Biden administration to address and reduce the dangers of blundering into nuclear war. So there's three things in particular that we would like to see the new administration do. One would be ending sole authority. In other words, the authority to use nuclear weapons first should be shared with Congress. There should be no sole presidential authority for first use, and we should also prohibit first use in a blanket way. And this is something that there is some hope for. The Biden campaign and Vice President Biden himself at the time spoke in favor of the sole purpose of nuclear weapons. In other words, the sole purpose of nuclear weapons should be to deter their use by others. To me, this is very close to a no first use announcement and we need to work with the new administration to make sure that a sole purpose policy is equivalent as much as possible to a no first use commitment.

And again, that would eliminate the sole authority of the president to use nuclear weapons first because there would be no first use allowed. And lastly, we need to retire the weapons that are most vulnerable to being used first or being used under pressure of a false alarm. And that is our land-based ballistic missiles- our ICBMs. These weapons are not needed for deterrence. We don't need them in particular because we have our nuclear weapons based as well on submarines at sea and on bombers that can be sent aloft. And so not only are the ICBMs redundant, but they're tremendously dangerous because the Russians know exactly where they are. They're on high alert and they are the weapons that the president would be under tremendous pressure to use in an alert situation, out of fear that if a nuclear attack lands, then those weapons would be destroyed.

So there's pressure to "use them or lose them" before an attack arrives. And that's where you get the danger of responding to a nuclear attack that turns out to be false and starting nuclear war by mistake. This is a particularly important issue too because the air force is in the process of a \$260 billion program to rebuild the ICBMs. And now is the time to cancel this program before it

becomes too big to fail. So me personally, this is the highest priority thing. And for Ploughshares, this is the highest priority target we're going after. is canceling the new ICBM program because now's the time to do it. If we don't do it now, we'll be stuck with these weapons for the next 50 years. And they play a significant role in the risk of blundering into nuclear war by mistake.

Lastly, I want to talk about some of the lessons that we learned in the Obama administration, right? President Obama came in so many years ago with great hopes of eliminating nuclear weapons and reducing nuclear threats. He got some of those things done, but not near all of them in part because when he came in, the interested public felt that he had this, right. He had it covered. And so they could go off and worry about other things. And that was a problem because there wasn't enough public support in Congress or in the general public to give President Obama the political capital he needed to get these things done. And when he came into office, he realized just how hard it is to take on the nuclear bureaucracy. So we need to not make that mistake again. I mean, look, we've done the most important thing.

Job one, elect a president that cares about these issues. Okay, done. We got that, but we have to engage- the public needs to engage- with that president to make sure they deliver on the things they need to do. And here I wanted to agree with Jackie, that what we need is a multi-issue campaign that brings nuclear policy together with other issues because you know, gone are the days we're going to have a single-issue campaign on nuclear weapons. It's just not going to happen. But the way I look at it is that the Biden-Harris administration is coming in with clear priorities: fix the economy, fix COVID-19, take on climate change, address racial injustice. All of those things are tremendously important. They're going to take a boatload of money. At the same time, we can't just print all that money because the Republicans are now, my prediction, are going to rediscover the problems with deficit spending, which they forgot about for the last four years.

So we won't be able to just rank up the debt as we have. We'll have to cut programs to pay for new programs. Well, from my perspective, where we have money to save is in the nuclear program. The Trump administration was, is planning to spend upwards of \$2 trillion to rebuild the arsenal over the next 30 years. We can save a lot of money from that- in particular with the \$260

2022]

billion for the new ICBM. So I want to take that \$260 billion for the new ICBM and give it to rebuilding the economy, give it to addressing COVID, to addressing racial injustice and climate. So I want to build a coalition, a campaign with other communities that need federal funds because we've got in the nuclear space federal funds to give away. And I think that could be a very powerful movement. In fact, next week, Ploughshares Fund is sponsoring an event on Wednesday.

One of our panels will have members from those different communities to talk about all the needs in those communities that would be much better use of that money than spending it on nuclear weapons that would make us less safe. So let me end it there, but with an appeal that just because we've elected a President Biden that cares about nuclear policy issues, people cannot walk away from this issue. We need to stay engaged. We need to support the president to get these things done. President Biden, that incoming president Biden. And the way to do that is a multi- issue campaign that ties nuclear policy together with other prominent issues. And Charlie, I will end it there.

CHARLES MOXLEY:

Thank you, Tom. This is very encouraging. But it's also putting a lot of work on our plate. Laurie told us the many things we can do. Jackie told us the many things we can do and now Tom, you've done it again. We're now turning to Audrey Kitagawa and then Fr. Christiansen. Audrey will talk about faith groups and communities working together. She will also talk about the role of feminism in terms of hopefully achieving improvement in how international security affairs go and ethical or moral issues.

Father Christiansen will then talk with us about what the Catholic Church has done and what the Vatican has done in terms of several work products that have been helpful. And then we will hear about some cooperation between Georgetown, Notre Dame, and Catholic Universities that I think is a model that hopefully we're going to be able to develop going forward. I'm delighted, by the way, to see that Dean Feerick is still with us from Fordham, so maybe you will be able to address whether Fordham might join that effort. And then I think we'll have time for discussion, which we said we're going to do, and go back and give everybody a chance

to comment on the various comments others have made. Audrey, please take it away.

AUDREY KITAGAWA:

Thank you, Charles, and good afternoon, everyone. I want to thank the many co-sponsors and organizers for this day of programming. It is a privilege to be on this panel. My special thanks to my dear friend, Jonathan Granoff, for the special invitation to be here today. This panel is examining the approaches for advancing the rule of law and morality regarding nuclear weapons. We will discuss specific actions which have been undertaken by communities of faith on the nuclear weapons issue. Over 84% of the world's population are adherents of some faith tradition. This represents a tremendous resource. Leading guiding institutions, including the United Nations, have increasingly come to understand the importance of engaging with faith communities to advocate for, as well as implement, important local and global programs and initiatives.

Significantly, communities of faith provide the voice of inspiration that finds its origins in our sacred texts and traditions. Faith communities have also been instrumental in providing the voice of advocacy. They provide humanitarian outreach and services to communities in need. I begin by mentioning the work within the interfaith communities, with which I personally have been involved. The Parliament of the World's Religions which started the global interfaith movement with its inaugural convening in Chicago in 1893, has embraced the nuclear weapons issue and addressed it at each of its international convenings. Jonathan Granoff, who is the special ambassador of the Parliament on the nuclear issue, has been instrumental in putting this issue front and center at all of its international convenings from Cape Town, South Africa in 1988, and thereafter.

In 2018, the Parliament issued a passionate call for the abolition of nuclear weapons. Since that time, the Parliament has deepened its cooperative engagement by partnering with other faith-based organizations to create a joint statement called the Hiroshima-Nagasaki Accord. The Accord was co-created with United Religions Initiative, the Charter for Compassion, and Religions for Peace. The Accord has nine action items for faith communities as well as people everywhere to implement. They are:

- If you are **young**, demand urgent governmental action before these weapons can rob you and your children of a future.
- If you are **a diplomat**, keep pounding away on the fulfillment of legal commitments already contained in treaties in force that call for the reduction and elimination of the threat posed by these weapons.
- If you are a **religious leader**, pray, preach, prophecy to stop the nuclear end of the world. And if you're not informed about the nuclear issue become educated, subscribe to a nuclear newsletter and wake up.
- If you are a **politician**, join parliamentarians and leaders worldwide who are working to stop the modernization and expansion of the capacity of nuclear weapons in quality and quantity, and advance policies and legislation that reduces the threat of the use of weapons, stop their spread, and lead to their elimination.
- If you are a **citizen**, join a nuclear weapons abolition group. March in the streets, write letters, pray fervently, and demand that institutions stop investing in the nuclear weapon industry.
- If you are a **scientist**, don't be used by politicians who champion nuclear stockpiles. Find solidarity in your ranks and reach across national boundaries to scientists in other countries.
- If you are an **environmentalist**, recognize that nuclear weapons are the immediate and ultimate climate change for all time.
- If you are a **nation armed with nuclear weapons**, join with other nuclear nations to establish a joint enterprise committed to working for the elimination of nuclear weapons.

In commemoration of the 75th anniversary of the bombings of Hiroshima and Nagasaki, a video was also jointly created to make the moral case for the abolition of nuclear weapons. Links to the video and the Accord have been provided to the conference organizers. This modeling of cooperative engagement between communities of faith, and faith-based organizations to support the abolition of nuclear weapons should be generously replicated.

United Religions Initiative, which is comprised of more than eight-hundred cooperation circles around the world, has a very well-developed cooperation circle created just to advocate for a nuclear weapons free world, called "Voices For a World Free of Nuclear Weapons."

Fifty-three diverse faith communities committed to a nuclear weapons free world presented a joint statement at the Third Session of the Preparatory Committee for the 2020 Review Conference of the parties to the Treaty on the Non-Proliferation of Nuclear Weapons (TPNW). These powerful advocacy tools continue to be developed to address the abolition of nuclear weapons.

The Public Statement gave four areas that communities of faith urged actions to be taken by the States. It set forth, "Nuclear weapons profoundly violate all values and commitments. We can never accept a conception of security that privileges the concerns of any state or nation over the good of the human and planetary whole. The horrific destructiveness of nuclear weapons makes their abolition the only path to authentic human security. In July of last year, in an important step toward a world free of nuclear weapons, the TPNW was adopted by 122 governments. We strongly urge all states that have not done so to sign and ratify it."

