UCLA Burkle Center

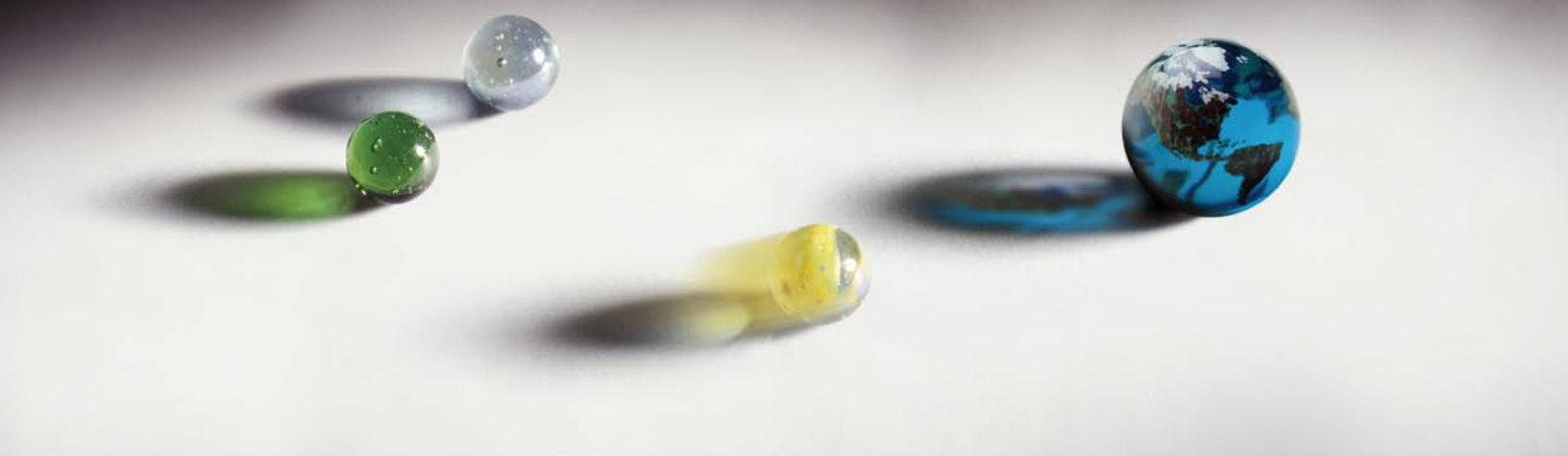
Nuclear Weapons in a New Century: *Facing the Emerging Challenges*

March 6 & 7, 2007, Covel Commons, UCLA Campus

"mankind MUST put an end to WAR or war WILL put an END to mankind"

JOHN F. KENNEDY

Speech to UN General Assembly, September 25, 1961



FOREWORD

Since the dawn of the nuclear age, nuclear proliferation has been at or near the top of every informed person's list of major threats to the human species. Fortunately, the number of nations acquiring nuclear weapons has grown far more slowly than expected. In 1975, thirty years after the first nuclear detonation, there were eight nuclear weapons states: United States, United Kingdom, Soviet Union, France, China, India, Israel, and South Africa. Since then, we've seen the addition of Pakistan and North Korea, and the "subtraction" of South Africa, which rolled back its nuclear weapons program.

Thus, in the second half of the nuclear age to date, the number of members of the nuclear club has grown by only one. According to this crucial indicator, the nonproliferation regime has been remarkably successful. The question is whether it is about to unravel and, if so, what can be done to prevent that catastrophe.

The conference on "Nuclear Weapons in a New Century: Facing the Emerging Challenges," sponsored by UCLA's Ronald W. Burkle Center for International Relations, and organized by the Center's Director Kal Raustiala and Senior Fellow Wesley Clark, assembled an outstanding collection of scholars and practitioners to explore the proliferation challenges, and to identify and examine actions that might be taken to address those challenges. The discussions were informative and insightful, and, we hope and trust, will contribute substantially to the global effort to stem the spread of nuclear weapons.

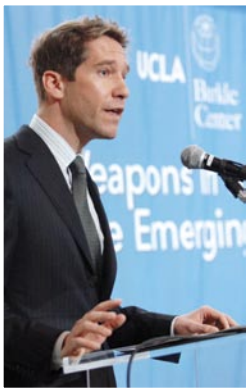
Albert Carnesale
UCLA Chancellor Emeritus and Professor

Opening keynote address by William Perry, senior fellow at the Hoover Institution and former secretary of defense.

