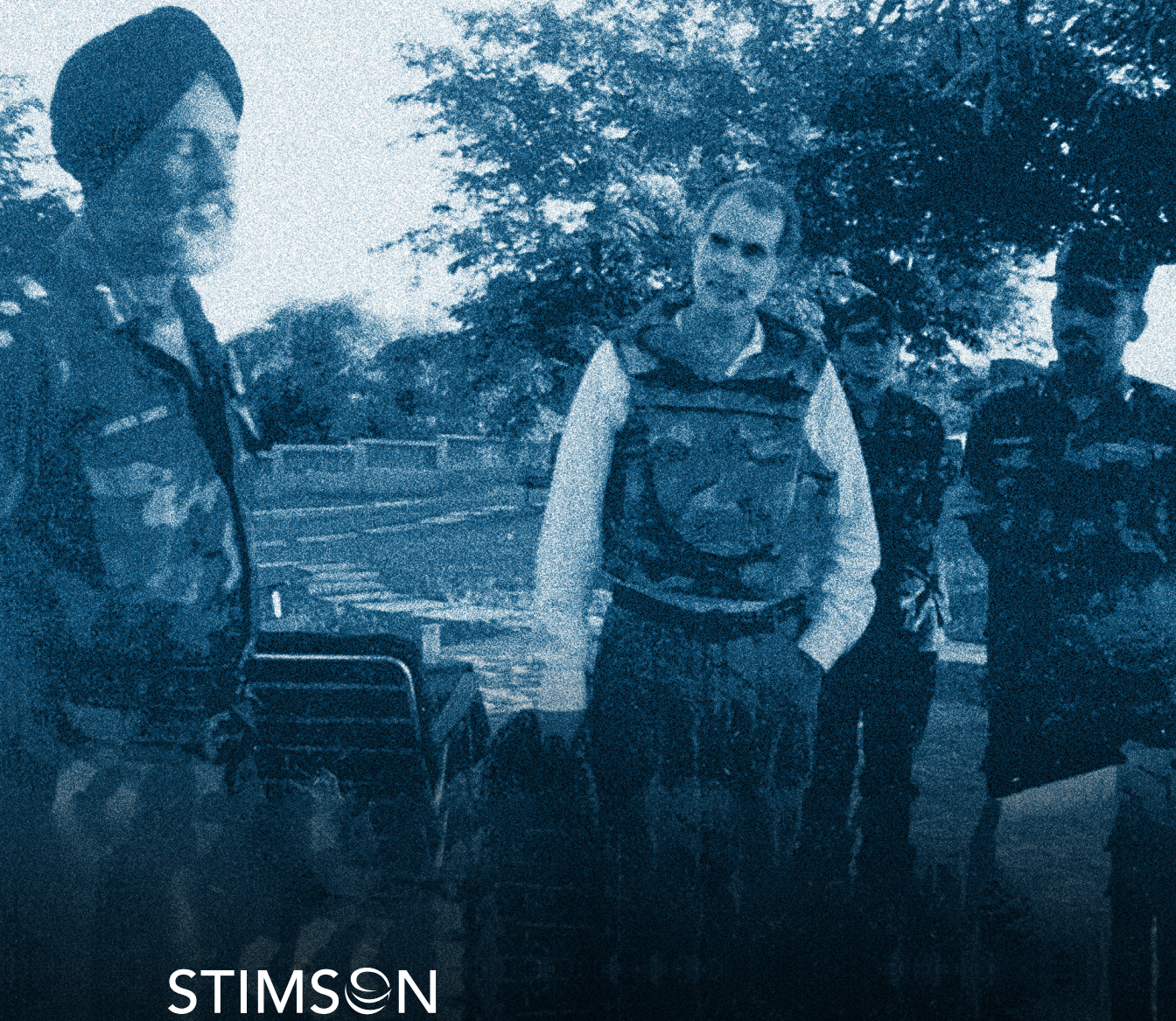


The Gift of Meaningful Work: A Tribute to Michael Krepon

Edited by Sameer Lalwani
and Sunaina Danziger



STIMSON

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President's Note

Brian Finlay

In 2015, Michael Krepon was awarded a lifetime achievement award by the Carnegie Endowment for International Peace. The presenters of that honor reflected upon the prevailing attributes that have defined Michael's remarkable career: nonpartisanship, pragmatism, mentorship, and an unending patience in his pursuit of more ideal policy objectives. These attributes are brought to life by his collaborators in the pages that follow.

On behalf of all of Michael's colleagues at the Stimson Center as well as our Board of Directors, I am deeply grateful to Sameer Lalwani for his vision for this volume and to Sunaina Danziger for co-editing these essays and for bringing this work to life. Additional thanks to Janice Fisher for copy editing, to Erin Craft Mazzeffi for design, and to our communications team Dave Solimini and Caiti Goodman for their important contributions. As you will read, the breadth of individuals influenced positively by Michael and his work is as inspiring as the depth of impact they, in turn, have had in the world. Their contributions speak for all of us who have benefited from knowing, learning from, and being mentored by the *éminence grise*.

In 1947, Henry L. Stimson authored his autobiography. In *On Active Service in Peace and War*, he reflected upon a remarkable career in which he played a too often unsung, but undeniably significant role in international relations. In a poignant phrase that summed up his *modus vivendi*, he wrote: "The one who tries to work for the good may suffer setback and even disaster, but will never know defeat. The only deadly sin I know is cynicism."

The remarkable arc of Michael Krepon's career is not just the embodiment of Henry Stimson's observation, it is his leadership example to all of us to undertake the meaningful work needed to make the world a safer and better place.

Foreword

I had been crossing paths in Washington with Michael Krepon for many years when he sat me down in the late 1980s to tell me about the new think tank he was founding along with Barry Blechman. The two men saw a dearth of pragmatic bipartisan cooperation on important security policy issues, especially where weapons of mass destruction were concerned. They wanted to do something about it.

On that day thirty years ago, Michael told me that the new think tank would be named for Henry L. Stimson, one of America's great statesmen, who personified the traits of bipartisanship and international engagement. Like Stimson, Michael said, "we want to pursue pragmatic steps toward ideal objectives."

I have to admit to a certain skepticism at the time, since the think tank community is crowded with eminent figures of all political persuasions, jostling for funding and influence on the U.S. policy scene. To be truthful, I did not think that the Stimson Center would get off the ground — but I was wrong. Thanks in no small part to the energy, intellect, and influence of both Michael and Barry, Stimson quickly carved out an influential place among the idea factories in Washington. I have been admiring its work ever since.

It is fitting, therefore, that this volume of essays join the one published to honor Barry Blechman a few years ago. Michael Krepon was one-half of the genial and genius partnership who brought an important new institution to life, the Stimson Center.

These essays devoted to Michael highlight his commitment to mentoring young experts in their personal, professional, and intellectual growth. Many, as is evident

from their stories, disagreed with him at the outset of their cooperation, but came to respect and admire him through their tough intellectual exchanges. They also, it is clear, came away inspired.

The book's contributors hail from academic institutions and think tanks, from diplomatic and military worlds, and from the U.S. and South Asia policy communities. Each of them had a unique relationship with Michael Krepon, the combination of which sends a clear message: his lifetime of work and scholarship has had a profound impact on national security policy, community- and institution-building, strategic debates both at home and abroad, and academic scholarship.

Polly Nayak, a former senior U.S. intelligence official and Stimson Center Distinguished Fellow, paints a detailed personal and professional portrait of Michael from his time on Capitol Hill and the Arms Control and Disarmament Agency to building the institution that became the Stimson Center. Along the way, she vividly describes his creative efforts to reduce risks in a nuclear South Asia.

John Parachini, a senior researcher at the RAND Corporation, focuses on the utility of transparency and the value of building coalitions across partisan divides, two themes that run through the length and breadth of Michael's arms control work.

Stimson Center Senior Fellow and Co-Director of its East Asia Program **Yun Sun** concentrates on Michael's mentorship of many young scholars. He always insisted on perseverance and confidence — but also, in the rough-and-tumble of professional life, on personal kindness.

University of Albany Professor **Christopher Clary** carries these themes forward, reflecting on his time working with Michael as a research assistant for Stimson's South Asia Program. He describes how Michael combined high expectations with hands-off management, great opportunities, and personal investment of his own time to shape young experts.

Professor **Rabia Akhtar** is a former Visiting Fellow of the South Asia Program, now at the University of Lahore and serving as a member of the Pakistan Prime Minister's Advisory Council on Foreign Affairs. She stresses that her own views differ fundamentally from Michael's, but that he nevertheless has been influential in his efforts to warn Pakistan of the nuclear dangers that the country faces, inspiring a renaissance among Pakistan's strategic community.

Stimson Co-Founder **Barry Blechman** takes the pen to share the origin story of the Stimson Center and his partnership with Michael. He provides a lively account of the institution's antecedents, its guiding philosophy of pragmatism and bipartisan credit sharing, and the challenges and triumphs of its first thirty years.

The Gift of Meaningful Work

Manpreet Sethi, a Senior Fellow at the Centre for Air Power Studies in New Delhi, writes of Michael as a “friend and guru” whose intellectual honesty has built bridges in the subcontinent and beyond. Their shared commitment to developing an outer space code of conduct is at the root of their professional relationship, devoted to fostering international peace.

Naval Postgraduate School Professor **Feroz Hassan Khan**, a former Pakistan Army Brigadier and Director General for Arms Control in the Strategic Plans Division, details Michael’s novel efforts to spearhead Track 2 dialogues and develop nuclear risk reduction and confidence-building measures in South Asia.

Indian scholar of defense policy **Abhijit Iyer-Mitra** describes how Michael’s insistence on humility, open-mindedness, and solid data in policy analysis has instilled a commitment to moderation in his own research.

Victoria K. Holt, former Deputy Assistant Secretary of State and Stimson Vice President, now Director of Dartmouth University’s Dickey Center for International Understanding, shows Michael as a convener of ideas and a community organizer who fosters dialogue and personal relationships. At the same time, she describes how Michael built a legacy around asking big, tough questions, expecting others to do the same.

MIT Political Science Professor **Vipin Narang** discusses Michael’s profound impact on the study of nuclear weapons in South Asia’s geopolitics. Michael’s three significant contributions, he says, are the fragility of “strategic stability,” the flawed comparisons between South Asia’s nuclear dyad and the Cold War nuclear standoff, and the imperative of using solid original data in research.

Former Stimson Research Associate **Julia A. Thompson** captures how mentorship sits at the core of Michael’s professional career, guiding younger scholars, not on what to think, but on how to think, with grace and poise.

Former Director General of Pakistan’s Strategic Plans Division **Khalid Kidwai** congratulates Michael’s successes at Stimson, recalling the mutual understanding that grew from several exchanges in Islamabad and Washington on strategic affairs. I too remember serious and difficult exchanges with General Kidwai, so I appreciate what he and Michael were able to accomplish.

Former Indian Foreign Secretary **Shyam Saran** offers a reflection of Michael’s last lecture in New Delhi in summer 2017, amidst the India-China border crisis. Observing the links between the fluid nuclear landscape and crises involving international regimes, geopolitics, and new technologies, Saran, like Krepon, issues a clarion call to pursue new measures of nuclear disarmament.

Stimson South Asia Director **Sameer Lalwani** concludes the collection with an essay on the lessons in character he acquired from Michael over the years serving as his deputy, co-director, and colleague. He describes a number of teachable moments based how Michael made personal connections, nurtured young talent and divergent views, listened, created space for deep thinking and work-life balance, and maintained a pragmatic optimism that always aimed high.

I could not end my foreword to this important volume honoring Michael Krepon without stressing that he never stops his pursuit of renewed insight and excellence on the nuclear policy front. His book *Winning and Losing the Nuclear Peace: The Rise, Demise, and Revival of Arms Control*, to be published by Stanford University Press in October 2021, tells the sorry tale of the ups and downs in the arms control arena since the United States first attempted to sit down with the USSR to control nuclear weapons. Despite the many discouraging downs that he catalogues, the book ends on a hopeful note, calling for a renewal in our efforts to curb this most dreadful of the weapons of mass destruction. For Michael Krepon, we cannot, we must not stop trying.

Rose Gottemoeller *is the Payne Distinguished Lecturer at the Freeman-Spogli Institute, Stanford University. Gottemoeller was previously the Deputy Secretary General of NATO from 2016 to 2019 and before that, Under Secretary for Arms Control and International Security at the U.S. Department of State. In 2009-10, she was chief U.S. negotiator of the New START Treaty with the Russian Federation.*

Michael Krepon, Unbound: An Intellectual Portrait

Polly Nayak

Were it not for a couple of vexatious college chemistry courses, Michael Krepon might now be a star marine biologist, rather than one of America's most innovative and insightful nuclear arms control analysts and advocates. In that case, I would never have met Michael, although I surely would have watched him on PBS, owing to a shared fascination with evolution and marine life. But then I would have missed out on my cherished professional collaborations with him starting in fall 2002. These experiences are the bases for my brief reflections here on an extraordinary human being.

In Michael's paraphrase of Robert Frost, he ultimately chose a road less taken. He did some ultimately useful professional wandering before finding his path, as did I and many others in our generation. Michael and I are both early members of the post-World War II American "boomer" generation. Michael was born here of immigrant parents. My father had arrived in this country during the war as a refugee. Michael and I graduated from college in the same year, 1968 — Michael, from Franklin & Marshall College in Pennsylvania.

To the dismay of our respective hard-working Depression-era parents, our job aspirations were ill defined. We were graduating into a world unfamiliar to most of our mentors and instructors. In 1967, my university's misnamed "placement center" displayed in the waiting room a lengthy newspaper article arguing that our cohort was simply too large for the U.S. economy to absorb. We therefore seemingly were doomed to be un- or under-employed for a lifetime. As I canceled my appointment with a placement counselor, I promised myself an interesting, if not lucrative, future.

Michael's optimism was and still is even harder than mine. It has been thoroughly tested. At 13, Michael weathered the loss of his dad. In recent years, Michael's optimism has buoyed him through multiple severe health challenges. It also has sustained his conviction that the nations of the world can continue to avert the nuclear catastrophe that many still fear.

Detours

Michael found his undergraduate academic calling in history, including that of the Middle East. He was granted a free graduate education at the Johns Hopkins University School of Advanced International Studies, provided that he take intensive Arabic language training. After a summer of preparation at Berkeley in 1969, he took up Arabic at the American University in Cairo in 1970 on a National Defense Education fellowship. He quickly realized that he was interested neither in Arabic nor in the Middle East, but the fellowship allowed him to explore the region unfettered. He was to draw on his experience there in his later work on nuclear-armed India and Pakistan. In 1970, however, he had no clear follow-on plan after returning from Cairo.

For Michael, “the best thing about . . . graduate school in Washington between 1968 and 1970 was taking part in teach-ins and mass marches” (Michael's words). So after Cairo, Michael co-founded an NGO that aimed to channel student activism into changes in U.S. foreign policy, especially on Vietnam.

After three years at the NGO, Michael realized that he wanted to have more impact, so he found himself walking the corridors of Congress looking for a job. His subsequent four years on Capitol Hill gave him a thorough grounding in the rough-and-tumble tradeoffs of the American legislative process. This proved to be an indispensable part of the varied background cited by the award committee at the Carnegie Endowment, as it granted Michael the coveted Thérèse Delpuch Memorial Award in 2015 for his lifetime contributions to nuclear arms control and its practitioners.

In an early sign of Michael's powers of persuasion, he landed a position in the office of Democratic Representative Floyd Hicks, a former Washington State judge in the Henry “Scoop” Jackson hardline-security, progressive domestic mold. Michael's bold opening gambit to Hicks — a member of the House Armed Services Committee — was that he could help increase the congressman's influence on the Hill. Hicks bought the offer. Michael then dug deeply into a contentious issue that was about to be debated in the House of Representatives: the U.S. Army's request for pre-production funding of a new nerve agent. Based on Michael's research, Hicks took on the issue in opposition to the “Southern Bulls” who ran the Committee. Hicks managed to stay on the right side of the old guard while being the only member of Congress to

pass a floor amendment against their wishes — two years in a row. Hicks returned to a judgeship in his home state.

For the remainder of his four years on the Hill, Michael went on to work for Hicks's successor, Representative Norm Dicks. Dicks had a rare first-term appointment to the powerful House Appropriations Committee, where he defended home-state appropriations and worked with another freshman congressman, Al Gore, on arms control. But four years on the Hill was enough.

Michael readily accepted his friend Barry Blechman's offer of a job at the Arms Control and Disarmament Agency (ACDA) in 1978. Michael was attracted to ACDA's mission as the lead U.S. agency for formulating, negotiating, implementing, and verifying international arms control measures, agreements, and treaties. The reality of ACDA, however, was deeply frustrating, especially during the loosely organized Carter administration. In Michael's words:

I worked for three ACDA Directors — [Paul] Warnke, [George] Seignious, and [Ralph] Earle II. I became the youngest office director in the weakest agency of government at a time of diminished prospects for arms control. . . [Newly elected President Ronald] Reagan's advance guard requested my departure. But as I was in the senior executive service by then, I had enough leverage to get a four-month extension working at OMB [the Office of Management and Budget]. We had a new baby daughter, so finances were tight. The CFR [Council on Foreign Relations] came through with an International Affairs Fellowship, which was a life saver. Moved the family of four to Princeton to write book number one at half my ACDA salary. Barry [Blechman] came to my rescue yet again, with the formation of the Roosevelt Center with Doug Bennet (dad of the Senator).¹

Michael had found his issue but not his medium. He acknowledges that he sharpened some skills at ACDA — his ability to structure an argument and the art of finding allies — but he realized that he could no more be happy in an executive department of government than on the Hill. "Being able to speak with my own voice is like breathing oxygen," he says. "There are two ways to influence from outside government: be a shill or be truly independent."

The world of nonpartisan NGOs beckoned. After the Roosevelt Center project fell through, Michael moved to the Carnegie Endowment in Washington, DC, as a senior associate in 1983, with Barry Blechman's backing. Barry was in business on his own at his consultancy, DFI International.

1 Derived from direct interviews with Michael.

Building Stimson

Michael left the Carnegie Endowment in mid-1989 to launch a new think tank in Washington with Barry Blechman. They privately nicknamed it “Project Dialogue” — an organization designed to bring people together to seek “pragmatic solutions for global security,” as the Stimson Center motto proclaims. Stimson’s launch fortuitously coincided with the fall of the Berlin Wall and the end of the Cold War, opening new opportunities for policy-relevant research on security choices ahead. Little else about the Stimson Center’s development has been just a matter of luck.