As people of faith, this group urged the United Nations General Assembly to do four things:

1. Address the issue of disarmament not only as integral to the security agenda seen from military and political perspectives, but also as a moral and ethical imperative;

2. Support proposals for substantive discussions in multilateral forums on a legally binding instrument to prohibit L.A.W.S.;

3. Heed the voices of the words, *hibakusha* (all the victims of nuclear weapons) and recommit to the unequivocal undertaking to achieve and maintain a world without nuclear weapons;

4. Recognize that the fundamental justification for the TPNW is the prevention of the catastrophic humanitarian consequences of any use of such weapons and that its early entry into force is absolutely necessary.

Father Drew Christiansen, one of the panelists that we have this afternoon, said it clearly, "We should cease to imagine nuclear weapons as tools for us to manage, but rather as a curse we must banish."

Beatrice Fihn, Executive Director of the International Campaign to Abolish Nuclear Weapons, and recipient of the 2017 Nobel Peace Prize said, "Humans harnessed the power of science to build these weapons; we have harnessed the power of faith to stop them."

Communities of faith that implement activism, advocacy and the voice of inspiration, help us to to deepen our faith and have greater hope that we can create a better future. Influential religious leaders also play constructive roles. Pope Francis, who leads over 1.2 billion Catholics, said In his speech in Hiroshima, "... the world has grown content with a false sense of security sustained by a mentality of fear and mistrust, one that ends up poisoning relationships between peoples and obstructing any form of dialogue. Peace and international stability are incompatible with attempts to build upon the fear of mutual destruction or the threat of total annihilation."

At the 75th anniversary of the bombing of Hiroshima, Pope Francis said, "It has never been clearer that, for peace to flourish, all people need to lay down the weapons of war, and especially the most powerful and destructive of weapons: nuclear arms that can cripple and destroy whole cities, whole countries... The use of atomic energy for purposes of war is immoral, just as the possessing of nuclear weapons is immoral and is to be condemned."

His Holiness the Dalai Lama, who is a Nobel Peace Laureate, and an advocate for nonviolence said, "We human beings have created many of the problems in today's world... As long as we have strong negative emotions and we view our fellow beings in terms of 'us' and 'them', there will be a tendency to try to destroy them. We must recognize the oneness of humanity, and understand that we will not achieve peace merely through prayer; we need to take action."

In his sermon, *Loving Your Enemies*, Martin Luther King said, "It is an eternal reminder to a generation depending on nuclear atomic energy, a generation depending on physical violence, that love is the only creative, redemptive transforming, power in the universe." King wanted all people, all nations to come together to work out their differences through what he called "a great fellowship of love."

I extend my appreciation to all of these inspiring leaders, whether religious or not, who articulate what it is to be authentically human and find that moral ground within ourselves, which gives rise to all of our religions, and yet, is transcendent of all religions. The life given by the Divine Creator of all there is, is sacred.

CHARLES MOXLEY:

Thank you so much, Audrey. This is so inspirational. I mean, it's hard to talk of it as an action item, although it is, but it transcends action to call upon us to change ourselves and achieve a greater potential of our human nature. So, the action list expands. Father Christiansen, Drew, would you talk us through the great work you've been doing, and Simona, would you put up Father Christiansen's PowerPoint so we can all see it?

DREW CHRISTIANSEN:

Thank you, Charles. I want to thank you and Jonathan Granoff and Edward Lenci for inviting me to be with you today. And I want to thank Audrey for reading my work so attentively. In talking about the church, I don't want to talk exclusively about the Catholic Church because many of these activities have been undertaken ecumenically and inter-religiously. We've learned from other denominational practices, as I'll point out, and we carry out a lot of this work inter-religiously as well. So what I hope is that I'll exhibit various dimensions in which the Catholic Church has been involved, and in which any religious organizations can be involved. There's one distinct dimension for the Catholic Church, that's diplomatic; but by and large other religious organizations are involved in civil society and in the UN structure in very deep ways that they weren't 25 years ago. And so they've been involved in this whole discussion, too.

So they are also part of the diplomatic world in a broader sense. The first dimension I want to talk about is that of pastoral care. In pastoring, the first mode we think of reaching the faithful is preaching. The late Andrew Greeley, the sociologist and priest, used to say the Sunday commonly was the place where most Catholics learned about the church. Well, I'm afraid that on war and peace, they may learn too little, or what they would learn may be wrong.

The church has changed its position. The position has evolved not only as events have changed, and the climate of public opinion has changed, but also as moral insight has changed. So first, we accepted nuclear weapons as part of a necessary evil world.

And then, in 1982, Pope John Paul II and the U.S. Bishops in 1983 said, "No, we can only accept nuclear deterrence under strict conditions." And as those conditions were no longer met, the Holy See began to say, "No, abolition has to be the end of policy." And then finally, under Pope Francis, the church has signed on to abolition under the Treaty to Prohibit Nuclear Weapons, and in his own teaching, he has condemned the possession, the use, and the threat to use nuclear weapons, thereby condemning nuclear deterrence as well.

And so, to preach on this issue, clergy must understand that there's been an evolution of the teaching, and that whole teaching must be taught, and the teaching must be made "church wide and parish deep." Preaching, I think, has a special opportunity in the upcoming religious seasons of Advent and the weeks leading up to Advent, where there's a lot of contemplation of the end of time. Nuclear weapons are often looked at from the point of view of the apocalypse, but also in Advent, we're looking at the advent of the Kingdom of God, where peace flourishes in a new way, and so the liturgical dynamics set this opportunity to bring up these issues in a special way.

Also, there's a teaching function with relation to the sacraments, particularly in preparation for entrances of the church, either through baptism, on the part of adults who are non-Christian or through confirmation, if they come from other Christian denominations; and there's a long process called the Rite Of Christian Initiation of Adults, where new Catholics can and ought to learn about this teaching.

The RCIA is part of making the teaching on elimination of nuclear weapons "church wide and parish deep." There's also a question of adult education, and this is the area where I think, it's most possible to do education. The clergy sometimes are afraid of talking about difficult issues like nuclear war because they're not prepared, but also because it may divide the congregation. And it's easy, I think, to handle all the adult education with the help of competent lay people, who are competent, not only on the topic, but in the ability to lead a serious discussion. And many polls that we've taken have indicated again and again, that people believe that congregations are the place where they want to talk about moral issues and expect to talk about them. And so all an anxious clergy person has to do is to host an event and let the lay leadership take it over.

I think there's another dimension to this, which is that these meetings can gather as "communities of moral discourse," as Jim Gustafson, the Protestant theologian, calls them, where you simply are talking about issues of public or even global ethics. In modern Catholic Social Teaching, however, they also function as communities of discernment. People come together to look at the current situation of the world, and see what God is expecting them to do, and take decisions together about that. And that decision making about collective action should be part of what goes on in adult education.

And finally, there is pastoral care in the more specific sense. Ordinarily, we think of that in confession, in confessing sins, sins of participation and evil even, but pastoral care takes place in an even richer way in a spiritual direction. The image I have here is of our Jesuit patron and founder, St. Ignatius Loyola, with his finger over his mouth, indicating, "Shh," silence, listen to your heart. This is an unusual image of him as a spiritual director and the founder of the modern tradition of spiritual direction, indicating that what we ought to be doing, is helping people through their own discernment. Everyone is called to discern what to do with respect to the elimination of nuclear weapons, and the duty of the clergy is to help people through that moral discernment. And that's pastoral accompaniment. Pope Francis has written glowingly about that kind of process. And I think we ought to adapt it.

Higher education and public education more broadly is the domain in which I work principally. You see here three of my colleagues with whom I work for actually. The man with his back to you, is Cardinal-elect Silvano Tomasi, and he's been, really, the leader within the church with Pope Francis on this issue. In front of him, is Maryann Cusimano Love, from Catholic University of America, and Gerry Powers, from Notre Dame, and Alessio Pecorario from the Vatican curia. The photo is from our January conference here at Georgetown, The Pope And The Bomb. Together, we work in a group called the Initiative for Reengaging the Catholic Community on Nuclear Disarmament. We do a variety of things. One of the things that we're aiming at doing is educating the next generation of nuclear arms negotiators and nuclear abolition advocates. We've had a succession of summer institutes to that end.

This year we postponed it due to Covid, and now, we'll have a mini course January 11th to January 14th online. And we're hoping that we'll get students from Catholic universities worldwide and from other, especially religiously affiliated colleges and universities as well. We provide internships and they're broad. One of my own students here at Georgetown was a member of the Vatican delegation to the negotiation of The Treaty on the Prohibition of Nuclear Weapons. And I like to say, it was the first time that we had a Jew as a part of the Vatican delegation. He really acquitted himself well there, and he's still part of our work.

There were international exchanges back in the summer on the anniversaries of the atomic bombings of Hiroshima and Nagasaki. And then again, in early October, we did a series of conversations with the Archbishop of Nagasaki, who himself had been an infant in womb at the time of the bombing. And we involved students from Japan and Korea, from the U.S., and elsewhere, in conversations with him and with one another on these issues. And the students are now continuing those kind of exercises- they just said one last night.

In addition, we run conferences. And in January, here at Georgetown, in that conference on the Pope and the Bomb, we had presenters from a book that I'm editing on pastoral and moral guidance for people in the nuclear field and clergy and pastoral workers who need to advise and accompany them in dealing with the issues that they face.

Now that the Pope has condemned nuclear weapons and deterrence, some people may really face hard issues. And the idea of this forthcoming book will be to help guide them. And that conference was a foretaste of that work. So that's some of the work of teaching and scholarship we do.