"The MOST spectacular event of the PAST half century is ONE that did not OCCUR."

THOMAS SCHELLING
Nobel Prize for Economics, 2005

Nuclear Weapons in a New Century: Facing the Emerging Challenges



The 21st century has ushered in new security challenges to the international order, while older challenges persist. Among the most pressing is the threat of nuclear weapons. In accepting the Nobel Prize for economics in 2005, Tom Schelling wrote the words on the left, remarking on the astonishing sixty years the world had enjoyed — astonishing because, despite possessing many thousands of nuclear warheads, the the international community had managed to refrain from using any of them in conflict.

We hope the same will be said after sixty more years. We convened this conference at UCLA to examine the urgent nuclear challenges the world faces in the 21st century and to explore solutions, or at least approaches, to these challenges.

The situations in North Korea and Iran dominate the news today, but other problems exist as well. Tensions in South Asia, the accelerating demand for peaceful nuclear technology, the prospect of nuclear terrorism — these and many other threats are serious and difficult.

Are our existing regimes up to the task? Or will nations increasingly choose to take unilateral steps to prevent proliferation? While not all of the issues at stake in the field of nuclear proliferation could be addressed in a day and a half, our conference format allowed us to discuss many of the most significant.

I hope that you will join us for future discussions at UCLA or on our Web site, **www.international.ucla.edu/burkle**

Kal Raustiala
Director, Ronald W. Burkle Center for International Relations and Professor, UCLA Law School & UCLA International Institute

Left photo: Wesley Clark, senior fellow, UCLA Burkle Center. Right photo: William Perry, senior fellow at the Hoover Institution and former secretary of defense.

"The DUAL NATURE of nuclear science is NOT UNIQUE, because the principles that we apply in solving the 'NUCLEAR DILEMMA' should reflect how we INTEND more generally to DEAL with the use of ADVANCED science and technology in the globalized context of the 21st CENTURY."

SHIRLEY JACKSON
President, Rensselaer Polytechnic Institute

Conference Program

March 6, 2007

Welcome Address *Kal Raustiala, General Wesley K. Clark (Ret.)*

Opening Keynote Address *William Perry, moderated by David Sanger*

March 7, 2007

Continental Breakfast

Welcome and Opening Remarks

Opening Plenary Panel

Is Proliferation Inevitable? And Do We Need a New Regime to Manage It?

Thomas Schelling, Albert Carnesale, George Miller, Etel Solingen, Shirley Jackson
Moderator: *Doyle McManus*

Break

Regional Threats: Iran

Scott Sagan, Abbas Milani, Nikki Keddie
Moderator: *General Lee Butler (Ret.)*

Regional Threats: North Korea

Susan Shirk, Robert Templer, Ashton Carter
Moderator: *Lee Feinstein*

Regional Threats: India and Pakistan

Greg Treverton, Neil Joeck
Moderator: *Peter Kovach*

Break

Other Challenges: Does Peaceful Use Spur Proliferation? What Does the India-US Deal Foretell?

Raymond Juzaitis, Shirley Jackson, Neil Joeck
Moderator: *George Miller*

Other Challenges: Revamping U.S. Force Structure

Elizabeth Sherwood-Randall, Ron Lehman, Ashton Carter
Moderator: *General Lee Butler (Ret.)*

Other Challenges: Nuclear Terrorism: Risks and Realities

Daniel Chivers, Michael Levi, Brian Jenkins
Moderator: *Amy Zegart*

Lunch Break

Lunch Keynote Address *Robert Joseph*
By invitation only

Addressing the New Proliferation Threats:
International Agreements: Can the NPT Be Modernized?