Michael ran and shaped the Stimson Center as its president and CEO for its first 11 years. He made the job look effortless, even as he continued writing and publishing prolifically. To date, Michael has produced 22 books. Building policy and civil society contacts in the U.S. and abroad and raising money were priorities for Stimson at the outset. Barry Blechman, meanwhile, served on the Stimson board for the Center’s first seven years and again starting in 2014.

Where and when could Michael have learned to manage a complex new organization? Surely neither as president of his senior high school class in Sharon, Massachusetts, in 1963–64, nor during his brief time at ACDA. His three years at a small Washington-based NGO doubtless opened his eyes to some of the challenges he would encounter in building the Stimson Center.

Only recently have I comprehended the magnitude of Michael’s and Barry’s financial courage in launching the Stimson Center. As George Perkovich of the Carnegie Endowment (DC) observed at Michael’s award ceremony in 2015: “Setting up an independent think tank without an endowment is a daunting task — especially one [a think tank] that lasts 25-plus years.” Dr. Perkovich good-humoredly added that Michael’s tenacity comes with a dose of stubbornness, an observation with which I agree.

Despite the pressures on Michael to kick-start the Stimson Center, he and I gradually became acquainted starting in 1990, on the fringes of events that I attended at Washington think tanks and universities when I was able to slip away from my professional intelligence responsibilities for a few hours. My return to South Asia analysis as director after another assignment coincided with the growth of Michael’s concern about recurrent episodes of military brinkmanship between India and Pakistan, both threshold nuclear states. Their respective nuclear weapons tests in the spring of 1998 infuriated Washington policymakers, who believed they had dissuaded New Delhi and Islamabad from this course. U.S. policy concerns quickly shifted to the heightened risk that the next tiff between the two neighboring adversaries could escalate to the use of nuclear weapons, with virtually no time to reconsider.

Within weeks after the 1998 nuclear tests, then-Deputy Secretary of State Strobe Talbott enlisted me in his “small group on South Asia” to review the state of play in the region and weigh Washington’s policy options. Part of his plan was to bring together both nuclear and foreign-area U.S. government policy experts. He was troubled by what he saw as dysfunctional bureaucratic divides and turf battles between the two groups at State and several other government departments. The issue at hand presented an opportunity to reinforce the value of cross-pollination.

Cross-pollination between expertise on nuclear weapons and on foreign regions is part of Michael’s DNA and his agenda for the Stimson Center. He has justly been celebrated for his success in fostering collaboration and professional networks among U.S. and international experts with overlapping interests and complementary skills. Stimson won the MacArthur Foundation’s Award for Creative and Effective Institutions in 2013, in large part for Michael’s ceaseless attention to this task. As a master “convenor,” Michael also has quietly built bridges between scholars and practitioners for decades.

Working with MK, Part I

In the fall of 2001, as I began a year-long fellowship at Brookings, one of my first stops was at Michael’s then-office around the corner at Dupont Circle. He suggested that we identify a project on which we could partner. Michael has never aspired to be a foreign area specialist, so he has frequently partnered for major projects with such specialists, including me. The stress-ridden year that followed 9/11 was un conducive to such a joint project, but our conversations cemented my yearning to retire from federal service as soon as I became eligible in 2002. I was aching to broaden my intellectual intake and output beyond what my “classified” role permitted. Michael’s work demonstrated the enormous influence that a talented nongovernment expert working with unclassified information might have on policy and policymakers.

One of Michael’s first acts after my retirement in late 2002 was to recommend me for membership on a distinguished advisory panel at one of the U.S. national laboratories, based on my South Asia expertise. Following India’s and Pakistan’s nuclear tests, the labs were increasing their focus on South Asia. I also brought to the table firsthand knowledge of U.S. national security decision making at the “principals” level. Michael was already a panel member. I was interviewed and accepted. I served happily with Michael on the panel for another decade-plus, while also working as an independent consultant on numerous projects for NGOs, government departments, and private-sector organizations.

Given both Michael’s modesty and his tendency to stovepipe information by project, I learned more about his impact on U.S. arms control from others on the lab

Michael's work demonstrated the enormous influence that a talented nongovernment expert working with unclassified information might have on policy and policymakers.

advisory panel than I had from him over multiple years. The panel viewed Michael as a star for his role in promoting treaties limiting the proliferation of nuclear and chemical weapons, as well as efforts to get a Comprehensive Nuclear-Test-Ban Treaty (CTBT) off the ground.² Michael largely ducked praise from the arms control community for his herculean effort in 2004 to mobilize and unite U.S.-based NGOs to press for an extension of the Nuclear Nonproliferation Treaty (NPT) at the upcoming 2005 Review Conference. The NPT was extended indefinitely.

The lab has remained rightfully proud of its own contributions to “a world in which two ideological and geopolitical rivals managed to limit, reduce, and eliminate a great many of their most powerful weapons and means of delivery,” in Michael's words.³ Many of the laboratory's personnel are technical experts on WMD. When I joined the advisory panel, many at the lab were engaged in cooperative threat reduction (CTR) efforts with Soviet (subsequently, Russian) counterparts, begun as the USSR splintered and former Soviet republics became independent. The initial CTR Act, also known as “Nunn-Lugar” in honor of the two senators who conceived it, is still the only U.S. nonproliferation program to have been initiated by Congress. Its first goal was to secure, remove, and/or destroy Soviet nuclear and chemical weapons materiel left behind in Belarus, Ukraine, and Kazakhstan. Undertaken in cooperation with Russian scientists, this laborious effort aimed to foil the theft and sale of these WMD ingredients on the black market. The 9/11 attacks and anti-Russian Chechen militancy had raised concerns that these components could end up in terrorist hands.⁴

For Michael and for the lab scientists, the U.S.-Soviet WMD accords and post-Soviet CTR programs remain a gold standard that cannot simply be replicated multilaterally in the messy geopolitics of the post-Soviet era. Michael has pragmatically added to his toolkit a different measure of success: evidence of de facto restraint across multiple countries that suggests broad acceptance of a norm. The salient example is the norm of nonuse of nuclear weapons, implicitly demonstrated by the fact that no nation state has used a nuclear weapon in the past 70 years.

2 The Carnegie Endowment's George Perkovich shared the story with attendees at Michael's 2015 award ceremony. The official name for the NPT is the Treaty on the Non-Proliferation of Nuclear Weapons.

3 Michael Krepon, “The Gift of Meaningful Work,” *Arms Control Wonk*, April 2, 2015, <https://www.armscontrolwonk.com/archive/404548/the-gift-of-meaningful-work/>.

4 National laboratory-based CTR programs with other governments typically have been more modest in scope – for example, improving the safety and security of nuclear materials, including small amounts discarded by hospitals in dumps.

Michael has continued to argue that nuclear deterrence alone is intrinsically threatening and that it encourages arms racing and miscalculations. His consistent advice for keeping countries that are practicing mutual nuclear deterrence from annihilating each other is to develop mutual reassurance, as the United States and Soviet Union did. As he wrote in an article for *Forbes* magazine in November 2019:

Deterrence alone doesn't create reliable lines of communication that are essential in severe crises. Deterrence alone doesn't forge personal bonds between leaders intent on reaching agreements to reduce nuclear dangers. Deterrence alone doesn't reduce nuclear force structure. Deterrence by itself isn't stabilizing. Deterrence doesn't prevent arms racing. What deterrence alone cannot achieve, diplomacy and arms control can.

*We've forgotten what [President Ronald] Reagan and [Soviet Premier Mikhail] Gorbachev taught us . . .*⁵ (emphasis added).

It is astonishing that communications on deterrence stability and arms reductions between this unlikely pair of late–Cold War leaders remain *the* model of trust-building between leaders of nuclear powers. The momentum created by their frank discussions led to bilateral cuts and accords relating to nuclear warheads and delivery systems through President H. W. Bush's administration and into President Bill Clinton's.

Reagan and Gorbachev affirmed publicly and jointly numerous times that “a nuclear war cannot be won and must never be fought.” “Both men meant what they said,” Michael observed. “The affirmation of No Use lies at the heart of a norm-based global nuclear order. A safe global nuclear order requires no battlefield use, no nuclear tests, and no nuclear proliferation — vertical as well as horizontal.”⁶ Over time, he wrote in an April 2019 article, championing norms can make nuclear weapons increasingly peripheral and less valuable by facilitating lower numbers and less exacting readiness standards.⁷

In *Better Safe Than Sorry: The Ironies of Living with the Bomb* (2008), Michael deplored the retreat by Washington and Moscow from the WMD diplomacy and treaties that had marked a period of “unparalleled achievement” lasting from President Reagan's second term through President Clinton's. Distrust between two-term President George W. Bush and President Vladimir Putin, Michael argued, contributed to the erosion and neglect of treaties that, however imperfect, had made the world safer from nuclear, biological, and chemical threats.

5 Michael Krepon, “Trump's Track Record of Nuclear Deterrence Without Reassurance Is Dangerous,” *Forbes*, November 25, 2019, <https://www.forbes.com/sites/michaelkrepon/2019/11/25/trumps-track-record-of-nuclear-deterrence-without-reassurance-is-dangerous/>.

6 Krepon, “Trump's Track Record.”

7 Michael Krepon, “After New Start, What?” *Arms Control Wonk*, March 4, 2019, <https://www.armscontrolwonk.com/archive/1206823/after-new-start-what/>.

When dismissed by defense hardliners as a naive idealist for believing that antagonistic countries can reach and should abide by verifiable arms control agreements, Michael has countered that the truly naive conviction is that dominance alone can ensure a nation's nuclear security. A country's "soft power" is not credible unless accompanied by military power — but "hard power" without the likability conferred by soft power is self-limiting.

At times, even Michael's optimism about prospects for avoiding the further spread, let alone use, of nuclear weapons has seemed to falter. The horizontal spread of nuclear weapons without agreement on rules of the road has been one source of concern. Another has been the narrowing distinctions between advanced conventional weapons and WMD, which have increased the risks of fatal overreactions.

In addition, recent U.S.-Russia relations are a far cry from their high mark after the dissolution of the Soviet Union. Russia and China have opposed the United States jointly on some international security issues. Both Russia and China are intent on unilaterally changing borders with neighbors by force — risking military push-back that could escalate into conflict, as has already occurred in Ukraine. India and Pakistan have made cross-boundary military incursions in Kashmir a *casus belli*.

In anticipation of the spread of WMD into space, Michael argued beginning in 2003 against such weaponization.⁸ Ever realistic, he moved on to developing a proposed code of conduct for such weapons.⁹

Working with MK, Part II

India and Pakistan went to the top of Michael's priorities for WMD risk reduction as he handed off the management of the Stimson Center to a talented successor, Ellen Laipson, in early 2002. Adding urgency to the India-Pakistan issue was the fact of hostile neighboring states with nuclear weapons but no prior experience of managing them. The rapid escalation of hostilities between the two militaries at Kargil in Kashmir in 1999 had underscored chillingly the potential for miscalculation to result in nuclear catastrophe. President Clinton personally pressed Pakistan's civilian prime minister to withdraw unilaterally the military forces that had begun the Kargil fight. Pakistan's military did not willingly take orders from civilian leaders. A military coup soon followed.

Less than three years later, an attack on India's Parliament by militants based in and supported by Pakistan prompted first India's and then Pakistan's army to deploy

8 Michael Krepon with Chris Clary, *Space Assurance or Space Dominance? The Case Against Weaponizing Space*, (Washington, DC: The Stimson Center, 2003).

9 For example, Michael Krepon, "Space: A Code of Conduct," *Presidential Inbox 2009*, June 21, 2012: <https://www.e-ir.info/2012/06/21/space-diplomacy-and-an-international-code-of-conduct/>.

nose-to-nose along the entire international border. This 2001–2002 crisis demonstrated how Pakistan’s unacknowledged reliance on militants as proxies against India dimmed prospects for meaningful bilateral negotiations. Such militant groups also have acted as spoilers when Indian and Pakistani civilian leaders have attempted to improve relations.

This and successive India-Pakistan crises have spurred a stream of Stimson-sponsored articles and books on how mutual nuclear deterrence between countries could spark destabilizing sub-nuclear conflict, as exemplified by Pakistan’s attacks on India via proxy groups. Many of the authors belonged to successive cohorts of young American scholars and practitioners recruited to Stimson by Michael. They have cut their professional teeth identifying and analyzing potential “off ramps” from future conflicts between the two neighboring nuclear weapons powers.

Michael’s move from the Washington area to the semirural town of North Garden, Virginia, near Charlottesville, came with an added opportunity to influence “next-gen” U.S. thinkers on WMD issues and crisis dynamics, specifically in South Asia. Appointed the University of Virginia’s Diplomat Scholar, he taught there from 2001 to 2010.

A priority for Michael as he grew Stimson’s South Asia program was fostering confidence between a multiplicity of Indian and Pakistani counterparts. His initiatives have ranged from sponsoring meetings for scholars, former diplomats, and retired security officials from India, Pakistan, and the U.S., to engendering ties between young Indian and Pakistani professionals. His annual summer fellowship program at Stimson — one of Michael’s most admired contributions to such confidence-building — brings together accomplished young Indians and Pakistanis variously steeped in WMD issues and in the social sciences to share ideas and research with each other and with Stimson fellows. Stimson’s online strategic analysis platform *South Asian Voices* provides a forum for continuing discussion.

As Michael became more steeped in the complexities of India-Pakistan relations, he departed from an earlier conviction that resolving their dispute over Kashmir would end hostilities between the two countries. In my view, Kashmir long ago became a symptom rather than a cause of tension between the two neighbors. Moreover, as Michael has realized, the prospects for Indian acceptance of even the best-intentioned foreign-brokered negotiations were zero.

For Michael and his wife, the pleasures of a tranquil setting away from the hubbub of DC outweighed the pain of his commute to and from Stimson. He fell into a pattern of several successive days each week at Stimson, followed by a block of time in the Charlottesville area for research, writing, and teaching.

Working with MK, Part III

In one of our frequent discussions about U.S. foreign policy, Michael asked me how the State Department examines its diplomatic performance in crises after the fact and extracts lessons for the future. As a history buff, he was dismayed to hear that the State Department does not routinely do such after-action analyses. An explanation I had received from senior diplomat friends was that such reports, when inevitably leaked, would become political fodder for unfriendly legislators to push cuts in State's always-meager budget. Michael wondered how U.S. foreign policymakers could learn from both successful and failed diplomatic interventions of the past if these were not fully documented and reviewed. The reported success of the then-secret mission in 1990 by Deputy National Security Advisor Robert Gates to dissuade Islamabad and New Delhi from an impending military confrontation was the most recent publicly known touchstone for diplomacy on the subcontinent.

To my delight, Michael subsequently proposed that he and I try to fill that gap by piecing together how Washington had undertaken crisis mitigation during the 2001–2002 faceoff between India and Pakistan, while the U.S. officials involved still remembered the details. Our initial list of former and serving American officials to interview grew steadily as we proceeded. We did nearly all the interviews together. I did the first draft of our paper; Michael did the second. We settled our analytic and stylistic differences amicably.

The result was our joint monograph, *U.S. Crisis Management in South Asia's Twin Peaks Crisis*, published by Stimson in 2006.¹⁰ It was one of the first published accounts and analyses of how Washington read the unfolding 2001–2002 crisis between India and Pakistan. Our *Twin Peaks* study detailed the shuttle diplomacy strategy devised and orchestrated by then-Secretary of State Colin Powell and his deputy, Richard Armitage, in cooperation with other American officials and several foreign governments. The strategy assumed that the rotating presence of senior foreign officials in the capitals would reduce the chances of a major strike by India or Pakistan against the other. Buying time for passions to cool, particularly in New Delhi, was the main objective. Michael and I co-produced a subsequent book chapter and made numerous public presentations that drew on our 2006 monograph.

Our next major joint product was an interview-based study of the U.S. policy response to multiday attacks in late 2008 by Pakistan-based militants on foreign as well as local targets in Mumbai, India's commercial capital. As Michael and I documented in *The Unfinished Crisis*, Washington officials tried a hybrid approach to forestall potential Indian retaliation for the November attacks. Drawing on their diplomatic

10 Polly Nayak and Michael Krepon, *U.S. Crisis Management in South Asia's Twin Peaks Crisis* (Washington, DC: The Stimson Center, 2006). Our title was a reference to the bimodal curve of tension between India and Pakistan during the protracted 2001–2002 crisis. Michael borrowed it from a 1990s U.S. serial television show called "Twin Peaks."

strategy of 2001–2002, senior officials in the outgoing George W. Bush administration engaged as before in top-level diplomacy and high-level official visits. The new element was a multinational investigation of forensic evidence from the attacks. U.S., British, and Israeli counterterrorism experts worked with Indian law enforcement to exploit and document evidence.¹¹ At the time, there seemed at least a possibility that Islamabad might agree to cooperate in the face of hard evidence. This was not to be, however.

Interviewing former and serving senior American officials with Michael over the years has given me some insights into how he has built lasting bonds with busy policy-makers. His warm hospitality at Stimson and at home has straddled the personal and the professional. He has been a convenor in both places, providing otherwise-rare opportunities for informal, off-the-record engagement and frank conversations between U.S. and foreign experts and decision makers. Michael has an endearing knack of going completely still when listening. He misses nothing.

Working with MK, Part IV

In 2016, Michael began to imagine retiring from Stimson. He picked a gifted deputy, Sameer Lalwani, gave him space to initiate new projects, and then promoted him to co-director of the South Asia program. In 2018, Sameer assumed the full mantle of director and recruited a talented former foreign service officer, Elizabeth Threlkold, as his deputy. Michael remained a distinguished fellow in the program. My longtime informal collaboration with Michael on innumerable projects — ranging from brainstorming and sharing professional contacts, to arguing analytic points — was about to turn virtual.

In the course of this transition, I was formally brought into Stimson as a distinguished fellow in the South Asia program, along with David Smith, a highly knowledgeable retired U.S. Army Foreign Area Expert on the region. David had served multiple tours as defense attaché at Embassy Pakistan.