Finally, the Holy See has a unique position as being a member of many treaties and an observer member of the UN. It chooses to be an observer. Although, in the negotiations on the treaty to prohibit, it was elected by the other members to be a voting member of that group as well. But the Holy See is the oldest diplomatic entity in the world, and so, it continues to exercise a diplomatic function on issues of disarmament. The Holy See, if you will, is the public face of the Catholic Church in the international community.

Vatican diplomacy relates Catholic Social Teaching to the wider world and especially to the state system. Under the title of the Holy See, it's a permanent observer at the UN, in New York and the UN agencies in Geneva. And it's a state party to a number of treaties, including the Nonproliferation Treaty, the Treaty to Prohibit Nuclear Weapons, and is a member state of the International Atomic Energy Agency. It's been involved in a number of activities in this area in recent years. Its work in nuclear weapons is part of a continuing program, a promotion of humanitarian considerations in the issues of limitation of weapons, which included work on landmines and the arms trade.

It's been a participant in the Humanitarian Consequences Movement, a series of meetings promoted by civil society and the non-nuclear weapons states, beginning in 2013, that laid out contemporary knowledge about the consequences of nuclear weapons for humanity and for the planet. It also reviewed the lack of resources and for recovery of the planet and recovery of civilization, if there were ever a nuclear war. The movement increased the weight of the knowledge of the destructive potential of nuclear weapons, and, therefore, the need to abolish nuclear weapons. Pope Francis, as I said, has condemned the possession, the use, the threat to use of nuclear weapons, and therefore deterrence and most notably, in Nagasaki and Hiroshima, but even the year before, in a conference at the Vatican. And the book you saw before, A World Free from Nuclear Weapons, that we've published from Georgetown, presents the talks given there, including talks by a number of noble laureates and diplomats who were involved in the creation of the treaty.

Among the more recent pronouncements of the Holy See in recent weeks has been one by Archbishop Gallagher; he's the Vatican foreign minister. At his presentation to the General Assembly on The International Day For Elimination of Nuclear Weapons, he, among other things, said states have no legacy rights to nuclear weapons. That is a formula for saying the nuclear weapon states should not treat the NPT as a treaty that guarantees them possession of nuclear rights. Henry Kissinger, when he came to join George Schultz's effort on abolition, argued that the time had come when the US could no longer think of itself as being able to have nuclear weapons when no one else could have them because the world was too threatened by the multiple states that had weapons and the instability of the current multi-polar situation. And so, he of all people, ultra-realist, along with George Schultz, Sam Nun, and Bill Perry, calls now for nuclear abolition.

And then, most recently, just within the last couple of weeks, Archbishop Caccia, the Vatican ambassador at the UN, at the first committee—the first committee is the one that considers issues in nuclear disarmament and international security—delivered a statement on general issues that need to be looked at, but he put a special emphasis on the need to implement the sixth article of the NPT: the pursuit of general and complete disarmament, that is disarmament on nuclear weapons in conjunction with conventional disarmament.

Charles Moxley earlier said there's an irony in that what was once something that the US wanted, conventional disarmament, is now something Russia would want because of the disparity in conventional forces. The Holy See is now arguing that really, this is the time to pursue both sides together, so that we can have a stable movement downward towards a non-nuclear peace. And finally, this document that you see on the slide, is the document of ratification of the treaty to prevent nuclear weapons, signed by Pope Francis on the 26th of September in 2017. The next two slides provide resources, and since these presentations will be available online, you can go there and look for these. These are two pages of resources here. And I hope you'll be able to take advantage of them. Thank you all for listening.

CHARLES MOXLEY:

Thank you, Father Drew. It's extraordinary the range of actions that are taking place now. There's a lot to build on here. I think one area we talked about in our prep, that we didn't get to, is Jackie was going to tell us about a huge movement of parliamentarians that we really should talk about. And then I think we should have a general discussion within the panel of reactions to one another's comments.

JACQUELINE CABASSO:

First of all, I wanted to reinforce Tom's note that we really need to push hard on the new Biden administration. I will note that Obama's Nuclear Posture Review did not accept the sole use doctrine, so we really have to do that. One mechanism is through mayors. Mayors Of Peace was established in 1982 during the UN Second Special Session on Disarmament by the mayors of Hiroshima and Nagasaki to promote the total elimination of nuclear weapons. With active support from civil society, as of November 1, membership has grown to nearly 8,000 cities in 165 countries with 218 U.S. members. Mayors for Peace seeks to achieve two key objectives: realization of a world without nuclear weapons and realization of safe and resilient cities, which taken together will lead to lasting world peace.

Here again, it is a multi-issue approach. Mayors for Peace has ECOSOC status and works closely with the UN Office of Disarmament Affairs. In the United States, Mayors for Peace works closely with the U.S. Conference of Mayors, the official nonpartisan association of more than 1400 cities with populations over 30,000. The U.S. Conference of Mayors has adopted Mayors for Peace resolutions for 16 consecutive years. In 2019 they called on all presidential candidates to make known their positions on nuclear weapons and to pledge U.S. global leadership in preventing nuclear war, returning to diplomacy and negotiating the elimination of nuclear weapons.

This year, the U.S. Conference of Mayors adopted a resolution calling for human centered security in a time of global pandemic, demonstrating that local elected officials in the world's leading nuclear-armed state understand the inter-connected prerogatives for human security. The new resolution calls on the President and Congress to support the UN secretary General's call for an immediate global cease fire and international cooperation to address the COVID-19 pandemic; to reconceptualize security in human-centered terms by redirecting funds currently allocated to nuclear weapons and unwarranted military spending to support safe and resilient cities and meet human needs; and to lead global efforts to prevent nuclear war and actively pursue a verifiable agreement among nuclear arm states to eliminate their nuclear arsenals. This last clause is a restatement of the U.S. Conference of Mayors' previous commitment to the Back From the Brink Campaign, which I want to bring to folks' attention as a way of putting pressure on the new Biden administration. The Back From the Brink campaign calls on the U.S. to renounce the option of using nuclear weapons first, end the sole unchecked authority of any U.S. president to launch a nuclear attack, take U.S. nuclear weapons off hair-trigger alert, cancel the plan to replace the entire U.S. nuclear arsenal with enhanced weapons, and pursue a verifiable agreement among nuclear-armed states to eliminate their nuclear arsenals. This agenda has been endorsed by 352 organizations and 47 municipalities, including Washington DC, Baltimore, Salt Lake City, Honolulu, and Los Angeles, as well as the State legislatures of California, Maine, New Jersey, and Oregon. This is a live and active campaign now, that Mayors for Peace is part of in the United States.

CHARLES MOXLEY:

Okay, terrific. Before we go back to the panel, when I mentioned parliamentarians, that was referring to a program that GSI—Global Security Institute—has worked on. And I think Jonathan's going to tell us briefly about that.

JONATHAN GRANOFF:

Right, well, the Parliamentarians for Nuclear Non-Proliferation and Disarmament is in over 80 countries. There are over 800 parliamentarians in it from multiple parties. Jeremy Corbin was a co-president; Ed Markey is a co-president. Foreign leaders would include Helen Clark, the former Prime Minister of New Zealand. Laura Chinchilla was the president of Costa Rica. So it's very high level, and it's really put together by an amazing energetic visionary, Alyn Ware, and its goal is to educate massive numbers of parliamentarians on the imperative and value of nonproliferation and nuclear disarmament and to share policies and proposals that they can take and do within their parliaments.

And I commend, their website is pnnd.org, Parliamentarians for Nuclear Nonproliferation and Disarmament. It has not reached anywhere close to its potential for simple lack of funding and organizational support, but it has tremendous potential to bring together the movements dealing with climate, human rights, and disarmament because we discovered that the same parliamentarians who care about nuclear weapons are exactly the same parliamentarians who are on the front lines on climate change. So this is a robust organization with even greater potential.

CHARLES MOXLEY:

Thank you, Jonathan. Let me ask Tom Collina. Tom, there's been a question raised in connection with your comments about things that the Biden administration is likely to do, and might be persuaded to do, with respect to the scope of the expenditures and so forth. To what extent can the administration just say, "I'm not going to spend them."?

TOM COLLINA:

Well, one of the first things that an incoming Biden administration will have to do is take the draft budget for the next fiscal year from the outgoing Trump administration, mark it up, because there won't be time to do a top to bottom new budget, and send it to Congress as the Biden administration's first proposed budget to Congress. In that budget, for example, the Biden administration could zero out funding for the new land-based ballistic missile, the new ICBM: just zero it out.

So the new administration will have a tremendous amount of latitude. Now, of course, Congress can try to put that money back in, but then you'll have, presumably, a split between house and Senate and then the white house will get to decide, so I like those odds. But, yeah, a new administration will have a lot of influence over its own budget to begin with. And then because of the power of the veto, can have a lot of influence with how the congressional budget process goes, but it all starts with the budget submission that the new administration will put together in the spring.

CHARLES MOXLEY:

You seem somewhat optimistic on the reining in the expenditures, but there's so much money going to such a diffuse group of companies and efforts. How feasible is it that we're really going to rein that in, materially?

TOM COLLINA:

2022]

Look, I'm hopeful, but I'm not confident. I completely agree that we are up against it with the hundreds of billions of dollars that are going to defense contractors and the influence that that buys you in Congress and other places. So, we are outgunned on many levels. What gives me hope, is that again, the new administration is coming in with so many needs on the budget front, so many higher priority needs to fill than new nuclear weapons. And that, if they are reasonable folk, which I think they are, and they're looking for places to save money, then the defense budget, and within that, the nuclear weapons budget, is just an obvious, reasonable place to go.