David Koplow, Jack Beard, Richard Falk
Moderator: *Neil Joeck*

Addressing the New Proliferation Threats:
Unilateral Action: Preemption and Prevention

Yoram Dinstein, Bob Powell, Thomas Schelling
Moderator: *Mike Intriligator*

Addressing the New Proliferation Threats:
Ad Hoc Multilateralism: The Security Council, Sanctions and Interdiction

Daniel Drezner, Peter Cowhey, Lee Feinstein
Moderator: *Etel Solingen*

Break

Closing Plenary Panel

Challenges for the Next Administration

Doyle McManus, Joseph Cirincione, Ashton Carter, Susan Shirk, Joby Warrick
Moderator: *General Wesley K. Clark (Ret.)*

Closing Reception

Special thanks to
University of California Institute on Global Conflict and Cooperation
for their support of this conference.

"Certainly COERCIVE PRESSURES have an influence, but it is FAR BETTER if we can PERSUADE the other state to WANT TO do what WE WANT it to do. And to DO that we NEED US legitimacy."

GENERAL WESLEY K. CLARK *(Ret.)*

Left photo: Thomas Schelling, 2005 Nobel Laureate in Economics. Center photo: Elizabeth Sherwood-Randall, Center for International Security and Cooperation, Stanford; Ron Lehman, Lawrence Livermore National Laboratory; General Lee Butler, USAF (Ret.). Right photo: Shirley Jackson, President, Rensselaer Polytechnic Institute.

CONFERENCE ADDRESSES CHALLENGE OF NUCLEAR PROLIFERATION, TERRORISM

By Ajay Singh

Imagine you're on your way to work – or relaxing at home – and a nuclear device explodes somewhere in the nation. Instantly reminiscent of 9/11, the attack would almost certainly result in a U.S. nuclear response against the suspected aggressor.

"God help whoever's on the other side," said Robert Powell, a professor of political science at UC Berkeley, who raised that all-too-plausible scenario at a recent public conference on nuclear weapons at UCLA. "Nine-11 led to Iraq," he noted. "Can you imagine how little evidence it would take this time around to prompt a massive U.S. response?"

Titled "Nuclear Weapons in a New Century: Facing the Emerging Challenges," the March 6–7 conference at the Covel Commons was organized by the Ronald W. Burkle Center for International Relations and co-hosted by Gen. Wesley K. Clark (Ret.), a fellow at the center, and Kal Raustiala, its director.

Nuclear terrorism threatens to wreck 61 years of nuclear peace, Nobel laureate Tom Schelling, one of the key speakers, noted at the conference. ("The most spectacular event of the past half century is one that did not occur," Schelling wrote when he accepted the Nobel Prize for economics in 2005.)

Nuclear terrorism is closely connected with nuclear proliferation, one of the conference's major themes which was dominated by discussions about the efforts of Iran and North Korea to become nuclear powers.

"A nuclear-armed Iran is intolerable," former Undersecretary of State for Arms Control and International Security Robert G. Joseph remarked in a lunch keynote address. "Iran supports terrorism, undercuts prospects for peace between Lebanon and Israel and wants to wipe Israel off the map." Joseph added that both Iran and North Korea were bent on developing atomic weapons at a time when a growing number of countries want nuclear weapons. "If we fail in Iran, it provides the stage for further proliferation," he warned.

" This administration came in promising to make a radical break with the proliferation policies of the past, and they did. It has proved to be a disaster."

JOSEPH CIRINCIONE

Vice President for National Security, Center for American Progress

"The strongest reason against acquiring nuclear weapons . . . is you wouldn't dare use them if you had them because whoever first uses nuclear weapons . . . is likely to become a kind of pariah that we've never seen before"

ROBERT JOSEPH
Undersecretary of State for Arms Control & International Security, 2005 – 2007

However, recent signs suggest that Washington's threat of force toward Iran, coupled with multilateral diplomatic efforts to persuade the Iranian regime to rein in its rhetoric and adventurism, is causing Tehran to rethink its nuclear ambitions.

"The latest change is that there is no talk of enriching uranium but of the *right* to enrich uranium," said Abbas Milani, an ethnic Iranian who is director of Iranian Studies at Stanford University. "That's setting the stage for precisely the kind of negotiations that should happen – and the only setback to this process would be an attack on Iran. It will do for the regime what it wants from the nuclear program: its self-preservation."

The Bush administration is working with several Persian Gulf states to include them in a U.S.-led security relationship, Joseph said. Similarly, after North Korea's provocative nuclear test last October, the United States reaffirmed its nuclear protection to Japan, which was "very reassuring to the Japanese," he added. That, in turn, "reassured China because China is concerned about Japan going nuclear."