As Michael announced his retirement, he assured his audiences that he would continue posting his latest thinking on arms control at the *Arms Control Wonk* blog. “These posts will continue, more or less regularly,” he wrote. “Writing isn’t just a habit; it’s a form of restoration and renewal.”¹² Michael’s frequent, provocative short pieces, many of them on the *Arms Control Wonk* blog, have served as useful test beds for his evolving ideas, as well as reminders of arguments already made in his books or talks. These think pieces usually are narrowly focused and thus easy to mull for several

11 Polly Nayak and Michael Krepon, *The Unfinished Crisis: U.S. Crisis Management After the 2008 Mumbai Attacks* (Washington, DC: The Stimson Center, February 2012).

12 Michael Krepon, “Retirement,” *Arms Control Wonk*, December 2, 2019, <https://www.armscontrolwonk.com/archive/1208521/retirement/>.

hours after their reading. Most are preceded by a quote from a vintage film or popular song. These reveal the broad range of Michael's humor and his surprising knowledge of rock and roll.

In a typical exchange with Michael, as I commended to him a new biopic on civil rights leader John Lewis in July 2020, Michael recommended to me, in turn, the 1968 movie *Bullitt*. I was left to discover why. It took little time to find the message in *Bullitt* that resonated with Michael. In a confrontation between the two leading characters, San Francisco Police Lieutenant Frank Bullitt (played by actor Steve McQueen) and Senator Walter Chalmers (Robert Vaughn), they have the following exchange:

Chalmers: "Come on, now. Don't be naive, Lieutenant. We both know how careers are made. Integrity is something you sell to the public. . . . Frank, we must all compromise."

Bullitt: "Bullshit. . . . You sell whatever you want, but don't sell it here tonight."¹³

Polly Nayak, currently a distinguished fellow at the Stimson Center, brings an eclectic background to the role. A South Asia expert, she lived and worked in the region before joining the U.S. Intelligence Community as an analyst. She had earlier worked for non-profits in the United States. Following a stint as a President's Daily Briefer, she managed analytic units focusing on Africa and on South America, before returning to South Asia. She spent the last six years of her government career as the Community's senior referent, manager, and leader on South Asia, deepening her experience and knowledge of senior-level policymaking. Since retiring from government, Polly has worked mostly as an independent consultant — serving on several senior advisory boards, writing articles, teaching analytic techniques and courses on South Asia, and serving as a guest lecturer. Her publications include several monographs for think tanks, notably two co-authored with Michael Krepon.

13 *Bullitt*, directed by Peter Yates (Warner Brothers, 1968)

The Poet of Arms Control Transparency

John Parachini

By any measure, Michael Krepon has written a Shakespearean amount on arms control. He has written more than 600 blog posts, dozens and dozens of books, articles, reports, congressional testimony statements, op-eds, and issue briefs, some of which I link to below. Many have clever and thought-provoking titles to draw in a reader. “Eyes Away from the Prize,” “Pyrrhic Victories and Draws,” and “The Waning of On-site Inspections and Strategic Seychel” are a few examples of these “come hither reader” titles.¹

In 1989, as one of the first employees at the Henry L. Stimson Center, I had the good fortune to work for Michael and assist in a small way with some of his contributions to the literature. Several years later, I returned to a Stimson Center that had grown, diversified, and faced new challenges and had another opportunity to witness Michael’s agile “pen.” Over the course of many good meals, I have continued to enjoy his friendship and appreciate his formidable contributions to the cause of peace through arms limitations and confidence-building measures.

There are two themes that run through many of his writings and advocacy that, in my estimation, are particularly salient for the current era of arms control: transparency and cross-cutting coalitions. The first theme is the value of transparency as a tool in the arms control toolkit. For me, Michael’s insight on the power of transparency

¹ For example, see Michael Krepon, “Eyes Away from the Prize,” *Arms Control Wonk*, September 2, 2013, <https://www.armscontrolwonk.com/archive/403875/eyes-awat-from-the-prize/>; Michael Krepon, “Pyrrhic Victories and Draws,” *Arms Control Wonk*, September 18, 2017, <https://www.armscontrolwonk.com/archive/1203877/pyrrhic-victories-and-draws/>; and, Michael Krepon, “The Waning of On-Site Inspections and Strategic Seychel,” *Arms Control Wonk*, March 8, 2020, <https://www.armscontrolwonk.com/archive/1209030/the-waning-of-on-site-inspections-and-strategic-seychel/>.

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started in space and continued through the air right down to the ground. He is not unique in making the case for these confidence-building measures,² but as his writings attest, he is unique in the eloquence and persuasiveness with which he advocated them.

My first assignment working for Michael was to proofread an edited volume he and others assembled, entitled *Commercial Observation Satellites and National Security*.³ At the time, it seemed like a distraction from the heady business of nuclear arms control I had hoped to work on. Now, with the

distance of time and several dramatic technological advancements, the volume is a good example of how prescient Michael and his co-authors were about the potential of commercial satellite imagery for international security. Back then, imagery was expensive, identifying meaningful objects on the skin of the earth was largely a skill that few outside of government possessed, and despite thirty years since the CIA's satellite images of Soviet missiles in Cuba, the concept of using the imagery for more than discovery was still comparatively new.

The use of commercial imagery for national security purposes is now common and not just by governments with the money to buy it and the skills to glean insights from it. Nongovernmental organizations procure and analyze imagery of military activities that states seek to hide and provide these images for the world to see. Media outlets run stories, and states scramble to explain themselves when they get caught with inconvenient truths.

38North,⁴ now based at the Henry L. Stimson Center, pioneered the use of commercial satellite imagery to provide insights on North Korea's missile and nuclear program. Using commercial imagery enables 38North and other North Korea-watching organizations to dispel some of the mystery associated with some of the regime's military and economic activities. The net result is that commercial satellite imagery creates a common information basis to assess countries' military activities. It also makes it harder for countries to deny that their military activities violate agreements or international norms. The sky has eyes that see things that can be shared for all to see.

2 Michael Krepon, "Joint Verification Experiments," *Arms Control Wonk*, January 11, 2011, <https://www.armscontrolwonk.com/archive/402990/joint-verification-experiments/>.

3 Michael Krepon et al., *Commercial Observation Satellites and International Security* (New York, NY: St Martin's Press, 1990).

4 "38 North," Stimson Center <https://www.38north.org/>.

In an amazing change of roles, the U.S. government's National Geospatial-Intelligence Agency (NGA) now takes commercial imagery procured and analyzed by NGOs and makes it all available via its "Tearline" portal for everyone to see.⁵ Thirty years ago, who would have thought that NGOs would be providing commercial imagery to a U.S. intelligence organization on topics as diverse as China's special economic zones, North Korea's hydroelectric power, and Russia's military activities in the Arctic?⁶

In the thirty years since Michael's edited volume on commercial observation satellites, the technology has evolved, costs of imagery have come down, and there is a greater appreciation of the politically transformative power satellite imagery can provide. We are in a moment when transparency flows from commercial satellites down to social media accounts filled with video images. Just think of the value of Syrians posting cellphone-shot video of government attacks with chemical weapons. A ground-based transparency system is in the hands of individual citizens, and the world reaps the benefit.

Open Skies Make for Trusting Relations

One of my next projects for Michael involved research on how electro-optical and infrared imaging technology loaded on commercially available aircraft could assist peacekeeping operations. Michael foresaw that the power of transparency could lower costs and was easy to procure for international operations. He put the concept into the public space with an article in *Survival* that he co-authored with Jeffrey P. Tracey.⁷ In the article, they described the cost-saving value and confidence-building potential that surveillance technology could provide to UN peacekeeping operations. As another measure of how far things have evolved, the UN now uses surveillance drones to assist peacekeeping operations.⁸

The Chemical Weapons Convention, On-site Inspections, and the Poison Gas Task Force

Another assignment I had during my first tour at the Stimson Center was to assist Michael with a seminar series where he elicited insights from guest speakers on different

5 "About Tearline," National Geospatial-Intelligence Agency, <https://www.tearline.mil/about-tearline/>.

6 For example, see: "Special Economic Zones," Tearline Project, National Geospatial-Intelligence Agency, 2020, https://www.tearline.mil/public_cat/special-economic-zones/.; "North Korea's Economy," Tearline Project, National Geospatial-Intelligence Agency, 2021, https://www.tearline.mil/public_cat/north-korea-economy/.; "Arctic," Tearline Project, National Geospatial-Intelligence Agency, 2020, https://www.tearline.mil/public_cat/arctic/.

7 Michael Krepon and Jeffrey P. Tracey, "'Open Skies' and UN Peace-Keeping," *Survival*, 32, no. 3 (May/June 1990): 251-263.

8 Hervé Ladsous, "Drones are Effective in Protecting Civilians," *Africa Renewal*, United Nations, <https://www.un.org/africarenewal/magazine/april-2016/drones-are-effective-protecting-civilians>.

ways to verify arms agreements.⁹ Memorable in the series were approaches to monitor the elimination of chemical weapons. How to arrange routine inspections of chemical industry facilities and possible criteria for challenge inspections were topics covered in seminars that fed seamlessly into Michael's writings thereafter. These were ground-based transparency measures that furthered President Reagan's mantra "trust, but verify."

When I returned to the Stimson Center in the late 1990s, I enjoyed a front-row seat to Michael's advocacy on the transparency elements for the Chemical Weapons Convention (CWC). The concepts that had been discussed in seminars years before became integral tools to further compliance with the universal ban. To support the CWC ratification,¹⁰ the Stimson Center hosted the Poison Gas Task Force to coordinate the accords ratification effort. As the steward of this NGO Task Force, I worked with NGO colleagues to send out "fax blasts" providing background information on the convention and its provisions. Monitoring the elimination of classes of chemicals and facilities was a key aspect of the convention and prime example of the type of transparency measure Michael argued to include in the arms control toolkit. Again, this fit with the Reagan mantra "trust, but verify."

Ties that Bind Across the Partisan Divide

A second theme running through Michael's work is the importance of building a coalition across partisan and national divides to secure meaningful accords that endure. The theme was a central finding in the study Michael conceived involving a case comparison of arms control treaty ratification experiences in the U.S. Senate. The resulting edited volume of case studies, entitled *The Politics of Arms Control Treaty*, is a seminal volume on the topic.

Michael cites credible figures whose support for an arms control measure bridges "partisan divides." For example, it was Republican President and former U.S. General Dwight D. Eisenhower who originally proposed overflights to reassure the United States and the Soviet Union about their respective military capabilities. Highlighting how the Open Skies approach to military weapons transparency was an Eisenhower concept helped make it an accord that senators of both political parties could endorse.¹¹

9 Lynn Hansen, *Verifying Conventional Force Reductions*, Conventional Defense - Occasional Paper Series No. 1 (Washington, D.C.: The Stimson Center, 1990), <https://www.stimson.org/1990/verifying-conventional-force-reductions/>.

10 Michael Krepon et al., *The Battle to Obtain U.S. Ratification of the Chemical Weapons Convention*, South Asia - Occasional Paper No. 35 (Washington, D.C.: The Stimson Center, 1997), <https://www.stimson.org/1997/battle-obtain-us-ratification-chemical-weapons-convention/>.

11 Michael Krepon, "Open Skies," *Arms Control Wonk*, May 2, 2014, <https://www.armscontrolwonk.com/archive/404127/open-skies/>.

The same was true in the case of the CWC ratification. Former CIA Director and Republican President George H.W. Bush pushed for the conclusion of the CWC negotiations during his presidency. Bush's former Secretary of State James Baker's endorsement of the convention proved valuable for the ratification campaign. Credible Republican statesmen and former military leaders served as political cover for several Senate Republicans to join Democrats to support the ratification of the convention during Democratic President Bill Clinton's presidency. Even though the accord was negotiated during Bush's presidency and strongly supported by Republican Senator and Vietnam war hero John McCain, overcoming partisan opposition to the accord proved to be critical.

Getting the U.S. legislative and executive branches of government to embrace arms control measures as essential elements of American national security is never easy. Since the First World War, the Republican party has consistently positioned itself as the defender of the American nation's sovereignty, with military might as the primary instrument to do so. The Democratic party, more often than not, has sought security through both diplomacy and military means. Republican party leaders have too infrequently embraced nonmilitary, diplomatic means to effectively ensure the nation's security. But when they have leveraged the tools of arms control, the results have been dramatic,¹² enduring, and saved the country many lives and precious national resources.

The Arms Control Challenges Ahead

Vladimir Putin and Donald Trump each abandoned the Intermediate Range Nuclear Forces (INF) and Open Skies treaties and blamed the other for the demise of the accords.¹³ While these Cold War-era accords had their weaknesses, the contribution they made to security warranted, at a minimum, keeping them in place while both sides sought to improve them. While this perilous 21st-century maneuvering is profoundly distressing in the moment, it should prompt policymakers, analysts, and warfighters, of all major powers and political persuasion, to rethink the role of arms limitation in the service of peace.

New rules on military means and measures are needed for a new era with China as a newly emerging major power, proliferation of new technologies that are changing the way of warfare, an international community bedeviled by a global pandemic,

12 Michael Krepon, "The Cruel Politics of Arms Limitation," *Arms Control Wonk*, June 13, 2016, <https://www.armscontrolwonk.com/archive/1201502/the-cruel-politics-of-arms-limitation/>.

13 Michael Krepon, "All Roads Lead to Putin," *Arms Control Wonk*, October 21, 2019, <https://www.armscontrolwonk.com/archive/1208265/all-roads-lead-to-putin/>; Michael Krepon, "Krasnoyarsk: The Antecedent to the INF Treaty Violation?" *Arms Control Wonk*, November 10, 2019, <https://www.armscontrolwonk.com/archive/1208406/krasnoyarsk-the-antecedent-to-the-inf-treaty-violation/>.

waves of people fleeing their land of origin, and climate change that, unless checked, will wreak havoc. A new generation of policymakers, analysts, and warfighters are richly served by the toolkit the poet of arms control provides us and will continue to type out for years to come. An interested reader will find in Michael Krepon's trove of writings many signposts on how to leverage novel technological means for transparency and how to forge credible voices into a coalition for new approaches to peace aided by limitations on the weapons of war.

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A Light for the Young

Yun Sun

When I think of Michael, the first thing that comes to mind is his smile, a smile that sparkles wisdom, humor, and care that shine through your heart even on the rainiest days. Michael may not know this. But his work, his approach, his teaching through his own example has been the light for many of the younger generations of scholars and practitioners at Stimson and beyond. He is the light for the young.

One of the first things Michael taught me — as he has taught many other younger scholars at Stimson — is the need to identify and/or establish our unique comparative advantage. The simple question of what is different about our research does not afford a simple answer. And for us young puppies in the field, it usually takes serious soul-searching to come up with a near-plausible answer. Michael has the sharp eyes and analytical mind to push us to think about what we need to survive and excel in this competitive field. This thought process might sound natural to veteran scholars, but it is quite difficult for younger scholars who do not yet possess a vision or insights to know what we are good at or for. Michael has helped generations of young scholars search for, define, and strengthen their unique qualities. That usually is the most difficult first step for any new persons in our field.

Michael has a unique way of seeing people and building their confidence. He brings a sense of mission to the people working with or around him. He is always eager to hear what younger scholars have to say and sees the value in what others might consider untraditional analysis. For us younger scholars, who are usually awed and daunted by the depth of the knowledge from veterans like Michael, his encouragement comes not only as a push of support, but also as a sense of mandate by responsibility. Had it not been for Michael's enlightenment and encouragement, I

His answer was a light through
the darkness: "Cynical? Never.
Because it will cost you the
intellectual curiosity, the inquisitive
mind and your motivation."

would not have embarked on many of the research products that I did on China's relations with South Asia. He has the amazing ability to see people's strengths and to motivate people to build on them and maximize their value.

Michael has taught me perseverance. None of the issues he has dedicated his life to offer easy or quick solutions, if any solution at all. From the feud

between India and Pakistan to nuclear arms control, Michael will never be defeated by the lack of progress or the oftentimes disheartening regression from some, if not all governments. After four decades in the often disappointing field, Michael has an amazing ability not to be overcome by cynicism. Instead, he always asks the most incisive questions and explores the next most feasible solution. I remember once asking him how he maintains the pureness of his inquisition into issues that are usually caught in the center of politics and not be cynical. His answer was a light through the darkness: "Cynical? Never. Because it will cost you the intellectual curiosity, the inquisitive mind and your motivation."

Michael is one of the most accomplished scholars in the field of arms control and nuclear disarmament that I know. However, he has always set an example regarding the importance of family and achieving a work-life balance. Like a father, he cares as much about your personal life and happiness as he does about your professional development and success. We have had many conversations about how female professionals in the policy field can strike a balance between office and home. Michael's unique take is always practical, pragmatic, and helpful. Michael's advice and wisdom have helped me navigate many of the personal challenges I have encountered in my life. Without Michael, I would not have come this far.

What is a mentor? A mentor is a person or friend who guides a less experienced person by building trust and modeling positive behaviors. Michael has mentored so many generations of less experienced policy analysts and practitioners by being dependable, engaged, authentic, and tuned into our needs. We all owe him a tremendous debt for who we are and how far we have come. Through his own example, Michael showed us the kindness, the guidance, and the responsibility we owe to our junior staff and the future generations of scholars who will grow and develop with the best knowledge and assistance we have in us. Teaching others is many times more difficult than learning ourselves. But Michael has taught us through his patience, his perseverance, and his unparalleled sense of responsibility.

In many, many ways, Michael has been a light for me, and for so many of us.

Yun Sun is a Senior Fellow and Co-Director of the East Asia Program and Director of the China Program at the Stimson Center. Her expertise is in Chinese foreign policy, U.S.-China relations, and China's relations with neighboring countries and authoritarian regimes. From 2011 to early 2014, she was a Visiting Fellow at the Brookings Institution, jointly appointed by the Foreign Policy Program and the Global Development Program, where she focused on Chinese national security decision-making processes and China-Africa relations. From 2008 to 2011, Yun was the China Analyst for the International Crisis Group based in Beijing, specializing on China's foreign policy towards conflict countries and the developing world. Prior to ICG, she worked on U.S.-Asia relations in Washington, DC, for five years. Yun earned her master's degree in international policy and practice from George Washington University, as well as an MA in Asia Pacific studies and a BA in international relations from Foreign Affairs College in Beijing.