CHARLES MOXLEY:

Let me ask an action-oriented question. As I said, we've had hundreds of people here today., We now have 105 people still with us, and let me remind everybody, that we're going to have a virtual reception after this panel and some concluding comments. So, we do hope people will stick around, for that. But, where's our action item? For instance, I'll ask John Burroughs, I don't see you right now, and I'll ask Ariana, Jonathan Granoff, and Ed Lenci. What can people do? The people who are on this program, the 105 who are here now, who can they reach out to, to find out how they can be part of the effort? We've defined action items, but now we have to operationalize it. So, who's going to coordinate this? What organization or person can be that resource? This was not a scripted question, but as this discussion has been so hopeful, it cries out for some coalition of people who can coordinate the interest that this program has obviously discovered.

JOHN BURROUGHS:

Charlie, this is John Burroughs. I'm going to take that as a question that I must answer. And certainly, if you're interested in working as a lawyer or in legal related advocacy, get in touch with Lawyers Committee on Nuclear Policy, contact@lcnp.org. But I don't think we can volunteer to be a center for activism in general.

CHARLES MOXLEY: Jonathan?

JONATHAN GRANOFF:

Well, if you're a lawyer, join the international law section of the ABA, one of the sponsoring organizations, and join the task force on nuclear nonproliferation, which I chair. And there's a committee on national security, where I'm a senior advisor and these committees, we already have two existing American bar Association resolutions that are relevant. One is, for ratification of the Test Ban Treaty. And the other is, for the fulfillment of the promises in the Nuclear Nonproliferation Treaty. So there's ample room to push the American bar Association, formally, to lobby resolutions which took years of hard work to obtain. And that is a strong, powerful, very effective lobbying arm that has the potential to actually make a bipartisan difference because the ABA proper has over 400,000 lawyers. And the only thing that's lacking is a little energy to put it together. The other thing I would suggest is that it would be extremely valuable if an organization in Washington gathered together a group of thought leaders in the different movements to meet together on a regular basis through Zoom to develop greater coherence in strategies. First beginning with the arms control disarmament community, but then having as part of its agenda, how to build bridges with the natural allies that we have in the human rights and climate movements. And I end by saying our adversaries have created unnatural alliances. If you're against abortion, statistically in the United States, you're likely to be for more prisons, you're likely to support space weaponization and more nuclear weapons. There's no logical relationship. This is an artificial alliance that's been created, but we have natural alliances of interest and sensibility, but we haven't developed a narrative or a set of principles that would allow us to coordinate our efforts.

Thus far, the climate movement, the environmental movement, the human rights movement, the disarmament movement have been siloed in their funding and in their metrics of success. I think that it's time that we brought these movements together. We need some organization to convene thought leaders to come up with a strategy. And it should also include, because these issues are global in nature, a global dimension, not just the Washington beltway mentality, but these issues are global especially for people who address the climate. They care about the global perspective, and we have to bring together those of us who work in the UN environment with those who work on the Hill. I believe the framework of Human Security is viable.

CHARLES MOXLEY:

That is terrific. Jackie, what about the Western State's Legal Foundation? Do you all need people to reach out to you? I mean, I know your organization does a lot of work across different areas. So, is there an opportunity there?

JACQUELINE CABASSO:

I would be happy to hear from anybody who is interested in following up on anything I said. I wanted to respond to Jonathan and say we must be very careful. There are a lot of formations out there now, a lot that are not necessarily in touch with each other, some of which have very similar agendas, some of which do not. A little red flag goes up for me when people say a DC group should be doing the convening because there are a number of coalitions that are national and around the country that are dealing with racial justice, economic justice, environmental justice and so on. It needs to be done thoughtfully. Another approach is to try to get people's interest and feed them into existing organizations and formations; to try to strengthen existing organizations.

There's one coalition on nuclear disarmament advocacy that comes to my mind, which was formed for the Hiroshima and Nagasaki 75th anniversary, called "Still Here." It brought together an unusually broad spectrum of nuclear arms control and disarmament groups - and a little bit broader than that. There is now a list-serve, and the group is going to start meeting regularly to see how we can take the cooperation and collaboration that went into the 75th anniversary effort and move it forward. Some of the legal folks might want to plug into that.

CHARLES MOXLEY:

That sounds interesting. Let me ask Ed Lenci. Ed, Jonathan talked about opportunities within the ABA to get involved. My question is whether the International Section of the State Bar, of which you're the chair elect. Do you think there's an appetite there to take action, if there are members of the State Bar who might want to act through the State Bar?

EDWARD LENCI:

I would have to ask the executive committee if there is an interest in it. I am not trying to discourage it by saying that I'm just saying that I don't want to run off at the mouth and be seen as taking a position I wasn't authorized to take. I would encourage attorneys with an interest in this area to join the New York state bar association international section, and if you really have an interest in pursuing this area, propose a committee because we have committees on a host of subjects. If we form a committee and members get active, who knows where it could go.

CHARLES MOXLEY:

I have to second Ed's comment. I've been very active in the State Bar for years. My day job is as an arbitrator and a mediator, and I'm a former chair of the Dispute Resolution Section of the State Bar, which is a big section, similar in size, I think, to the International Section, and there the basic rule is, if you want to see something happen, the best way to make that happen is to just do it; try to find a few people, and now you're a committee within the section. So, my experience is that the roadway is open for people who want to get involved.

I know many of the speakers throughout the day here, and we've all been active in this field for years. Father Christiansen, one question I have for you is this: the Catholic Church is huge: we heard one billion or more members. We also heard about the Catholic Peacebuilding Network—a cooperative arrangement, as I understand it, among Notre Dame, Catholic University, and Georgetown. Is that something replicable? Maybe we'll put Dean Feerick on the spot and see if there's a potential here for maybe Fordham getting involved at the university level or the law school level.

DREW CHRISTIANSEN:

It's also expandable as our group would be happy to have other Catholic colleges. The Boston colleges were once involved and they're kind of involved in an ad hoc basis. Then we had Loyola along with Northwestern when we did the conversations with Archbishop Takami a couple weeks ago. So I'd say, yeah, it is replicable and expandable. The other thing I'd add is that in a lot of the teaching documents from the Senate, from Pope Francis, they talk about the parish being a place that is a community of communities and of movements. So that says it doesn't have to be a formal parish work but the parish can be a place where there can be a group of moral conversation that will eventually become a group of moral discernment together and social action.

It's possible to put your own group together in a parish context or to become part of a wing of Pax Christi perhaps, one of the other Catholic agencies to deal with these issues. So as with the bar, I think people, especially professional people and educators ought to be in a position to self-organize, to start, and to promote this. The Pope will continue to speak on this. I imagine before Christmas we will hear from him again on this issue. I think that should be an incentive for folks to take this issue up and decide what they can do from where they stand, and I think that goes for people in politics and diplomacy and in the military as well.

CHARLES MOXLEY:

I think that's certainly right, that the initiative is there. We just have to get people focused on the issue. I think for this panel, Audrey, you get the last word and then I'll invite Dean Feerick, if you'd like to make some final comments. Then I think Jonathan, John, and I would like to just say a couple of very brief final comments sort of reflecting on the day, and we'll go into our cocktail party, our virtual cocktail party, which is often very interesting. Audrey.

AUDREY KITAGAWA:

Thank you so much again, Charles. The foundation of human rights comes from an inner knowing that we are inherently spiritual beings with spiritual purposes, and the laws that we create are a manifestation of that inner knowing, an externalized attempt of written codification, of what we inherently know of ourselves as spiritual beings with spiritual purposes.

Article 1 of the UDHR recognizes that all human beings are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

But where does conscience come from? I suggest that conscience arises from consciousness itself, which is the quality or state of being which is aware, aware of what is taking place within oneself, and all around us. It is therefore, simultaneously individual and universal in nature.

That state of being which is aware instantly tells us if our actions, whether through thought, speech or conduct, creates a violation of ourselves or another; a violation that ultimately leads to our degradation and the degradation of the other. Though we can try to rationalize our actions, the conscience is the repository of truth which knows that no amount of rationalization can soothe the disquietude that sits within our hearts until that violation is cleared through a coherent alignment of the inner knowing with the outer conduct.

The ethical dimension of human rights law is a further externalized articulation of a moral code that is often manifested in our cultural traditions, or areas of human behavior that we ascertain to be acceptable, or unacceptable, good or bad, right or wrong in accordance with our societal norms and values.

It also speaks to our values as building blocks of our ethical and moral principles. The fundamental values of freedom, equality, solidarity, tolerance, respect for nature and shared responsibility were set forth at the Millennium Summit of the General Assembly in 2000 as essential to international relations in the 21st Century.

The essence of the spiritual and ethical dimensions of human rights law is ultimately based on an altruism that is unselfish and has regard for the welfare of others. All the great spiritual teachers and ethicists from the beginning of the recorded human existence share that the highest potential of the fully developed human being is one who has the heart of compassion, love, and caring for one other that not only makes human existence itself possible, but also makes it worthwhile.

To develop into a mature human being then, means that the elevated person will not only embrace the rights of others, but will see it as indistinct from his own rights because that sense of separation that creates a duality of you and me has moved to that transcendent state where we are all One in the family of man, and with all of life itself.

As the great humanitarian and Nobel recipient, Albert Schweitzer said, "Until mankind can extend the circle of his compassion to include all living things, he will never himself, know peace."

CHARLES MOXLEY:

Thank you, Audrey. That is a lot to meditate on, and I think we're all going to play the link to this program more than once and watch it. Before I ask Dean Feerick for any closing comments, I'm going to ask Laurie, as you listen to all this, if you've had any thoughts of further litigation, and equally importantly, are you a contact for anybody who wants to get involved in litigation in this realm?