No silver bullet can combat nuclear proliferation, Joseph said, but "each one plays an important role." For example, he explained, at the second meeting of the Global Initiative to Combat Nuclear Terrorism in Ankara last February, representatives of the 13 signatories to the program discussed ways to provide nuclear fuel for power purposes to nations that give up their option to enrich uranium, which can be used to make nuclear weapons.

One area of grave concern is the selling of fissile material, which can be used to make "radioactive dispersal devices," or "dirty bombs," on the nuclear black

market. In 2005, the International Atomic Energy Agency uncovered 103 incidents – an average of one every three weeks – of fissile material trafficking on the black market, Washington Post reporter Joby Warrick told conference participants.

Some U.S.-led multilateral sting operations to catch both buyers and sellers in this murky underworld are already underway, said Brian Jenkins, a UCLA alumnus who is senior advisor to the president of the RAND (Corp.) and a leading authority on terrorism.

But the nightmare for U.S. planners is that the Al Qaeda will someday acquire nuclear weapons. "Al Qaeda has said it wants to kill 4 million Americans because the U.S. has killed 4 million Muslims – and they can't do that with 9/11-type strikes," said Michael Intriligator, professor of economics and political science at UCLA, who moderated a panel discussion on proliferation threats. He added: "Al Qaeda has a demand for nuclear weapons and there is a supply – they're going to get them."

For security officials, it's no longer a question of if terrorists get nuclear weapons but when. And the clock's ticking. "Radiation detection systems at U.S. borders are essentially a tactical response that need to be buttressed by a deterrence policy based on the ability to track nuclear materials back to their source with the help of the emerging field of nuclear forensics," said Daniel Chivers, a Ph.D. candidate in the nuclear engineering department at UC Berkeley. "The detection of nuclear weapons materials is extremely hard and the proposed techniques will have major problems scaling up to protect all ports of entry."

Nuclear terrorism will be a major test for whoever succeeds President Bush as president next year. "For the first time since 1952, the U.S. president will not be a sitting vice president or president," observed Joseph Cirincione, vice president for national security at the Center for American Progress, a Washington, D.C., think tank. Several other nations, including Russia and Iran, are also scheduled to elect new leaders in the near future and "will be able to take on new ideas," he added.

The fissile material market, said Cirincione, is "the ultimate preventable nuclear catastrophe," in the words of Harvard nuclear expert Graham Allison. The United States spends $1 billion a year tackling fissile material – "we spend that every three days in Iraq," Cirincione said. "We have the prevention programs in place, the people who know how to implement them – all we lack is the resources and the presidential will."

" The next wave...Nuclear Power—we can't afford not to have nuclear power spread everywhere throughout the world...it is a far better energy future than any other we can think of...but we can't have nuclear power be the leading edge of nuclear proliferation."

ASHTON CARTER
Ford Foundation Professor of Science and International Affairs, Harvard

IN CLOSING

How do we keep nuclear-capable states from joining the nuclear club? And how do we keep existing nuclear weapons from drifting out of state control and into the hands of terrorist organizations? Nuclear weapons remain exceedingly complex to build and detonate. Yet rapid innovation and technological creativity are twin marks of our age, and the number of states capable of going nuclear is sure to rise. This is especially true in an increasingly globalized world in which knowledge, inventions and raw materials move easily around the globe.

We chose to organize a conference on "Nuclear Weapons in a New Century" at the Burkle Center for International Relations because we believe the problem of nuclear proliferation is both urgent and challenging. It is a long-term issue that is not going away. The problem of proliferation demands political will. Equally, however, it requires careful, thoughtful and creative analysis.

Above left photo; Robert Joseph, Former Undersecretary of State for Arms Control and International Security. Right photo: (from left) Joby Warrick, Washington Post; Wesley Clark, UCLA Burkle Center; Joseph Cirincione, Center for American Progress; Ashton Carter, Ford Foundation Professor of Science and International Affairs, Harvard; Susan Shirk, UC San Diego, Director of the Institute on Global Conflict and Cooperation.

We recognize that conferences such as this one, held on university campuses, are not a solution to the problem of nuclear proliferation. But we believe that ideas and discussion nonetheless matter because they shape the debates, and even the assumptions, that drive nuclear policy.