An Apprenticeship Both Personal and Professional

Christopher Clary

A surprising amount of luck led my path to cross with Michael Krepon's. I was sitting outside a professor's office in Wichita, Kansas, where I was an undergraduate, when I saw a pamphlet advertising various DC experiences. One of them involved a two-week seminar in Washington, hosted at Johns Hopkins School of Advanced International Studies. I was 19, and had little experience outside of Kansas save for family vacations and trips with my high school Spanish class. I signed up. And among the speakers I heard was Michael. That two-week seminar convinced me I should go back to DC as an intern, something I hadn't considered before then.

At the time, I had focused mostly on Latin American studies as an undergraduate, needing to put all those years of Spanish instruction to work, but I applied widely in DC, mostly at Latin American-focused think tanks but also to some places which I had encountered during that DC seminar. In my cover letter, I mentioned that I had seen Michael and that I had been impressed with his messages and comportment. I think I used some variant of "sagacity" or some similar word one shouldn't actually use in real life but seemed apt as a precocious undergraduate. But he did seem wise to me in that first encounter. Not just the beard — though the beard helped. There was something about his cadence and thoughtfulness that struck me.

The Latin America think tanks were slow to write back to my applications. But I did hear back from the Stimson Center. The research associate that was selecting interns at the time was Chris Gagné, from Maine, and I think on a lark he decided that my resume seemed plausible enough, I had seen Michael in real life, and there hadn't been any interns from Kansas to the best of his knowledge, so he selected me in consultation

with Michael. Off I went, to intern for Michael and Chris in the spring of 2000.

It was an incredible time to be studying South Asia. The 1998 nuclear tests had been followed by the 1999 Kargil War, which in turn had been followed by the 1999 Pakistan military coup. President Clinton was set to travel to India, and Michael was in the group of think tankers invited to the White House to chat with the president before the trip. Michael was president so split his time between South Asia and Stimson institutional obligations.

I learned an enormous amount in an incredibly short period of time. The South Asia intern had many jobs, but two of the most important for my subsequent learning were helping to manage the visiting fellows program and identifying which regional news stories Michael should see. The latter task is the more boring one to describe, but every day I went through six South Asian newspapers — every front page, international, national, and opinion piece. I still remember the lineup: *Dawn*, *The News*, and *The Nation* from Pakistan, and *Indian Express*, *The Hindu*, and the *Times of India* from across the border. I believe even today I have never understood the nooks and cranny of the South Asian news cycle as I did as a 19-year-old intern.

After I graduated, I didn't really know what to do and decided to go back to Washington. I had built up a decent savings account by squirreling away paychecks from my college job at Office Depot and some extra money from student loans, and I thought I could try for a year in DC to see if anyone would offer gainful employment. Michael had shifted away from being Stimson's president to permit more time to work on South Asia and space weaponization, and to move near Charlottesville, Virginia. I started as a recidivist intern — gladly receiving Stimson's comparatively generous \$1,500 per semester stipend again — with the hope that when Chris Gagné went off to bigger and better things (in his case, law school), Michael might be willing to hire me as a research assistant. He did.

Working for Michael taught me how to work in a professional office and taught me how to research. Michael would send me on hunting expeditions to track down some fact or some set of facts that he needed to build an argument. In those days of rudimentary internet, those searches often involved going to the library. He would hand us books he thought seemed promising and ask us to summarize them on the front and back of a 4 × 6 notecard, to go in a giant collection of notecards he had been keeping to store his research notes. He commuted to DC mid-week, which meant we were largely on our own on Mondays and Fridays. I turned 21 as an intern for him, and likely was more adventurous than was wise during that time. The office overlooked Dupont Circle, and several of us took advantage of a conference room to bring back food and beverage and look out over the circle. On particularly late nights, I'm embarrassed to say I may have slept in his office on occasion. But precisely because Michael was a bit distant, he gave his employees the space to figure out what needed to happen. Often we would have to go talk to a Stimson vice president about

some budget issue, on his behalf but also on our own behalf. His being in Charlottesville meant we had enough autonomy to screw up and grow.

The first time Michael Krepon took me to South Asia, I left enamored and overwhelmed. It was what seemed like it must be the hottest part of May. Michael told me to fly into Delhi early, in part so I could go to Agra. The day I visited the Taj Mahal it was 45 degrees Celsius. The timing of the trip was also in the midst of what Michael came to call the Twin Peaks crisis. The United States had invaded Afghanistan in October 2001, resuscitating a defunct U.S.-Pakistan relationship. Terrorists had attacked the Indian Parliament building on December 13, 2001, leading India to conclude that if a terrorist provocation against the United States merited a robust military response, why should India stand by in the face of an attack on its center of government? The Indian Army mobilized for the first time since the 1971 war. Things were calmer by early May when we arrived, but still quite tense with both the Indian and Pakistani armies remaining in forward positions. I remember several things from that initial trip, but especially sitting in the office of the Director-General of Military Operations in South Block, where he assured Michael and me that India knew quite well where U.S. military forces were operating in Pakistan to support the operations in Afghanistan, and that India was — in his words — quite confident that it could give Pakistan a “good bashing” without endangering U.S. troops. That speech seemed especially ominous once another attack on an Indian army camp at Kaluchak in Kashmir killed the wives and children of Indian soldiers, causing the second “peak” of the Twin Peaks crisis. Michael and I left India on May 15 convinced war was not only possible but likely. Prime Minister Atal Behari Vajpayee had different plans.

Michael flying me to India, putting me up in nice hotels, insisting I go to Agra, and having me accompany him to meetings all around Delhi was an enormous investment of time and energy into me. I wasn't special. Michael had made similar investments in a string of research assistants at Stimson and would continue to make such investments long after me. But it was profoundly important to me. It wasn't just taking me to Delhi, it was trusting me to be a good representative of Stimson and him. Michael was invited to a space security conference in Geneva but couldn't make it. Would I go? Yes. Michael was invited to give a talk at the International Institute for Strategic Studies on India and Pakistan but couldn't attend. Would I present? Yes. Michael couldn't attend a conference at Wilton Park outside of London. Was I interested? Yes. I'm still not sure how Michael convinced all of these important organizations to take me in his stead — I was 22, and awfully inexperienced. But somehow, he did.

Toward the end of my time at Stimson, Michael began a series of “Track II” conferences outside of London with eminent Indian and Pakistani attendees: multiple former foreign secretaries; many retired military generals, admirals, and air marshals; and at least one former intelligence official who would later become India's national

Michael had made similar investments in a string of research assistants at Stimson and would continue to make such investments long after me.

But it was profoundly important to me.

security advisor. Those conversations about the dangers of Indian and Pakistani crises, occurring in the immediate aftermath of the 2001–2002 military standoff, were formative to much of my subsequent thinking. I recall distinctly a Pakistani air marshal saying that if India attacked Pakistan from the air, the only way Pakistan could avoid retaliating is if their air defenses worked well. The discussion stuck with me and seemed all the more vivid during the 2019 Balakot episode, a decade and a half later.

These events were also important to me because Michael introduced me to several American facilitators he had invited to the workshop. Most prominent for my subsequent years were Scott Sagan and Peter Lavoy. Michael had an unwritten rule, which is that research assistants and associates should be gently encouraged to leave after about two years. Stimson was too small at the time to permit any meaningful vertical ascent, and the work was interesting enough and salary sufficient that people could get stuck. So I forget how much this unwritten rule was internalized by me versus nudged by Michael, but I knew in mid-2003 that it was time for me to go. Michael was skeptical of PhDs, having not gone through the process himself, but encouraged me to talk to those like Peter and Scott who had them. Scott walked me through the pros and cons of PhD training. Peter did one better and offered to hire me as his research associate at the Naval Postgraduate School while paying for my master's degree, forestalling any need to decide to PhD or not to PhD for a few years more.

It is simply impossible for me to imagine my life without Michael Krepon. My life, after interning for him, took a radically different path than it was on beforehand. That other path might have been fine, but it might also have kept me in Kansas. Michael began a journey that took me to Pakistan and India countless times, that led me to the Pentagon, and eventually led me back to a PhD because I loved South Asian politics so much I wanted to work on it for the rest of my life. I owe that to him, and am forever grateful.

Christopher Clary *is an assistant professor of political science at the University at Albany, State University of New York, and a Nonresident Fellow with the Stimson Center's South Asia program. Previously, he was a postdoctoral fellow at the Watson Institute at Brown University, a predoctoral fellow at the Belfer Center at Harvard University, a Stanton Nuclear Security Predoctoral Fellow at the RAND Corporation, and a Council on Foreign Relations International Affairs Fellow in India. Clary previously worked in the Office of the Secretary of Defense. He served as Michael Krepon's intern and research assistant from 2000 to 2003.*

Renewing Islamabad's Strategic Discourse

Rabia Akhtar

To say that Michael Krepon worries about nuclear South Asia would be the understatement of this century. Having known Michael in various capacities, first as a star scholar-struck student, later as an academic, and having read his huge body of work on all things nuclear South Asia, I have found Michael to be ever curious, always learning, and ever trying to understand the drivers of instability in our region, even when perhaps no one understood the region better. In one of my discussions with Michael several years ago on what gives him sleepless nights about nuclear South Asia, he said that not enough scholars or students in South Asia who study nuclear issues are asking the questions, and since there is not much debate on strategic issues within the strategic communities in Pakistan and India, Western scholars continue to raise the alarm bells that should in fact be raised by the citizen scholars themselves. Michael's statement was hard to argue with. Very few publications have come out of Pakistan on nuclear issues (more on that later).

From a Pakistani perspective, as a student of nuclear South Asia, before I trained as a nuclear historian, I used to think of Michael as arrogant, someone who wished to tell the Pakistanis that they did not understand the dangers inherent in the nuclear weapons business or that they were too comfortable and proud about their nuclear capability, and wrongly so. But little did I know back then as a grad student, when I used to attend seminars Michael gave in Islamabad, that Michael knew what he was talking about. And the fact that he was the one talking about it and not us, as the academic strategic community based in Islamabad, has had me thinking over the years on what needed to change. Perhaps the reason that I completed my doctorate in security studies, wrote a dissertation on U.S. nonproliferation policy towards Pakistan

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under five administrations from Ford to Clinton, and started teaching nuclear South Asia was because I wanted Michael to see that we too in Pakistan were thinking about nuclear issues and training our next generation to ask the questions. I have never accepted it upfront, but I would like to credit Michael, for pushing me to play a small part in shaping Pakistan's strategic discourse academically and take ownership of the discourse in a small way.

At seminars in Islamabad, Michael would be deliberately provocative. His writings on Pakistan were critical. When he said that “nuclear deterrence stability is a mirage,” no one wanted to hear that, since faith in nuclear deterrence in South Asia was all too strong for Michael to make us question it or accept that it was a myth. Michael warned us about the pitfalls of nuclear competition between Pakistan and India, characterized as action-reaction syndrome. But were we paying attention? No. Michael warned that when India and Pakistan produce more nuclear weapons, diversify launch capabilities, grow fissile material stockpiles, increase their targeting options, and develop more complex command and control arrangements, sources of friction between them will only magnify, not reduce through these arrangements. Take a survey in both India and Pakistan, and if the respondents answer honestly, you would find that both sides are quite comfortable in the sense of security that these arrangements have generated and will continue to be in this state for a long time to come. Both countries feel that they don't have enough firepower to drop out of the nuclear competition yet—a competition that is increasingly becoming triangular, a complexity that Michael appreciates even when he believes it to be imbalanced and unstable. His bottom line anxiety remains, that nuclear deterrence stability will remain elusive, more so in a nuclear triangle of India, China, and Pakistan. Again, there is no argument to be had on this point, I completely agree, but the sources of my anxiety are less profound than Michael's.

In my recent article for the *South Asian Voices* — a great initiative by Stimson's South Asia program to bring together Indian and Pakistani nuclear studies scholars — I wrote about the future of Indo-Pak nuclear rivalry post Pulwama-Balakot crisis of 2019, which has renewed my faith in deterrence. I understand what Michael advocates, that nuclear deterrence stability is elusive, but to me it is not that subtle. My faith comes from Pakistan's demonstration of its capability and resolve post-Balakot strikes, decisions taken that were rational and calculated. I have written, “it needs to be appreciated that Islamabad's response to India's strikes — through its choice of targeted locations, the manner of their execution, and the release of the captured

pilot — helped achieve crisis termination.”¹

Pulwama-Balakot is perhaps the first crisis in Indo-Pak history where crisis termination neither rested with a third party nor was initiated by it. There is much to celebrate here, and I will retain my optimism, humbly so, about nuclear deterrence between India and Pakistan saving the day for two reasons. First, India witnessed Pakistan’s capability and resolve in 2019 and now has full knowledge of Pakistan’s conventional response options, which will be exhausted in any future crisis, as opposed to the often-portrayed knee-jerk version of a Pakistan projected to use nuclear weapons at the drop of a hat. The fact that Pakistan’s response was unprecedented and ran counter to most predictions that a conventionally inferior, nuclear-armed state would escalate to the nuclear level relatively early on in a crisis is one source of renewed faith in deterrence.

Second, while there are concerns that both India and Pakistan can feel confident in playing rounds of escalation safely (even though both sides don’t appear complacent about escalation control), the “fear” (as was amply demonstrated in the Pulwama-Balakot crisis in 2019) that either side may escalate is a deterrent in itself for any further escalation. This might not help ease Michael’s worry about nuclear deterrence instability in South Asia, but the fact that both India and Pakistan comprehend and are fully aware of the “fragility” of their established mutual nuclear deterrence is something to be acknowledged.

Pakistan’s strategic community is small and has matured over the years reading Michael’s insightful works on nuclear South Asia. Yes, still not enough is being published out of Pakistan as Michael would have liked, but this is just a beginning, albeit a slow one. Here is a list of books (not exhaustive and not chronologically stacked together) influenced and inspired by Michael’s works and discussions with us on strategic and foreign policy issues over the years: I will start with my own book; my drafts have benefited from Michael’s insights:

- *The Blind Eye: U.S. Non-Proliferation Policy Towards Pakistan from Ford to Clinton* (Rabia Akhtar)
- *Brokering Peace in Nuclear Environments: U.S. Crisis Management in South Asia* (Moeed Yusuf)
- *Universalizing Nuclear Nonproliferation Norms: A Regional Framework for the South Asian Nuclear Weapon States* (Adil Sultan)
- *India’s ‘Surgical Strike’ Stratagem, Brinkmanship and Response* (Zafar Nawaz Jaspal)

¹ Rabia Akhtar, “The Future of the India-Pakistan Nuclear Rivalry,” *South Asian Voices*, May 21, 2020, <https://southasianvoices.org/the-future-of-the-india-pakistan-nuclear-rivalry/>.

- *Shaking Hands with Clenched Fists: The Grand Trunk Road to Confidence Building Measures Between Pakistan & India* (Asma Shakir Khawaja)
- *Pakistan's Security Problems & Challenges in the Next Decade* (Salma Malik, ed.)
- *Eating Grass: The Making of the Pakistani Bomb* (Feroz Hassan Khan)
- *Learning to Live with the Bomb: Pakistan: 1998–2016* (Naeem Salik)
- *The Genesis of South Asian Nuclear Deterrence: Pakistan's Perspective* (Naeem Salik)
- *Nuclear Pakistan: Seeking Security and Stability* (Naeem Salik, ed.)
- *India's Habituation with the Bomb: Nuclear Learning in South Asia* (Naeem Salik, ed.)
- *Nuclear Pakistan: Strategic Dimensions* (Zulfiqar Khan, ed.)
- *Pakistan's Nuclear Policy: A Minimum Credible Deterrence* (Zafar Khan)
- *Pakistan and the New Nuclear Taboo: Regional Deterrence and the International Arms Control Regime* (Rizwana Abbasi)
- *Nuclear Deterrence in South Asia: New Technologies and Challenges to Sustainable Peace* (Rizwana Abbasi and Zafar Khan)
- *The Evolution of Nuclear Deterrence in South Asia* (Tughral Yamin)
- *The Wrong Ally: Pakistan's State Sovereignty Under U.S. Dependence* (Ahmed Waheed)
- *Nuclear Learning in South Asia: The Levels of Analysis* (Rabia Akhtar and Debak Das)
- *The Battle for Pakistan: The Bitter U.S. Friendship and a Tough Neighbourhood* (Shuja Nawaz)
- *From Kargil to the Coup: Events that Shook Pakistan* (Nasim Zehra)
- *The Nuclearization of South Asia* (Kamal Matinuddin)
- *Crossed Swords: Pakistan, Its Army, and the Wars Within* (Shuja Nawaz)
- *The Kargil Conflict, 1999: Separating Fact from Fiction* (Shireen Mazari)
- *Confronting the Bomb* (Pervez Hoodbhoy and Zia Mian)

The Gift of Meaningful Work

- *Four Crises and a Peace Process: American Engagement in South Asia* (Pervaiz Iqbal Cheema, P. R. Chari, and Stephen P. Cohen)
- *Indian Nuclear Deterrence: Its Evolution, Development and Implications for South Asian Security* (Zafar Iqbal Cheema)
- *The Armed Forces of Pakistan* (Pervaiz Iqbal Cheema)
- *Afghanistan and Pakistan: Conflict, Extremism, and Resistance to Modernity* (Riaz Muhammad Khan)
- *Beyond Tora Bora: The Aurakzai Memoirs* (Ali Muhammad Jan Aurakzai)
- *Estranged Neighbours: India, Pakistan, 1947–2010* (K. M. Arif)
- *Working with Zia* (K. M. Arif)
- *Khaki Shadows* (K. M. Arif)
- *Pakistan's Foreign Policy: A Concise History* (Abdul Sattar)
- *Pakistan's Foreign Policy: A Reappraisal* (Shahid Amin)
- *Pakistan's Foreign Policy Dilemma: A Perennial Quest for Survival* (Shamshad Ahmed)
- *Pakistan Beyond the Crisis State* (Maleeha Lodhi, ed.)

Miles to go, but grateful to Michael Krepon for showing us the path and pushing us to ask the questions.

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Nuclear Risk Reduction and the Founding of the Stimson Center

Barry Blechman

My partnership and friendship with Michael Krepon were born in arms control, forged in arms control, and, I suppose, will still be on our minds for the remainders of our lives.