LAURIE ASHTON:

Yes, I am a contact for folks who want to be involved in litigation. One thought did occur to me while I was listening to Tom Collina and his optimism with the Biden administration. I want to share that optimism with a quote of Barack Obama's when he was quoting Roosevelt; I believe it was with regard to weapons related issues. It goes something like this: I agree with you, I want to do it, now make me do it. Litigation can fill the role of leaning on leaders that agree with us but need more reasons to get it done because of how strong the lobbyists, the defense contractors, the military complex is in general. That's where I see litigation and you guys know where to find me.

CHARLES MOXLEY:

Thank you, Laurie. Dean Feerick.

JOHN FEERICK:

Well, I've made three pages of notes listening to conversations, and I'm just overwhelmed and inspired by each of you in terms of the example you have given in your own lives and your focus on this particular subject, which has not really been part of my background. I lead a center at Fordham law school called Center for Social Justice, and we are very heavily involved in immigration issues, and we played a very significant role in Dilley Texas in terms of the political asylum issues. The Jesuit refugee service gave us their national award for work that the center is doing. So those are sort of the areas of my own involvement, but I made notes to have communications with different individuals at Fordham, like Karen Greenberg of our National Security Center to talk to her about this issue. We have a wonderful human rights program, headed up by Marty Flaherty, who is very, very well known in the field of human rights.

I'm going to encourage his center to focus on these issues. I do have a very close relationship with Father McShane who is the president of Fordham University. And I'm going to ask him the question of why we aren't involved as a university with Georgetown, Catholic University, Notre Dame and whoever else is involved. Father might say to me, John, this is not your background. I'll say, but I know people like Charlie Moxley, a Fordham College graduate, who can be very helpful. I promise you I'm going to do what I've just said because I didn't expect to end up with work tonight. I'm just going to get started on it tonight in terms of communications. That's the way I work. So you were all terrific and you educated me, you inspired me, and I'm going to act on that. Thank you.

CHARLES MOXLEY:

Thank you so much, Dean. Let's now just take just a few minutes for each of us, to say a few final words. Maybe John, Jonathan, and maybe Ed, if you would like to just give us some final reflections. I know we're standing between us and the cocktail party, but it has been a wonderful experience. Let's just each briefly reflect a little on what we came away with today, John.

JOHN BURROUGHS:

I'd like to say on behalf of Ariana Smith and myself that I hope the participants learned something today and were inspired today. I'll just repeat what I said a few moments ago, which is if you're interested in activism in relation to legal issues we've discussed today, please get in touch with us at contact@lcnp.org.

CHARLES MOXLEY:

Thank you. Jonathan.

JONATHAN GRANOFF:

I was very struck by Governor Brown's emphasis on planetary realism. That since time in memorial, the wise have admonished us to see the reality of the human family as one as a precondition for becoming fully human. The very famous Sufi poet Sa'di said, "Oh

2022]

the human family is as one body; an injury to one part, a disease, causes a healing response from the whole. Oh you who don't feel the suffering of others, how can you call yourselves fully human?" This assertion of compassion and human unity- the wise have all been telling us and it is resonant with the universality of the golden rule. This moral imperative at this moment in our lives has become a practical necessity in order to address protecting the climate, addressing pandemic diseases, and the horrific threat of nuclear weapons hanging over our heads. This requires a global understanding, and that global understanding is a mere sentiment unless it has the traction of law.

I reach out to my colleagues in the bar and say it's our job to translate that human sentiment into practical reality. I recently engaged in a zoom dialogue with Jane Goodall, Our Future Peace or Pieces. And Jane's admonition, one of the great wise people of our time, is consistently that you have to go on the journey from the head to the heart, and then we said, but now we have to go the head, the heart, to the hand and that's what's before us. And that's what we've heard all day. There are tools in the law. We need to learn them well and use them well. I really thank Ed and Charlie and John and Carra and Simone for the hard work of bringing this together and making this wonderful day in which I didn't feel uncomfortable sitting for, I don't know, eight hours. God bless you. Thank you.

CHARLES MOXLEY:

Thank you, Jonathan. Ed, would you like to make any final concluding reflections?

EDWARD LENCI:

Yes. I just want to thank everyone involved in this: speakers and the folks who were in the audience, the virtual audience, and especially Carra and Simone for making this a great conference and one that I think will, as it's being recorded, serve as an educational tool that we can use at colleges and even high schools to basically spread the word about what we were talking about today.

CHARLES MOXLEY:

Okay. Thank you, Ed. I think the points that stand out most in my mind are twofold. Maybe threefold. One, it is gratifying, and it was evident back at the time of the ICJ case, that the U.S. acknowledged, and the other nuclear weapons states and states around the world have broadly recognized, that the law of armed conflict applies to nuclear weapons. I think a lot of us felt we had done a lot of what we were interested in doing with getting that realization over the years. Even after the ICJ decision, a lot of us wrote books and articles about the fact that this law applies and the U.S. agrees that it applies. But I no longer feel that that's adequate, because it was evident from today that, while it is important to have the articulation of what the rule is, the application of the rule matters.

This came from the Red Cross, Kathleen Lawand, thank you. The statements of the rules by the Red Cross and by the U.S. military and the manuals constitute essentially the same statements of the law. It's a good start that the rules are stated the same. The flaw is in the application and in the U.S. approach to the matter. It's for others to judge the matter, but my sense is that it legally required under the law, as formulated across the board in international law, including by the U.S. itself, that a state, in evaluating the lawfulness of a potential military strike, include a nuclear weapons strike, must consider all the potential effects of the strike. And when you consider them, you can't just ask, "can we hit the target?" You have to look at the whole range of effects, including radioactive fallout and potential electromagnetic pulses and nuclear winter effects, along with potential nuclear responses and escalation. And you have to do so using risk analysis, assessing and integrating into the analysis the foreseeable levels of likelihood of the various foreseeable potential effects. Once one goes through such an analysis, the conclusion seems compelling that essentially any use of nuclear weapons, certainly between major nuclear weapons states, will likely carry some risk of existential effects that cannot pass legal muster under this established body of law.

So, I think the first point is that we have to start refining the issues as to the application of this body of law. I thought that the point Scott Sagan made is so good: that we need to get the JAG people at the next one of these conferences, which hopefully we will do soon. We need to get a dialogue going.

The second point I wanted to make relates to some of the points Ambassador Ford made. I'm sure they were made in complete good faith and I'm sure he believes them. The sense is that the potential enemies are bad, and they're doing bad things, and so we just have to be ready to deal with them, and that they don't have civil society and we have civil society. What is missing there, in my view, is that the United States is, or has the potential to be, the world leader and it isn't right now. We can change things. We can take inspiration from Governor Brown and address these issues.

At this point, we're not even trying to change launch-onwarning. Maybe, as Tom Collina told us, there is a potential to drop our land-based ICBMs, which, as we've heard, are part of United States' triad of land, sea, and air nuclear forces, since that leg of the triad is so volatile. Once you get a report that there's an incoming attack, reports that have occurred often on a false alarm basis in the past, there is a huge pressure to use such vulnerable targets, to "use-'em" so as not to "lose-'em" before they are potentially destroyed in a matter of minutes.

Also, even the Obama nuclear posture review, which said abolition is our objective, had pushed that objective into the indefinite future. That delay seems inappropriate, as a matter of law, for reasons we've heard today because of NPT Article Six. That nuclear posture review also disturbingly suggested that abolition is going to mean that we're going to have all the nuclear power countries and near nuclear countries ready to become nuclear again at the drop of a hat.

Is that inevitable? Can something be done? Many questions remain for our next discussion.

So a final thanks to Fordham's Dean Feerick and to the State Bar and to you, Simone Smith and Carra Forgea, our wonderful State Bar administrators for this program. Thank you. May we all be inspired to take necessary steps to address the existential risks posed by nuclear weapons and utilize the full force of the rule of law to do so.

Charles J. Moxley, Jr., Dr. John Burroughs, and Jonathan Granoff

Charles J. Moxley Jr., John Burroughs & Jonathan Granoff, *Nuclear Weapons and Compliance with International Humanitarian Law and the Nuclear Non-Proliferation Treaty*, 34 FORDHAM INT'L L.J. 595 (2011), https://ir.lawnet.fordham.edu/ilj/vol34/iss4/1/.

This Law Review article provides an overall introduction to legal requirements that relate to the lawfulness of nuclear weapons threat and use.

BOOKS

- JOHN BURROUGHS, THE LEGALITY OF THREAT OR USE OF NUCLEAR WEAPONS: A GUIDE TO THE HISTORIC OPINION OF THE INTERNATIONAL COURT OF JUSTICE (1997), https://books.google.com/books/about/The Legality of Thre at Or Use of Nuclear.html?id=zYqtmngpgIIC.
- JOHN BURROUGHS ET AL., NUCLEAR DISORDER OR COOPERATIVE SECURITY? U.S. WEAPONS OF TERROR, THE GLOBAL PROLIFERATION CRISIS, AND PATHS TO PEACE (Michael Spies & John Burroughs eds., 2007), <u>https://www.lcnp.org/nuclear-disorder-orcooperative-security</u>.
- JOHN BURROUGHS ET AL., RULE OF POWER OR RULE OF LAW? AN ASSESSMENT OF U.S. POLICIES AND ACTIONS REGARDING SECURITY-RELATED TREATIES (Nicole Deller, Arjun Makhijani & John Burroughs eds., 2003), https://www.amazon.com/gp/product/1891843176/ref=as l i tf til?tag=foreaffamaga-20&camp=0&creative=0&linkCode=as1&creativeASIN=18918 43176.