In his opening remarks at our conference, Tom Schelling referred to the importance of "nuclear thinking." In order to facilitate such thinking, we invited a wide range of experts from many walks of life to UCLA to rethink nuclear proliferation policy and politics. Our participants included government officials; regional, issue and area specialists; and respected journalists. We were very pleased that so many terrific individuals joined us for this event, including both former Secretary of Defense William Perry and recently retired Undersecretary of State for Arms Control and International Security Robert Joseph. The sessions were uniformly lively, focused and illuminating.

A central theme that emerged from our day and a half of discussions was the need for both greater attention to — and greater respect for — the existing regime governed by the Nuclear Non-Proliferation Treaty, or NPT. As several speakers noted, the NPT has been remarkably successful at constraining nuclear ambitions. There are less than ten nuclear weapons states today, even though the fundamental technology is as old as color television. Several states have renounced their nuclear arsenals, and others have refrained from developing such arsenals despite their evident capability to do so.

This great success is tempered by the very real risk that the number of nuclear states will grow rapidly in coming years. The NPT has worked well, but not all parts of the regime

"NOW the greens are IN LOVE with NUCLEAR power"

ALBERT CARNESALE
Chancellor Emeritus, UCLA

have worked equally well. A core principle of the NPT is that the nuclear weapons states will work toward their own disarmament, and that principle has not been taken seriously enough. Many speakers mentioned the great symbolic and political importance of the divide between nuclear haves and have-nots, and the resentment (and fear) that many nuclear have-nots feel.

Left photo: General Lee Butler with UCLA students. Center photo: Jack Beard, UCLA; David Koplow, Georgetown University Law Center; Neil Joeck, Lawrence Livermore National Laboratory; Richard Falk, UC Santa Barbara. Right photo: Amy Zegart, UCLA.

Consequently, one lesson is that managing nuclear proliferation — and there was widespread agreement among participants that this is a problem not of prevention but of management— must include careful attention not only to the actions of potential breakout states but also to the actions of the declared nuclear powers. This is particularly true of the United States. The often belligerent rhetoric of the Bush administration, coupled to its actions with regard to Iraq and the rest of the "Axis of Evil," led several speakers to question whether the world was moving forward or backward.

Only time will tell if the first decade of the 21st century was a decade of lost opportunities. In the meantime, it is imperative that the declared nuclear powers take seriously the full package of rights and obligations under the NPT. Managing proliferation at times may require coercion, but it just as often requires persuasion and legitimacy. States must see and understand the benefits of foregoing nuclear weapons; as we have painfully learned, we cannot reliably deter their acquisition through threats.

In retrospect, the Cold War was both more and less frightening than our own age. The enormous arsenals of the United States and Soviet Union came close to being activated on several occasions, and of course the threat of total war hung over the world for decades. Yet the Cold War was reassuringly stable in some respects, and despite a range of proxy conflicts, it never became hot.

The 21st century is quite different. The omnipresent menace of great-power war is gone. Yet attacks today can come from many places, and the threat of non-state actors wielding weapons of mass destruction is frightening and, to many, all too easy to contemplate. Most of our major ideas about nuclear policy were forged in the unusual crucible of the Cold War. Some still have great resonance. But clearly, we must rethink our assumptions and our policies to match a much more fluid and complex world. We hope that this conference has helped foster that process.

About the Ronald W. Burkle Center for International Relations at UCLA

The Ronald W. Burkle Center for International Relations fosters cutting-edge research and interdisciplinary and policy-oriented teaching on the contemporary world and the role of the United States in global security and military, political, social and economic affairs. In addition, the center brings to campus internationally renowned policymakers and analysts to present their perspectives on issues of global importance.

The Burkle Center offers funding opportunities for both UCLA students and faculty undertaking research on international relations. The center also supports student-led initiatives such as the UCLA Darfur Action Committee and the UCLA Undergraduate International Relations Society.

Core financial support for the center is provided by an endowment generously given by Ronald W. Burkle. Other major sources of support include the UCLA International Institute; the University of California's Institute on Global Cooperation and Conflict; the governments of the United States, Greece and Qatar; and many private donations.

For more information about supporting the UCLA Ronald W. Burkle Center and for all other inquiries, please contact:

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