Michael and I first worked together more than 40 years ago, during the Carter administration, at the U.S. Arms Control and Disarmament Agency, then a semi-autonomous part of the State Department. When Jimmy Carter was told unceremoniously that he would serve only one term, Michael moved to the Carnegie Endowment to work on nuclear arms control. At that time, I was located at a short-lived think tank called the Roosevelt Center. Actually, it was called the Eleanor, Theodore, and Franklin Roosevelt Center, making sure to cover all the bases. This was in the mid-1980s, when there weren't many think tanks in Washington, and those that did exist were either focused on academic audiences, publishing learned tomes on policy issues of the day, or simply places for government officials, wannabe government officials, and policy wonks to gather for lunch or dinner and discussions of those same issues. With rare exceptions, their actual impact on policy varied from slight to none.

At the Roosevelt Center, we had a different idea. Free from the need to raise money thanks to a single donor, we would select issues to work on (a) that were important, (b) in which we had expertise, and (c) for which the politics of the time were such that there seemed to be a chance to help the nation move forward to their resolution. We were guided by a maxim attributed to John J. McCloy (Secretary of

We were guided by a maxim attributed to John J. McCloy (Secretary of War Henry Stimson's deputy): "It's possible to accomplish almost anything in Washington, so long as one is willing to give the credit to others."

War Henry Stimson's deputy): "It's possible to accomplish almost anything in Washington, so long as one is willing to give the credit to others." And we started several projects, notably a working group co-chaired by Senators Sam Nunn and John Warner, chairman and ranking minority member of the Armed Services Committee respectively, to examine new ways to reduce the risk of nuclear war. One idea was to create a direct communications link between the U.S. and Soviet armed forces. At the time, the only direct means for the two antagonists to com-

municate was the hotline. The new link was intended to permit the exchange of information without involving the two nations' most senior leaders. It took several years, but the so-called Nuclear Risk Reduction Centers eventually were set up. The link still exists and is used to exchange information about missile launches, movements of nuclear warheads, and other technical information concerning the status of the two sides' nuclear forces. Senators Nunn and Warner, and President Reagan, got the credit.¹

Unfortunately for the Roosevelt Center, its funder did not think the idea of giving other people credit for work he had made possible through his financial largesse was such a good idea, and the institution soon went out of business. But Michael and I kept its philosophy in mind, and it became the founding principle of the Stimson Center when we established it in 1989. By then, I had created a corporate entity called Defense Forecasts, which I ran with the help of several graduate students out of my home. Bored with writing reports and working alone, I decided to expand and asked Michael if he was willing to take a chance with me. He readily agreed, and we rented a small office suite, hired a few people, and went to work. Our foundation contacts informed us that we would have to create a nonprofit organization if we expected to land grants of any magnitude, and so the Stimson Center was born. Michael was the president, and I chaired the board. In the beginning, I spent half of my time on Stimson projects, but this declined as the years passed and the demands of my corporation increased. Both organizations prospered for many years, and we shared space until our combined workforce was just too large to make it sensible.

In the early days, arms control was, I'd say, the primary focus of our work. I worked on ideas for limiting naval nuclear weapons, and like to think we contributed to President George H. W. Bush's decision to remove all tactical nukes from warships and submarines in 1990. Michael turned his attention to means of reducing tensions

¹ Michael and I eventually wrote up the story of their creation and achievements in *Nuclear Risk Reduction Centers* (Significant Issues Series 8, no. 1. Washington, DC: Georgetown Center for Strategic and International Studies, 1986).

and the risk of nuclear conflict in Europe. He dreamed up, and worked diligently to persuade the U.S. government to create, the Open Skies Treaty, an arrangement whereby the U.S. and USSR (soon to become Russia) could overfly one another's territory to verify exchanges about military deployments and exercises.

Perhaps even more importantly, Michael worked diligently to unify Washington's arms control community in preparation for the 1995 meeting on the 25th anniversary of the Non-Proliferation Treaty. This keystone of efforts to restrain nuclear weapons included a provision that stated that after 25 years, signatories would decide whether to scrap the agreement, extend it for some number of years, or extend it indefinitely. Michael and his colleagues worked indefatigably for the last and succeeded. He and Stimson then turned their attention to the negotiations for a Comprehensive Nuclear Test Ban. Step one, again, was to unify the Washington arms control community behind a common agenda. Then they worked with NGOs and individuals in foreign capitals to help move countries to common positions. Again, success was had! The Comprehensive Test Ban Treaty was completed in 1996 and, although not yet formally in force, there has been a moratorium on nuclear tests since that year. This moratorium has been broken only by India and Pakistan in 1998, and North Korea on several occasions during this century. The absence of nuclear testing by the great powers for more than 25 years is a major factor in making nuclear war virtually unthinkable.

Working behind the scenes, giving others the credit, the Stimson Center with Michael Krepon in the lead has made huge contributions to this prospect. While there has been backsliding—as a result of Vladimir Putin's efforts to mask Russia's conventional weakness by stressing its nuclear arsenal in statements, doctrine, and exercises, as well as because of the Trump administration's withdrawal from certain agreements—the most important elements still exist: The Non-Proliferation Treaty (with only four nations outstanding), the test moratorium, and the limits on U.S. and Russian nuclear arsenals contained in the New START Treaty. Only time will tell if they can be sustained, but the foundation exists thanks in part to Stimson and Michael Krepon. Michael continues to labor to reduce nuclear dangers, with a new comprehensive history of nuclear arms control and its future to be published by Stanford University Press in the fall of 2021.

In its now more than 30-year history, the Stimson Center has greatly broadened its agenda — nuclear issues play only a small part in its work. But regardless of subject, the keys to our success remain. Give people meaningful work on important issues, figure out which stakeholders need to be involved in their solution, devise a strategy to make that happen — taking account of not only the substance of the issue, but its politics and the needs of key participants. This is the formula for Michael's and Stimson's success.

Dr. Barry M. Blechman is co-founder and a Distinguished Fellow of the Stimson Center. He served as chairman of Stimson's board from 1989 to 2007 and returned to the board in 2014. Dr. Blechman also founded DFI International Inc., a research consultancy, in 1984, and served as its CEO until the company's sale in 2007. Dr. Blechman has more than fifty years of distinguished service in national security in both the public and private sectors. He has worked in the Departments of State and Defense, and at the Office of Management and Budget, and served as assistant director of the U.S. Arms Control and Disarmament Agency.

A Relationship for Which I Have No Name

Manpreet Sethi

Michael Krepon has not been a colleague — I never had the opportunity to work with him; he cannot be called an associate — I never had the chance of a long enough association with him; I cannot call him a mentor either. In fact, all that I have had with him are no more than half a dozen personal encounters, and, perhaps, a dozen email exchanges over the last ten years. And yet, I do call him a friend, a *guru* of sorts through his writings, and there is a connect.

This connection surfaces in similarities of our thoughts on issues such as nuclear risk reduction, arms control, deterrence requirements, and space security. Michael Krepon, of course, given his understanding of history, is an insightful authority on these, and a prolific writer. I find the essence of his thoughts often echoing with my own sense of the subject.

In fact, I remember an interaction at the Stimson Center in 2017 when I presented him with a copy of my then recently published book on the *Code of Conduct for Outer Space*. I knew this was a subject close to his heart. Encouragingly taking the book from my hands, he chuckled, “You and I seem to be the only two people in the world writing on this and putting our faith into the concept!” This is what I have learned from him — an unflagging desire to keep on contributing ideas to policy debates even when there seems to be little receptivity to them, by retaining a faith that they will reach fruition when the time is right.

Michael Krepon is well known in South Asia for his deep engagement with the region. He moved to studying this region after a long period of authoritative

Manpreet Sethi

academic and policy association with U.S.-USSR arms control during the Cold War. After the breakup of the Soviet Union, he brought his “toolbox of CSBMs (confidence and security-building measures)” to India-Pakistan. In this context, he has made myriad contributions through his writings. But even more importantly, he founded the Stimson Center in Washington that came to extend a platform to South Asian scholars to converge for exchange of views and perspectives.

Interestingly, my first introduction to his name and the Center happened in 1999 when I was a young researcher at the Institute for Defence Studies and Analyses (IDSA), the only think tank in India at the time. Its then Director, Air Commodore Jasjit Singh (Retd), asked me whether I would like to take a fellowship at the Stimson Center since his friend, Michael, was looking for Indian scholars. Excited as I was at the thought, I nevertheless had to decline owing to other personal commitments. But during my journey as a strategic analyst I have met many Indian scholars who talk fondly of the gainful time they spent there.

My next close encounter with Michael’s writings came about in the mid-2000s. This was the period when the Indo-U.S. nuclear deal was being passionately debated in both countries. Michael was putting the weight of his arguments on nonproliferation against such a deal. He was opposed to the idea of a “concession” being made to India without getting New Delhi to join the Nuclear Non-Proliferation Treaty (NPT) and Comprehensive Nuclear-Test-Ban Treaty (CTBT). He was widely seen in India as a nonproliferation hardliner. I was obviously on the other side of the camp and remember buttressing the case for India’s accommodation into the nonproliferation regime by my own set of arguments. Michael could not have known of my existence then, but by his writings he had introduced himself to me.

With the thought ingrained in my mind that Michael was not in favor of India, a belief that was common across the Indian strategic community, I was pleasantly surprised when I read some of his writings on nuclear deterrence and reducing nuclear dangers to discover that some of our thoughts were so similar. We were both seeking international security, but from different perches of national interest.

Michael Krepon’s academic
and scholarly journey is
testimony to the fact that
intellectually honest writing finds
its resonance across distances.

I finally put a face to the writings when I met Michael at a conference in Beijing in 2012. While we “sparred” in the Q&A of the session on the issue of India’s membership in the CTBT, I had the enjoyable experience of sharing the lunch table with him thereafter. We spoke about many things, including his idea of norm building in outer space. Coincidentally, this was a subject that I too was then engaged in studying from

India's perspective. This fructified into a book that I presented him with some years later.

Some months thereafter, I took the liberty of sending him some of my writings. It was a shot in the dark, since I did not expect him to remember our Beijing interaction. But, to my surprise, he responded, and with comments on my articles! Since then, I have continued to share many of my writings with him and heard back thoughtful and often encouraging responses.

In 2017, Michael included me in a list of scholars whom he invited to write for the "Off Ramps from Confrontation in Southern Asia" initiative. It was a fascinating concept with the objective of finding ways of slowing the nuclear treadmill that India and Pakistan were working on, in an effort to reduce nuclear dangers. In the course of writing my piece for this publication, I exchanged a few iterations of the paper with Michael. I remember being struck by his perseverance to carefully read through each one of the drafts and offer many considerate and thought-provoking suggestions.

Michael Krepon's academic and scholarly journey is testimony to the fact that intellectually honest writing finds its resonance across distances. It builds connects even across disparate positions. I might not know Michael enough, but his writings provide me with an insight into the person that he is — sensitive and caring towards the well-being of the world, passionate about learning and teaching as is evident from his numerous protégés, welcoming of contrarian thoughts and ideas, and truly keen to generate debate.

I hope I will imbibe some of these qualities from a relationship for which I cannot really find a name.

Dr. Manpreet Sethi is a Distinguished Fellow at the Centre for Air Power Studies, New Delhi, where she heads its program on nuclear security. She is the recipient of the K Subrahmanyam Award in 2014 and Commendation by Chief of Air Staff in 2020. Since receiving her doctorate in 1997, she has worked on nuclear issues ranging from energy, strategy, and arms control to disarmament. She is author/co-author/editor of eight books and over 100 papers. She lectures regularly at the National Defence College and other establishments of the Indian Armed Forces, police, foreign services, and universities. Sethi is a regular at nuclear policy conferences, Track II initiatives, and the UN. She was Member, Prime Minister's Informal Group on Disarmament in 2012, and on the Executive Board of the Indian Pugwash Society. She is currently on the Board of Directors of the Asia Pacific Leadership Network and Consultant with the Nuclear Abolition Forum.

Contributions to Arms Control in South Asia

Feroz Hassan Khan

Michael Krepon's retirement marks the beginning of the end of an era that has featured American scholars on South Asia assiduously attempting to transform their Cold War experience and knowledge to India and Pakistan.¹ Few scholars on South Asia are as passionate in pleading the dangers of nuclear competition as is Michael. He dedicated three decades to traveling, researching, and burning the midnight oil in exploring avenues for peace, security, and détente between India and Pakistan. Under his leadership, the Stimson Center became the cradle for out-of-the-box thinking on strategic affairs, arms control, and confidence-building measures (CBMs). I am fortunate of my association with him both during my military service in Pakistan and my transition to academic life in the United States.

What probably drew Michael to South Asia was the series of military CBMs that India and Pakistan signed between 1988 and 1992 when the Cold War was winding down and nuclear capabilities were spreading in conflict-prone regions all over the world.² In the mid-1990s, when a plethora of arms control negotiations took the center stage under the aegis of the UN, Michael was curious to learn how policymakers in India and Pakistan understood the challenges of the nuclear age, the nuances of

1 The passing away of Professor Stephen P. Cohen in 2019 and the retirement of Michael Krepon marks the end of a generation of American scholars who had Cold War experience and had remained engaged with India and Pakistan. Several scholars on South Asia of the same era have either retired or fatigued with South Asia after experiencing the irredeemable nature of India and Pakistan rivalry. In general, Indians and Pakistani scholars reject application of Cold War logic to the South Asian environment and resist sustaining a peace process. However, a new generation of American scholars on South Asia are emerging that will carry forward the baton.

2 Important CBMs included non-attack on nuclear installations (1988), prevention of airspace violations (1991), advance notification of military exercises (1991), and complete prohibition on chemical weapons (1997). See South Asia Confidence-Building Measures (CBM) Timeline, <https://www.stimson.org/2017/south-asia-confidence-building-measures-cbm-timeline/>.

Cold War literature, and how best those concepts applied in a tightly coupled region with a history of entrenched rivalry and active conflict. At the time I was serving in a newly established “special cell” in the Combat Development Directorate in General Headquarters (GHQ), which would later become the directorate in Pakistan’s Strategic Plans Division (SPD). Those were the covert days of the Pakistani nuclear program, and little was publicly known about the institutional nexus between the military and foreign ministry that was managing this new paradigm in international affairs. Michael probably learned from Stephen Cohen, who had interviewed me in his visit to Islamabad and subsequently wrote the following in the revised edition of his book *The Pakistan Army*:

The establishment of an arms control cell in GHQ (with one officer attached to the MFA), is an indication that the army is aware of the need both to participate in such decisions and inform them with military expertise. This is a welcome development: if the army can be persuaded that negotiations or even unilateral actions do not weaken Pakistan’s immediate position in terms of hard security considerations, there may be fresh thinking. Senior officers are interested in the way in which agreements between adversaries have been monitored in recent years, and are curious to learn about verification mechanisms, which would lessen the risk of both surprise and embarrassment should India fail to stick to the terms of a security agreement.³

At the time, scholars from all over the world would flock to Islamabad, speak in seminars and conferences to exchange views on Cold War experiences, and engage in discussions on the nuances of international negotiations on weapons of mass destruction (WMD), including nuclear test ban, fissile material treaty, missile controls, and chemical and biological weapons. Michael was a leading scholar who stood out with his visible passion for peace between India and Pakistan. In particular, he was keen on the outcome of the Gujral-Sharif initiative of composite dialogue between India and Pakistan, which in 1997–98 sparked new hope for peace and security in the region. An ardent promoter of nuclear risk reduction centers, he (and Barry Blechman) staunchly believed that the Cold War model of an “autonomous institutional arrangement for reducing risks to nuclear war” could well be emulated in South Asia.⁴

After the 1998 nuclear tests, the Clinton administration — concerned about the nuclear future of the region — initiated separate strategic dialogues with India and Pakistan to establish a minimum deterrence posture in the region. In those strategic dialogues, Pakistan had presented a non-paper that introduced a new concept of

3 Stephen P. Cohen, *The Pakistan Army* (New York: Oxford University Press, 1998 ed.), 175–176.

4 Barry Blechman and Michael Krepon, *Nuclear Risk Reduction Centers* (Washington, DC: Georgetown Center for Strategic Studies, 1986), 9.

“strategic restraint regime.”⁵ Michael was pleasantly surprised at the originality of and positive professional response to the American proposal, but he was skeptical whether Pakistan genuinely desired a “strategic restraint” arrangement or was it merely another “look good” proposal designed to put India under pressure. He argued that Pakistan knew well that India would reject it, citing other (China) concerns.⁶ Many years later, on Michael’s insistence, I wrote a revised strategic restraint proposal, which not only redresses the failure of the previous proposal but suggests a new set of principles, including strategic CBMs.⁷

Michael spearheaded a series of Track II dialogues involving serious discussions on nuclear doctrines, crisis management, escalation control, and arms race stabilities

Michael passionately introduced the insights of Cold War literature to South Asian scholars and policymakers. He frequently visited Islamabad and exchanged frank ideas with the Director General, Strategic Plans Division, and officers. Michael spearheaded a series of Track II dialogues involving serious discussions on nuclear doctrines, crisis management, escalation control, and arms race stabilities. I recall one such event in spring 2004 at Blenheim Palace — the birthplace of Sir Winston Churchill. Michael gathered former senior Indian and Pakistani officials to debate whether the Clausewitz dictum — that war is an extension of politics by other means — still applies to a nuclearized South Asia. Or does Bernard Brodie’s conclusion that nuclear-armed adversaries must avoid war apply to the region? In 1946, Brodie had famously observed that “the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them.”

For almost two decades, Michael compelled regional intellectuals and policymakers to sense the tension between Clausewitz and Brodie, underscoring the challenges of maintaining stable deterrence. After each major crisis since Kargil (1999), Michael hoped India and Pakistan had turned a corner. Now close to his retirement, progress on nuclear stabilization seems elusive; at best there is hope that India and Pakistan won’t backslide from the restraint both sides have demonstrated in limiting the crises in the past two decades.

5 The Strategic Restraint Regime proposal was officially presented as a non-paper to the U.S and India in 1998 when Deputy Secretary of State Strobe Talbott led the negotiations on deterrence posture for the region. To date, SRR remains a formal instrument of Pakistani diplomacy.

6 In the 1970s and 1980s, Pakistan proposed several regional-based treaty proposals such as “regional NPT,” “regional test ban,” mutual regional inspections of nuclear facilities, etc. India rejected all regional-based proposals, which allowed Pakistan to parry nonproliferation pressures.