- U.N. OFF. FOR DISARMAMENT AFFS., RETHINKING GENERAL AND COMPLETE DISARMAMENT IN THE TWENTY-FIRST CENTURY, U.N. Sales No. E.16.IX.8 (2016), https://www.un.org/disarmament/publications/occasionalp apers/no-28/.
- A WORLD FREE FROM NUCLEAR WEAPONS: THE VATICAN CONFERENCE ON DISARMAMENT (Drew Christiansen & Carole Sargent eds., 2020), <u>http://press.georgetown.edu/book/georgetown/world-free-nuclear-weapons</u>.
- THOMAS GRAHAM JR., DISARMAMENT SKETCHES: THREE DECADES OF ARMS CONTROL AND INTERNATIONAL LAW (2015), https://www.thomasgraham.info/2018/12/06/disarmament -sketches/.
- THOMAS GRAHAM JR. & KEITH A. HANSEN, SPY SATELLITES AND OTHER INTELLIGENCE TECHNOLOGIES THAT CHANGED HISTORY (2007), <u>https://www.thomasgraham.info/2018/12/07/spy-</u> <u>satellites/</u>.
- THOMAS GRAHAM JR., UNENDING CRISIS: NATIONAL SECURITY POLICY AFTER 9/11 (2012), https://www.thomasgraham.info/2018/12/07/unendingcrisis/.
- SCOTT L. MONTGOMERY & THOMAS GRAHAM JR., SEEING THE LIGHT: THE CASE FOR NUCLEAR POWER IN THE 21ST CENTURY (2017), https://www.thomasgraham.info/2018/11/27/seeing-the-light/.
- THOMAS GRAHAM JR., THE ALTERNATE ROUTE: NUCLEAR-WEAPON-FREE ZONES (2017), https://www.thomasgraham.info/2018/11/27/the-alternateroute/.

2022]

- THOMAS GRAHAM JR., ON TYRANNY AND CRISIS (2020), <u>https://www.thomasgraham.info/2020/09/23/on-tyranny-and-crisis/</u>.
- SCOTT D. SAGAN, MOVING TARGETS: NUCLEAR STRATEGY AND NATIONAL SECURITY (1990), https://press.princeton.edu/books/paperback/97806910232 67/moving-targets.
- SCOTT D. SAGAN, THE LIMITS OF SAFETY: ORGANIZATIONS, ACCIDENTS, AND NUCLEAR WEAPONS (1993), https://www.jstor.org/stable/j.ctvzsmf8r#:~:text=The%20Li mits%20of%20Safety%3A%20Organizations%2C%20Accide nts%2C%20and%20Nuclear%20Weapons,-Scott%20D.&text=Book%20Description%3A,world%20full% 20of%20hazardous%20technologies.
- SCOTT D. SAGAN & KENNETH N. WALTZ, THE SPREAD OF NUCLEAR WEAPONS: AN ENDURING DEBATE (3d ed. 2012), https://politicalscience.stanford.edu/publications/spreadnuclear-weapons-enduring-debate-thirdedition#:~:text=Over%20the%20past%20fifteen%20years.of %20a%20nuclear%2Darmed%20world.

OTHER PUBLICATIONS (ARTICLES, JOURNALS, OPINIONS, REPORTS AND STATEMENTS)

Dr. John Burroughs

- John Burroughs, Building Blocks for Nuclear Ban Treaty: NPT & Advisory Opinion of the International Court of Justice, INTER PRESS SERV. (Nov. 2, 2020), http://www.ipsnews.net/2020/11/building-blocks-nuclearban-treaty-npt-advisory-opinion-international-court-justice/.
- John Burroughs, *Key Issues in Negotiations for a Nuclear Weapons Prohibition Treaty*, ARMS CONTROL ASS'N (June 2017), https://www.armscontrol.org/act/2017-06/features/key-issues-negotiations-nuclear-weapons-prohibition-treaty.

- John Burroughs, Looking Back: The 1996 Advisory Opinion of the International Court of Justice, ARMS CONTROL ASS'N (July/Aug. 2016), <u>HTTPS://WWW.ARMSCONTROL.ORG/ACT/2016_07/FEATURES/LOOKI</u> <u>NG-BACK-THE-1996-Advisory-Opinion-of-the-International-</u> COURT-OF-JUSTICE.
- REACHING CRITICAL WILL, WOMEN'S INT'L LEAGUE FOR PEACE & FREEDOM, UNSPEAKABLE SUFFERING: THE HUMANITARIAN IMPACT OF NUCLEAR WEAPONS (Beatrice Fihn ed., 2d ed. 2021), https://www.reachingcriticalwill.org/resources/publications -and-research/publications/7422-unspeakable-suffering-the-humanitarian-impact-of-nuclear-weapons.

By Rev. Drew Christiansen, S.J., Ph. D.

- Drew Christiansen, *The Vatican and the Ban Treaty*, 15 J. CATH. Soc. THOUGHT 89 (2018), https://www.pdcnet.org/jcathsoc/content/jcathsoc_2018_00 15 0001 0089 0108.
- Drew Christiansen, *Fratelli Tutti and the Responsibility to Protect*, 18 J. CATH. SOC. THOUGHT 5 (2021), <u>https://www.pdcnet.org/jcathsoc/content/jcathsoc 2021 00</u> <u>18_0001_0005_0014</u>.

By Tom Z. Collina

- William J. Perry & Tom Z. Collina, *Who Can We Trust With the Nuclear Button? No One*, N.Y. TIMES (June 22, 2020), https://www.nytimes.com/2020/06/22/opinion/nuclear-weapons-trump.html.
- Tom Z. Collina & Akshai Vikram, *Why Are We Rebuilding the 'Nuclear Sponge'?*, NAT'L INT. (Nov. 6, 2019), <u>https://nationalinterest.org/feature/why-are-we-rebuilding-</u> <u>%E2%80%98nuclear-sponge%E2%80%99-94371</u>.
- William J. Perry & Tom Collina, *How to Starve Trump's Lust for Nukes*, POLITICO (Sept. 10, 2019),

https://www.politico.com/magazine/story/2019/09/10/don ald-trump-nuclear-arms-race-228058/.

- Tom Z. Collina, *The Cruise Missile Could Be Mattis's Nuclear Crisis*, NAT'L INT. (Jan. 20, 2017), <u>https://nationalinterest.org/feature/the-cruise-missile-could-be-mattiss-nuclear-crisis-19118</u>.
- Tom Z. Collina, *How President Trump Might Radically Rethink U.S. Nuclear Policy*, FOREIGN POL'Y (Nov. 16, 2016, 4:47 PM), <u>https://foreignpolicy.com/2016/11/16/how-president-</u> <u>trump-might-radically-rethink-u-s-nuclear-policy-russia-</u> <u>north-korea-iran-nato/</u>.
- Rose Aguilar, Your Call: Modernizing U.S. Nuclear Arsenal Could Cost \$1 Trillion, KALW PUB. MEDIA (Aug. 4, 2016, 9:23 AM), https://www.kalw.org/show/your-call/2016-08-04/yourcall-modernizing-u-s-nuclear-arsenal-could-cost-1trillion#stream/0 (interviewing Tom Collina).
- Tom Z. Collina, America Would Never Be the First to Use Nukes. So Why Say We Might?, NAT'L INT. (July 28, 2016), https://nationalinterest.org/feature/america-would-neverbe-the-first-use-nukes-so-why-say-we-17168.
- Tom Z. Collina, *The Iran Deal Is Working. Don't Mess With Success*, HILL (July 14, 2016, 3:25 PM), <u>https://thehill.com/blogs/congress-blog/foreign-policy/287662-the-iran-deal-is-working-dont-mess-with-succe</u>.
- Tom Z. Collina, *How to Slow President Trump From Pushing the Nuclear Button*, DEF. ONE (June 30, 2016), <u>https://www.defenseone.com/ideas/2016/06/how-slow-</u> <u>president-trump-pushing-nuclear-button/129556/</u>.
- Tom Z. Collina, *A Good Iran Deal*, DEF. ONE (July 14, 2015), https://www.defenseone.com/ideas/2015/07/good-irannuclear-deal/117688/.

- Russia Views U.S. Missile Defense System as a 'Threat,' CNN (May 12, 2016), https://www.cnn.com/videos/world/2016/05/12/us-missile-defense-system-russia-tensions-tsr-dnt-starr.cnn (with commentary from Tom Collina).
- Tom Z. Collina, What Obama Really Needs to Say in Hiroshima, FOREIGN POL'Y (May 10, 2016, 12:41 PM), https://foreignpolicy.com/2016/05/10/what-obama-reallyneeds-to-say-in-hiroshima/.
- Tom Z. Collina, *The Ugly Truth About Nuclear Terrorism*, NAT'L INT. (Apr. 11, 2016), <u>https://nationalinterest.org/feature/the-ugly-truth-about-nuclear-terrorism-15728</u>.
- Scott Horsley, *As Leaders Gather for Nuclear Summit, a Look Back at Progress and Pitfalls,* NPR (Apr. 2, 2016, 5:10 PM), https://www.npr.org/2016/04/02/472816793/as-leaders-gather-for-nuclear-summit-a-look-back-at-progress-and-pitfalls (commentary by Tom Collina).

By Hon. Thomas Graham, Jr.