7 Feroz Hassan Khan, “Strategic Restraint Regime 2.0,” in Michael Krepon and Julia Thompson, eds., *Deterrence Stability and Escalation Control in South Asia* (Washington, DC: Henry Stimson Center, 2014), 161–174.

Michael was never convinced that offsetting nuclear capability was stabilizing, and for him the “myth of deterrence stability” between nuclear-armed neighbors was a dangerous assumption. In his view, “deterrence stability can be secured most readily when states have no reason to fight,” and he was convinced that “just as deterrence stability eluded the nuclear superpowers, it will be similarly elusive in the Subcontinent.”⁸ Krepon’s pessimism has been at severe odds with the optimistic faith in nuclear deterrence and almost mythical belief in Pakistan in nuclear weapons as *sine qua non* for national survival. As late as February 2020, in a keynote speech Lt. Gen (retd.) Khalid Kidwai, former Director General, Strategic Plans Division, said the following, underscoring the contrasting visions: “On a daily and hourly basis, [nuclear weapons compel] India’s political and military leaders to craft a politico-military strategy, taking into consider Pakistan’s real time nuclear capability . . . Official India, I hope, does not take Pakistan’s nuclear capability as a bluff.”⁹

Over decades, Michael developed a wide base of acquaintances and friends in the government, military, think tanks, university, and strategic scholars community in South Asia. He is admired in the region, but he could never be popular in the officialdom or with policymakers. Michael seldom sugarcoats; his message is straightforward, and his sincerity lies in a polite but blunt expression. He minces no words in blaming both India and Pakistan for the sufferings of Kashmir. He would openly express empathy with the Kashmiris on their brutal handling of Indian security forces and equally censure Pakistan for abetting the insurgency. His advocacy to eschew arms racing and reaching *modus vivendi* with India is often viewed in Pakistan as sympathetic towards India. The irony is that Michael’s frank wisdom makes him equally viewed in India (and by some Americans) as a Pakistani sympathizer when he advises India to take stability-enhancing measures with Pakistan.

His colleagues, protégées, and legion of students from India and Pakistan may well be familiar with the famous Kreponian smile in response to illogical arguments or emotional outbursts of disagreement common in South Asia. Michael is a true believer in scholarly integrity. For those in the business of writing and speaking on sensitive political and security issues, he might typically allude to Stanley Ferrard’s famous phrase, “You are not responsible for what people think about you. But you are responsible for what you give them to think about you.” Michael is retiring but has given much for generations in South Asia to think about.

8 See Michael Krepon, “Introduction” and “The Myth of Deterrence Stability Between Nuclear-Armed Rivals,” in Michael Krepon, Joshua T. White, Julia Thompson, and Shane Mason, eds., *Deterrence Instability & Nuclear Weapons in South Asia* (Washington, DC: The Stimson Center, 2015), 11, 15.

9 Keynote Address of Lt Gen (retd.) Khalid Kidwai, Advisor National Command Authority and former Director- General Strategic Plans Division, on “Workshop on South Asian Strategic Stability: Deterrence, Nuclear Weapons and Arms Control” at the Institute of Strategic Studies, London, February 6, 2020, <https://www.iiss.org/events/2020/02/7th-iiss-and-ciss-south-asian-strategic-stability-workshop>.

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Applying Methodology to My Madness

Abhijit Iyer-Mitra

Michael was always viewed with suspicion by the Indian establishment, much more so by the nuclear establishment. This of course isn't very difficult to imagine given that anyone in India who says anything negative about the nuclear establishment — be it pointing out the hypocrisies, the (many) failed deadlines, the over-promising, the lack of carefully thought out policy — is viewed as either a Pakistani stooge or a less than loyal citizen. That, however, had never been my experience with Michael. To every well-rehearsed talking point I'd throw at him, he'd come back not simply with a response, but with a careful, deeply thought out breakdown of the facts. The moment when you'd understood that the depth of his exploration of the subject had been far deeper than yours, you'd grin sheepishly and wish you could crawl into a hole and hide. There was never that triumphalism of a won argument, but instead the benevolence of a guru who has taught you something valuable. As then Cardinal Ratzinger (later Pope Benedict XVI) would say, "The job of a philosopher is to ask questions that can't be answered, and the role of a theologian is to give answers that can't be questioned." Here, Michael was definitely the theologian.

As much as I jostled with him on his trips to Delhi and mine to DC, I really got to know him during my fellowship at Stimson in summer 2014. The idea of the fellowship was to place one Indian researcher with a Pakistani researcher in the hope of building bridges and greater understanding of where the other side was coming from. It was something Michael had conceived of, and it was typically him. I fully expected airy fairy paeans on love, brotherhood, and the like, given the joke in South Asian circles is that "the real conversation between the Indian and Pakistani begins when the white man leaves the room." That, as it turned out, was not at all the case. Michael

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position became plain and clear.

had a finely tuned “bullshit meter” without the need to state it publicly or embarrass anybody. He didn't call out fabrications; instead he grilled people with questions in a very nonconfrontational way, such that the contradictions of their position became plain and clear. That was his method of dealing with conversations that assumed Americans simply wouldn't understand or fall for a “sob story” being peddled.

That was the very first lesson he taught me — that aggression isn't research and winning an argument isn't perspicacity. Far from it. He taught me the value of constant questioning in order that one may better understand the contradictions of the interviewee without ever alerting the victim, who would invariably walk away thinking he'd/she'd pulled the wool over Michael's eyes. Once I slowly began socializing myself into this mode of inquiry, I realized the extraordinary amount of research that was required to get there and remained flummoxed as to how he had such a finely tuned sense of pickup on lies by either the Indian or Pakistani government. As it turned out, it was pure methodology.

He showed me his research over the years, how every single op-ed that appeared in a Pakistani newspaper would be vetted for similar themes. As it turned out, that very week, three former Pakistani ambassadors to the United States had written op-eds on India's nuclear no-first-use policy. He taught me to compare these three, how to pare each essay down to the bare essentials and compare what was similar and what was different in each. Remarkably, patterns emerged that had before eluded me. There was a core message that was common to all three op-eds, and he interpreted this to be the signaling that the Pakistani establishment wanted to send out. The rest, he correctly adduced, were improvisations by the ambassadors themselves that could be safely discarded for now, but stored for later use. Depending on whose argument got picked up as the definitive one by the Pakistani establishment, one could triangulate the messy power equations within their nuclear hierarchy. Needless to say, the intelligence value of this was enormous, and I'd never seen this kind of systematic and methodology-driven approach to dissecting Pakistan.

Over the following weeks, with his able colleague Julia Thompson's help, I was exposed to a whole database, meticulously collated over years, of official statements, how often they were echoed and by whom in newspapers, of the slightest of nuances

during interviews and Track II events, which for most South Asians are just business class junkets to exotic locations. This was no frivolous shop talk — this was a serious and systematic treasure trove of data that acted as an early warning system for policymakers to perceive imminent changes in postures, force levels, and changing priorities. For me, that entire summer in DC was the most serendipitous of my whole life. Instead of groaning over “oh god, not one more banal nuclear statement,” I started looking forward to playing detective to every single statement or op-ed that came from across the border, and needless to say it enriched my entire approach to sustained methodology and building a time series dataset.

As I discovered, Michael wasn't a nuclear “bore” at all. He had a great, wry sense of humor, something I got the full force of when I visited his charming forest cabin tucked away in the middle of rural Virginia. Alas, the other lesson he tried to teach me — to avoid being harsh, to underplay my conclusions, and to moderate my aggression — I've still not become mature enough to imbibe. But hey, he succeeded in making me a better researcher, even if he failed quite miserably in his other three efforts.

As Michael retires, I'd just like him to know that he was the finest teacher, friend, and mentor I had, who taught me in three months what I hadn't learned in 13 years prior. Thank you, Michael; you taught me not only how to read a situation, but also what real mentorship looks like.

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“What Next?”: The Expert, Community-Builder, and Visionary

Victoria K. Holt

Michael Krepon’s contribution to preventing nuclear conflict is immense and legendary. So too are his contributions to offering a vision, building community, and inspiring others to join the effort to prevent conflicts. I know because I have experienced and seen his impact for more than 30 years. And my hunch is that there are hundreds of people like me who are deeply affected by all he has offered.

I met Michael Krepon before he founded the Stimson Center, wrote dozens of books, and became a colleague, mentor, and friend. In the beginning, he definitely didn’t know me.

My first memory of Michael is one of awe. He was a senior associate with the prestigious Carnegie Endowment for International Peace and an expert on nuclear arms control. In 1985, I wanted to work on nuclear weapons issues. As a recent college graduate who had studied deterrence and led student antinuclear activities, I had driven with all my belongings to Washington, DC, after working on the nuclear freeze campaign in Oregon and for a conservative, antiwar organization in Chicago. At 23, I dressed up for my internship at the Arms Control Association (ACA), ready to talk about ICBMs and nuclear treaties, first strike policies, and Soviet intentions. My real job was to answer the phone, send out factsheets, and do research. When we were lucky, we got to take extra seats at the Carnegie luncheons and listen to experts — including Michael Krepon. I was very impressed by what he said and could not understand how he knew so much about how to fix the most critical issues facing our world. His was a leading voice of sanity and insight.

I soon saw his human side too. ACA was part of the larger Carnegie Endowment community, including its softball team, which was primarily populated by the younger staff and interns. I was the horrible pitcher for our team, which rarely won. Unlike many other senior associates, Michael would come out to games on the National Mall and play ball — one time, wearing purple corduroy pants, and got on base. The interns were impressed. Brilliant *and* fun.

Michael was still intimidating, of course, even when he led a brown-bag lunch to give us all career advice and encourage our interest in nuclear security issues and preventing conflict. “Work on the Hill,” he advised, “at some point.” We wrote it down, earnestly. I was mystified, however, as though we were told the equivalent of “learn to fly a plane” or “try your hand at climbing glaciers.” That seemed like a great idea, but with no imaginable pathway to get there.

Yet two years later, I landed a job as a Hill staffer, working for a new member of Congress on the House Armed Services Committee. By 1987, national debates over nuclear weapons and arms control were heated between Congress and the administration. Michael had helped me imagine a job I would come to love. I have no doubt others were equally encouraged.

As a congressional staffer, I saw the role Michael Krepon played as an expert and advisor.¹ Always a prolific writer and analyst, he was highly sought as an advisor and commentator, appearing in press conferences and testifying before Congress.² We were in the thick of serious deliberations over the ABM Treaty and the Strategic Defense Initiative, WMD proliferation, chemical weapons, procurement of B-2 bombers, MIRVs and depressed trajectory missiles, ASAT technologies, the CTBT, and, of course, the U.S. relationship with the Soviet Union and nuclear weapons agreements. Billions of dollars were at stake, as were changing strategic dynamics and nuclear arms control negotiations. Congressional decisions affected how much money and support the Reagan administration, then Bush administration, had for these weapons systems and policies.

Staff would meet with the national organizations supporting nuclear arms control in the late 1980s and early 1990s to develop ideas and strategies. For those of us working inside Congress, think tanks, and NGOs, there was also a deep sense of purpose and community. The issues were weighty and critical for our nation; there was real fear of an accidental escalation to a nuclear exchange. Michael helped

1 Michael Krepon, “U.S.-Soviet Union Relations and Arms Control,” Testimony Before the House Foreign Affairs Arms Control, International Security and Science Subcommittee, June 4, 1991, <https://www.c-span.org/video/?18240-1/us-soviet-union-relations-arms-control>.

2 To appreciate Michael's expert commentary and testimony to Congress, see C-SPAN's collection of greatest hits from 1986 through the current day, covering his work on nuclear issues and arms control, India and Pakistan, the United Nations, and extremist movements, among other topics: <https://www.c-span.org/person/?michaelkrepon>.

convene the experts and NGOs, building a community, even though he wasn't in agreement with the more grassroots or progressive ideals. He would argue with folks, posit ideas, and press for the "what next" discussion. Some activists would press for positions that Michael did not endorse. He endured criticism as he helped organize the meetings and bring ideas forward, building a community of those deeply engaged — from many perspectives — in addressing prevention of nuclear war. Each year, a conference was held in West Virginia at the Coolfont Resort, where experts and advocates, Hill staff, and NGO leaders would meet to set strategy and play ping-pong. There I saw Michael in action, where he was a major presence, even when he did *not* attend.

He would argue with folks,
posit ideas, and press for
the "what next" discussion.

Only later did I realize what a powerful skill it is to convene and create dialogue in a community. Rather than be apart from the civil society and activist organizations, rather than only address elite policymakers, he joined them all. Michael talked with a range of people and organizations, argued with them, and took ideas seriously. He helped frame the debate and be part of a community. He believed in ideas and in people. Michael built things.

That community grew alongside Stimson's founding in 1989 and the prominent role that the Center increasingly played in the major peace and security issues of the day. Under Michael's leadership with Stimson co-founder and Board Chair Barry Blechman, Stimson embraced the issues facing a post-Cold War world as conventional conflicts bloomed. Stimson developed leading papers and analysis on peacekeeping missions, regional forces, UN reform, U.S. foreign policy, and modern options for addressing conflict.

By the mid-1990s, I left Capitol Hill to run a project on peacekeeping issues, and once again, encountered Michael's vision and leadership in this field. I remember my first meeting on peacekeeping at the Stimson Center, and walking through the doors off Dupont Circle to find many of the best minds around the table. While I was working with a small NGO, I was invited to the experts' table — part of Stimson's inclusivity. Michael helped hire and support a community of analysts and policy experts who shaped that dialogue for decades to come, making Stimson a well-known name at the United Nations and in peacekeeping missions worldwide.³

3 Michael Krepon and Nathan Cohn, eds., *Crises in South Asia: Trends and Potential Consequences* (Washington, DC: The Stimson Center, 2011); Michael Krepon, Barry Blechman, and Andrew J. Goodpaster, eds., *An American Legacy: Building a Nuclear-Weapon-Free World* (Washington, DC: The Stimson Center, 1997); Michael Krepon, Barry Blechman, and J. Matthew Vaccaro, eds., *Equipped for the Future: Managing U.S. Foreign Affairs in the 21st Century* (Washington, DC: The Stimson Center, 1998); etc.

By 2001, after working in the Clinton administration's State Department, I was looking for a place to launch new work on UN reform and peace operations on a bipartisan basis. Thanks to Lorelei Kelly introducing me to Stimson's new team, I found a home to work with the legendary Stimson senior associate William Durch. Michael had just stepped down as the president, remaining engaged in the life of the Center and its work. For the first time, I got to know him as a colleague, and he took an interest in our efforts to address the post-9/11 issues, including interventions in Afghanistan and Iraq, the need to reform and modernize UN missions, post-conflict stabilization, and preventing genocide and atrocities. Michael always stopped by the door to talk about issues, ask how our projects were doing, and offer ideas to support good analysis and policy options. He was traveling constantly, back from South Asia or a conference, and encouraged me to think beyond work on U.S. policy to understanding regional and multilateral dynamics. By the end of my time at Stimson, I had traveled to multiple UN missions, visited conflict zones in Africa, and understood how valuable that field perspective was from Darfur to Kinshasa.

I carried that view back to government, prioritizing my staff getting out to see the UN missions they covered for the State Department after I joined the Obama administration as a Deputy Secretary of State in 2009. Dealing with issues on the Security Council, I continued to benefit from Michael's insights and engagement during conversations over lunch, and was grateful for his smart professional advice. His mentorship was invaluable. He took the time to ask about my personal life as well, keenly aware of the balancing act with family, and kindly asking after my health when I had to get a new hip. Michael gave me insights on various strategic issues, including whether we should press for the UN Security Council to hold a session on the Comprehensive Test Ban Treaty. He said yes, and we did.

After leaving the State Department in 2017, I came back to Stimson — in great part thanks to Michael's persistent encouragement — and his vision, ideas, and sense of community. (I think he was still going to softball games.) He reminded me that ideas matter, that actions have impact, and that writing and speaking can shape debates far beyond our immediate sight lines. The values he espouses, his inspiration to ask big and tough questions, and his confidence that we can tackle those questions is inspiring to me. Those qualities are deeply embedded in Stimson's culture and approach as well.

What do you think, what more can we do, and how can that move forward? Those questions, now for nearly 35 years, are a gift Michael has given me and many others. Let me suggest, for all of us who have enjoyed his leadership and friendship, that he has built an awe-inspiring approach and helped prevent nuclear conflict on our lifetime.

Thank you, Michael Krepon, you have built a deep and inspired community and changed the world. What next?

Victoria K. Holt is a Distinguished Fellow at the Stimson Center and the Norman E. McCulloch Jr. Director of the John Sloan Dickey Center for International Understanding at Dartmouth College. Her areas of expertise focus on issues relating to international security and multilateral tools, including peace operations and conflict prevention, the United Nations and the U.N. Security Council, protection of civilians, crisis regions, and U.S. policymaking. Prior to joining Stimson, Holt was the Deputy Assistant Secretary of State for International Security in the Bureau of International Organization Affairs at the U.S. Department of State, serving from 2009 to early 2017. In that role, she was responsible for U.S. policy and guidance for U.S. actions in the UN Security Council and for its mechanisms. She oversaw the Office of Peace Operations, Sanctions and Counter-terrorism, and the Office of United Nations Political Affairs. She led the development of U.S. diplomatic initiatives, including the 2015 Leaders' Summit on U.N. Peacekeeping, hosted by President Obama to increase capacities for UN operations.

Pioneering Scholarship from the First to the Second Nuclear Age

Vipin Narang

It is hard to overstate the impact Michael Krepon has had on a whole generation of nuclear scholars — particularly those, like me, who came of age with India and Pakistan’s 1998 nuclear tests and the birth of a delicate nuclear subsystem in Southern Asia that few in the United States were equipped to understand, let alone manage. When I was a graduate student writing my dissertation on the nuclear strategy of regional powers, including and especially India and Pakistan, Michael impacted me — and those of my generation — in two crucial ways: through his scholarship and through his mentorship.

The latter is obvious to anyone who sees Michael’s lineage and scholarly/analytical “family tree” at Stimson. No student of India and Pakistan’s nuclear weapons has been untouched by Michael and the Stimson Center. The door was always open to present our work, pick Michael’s brain and his Rolodex. For lowly graduate students, Michael was the model of a senior mentor who nurtured all scholars — both from the West but perhaps equally, if not more, importantly, from India and Pakistan itself. The number of scholars who owe their start to, and have immensely benefited from, Michael’s mentorship is a legacy that would be hard to match in the South Asia nuclear field. I do not think I could ever pay Michael back for his generosity and warmth, so I — and others — can only hope to pay it forward.

I wanted to spend some time discussing the impact Michael’s scholarship has had on the study of nuclear weapons, and South Asia specifically. Just as the legacy of his mentorship will endure for generations, so will his scholarship. Many academics like

me were trained, almost with Pavlovian response, to view South Asia and its nuclear dynamics and evolution through the same lens we analyzed other nuclear dyads — notably the Cold War American and Soviet competition — and through “structural” variables that privileged the stability provided by nuclear weapons. Michael’s scholarship beat some of these bad habits out of us, brilliantly surfacing three key crucial points that we must never forget in the study of nuclear weapons, and especially in South Asia.

First, the Cold War nuclear balance was not as stable — and not nearly as automatic — as we depict it or like to think it was. The United States and the Soviet Union engaged in a lot of bad habits and dicey propositions — as Michael reminds us in his book on the lure and pitfall of MIRVs during the Cold War and as applied to regional powers. Cold War nuclear postures were sometimes quite literally insanely destabilizing. What spared the world nuclear war is something Michael has spent his life’s work on — and perhaps his greatest academic and policy legacy: confidence-building measures. His must-read forthcoming book on the history of Cold War arms control is the culmination of his life’s work on the importance of confidence-building measures. You cannot get to verifiable and meaningful arms control without confidence-building measures, and you cannot get anything resembling strategic stability without these ingredients. If you were to ask me to identify the most important and heroic contribution Michael has made to the study of nuclear relationships and dynamics, it is that nothing worked, or can work, without confidence-building measures. He brings the politics into nuclear politics. Nothing is automatic — least of all notions of “strategic stability” — or can be taken for granted between nuclear powers: they have to work for it.

Second, although it appears obvious now to all those who study India and Pakistan, Michael was the leading voice in the West to implore scholars and analysts not to view India and Pakistan through our (flawed) Cold War lenses. Of course, there are the crucial structural differences — proximity shortening missile flight times to mere minutes or seconds, cash-strapped nations without the ability to erect all the guardrails that inhibited accidental or inadvertent nuclear use, and so forth. But the historian in Michael implored us not to lose sight of the historical, cultural, and emotional differences between the Cold War superpowers and India and Pakistan, which had to that point fought three major conventional wars and were locked in an enduring rivalry despite shared cultural heritage, colonial legacy, and the wounds of partition. If I were to distill Michael’s key contribution to the study of South Asia’s nuclear dynamics, it is that escalation risks are not merely a function of geography and structure but of history and emotion as well. This key insight is threaded through all of Michael’s voluminous scholarship on South Asia’s nuclear dynamics. The sterility of the nuclear balance and nuclear escalation risks gets quickly complicated when the masala of shared violent history and emotional scars of partition are thrown in the

If I were to distill Michael's key contribution to the study of South Asia's nuclear dynamics, it is that escalation risks are not merely a function of geography and structure but of history and emotion as well.

mix. This simply reinforced his conviction that South Asia was headed for disaster — you cannot keep rolling the nuclear dice in South Asia without it, at some point, coming up snake eyes — absent active and sustained confidence-building measures. No scholar has done more to convincingly argue and show this than Michael.

The third major contribution Michael has made to especially the study of South Asian nuclear dynamics is that he was one of the pioneers of seeking “original data” — largely through participant interviews — in our study of South Asia. What do the participants in the crises *themselves* think happened and why? In doing so, Michael was implicitly imploring us to do two things. First, leaders and participants — and their perceptions — matter and are what drive crisis behavior. Where many analysts seek complexity and simple “structural” answers, Michael sought organized and systematic complexity. Second, seeking sources from and original interviews with participants from the region and in the crises validated their perceptions and avoided essentializing Indians and Pakistanis. For me, the *Twin Peaks* report with Polly Nayak is a model of how to study crises between India and Pakistan, laden with rich interviews and sources from the region itself, not from Washington, DC. Only by understanding why Indian and Pakistani leaders acted the way they did, the perceptions and fears or overconfidence they may have had, can scholars and policymakers understand why and how the crisis unfolded — and how to potentially manage inevitable future crises.

In short, Michael is irreplaceable. Both as a mentor and a scholar, he is in rarefied company. Not only will all of us who were touched by his warmth and generosity miss him, the world will be poorer for not having more of his sharp research and scholarship. He leaves a long and wide legacy, however, and we as scholars have an obligation to pay it forward — to foster and encourage the next generation, and to remember that nuclear “stability” is not automatic, it takes work. It is up to us to work for it, as Michael has done his entire life.

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On Mentorship

Julia A. Thompson

When asked to write a piece about Michael, I knew the topic immediately: mentorship. Michael has proven himself an enthusiastic, dedicated, and effective mentor to countless early-career individuals. Within Stimson — and in particular for the South Asia program — he has fostered a culture that develops and launches the next generation of analysts. In the broader South Asia research community, he has equally supported and valued the contributions of early to mid-career analysts. In fact, he has made it a core focus of his professional work.

In late 2012 or early 2013, Michael and I began to discuss his idea for a new initiative that would focus on the next generation of strategic analysts and academics in South Asia. He described a multipronged effort. First, a website that would feature analysis from rising analysts in the region. Second, an associated visiting fellowship — inviting some of these top analysts for a visiting fellowship at Stimson. Third, a series of workshops with emerging analysts. And finally, the development of educational materials — a concept that would eventually evolve into two massive open online courses. Having been Michael’s research associate (RA) for only a few months (and only a year out from graduate school), I was unsure of my role at first. Seeking either to terrify me, or to assure me that his RAs always have something interesting to keep them busy, Michael informed me that I would co-lead the effort with him.

We considered a few names for the initiative. One idea Michael liked was called “Generation Why?” — to call to mind the idea of debate or asking hard questions. Eventually, we decided on “South Asian Voices.” The website launched in September 2013 and as of August 2021, has published over 1,700 articles from over 330 contributors.

"I view this position as a launching pad. I want you to work hard, and then leave to do something even better."

We welcomed the first cohort of SAV Visiting Fellows to Stimson in July 2014 and the second in March 2015. Michael was committed to their success. He provided professional guidance on their research projects and made introductions to experts and practitioners based in DC. On a more personal note, he welcomed both cohorts to his home outside Charlottesville for lunch and a stroll through the woods.

Throughout the time when I worked for him (2012–2015), Michael continued to meet with and facilitate workshops for emerging analysts of strategic issues in South Asia, both in the region and in Washington. He also co-hosted a workshop in Istanbul with the Carnegie Endowment on "Deterrence Stability in South Asia" for a group of analysts from India and Pakistan. Through all these efforts (and more), Michael offered direct support and mentorship to early and mid-career analysts in the region.

Michael has also been committed to mentoring and developing the next generation of strategic analysts within Stimson. Before writing this piece, I reached out to several former colleagues for their thoughts on Michael. One told me that Michael "always made time to come to speak to the interns." No matter his other commitments, he would give a talk on the history of the Center and make time to offer career advice. In the South Asia program, he encouraged our interns to kick-start their publication record, even co-authoring pieces with them. He also ensured that they attended events at other think tanks to gain exposure to the broader policy and analysis community in DC.

Another former colleague agrees that when an RA works for Michael, he tells them he hopes they can leverage their time at Stimson to move on and up in their careers. It can make for a disconcerting moment during an interview to hear some version of: "I view this position as a launching pad. I want you to work hard, and then leave to do something even better. And I really won't want you to stay more than a few years." (In retrospect, it's a great message for an early-career analyst.)

Michael incorporates early-career staff into the research, analytic, and programmatic aspects of Stimson's work from day one. RAs co-author Stimson publications, and Michael encouraged us to publish op-eds and other articles on our own. Michael has helped guide many South Asia program RAs through independent research projects and encourages them to present their findings at conferences, workshops, and Stimson events. He makes an effort to introduce RAs to the DC South Asia and nuclear policy communities and enables access to smaller roundtable discussions.

The Gift of Meaningful Work

Michael also involved Stimson's early-career analysts in visits to South Asia. RAs helped plan and participated in workshops and meetings with senior officials and other analysts. In 2015, as the program grew in size and work on the MOOC gained speed, Michael proposed that early-career analysts should take the lead on conducting and recording a series of interviews with subject matter experts in Pakistan, India, and the United States. Of Michael's inclusion of RAs in all these activities, a former colleague noted that "after a while, it felt normal," but looking elsewhere, "it really isn't [common]."

Michael's inclusion and development of early-career analysts makes a lasting and positive impact. His goal is not to teach RAs *what* to think. Instead, Michael seeks to teach *how* to think, *how* to ask questions, and *how* to approach hard problems. These skills are essential. Not every RA continues in the field of South Asian studies or nuclear issues, but all will leave with an improved analytical skillset. Perhaps because he invests so much in our professional development, Michael is thrilled for his RAs when they move on to their next position.

In 2015, Michael received a lifetime achievement award from the Carnegie Endowment for International Peace (the Thérèse Delpéch Memorial Award) for his "exceptional creativity, integrity, humanity and amity," for making "major intellectual contributions to critical debates" on nuclear issues, and for mentoring rising talent in the United States, Pakistan, and India. While one might be tempted to slow down after receiving a lifetime achievement award, I doubt Michael is that type. In his 2015 acceptance speech, he spoke of the gift of being able to do "meaningful work." I am confident that he will continue the meaningful work of mentoring, in one capacity or another.

Julia A. Thompson *served as a research associate for the Stimson Center's South Asia and Space Security programs from 2012-2015. While at Stimson, she co-edited two volumes of essays on deterrence stability in South Asia, and one on anti-satellite weapons and deterrence.*

On Retirement

Khalid Kidwai

On quite a few occasions during my 15-year stewardship at the Strategic Plans Division, I had the pleasure of meeting Michael Krepon in my office whenever he visited Pakistan. During some of my visits to Washington, DC, on official assignments, I also had the pleasure of speaking at a number of think tanks. On one such visit I was invited by the Stimson Center, and I recall interactions with some of Washington's luminaries on professional issues.

Michael has a most friendly and pleasant demeanor and is someone with whom one could have a very absorbing exchange of views on topical or current issues with relative ease. We could easily stick to our respective viewpoints and retain with pleasure our country perspectives. We both battled for our respective sides and I think understood each other's take on a variety of issues without probably conceding much.

Needless to say, Michael is intellectually gifted and most knowledgeable on strategic issues. His lifetime achievement of making the Stimson Center a world-class and widely regarded think tank is to be commended. As he retires, I would like to wish him and his family the best in their post-retirement life.

Lt. Gen. (Ret.) Khalid Kidwai *was advisor to Pakistan's National Command Authority and pioneer Director General of Pakistan's Strategic Plans Division, which he headed for an unprecedented 15 years. He is one of the most decorated generals in Pakistan and was awarded the highest civil award, Nishan-i-Imtiaz, as well as Hilal-i-Imtiaz and Hilal-i-Imtiaz (Military).*

Why Nuclear Disarmament Is Even More Urgent Today

Shyam Saran

Michael Krepon has been an outstanding scholar. South Asia and nuclear-related issues have been his areas of special focus. The Stimson Center, which he co-founded in 1989, has been an internationally acclaimed center for promoting studies on a range of international security and nuclear arms control-related issues, with Michael playing the role of a mentor. I was happy to welcome him in India in 2017. He gave a lecture that is still talked about in India's security community. Despite his formal retirement, I am certain that we shall continue to benefit from his wisdom and scholarship in the days to come. This essay is in his honor and on a subject dear to his heart.

Our contemporary world confronts major challenges. We are in the midst of a raging pandemic that has also spawned an economic crisis. Lurking around the corner is an ecological emergency of which climate change is an acute symptom. With each passing day, the ecological crisis grows in scale and intensity. Our oceans are being suffocated with plastic waste. Fresh water resources are diminishing and are increasingly contaminated. The natural fertility of the earth is being eroded through overuse of chemical fertilizers and toxic pesticides. The planet's biodiversity is being lost at an alarming rate. It should come as no surprise, then, that the threat of nuclear annihilation, which preoccupied much of the latter half-century of the previous millennium, has receded into the background. The end of the Cold War in 1990 and the conclusion of significant nuclear arms control measures by the U.S. and Russia, which possess the largest nuclear weapon arsenals, created a sense that the threat of nuclear war had receded. But this is an illusion. Not only has the threat of nuclear war not receded, but it has also become an even more urgent challenge. Let me explain why.

One, the world of an essentially binary East-West nuclear equation has been overtaken by a much more complex, uncertain, and shifting multilateral, multiregional equation, whose dynamics are entirely different. Theories of nuclear deterrence, the assumptions underlying nuclear arms control, and confidence-building measures, which were developed in the context of the East-West binary, still influence our thinking about nuclear issues. That world no longer exists. We have nine declared and undeclared nuclear weapon states and several aspiring ones. This is a far more fluid nuclear landscape, with complex and poorly understood interrelations and interactions among these more numerous nuclear actors.

Two, there is a new and alarming dimension to the nuclear security issue, and that is the link between nuclear weapons and the forces of international terrorism and extremism frequently associated with nonstate actors. If a nonstate actor acquires nuclear weapons, even of a rudimentary design, and threatens a state, would nuclear deterrence have any efficacy in this situation? What if the threat emanates from a location within one's own country or from the territory of a friendly country? India is particularly sensitive to this danger because of well-known developments in its own neighborhood. There have been reports in the recent past of jihadi groups attempting to acquire nuclear weapons. What may deter them?

Three, the international nonproliferation regime based on the NPT has been unraveling for some time. This is partly due to the failure of nuclear weapon states party to the NPT to honor their commitment to undertake nuclear disarmament and partly because several of its non-nuclear weapon states parties have been engaged in clandestine proliferation. These developments are no longer amenable to technical fixes.

Four, one reason why there was a lowering of attention on the nuclear threat was the successful conclusion of the Comprehensive Test Ban Treaty (CTBT) in 1995, though India refused to be a party to it. The CTBT has not come into force, but there has been a de facto moratorium on nuclear testing that has been observed by all countries so far except for North Korea, which has carried out several underground nuclear tests

Taken together, these developments lead us to the inescapable conclusion that the threat of nuclear war and annihilation is much greater than at any time since the dawn of the nuclear age.

in the past five years. This appeared to prevent the further qualitative improvement of nuclear weapon arsenals. However, this is a false sense of security. The CTBT does not prevent subcritical tests that can allow design improvements.

This is what several nuclear weapon states have been engaged in. Subcritical tests simulate aspects of nuclear explosions using chemical explosives. Since only a subcritical amount of plutonium is used,

there is no actual nuclear explosion and therefore, technically speaking, no violation of the CTBT. Another variation of subcritical tests is hydro-dynamic tests also designed to test the health of weapons lying in storage. As available computing power increases by quantum leaps, the efficacy of subcritical tests in the qualitative improvement of nuclear weapons will also increase.

Five, we must also recognize the impact on nuclear weapons and doctrines associated with their use from technological developments taking place in other fields. The CTBT does not impose any limitation on the qualitative improvement of delivery systems, which include land-based missiles and air-launched and submarine-launched systems. The range and accuracy of delivery systems have been improving significantly over the last several years, and this is no longer confined to the U.S. and Russia. China has been catching up fast. We have now reached a point where neither the U.S. nor Russia wishes to engage in serious nuclear arms control without China's participation. China has so far declined to do so.

Lastly, another technological development has further complicated the subject of nuclear arms control and cast doubt on the continued relevance of nuclear deterrence. This is the development and possible deployment of hypersonic weapons. These are delivery vehicles that may be mounted with either nuclear or conventional munitions and can fly at speeds of at least Mach 5. They are also maneuverable weapons whose target may be changed without warning.

Another related class of delivery vehicles is hypersonic cruise missiles, powered by high-speed, air-breathing engines. These weapons will challenge detection and would be extremely difficult to intercept and destroy before they reach their target. Their very short flight time means that the timeline for response may be virtually in minutes. The risk of miscalculation and unintended escalation would be heightened. They could well lead to the adoption of preemptive strike doctrines.

Taken together, these developments lead us to the inescapable conclusion that the threat of nuclear war and annihilation is much greater than at any time since the dawn of the nuclear age. The stakeholders are not only nuclear weapon states but also the large majority of non-nuclear weapon states whose survival is also on the line.

How do we deal with this existential threat?

Since it is a threat with universal dimension, it can only be dealt with in a multi-lateral process. There is a proposal for the establishment of a Working Group on Nuclear Disarmament at the Conference on Disarmament in Geneva. It is the sole multilateral negotiating body for disarmament and international security-related issues. It was successful in negotiating a Convention on Chemical Weapons, which is also a weapon of mass destruction like nuclear weapons. There is no reason why the same

effort should not be made on the much more dangerous class of weapons of mass destruction—that is, nuclear weapons. It is only in a multilateral process that there is a credible possibility to address multiple and interlinked nuclear equations, which more limited bilateral or regional processes cannot. Pakistan may argue that it needs nuclear weapons because of security concerns vis-à-vis India. India will, no doubt, claim that it needs nuclear deterrence because of threats it perceives from Pakistan, China, and a proliferating neighborhood. China may cite the threat it perceives from the U.S. Russia has concerns over the U.S. arsenal and increasingly about the expanding arsenal of China. And the U.S. may cite threats from Russia, China, and all others combined. If the North Korean nuclear threat is not dealt with, then the pressure on Japan and South Korea to go nuclear may become irresistible. All these complex interlinkages can only be reconciled in a multilateral setting, as can the issues of phasing and time frames and the key and indispensable issue of establishing a universally applicable, transparent, and nondiscriminatory verification and compliance regime. Without such a regime, clandestine proliferation, whether by states or nonstate actors, cannot be addressed with a high degree of confidence. As countries with over 97 percent of existing nuclear arsenals, the U.S. and Russia must take the lead, but this can be part of the phasing that a Nuclear Weapons Convention will incorporate.