- THOMAS GRAHAM, THE NAUTILUS PEACE & SEC. NETWORK, REDUCING NUCLEAR DANGERS ON THE KOREAN PENINSULA: BILATERAL VERSUS MULTILATERAL APPROACHES (2019), <u>https://nautilus.org/napsnet/napsnet-specialreports/reducing-nuclear-dangers-on-the-korean-peninsulabilateral-versus-multilateral-approaches/</u>.
- Thomas Graham Jr., *The Once and Future Threat of Nuclear Weapon Testing*, JUST SEC. (Aug. 30, 2019), https://www.justsecurity.org/66020/the-once-and-future-threat-of-nuclear-weapon-testing/.
- Thomas Graham Jr., *Prudence or Folly: A Case for Extending the New START Treaty*, AM. AMBASSADORS LIVE! (May 5, 2020),

https://www.americanambassadorslive.org/post/prudenceor-folly-a-case-for-extending-the-new-start-treaty.

• Thomas Graham Jr., *The Trump Administration's Nuclear Test Delusions*, JUST SEC. (June 10, 2020), <u>https://www.justsecurity.org/70654/the-trump-administrations-nuclear-test-delusions/</u>.

By Jonathan Granoff

- Jonathan Granoff, *Nuclear Weapons, Ethics, Morals, and Law,* 2000 BYU L. REV. 1413 (2000), <u>https://digitalcommons.law.byu.edu/lawreview/vol2000/iss</u> <u>4/3/</u>.
- Jonathan Granoff, *The Nuclear Nonproliferation Treaty and Its* 2005 Review Conference: A Legal and Political Analysis, 39 N.Y.U.
 J. INT'L L. & POL. 995 (2007), <u>https://nyujilp.org/wpcontent/uploads/2013/02/39.4-Granoff.pdf</u>.
- Jonathan Granoff, Pacta Sunt Servanda: Nuclear Weapons and Global Secure Sustainable Development, 21 Sw. J. INT'L L. 311 (2015), <u>https://www.swlaw.edu/sites/default/files/2017-04/SJIL%20V21%2C%20N2%207-</u> Pacta%20Sunt%20Servanda-Granoff.pdf.
- Jonathan Granoff, *The Process of Zero*, 26 WORLD POL'Y J. 85 (2009/2010), <u>https://www.jstor.org/stable/40468741</u>.
- *Featured Videos*, GLOB. SEC. INST., <u>https://gsinstitute.org/featured-videos/</u> (last visited May 8, 2022).
- Writings and Interviews by GSI President Jonathan Granoff, GLOB. SEC. INST., <u>https://gsinstitute.org/who-we-are/writings/</u> (last visited May 8, 2022).

2022]

By Hans M. Kristensen

- Hans Kristensen & Matt Korda, US Officials Give Confusing Comparisons of US and Russian Nuclear Forces, FED'N OF AM. SCIENTISTS: STATEGIC SEC. (Oct. 22, 2020), https://fas.org/blogs/security/2020/10/nuclear-arsenalconfusion/.
- Hans Kristensen, *At 11th Hour, New START Data Reaffirms Importance of Extending Treaty*, FED'N OF AM. SCIENTISTS: STATEGIC SEC. (Oct. 1, 2020), <u>https://fas.org/blogs/security/2020/10/new-start-2020 aggregate-data/</u>.
- Hans Kristensen, Construction of New Underground Nuclear Warhead Facility at Warren AFB, FED'N OF AM. SCIENTISTS: STATEGIC SEC. (Sept. 28, 2020), https://fas.org/blogs/security/2020/09/warrenunderground-facility/.
- Hans Kristensen, (The Other) Red Storm Rising: INDO-PACOM China Military Projection, FED'N OF AM. SCIENTISTS: STATEGIC SEC. (Sept. 15, 2020), https://fas.org/blogs/security/2020/09/pacom-chinamilitary-projection/.
- Hans Kristensen & Matt Korda, *The Pentagon's 2020 China Report*, FED'N OF AM. SCIENTISTS: STATEGIC SEC. (Sept. 1, 2020), https://fas.org/blogs/security/2020/09/the-pentagons-2020-china-report/.
- Matt Korda & Hans Kristensen, Remembering Hiroshima and Nagasaki, 75 Years After, FED'N OF AM. SCIENTISTS: STATEGIC SEC. (Aug 5, 2020), https://fas.org/blogs/security/2020/08/rememberinghiroshima-and-nagasaki-75-years-after/.
- Hans Kristensen & Matt Korda, 75 Years Ago: The Trinity Nuclear Test, Fed'N OF AM. SCIENTISTS: STATEGIC SEC. (July 16,

2020), <u>https://fas.org/blogs/security/2020/07/75-years-ago-the-trinity-nuclear-test/</u>.

- Hans M. Kristensen & Matt Korda, Nuclear Notebook: Indian Nuclear Forces, 2020, 76 BULL. ATOMIC SCIENTISTS 217 (2020), <u>https://thebulletin.org/premium/2020-07/nuclear-</u>notebook-indian-nuclear-forces-2020/.
- Past Nuclear Notebook columns can be found <u>here</u>. A full listing of Kristensen's publications can be found <u>here</u>.

By Prof. Charles J. Moxley, Jr.

- CHARLES J. MOXLEY, JR., NUCLEAR WEAPONS AND INTERNATIONAL LAW IN THE POST COLD WAR WORLD (2000), <u>https://www.amazon.com/Nuclear-Weapons-International-</u> <u>Post-World/dp/1572921528</u>.
- FOREIGN & INT'L L. COMM., N.Y. COUNTY LAWS.' ASS'N, ON THE UNLAWFULNESS OF THE USE AND THREAT OF USE OF NUCLEAR WEAPONS (2000), https://www.nycla.org/sitefiles/publications/NuclearWeaponssept2000.pdf.
- Ending U.S. Reliance on Nuclear Weapons and Achieving Their Global Elimination: Wise Policy and Required by Law, LAWS. COMM. ON NUCLEAR POL'Y (March 2008), https://static1.squarespace.com/static/603410a4be1db0580 65ce8d4/t/605b5ec650f11f568fb9863c/1616600774868/20 08JulyLCNPshortstatement.pdf.
- Charles J. Moxley, Jr., Obama's Nuclear Posture Review: An Ambitious Program for Nuclear Arms Control but a Retreat from the Objective of Nuclear Disarmament, 34 FORDHAM INT'L L.J. 734 (2011), https://ir.lawnet.fordham.edu/ilj/vol34/iss4/3/.

By Allison Pytlak

- Cesar Jaramillo, Justin Mohammed & Allison Pytlak, *The Trudeau Government Is Fuelling a Humanitarian Crisis in Yemen*, GLOBE & MAIL (Sept. 24, 2020), <u>https://www.theglobeandmail.com/opinion/article-the-trudeau-government-is-fuelling-a-humanitarian-crisis-in-yemen/</u>.
- Allison Pytlak, Are Arms Trade Treaty Meetings Being Used to Their Full Potential?, 12 GLOB. RESP. TO PROTECT 156 (2020), https://brill.com/view/journals/gr2p/12/2/articlep156 156.xml.
- REACHING CRITICAL WILL, WOMEN'S INT'L LEAGUE FOR PEACE & FREEDOM, ASSURING DESTRUCTION FOREVER: 2020 EDITION (Allison Pytlak & Ray Acheson eds., 2020), https://www.reachingcriticalwill.org/resources/publications -and-research/publications/14711-assuring-destructionforever-2020-edition.
- DEBORAH BROWN & ALLISON PYTLAK, WHY GENDER MATTERS IN INTERNATIONAL CYBER SECURITY (1st ed. 2020), <u>https://www.apc.org/sites/default/files/Gender Matters Re</u> port Web A4.pdf.
- George E. Mitchell & Allison Pytlak, Correlates of Statesponsored Cyber Conflict, in ROUTLEDGE HANDBOOK OF INTERNATIONAL CYBERSECURITY 22 (Eneken Tikk & Mika Kerttunen eds., 1st ed. 2020), https://www.routledge.com/Routledge-Handbook-of-International-Cybersecurity-1st-Edition/Tikk-Kerttunen/p/book/9781138489011.
- Allison Pytlak, *In Search of Human Rights in Multilateral Cybersecurity Dialogues, in* ROUTLEDGE HANDBOOK OF INTERNATIONAL CYBERSECURITY 65 (Eneken Tikk & Mika Kerttunen eds., 1st ed. 2020), <u>https://www.routledge.com/Routledge-Handbook-of-</u>

International-Cybersecurity-1st-Edition/Tikk-Kerttunen/p/book/9781138489011.

- Allison Pytlak, Converging Agendas: Global Norms on Gender, Small Arms, and Development, in GENDER-RESPONSIVE SMALL ARMS CONTROL 27 (Emile LeBrun ed., 2019), https://smallarmssurvey.org/sites/default/files/resources/S AS-GLASS-Gender-HB.pdf.
- Ray Acheson & Allison Pytlak, *The Nuclear-armed States Are Creating the Conditions for NPT Collapse*, EUR. LEADERSHIP NETWORK (May 29, 2018), <u>https://www.europeanleadershipnetwork.org/commentary/t he-nuclear-armed-states-are-creating-the-conditions-for-npt-collapse/</u>.
- REACHING CRITICAL WILL, WOMEN'S INT'L LEAGUE FOR PEACE & FREEDOM, ASSURING DESTRUCTION FOREVER: 2019 EDITION (Allison Pytlak ed., 2019 ed. 2019), https://www.lasg.org/Modernization/assuring-destructionforever-2019.pdf.

By Prof. Scott D. Sagan

- LEARNING FROM A DISASTER: IMPROVING NUCLEAR SAFETY AND SECURITY AFTER FUKUSHIMA (Edward D. Blandford & Scott D. Sagan eds., 2016), https://www.sup.org/books/title/?id=24812.
- INSIDER THREATS (Matthew Bunn & Scott D. Sagan eds., 2017), https://www.cornellpress.cornell.edu/book/9781501706493 /insider-threats/#bookTabs=1.
- Ethics, Technology & War, 145 DAEDALUS J. AM. ACAD. ARTS & SCI.
 6 (2016), <u>https://www.amacad.org/daedalus/ethics-technology-war</u>.

- The Changing Rules of War, 146 DAEDALUS J. AM. ACAD. ARTS & SCI.
 6 (2017), <u>https://www.amacad.org/publication/changing-rules-war</u>.
- Scott D. Sagan et al., Does the Noncombatant Immunity Norm Have Stopping Power? A Debate, 45 INT'L SEC. 170 (2020), <u>https://direct.mit.edu/isec/article-abstract/45/2/170/95267/Does-the-Noncombatant-Immunity-Norm-Have-Stopping?redirectedFrom=fulltext.</u>
- Katherine E. McKinney, Scott D. Sagan & Allen S. Weiner, *Why* the Atomic Bombing of Hiroshima Would Be Illegal Today, 76 BULL. ATOMIC SCIENTISTS 157 (2020), https://www.tandfonline.com/doi/full/10.1080/00963402.2 020.1778344.
- Scott D. Sagan & Benjamin A. Valentino, On Reciprocity, Revenge, and Replication: A Rejoinder to Walzer, McMahan, and Keohane, 33 ETHICS & INT'L AFFS. 473 (2019), https://www.cambridge.org/core/journals/ethics-andinternational-affairs/article/abs/on-reciprocity-revenge-andreplication-a-rejoinder-to-walzer-mcmahan-andkeohane/3DFC158DDEAEE23B24C1447816C31D93.
- Scott D. Sagan, Armed and Dangerous: When Dictators Get the Bomb, FOREIGN AFFS. (Nov./Dec. 2018), https://www.foreignaffairs.com/articles/north-korea/2018-10-15/armed-and-dangerous.
- Scott D. Sagan & Benjamin A Valentino, Not Just a War Theory: American Public Opinion on Ethics in Combat, 62 INT'L STUD. Q. 548 (2018), https://academic.oup.com/isq/article/62/3/548/5098692?l ogin=true.
- Scott D. Sagan, The Korean Missile Crisis: Why Deterrence Is Still the Best Option, FOREIGN AFFS. (Nov./Dec. 2017), https://www.foreignaffairs.com/articles/north-korea/2017-09-10/korean-missile-crisis.

2022]

 Scott D. Sagan & Benjamin A. Valentino, Revisiting Hiroshima in Iran: What Americans Really Think About Using Nuclear Weapons and Killing Noncombatants, 42 INT'L SEC. 41 (2017), https://direct.mit.edu/isec/article/42/1/41/12168/Revisitin g-Hiroshima-in-Iran-What-Americans-Really.

By multiple authors/editors:

- REACHING CRITICAL WILL, WOMEN'S INT'L LEAGUE FOR PEACE & FREEDOM, ASSURING DESTRUCTION FOREVER: NUCLEAR WEAPON MODERNIZATION AROUND THE WORLD (Ray Acheson ed., 2012), https://www.reachingcriticalwill.org/resources/publications -and-research/publications/5712-assuring-destruction-forever-nuclear-weapon-modernization-around-the-world.
- Katherine E. McKinney, Scott D. Sagan & Allen S. Weiner, *Why the Atomic Bombing of Hiroshima Would Be Illegal Today*, 76 BULL. ATOMIC SCIENTISTS 157 (2020), https://www.tandfonline.com/doi/full/10.1080/00963402.2 020.1778344.
- Jeffrey G. Lewis & Scott D. Sagan, *The Nuclear Necessity Principle: Making U.S. Targeting Policy Conform with Ethics & the Laws of War*, 145 DAEDALUS 62 (2016), <u>https://www.amacad.org/daedalus/ethics-technology-war</u>.

ICRC

- Louis Maresca & Eleanor Mitchell, *The Human Costs and Legal Consequences of Nuclear Weapons Under International Humanitarian Law*, 899 INT'L REV. RED CROSS 621 (2016), <u>https://international-review.icrc.org/articles/human-costs-and-legal-consequences-nuclear-weapons-under-international-humanitarian-law</u>.
- 2017 Treaty on the Prohibition of Nuclear Weapons Factshseet, INT'L COMM. RED CROSS (Jan. 18, 2021),

229

https://www.icrc.org/en/document/2017-treatyprohibition-nuclear-weapons.

- Peter Maurer, *Nuclear Weapons: Averting a Global Catastrophe*, INT'L COMM. RED CROSS (Apr. 23, 2018), <u>https://www.icrc.org/en/document/nuclear-weapons-averting-global-catastrophe</u>.
- Treasa Dunworth, Pursuing "Effective Measures" Relating to Nuclear Disarmament: Ways of Making a Legal Obligation a Reality, 899 INT'L REV. RED CROSS 601 (2016), <u>https://international-</u> review.icrc.org/sites/default/files/irc97 7.pdf.

Parliament of the World's Religions

- Jonathan Granoff, Archive of Responding to the Unique Challenge of Nuclear Weapons: A Passionate Call from the Parliament of the World's Religions, PARLIAMENT WORLD'S RELIGIONS (Nov. 28, 2018), https://web.archive.org/web/20190324132844/https://ww w.parliamentofreligions.org/blog/2018-11-29-1140/responding-unique-challenge-nuclear-weaponspassionate-call-parliament-world%E2%80%99s.
- The Hiroshima/Nagasaki Accord August 6 & 9, 2020, VOICES FOR WORLD FREE NUCLEAR WEAPONS (Aug. 6, 2020), https://charterforcompassion.org/images/menus/Peace_non_ violence/PDFs/Accord PDF.pdf.
- Parliament of the World's Religions, 75th Commemorative Remembrance of Hiroshima and Nagasaki: Introducing the Hiroshima/Nagasaki Accord, YouTuBE (Aug. 6, 2020), https://www.youtube.com/watch?v=2sI3EmFzEo0&ab chan nel=ParliamentoftheWorld%27sReligions.

Links to ICJ Decisions

- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8), <u>https://www.icjcij.org/public/files/case-related/95/095-19960708-ADV-01-00-EN.pdf</u>.
- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (Weeramantry, J., dissenting), <u>https://www.icj-cij.org/public/files/case-related/95/095-</u> <u>19960708-ADV-01-12-EN.pdf</u>.
- These opinions are also available on the ICJ website at:
 - Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (Schwebel, J., dissenting), <u>https://www.icj-cij.org/public/files/case-</u> related/95/095-19960708-ADV-01-09-EN.pdf.
 - Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (Higgins, J., dissenting), <u>https://www.icj-cij.org/public/files/case-</u> related/95/095-19960708-ADV-01-14-EN.pdf.
 - Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (Koroma, J., dissenting), <u>https://www.icj-cij.org/public/files/case-</u> <u>related/95/095-19960708-ADV-01-13-EN.pdf</u>.
 - Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (Shahabuddeen, J., dissenting), <u>https://www.icj-cij.org/public/files/caserelated/95/095-19960708-ADV-01-11-EN.pdf.</u>
 - Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (separate opinion of Guillaume, J.), <u>https://www.icj-cij.org/public/files/caserelated/95/095-19960708-ADV-01-06-EN.pdf</u>.

- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (declaration of Herczegh, J.), <u>https://www.icj-cij.org/public/files/case-</u> related/95/095-19960708-ADV-01-02-EN.pdf.
- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (declaration of Shi, J.), <u>https://www.icj-cij.org/public/files/case-</u> <u>related/95/095-19960708-ADV-01-03-EN.pdf</u>.
- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (declaration of Ferrari Bravo, J.), <u>https://www.icj-cij.org/public/files/case-</u> related/95/095-19960708-ADV-01-05-EN.pdf.
- Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (separate opinion of Ranjeva, J.), <u>https://www.icj-cij.org/public/files/caserelated/95/095-19960708-ADV-01-07-EN.pdf.</u>

Applicable Websites

- ARMS CONTROL ASS'N, <u>https://www.armscontrol.org/</u> (last visited May 9, 2022).
- BULL. ATOMIC SCIENTISTS, <u>https://thebulletin.org/</u> (last visited May 9, 2022).
- FED'N AM. SCIENTISTS, <u>https://fas.org/</u> (last visited May 9, 2022).
- GLOB. SEC. INST., <u>https://gsinstitute.org/</u> (last visited May 9, 2022).
- INT'L COMM. RED CROSS, <u>https://www.icrc.org/</u> (last visited May 9, 2022).
- LAWS. COMM. ON NUCLEAR POL'Y, <u>https://www.lcnp.org/</u> (last visited May 9, 2022).
- PLOUGHSHARES FUND, <u>https://www.ploughshares.org/</u> (last visited May 9, 2022).
- REACHING CRITICAL WILL, <u>https://www.reachingcriticalwill.org/</u> (last visited May 9, 2022).
- UN OFFICE FOR DISARMAMENT AFF., https://www.un.org/disarmament/ (last visited May 9, 2022).

2022]

- WESTERN STATES LEGAL FOUND., <u>http://www.wslfweb.org/</u> (last visited May 9, 2022).
- WOMEN COLOR ADVANCING PEACE, SEC. & CONFLICT TRANSFORMATION, https://www.wcaps.org/ (last visited May 9, 2022).