The Conference on Disarmament does not have to start from scratch. In July 2017, the General Assembly adopted a resolution on a Treaty on the Prohibition of Nuclear Weapons. The treaty was opened for signature soon thereafter and came into force on January 22, 2021. Though the treaty was not supported by nuclear weapon states and some of their allies, it is a historic document and should shake the conscience of the world. The Conference on Disarmament should take it as the initial negotiating draft and then build around it. The threat of nuclear annihilation is real and has just become even more dangerous. We need to step back from the abyss with a sense of acute urgency.

Shyam Saran is a former Foreign Secretary of India and has served as Prime Minister's Special Envoy for Nuclear Affairs and Climate Change. After leaving government service in 2010, he has headed the Research and Information System for Developing Countries, a prestigious think tank focusing on economic issues (2011–2017), and was Chairman of the National Security Advisory Board under the National Security Council (2013–15). He is currently Life Trustee of India International Centre, Member of the Governing Board of the Centre for Policy Research and of the Institute of Chinese Studies, a Trustee at the World Wildlife Fund (India), and Member of the International Advisory Council of the Confederation of Indian Industry. Saran also serves as a member of the Governing Board of Welham Girls' School. He has recently published a book, *How India Sees the World*. Shyam Saran was awarded the Padma Bhushan, the third highest civilian award, in 2011 for his contributions to civil service. In May 2019, he was conferred the Spring Order Gold and Silver Star by the Emperor of Japan for promoting India-Japan relations.

Onwards and Upwards: Lessons in Character

Sameer Lalwani

The first time I met Michael Krepon, I was being interviewed to become his deputy at the Stimson Center. Having worked on and researched South Asian security for a decade, I had read plenty of his work, but had never had a conversation with him. By all accounts from my friends who knew him, he was one of the foremost experts on South Asia strategic and nuclear issues in Washington. And despite my confidence in my training and experience, he certainly cut an intimidating figure.

I had prepped by reading about a year's worth of his writings, including op-eds in several South Asian newspapers, a recently edited volume on deterrence stability, and, of course, his column for *Arms Control Wonk*. We sat in his office on a gorgeous, sunny afternoon, and as I readied to be quizzed about deterrence dynamics, regional rivalries, and escalation control, he said: "Tell me your story."

Caught off guard, I fumbled my way through the highlights of a short, uneventful career trajectory that had brought me to this job interview. He pushed further on a series of questions that led us through my upbringing and childhood, the ideas that most intrigued me in college, memorable fieldwork experiences abroad, and above all my aspirations and motivations in life. I don't think we touched on a substantive South Asia security issue for the first hour of the discussion. (When we did, I committed the error of defending South Asian nuclear deterrence to someone who had spent decades challenging that proposition, including in an essay that would come out the following month, "Can Deterrence Ever Be Stable?"¹).

1 Michael Krepon, "Can Deterrence Ever Be Stable?" *Survival* 57, no. 3 (May/June 2015): 111-132.

At the time, I was puzzled by Michael's focus on the personal rather than the substantive. In hindsight, I realized his questions were less about probing my knowledge than my character. Perhaps it was Michael's way of assessing whether we would be compatible not only as thought partners, but as mission partners, committed to helping lead a team of young scholars to enhance the quality of strategic debate within Washington and Asia.

I learned a great deal of substance in my time working with Michael as his deputy, then his co-director, and later as his successor to run the Stimson Center's South Asia Program. This substance stretched from the debates and coalitional politics of MIRVs during the Cold War, to the command and control challenges of tactical nuclear weapons, to the vast range of potential confidence-building measures. It is, however, the lessons in character over the past six years that most stand out to me, which I will carry with me throughout my career and my life. Here are a few of them.

The Personal Is Powerful

One of the earliest lessons I learned from Michael was how he built personal connections by interweaving the intimacy of private life with policy conversations. We would be meeting with current and former senior officials, many of whom Michael had known for decades, and even though our meeting was to tackle some hard strategic assessments of conventional and nuclear deterrence, Michael managed to make it feel like a social call.

He would recall some detail from a previous exchange and open with a question about our interlocutor's personal life—be it career advancement, a memorable travel experience, a health challenge, a child's overseas educational endeavors or impending nuptials, or the arrival of a grandchild. Michael had plenty to volunteer about his own family, his latest triumphs and tribulations, and the everyday wonders of his moss garden, for which an invitation to visit was always offered.

Such an opening seemed to resonate with even the most hard-nosed foreign affairs advisor or four-star general, who was just as much a devoted spouse, proud parent, or indulgent grandparent. It was a move that was tactically disarming but also sincere and humanizing. It reminded all of us in the room that even as we were about to broach topics that were provocative, even adversarial, we shared some fundamental bonds. If subsequent discussions got contentious, this offered a way to reset the conversation at the close in the hopes of resuming dialogue another day. Consistent with Michael's body of arms control work, this bonding effort proved a valuable interpersonal confidence-building measure and off-ramp.

Fostering Talent and Independent Thinking

A point of emphasis for Michael was nurturing young talent. He always made time for the professional and intellectual development of our research assistants as well as the rising generation of South Asian scholars. This involved a nontrivial investment in time and energy, teaching and training younger scholars how to write compellingly for various audiences, design research, present data, interface with funders, and oversee management responsibilities of long-term projects. In response to any analytical contribution to *South Asian Voices*, Michael was often the first to comment, offering praise and then a thought-provoking question for future analysis.

In some ways, this focus on development was baked into our mission. More than that, however, when dealing with the intractable challenges of deterrence instability and arms control, we all needed the little victories to keep us motivated in our broader efforts. The successes of our young staff—their publications, acceptances to graduate programs, and opportunities in government—felt like wins for all of us and inspired us to keep pressing forward.

George Perkovich praised
Michael for a
“moral stubbornness”
that drove people
to better humanity.

When the Thérèse Delpech Memorial Award was given to Michael for a lifetime of leadership and service to the nongovernmental nuclear policy community, George Perkovich praised Michael for a “moral stubbornness” that drove people to better humanity.² (It was this persistence, some joked, that allowed Michael to remain a loyal Red Sox fan for the many disappointing decades prior to 2004.) But his moral stubbornness did not prevent him from also being intellectually open-minded and agile.

Michael had a knack for attracting talented people to his team who injected new vigor and creativity into our projects—including people who disagreed with him on many issues. Just as he could be incredibly persuasive, he remained amenable to being persuaded. He was unthreatened by staff who were talented, ambitious, and independent-minded, even if it led to some clashes of opinion. At first, I worried when we butted heads occasionally, but I grew to realize we both enjoyed these debates and found they kept us sharp, and honest.

I now think the heterogeneity of expertise and opinion was part of his plan and a model he sought to share. He would often express to his South Asian institutional

2 James Acton, Michael Krepon, and George Perkovich, “Thérèse Delpech Memorial Award,” Carnegie International Nuclear Policy Conference, Washington, DC, March 23-24, 2015, <https://carnegieendowment.org/2015/03/24/luncheon-th-r-se-delpech-memorial-award-pub-57390>.

counterparts that his mission was to spark better strategic debate not by telling people *what* to think but by teaching them *how* to effectively generate and express their own thinking.

The Art of Silence

Michael is a master of utilizing silence. From time to time, we would sit in his office to discuss the strategic implications of a recent event—an insider account of strategic decision-making in the region, a leader-level meeting or statement, or the latest military movements. He would often pose the first question. I would try to respond carefully with calibrated and conditional analysis. He would nod, continue to meet my eyes, but remain silent. Finding the silence unsettling and the weight of his gaze exacting, I would find myself sharing further thoughts, but this time, less polished, less qualified, and far more instinctual.

Only later, when I saw Michael employ this approach with visiting emissaries or embassy officials, did I fully appreciate its advantages. Michael certainly possessed a gravitas and wisdom that compelled people to volunteer more than they otherwise would, but I observed that Michael exercised a restraint that many of his peers in Washington did not. Perhaps he knew all along something that journalist and historian Robert Caro recently revealed about his own tricks of the trade: that “silence, and people’s need to fill it” is a “weapon” that can be wielded not just by interviewers but in all discussions.³ More important, perhaps, is that Michael fundamentally believed in the value of listening to others.

An Economy of Words and of Ego

Silent patience in conversation constituted just one part of Michael’s broader approach to the art of word economy. Knowing he had over forty years of experience and well over a thousand publications, I trusted Michael’s master craftsman editing skills with anything I wrote, from papers to op-eds and even emails. Besides having a knack for turning a phrase and maintaining focus on the controlling idea in any essay, Michael could always be counted on to trim the fat. Many a policy analyst and practitioner will preach the gospel of pithiness. But Michael practiced argument economy not only in writing but also in speech.

During a roundtable event on one foreign trip several years ago, I recall being perturbed by a series of what I considered faulty contentions and inaccurate criticisms by our interlocutors that caricatured U.S. policy. The debater in me was

3 Robert Caro, *Working: Researching, Interviewing, Writing* (New York: Knopf, 2019), 137.

unleashed, and when it came time for me to speak, I proceeded to rebut each and every one of these criticisms and contentions. Five minutes in, I felt I was just hitting my stride when Michael, sitting next to me, wrote in the margins of my legal pad something to the effect of “You don’t have to swing at *everything!*” and then, underneath, “Less is more.” Soon after, Michael spoke in a soothing cadence, focusing in on a single issue and applying subtle but skillfully placed logical jabs that ultimately drove home a point all participants would remember months later.

“It’s good to project analytical skill, but a little humility doesn’t hurt either.”

In subsequent discussions, Michael related to me that he too sometimes felt the urge to deal rapid-fire intellectual knockout blows to arguments he found frustrating. He reminded himself, though, that this impulse was the ego trying to speak, which if unchecked would yield nothing constructive. In a recent conversation, I recounted this episode to him and he quipped, “It’s good to project analytical skill, but a little humility doesn’t hurt either.”

Spaces of Distance, and Love

The toolshed home office in Michael’s backyard would be the envy of every scholar if it were ever profiled on Room Rater.⁴ It is the site of his past twenty years of writing craftsmanship, where all the covers of his over 20 books are framed, and where he still stores the boxes of notecards he used in writing many of those books as well as articles. Surrounding Michael’s writing shed is a moss garden, a creek, and woods all around—a natural space for contemplation and creativity.

This little privilege, earned through many decades of hard work and service, has an incredible aura. Upon entering, you feel the sense of love, care, and pride Michael has invested in this space and in his scholarship. To me, the writing toolshed embodies two symbols of what made Michael a grounded and successful policy scholar.

The first symbol is the distance from the din of activity in Washington to literally think outside the box. The shed let Michael firewall the frenzy of capricious national security news cycles and concentrate on the more consequential elements of our strategic landscape, and the larger muscle movements required to shape them. A separate space—even a toolshed in the middle of the woods—allowed not only for deep focus in writing but also perspective. It enabled thinking in a more holistic manner and in

4 For anyone reading this in the future, Room Rater on Twitter (<https://twitter.com/ratemyskyperoom>) blew up into a cultural phenomenon in 2020 because nearly all TV interviews had to be conducted with people from their home offices during a global pandemic.

longer time horizons than is sometimes permitted when enmeshed within Washington. Whenever Michael returned to Washington, I expected him to be exhausted from long bouts of writing, but instead, it proved to be his source of renewal.

The toolshed's second symbolism involves Michael's commitment to his home life, even when he was deep in research. It was as if Michael needed to be proximate to his family, surrounded by reservoirs of love, to do his best work. Michael understood and preached the gospel of work-life balance, attending to this emotional ballast as both an inherent good and also as a means to nurture his most productive scholarship. I imagine his perseverance through several health challenges made this all the more important. He also ensured that others could practice what he preached. When I first joined Stimson, my wife and I were expecting our first child in about five months, and there was no paid parental leave policy. So Michael effectively created one for me, so that I could attend to my duties as a parent and be a happier, healthier, and more productive scholar in the long run.

Michael would often remind us that we were
"granted the gift of meaningful work."

Onwards and Upwards

Anyone who's spent time with Michael knows that "onwards and upwards" is one of his signature phrases. He used it at the end of discussions, projects, email exchanges, and even a day at the office. It was his way of bookending one chapter and starting a new one. I never gave much thought to it until the past year. Then all of a sudden I was struck by how embedded this phrase was within the credo of the Stimson Center, within which Michael had invested all of himself. Upon reflection, onwards and upwards seemed to perfectly capture the Stimsonian notion of pragmatic idealism.

"Onwards" connotes the pragmatic impulse to keep pressing forward without becoming too self-congratulatory when meeting success nor—more often—too despondent when facing setbacks. There is always more to be done in the realm of global nuclear risk reduction, enhancing the quality of strategic assessment in Southern Asia, and formulating more prudent foreign policy. Neither achievement nor failure should distract nor debilitate us from resuming our work and taking the lead on to the next step in the process.

But "upwards" strikes an idealistic chord, the desire to not only move forward with the status quo but to aim higher. A steady state was not good enough; we always

needed to be striving for better. Michael would often remind us that we were “granted the gift of meaningful work.”⁵ The work would not be meaningful if it weren’t hard, if we weren’t reaching for something bold.

These twin motors—onwards and upwards—have propelled the Stimson Center for decades, but they were originally engineered by Michael Krepon. And I can’t wait to see where this energy propels us in the next chapter.

Sameer Lalwani *is Senior Fellow and Director of the South Asia Program at the Stimson Center, where he researches nuclear deterrence, interstate rivalry, national security decision making, crisis behavior, and counter/insurgency. He is also a term member with the Council on Foreign Relations and a Contributing Editor to War on the Rocks. He has previously been an Adjunct Professor at George Washington University’s Elliott School of International Affairs and a Stanton Nuclear Security Postdoctoral Fellow at the RAND Corporation. Lalwani received his PhD from MIT’s Department of Political Science, where he was an affiliate of its Security Studies Program.*

5 “Thérèse Delpech Memorial Award,” 2015.

My Story

Michael Krepon

My commitment to this meaningful work is rooted, like that of so many others, in an immigrant's tale

In my case, it begins with a 10-year-old girl who anxiously made her way with an older brother from the Lithuanian-Polish border to New York Harbor, steerage class. That girl, my mother, joined the rest of her family in Dorchester, Massachusetts, where my grandfather set up a small convenience store. My mother found the love of her life hanging around that store. My father, born in America, changed his name from Kreponitsky to improve his prospects in life. When they could afford the down payment on a six-room house, my parents moved out of their tenement apartment to properly raise their children. Their dreams, including going to college, were invested in my sisters and me, and we are a reflection of them.

I didn't compete with my sisters, who were straight A students. Instead, I made my mark as a class officer and as the head of the junior congregation at our temple. When I was 13, my dad succumbed to cancer — probably from making munitions at the Watertown Arsenal during World War II. I am named after his younger brother, who died in the Battle of Anzio.

With no money for college, four community service organizations in our small town of Sharon came to my rescue, awarding me scholarships at my high school graduation.

These gifts, a student loan, and working as a dishwasher provided the money for me to attend Franklin & Marshall College, where I discovered, like the Scarecrow in the Wizard of Oz, that I had a brain.

I was one of the top four graduates in my class. The Johns Hopkins School of Advanced International Studies then offered me a free graduate education in the form of a National Defense Foreign Language Fellowship. In return, I was obliged to become proficient in Arabic, which opened doors to the Islamic world, diplomacy, and travel. Fortuitously, my intensive language courses over the summer of 1969 were at Berkeley, where more doors were opened. The following summer, after graduating with a master's degree, I studied at the American University in Cairo, where I was one of two Jewish-American students.

My interests in the Vietnam War were stronger than my interests in the Arab-Israeli conflict. After returning from Cairo, I joined forces with two other recent graduates — also veterans of teach-ins and antiwar organizing — to start up a non-profit organization to channel student activism into constructive change in U.S. foreign policy. After three years of student organizing, I went to work on Capitol Hill. My proudest achievement there was persuading and then helping my boss to deny the U.S. Army funds for “binary” nerve gas weapons. In due course, the Army got out of the chemical weapons business, a necessary precursor for the negotiation of the Chemical Weapons Convention banning chemical weapons.

After the election of Jimmy Carter, I moved to the State Department's Arms Control and Disarmament Agency, where I began working on nuclear arms control. As the youngest office director in the weakest agency of government dealing with nuclear dangers, this was a humbling as well as a learning experience. After Ronald Reagan was elected, I was asked to leave and was fortunate to be awarded a Council on Foreign Relations Fellowship. I spent a year at Princeton writing my first book, *Strategic Stalemate: Nuclear Weapons and Arms Control in American Politics*. Brent Scowcroft and Paul Warnke wrote the forewords.

Returning back to Washington, I managed to land as a senior associate at the Carnegie Endowment for International Peace, where I worked for six years on nuclear arms control, verification, and space.

There I edited the first book, *Commercial Observation Satellites and International Security*, to assess the likely impacts of any nation or person being able to buy high-resolution imagery.

From the Carnegie Endowment, a colleague in the Carter administration, Barry Blechman, and I co-founded the Stimson Center in 1989. Our founding motto was “Pragmatic Steps toward Ideal Objectives.” Stimson now employs over sixty people with a budget of over ten million dollars.

Our “graduates” are engaged in meaningful work all over Washington and around the world. After stepping down from running Stimson, I taught for nine years as the

The Gift of Meaningful Work

University of Virginia's Diplomat Scholar, while continuing to work — as I do to this day — on Stimson programming on nuclear and space issues.

In 2015, I received the Carnegie Endowment's award for lifetime achievement in nongovernmental efforts to reduce nuclear dangers. I was recognized for co-founding the Stimson Center, for mentoring young talent, for working to prevent mushroom clouds on the subcontinent, and for conceptualizing a code of conduct to prevent space warfare. I have been centrally involved in pushing for and protecting threat reduction treaties, especially those ending nuclear testing, reducing nuclear forces, and eliminating chemical weapons.

I've written and edited a total of 21 books and 500 articles, and tap out a weekly blog at *Arms Control Wonk* and *Forbes*. All of my books are framed in my toolshed/office at home along with a royalty check from one of my publishers for one nickel.

Kids grown, my wife and I moved to North Garden, Virginia, near Charlottesville, where I am the steward of nine acres of woods, moss, and countless ferns. We marvel that our two kids now have kids of their own — and at the distance we both have traveled since our forebears decided to make better lives for themselves in America.

**Editor's Note: This piece is taken from My Story, an autobiographical series written by the experts and team at the Stimson Center. This was part of a Stimson series published in December 2017 (<https://spark.adobe.com/page/IrclABjATHzVz/>).*

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